

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U 39-E) for Authorization to Procure Energy Storage Systems during the 2014 Biennial Procurement Period Pursuant to Decision 13-10-040

A1402007

Application No.

(U39-E)

#### APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY (U 39-E) FOR AUTHORIZATION TO PROCURE ENERGY STORAGE RESOURCES (2014-2015 BIENNIAL CYCLE)

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#### I. INTRODUCTION

Pacific Gas and Electric Company ("PG&E") files this application ("Application") to

obtain California Public Utilities Commission ("CPUC" or "Commission") approval of its

Energy Storage Procurement Plan for the biennial 2014-2015 procurement period ("2014 Energy

Storage Plan" or "2014 Plan"), as required by the Decision Adopting Energy Storage

Procurement Framework and Design Program ("Energy Storage Decision" or "Decision").<sup>1/</sup>

The Decision directs PG&E, San Diego Gas & Electric Company, and Southern California

Edison Company (the investor owned utilities or "IOUs"), to

"(O)n or before March 1, 2014, file a procurement application containing a proposal for procuring energy storage resources, as described in Section 3.d. of Appendix A of this Decision. The solicitation shall occur no later than December 1, 2014."<sup>2/</sup>

Energy Storage Decision Appendix A ("Storage Framework"), Section 3.d,<sup>3/</sup> sets forth

the required components of the energy storage procurement application. The following table

<sup>&</sup>lt;u>1</u>/ Decision ("D.")13-10-040.

<sup>&</sup>lt;u>2</u>/ Energy Storage Decision, Ordering Paragraph ("OP") 3.

<sup>&</sup>lt;u>3</u>/ Energy Storage Decision, O.P. 1 adopted the *Energy Storage Procurement Framework and Design Program*, which is Appendix A of the Decision.

identifies the components required by the Storage Framework and the location of PG&E's responses within its 2014 Plan. PG&E has served Prepared Testimony ("Testimony"), which is incorporated by reference, in support of this Application in accordance with Commission Rule 1.7.

# Table 1PG&E's 2014 Energy Storage Plan

<b>Requirements for Procurement Application</b>		
Storage Framework Component	Location within PG&E's 2014 Energy Storage Plan	
An updated, adjusted table with estimates for biennial procurement targets for each storage grid domain from current year to $2020;^{4/}$	Application, Section II.X Testimony Chapter 2	
Reference to 1) needs study by the California Independent System Operator for the IOU's system, local, and flexible needs, if available, or 2) upgrade needs identified in the IOU's transmission or distribution planning studies; $\frac{5}{2}$	Application, Section II.B	
A list of all applicable rules and statutes impacting the procurement plan; $\frac{6}{2}$	Application, Appendix A, "Rules and Statutes"	
An explanation of the type of storage resources and the associated MW quantities the IOU intends to procure, categorized by grid domains and use cases, <sup><math>2/</math></sup>	Application, Section II.C Testimony Chapter 3	
A detailed description of how the IOU intends to procure resources specifying the structure of any RFO or alternative procurement processes and related timelines; <sup><math>\frac{8}{}</math></sup>	Application, Section II.E Application, Appendix B, "2014 Energy Storage Request for Offers Solicitation Protocol"	

<sup>&</sup>lt;u>4</u>/ Energy Storage Decision, Storage Framework p. 7.

- <u>6</u>/ *Id*.
- <u>7</u>/ *Id*.
- <u>8</u>/ *Id*.

<sup>&</sup>lt;u>5/</u> *Ibid.*, p. 8.

<b>Requirements for Procurement Application</b>		
Storage Framework Component	Location within PG&E's 2014 Energy Storage Plan	
Operational requirements, to be applied either to all projects or separately with respect to transmission, distribution, and customer-sited storage. <sup>9/</sup>	Application, Section II.D Testimony Chapter 4	
A proposed methodology for an analysis that evaluates bids on cost and fit submitted in a solicitation. <sup><math>10/</math></sup>	Application, Section II. F Testimony Chapter 5	
Proposed storage equipment/power/services purchase agreements for successful bids	Application, Appendix B appendix G1 "Energy Storage Agreement"	
involving third party-owned or –aggregated projects. <sup>11/</sup>	Application, Appendix B appendix G2 "RPS Power Purchase Agreement"	
	Application, Appendix B appendix G3 "RA Capacity Confirmation for Energy Storage"	
	Application, Appendix B appendix G4 "Engineering, Procurement, and Construction Term Sheet for Utility Developed Energy Storage Projects"	
	Application, Appendix B appendix G5 "Purchase and Sale Agreement Term Sheet"	
	Application, Appendix B – appendix G6 "Purchase and Sale Agreement Term Sheet for Transmission and Distribution Deferral Projects" (to be provided)	
A report on all storage resources procured to date in all Commission proceedings. <sup>12/</sup>	Application Section II.A. Testimony Chapter 2	
Request for cost-recovery authorization. $\frac{13}{2}$	Application Section II.G. Testimony Chapter 6	

<u>9</u>/ *Id*.

<u>10</u>/ *Ibid*, p. 9.

<u>11</u>/ *Id*.

<u>12</u>/ *Id*.

<u>13</u>/ *Ibid*, p. 10.

Section II of this Application provides a brief summary of the information that the Storage Framework requires PG&E to provide. Complete information is provided in PG&E's Testimony and in the appendices to this Application.

Section III identifies several areas where PG&E seeks clarification of certain requirements in the Energy Storage Decision; Section IV sets out PG&E's proposed schedule for this proceeding; Section V provides the necessary information for the Application to comply with the Commission's Rules of Practice and Procedure; and Section VI sets forth PG&E's requested relief.

PG&E intends to procure sufficient storage to meet its total 2014 Biennial Target through the following means:

- A competitive Request for Offers ("RFO") to procure energy storage resources connected to the California Independent System Operator ("CAISO")-controlled transmission and distribution systems;
- CPUC-approved programs, which currently include the Self Generation Incentive Program ("SGIP"),<sup>14/</sup> Permanent Load Shifting ("PLS") program,<sup>15/</sup> Demand Response ("DR") and Electric Vehicle ("EV") pilots where applicable,<sup>16/</sup> and any future programs and pilots developed on an on-going basis for customerconnected storage;<sup>17/</sup>
- Mechanisms including, but not limited to, electric vehicle funding programs that also provide grid storage. To the extent that energy storage opportunities are

<sup>&</sup>lt;u>14</u>/ Pub. Util. Code Sec 376.6, D.11-12-030.

<sup>15/</sup> D.12-04-045, CPUC Resolution No. E-4586.

<sup>&</sup>lt;u>16</u>/ Energy Storage Decision, p. 58.

<sup>17/</sup> Energy Storage Decision, COL 34.

identified in the electric vehicle grid integration proceeding, PG&E will seek to include such cost effective measures in its 2014 Plan.<sup>18/</sup>

- Eligible Energy Storage projects that are developed under Commission-approved contracts arising from other Commission proceedings, such as the Long Term Procurement Plan ("LTPP") proceeding, the Renewables Portfolio Standard ("RPS") Program, and the Resource Adequacy ("RA") proceeding;<sup>19/</sup>
- Other CPUC-approved channels, such as the California Energy Commission's Public Interest Energy Research ("PIER") or the CPUC's Electric Program Investment Charge ("EPIC")-funded projects, under certain conditions.<sup>20/</sup>

#### II. MATERIAL REQUIRED BY THE STORAGE FRAMEWORK

#### A. Summary of Storage Resources Procured to Date

The Energy Storage Decision pre-approved certain transmission, distribution, and customer-side energy storage projects for which PG&E has executed contracts or has made other commitments. PG&E will count only projects that are currently operational towards its 2014 Targets. PG&E records 8.5 MW of storage projects at the distribution-level and 3.5 MW of eligible storage projects at the customer-level. PG&E has also procured 150 MW of storage from an eligible pre-approved storage project at the transmission-level that will be applied to future procurement targets between 2016 and 2020.

<sup>18/</sup> Energy Storage Decision, p. 32, "Existing Energy Storage Projects." Order Instituting Rulemaking ("R.") 13-11-007 was issued on 11/22/13 to adopt policies, guidelines and implementation strategies to facilitate utility participation in vehicle-grid integration. "We will ... seek to establish rules that allow utilities, PEV drivers, and the grid to capture safely and reliably the benefits of PEV battery storage for the managed charging, and for providing demand response ancillary services to the grid and power markets." (R. 13-11-007, p. 15.) "The Commission has several existing proceedings that are developing demand response and storagerelated rules. ... This proceeding will coordinate with those proceedings on electric transportation's role to avoid duplicating efforts." (Id, p. 17.)

<sup>19/</sup> Energy Storage Decision, Conclusion of Law ("COL") 11 and p. 33, "Projects Authorized in Other Commission Proceedings."

<sup>20/</sup> Energy Storage Decision, COL 10 and p. 33, "Projects Funded From Third Parties."

PG&E's full report of existing energy storage procurement is provided in Chapter 2 of the supporting Testimony, "Report on all Existing and Eligible Storage Resources."

#### B. PG&E's Adjusted Procurement Targets For 2014

The Energy Storage Decision adopted a 2014 Target for PG&E of 90 MW, subject to adjustment for eligible storage projects that that were previously pre-approved by the Commission. For the 2014 biennial period, PG&E proposes to reduce its Energy Storage Decision Target ("Target") by 8.5 MW at the distribution level and 3.5 MW at the customer level. PG&E will reduce its Targets in future solicitation cycles with the 150 MW transmissionlevel energy storage project that was pre-approved by the Decision as it proceeds with development and becomes operational.

PG&E's calculation of its Target for the 2014 biennial period is depicted in the following Table 2.

#### Table 2

Storage Grid Domain (Point of Interconnection)	Transmission	Distribution	Customer	2014 Biennial Amounts
Energy Storage Decision Target	50	30	10	90
Existing Eligible Projects (credits toward Decision Target)	0	8.5	3.5	12.0
Adjusted 2014 Target	50	21.5	6.5	78

#### PG&E's 2014 Energy Storage Procurement Targets (All figures represent MW)

The Energy Storage Decision provides that up to 80 percent of PG&E's 2014 transmission and distribution Targets can be deferred if the PG&E can show that it has not received bids that are economically or operationally viable, or that PG&E has not received

sufficient bids to meet the Targets.<sup>21/</sup> PG&E has not yet issued its first solicitation for energy storage projects, so it would be premature for PG&E to defer or shift procurement between the transmission and distribution domains at this time. PG&E intends to re-assess the issue of deferral after the conclusion of its 2014 solicitation and its submission of agreements to the Commission.

PG&E's full report of its biennial Targets through 2020, as adjusted, is provided in Testimony Chapter 2, "Report on all Existing and Eligible Storage Resources."

#### C. Reference to Needs Studies for PG&E's System, Local, and Flexible Needs

#### 1. CAISO Studies

The Energy Storage Decision indicates that the procurement goals in this 2014 Plan have been administratively determined independent of any findings or conclusions contained in any needs studies.<sup>22/</sup> In the longer term, the Commission expects that procurement of energy storage will be increasingly tied to need determinations within the LTPP proceeding.<sup>23/</sup>

Although the CAISO had conducted preliminary studies with regard to system needs with respect to the 2012 LTPP proceeding, the Commission decided to defer the task of system need analysis to the 2014 LTPP proceeding. System, flexible, and local capacity needs for PG&E were not identified in any phase of the multi-track 2012 LTPP proceeding.

The 2014 LTPP proceeding has just begun, and neither the CAISO nor any other party has presented need studies in that proceeding. Other, existing CAISO needs studies provide little information that is relevant to PG&E's need for energy storage systems.

<sup>&</sup>lt;u>21</u>/ Energy Storage Decision, p. 42.

<sup>22/ &</sup>quot;To the extent that energy storage is treated akin to a 'preferred resource,' as it has been designated in D.13-02-015, the Commission has clear precedent to administratively establish storage procurement targets without a system needs determination." Energy Storage Decision, p. 24.

<sup>&</sup>lt;u>23</u>/ Energy Storage Decision, p. 34.

#### 2. PG&E's Transmission Planning Studies

PG&E will examine the Transmission Project List contained in the CAISO-approved 2012-2013 ISO Transmission Plan, dated March 20, 2013, and will attempt to identify planned transmission project(s) where an energy storage system might potentially provide transmission grid optimization benefits that are sufficient to defer the identified investment. Based on a preliminary identification, PG&E will conduct further studies, such as power flow analysis, voltage analysis, etc., to validate whether an energy storage project could actually defer the planned transmission investment. If energy storage is validated, then the necessary operational requirements that would be required of an energy storage system, such as location, size, duration, etc., will be included in the RFO solicitation package to give transmission-level storage projects an opportunity to address that need in the RFO solicitation.<sup>24/</sup> Such a project would function as an "energy storage transmission asset."

#### 3. PG&E's Distribution Planning Studies

PG&E will examine its internal distribution capacity/reliability investment plan and will attempt to identify planned distribution project(s) where an energy storage system might provide distribution grid optimization benefits to improve reliability and/or to defer distribution capacity investment. If such a distribution project is identified, PG&E will conduct further studies, such as load forecast, load profile examination, load flow simulation, voltage analysis, etc., to validate whether an energy storage project could defer the planned distribution investment. If so, then the necessary operational requirements that would be required of an energy storage system, such as location, size, duration, etc., will be included in the RFO solicitation package to give distribution-level storage projects an opportunity to address that need in the RFO solicitation. Such a project would function as an "energy storage distribution asset."

<sup>24/</sup> An energy storage project on the transmission level that defers a planned transmission project may be subject to CAISO Transmission Planning Process (TPP) for review and/or approval.

#### D. Types of Storage Resources that PG&E Intends to Procure

The "Energy Storage Request for Offers Solicitation Protocol," which is submitted as Appendix B to this Application, describes in detail the storage resources that PG&E intends to procure through the 2014 Energy Storage RFO. PG&E's goal is to meet its adjusted 2014 T&D grid domain storage target of 71.5 MW using resources obtained through the RFO process. PG&E will continue to procure energy storage using existing processes as well.

PG&E proposes to use its Evaluation Methodology, summarized in Section II.F. and described in detail in Chapter 5 of PG&E's Prepared Testimony, to select T&D grid domain energy storage resources that are eligible to be counted toward PG&E's energy storage procurement targets. Further description of the storage resources PG&E intends to procure is provided in Chapters 3, 4, and 5 of the supporting Testimony.

#### E. Operational Requirements

PG&E's operational requirements for energy storage systems are essential for ensuring that procurement will result in the realization of the Commission's energy storage goals. PG&E's RFO will require each shortlisted participant to contribute to at least one of the overarching guiding principles of the Storage Program: grid optimization, renewable integration, or GHG emissions reduction. To ensure that storage projects meet this standard, PG&E has identified products and uses that support one or more of the CPUC's identified guiding principles. Although the Energy Storage Decision requests that IOUs describe their energy storage procurement in terms of "use cases,"<sup>25/</sup> PG&E does not identify its intended 2014 energy storage resources in terms of technology-specific use-cases.

PG&E intends to select projects in the 2014 RFO based on their provision of products and uses, which PG&E will determine based upon its evaluation of the project offers submitted. PG&E has mapped the products and uses of energy storage to each of the Commission's energy storage guiding principles in the following table:

<sup>25/</sup> Energy Storage Decision, Storage Framework, p. 8.

CPUC Energy Storage Guiding Principles	Energy Storage Products/Uses	
	Black start capability	
	System/Local Resource Adequacy	
Optimization of the Grid	Frequency response (inertia)	
	T&D capacity upgrade deferral	
	T&D reliability upgrade deferral	
	Frequency Regulation	
	Spinning/Non-Spinning Reserves	
	Flexible Ramping Product	
Integration of Renewable Energy	Over-generation and curtailment support	
	Energy shifting	
	Flexible Resource Adequacy	
	Reduces intermittency of renewable resource	
	Energy shifting	
<b>Reduction of Greenhouse Gas Emissions</b>	Over-generation and curtailment support	
	Improves efficiency of a fossil-fired resource	

 Table 3

 Energy Storage Products/ Uses Linked to Energy Storage Principles

Generally speaking, the Operational Requirements for each of these market-based products are consistent with the definition and requirements for each product in the CAISO Tariff. Each energy storage resource will be required to comply with the CAISO requirements applicable to the products and uses offered by the resource. Under this technology-neutral approach, all storage systems capable of meeting operational requirements that satisfy the Commission's guiding principles will be considered. This should result in the most costeffective procurement consistent with the Commission's intent. Further detail is provided in Chapter 4 of the Testimony.

#### F. Description of 2014 Energy Storage Procurement

PG&E expects to meet its 2014 Target through contracts arising from the energy storage RFO described in Appendix B, "Energy Storage RFO Solicitation Protocol," and through other authorized procurement channels. Resultant contracts will require energy storage facilities to be operated and maintained in a safe, reliable, and efficient manner that reasonably protects the public health and safety of California residents, business, employees and the community.

#### 1. Energy Storage Resources

Through the 2014 Energy Storage RFO, PG&E seeks offers for energy storage projects that will participate in the wholesale market, and offers for projects that will be utilized as transmission or distribution assets, which are collectively referred to as "T&D Assets". Offers for wholesale market resources will be considered if they meet the following minimum size criteria: (1) resources connected at the distribution level must be at least 1 MW and (2) resources connected at the transmission level must be at least 10 MW. Size requirements for T&D Assets will be included in the specifications issued for any identified transmission or distribution upgrade deferral projects in the RFO issuance documents.

Energy storage resources procured through the RFO generally function primarily as either wholesale market resources or T&D Assets. However, some T&D Assets may also perform a wholesale market function, in which case they are considered to be "dual-use" resources. Energy storage wholesale market resources may be owned by third parties and sell storage services to PG&E under a power purchase agreement, such as the Energy Storage Agreement. ("ESA"). PG&E requires that all energy storage T&D Assets (including dual-use resources) be owned by PG&E to ensure system reliability. Third parties may develop and transfer resources to PG&E under a turnkey Purchase and Sale Agreement ("PSA"), or provide services on a utility-owned resource under an Engineering, Procurement, and Construction ("EPC") contract.

The utility ownership of distribution assets is also necessary for compliance with Public Utilities Commission Code Section 399.2(a)(2), which specifies that "each electrical corporation shall continue to be responsible for operating its own electric distribution grid including, but not limited to, owning, controlling, operating, managing, maintaining, planning, engineering, designing, and constructing its own electric distribution grid, emergency response and restoration, service connections, service turn-ons and turn-offs, and service inquiries relating to the operation of its electric distribution grid, subject to the commission's authority."

#### 2. PG&E's 2014 RFO Process

PG&E will utilize a competitive RFO process modeled after the RFO processes that PG&E currently uses to procure electricity products for its customers, such as the RPS RFO or Combined Heat and Power ("CHP") RFO. The "2014 Energy Storage RFO Solicitation Protocol," a draft of which is attached as Appendix B ("Storage Protocol"), provides a detailed description of how PG&E intends to procure resources through this competitive solicitation.

Before PG&E issues the final Storage Protocol, PG&E will employ an independent evaluator ("IE") approved by the Energy Division to oversee PG&E's conduct of the RFO. The purpose of an IE is to ensure a fair, competitive procurement process free of real or perceived conflicts of interest. The IE will assess the competiveness and integrity of PG&E's solicitation and prepare a post-solicitation report for submission along with PG&E's request for approval of its selected energy storage projects.

PG&E will update its Procurement Review Group ("PRG"), which is an advisory body of regulators and non-market participants convened pursuant to CPUC decisions to monitor the energy procurement activities of the IOUs for consistency with Commission direction at key points in their energy storage procurement process. Commission staff from the Energy Division and the Office of Ratepayer Advocates will be kept informed through their participation in the PRG.

PG&E's 2014 Energy Storage RFO materials are presented by the Storage Protocol, within which are draft commercial documents, including the ESA, a PSA term sheet, an EPC term sheet, and other documents as described in this Application. These materials are subject to revision by PG&E; even after this Application has been submitted, PG&E will continue to examine commercial options for energy storage. If PG&E identifies one or more opportunities for an energy storage facility to function as a T or D Asset in time for the Energy Storage RFO, PG&E will supplement its Protocol and provide additional commercial documentation to potential bidders before it issues its solicitation. Regardless of T&D opportunities, PG&E may

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also publish revisions to its RFO Protocol in order to seek out the highest value energy storage systems possible.

The following chart indicates the form of commercial document that a participant in the 2014 Energy Storage RFO should use, based upon the commercial nature of the proposed product and ownership of the energy storage facility.

#### Table 4

3 <sup>rd</sup> party-owned Storage	Utility-owned Storage
Energy Storage Agreement ("ESA") for Non-Generator Resource, <sup>26/</sup> Appendix B - appendix G1	Engineering, Procurement, and Construction Term Sheet for Utility Developed Energy Storage Projects, Application, Appendix B - appendix G4
RPS Power Purchase Agreement ("PPA") Application, Appendix B - appendix G2	Purchase and Sale Agreement ("PSA") Term Sheet for turnkey Non-Generator Resource or infrastructure upgrade deferral, Appendix B - appendix G5
Resource Adequacy ("RA") Capacity Confirmation for Energy Storage, Application, Appendix B - appendix G3	Purchase and Sale Agreement Term Sheet for Transmission and Distribution Deferral Projects, Application, Appendix B - appendix G6 (to be provided)

#### Agreements for Energy Storage Procurement Interconnected at either Transmission or Distribution Levels

Depending on counterparty responses to the RFO, the final versions of PG&E's energy storage pro-forma documents may differ, perhaps substantially, from the form agreements submitted with this Application. Assuming that the Commission approves this Application on a timely basis without requiring substantial modifications, PG&E intends to issue its Energy Storage RFO by December 1, 2014.

<sup>26/</sup> The CAISO tariff defines "Non-Generator Resources" as, "Resources that operate as either Generation or Load and that can be dispatched to any operating level within their entire capacity range but are also constrained by a MWh limit to (1) generate Energy, (2) curtail the consumption of Energy in the case of demand response, or (3) consume Energy."

Timely interconnection with the transmission or distribution grid, as the case might be, is an important factor because the lack of full capacity deliverability could prevent a project from delivering the products and attributes in accordance with its storage contract. Projects obligated to provide capacity must achieve full deliverability status by the time deliveries are required to begin. Because of the compressed timeline for the 2014 RFO, PG&E will not require a participant in the 2014 Energy Storage RFO to have submitted an application for a Phase I interconnection study to the CAISO at the time of offer submission. However, a successful RFO participant must have submitted its application by the time of contract execution.<sup>27/</sup> A project's progress toward obtaining the CAISO interconnection required for its proposed products will be taken into account during the evaluation process.

PG&E's general approach to project selection will be technology neutral, although a diversity of technologies over time is desirable. At the overall program level, technologies should be fundamentally sound to give PG&E confidence that the stated attributes of energy storage can actually be provided to PG&E's customers. However, PG&E will also consider pilot/test projects focused on gaining experience using storage devices under multiple applications.

Each executed agreement must receive final and non-appealable CPUC Approval before storage service may begin. Commission Approval will consist of a final non-appealable Commission decision without conditions or modifications that are unacceptable to either PG&E or the counterparty, which approves the agreement in its entirety, including all related payments to be made by PG&E and PG&E's proposed cost recovery treatment, subject only to the CPUC's review of PG&E's administration of the Agreement, and finds that procurement under the Agreement counts toward PG&E's Target as proposed by PG&E.

<sup>27/</sup> PG&E anticipates that in future storage RFOs it may require projects to have submitted a Phase 1 interconnection study by the date of offer submission.

PG&E will procure energy storage on behalf of all of its customers. The Commission recognized that the departure of load for which an IOU procured electricity may lead to stranded energy procurement costs. To protect remaining customers from unfair costs, the Commission authorizes the IOU to allocate the above-market cost of procurement to a non-bypassable charge, which is collected from all customers within the IOU's territory. PG&E will seek stranded cost recovery over the full term of any energy storage contract when it submits the contract for CPUC Approval.

The Energy Storage Decision reserved the issue of how IOUs will obtain Commission approval of their energy storage procurement.<sup>28/</sup> As discussed in Section III.C, below, PG&E recommends the use of Tier 3 Advice Letters to obtain Commission approval of energy storage procured through the 2014 RFO.

Detailed information about PG&E's 2014 Energy Storage RFO, including the solicitation timeline, is provided in the draft Protocol which is attached as Appendix B.

#### **3.** Other Procurement Channels

PG&E may procure energy storage projects through other competitive solicitations, such as its current RPS solicitation. Although PG&E has no plans to procure projects other than through competitive solicitations at this time, PG&E could use alternative means to obtain valuable energy storage benefits that were not offered into a competitive RFO. Any project procured outside of the RFO process would be subject to Commission evaluation and approval on a case-by-case basis.<sup>29/</sup>

<sup>&</sup>lt;u>28</u>/ Energy Storage Decision, p. 70, item 9, "(The Energy Storage Decision) no longer requires the IOUs to file a Tier 3 Advice Letter setting out the contracts for the winning energy storage bids, and instead states that, in its approval of the procurement applications, the Commission will provide additional direction on the process the IOUs shall use to request approval for the winning bids."

<sup>&</sup>lt;u>29</u>/ Energy Storage Decision, p. 52.

#### G. Evaluation Methodology

PG&E's methodology for evaluating offers and agreements resulting from the 2014 Energy Storage RFO is described in Chapter 5 of the Prepared Testimony. Each proposal will be evaluated in terms of its ability to provide the products or uses that meet the Commission's principles for energy storage, as described above in Section II.E, Operational Requirements, and in more detail in Chapter 4.

PG&E will apply the principles of its Least Cost Best Fit (LCBF) methodology using quantitative and qualitative criteria based on information contained in the submitted offer forms received though the Storage RFO.<sup>30/</sup> PG&E's evaluation methodology will examine the "full range of benefits and costs identified in the use case framework developed and the EPRI and DNV KEMA reports submitted in this proceeding." The evaluation model is being developed in conjunction with DNV GL, the successor to DNV KEMA. The evaluation results will be considered in the selection of offers with which PG&E will enter into negotiations (Shortlisted Offers). PG&E has collaborated with Southern California Edison Company ("SCE") and San Diego Gas & Electric Company ("SDG&E") to draft a consistent evaluation protocol ("CEP"). The CEP is included in Testimony Chapter 5.

#### H. Cost Recovery of Storage Procurement<sup>31/</sup>

The cost of energy storage procured pursuant to the Storage RFO should be recovered in rates based on whether the energy storage facility is functioning as a wholesale market resource or a T&D Asset. PG&E's cost recovery recommendations for Energy Storage procurement are outlined below, and a more detailed explanation is provided in Chapter 6 of the Testimony.

<sup>&</sup>lt;u>30</u>/ Participants will be required to submit accurate figures, descriptions and calculations with their offers.

<sup>31/</sup> The CAISO tariff defines "Non-Generator Resources" as, "Resources that operate as either Generation or Load and that can be dispatched to any operating level within their entire capacity range but are also constrained by a MWh limit to (1) generate Energy, (2) curtail the consumption of Energy in the case of demand response, or (3) consume Energy."

The costs of energy storage T&D Assets, which allow infrastructure improvements to be deferred, are incurred in place of the cost of transmission or distribution upgrades. It is appropriate, then, to collect the cost of T&D Assets storage through the appropriate transmission or distribution rates. The Transmission Access Charges assessed by the CAISO collects the annual authorized revenue requirement associated with the transmission facilities and entitlements turned over to the operational control of the CAISO by a participating transmission owner, such as PG&E. The cost of energy storage responsible for the deferral of transmission-level infrastructure costs should be included in the FERC-approved Transmission Access Charge. If the energy storage device allows distribution infrastructure improvement to be deferred, its costs should be recovered in the rates for the utility's distribution facilities. PG&E's distribution infrastructure revenue requirement is collected in its general rates.

A wholesale market resource provides CAISO-defined services such as energy, capacity, ancillary services or some combination of these attributes. The reasonable cost of this energy storage should be recorded and collected in rates through each IOU's Energy Resource Recovery Account ("ERRA") if the storage is purchased from third parties. If the storage resource is owned by the utility, the cost of energy storage is calculated as the utility's cost of service and should be collected in the utility's general rates.

PG&E's procurement of market-based energy storage will meet the needs of today's bundled customers. Accordingly, energy storage contracts should be added to the portfolio of contracts for which departing load is responsible through the Power Charge Indifference Adjustment ("PCIA"). Currently, recovery of power purchase contracts through the PCIA is limited to 10 years, except for contracts under the Renewables Portfolio Standard ("RPS") or qualifying facilities/combined heat and power ("QF/CHP ") settlement programs.<sup>32/</sup> As explained in more detail, below, the term of PCIA recovery for energy storage contracts should not be limited to 10 years but should be equal to the full term of the contract.

<u>32</u>/ D.04-12-048, which established the procurement rules for existing generation resources.

#### **III. REQUESTS FOR CLARIFICATION**

In this section, PG&E brings various implementation issues to the Commission's attention. In particular, PG&E is concerned that two RFO deadlines established by the Energy Storage Decision will make it difficult to obtain the highest value for PG&E's customers through the energy storage RFO. The second major issue concerns the recovery period for stranded costs. PG&E seeks modification of the non-bypassable charge timeline, consistent with the Commission's recent finding that it is reasonable to address cost allocation and non-bypassable charge mechanisms as they arise in proceedings on a case-by-case basis.<sup>33/</sup>

#### A. **RFO Administration Issues**

#### 1. The Energy Storage Decision's Deadline for Requesting Deferment should be Changed to be Concurrent with the Filing for Approval of RFO Procurement

The energy storage program structure gives IOUs an opportunity to request deferment of their procurement targets. The Energy Storage Decision requires each IOU to submit any request for deferment of the biennial procurement target within 3 months after the IOUs' receipt of RFO offers relating to that procurement target.<sup>34/</sup>

It is not practical for PG&E to complete a thorough analysis of the offers, which often requires evaluators to obtain additional information from participants, short list offers, and then negotiate with potential counterparties, within 3 months. All of these steps are required to form a reasonable impression of which projects have reasonable value, will have agreeable contract terms and conditions, and are commercially viable. The short timeline creates an incentive for an IOU to hedge the risk of missing its target by discounting the ability to execute offers, which is not beneficial to the Storage Program and its market participants. The Commission should instead authorize the IOUs to include any deferral request as part of their submission of RFO

<sup>&</sup>lt;u>33</u>/ D.13-08-023, Decision Denying Petition for Rulemaking and Closing Proceeding.

<sup>&</sup>lt;u>34</u>/ Energy Storage Decision, A, Sec. 3.e), p. 10.

contracts for approval, which PG&E proposes should occur 12 months after the RFO offers have been shortlisted.

#### 2. The Energy Storage Decision's Deadline for Submission of RFO Contracts be Changed to 12 Months after RFO Offers are Shortlisted

The IOUs are also required to execute and submit the energy storage contracts from the 2014 RFO for Commission approval, and to report on RFO results, no later than one year after the Energy Storage RFO is issued.<sup>35/</sup> This would require PG&E to execute all of its Energy Storage contracts within 8 months of receiving offers in response to the RFO. PG&E doubts this will be sufficient time because energy storage proponents who are participating in a competitive solicitation for the first time may not be prepared for the solicitation, evaluation, short listing and negotiation process. PG&E will also be learning about the operational characteristics of particular storage technologies, incorporating new considerations in its evaluation methodology, and negotiating new terms necessary to ensure that storage capabilities are fully operationalized in accordance with PG&E's system needs.

PG&E requests the Commission to require each utility to submit its executed energy storage contracts within one year of creating its shortlist of RFO offers, in keeping with PG&E's RPS program. This target allocates more time to the commercial process and takes advantage of the full term of the biennial energy storage procurement cycle.

# 3. No Intermediate Compliance Filing should be Required between the Commission's Decision on this Application and PG&E's Issuance of its Proposed RFO

Although the Commission may require the IOUs to re-submit their RFO materials in conformance with the Application Decision, PG&E recommends the Commission forego that option because it is unnecessary and potentially unproductive. It is unrealistic to attempt to create "one size fits all" commercial documents when the potential applications of energy storage are still being explored and negotiations are likely. The IE will provide adequate

<sup>&</sup>lt;u>35</u>/ Energy Storage Decision, Appendix A, 3. h), p. 11," Commission Approval of Procurement Contracts."

guidance as to whether the RFO materials conform to the decision on this Application and ensure that PG&E provides a fair opportunity for participants to compete in the RFO. Finally, the Commission will determine the reasonableness of each executed agreement when PG&E submits the results of its RFO for approval.

For these reasons, PG&E requests that no intermediate compliance filing be required between the Commission's decision on this Application PG&E's issuance of its RFO.

## **B.** PG&E Proposes that the Commission Allow Stranded Cost Recovery for the Full Term of an Energy Storage Contract

IOUs are authorized to recover the above-market cost of stranded long-term power procurement from all customers through a non-bypassable charge.<sup>36/</sup> The term during which a procurement cost may be recovered through the non-bypassable charge is generally limited to 10 years. After 10 years, the stranded cost is borne by the IOUs' bundled customers, which creates a disincentive for IOUs to enter into contracts with terms longer than 10 years. However, developers of new energy storage have asserted that a contract term greater than 10 years may be needed to support development.

The Commission has overridden the 10 year limit to accommodate new development in at least two cases. Relatively recently, the parties to the Qualifying Facilities/Combined Heat and Power (QF/CHP) Settlement Agreement agreed to a 12-year contract term for new construction. The Commission noted that it, "... has extended the 10 year non-bypassable charge limitation in other areas, most notably with RPS ("Renewables Portfolio Standard") contracts, which are recovered over the life of the PPA and thus may be recovered for a period substantially longer than 10 years."<sup>37/</sup> The Commission has encouraged the development of renewable resources by approving pro-forma RPS PPAs with 20 year terms and potentially longer bilateral PPA terms. This could create an unfair advantage for certain offer categories,

<sup>&</sup>lt;u>36</u>/ D.08-09-012, p. 7, citing D.04-12-048.

<sup>37/</sup> D.10-12-035, Decision Adopting Proposed Settlement (Qualifying Facilities/Combined Heat and Power), p. 41, citing D.04-12-048 at 63.

such as energy storage units that are co-located with renewable technologies and receive payments under RPS contracts.

To avoid technology bias in energy storage procurement, the Commission should find it reasonable for IOUs to recover the stranded costs of energy storage procurement for the entire term of the energy storage contract regardless of its length, just as RPS stranded costs may be recovered over the entire term of an RPS PPA.

#### C. PG&E Proposes that the Commission Authorize RFO Results to be Submitted by Advice Letter

PG&E recommends that the Commission adopt the Tier 3 advice letter process for review and approval of the contracts resulting from its first Energy Storage RFO. The Tier 3 advice letter process has afforded the Commission effective oversight over the results of PG&E's RPS solicitations and CHP RFOs. It should also be used to review PG&E's competitive energy storage procurement.

### D. PG&E Requests that the Commission Determine that Electric Generation Using Biogas is Eligible Energy Storage

PG&E supports the broadest interpretation of "energy storage resource" eligibility consistent with AB 2514 to provide its customers with potentially more cost-effective procurement options. PG&E requests the Commission to determine that electric generation using biogas technology constitutes Eligible Energy Storage. PG&E does not, however, propose to procure such resources through the 2014 RFO. PG&E would continue its efforts to procure biogas generation resources through other existing mechanisms.

Section 2835(a) defines "energy storage system" as "commercially available technology that is capable of absorbing energy, storing it for a period of time, and thereafter dispatching the energy." An energy storage system must also possess at least one of the following storage characteristics: (1) Use mechanical, chemical, or thermal processes to store energy that was generated at one time for use at a later time; (2) Store thermal energy for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity at that later time; (3) Use mechanical, chemical, or thermal processes to store energy generated from renewable

resources for use at a later time; or (4) Use mechanical, chemical, or thermal processes to store energy generated from mechanical process that would otherwise be wasted for delivery at a later time.

PG&E seeks clarification of what constitutes an Eligible Energy Storage resource in order to encourage the broadest participation of viable offers in its Energy Storage RFO. For example, dairy biogas systems rely on a chemical process to store energy from renewable biomass on-site for use at a later time. But for the biogas storage, the energy in the methane produced by the decomposition of biomass would be wasted; instead, a renewable form of energy is captured and stored. Like thermal storage, biogas storage enables energy to be used to generate electricity at a later time.<sup>38/</sup> The Commission should confirm that electric generation using dairy biogas is eligible to count toward energy storage targets.

#### IV. PROPOSED SCHEDULE FOR THE PROCEEDING

PG&E respectfully requests that the Commission approve this Application as soon as practicable, but no later than September 11, 2014. The schedule for approval of the Application should be relatively brief because the Application simply sets forth PG&E's plan for compliance with the Energy Storage Decision. The Energy Division has already scheduled a workshop on March 14, 2014, to allow interested stakeholders to learn about the IOUs' applications, which mitigates the need for a protracted fact finding process. The Application raises no novel issues for Commission determination; PG&E's questions only raise matters of interpretation of the Energy Storage Decision or other Commission rules. The schedule for approval of this Application should be expeditious, given the limited scope of this Application, consideration of the time that may be needed for PG&E to conform its RFO materials to the Commission's

<sup>38/</sup> The Energy Storage Decision identifies the Commission-approved power purchase agreement between PG&E and Rice Solar for a solar thermal generation project paired with molten salt storage as eligible to count toward the Energy Storage Target. Energy Storage Decision, p. 28, citing also CPUC Resolution E-4545.

decision, and the benefit of circulating the RFO materials to the public prior to formal issuance of the RFO on December 1, 2014.

Activity	Date
Application Filed	February 28, 2014
Application Noticed	March 5, 2014
Responses Filed	April 7, 2014 (next business day after April 6, 2014)
PG&E's Reply to Responses	April 18, 2014
Pre-Hearing Conference	May 2, 2014
Scoping Memo	May 9, 2014
Evidentiary Hearing	None
Concurrent Opening Briefs Due	May 23, 2014
Concurrent Reply Briefs Due	June 6, 2014
ALJ Proposed Decision Issued	August 11, 2014
Commission Vote	September 11, 2014

#### **Proposed Schedule**

# V. COMPLIANCE WITH THE COMMISSION'S RULES OF PRACTICE AND PROCEDURE

#### A. Contents of Application (Rule 2.1)

#### 1. Requested Relief

PG&E requests that the Commission approve PG&E's 2014 Energy Storage Plan, as set forth in this Application, its Appendices, and supporting Testimony and find it to be reasonable as soon as practicable, but in any event no later than September 11, 2014. PG&E is not seeking up-front approval of any of the procurement described in this Application. PG&E recommends that the Commission determine that PG&E may seek approval and cost recovery of procurement under the 2014 Plan to within one year of PG&E's shortlisting of offers received in response to its energy storage RFO, through the Tier 3 Advice Letter Process.

PG&E respectfully requests the Commission to issue a decision approving PG&E's 2014 Energy Storage Plan as presented in this Application, granting the relief requested in Section VI, below.

#### 2. Statutory Authority

PG&E makes this request pursuant to the Commission's requirement in the Energy Storage Decision that PG&E file this application. PG&E also makes this pursuant to the following provisions of the Public Utilities Code: Section 451 for a finding that PG&E's electricity procurement costs under the Amended PPAs are just and reasonable; Section 454 for authorization to recover costs of the Amended PPAs in rates; Section 454.5 for upfront approval of the Amendments as acceptable and eligible for rate recovery; Section 701 which confers plenary authority on the Commission to regulate every public utility within California; and Section 728 under which the Commission may set just and reasonable rates.

#### 3. Legal Name and Principal Place of Business (Rule 2.1(a))

The Applicant's legal name is Pacific Gas and Electric Company. PG&E's principal place of business is 77 Beale Street, B30A, San Francisco, California. Its post office address is P.O. Box 7442, San Francisco, California, 94120-7422. PG&E is a corporation organized under the laws of the State of California.

# 4. Correspondence and Communication Regarding This Application (Rule 2.1(b))

Correspondence regarding this Application should be directed to the following PG&E representatives in this matter:

Wade A. Greenacre Energy Supply Proceedings Pacific Gas and Electric Company P.O. Box 770000 San Francisco, CA 94177-0001 Telephone: (415) 973-8098 Facsimile: (415) 973-3574 E-Mail: WAG9@pge.com Evelyn C. Lee Law Department Pacific Gas and Electric Company P.O. Box 7442 San Francisco, CA 94120-7442 Telephone: (415) 973-2786 Facsimile: (415) 973-5520 E-Mail: ECL8@pge.com

#### 5. Category of the Proceeding

The Application should be categorized as a rate-setting proceeding.

#### 6. Need for Hearing

There is no need for an evidentiary hearing. The Commission should approve the

Amendments without hearings, based on the information presented by PG&E in this Application

and the Prepared Testimony that PG&E has served on the service list.

#### 7. Issues To Be Considered

The following issues should be considered in this proceeding:

- Whether, by filing this Application, PG&E has complied with D.13-10-040, Ordering Paragraph 3;
- Whether PG&E should be authorized to issue the RFO described in this Application on December 1, 2014;
- Whether PG&E has correctly identified its existing eligible energy storage credits and correctly calculated its 2014 Biennial Adjusted Storage Target;<sup>39/</sup>
- Whether PG&E should recover its costs of energy storage procurement through the various ratemaking mechanisms as proposed;
- Whether the Energy Storage Decision's deadline for requesting deferment of storage targets be changed to be concurrent with the filing for approval of RFO procurement;
- Whether the Energy Storage Decision's deadline for submission of RFO contracts be changed to 12 months after RFO offers are shortlisted;
- Whether there should be no requirement for a compliance filing between the Commission's decision on this application and PG&E's issuance of its proposed RFO;
- Whether the Commission should allow stranded cost recovery for the full term of an energy storage contract;
- Whether PG&E should be authorized to submit contracts resulting from the RFO by advice letter; and
- Whether electric generation using biogas qualifies as eligible energy storage;

#### **B.** Organization and Qualification to Transact Business (Rule 2.2)

PG&E is, and since October 10, 1905 has been, an operating public utility corporation organized under California law. It is engaged principally in the business of furnishing electric and gas services in California. A certified copy of PG&E's Restated Articles of Incorporation,

<sup>&</sup>lt;u>39</u>/ Energy Storage Decision Section 4.5.3.

effective April 12, 2004, is on record before the Commission in connection with PG&E's Application 04-05-005, filed with the Commission on May 3, 2004. These articles are incorporated herein by reference pursuant to Rule 2.2 of the Commission's Rules.

#### C. Authority to Increase Rates (Rule 3.2)

PG&E does not propose to modify its electric rates in this Application. This Application only requests the Commission to decide the issues listed in section V.A.7., above, affirmatively in PG&E's favor and approve PG&E's 2014 Energy Storage Plan. It does not seek Commission review and approval of any procurement transaction. Specific energy storage transactions will be submitted for subsequent Commission approval either through PG&E's General Rate Case or through a separate application or advice letter. Any rate impact from the proposed procurement and PG&E's authority to increase rates will be determined in those subsequent proceedings.

#### VI. REQUESTED RELIEF

PG&E respectfully requests the Commission to issue an order that finds that:

- 1. By filing this Application, PG&E has complied with D.13-10-040, Ordering Paragraph 3;
- 2. PG&E should be authorized to issue the RFO described in this Application on December 1, 2014;
- 3. PG&E has correctly identified its existing eligible energy storage credits and correctly calculated its 2014 Biennial Adjusted Storage Target;<sup>40/</sup>
- 4. PG&E should recover its costs of energy storage procurement through the various ratemaking mechanisms as proposed;
- 5. The Energy Storage Decision's deadline for requesting deferment of storage targets should be changed to be concurrent with the filing for approval of RFO procurement;
- 6. The Energy Storage Decision's deadline for submission of RFO contracts should be changed to 12 months after RFO offers are shortlisted;
- 7. There be no intermediate compliance filing required between the Commission's decision on this application and PG&E's issuance of its proposed RFO;

<sup>&</sup>lt;u>40</u>/ Energy Storage Decision Section 4.5.3.

- 8. The Commission should allow stranded cost recovery for the full term of an energy storage contract;
- 9. PG&E should be authorized to submit contracts resulting from the RFO by advice letter;
- 10. Electric generation using biogas qualifies as eligible energy storage; and
- 11. PG&E should be granted such other relief as the Commission finds to be just and reasonable.

Respectfully submitted,

TRINA HORNER

WILLIAM V. MANHEIM EVELYN C. LEE

By: <u>/s/ Trina Horner</u> TRINA HORNER

Vice President, Regulatory Proceedings and Rates Pacific Gas and Electric Company 77 Beale Street, B10B San Francisco, CA 94105 Telephone: (415) 973-6490 Facsimile: (415) 973-7226 E-Mail: TNHc@pge.com

PACIFIC GAS AND ELECTRIC COMPANY

Dated: February 28, 2014

By: <u>/s/ Evelyn C. Lee</u> EVELYN C. LEE

Law Department Pacific Gas and Electric Company 77 Beale Street, B30A San Francisco, CA 94105 Telephone: (415) 973-2786 Facsimile: (415) 973-5520 E-Mail: ECL8@pge.com

Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

#### VERIFICATION

I, Trina Horner, am an officer of Pacific Gas and Electric Company, a corporation, and am authorized, pursuant to Code of Civil Procedure § 446, ¶3, to make this verification on its behalf. I have read the foregoing APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY (U 39-E) FOR AUTHORIZATION TO PROCURE ENERGY STORAGE RESOURCES (2014-2015 BIENNIAL CYCLE) dated February 28, 2014.

The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 28<sup>th</sup> day of February 2014 at San Francisco, California.

/s/ Trina Horner

Trina Horner Vice President Regulatory Proceedings and Rates

### **APPENDIX A**

# **Governing Statutes and Rules**

Subject	Reference	Key Provision
Energy Storage	Assembly Bill ("AB") 2514, codified at Public Utilities Code ("Pub. Util. Code") Sec 2835	Requires California Public Utilities Commission ("CPUC") to determine targets for local serving entity procurement of energy storage resources
Energy Storage	CPUC Rulemaking ("R.")10- 12-007	Review of staff's Energy Storage Framework proposal
Energy Storage	CPUC ("D.") 13-10-040	Requires Investor-Owned Utility ("IOU") procurement of energy storage pursuant to biennial CPUC-approval Plan
Greenhouse Gas ("GHG") Emissions Performance Standard	Senate Bill ("SB") 1368, codified at Pub. Util. Code Sec 8340	Prohibits "covered procurement" from exceeding CO2 emissions standard of 1100 lb./MWh
Renewables Portfolio Standard	AB 327	Requires IOUs to procure 33% of energy from renewable resources by 2020
GHG	AB 32, codified at Health & Safety Code § 38500 et seq.	Requires California to reduce GHG to 1990 levels by 2020.
Self-Generation Incentive Plan ("SGIP")	Pub. Util. Code § 376.6 D.11-12-030	Establish SGIP to provide incentives for investing in distributed generation.
Permanent Load Shifting ("PLS")	D.12-04-045 Resolution E-4586	Adopts PLS programs and budgets.
Demand Response	D.08-04-050 D.10-12-036	Load Impacts of Demand Response and Demand Response Participation in CAISO Market
Resource Adequacy	D.13-06-024	Energy Storage may be procured as a form of flexible capacity used to provide resource adequacy
Alternative-Fueled Vehicle Programs	R.13-11-007	Evaluation of electric vehicle batteries for energy storage
Long Term Procurement Plan ("LTPP")	R.12-03-014	Need determinations may tie to procurement energy storage
Procurement Rules	D.07-12-052	Utility procurement outside of competitive solicitations; development of utility owned resource

Subject	Reference	Key Provision
Transmission Interconnection Rules	CAISO Large Generator Interconnection Agreement	Requirements for generator interconnection to grid at transmission level
Distribution Interconnection Rules	Utility Wholesale Distribution Tariff	Requirements for generator interconnection with IOU-owned distribution system
Distribution Interconnection Rules	Rule 21	Interconnection at distribution level by Qualifying Facilities ("QFs") under Public Utilities Regulatory Policy Act ("PURPA"), net metering, and SGIP
Confidentiality	D.06-06-066, D.08-04-023	Confidentiality of energy procurement information submitted to CPUC
Confidentiality	CPUC General Order 66-C	Exceptions to Public Records Act
Cost Recovery	D.04-12-048	10-year limit on recovery of procurement costs except for RPS contracts
Cost Recovery	D.06-07-029	Cost Allocation Methodology for long-term procurement of new generation
Cost Recovery	D.08-09-012	Responsibility for non- bypassable charges
Standards of Conduct	D.02-10-062, as modified by D.02-12-074; D.03-06-067; D.03-06-076.	CPUC Standards of Conduct for energy procurement

### **APPENDIX B**

2014 Energy Storage Request for Offer Solicitation Protocol



### **Energy Storage Request for Offers Solicitation Protocol**

2014 ES RFO

Draft for December 1, 2014
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# I. Introduction and Overview

## I.A. Overview

Pacific Gas and Electric Company ("PG&E") is issuing this Energy Storage ("ES") Request For Offers ("RFO" or "Solicitation") to achieve its procurement megawatt ("MW") targets established in the California Public Utilities Commission ("CPUC") Decision D.13-10-040 and to procure the products and services requested pursuant to this solicitation.

In October 2013, the CPUC approved a final decision setting procurement targets for CPUC jurisdictional load serving entities (LSEs)<sup>1</sup>. PG&E's procurement targets for the transmission and distribution connected ES resources under this decision are summarized in the following table:<sup>2</sup>

	2014 Cycle
Transmission System Connected (MW)	50
Distribution System Connected (MW)	30
Total (MW)	80

Through this first of four RFOs, PG&E seeks offers ("Offer or Offers") to meet its first MW target. This Solicitation Protocol sets forth the terms and conditions of PG&E's 2014 RFO. By responding to this RFO as described in Section V, Paragraph A "Agreement by Participant" (page 24), the Participant agrees to be bound by all the terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E. An entity submitting an Offer in response to this Solicitation Protocol is hereby defined as a "Participant." The Independent Evaluator ("IE") for this Solicitation will be chosen prior to issuance.<sup>3</sup>

This Solicitation Protocol adheres to the guiding principles contained within the CPUC's energy storage procurement policy, which includes but is not limited to the following:

- 1. The optimization of the grid, including peak reduction, contribution to reliability needs, or deferment of transmission and distribution upgrade investments;
- 2. The integration of renewable energy; and

<sup>&</sup>lt;sup>1</sup> Decision Adopting Energy Storage Procurement Framework and Design Program13-10-040

<sup>&</sup>lt;sup>2</sup> The CPUC also adopted procurement targets for Customer Connected ES. Procurement by PG&E to meet those targets will occur outside of this RFO.

<sup>&</sup>lt;sup>3</sup> The Independent Evaluator's email address is \_\_\_\_\_.

3. The reduction of greenhouse gas emissions to 80 percent below 1990 levels by 2050, per California goals.

In this RFO, PG&E will consider Offers for the following storage resources, which are further described in Section II.C and are referred to as "Projects":

- New Stand Alone Energy Storage Resources, not currently existing
- Existing Stand Alone Energy Storage Resources
- Hybrid Conventional/Energy Storage Resources using existing conventional generation currently under contract to PG&E
- Hybrid Renewable/Energy Storage Resources using new storage to supplement generation by a facility that qualifies as an Eligible Renewable Energy Resource, as certified by the California Energy Commission as meeting the applicable criteria set forth in the California Public Utilities Code, Sections 399.12 subsection (e) and 399.1.2.5 ("RPS")

# I.B. Energy Storage Website and Communication between PG&E and

# Participants

To access PG&E's website where all Solicitation Protocol documents, information, announcements and Questions and Answers are posted and available for Participants to download, go to <u>www.pge.com/rfo</u> and click on "2014 Energy Storage RFO." All correspondence will be monitored by the Independent Evaluator (IE) selected to monitor this Solicitation. The IE is an independent, third-party evaluator who is required to monitor and evaluate any competitive solicitation for utility power procurement pursuant to several CPUC decisions.

All Offer submittal information pertaining to this RFO will be hosted on the Power Advocate site. In order to participate in this RFO, Participants must register through Power Advocate at the Public Registration Link: <u>TBD</u>. PG&E strongly encourages Participants to register with Power Advocate well before Offers are due. PG&E will be posting the detailed instructions for submitting Offer(s) and using the online platform on PG&E's website prior to Offer submittal.

# I.C. Schedule Overview

The expected schedule for this RFO is listed below. All deadlines occur at the 5:00 P.M. Pacific Prevailing Time (PPT), unless otherwise noted.

Ongoing:	Participants are invited to register on-line to receive
	notices regarding the RFO at <a href="https://www.pge.com/rfo.">www.pge.com/rfo.</a>

December 1, 2014	PG&E issues RFO
December 16, 2014	Deadline for Participant to submit registration for ES Participants' Conference
December 18, 2014	General Participants' Conference
January 15, 2015	General Participants' Offer Form Webinar
February 27, 2015	Deadline for PG&E to receive Offers By 1:00 P.M. PPT.
June 30, 2015	PG&E notifies selected Participants of their Offer eligibility for Shortlist Negotiations.
	Participants' accept Shortlist position, and post any Shortlist Offer Deposit, as applicable.
June 30, 2016	PG&E 2014 ES Solicitation Shortlist Expires

To be considered in this RFO, an Offer must be received by PG&E in accordance with this Solicitation Protocol no later than 1:00 P.M. PPT on [February 27, 2015].

The schedule for the RFO is subject to change at PG&E's sole discretion at any time and for any reason. PG&E will endeavor to notify Participants of any schedule change, but shall not be liable for any costs or liability incurred by Participants or any other third party due to a change in the schedule or for failing to provide notice of any change. PG&E expects to seek CPUC Approval, as will be defined in the fully-executed definitive agreement ("Agreement"), of all executed Agreements resulting from this RFO. PG&E reserves the right to execute Agreements with individual Participants at any time after shortlisting and to seek CPUC approval of individual Agreements prior to the execution of others in order to expedite the approval process.

PG&E is committed to minimizing the amount of time required to negotiate agreements and obtain CPUC Approval, while ensuring that the Participants have sufficient time to prepare Offers and PG&E has sufficient time to evaluate and review Offers to ensure the best are selected for negotiations. Negotiations of Shortlisted Offers may conclude sooner or be extended beyond the date specified above. The most significant way to reduce the amount of time spent in the RFO process is for Participants to provide all of the Required Information and conform your Offer to the agreement that best suits your offered product or project, as applicable.

## I.D. Events in the RFO Schedule

- <u>On-line Registration</u>: Participants may register at the RFO website <u>http://www.pge.com/rfo</u> to receive timely announcements and updates about PG&E's Energy Storage RFO and other RFO related information. On-line registration is not required, but is strongly recommended. Participants who register will receive information notices on this RFO and other upcoming RFO solicitations.
- <u>PG&E issues the Solicitation</u>: All documents associated with the solicitation, including documents which Participants are required to provide with their Offer, will be posted to PG&E's public website under the "[2014 Energy Storage RFO]".
- 3) <u>Participants' Conference</u>: PG&E will hold a Participants' Conference on [December 18, 2014]. Call-in information and attendance registration form will be provided on the Solicitation website. In order to facilitate the expected large number of ES RFO Conference Participants, PG&E requests that Participants choosing to participate submit the Participants' Conference Registration Form, preferably no later than December 16, 2014 at 5:00 P.M. PPT, two days prior to the scheduled Conference date, to <u>EnergyStorage@pge.com</u>.
- 4) <u>Participants' Offer Form Webinar</u>: PG&E will hold a Participants' Offer Form Webinar on [January 15, 2015]. During this Webinar, PG&E will walk Participants through the process of completing the RFO Offer Form. Call-in information will be provided on the Solicitation website.
- 5) <u>Offers Due</u>: Offers must be received by PG&E by 1 p.m. PPT on [February 27, 2015] Participant offer package(s) must be submitted through the online platform, Power Advocate. Offer package(s) must include the documents described in Section "VII.B. Required Information" (page 29).
- 6) Upon receiving Offers, and as necessary, PG&E may request a meeting or conference calls to discuss a Participant's Offer. The purpose of these discussions is to provide PG&E with clarity and a full understanding of the details of an Offer for its evaluations. The IE may be present on these discussions.
- 7) <u>PG&E Selects Shortlist</u>: PG&E expects to notify Participants of their selection to PG&E's Shortlist by Shortlist Notice during the week of [June 30, 2015]. Notified Participants must meet the following requirements to be Shortlisted:

Participant shall post a Shortlist Offer Deposit as described in Section V.D. Each Shortlisted Participant must execute a Confidentiality Agreement in the form attached as Appendix C, by which agreeing to keep confidential the terms discussed during the course of finalizing the Agreement(s), within five (5) business days of Participant's receipt of written notice of its Shortlist Notice. PG&E reserves the right to request additional information and to add additional Participants to the shortlist following the initial selection.

8) PG&E expects to seek CPUC's approval of each Agreement.

# I.E. PG&E's Reservation of Rights

This RFO is an invitation to submit Offers to PG&E; it does not constitute an offer to buy and creates no obligation to execute any Agreement or to enter into a transaction under an Agreement as a consequence of the RFO. PG&E reserves the right to request information from a Participant at any time during the solicitation process. PG&E reserves the right, in its sole discretion, to reject any Offer at any time for any reason, including but not limited to grounds that it does not conform to the terms and conditions of this RFO or contains terms that are not acceptable to PG&E. PG&E also retains the discretion, in its sole judgment, at any time, (a) to formulate and implement new or additional criteria for the evaluation and selection of Offers; (b) to negotiate with any Participant; or (c) to modify this RFO as it deems appropriate to implement the RFO and to comply with applicable law or other direction provided by the CPUC. In addition, PG&E reserves the right to either suspend or terminate this RFO at any time for any reason whatsoever. PG&E will not be liable in any way, by reason of such withdrawal, rejection, suspension, termination or any other action described in this paragraph to any third party, including any Participant, whether Participant has submitted an Offer or not.

# II. RFO Goals

# II.A. PG&E Resource Needs

PG&E's 2014 Energy Storage Procurement Target is 80 MW for transmission and distribution system connected resources. Given PG&E's progress towards this target, PG&E may elect to procure a different amount than 80 MW. PG&E may elect to either enter into agreements with (i) entities that provide energy storage services or resource adequacy value, as discussed further in II.B below, or (ii) a developer who will build or enable PG&E to build an energy storage facility that PG&E will then own and operate, as discussed in Section II.D ("Utility Ownership Options").

PG&E is seeking Offers from resources that meet the specifications noted in Section III. "Eligibility Requirements" (page 14). Optimal Offers will be those that best allow PG&E to procure energy storage and contribute to the other criteria specified in Section IV. "Evaluation of Offers" (page 17).

## II.B. Products

PG&E is seeking Offers to purchase "Products" from existing and new Facilities, Hybrid Conventional Facilities, and Hybrid Renewable Facilities. The Products, as more clearly defined in each of the potential Agreements (See applicable Appendix G), are individually known as "Procurement Agreement" and collectively known as the "Procurement Agreements." The list of Procurement Agreements and the associated short summary of key terms for each of the Procurement Agreements are provided below:

Interconnection	Agreement Type
	Energy Storage Agreement ("ESA") for a wholesale market resource
Transmission	Tolling Agreement
	RPS PPA
	Resource Adequacy ("RA") Confirm
	ESA for a wholesale market resource
Distribution	RPS PPA
	RA Confirm

Depending on the Procurement Agreement type, PG&E seeks to purchase energy, capacity, ancillary services, renewable and environmental attributes, if applicable, and/or Resource Adequacy, in each case as further defined in the relevant Procurement Agreement. PG&E requires Offers in which PG&E is the sole off-taker of the net output from the facility. An Offer requires the energy to be separately metered by a CAISO-approved meter located on the high side of a step-up transformer that is dedicated solely to the project, and the entire Product is delivered to PG&E. Specific operating flexibility must be defined by the Participant. Each of the Procurement Agreements, except for the RA Confirm is drafted based on the assumption that PG&E is the Scheduling Coordinator ("SC"). If PG&E is not the Scheduling Coordinator, the Procurement Agreements will need to be modified.

Any operational limitations on the facility due to environmental constraints or other factors must be specifically identified in the Offer Form (Appendix A) and the Project Description (Appendix B) and be substantiated in terms of operational criteria, technical limitations, permit requirements, or environmental regulations.

Regardless of the contract structure offered, Participants are requested to itemize capacity, fixed O&M, variable O&M and fuel costs (where applicable) to aid PG&E in comparing Offers.

A Participant may submit one Offer per project at a particular site with no more than four additional variations to an Offer. An Offer variation may only include term, price, commercial operation date, or duration.

See definitions for "Product" and referenced defined terms in the underlying form of each Procurement Agreement.

# 1. Energy Storage Agreement (ESAs):

Contract Options	Energy Storage Agreement (ESA)
Resource Configuration/Type	Stand Alone Energy Storage Facility
Credit/Collateral: PDS	PDS: \$15/kW at Execution/ \$60kW at CPUC Approval
Credit/Collateral: DTS	DTS: To be discussed during contract negotiations
Maximum Term	10 years
Minimum Project Size	10 MW
Minimum Duration	15 minutes
Product (Attributes/Rights conveyed to Buyer)	All available attributes of the facility including: Capacity, Capacity Attributes, Energy, and Other Products (including Ancillary Services)

PG&E is seeking ESA Offers for new energy storage resources. PG&E will not consider Offers from partial Units. Specific operating flexibility must be defined by the Participant. For details, see the appropriate Appendix G Agreement.

### 2. Amendment to Tolling Agreement

Contract Options	Amendment to Tolling Agreement
For existing conventional facilities that are already under a long-term contract with PG&E:	Amendment to existing Tolling Agreement with PG&E
Credit/Collateral: PDS	PDS <sup>4</sup> : \$15/kW at Execution and \$60/kW at CPUC Approval
Credit/Collateral: DTS	DTS: To be discussed during contract negotiations
Maximum Term	The minimum of (i) 10 years or (ii) the remaining Delivery Term under the existing contract
Minimum Project Size	10 MW
Minimum Duration	15 minutes

<sup>4</sup> The PDS only applies to the new energy storage capacity.

For Projects that are seeking to add Energy Storage to an existing Conventional Facility currently under long-term contract with PG&E, their current Tolling Agreement will need to be amended. Participants interested in this option should provide a detailed term sheet or redline with their Offer indicating the commercial or other terms that would need to be modified to accommodate the incremental energy storage capacity.

#### 3. RPS PPA

Contract Options	RPS Agreement
For New RPS not yet under contract:	New RPS Agreement with appropriate modifications
For new or existing RPS that is already under contract with PG&E:	Amendment to existing RPS Agreement with PG&E
Credit/Collateral: PDS	PDS <sup>5</sup> : \$15/kW at Execution/ \$60/kW at CPUC Approval/ \$90/kW at CPUC Approval for new baseload resources
Credit/Collateral: DTS	DTS: To be discussed during contract negotiations
Maximum Term	20 years
Minimum Project Size	10 MW
Minimum Duration	15 minutes
Product (Attributes/Rights conveyed to Buyer)	All available attributes of the facility including: Capacity, Capacity Attributes, Energy, Other Products (including Ancillary Services), and Green Attributes

Participants offering an Energy Storage project in conjunction with an RPS-eligible resource should include provisions affirming such status and conveying the environmental attribute benefits to PG&E by selecting the appropriate optional elements in the documentation.

For Projects that are seeking to add Energy Storage to an existing RPS Facility currently under long-term contract with PG&E, will need to amend their current RPS Agreement.

<sup>&</sup>lt;sup>5</sup> For Offers where energy storage is being added to an existing online RPS facility, the PDS only applies to the new energy storage capacity. If the RPS facility is also new, then, the PDS is calculated off of the entire combined capacity.

Contract Options	Resource Adequacy Confirmation
Resource Configuration/Type	New and Existing
Credit/Collateral: PDS	PDS <sup>6</sup> : \$15/kW at Execution/ \$60/kW at CPUC Approval
Credit/Collateral: DTS	DTS: To be discussed during contract negotiations
Maximum Term	10 years
Minimum Project Size	10 MW
Minimum Duration	The ability to operate for four consecutive hours at maximum energy output (Pmax) over three consecutive days <sup>7</sup>
Product (Attributes/Rights conveyed to Buyer)	Capacity and Capacity Attributes

## 4. Resource Adequacy Confirmation (RA Confirm)

Resource Adequacy: PG&E will consider Offers for Resource Adequacy only products, provided the capacity comes from an eligible<sup>8</sup> ES Facility, or from a portion of an eligible ES facility. A Participant must have or will require an EEI Master Agreement with PG&E by the time of execution and the form of agreement would be a Confirmation under the EEI Master Agreement.

In the event of a conflict between the terms listed in the summaries and the Procurement Agreements, the Procurement Agreements shall govern.

### II.C. Resources

PG&E will consider Offers from the following resources in this RFO:

- New Stand Alone Energy Storage Resources, not currently existing
- Existing Stand Alone Energy Storage Resources

<sup>&</sup>lt;sup>6</sup> The PDS only applies to new energy storage capacity.

<sup>&</sup>lt;sup>7</sup> Subject to the final RA counting rules and eligibility requirements applicable to energy storage resources as determined by the outcome of CPUC RA Proceeding: R.11-10-023

<sup>&</sup>lt;sup>8</sup> Eligible as defined by Public Utility Code 2835(a) except for pumped storage greater than 50 MW. D.13-10-040.

- Hybrid Conventional/Energy Storage Resources using existing conventional generation currently under contract to PG&E
- Hybrid Renewable/Energy Storage Resources using new storage to supplement generation by a facility that qualifies as an Eligible Renewable Energy Resource, as certified by the California Energy Commission as meeting the applicable criteria set forth in the California Public Utilities Code, Sections 399.12 subsection (e) and 399.1.2.5)

See additional information in Section III "Eligibility Requirements."

### 1. Utility Ownership Options

### a) Purchase and Sale Agreement for Utility Ownership on a Turnkey Basis:

PG&E is seeking PSA Offers for Facility Ownership of new energy storage resources. The Seller will commit under a Purchase and Sale Agreement ("PSA") to develop the Project (including obtaining all real property interests, permits and other authorizations and approvals required to construct and operate the Project), finance the Project, and cause the Project to be constructed, completed, tested and ready for placement into regular commercial operation by the Guaranteed Commercial Availability Date in accordance with the standards described in the applicable Appendix G, all on a turnkey basis at its own risk and at no cost or expense to PG&E other than its payment of the Purchase Price. Specific operating flexibility must be defined by the Participant. For details, see the applicable Appendix G. PG&E would take ownership of the facility once it is constructed and tested. Offers must include milestone guarantees and performance guarantees for the completed facility.

### b) Engineering, Procurement, and Construction contract for PG&E:

PG&E may also choose to perform the engineering, procurement and construction ("EPC") function and enter into contracts for a project that PG&E would develop and build.

# **III. Eligibility Requirements**

PG&E will consider an Offer from or for Projects that meet the applicable specifications noted below, in addition to the Project requirements set forth in Section [II.C]:

#### III.A. Project Size

Projects interconnected to the Distribution System: An energy storage Offer must be at or greater than 1 MW.

Projects interconnected to the CAISO Transmission System: An energy storage offer must be at or greater than 10 MW. Projects sized less than 10 MW may be eligible if they are sized to meet transmission or distribution circuit benefits identified by PG&E and listed in the RFO materials (in Section TBD). PG&E has a preference for projects 25 MW or greater.

Pumped Hydro: For energy storage projects that are pumped hydro systems, the system may not be more than 50 MW in accordance with the Decision.

Aggregated Capacity: Multiple Energy Storage facilities may aggregate their capacity in order to achieve the minimum project size, so long as the aggregate product is at least 10 MW, no single facility is less than 1 MW, the aggregate product has a single CAISO Resource ID, and the aggregate product is capable of being scheduled by the Buyer and dispatched by the CAISO or Buyer, as if they were one project, in accordance with the terms of the ESA.

### **III.B.** Qualities

The generating facility is an ES Facility that demonstrates its ability to meet one or more of the following guidelines: grid optimization, integration of renewable energy, or reduction of greenhouse gas emissions.

### III.C. Commercial Online Date

- 1) Stand Alone Energy Storage Projects must commence or have commenced operation between January 1, 2010 and December 31, 2024.
- 2) For Hybrid Energy Storage Projects (Storage + Existing Conventional Generation or Storage + RPS Generation) the Generation portion may have existed prior to January 1, 2010, but the Energy Storage portion must be new (see above) and online prior to December 31, 2024.

#### III.D. Contract Term

[see Section II.C].

#### III.E. Certain Performance and Operational Requirements

1) The Project must have a fifteen (15) minute minimum duration.

- 2) If an offer includes Resource Adequacy, the Project must meet the applicable CPUC and CAISO requirements, such as four-hour minimum duration.
- 3) The Project must be connected to the CAISO grid and able to respond to electronic signals Buyer's, Third-Part SC or CAISO systems.

### III.F. Electric Interconnection

Electric Interconnection refers to the technical aspects and equipment required to connect generators or other resources (such as energy storage devices) to the transmission or distribution systems. An interconnection is required before participation in the wholesale market can be achieved. PG&E prefers projects that are active in the interconnection queue.

After a resource has made it through the study phases of the interconnection process, contracts must be signed, the resource must be modeled in the CAISO's market systems, and metering and telemetry equipment will need to be installed before participation in the wholesale power market is allowed. In order to participate in the wholesale power market, these steps must be completed whether the resource interconnects using the CAISO's transmission interconnection process or using a utility's distribution interconnection process.

The interconnection process can be lengthy (over two years). Each Participant is strongly encouraged to initiate and submit an interconnection request to PG&E (or other California IOU) for distribution interconnection and to the CAISO for transmission interconnection prior to Offer submittal, as appropriate ("Interconnection Procedures"), and as further described in Section "X. Electric Interconnection" (page 32).

For Offers that are shortlisted and have not initiated an interconnection request, such process should be initiated at the first available time in conjunction with PG&E's and the CAISO's GIDAP process and required to be in process by execution of the applicable Agreement.

# III.G. Distribution system benefit projects, with specific geographic locations

## and functions for utility-ownership:

[TBD and will be identified for the RFO issuance.]

### III.H. Product Requirements

As will be further provided in the applicable Procurement Agreement, each Participant must agree and be able to: (i) to schedule and dedicate the contracted amount of electrical output or Product to PG&E, net of station use and electrical losses; and (ii) not

to sell, deed, grant, convey, transmit, or otherwise provide any energy, capacity, ancillary services or any other related electricity product, including Green Attributes, or capacity attributes associated with the output to an entity other than PG&E.

#### III.I. Public Funding

Energy storage projects receiving funding in part from local, state, and federal public programs, such as PIER- and EPIC, may count toward the procurement targets. Funding from other third party sources not listed must be disclosed.

## **IV. Credit**

Participants that execute an Agreement with PG&E, whether the Project is new or existing, must post collateral to PG&E to mitigate PG&E's risk in the event that the Project is not constructed or placed into commercial operation, or Seller is otherwise unable to meet the conditions of the Agreement prior to the start of the delivery term. PG&E will retain the Project Development Security or Pre-Delivery Term Security to cover the liquidated damages due to PG&E in the event the Participant defaults under the terms of the Agreement prior to the start of the Delivery Term. All Project Development Security or Pre-Delivery Term Security or Pre-Delivery Term Security must be in the form of Letter of Credit or cash. If providing a Letter of Credit, please review carefully the Letter of Credit requirements set forth in the applicable Procurement Agreement. PG&E at its sole discretion may modify the security requirements depending on the status of the facility and commencement of the delivery term.

### **IV.A.** Procurement Agreement Requirements:

See Section II.C

#### **IV.B.** Utility Owned Storage

[TBD]

## V. Evaluation of Offers

PG&E's Evaluation will apply the principles of "least-cost, best-fit" using quantitative and qualitative criteria based on information contained in the submitted Offers.<sup>9</sup> The result of PG&E's Evaluation will be to identify the Offers with which PG&E will enter into negotiations ("Shortlisted Offers").

<sup>&</sup>lt;sup>9</sup> Participants will be required to submit accurate figures, descriptions and calculations with their offers.

## V.A. PG&E's Evaluation of Offers for Transmission- and Distribution-Connected

### Storage

PG&E's Evaluation of Offers on the transmission- and distribution- connected storage grid domains will cover four functions: (1) Generation/Market, (2) Transmission Reliability, (3) Distribution Reliability, and (4) Dual-Use (T&D Reliability & Market). PG&E's Evaluation of these regulatory functions will include quantitative and qualitative criteria. The quantitative criteria include Net Market Value (NMV) and Portfolio Adjusted Value (PAV).

NMV benefits include net energy, capacity and ancillary services value. NMV costs include the offered fixed and variable pricing in the applicable Procurement Agreement and transmission network upgrade costs.

PAV may include adjustments that are relevant to PG&E's total energy portfolio, specifically for, but not limited to, location, deferral or replacement of transmission and/or distribution (T&D) project costs, increased efficiency for fossil generation and renewable generation curtailment support.

The benefit of deferred or avoided T&D project costs will be evaluated for Offers that are located on PG&E-identified substations and/or feeders. Such benefit will be assessed based on the deferred or avoided cost of the least expensive non-storage solution meeting the PG&E-identified operational need for a distribution location. This method compares energy storage projects directly to the T&D system project that would most likely have been required to be built. Such analysis will be based on the most current information available at the time the evaluation is performed. The main factors in the analysis for each alternative—storage or non-storage—include the installed cost, the operating and maintenance cost, project life, return on investment and discount rate.

### V.B. PG&E's Evaluation of Offers Co-Located with Energy Generation Facilities

Projects that are co-located with energy generation facilities may require further evaluation. Because this type of operation will be integrated with and dependent upon the operation of the associated generation facility, the NMV and PAV of the storage offer must be calculated as the NMV and PAV of the combined facility, minus the NMV and PAV of the generation facility alone. Depending on the exact configuration of the facility, including interconnection details such as whether the storage facility can be charged from the grid or only from the generation facility, co-location with a generation facility could increase or decrease the value of a storage project compared to an identical project sited at a standard transmission or distribution connection point.

### V.C. PG&E's Evaluation of Utility-Owned Offers

PG&E will evaluate UOG Offers submitted by third-parties (turnkey Purchase and Sale Agreements or "PSA's") or potentially, by PG&E itself (Engineering, Procurement and Construction contracts or "EPC") on head to head competitive basis. The Decision authorizes utilities to consider utility owned generation (UOG) for up to 50 percent of the overall procurement targets<sup>10</sup>, which replaces the CPUC's previous guidance approving long-term procurement of conventional generation.<sup>11</sup>

### V.D. Details of PG&E's Evaluation Protocol

PG&E will evaluate each Offer received in the ES Storage RFO using quantitative and qualitative criteria, which may include, but are not limited to:

#### Quantitative Attributes:

- 1. Net Market Value (NMV)
  - a. Benefits (Energy, Ancillary Services, Capacity)
  - b. Fixed and Variable Costs
- 2. Portfolio-Adjusted Value (PAV)
  - a. Location
  - b. Cost of Transmission Network Upgrade
  - c. T&D Investment Deferral Value
  - d. Increased Efficiency of Fossil Generation
  - e. Renewable Generation Curtailment Support

#### Qualitative Attributes:

- 1. Project Viability
- 2. Supplier Diversity
- 3. Credit
- 4. Contract Modifications
- 5. Counterparty Concentration
- 6. Technology Diversity

<sup>&</sup>lt;sup>10</sup> Conclusion of Law 31 of D.13-10-040 in Rulemaking 10-12-007, "Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems" stated, "It is reasonable to limit utility ownership of storage systems to 50% across grid domains."

<sup>&</sup>lt;sup>11</sup> Ordering Paragraph 30 of D.07-12-052 in Rulemaking 06-02-013, "Order Instituting Rulemaking to Integrate Procurement Policies and Consider Long-Term Procurement Plans" stated, "IOUs can not issue RFOs that seek both Power Purchase Agreements (PPAs) and Utility build bids."

#### 1. Quantitative Attributes

#### a) Net Market Value (NMV)

NMV compares an offer's costs to its market value. NMV is calculated for each offer as follows:

Net Market Value: NMV = (E + A + C) - (V + F)

Where:

E = Energy Value

- A = Ancillary Services (A/S) Value
- C = Capacity Value
- V = Variable Cost
- F = Fixed Cost

The risks and uncertainties associated with an offer's costs and benefits will be considered as part of Market Valuation.

#### 1) Energy Value

PG&E will assess the market value<sup>12</sup> of the energy deliveries for each offer based on a charging and discharging time series obtained for the offer over its delivery term. Any capacity used to meet reliability needs for the transmission or distribution system will be reserved first, to avoid double counting benefits. The market value of the energy will be computed from the appropriate price curves for the corresponding Trading Hub (NP15, ZP26, or SP15) adjusted for its location. The Locational Marginal Price (LMP) multipliers may be used to incorporate congestion and losses specific for the location, and therefore value the contribution to transmission congestion relief. The cost of Charging Energy (grid energy used to charge Energy Storage) will also be included in the Energy Value.

#### 2) Ancillary Services (A/S) Value

For offers that provide PG&E the ability to schedule and receive CAISO market revenues for A/S in accordance with CAISO tariff requirements, the incremental benefit of having A/S capability will be captured.

### 3) Capacity Value

<sup>&</sup>lt;sup>12</sup> Market value of energy includes GHG compliance costs, so impact on GHG is implicitly included in energy value.

The value of Resource Adequacy (RA) capacity associated with each offer will be determined based on the projected monthly quantity of Net Qualifying Capacity (NQC, for Generic RA) and Effective Flexible Capacity (EFC, for Flexible RA). Resources that are expected to be found fully deliverable by the CAISO will be attributed the full Generic RA capacity value for its projected NQC.<sup>13</sup> To the extent that an offer provides flexible capacity, the EFC capacity that is expected to count and meet the must-offer obligation for flexible RA will be evaluated at the projected monthly premium for flexible RA and added to the Capacity Benefit.<sup>14</sup>

### 4) Variable Cost

Variable cost for an offer will be calculated as the sum of hourly variable payments. Hourly variable payments will be based on the variable O&M (VOM) price multiplied by the discharge time series obtained for the offer. Variable cost will also include the cost of fuel (other than grid energy) and/or start-up costs, if applicable, but does not include the market costs for Charging Energy. The contract VOM price will affect the discharge time series – all other things being equal, a lower VOM will result in more energy charging and discharging both in PG&E's Evaluation and in actual operation.

### 5) Fixed Cost

Fixed Cost for an Offer will be calculated as the sum of projected monthly fixed payments. Monthly fixed payments will be based on the capacity payment price and the monthly contract capacity specified in the Offer, or the energy payment price (\$/MWh), as applicable.

Fixed Cost for a PSA Offer will be collected by PG&E's Cost of Service Model to determine the revenue requirement (mainly depreciation, return, taxes and fixed O&M) based on initial capital costs and fixed O&M of the facility. Each Offer will also be assigned an annual fixed overhead cost (independent of the size of the project) representing administrative costs plus the cost of scheduling into CAISO markets.

<sup>&</sup>lt;sup>13</sup> See the Commission's Resource Adequacy program (<u>http://www.cpuc.ca.gov/PUC/energy/Procurement/RA/ra\_history.htm</u>) and the CAISO Reliability Requirements (<u>http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx</u>)

<sup>&</sup>lt;sup>14</sup>See the Commission's current RA proceeding (Rulemaking 11-10-023) and the CAISO's FRAC-MOO initiative<u>http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx</u>

#### b) Portfolio Adjusted Value (PAV)

PG&E will calculate PAV to derive the value of each Offer from the perspective of PG&E's portfolio, not just from the market perspective. PAV may include the adjustments to the NMV based on factors including, but not limited to: (1) Location, (2) Transmission Network Upgrade Costs (3) T&D Investment Deferral Value, (4) Increased Efficiency for Fossil Generation, and (5) Renewable Generation Curtailment Support.

#### 1) Location

PG&E has a preference for projects in its service territory. Offers for energy storage from projects in NP15 will have an equal or higher PAV than comparable offers from resources in SP15.

For an Offer in a location that is projected to contribute to PG&E's satisfaction of a Local Capacity Requirement (LCR), the offer's capacity may be evaluated at a premium relative to the value of capacity that satisfies only system needs.

### 2) Transmission Network Upgrade Cost

Transmission availability and transmission-related costs will be part of an offer's PAV. PG&E will use results from Participants' interconnection studies, if available. Network upgrades include all facilities necessary to: (i) reinforce the transmission system after the point where a project's electricity first interconnects with and enters the subject utility's transmission grid; and (ii) transmit or deliver the full amount of generation to or from the Project.<sup>15</sup> Transmission cost adders reflect the cost of potential network upgrades borne by customers. Any transmission cost adders attributed to the Project will also be considered in ranking Offers.

#### 3) T&D Investment Deferral Value

As indicated in [Section TBD] PG&E has provided locations where energy storage is an alternative to a T&D investment, as well as the operational

<sup>&</sup>lt;sup>15</sup>Network upgrades include transmission lines, transformer banks, special protection systems, substation breakers, capacitors, and other equipment needed to transfer power to the consumer. Network upgrades are typically upfront funded by Participants, and refunded after commercial operation. The costs of network upgrades are included in transmission rates and paid by customers. For projects that are fully deliverable, PG&E will consider both reliability and deliverability network upgrades.

requirements, e.g., MW capacity and duration, associated with each location. For Offers that meet PG&E-identified operational requirements on PG&E-identified substations and/or feeders, the value of deferred T&D investment costs will be estimated.

### 4) Increased Efficiency for Fossil Generation

Energy storage has the potential for allowing gas-fired generation in PG&E's portfolio to run with fewer startups and to operate more efficiently. Not only would such efficiency reduce costs but also it would reduce greenhouse gas emissions. PG&E will estimate the cost of fuel, GHG compliance instruments, and start-ups to PG&E's portfolio that energy storage can help avoid. Such avoided cost would differ among Offers due to the variation in characteristics of those Offers.

### 5) Renewable Generation Curtailment Support

Higher penetration of renewable energy increases the likelihood of curtailment to avoid over-generation, negative energy prices, and reliability problems. Storage can help reduce the curtailment of intermittent generation in PG&E's portfolio, benefiting PG&E's customers by reducing instances of over-generation as well as increasing total generation from the renewable portfolio that contributes to meeting PG&E's RPS requirements.

#### 2. Qualitative Factors

### a) Project Viability

Project Viability means the likelihood that any resource associated with an Offer can satisfy the requirements of this RFO. This assessment is based on a review of the status and plans for key project activities (e.g. financing, site access, permitting, engineering, procurement, construction, interconnection, start-up and testing, operations, fuel supply, water supply, wastewater discharge, labor agreements, etc.).

### b) Contract Modifications

PG&E may assess the materiality and cost impact of any of Participant's proposed modifications to Solicitation requirements and the applicable Procurement Agreement or term sheet, as identified in the Detailed Term Sheet (Appendix H) to be provided with the Offer and the marked Procurement Agreement to be provided following Shortlisting. PG&E strongly encourages Participants to only make those changes to the Procurement Agreement associated with their Offer that address particular technology, project development or operational issues. PG&E will give additional consideration to Participants that agree to take on additional risk beyond what is specified in the Procurement Agreement or Term Sheet. In the RPS PPA, specially-marked contract terms are non-modifiable by CPUC order and cannot be modified.

### c) Credit

PG&E may consider the Participant's capability to perform all of its financial and financing obligations under the Agreements and PG&E's overall credit concentration with the Participant or its banks, including any of Participant's affiliates.

### d) Supplier Diversity

It is the policy of PG&E that Women-, Minority- and Service Disabled Veteran-owned Business Enterprises ("WMDVBE") shall have the maximum practicable opportunity to participate in the performance of Agreements resulting from this Solicitation.

Supplier Diversity is a consideration in the selection process. If Participant is selected and an Agreement is negotiated, the Agreement will include a requirement to make good faith efforts toward meeting the contracted supplier diversity target, and successful bidder(s) will be expected to report payments made to WMDVBEs to support the project upon request but no less than annually.

#### e) Counterparty Concentration

PG&E may consider the volume of energy or capacity already under contract from a particular counterparty, as well as offers received in this Storage RFO.

#### f) Technology Diversity

PG&E may consider technology diversity in its evaluation of offers.

# VI. Participation in the RFO Process

#### VI.A. Agreement by Participant

Each entity submitting an Offer in this RFO is a Participant. A Participant may be an individual owner, corporation, partnership or joint venture for an ES project. Each Participant (a) agrees to be bound by all terms, conditions and other provisions of this RFO and any changes or supplements to it that may be issued by PG&E and (b) makes the following representations and warranties:

- 1. Participant has read, understands, and agrees to be bound by all terms, conditions and other provisions of the RFO.
- 2. Participant has had the opportunity to seek independent legal and financial advice of its own choosing with respect to the RFO and all Appendices to the RFO.
- Participant has obtained all necessary authorizations, approvals and waivers, if any, required of Participant as a condition of: (i) submitting its Offer and, if Participant's Offer is selected; (ii) executing an Agreement with PG&E in the form submitted with its Offer, or at the conclusion of negotiations.
- 4. Participant is submitting its Offer subject to all applicable laws including, but not limited to, the Federal Power Act and all amendments thereto, and Public Utilities Code section 454.5.
- 5. Participant represents that it has carefully considered the terms and conditions of its Offer and that it is submitting its Offer in good faith, such that PG&E may reasonably expect Participant to enter into a definitive Agreement, and to negotiate, if requested by PG&E, as provided in Section XII, "Execution of Agreement," below.
- 6. Participant has not engaged in and will not engage in, Communications (as defined in the RFO) with any other Participant in the RFO concerning any terms contained in Participant's Offer, unless explicitly authorized by PG&E, and has not engaged in activities in violation of State or Federal antitrust laws or other unlawful or unfair business practices in connection with the RFO ("Prohibited Communication Activities"). Notwithstanding the foregoing, Participant may engage in communications with its advisors, counsel, experts or employees who have a need to know the content of the communications and have agreed to keep such information confidential (collectively, "advisors"). In addition, Participant may engage in communications with other Participants submitting an Offer in the RFO and their advisors ("Other Participants"), so long as: (1) such Other Participants are under common ownership and control with participant; (2) Participant and Other Participants do not engage in Prohibited Communication Activities; and (3) in the event Participant and Other Participant share a common advisor, Participant has, prior to sharing communications with such Other Participant and the common advisor, provided PG&E with (a) notice of such Other Participant and common advisor and (b) an attestation that Participant has not and will not engage in Prohibited Communication Activities with either the Other Participant or the common advisor.
- 7. The Offer submitted by Participant pertains solely to generation from an ES Facility on or before the initial delivery of electric energy under the Agreement,
- 8. If Participant's Offer is selected for PG&E's shortlist and Participant elects to continue its participation in this RFO process, Participant agrees to execute a Confidentiality

Agreement and good faith negotiations and will inform PG&E if the Participant is also participating in another ES RFO.

9. Participant will promptly notify PG&E of any change in circumstances that may affect its ability to fulfill the terms of its Offer.

A breach by Participant of any of these representations and warranties will constitute sufficient grounds for disqualification of the Participant from this RFO process and potential subsequent forfeit of the Shortlist Offer Deposit.

## VI.B. Offer

Respondents may submit one Offer for each project at a particular site. Each Offer may include five (5) Offer variations (the original Offer and four additional variation of that Offer). A variation may alter such attributes as term, price, commercial operation date, duration of discharge/operational characteristics or other Agreement terms and conditions.

## VI.C. Safety

PG&E is committed to providing safe utility (electric and gas) service to its customers. As part of this commitment, contracts arising under this RFO will require generating facilities to be operated and maintained in a safe, reliable and efficient manner that reasonably protects the public health and safety of California residents, business, employees and the community.

# VI.D. Shortlist Offer Deposit

If Participant is notified that it is eligible for PG&E's shortlist and accepts the shortlist position, then the Participant shall post a fee (the "Shortlist Offer Deposit") in the amount of \$3 per kilowatt (kW) of Contract Capacity before 5:00 P.M. PPT on the 10<sup>th</sup> business day after receiving such notice. Participant shall maintain the Shortlist Offer Deposit until the termination of negotiation with PG&E or as otherwise provided pursuant to the terms of the Agreement negotiated by PG&E and Participant.

# 1. Purpose of Shortlist Offer Deposit

The Shortlist Offer Deposit is intended to secure the obligation of each Participant to enter into a definitive Agreement, or negotiate and execute a definitive Agreement, as expressly provided in Section XII, "Execution of Agreement," below. If the Participant fails to submit the Shortlist Offer Deposit within the required time period, the Participant's Offer may be rejected and removed from the Shortlist.

## 2. Form of Shortlist Offer Deposit

The form of the Shortlist Offer Deposit may be either: (a) a cash deposit through a wire transfer, or (b) a Letter of Credit (as defined below). Wiring instruction for cash will be provided in the Shortlist notification.

#### a) Cash Deposit

PG&E will pay interest on each cash deposit, calculated on a monthly basis and compounded at the end of each calendar month, from the date on which the cash is fully deposited to the date of returning the cash deposit to the Participant. The applicable interest rate will be the rate per annum equal to the Monthly Federal Funds Rate (as reset on a monthly basis, as of the first day of the month, based on the latest month for which such rate is available) as reported in Federal Reserve Bank Publication H.15-519 or its successor publication ("Interest Rate"). The Interest Rate shall be calculated based on a three hundred sixty (360) day year and shall be payable upon the return of the cash deposit.

#### b) Letter of Credit

In lieu of a cash deposit, the Participant can provide, per the directions above, a Shortlist Offer Deposit using a Letter of Credit,

"Letter of Credit" means an irrevocable, non-transferable, stand-by letter of credit issued by either (a) a U.S. commercial bank or (b) a U.S. branch of a foreign commercial bank acceptable to PG&E. In either case the issuing bank must be acceptable to PG&E in its sole discretion and have a Credit Rating of at least: "A-" with a stable designation from S&P and "A3" with a stable designation from Moody's if rated by S&P and Moody's; or (ii) "A-" with a stable designation from S&P or "A3" with a stable designation from Moody's if such bank is rated by either S&P or Moody's, but not both, even if such bank was rated by S&P and Moody's as of the date of issuance of the Letter of Credit but ceases to be rated by either, but not both of the those rating agencies. The Letter of Credit shall substantially be in the form attached hereto as Appendix E2. If the Letter of Credit is issued by a branch of a foreign bank, PG&E may require changes to the form Letter of Credit included as Appendix E2. All costs of the Letter of Credit shall be borne by Participant. The Letter of Credit should be sent by overnight delivery to:

Pacific Gas and Electric Company Attn: Manager, Credit Risk Management 77 Beale Street, Mail Code B28L San Francisco, CA 94105

### 3. Return of Shortlist Offer Deposit

The Shortlist Offer Deposit will be returned to Participant by PG&E under one or more of the following conditions:

- a) Upon execution of the Agreement and Seller's submission of the collateral required under the Agreement;
- b) PG&E's rejection of the Offer subsequent to Shortlist selection; or
- c) In the course of negotiation, if PG&E and Participant cannot agree on the terms of the Offer and Agreement; provided that Participant has not unilaterally withdrawn the Offer as submitted through the Solicitation, or breached this Solicitation Protocol.

### 4. Forfeiture of Shortlist Offer Deposit

The Participant will forfeit the Shortlist Offer Deposit in its entirety due (i) to any material misrepresentation in information submitted in Participant's Offer or (ii) breach of this Solicitation Protocol. In the event that Participant forfeits the Shortlist Offer Deposit, PG&E will be entitled to draw upon the Shortlist Offer Deposit in its entirety as payment for direct and indirect damages incurred in connection with the Participant's misrepresentation or breach of this Solicitation Protocol.

### 5. Shortlist Offer Deposit as Security

PG&E shall be able to retain any cash deposit or draw on any Letter of Credit provided as a Shortlist Offer Deposit as security under an executed Agreement in the event that Participant fails to provide additional security and/or agrees to PG&E's retention of the Shortlist Offer Deposit as Development Security in accordance with the terms of the executed Agreement, if applicable.

PG&E will not reimburse Participant for its expense of participating in this RFO under any circumstances, regardless of whether the RFO reaches a successful conclusion or is terminated early at the sole discretion of PG&E.

# **VII. Participation Protocols**

### **VII.A.** Overview

All Offers must be received by [February 27, 2015] at 1:00 p.m. (PPT).

**Submitted Documents:** Documents will only be accepted through the online platform at Power Advocate. Power Advocate functions in most browsers; however; using browsers

other than Internet Explorer (IE) version 7 or higher may cause certain functionality to work unexpectedly.

Please make sure that your submittals do **not** contain any special characters such as \*&# in the file name. Submission of offers in any venue other than Power Advocate will not be accepted.

**Electronic Documents**: The electronic documents must be in a Microsoft Word and/or Excel file, as defined in Section VI.B of this Solicitation Protocol. The bidder should not provide documents in other electronic formats, versions, unless specifically requested. Electronic Documents must be uploaded to the Power Advocates Energy Storage RFO site.

## VII.B. Required Information

Offers must contain all required information and must be organized in accordance with these instructions.

Each appendix must be a separate folder or document, not one long pdf. As applicable, files should be provided in Microsoft Word or Excel. Maps or drawings may be in alternate formats, such as a pdf or kmz files, as appropriate. To the extent possible, pdf files should be provided in a searchable format.

Participant must complete the following documents, which are located in the Appendices, with Offer-specific information and include each one in its Offer, in the order given below.

## 1. Offer Package:

Introduction: Provide an Introductory Letter that describes the project or facility with pertinent information and a description of their offer information as applicable.

Address any potential changes to the project due to an Offer variation in the information below. A separate Offer Form is required for an Offer variation; however, an entirely new offer package is not required; there is no need to duplicate if most of the information is the same.

Appendix	Title	Description	Format
А	Offer Form	Please provide the requested information	MS Excel
B1	Project Description	Please describe the existing or proposed Project, single spaced, and include the requested information	MS Word
B2	Site Control	Please provide information relating to the Project-s location and generation-tie line ("Gen-Tie") route as	MS Word, PDF

		requested	
B3	Project Milestone Schedule	Exclude for existing projects that do not include an increase to existing capacity	MS Word
B4	Experience Qualifications	Please describe the Participants experience and staff qualifications, including but not limited to information requested	MS Word
B5	Electric Interconnection	Point of interconnection, status of project's studies	PDF
B6	PSA Additional Information	Information for purchase and sale agreement projects	MS Word
D	FERC 717 Waiver	Authorizes the disclosure of Participant's transmission-related information to Pacific Gas and Electric ("PG&E") marketing or merchant business unit ("PG&E Merchant")	MS Word
E1	Credit and Finance Information	Participant Identification and Finance Information, Financing Plant for Proposed Offer	MS Word
G, H	Detailed Term Sheet or redline	Summary of major contract terms or provide a redline of the applicable appendix G or existing Agreement with PG&E	MS Word

The Completed Offer Package must contain all material terms and must contain complete information including the Detailed Term sheet.

# 2. Post-Shortlist Documents (if applicable):

Shortlist Offer Deposit: Either (1) Cash via Wire Transfer or (2) Letter of Credit

Appendix	Title	Description	Format
С	Confidentiality Agreement	Participant must execute a Confidentiality Agreement and return such Confidentiality Agreement within five (5) business days of notification of their shortlist selection in order to continue to participate in the RFO	MS Word
E2	Letter of Credit (if applicable)	The form of the Shortlist Offer Deposit may be either: (a) a cash deposit through a wire transfer, or (b) a Letter of Credit (as defined below). Wiring instruction for cash will be provided in the Shortlist Notification.	MS Word

F	Request for Taxpayer ID (W-9) Form (if applicable)	Please provide the requested information if posting a cash deposit.	PDF
G or existing Agreement	Redline of Procurement Agreement	See description of various forms of Agreements in Section II.D. Contract Options for applicable form	MS Word
I	Additional Project Information	Please provide additional project information.	MS Word

Any proposed changes to the Procurement Agreement will be considered part of the Participant's Offer; that is, PG&E will assume that the Participant is willing to execute an Agreement based on these terms. Participant cannot make any changes to its proposed Agreement after the Offer has been received by PG&E. If a Participant requests modifications to their applicable form Procurement Agreement, PG&E may decide not to accept Participant's modifications or may propose its own modifications as a requirement for its Agreement.

# VIII. Pricing, Terms and Conditions

Participants are required to provide a complete offer package.

Participants must include in their Offer Form proposed pricing for the following items:

### VIII.A. Fixed Price:

- 1. For Standalone Energy Storage Resources, RA and Hybrid Conventional/Energy Storage Resources: Capacity Payment Price and/or Fixed O&M Price (\$/kW-yr)
- For Hybrid Renewable/Energy Storage Resources: Energy Payment Price in \$/MWh
- 3. For Resources offered under a PSA: Fixed Purchase Price (\$) and major overhaul costs

## VIII.B. Other Costs

- Variable O&M Price (\$/MWh),
- Fired Hour Charge (\$/fired hour/unit), and/or
- Start-up costs (\$/start/unit), if applicable

### VIII.C. Guaranteed Efficiency and/or Operating Heat Rates

Guaranteed Efficiency (guaranteed ratio of discharging to charging energy applicable to the Resource, expressed as a percentage) and/or Operating Heat Rates (the amount of fuel use per electricity output (Btu/kWh))

Participants are required to complete the Offer Form set forth in Appendix A, as well as the other applicable appendices. The information in the Offer Form should be consistent with the terms of the submitted form contract.

# **IX.** Communications

PG&E has established a website at <u>http://www.pge.com/rfo</u>, where Participants may register and where all public RFO documents, information, announcements and Q&As are posted and available to Participants.

To promote the accuracy and consistency of information provided to all Participants, PG&E prefers that all communications take the form of an e-mail directed to <u>EnergyStorage@pge.com</u>. With respect to a matter of general interest raised by any Participant, PG&E may, without reference to the inquiring Participant, post its response on its website. PG&E does not undertake to respond to all inquiries and, in its sole discretion, may decline to respond to any particular inquiry.

# X. Electric Interconnection

### X.A. Overview - Interconnection

The characteristics of a Project's interconnection to the PG&E electrical grid and the reliability of its deliveries are integral components of PG&E's Offer evaluation process. Participants may offer either Full Capacity Deliverability Status, as defined in the CAISO Tariff and PG&E's Wholesale Distribution Tariff (WDT) or Energy Only. Each offering will be evaluated individually. This section describes the interconnection requirements for existing and new Generating Facilities:

 Seller must demonstrate that there is sufficient capacity at the facility interconnection with PG&E's electric grid to receive the full net output of the Project. This ability and the associated costs are determined from the applicable generator interconnection procedure, i.e. CAISO Tariff for CAISO controlled transmission grid interconnections and PG&E's Wholesale Distribution Tariff (WDT) for non-CAISO controlled distribution grid interconnections, as applicable. While Participants are encouraged to initiate the applicable request as early as possible but must be in the interconnection process prior to applicable Agreement execution. Participants that are shortlisted that have not submitted an interconnection application must apply for interconnection as described in "X.C. System Impacts" (page 33) at the next available interconnection open period. Check the CAISO website for the next available window.16

- 2. For those projects that have a current interconnection study (*i.e.*, a System Impact Study, Facilities Study, Phase I, or Phase II) or Interconnection Agreement, each Offer must include all completed interconnection studies or a copy of the Interconnection Agreement to be considered for selection. The Participant must provide to PG&E the results of any updated interconnection studies as those results become available. This information may be used by PG&E in ranking and evaluating Offers.
- 3. Each Participant is solely responsible for any Direct Assignment costs and transmission charges, as described in "X.B. Direct Assignment Facilities and Charges" (page 33).

## X.B. Direct Assignment Facilities and Charges

Facilities needed to interconnect the generating facility to the first point of interconnection with an IOU's system are referred to as Direct Assignment facilities or interconnection facilities. Direct Assignment facilities include the transformer bank used to step-up the generation output to service voltage, the outlet line between this step-up transformer bank and the electric system, and protection and communication facilities needed for interconnection and safe operation of the generator. Direct Assignment charges include any charges the Project must pay to the IOU. The Participant is solely responsible for Direct Assignment Facilities and Charges.

## X.C. System Impacts

For New facilities, System Impacts relate to the capability of the electric system to deliver the full output of the project from the first point of interconnection with the IOU's system. This includes both Interconnection Service and Deliverability Assessment (as defined by the CAISO tariff). If there is insufficient capability, distribution and network upgrades would be needed. Upgrades may include distribution and transmission lines, transformer banks, special protection systems, substation breakers, capacitors, and other equipment needed to transfer the generation output to the consumer. Participants will be required to fund the full cost of all facilities necessary to interconnect to PG&E's system, including network upgrades. A Participant may be, pursuant to the CAISO Tariff, entitled to a cash equivalent refund for transmission network upgrades it funds on the CAISO system, with interest paid over a five-year

<sup>&</sup>lt;sup>16</sup> Refer to CAISO website for updates on this window at

http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx

period. Participants with new or expanded facilities that are shortlisted in this RFO must apply for interconnection at the next available cluster.

Please refer to the most current effective tariffs for complete information.

## 1. Projects with Completed and Current Interconnection Studies.

For projects that have already obtained cost estimates from completed and current Interconnection Studies through the applicable Interconnection Procedure, the Participant shall submit copies of the completed studies with the Offer.

# 2. Projects without Completed Interconnection Studies.

For projects that do not yet have completed Interconnection Studies, copies of the completed Interconnection Studies must be provided to PG&E when they are available.

# XI. Confidentiality Agreement

Except as provided below, all information and documents provided to PG&E by Participant in connection with this RFO shall be considered confidential information, and PG&E and the Participant shall be prohibited from disclosing such information and documents to any and all third parties except as provided below.

With respect to any information or documents provided by the Participant, PG&E shall have the right to disclose to the CPUC, its staff, the Independent Evaluator, the PRG, CAISO, other control area operator or balancing authority and any other entity in order to comply with any applicable law, regulation, or rule or order issued by a court or entity with competent jurisdiction over PG&E, at any time, even in the absence of a protective order, confidentiality agreement or nondisclosure agreement, as the case may be, without notification to the Participant and without liability or any responsibility of PG&E to the Participant.

Once a Participant is selected for the Shortlist, the Participant must execute a Confidentiality Agreement in the form attached as Appendix C and return such Confidentiality Agreement

within five (5) business days of notification of their selection in order to continue to participate in the RFO.

# XII. Participant's Financial Information

In conformity with accounting principles generally accepted in the United States of America ("US GAAP") PG&E may be required to collect and possibly consolidate financial information from the facility whose output is being purchased under long-term contractual arrangements. Some general guidelines for determining whether consolidation must occur include:

XII.A. Determination of allocation of the entity's risks and rewards;

XII.B Proportion of total project output being purchased by PG&E;

XII.C. Proportion of expected project life being committed to PG&E; and

XII.D. Pricing provisions of contract

That is, does the contract contain fixed long-term prices or does pricing vary over the term of the agreement based on market conditions or other factors.

For any Agreement that meets the applicability criteria as established by US GAAP, PG&E is obligated to obtain information from successful Participants to determine whether or not consolidation of a counterparty's financial information is required.

XII.E. If PG&E determines that financial consolidation is required;

PG&E shall require the following during every calendar quarter for the term of an Agreement:

- 1. Complete financial statements and notes to financial statements;
- 2. Financial schedules underlying the financial statements, all within 15 days of the end of each quarter; and
- 3. Access to records and personnel, so that PG&E's independent auditor can conduct financial audits (in accordance with generally accepted auditing standards) and internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002).

Any information provided to PG&E shall be treated confidentially and only disclosed on an aggregate basis with other similar entities for which PG&E has power-purchase contracts. The information will only be used for financial statement purposes and shall not be otherwise shared with internal or external parties.

## XIII. Execution of Agreement

By submitting an Offer, Participant agrees, if its Offer is selected for PG&E's shortlist, that it is prepared to (1) enter into a definitive Agreement consistent with the mark-up of the Agreement submitted if so requested by PG&E, and (2) negotiate, if so requested by PG&E, and execute a definitive Agreement consistent with the mark-up of the form of Agreement submitted with the Participant's Offer and containing such other terms and conditions as may be mutually acceptable to PG&E and the Participant. PG&E's evaluation of a Participant's Offer, and PG&E's shortlisting of a Participant, will not constitute any agreement by PG&E to any modification made by the Participant to the form of Agreement submitted to Participant.

## XIV. CPUC Approval

The effectiveness of any Agreement is expressly conditioned on PG&E's receipt of CPUC Approval, which will be more specifically defined in each of the Pro Forma Agreements and Term Sheet. At a minimum PG&E will require a finding from the CPUC that PG&E's entry into the Agreement satisfies PG&E's Energy Storage compliance requirement. Additionally, most Agreements will be subject to a no-fault termination if CPUC Approval, which typically requires the approval of the Agreement by the CPUC to be final and non-appealable, without any modifications that are unacceptable to either of the parties, does not occur within a specified period, as set forth in each of the applicable Agreements.

## XV. Waiver of Claims and Limitations of Remedies

Except as expressly set forth in this RFO, by submitting an Offer, the Participant knowingly and voluntarily waives any rights under statute, regulation, state or federal constitution, or common law to assert any claim or complaint or other challenge in any regulatory, judicial or other forum, including the CPUC, except as expressly provided below, the FERC, the Superior Court of the State of California ("State Court") or United States District Court ("Federal Court") concerning or related in any way to the RFO and/or any Appendices to the RFO ("Waived Claims"). The assertion of any Waived Claims by Participant at the CPUC, FERC, State Court, Federal Court, or otherwise shall, to the extent that Participant's Offer has not already been disqualified, provide PG&E the right, and may result in PG&E electing, to reject such Offer or terminate the RFO.

By submitting an Offer, the Participant further agrees that the sole forum in which Participant may assert any challenge with respect to the conduct or results of the RFO is the CPUC. The Participant further agrees that the sole means of challenging the conduct or results of the RFO is a protest to PG&E's filing before the CPUC seeking approval of one or more Agreements entered into as a result of the RFO. The Participant further agrees that the sole basis for any such protest shall be a challenge to the conduct or results of the RFO on the ground that PG&E failed in a material respect to conduct the RFO in accordance with the RFO rules and procedures outlined in this document, and the exclusive remedy available to the Participant in the case of such a protest shall be an order of the CPUC that PG&E again conduct any portion of the RFO that the CPUC determines was not previously conducted in accordance with the RFO rules and procedures outlined in this document. The Participant expressly waives any and all other remedies, including, without limitation, compensatory and/or exemplary damages, restitution, injunctive relief, interest, costs, and/or attorneys' fees. Unless PG&E elects to do otherwise in its sole discretion, during the pendency of such a protest the RFO and any related regulatory proceedings related to the RFO will continue as if the protest had not been filed, unless the CPUC has issued an order suspending the RFO or PG&E has elected to terminate the RFO.

The Participant agrees to indemnify and hold PG&E and the Independent Evaluator harmless from any and all claims by any other Participant asserted in response to the assertion of a Waived Claim by the Participant or as a result of a Participant's protest to an Advice Letter Filing resulting from the RFO. Except as expressly provided in this RFO, nothing herein, including Participant's waiver of the Waived Claims as set forth above, shall in any way limit or otherwise affect the rights and remedies of PG&E.

# XVI. Termination of the RFO-Related Matters

PG&E reserves the right at any time, in its sole discretion, to terminate the RFO for any reason whatsoever without prior notification to Participants and without liability of any kind to or responsibility of PG&E or anyone acting on PG&E's behalf. Without limitation, grounds for termination of the RFO may include the assertion of any Waived Claims by a Participant or a determination by PG&E that, following evaluation of the Offers, there are no Offers that provide adequate ratepayer benefit.

PG&E reserves the right to change the Offer evaluation criteria for any reason, to terminate further participation in this process by any Participant, to accept any Offer or to enter into any definitive Agreement, to evaluate the qualifications of any Participant, and to reject any or all Offers, all without notice and without assigning any reasons and without liability to PG&E or anyone acting on PG&E's behalf. PG&E shall have no obligation to consider any Offer.

In the event of termination of the RFO for any reason, PG&E will not reimburse the Participant for any expenses incurred in connection with the RFO regardless of whether such Participant's Offer is selected, not selected, rejected or disqualified.

Unless concluded earlier, RFO negotiations are targeted to be completed the week of June 30, 2016. PG&E reserves the right to continue or terminate negotiations in progress with a Participant. If negotiations are terminated, PG&E shall return Participant's Security deposit and Participant shall not be precluded from participating in future ES RFOs.
# **XVII.** Participant's Representations and Warranties

Each Participant submitting an Offer shall provide their electronic signature in the Offer Form attesting to the Participant's agreement to be bound by the conditions of the RFO in submitting its Offer and making the representations and warranties set forth therein.

BREACH BY ANY PARTICIPANT OF THE REPRESENTATIONS AND WARRANTIES IN SECTION V OF THIS SOLICITATION PROTOCOL, IN ADDITION TO ANY OTHER REMEDIES THAT MAY BE AVAILABLE TO PG&E UNDER APPLICABLE LAW, GROUNDS FOR IMMEDIATE DISQUALIFICATION OF SUCH PARTICIPANT FROM PARTICIPATION IN THE RFO AND, DEPENDING ON THE NATURE OR SEVERITY OF THE BREACH, MAY ALSO BE GROUNDS FOR TERMINATING THE RFO IN ITS ENTIRETY.



Instructions for \_\_\_\_\_

Version 2014.1

Unless otherwise provided herein, all capitalized terms shall have the meaning ascribed to them in PG&E's \_\_\_\_\_\_Solicitation Protocol dated XXXX XX, 2014 or the applicable Agreement.

# PLEASE BE SURE TO ENABLE MACROS. OTHERWISE THIS WORKBOOK WILL NOT FUNCTION PROPERLY.

### **Important Notes**

- 1. Please ensure to submit this file in Microsoft Excel. Other versions will not be accepted.
- 2. The workbook is set to recalculate automatically; however, if for some reason it is not refreshed automatically, please press F9 to refresh.
- 3. The workbook functions best using Microsoft Excel 2010 on a Window's XP Operating System



Participant Proposal and Contact Information

### There are 25 missing inputs. Please fill in all yellow highlighted cells.

List Missing Inputs

Counterparty Information Counterparty/Legal Entity Name Street Address	Developer Information Developer Name Street Address
City State <choose> Zip Code</choose>	City State <choose> Zip Code</choose>
Country	Authorized Contact #2
Website	First Nar
Website	Last Name
Project Owners	Title
Name Ownership 9 Website URL	Phone 1 Phone 1
	Phone 2
	En Email
ERROR: Total must be 100%	w. ed. ement of Protocol
By selecting 'Yes", participant hereby agrees to the terms of the folicit of Protoco Electronic Signature	Select 'Yes' to certify that the typed name acts as your electronic signature.
Part	ticipant Authorization
By selecting 'Yes", participant hereby confirms that it and a durate duly authorized representati	tive of Participant."
Electronic Signature	Select 'Yes' to certify that the typed name acts as your electronic signature.
	Attestation
βy providing the electronic signature, below, Participant hereby attests that all information Participant's knowledge as of the date such information is provide.	provided in this Offer Package and in response to this RPS RFO is true and correct to the best of
Electronic Signature	Select 'Yes' to certify that the typed name acts as your electronic signature.

Pacific Gas and Electric Company®	Project Description		There are 25 missing inputs. Please fill List Missin	
General Offer Information	Clear Comments      C			
Total Offers   2     Offer #	Year 2014		Utility	<choose one=""> Other Utility</choose>
Project Information         Full Legal Project Name         Generating Facility Name         Street Address         City         County         Facility Status         Air Pollution Control District         Local Area Reliability Region         CAISO Resource ID         Project Description	<choose one=""></choose>	Zip Code Longitude degrees Type of Site Control < <u>Choose One&gt;</u>	Product Type Contract Type Type of Existing Agreement Delivery Term Start Date Guaranteed Construction Start Date Delivery Term Length (Months) Scheduling Coordinator Storage Unit Specifications Storage Method Storage Method Other Storage Unit Technology Specific Technology	<choose one=""> Choose One&gt;</choose>
Interconnection App. Status Interconnecting Utility Other Utility Interconnection Point Status	<choose one=""></choose>	Reliability ork Upgrad-costs (\$)	4	
Interconnection Applied For?	<choose one=""></choose>	otal Network Upgrade Costs (\$)	Primary Storage Fuel Type	
Interconnection Agreement Capacity Interconnection Voltage Interconnection Level Delivery Market Delivery Market Other	MW kV <choose one=""></choose>	Other Characteristics	Storage Capacity	
Reliance on major transmission line? T&D Deferral Site Expected Interconnection Point	<choose></choose>		Max Capacity (MW) 0 RPS Facility Capacity (MW)	Month Capacity (MW)

Line Name / Number	
Closest Substation	Maximum System Output (RPS + Storage)
PSA Information	How much capacity of this resource has a four hour
Purchase Price	duration for three consecutive days?
Estimated expected life of asset under the assumed operating assumptions	
Cost of O&M service agreements for the major equipment	

January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

Tax Credit (PTC or ITC) Assumption	<choose one=""></choose>		
If other, please explain			
Project Development and Delivery Term Security			
Project Development and Delivery Term Security	Required	Offered	2
Project Development and Delivery Term Security Project Development Security (\$'s) *	<u>Required</u> \$ -	Offered	<u>2</u> 0.009

Gas Interconnection	
Gas Interconnection Utility	
Expected Interfonnection Date	
Expected Tariff Rate	



#### Participant Proposal - Storage Pricing Sheet

					Pricing	g / Compensation	/ Credit Require	ments				
	ment Pricing Plan			<choose one=""></choose>		Fixed O&M Pricing			<choose one=""></choose>		Fired Hour Charge Price Plan	<choose one=""></choose>
Escalation						Escalation Rate	2	_		_	Escalation Rate	
	rge per MWh Pricir	ig Plan		<choose one=""></choose>							Start-up Payment Pricing Plan	<choose one=""></choose>
Escalation	n Rate										Escalation Rate	
					Discharge Start	up Payment (\$) fo	or Entire Facility	Discharge Star	t-Up Payment (\$) Unit	for Single		
Contract Year	Capacity Payment Rate (\$/kW-yr)	Variable Charge per MWh delivered (\$/MWh)	Fixed O&M (\$/kW-yr)	Fired Hour Charge per Hour per Unit (\$fired hr/unit)	Hot	Warm	Cold	Hot	Warm	Cold		
1												
2												
3												
5												
6												
7												
8												
9				(								
10							$\sim$ $\sim$					
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12				$\frown$	$\downarrow \cap$							
13					$ \rightarrow $	24						
14						<u> </u>						
15 16			\									
10												
18												
19												
20												

Enter any startup cost details (if	
applicable)	
_	Enter any startup cost details (if applicable)

Anc	illary Services Inf	formation		
	Regulation Up	Regulation Down	Spinning Reserves	Non-spinning Reserves
Provided to PG&E to schedule?	<choose></choose>	<choose></choose>	<choose></choose>	<choose></choose>
Discharge Range - Lower MW				
Discharge Range - Higher MW				
Charge Range - Lower MW				
Charge Range - Higher MW				
A/S Ramp Rate (MW/min)				



#### Operating Capacity and Efficiency Characteristics (ISO Conditions)

Complete

PG&F	company				List Missing Inputs
Operating Power Lev Cycle Charging Discharging	rels P <sub>max</sub> (MW)	P <sub>min</sub> (MW)	Operat	ating Power Levels Description:	
Efficiency Guaranteed Efficiency Efficiency Curve Descrip	ition:			Minimum Down Time Requ From Charging to Charging From Charging to Discharging From Discharging to Charging From Discharging to Discharging	seconds seconds seconds
Duration Duration (maximum dis Minimum State-of-Char Discharging Rate		full SOC) Duration	Maximum continuous discharge hours from 100% State-of-Charge to min State-of-Charge	Signal Response and Control       Loss         Can the device be controlled by utility standard SCADA signals? <choose>         Is the project capable of receiving and responding to an AG       ging       <choose>         ging       <choose>       Station Use (MW/hr):         Can unit be scheduled for both Regulatio       Energy for the same       interval?</choose></choose></choose>	
P <sub>max</sub> 75% of Pmax 50% of Pmax 25% of Pmax P <sub>min</sub>	• • •		Choose> Choose> Choose> Choose> Choose> Choose>	What is the signal response time of all received startup) Choose>	
CAISO Market Partici		ischarging leve	Is as appropriate)		
CAISO classifies Energy S CAISO's New Resource I <u>CAISO's New Resour</u>	mplementation	Checklist. Plea	se describe your company's ability and e	participants must complete a set of requirements listed in the experience to complete these requirements:	

Ramp Rates/ Startup Time/ Ramp	Time					
For startup and ramp up time, please ex	cclude the time it takes to an AC electrical response from the time	that a communication signal for in	struction is received.			Ramping constraints and conditions detail:
	Ramp Rates	Startup Time (hot)	Startup Time (warm)	Startup Time (cold)	Ramp Up Time	

		Up		Down		Shutdown - Pmin		Shutdown - Pmin		Shutdown - Pmin		Pmin - Pmax	
Cycle	Output Capacity	MW	Time	MW	Time	Total Time	Unit	Total Time	Unit	Total Time	Unit	Total Time	Unit
Charging (PMax)	P <sub>Max</sub>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>
Discharging (PMax)	P <sub>Max</sub>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>		<choose></choose>

#### Maximum Number of Cycles (PMax)

24 Hours	1 Month	1 Year	Lifetime
Discharge / Charge Rates	Discharge / Charge Rates	Discharge / Charge Rates	Discharge / Charge Rates
P <sub>Max</sub>	P <sub>Max</sub>	P <sub>Max</sub>	P <sub>Max</sub>

Cycling constraints and conditions detail:

Transitions	
Transitions Limit?	<choose one=""></choose>
Switching constraints a	nd conditions dotails
Switching constraints a	nd conditions detail:

<b>Operating Hea</b>	at Rates			
Operating Fuel		<choos< th=""><th></th></choos<>		
Heat rate is net	guaranteed hea	t rate in HHV		
	ISO Cor	nditions	July Peak	Conditions
Discharging rate	Net Output (MW)	Heat Rate (btu/kWh)	Net Output (MW)	Heat Rate (btu/kWh)
P <sub>max</sub>				
P <sub>min</sub>				

Startup Fuel Requirements						
Start-up Fuel Required	<choose></choose>					
Other Fuel		-				
Hot Startup		MMBtu				
Warm Startup		MMBtu				
Cold Startup		MMBtu				

Outage Information				
Annual Maintenance Outage	Hours/yr			
Fixed O&M Driven by	<choose one=""></choose>			
Other O&M Driver				
Major Overhaul Cost	\$/overhaul	Major Overhaul Driver	<choose one=""></choose>	
Time per Overhaul	Hours	Other Overhaul Driver		
Regular Maintenance and Major Overhaul Vendors				
Overhaul Vendor Locations				
Service Hours (SH)				
Forced Outage Hours (FOH) Summer Months (May-Sep)				
Forced Outage Hours (FOH) Non-Summer Months				
Forced Outage Rate (FOR)	<b>%</b>			



#### **Operating Constraints and Degradation**









Point 1 Point 2 D1-Biogas: Biogas Contract and Information



Point 3 Delivery Point (Primary Preferred)

<Choose One>



Pacific Gas and PCS: Electric Company®

Supplier Diversity Information

Supplier Diversity	
ompany has an active Supplier Diversity program you do not feel is adequately address with these questions, please send in separate documentation with your Offer for	
Is your company a Diverse Business Enterprise?	<choose></choose>
Does your company have a Supplier Diversity program? Please describe program:	<choose></choose>
1500 character limit (1500 remaining)	
Does your company have a supplier Diversity of the program of PBEs?	<choose></choose>
5 aracter lin 10 re (ing)	
Doe company promote a subcontracting?	<choose></choose>
Pleas cribe p m:	
500 character limit (500 remaining)	
What percentage of your company's <b>total contracting and procurement</b> spend for the prior year was with women, minority and service disabled veteran owned businesses?	or
What will the percentage of procurement spend for this project will be spent with women, minority and service disabled veteran owned businesses over the course of the proposed PPA?	
Pre COD? Post IDD?	
	Image: series of the proprese series of the series of the proprese series of the proprese series of the series o

### Project Name:\_\_\_\_\_

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please provide the following Project information in the order requested.

### **1. SYSTEM DESCRIPTION**

A description of the electricity storage process and energy/fuel supply, including any resource studies and emission control technology. If fueled by biomass, digester gas or landfill gas, or municipal solid waste conversion, a description of access to a lasting and stable fuel supply, including the contractual duration of such access, should be provided. For other types of projects, the source of resource measurements, third party data, etc. characterizing the quality of the resource should be provided. If your project includes energy generation capabilities, please describe.

Please describe specific operating requirements that affect available capacity or energy over a day, month, or year (include impacts from operating unit temperature, other uses for resource, water management constraints, etc.).

## 2. TECHNICAL/EQUIPMENT DESCRIPTION

A summary of the technical characteristics of the Project, including:

- (i) a listing of the major components to be used;
- (ii) information relating to the availability of and Seller's access to the equipment and components utilized / proposed for construction and operation of the project, especially as it relates to the Project's scale;
- (iii) equipment source, e.g. existing owned inventory, new manufacturer order, resale market purchase;
- (iv) for all major equipment to be procured, list the manufacturer lead time, and describe how order queue position has been secured;
- (v) terms and expiration of warranties/guarantees;
- a description of the technical challenges relative to the Project's scale not related to the development of the core technology (i.e. manufacturing capacity of supplier production, complexity of deployment processes, etc.);

- (vii) a non-confidential description of any new or proprietary processes in manufacturing, deployment, operation, etc.; and
- (viii) any other relevant technical information about the project and supply chain considerations.

## **3. OPERATING PARAMETERS**

To give PG&E an understanding and confidence that proposed operation is achievable, provide the following information:

- (i) Describe specific design considerations and provide, where appropriate, significant design detail to confirm that the unit has been designed to accommodate planned operations and/or cycling. Components that should be specifically addressed are specific to your storage technology, such as turbine, pumps, PV panels, inverters, auxiliary equipment, etc.
- List known or expected operating characteristics of the facility including but not limited to min and max power outputs (charging and discharging), ramp rate, start-up times (cold, warm, hot), round trip efficiency (AC to AC), selfdischarge rate (standby and shutdown)
- (iii) CAISO classifies Energy Storage as a non-generator resource. To participate in CAISO markets, participants must complete a set of requirements listed in the CAISO's New Resource Implementation Checklist. Please describe your company's ability and experience to complete these requirements http://www.caiso.com/Documents/NewResourceImplementationChecklist.xls
- (iv) Can the storage device be controlled by utility standard SCADA signal?
- (v) Is the project capable of receiving and responding to an AGC signal?
- (vi) Describe the typical maximum number of cycles the storage device exhibits between fully charged and 50% or 100% Depth of Discharge (DoD) and the charge/discharge rate?

### 4. PERMITTING

Please complete the following table of permits and discretionary approvals required from local, state, federal, and/or tribal authorities for both the Project and any interconnection related upgrades under consideration. Include the status of permits in application phase and those required but not currently held and the expiration date of all discretionary permits already obtained and agency process for granting a permit extension.

#### Appendix B1

### 2014 ES RFO

### **Project Description**

Table of Permits and Discretionary Approvals Required from Local, State, Federal, and/or Tribal Authorities for the Project and any Interconnection Upgrades					
Permit Type or Approval	Issuing Agency/Entity	Date Issued <i>Or</i> Date application submitted and Date anticipated	Permit Expiration Date <sup>*</sup>		
EXAMPLE: Conditional Use Permit	Alameda County, CA	Issued 1/1/2013	Expires 1/1/2016		
[List additional permits, as necessary.]					
* Describe the agency process for granting a permit extension.					

### **5. ENVIRONMENTAL IMPACTS**

A. Please complete the following table. List all environmental studies and technical reports completed, in progress, or anticipated for the Project. Indicate report status, title, authors (individual, consulting firm or agency), dates published or completed, access, agency approvals. Briefly describe key report findings, potential adverse environmental impacts of the Project, and plans to reduce impacts. If possible, please include a copy of the minimization and mitigation measures.

## Appendix B1

## 2014 ES RFO

# **Project Description**

Table of Environmental Documentation, Impacts, and Mitigation						
Environmental Area	Environmental Studies and Technical Report(s)				Adverse Environmental	Impact Minimization/
	Report(s) Conducted? (Yes / In progress / Not Conducted <sup>3</sup> ) (Indicate type)	Bibliographic Reference(s) (Author, Date, and Title)	Report Access (Website link / Available upon request)	Approval Status (Agency Name and Date Approved / Submitted)	Impacts <sup>1</sup> (Briefly list adverse environmental impacts or areas of potential concern)	Mitigation <sup>1,2</sup> (Briefly list plans to minimize or mitigate adverse impacts)
CEQA/NEPA document(s)						
Biological Resources <sup>4</sup>						
Cultural Resources						
Air Emissions						
Water Quality/Supply						
Hazardous Materials/ Waste				7		
Land Use/ Agriculture						
Stakeholder Engagement						
Community and Environmental Leadership						

#### Appendix B1

#### 2014 ES RFO

**Project Description** 

Other [include	
as necessary]	

#### Notes:

<sup>1</sup> Shortlisted Projects will be asked to provide detailed information on Environmental Impacts and Minimization/Mitigation measures.

<sup>2</sup> Please list any mitigation credits purchased for this Project and associated generation interconnection and include the name of the resource providing the credits.

<sup>3</sup> If environmental studies and technical reports were not conducted please indicate the reason why.

<sup>4</sup> Biological resources include species, habitat, wetlands, waterways, and waterbodies.

- B. BIOLOGICAL RESOURCES List the species and status of any federal or state listed wildlife and plant species and special status species (including California Department of Fish and Wildlife (CDFW) species of special concern and fully protected species) identified to be present within the Project's general area (including generation interconnection).
- C. CULTURAL RESOURCES Provide the following information. Have potential Native American stakeholders been consulted? Are any cultural resources on the Project Site eligible for or listed on national or state registers?

#### D. AIR EMISSIONS

1) How does/will the project meet Best Available Control Technology standards?

2) Does the project require Emission Reduction Credits (ERC)?

If so, do you own or control sufficient ERC's?

If so, and you do not own or control sufficient, where/how will you get them?

3) How does/will the project meet new or proposed greenhouse gas (GHG) limits issued by the Air Resources Board under AB32?

E. WATER QUALITY AND SUPPLY – Provide the following information, as applicable.

- 1) Provide the facility's anticipated annual water use (freshwater, saltwater and/or reclaimed) in gallons per MWh generated during the contract period.
- 2) Does the facility have firm water rights for the life of the project?
- 3) Describe water conservation strategies. Indicate if the project uses the following technology and approaches:
  - Dry/hybrid cooling systems
  - Recirculation or reuse of water
  - Use of recycled and nontraditional water sources (including using waste water treatment discharge, saline aquifers, storm water flow, agricultural runoff)

#### **Project Description**

- 4) Indicate if facility will use freshwater, saltwater, reclaimed or recycled water. Describe source, use, and quantity. If proposing to use fresh water or salt water, describe how either reclaimed water and/or dry cooling are economically infeasible or environmentally unsound.
- 5) Identify all wastewater discharges from the facility and associated permits required.
- 6) Describe water quality strategies and approaches to handling waste water (response should reference any applicable permits listed above). Specify whether water discharges are to water bodies (e.g., ocean, lake, river, creek, etc.), land, holding ponds, sewer systems, or any combination thereof.
- 7) Describe, if any, the potential impacts to surface and/or groundwater quality.

#### F. HAZARDOUS MATERIAL AND HAZARDOUS WASTE

Provide the requested information, as follows, related to the facility's hazardous material and hazardous waste management programs, including waste minimization efforts.

- 1) Does the facility utilize Hazardous Materials?
- 2) Does the facility have a Hazardous Materials Business Plan (HMBP)? If yes, please provide a copy of the inventory summary with the associated map.
- 3) Does the facility generate hazardous waste? If yes,
  - i. How much hazardous waste is expected to be generated per year?
  - ii. How and where does the facility dispose of its hazardous waste?
  - iii. Does the facility have a program to reduce the volume of hazardous waste generated? Please describe the program or the practices for managing potential risk associated with hazardous waste.

LAND USE/AGRICULTURE

G.

- 1) What are the current zoning and general plan land use designations (existing and planned/future land use) for the Project Site? Will land use designations be changed for the Project?
- 2) Is the Project site located within a designated or proposed renewable energy planning area by Federal, state, or local jurisdictions?
- 3) Is the Project Site located on impaired, degraded, or mechanically disturbed land?
- 4) Is the Project Site designated agricultural land (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, or Grazing Land) or under a Williamson Act Contract?
- 5) Is the transmission route in a utility corridor designated, mapped and adopted by a federal, state or local agency?
- 6) Is the project consistent with local land use zoning ordinances, including General Plans, stack height restrictions, etc.? If the project requires zoning

changes or variances, describe the plan to obtain approval of the zoning changes and how this will be coordinated with CEC review.

- H. STAKEHOLDER ENGAGEMENT Please provide the following information.
  - 1) Describe any public opposition to the Project and permitting concerns (such as concerns with the project location or operation) expressed by federal, state, local agencies, non-governmental organizations, or Indian tribes,
  - 2) Has the Participant prepared agency, non-governmental agency, community, and/or tribal outreach plans for the Project? If so, please describe the plans, their implementation status, and effectiveness.
- I. COMMUNITY AND ENVIRONMENTAL LEADERSHIP Provide the requested, as follows, related to community outreach, environmental justice and environmental leadership.
  - Are there other emitting sources within one mile of the facility including both stationary (limit response to regulated industrial facilities) and mobile (limit response to major highways, railroads, and air and sea ports) sources? If so, please list them.
  - 2) Describe the facility's community outreach strategy. How does/will the applicant address community concerns related to the facility's safe operation and potential environmental and public health impacts?
  - 3) Describe the facility's relationship with the fence line community (limit response to 1 mile radius of facility). Include any feedback received from community members in the last year about the facility.
  - 4) Does the facility demonstrate any advanced environmental technology or operational practice to reduce environmental impact? Please describe technology, operational practice and projected benefits.

## 6. PRELIMINARY DESIGN

Provide the following preliminary design information used as the basis for the facility design and associated performance guarantees. Depending on the technology of the project offered, some sections will not apply.

- A. General Arrangements
- B. Plot Plan
- C. Single-Line Diagrams
- D. Heat Balance Diagram, for each fuel type used (Note for ESAs/PPAs: please provide a detailed explanation if the heat balances supplied as

part of this appendix do not equal the heat rate guarantees found in the associated ESA/PPA.)

Heat balances for each fuel to be permitted shall include the mass flow (lb/hr), temperature (°F), pressure (psia), and enthalpy (BTU/hr) for all water, steam, combustion air, and fuel streams entering and exiting the boundaries of the generating unit and of each major equipment component.

The heat balances shall be provided for each fuel that will be permitted for use at the facility. The fuel constituents and heating value shall be provided for each of the fuels.

E. Piping & Instrument Diagrams (P&ID)

The Piping and Instrument Diagrams ("P&ID's") should include line sizes, instrumentation, and valves for all major systems that will be provided by Seller, including main steam, reheat steam, low pressure steam, feed water, condensate, cooling water, and fuel. The Seller shall also provide a list of all system P&ID's that will be prepared during the design phase of the project.

- F. Water Balance Diagram for Base Load Operation
- G. Provide emission calculations used to fill out Offer Form.
   Emission calculations shall include cases for each fuel to be permitted.
   The calculations shall be based on the same fuel constituents used for the heat balances.
- H. Heat Balances, Water Balances and Emission Calculations shall be provided for several ambient conditions including: ISO conditions (59°F, 60% RH) at Site Elevation and Peak July Conditions at Site Elevation. Heat Balances shall be provided for Average Monthly Conditions at Site Elevation.

Water balance and heat balance data shall be labeled on block diagrams or provided in tabular form with values corresponding to stream numbers labeled on the block diagram. The stream values shall be expressed in gallons per minute for all sources and uses of water. The water quality analyses used as the basis for the water balances shall be provided, as well as the resulting water quality for all wastewater streams.

8

## **Project Description**

### 8. GAS INTERCONNECTION

If applicable, provide a description of the existing/proposed gas interconnection including but not limited to a description of the interconnecting utility, gas application status, gas agreement dates, etc.

#### PG&E

### 2014 ES RFO

## **Project Name:**

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please provide the following project information:

- Coordinates of the Project's boundaries and street map showing the location for the Project and the Gen-Tie route. Provide Township/range/section numbers of the Project area. Provide the County Assessor's parcel number and site address.
- 2. Provide map showing site location and key project facilities. Please provide the map in either one of the following formats:
  - i. Google kml/kmz, ESRI shape or other GIS data file of the project boundary. Specify projection information for GIS files or
  - ii. A digital map (.pdf, .jpg, tiff, etc.) of the project boundary, access roadways and the rights-of-way for all interconnecting utilities on aerial street or USGS topo background.
- Gen-Tie route from the Project to the first point of interconnection with the electric grid. Instructions for generating a GIS file using Google Earth can be found on the Energy Storage RFO website on <u>www.pge.com/rfo</u>.
- 4. Describe the elements of site control (direct ownership and leases, and options to own or lease the site), easements, and rights-of-way required for the Project and Gen-Tie, the associated requirements for each, and any steps taken towards obtaining such site control, easements, and rights-of-way for the entire term of the proposed Agreement.

### **Project Name:**

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please provide a Project milestone schedule describing financing, permitting, engineering, procurement, construction, interconnection, and startup activities, timelines and status. The schedule should include major activities and milestones for all aspects of the Project (including financing and interconnection) since project inception through the first year of commercial operation along with a supporting narrative.

PG&E

### **Project Name:**

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please describe the Participant's experience and staff qualifications, including but not limited to:

- 1. The staff make-up and size and the identification and resumes of Participant's key personnel and management.
- 2. Experience and qualifications in developing, designing and constructing, and operating and maintaining power storage and generation facilities, as well as contracting to sell and deliver long-term power supplies. Participant should highlight their experience in these all of these areas as it relates to
  - projects utilizing the same technology as the proposed Project;
  - projects of similar capacity as the proposed Project;
  - specific engineering, procurement and construction (EPC) contractors being considered for this Project; and
  - projects supplying storage and/or energy to California.
- 3. A description of the personnel structure of the proposed facility's development, design and construction, and operations and maintenance organizations.
- 4. Participant experience and history in financing power generation facilities, along with the financing plan and expected financing sources for the proposed Project. Identify any government assistance / program to be requested, expected, or received that would affect financing of this project.
- 5. In order for PG&E to address any potential conflicts of interest, please provide the name of the law firm or counsel representing Participant in its Offer.

### **Project Name:**

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please provide the requested information.

- 1. The current or proposed point of interconnection to the transmission or distribution system, and the distance from the Project to the electric interconnection point.
- 2. List the relevant transmission/distribution system interconnection information not already provided in the offer form, (i.e. switchyard or substation, with primary equipment listed; interconnecting voltages and interconnecting transmission lines; bus configuration: collector bus, ring bus, breaker and a half).
- 3. Status of the Project's associated studies, along with any application fees paid. Expected dates for i) the completion of the various studies associated with the interconnection process, ii) the completion of any upgrades required for interconnection, including those required for full deliverability status if applicable, and iii) the ultimate availability of the interconnection, along with any supporting documentation. Participant should provide all studies completed by the PTO or CAISO relating to its interconnection request, which should include descriptions of the scope of work and upgrades required for interconnection, along with their associated timing and costs. If Project's studies are for interconnection as an energy-only resource, it should be clearly noted in this section. If an interconnection agreement for the Project exists, it should be submitted in addition to the Phase II Study.

## Project Name:\_\_\_\_\_

PG&E reserves the right to request additional documentation listed but not already provided in the Offer package.

Please provide the following Project information in the order requested.

1. Provide a time schedule and cash flows for the entire project including development, permitting, engineering, construction, start-up and commissioning.

- 2. To forecast future O&M and capital costs, provide the following:
  - a. Cash flow of fixed and variable O&M,
  - b. Major maintenance and replacement intervals,
  - c. Operating assumptions used in determining the above cash flows,
  - d. Estimated expected life of the asset under the assumed operating assumptions,
  - e. How variations to the assumed operating assumptions affects items a & b above,
  - f. Cost of O&M service agreements for the major equipment,
  - g. Disposition of the major equipment at the end of the useful life.

#### **Confidentiality Agreement**

#### **CONFIDENTIALITY AGREEMENT**

This confidentiality agreement ("Confidentiality Agreement") dated as of latest date of signature found at the signature block ("Execution Date") is entered into by and between Pacific Gas and Electric Company, a California corporation, ("PG&E") and \_\_\_\_\_\_ ("Participant"), each of which may be referred to herein separately as a "Party" or together as the "Parties". *[Note to Participants: Please modify if you have provided an Offer as part of a joint venture or partnership by adding in names of all Participants involved.]* 

Whereas, the Parties have furnished and are furnishing certain Confidential Information, as defined below, to each other in the interest of developing a mutually agreeable agreement ("Agreement") in connection with PG&E's 2014 Energy Storage ("ES")Solicitation issued [insert date] ("Solicitation") pursuant to California Public Utilities Commission Decision [D.13-10-040].

Whereas, it is to the mutual benefit of each Party hereto to enter into this Confidentiality Agreement and provide for the procedure to exchange and protect Confidential Information, as defined below, pursuant to this Confidentiality Agreement;

NOW, THEREFORE, in consideration of Provider's disclosure to Recipient of Confidential Information and other valuable consideration, the Parties agree as follows:

#### 1. Definition of Confidential Information

The term "Confidential Information" shall mean all information that either Party ("Provider") has furnished or is furnishing to the other Party ("Recipient"), which with respect to Participant as Provider must in addition be clearly marked "Confidential" (or promptly identified in writing as such when furnished to PG&E in intangible form), in connection with or pertaining to the Solicitation or any Agreement offer thereunder, whether furnished before or after the Execution Date of this Confidentiality Agreement, whether intangible or tangible, and in whatever form or medium provided, and regardless of whether owned by Provider, as well as all information generated by Recipient or its Representatives, as defined below, that contains, reflects, or is derived from such furnished information. "Confidential Information" shall also include information regarding the Parties' bidding and negotiation process, including the status of such process, and potential commercial relationship concerning the Solicitation or any Agreement offer thereunder.

#### 2. Disclosure to Representatives

Recipient agrees that it will maintain the Confidential Information in strict confidence and that the Confidential Information shall not, without Provider's prior written consent, be disclosed by Recipient or by its affiliates, or their respective officers, directors, partners, employees, agents, or representatives (collectively, "Representatives") in any manner whatsoever, in whole or in part, and shall not be used by Recipient or by its Representatives other than in connection with the Solicitation and the evaluation or negotiation of the Agreement. Moreover, Recipient agrees to transmit the Confidential Information only to such of its Representatives who need to know the Confidential Information for the sole purpose of assisting Recipient with such permitted uses, as applicable; provided that, Recipient shall inform Representatives of this Confidentiality Agreement and secure their agreement to abide in all material respects by its terms. In any event, Recipient shall be fully liable for any breach of this Confidentiality Agreement by its Representatives as though committed by Recipient itself.

### **Confidentiality Agreement**

#### 3. Nondisclosure

Recipient further agrees that it:

- (a) shall not disclose any Confidential Information provided to it by Provider to any third party for any purpose, except as provided in Section 5 below (or Section 2 above if a Representative is a third party);
- (b) shall not distribute all or any portion of Confidential Information to any Representative for any purpose other than as permitted by Section 2 above; and
- (c) shall destroy or return all such Confidential Information upon Provider's request; provided that, each Party shall have the right to retain one copy of Confidential Information for regulatory compliance or legal purposes, and neither Party shall be obligated to purge extra copies of Confidential Information from electronic media used solely for disaster recovery backup purposes.

#### 4. Exclusions to Confidential Information

For purposes of this Confidentiality Agreement, Confidential Information does not include information that:

- (a) is in the public domain at the time of the disclosure by Provider or is subsequently made available to the general public through no violation of this Confidentiality Agreement by Recipient;
- (b) Recipient can demonstrate was at the time of disclosure by Provider already in Recipient's possession and was not acquired, directly or indirectly, from Provider on a confidential basis;
- (c) is independently developed by Recipient without use of or reference to the Confidential Information; or
- (d) is disclosed with the prior written consent of Provider.

### 5. Required and Permitted Disclosure

Recipient agrees not to introduce (in whole or in part) into evidence or otherwise voluntarily disclose in any administrative or judicial proceeding, any Confidential Information, except as required by law or as Recipient may be required to disclose to duly authorized governmental or regulatory agencies ("Required Disclosure"). In the event that Recipient or any of its Representatives becomes subject to a Required Disclosure, Recipient agrees:

- (a) to the extent practicable, to use reasonable efforts to notify Provider prior to disclosure and to prevent or limit such disclosure; and
- (b) if disclosure of such Confidential Information is required to prevent Recipient from being held in contempt or subject to other legal detriment, to furnish only such portion of the Confidential Information as it is legally compelled to disclose and to exercise its

### **Confidentiality Agreement**

reasonable efforts to obtain an order or other reliable assurance that confidential treatment will be accorded to the disclosed Confidential Information.

After using such reasonable efforts, Recipient shall not be prohibited from complying with the Required Disclosure and shall not be liable to the other Party for monetary or other damages incurred in connection with the Required Disclosure.

In addition to the Required Disclosure, the Parties shall be permitted to disclose Confidential Information as follows: (i) to PG&E's Procurement Review Group, as defined in California Public Utilities Commission ("CPUC") Decision (D) 02-08-071, subject to a confidentiality agreement, (ii) to the CPUC (including CPUC staff) under seal for purposes of review (if such seal is applicable to the nature of the Confidential Information), and (iii) to the Independent Evaluator, as defined and specified in the 2014 PG&E ES Solicitation Protocol ("Protocol"). PG&E shall also be permitted to disclose Participant's Confidential Information in order to comply with (A) any applicable law, regulation, or any exchange or control area rule, or (B) any applicable regulation, rule, or order of the CPUC, California Energy Commission, the California Air Resources Board, or the Federal Energy Regulatory Commission, including any mandatory discovery or data request issued by any of the foregoing entities, or (C) to potential complementary providers to enable or assist with renewable energy transactions, including, but not limited to, marketers, financial institutions, energy banking and shaping service providers, brokers or other providers of services or products that may enable the development of an Agreement, as designated by PG&E with a "need to know" in order to value or price the energy, evaluate such complementary services or products or otherwise enable the Parties to consummate an Agreement, provided that such recipients shall be duly notified of the confidential nature of the Confidential Information and agree to be bound by a materially similar obligation of confidentiality with respect to such Confidential Information as to which PG&E is bound]. [Include subsection (C) if Participant's project is located outside of California.]

#### 6. No License Rights

This Confidentiality Agreement and any Confidential Information used or disclosed hereunder shall not be construed as granting, expressly or by implication, Recipient any rights by license or otherwise to such Confidential Information or to any invention, patent or patent application, or other intellectual property right, now or hereafter owned or controlled by Provider.

### 7. Publicity

Subject to Sections 4 and 5, neither Party will disclose any information or make any news release, advertisement, public communication, response to media inquiry or other public statement regarding this Confidentiality Agreement and the Confidential Information disclosed hereunder (including without limitation the potential commercial relationship between the Parties, the inclusion of an offer on PG&E's shortlist of offers, or the status of negotiations) or the performance hereunder or with respect to an offer, without the prior written consent of the other Party.

### 8. No Future Contracts

Entry into this Confidentiality Agreement and the disclosure of Confidential Information hereunder shall not constitute an offer or acceptance or promise of any future contract or amendment of any existing contract. Each Party shall retain such rights with respect to its own Confidential Information as it had prior to entering into this Confidentiality Agreement. Unless and until a definitive Agreement has been executed and delivered between the Parties, neither Party shall have any legal obligation with

### **Confidentiality Agreement**

respect to any contemplated transaction because of this Confidentiality Agreement or any other written or oral expression with respect to any transaction except, in the case of this Confidentiality Agreement, for the matters specifically agreed to herein.

#### 9. No Representation or Warranties

Any Confidential Information exchanged under this Confidentiality Agreement shall carry no warranties or representations of any kind, either expressed or implied, unless specifically expressed per the terms of the Protocol. Recipient shall not rely on the Confidential Information for any purpose other than to make its own evaluation thereof or as provided in the Protocol.

#### 10. Injunctive Relief

Recipient acknowledges and agrees that, in the event of any breach of this Confidentiality Agreement, Provider may be irreparably and immediately harmed and monetary damages may not be adequate to make Provider whole. Accordingly, it is agreed that, in addition to any other remedy to which it may be entitled in law or equity and, with respect to PG&E as Provider any remedy under the Protocol, Provider shall be entitled to an injunction or injunctions (without the posting of any bond and without proof of actual damages) to cease breaches or prevent threatened breaches of this Confidentiality Agreement and/or to compel specific performance of this Confidentiality Agreement, and that neither Recipient nor its Representatives will oppose the granting of such equitable relief if a court finds a breach or threatened breach. Each Party expressly agrees that it shall bear all costs and expenses, including attorneys' fees and costs, that it may incur as Provider in enforcing the provisions of this Confidentiality Agreement.

### 11. Term and Provisions Surviving Termination

This term of this Confidentiality Agreement shall be two (2) years from the Execution Date; provided however, that either Party may earlier terminate this Confidentiality Agreement by giving the other Party thirty (30) days prior written notice of its intention to terminate this Confidentiality Agreement. Any such expiration or termination shall not abrogate either Party's obligations hereunder with respect to Confidential Information received prior to such expiration or termination nor those terms herein relating to the interpretation or enforcement of this Confidentiality Agreement relating to said obligations. Such obligations and terms shall survive for a period of three (3) years from said expiration or termination.

### 12. No Waiver

Any waiver of any provision of this Confidentiality Agreement, or a waiver of a breach hereof, must be in writing and signed by both Parties to be effective. Any waiver of a breach of this Confidentiality Agreement, whether express or implied, shall not constitute a waiver of a subsequent breach hereof.

### 13. Binding Nature and Amendment

This Confidentiality Agreement contains the entire understanding between the Parties with respect to Confidential Information received hereunder. No change or modification shall be made effective unless in writing and signed by an authorized representative of each Party. Any conflict between the language on any specified legend or stamp on any Confidential Information received hereunder, or any provision of the Protocol, an Agreement relating to Confidential Information provided

during the term of this Agreement, on the one hand, and this Confidentiality Agreement, on the other hand, shall be resolved in favor of the language of this Confidentiality Agreement. This Confidentiality Agreement may not be amended or modified except by a written agreement executed by both Parties.

#### 14. Governing Law and Jurisdiction

THIS CONFIDENTIALITY AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA. THE PARTIES AGREE THAT ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATED IN ANY WAY TO THIS CONFIDENTIALITY AGREEMENT SHALL BE BROUGHT SOLELY IN A COURT OF COMPETENT JURISDICTION SITTING IN THE CITY AND COUNTY OF SAN FRANCISCO. THE PARTIES HEREBY IRREVOCABLY AND UNCONDITIONALLY CONSENT TO THE JURISDICTION OF ANY SUCH COURT AND HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE ANY DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF ANY ACTION OR PROCEEDING IN ANY SUCH COURT, ANY OBJECTION TO VENUE WITH RESPECT TO ANY SUCH ACTION OR PROCEEDING AND ANY RIGHT OF JURISDICTION ON ACCOUNT OF THE PLACE OF RESIDENCE OR DOMICILE OF ANY PARTY THERETO. THE PARTIES HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE THE RIGHT TO A JURY TRIAL IN CONNECTION WITH ANY CLAIM ARISING OUT OF OR RELATED TO THIS CONFIDENTIALITY AGREEMENT.

#### 15. Severability

If any provision hereof is unenforceable or invalid, it shall be given effect to the extent it may be enforceable or valid, and such unenforceability or invalidity shall not affect the enforceability or validity of any other provision of this Confidentiality Agreement.

#### 16. Counterparts

This Confidentiality Agreement may be signed in counterparts, each of which shall be deemed an original. This Confidentiality Agreement may be executed and delivered by facsimile or PDF transmission and the Parties agree that such facsimile or PDF transmission execution and delivery shall have the same force and effect as delivery of an original document with original signatures, and that each Party may use such facsimile or PDF transmission signatures as evidence of the execution and delivery of this Confidentiality Agreement by the Parties to the same extent that an original signature could be used.

### 17. Notice

Any notice given hereunder by either Party shall be made in writing and shall be effective once delivered, in any of the following manners: by facsimile or e-mail, with indication of complete transmission thereof along with a confirmatory copy sent via U.S. Mail, certified mail, return receipt requested, as evidenced by a signed delivery receipt; or overnight delivery by a nationally recognized overnight delivery service, as verified by a delivery receipt or signature, addressed as follows:

### **Confidentiality Agreement**

To Participant: [TO BE COMPLETED BY EACH PARTICIPANT]

Name:	
Address:	_
Address:	
Facsimile:	_
Email:	-

To PG&E: Pacific Gas and Electric Company Electric Supply Department Attn: ES RFO Manager 77 Beale Street, (MC B25J) San Francisco, California 94105 Facsimile: (415) 973-3946 Email: energystorage@pge.com.

Either Party may periodically change any address to which notice is to be given it by providing written notice of such change to the other Party.

IN WITNESS WHEREOF, each Party has caused this Confidentiality Agreement to be duly executed and delivered by its proper and duly authorized agent as of the date set forth below. *[Note to Participants: For joint Offers, please add signature blocks for each Participant involved.]* 

#### PACIFIC GAS AND ELECTRIC COMPANY

[PARTICIPANT NAME]

Signature

Print Name

Title

Date

Signature

Print Name

Title

Date
PG&E

2014 ES RFO

FERC Order No. 717 Waiver

Project Name: \_\_\_\_\_

Consent Agreement

This consent agreement ("Consent Agreement") is entered into by [PARTICIPANT LEGAL NAME] ("Bidder") as of the signature date below, to authorize the disclosure of Bidder's transmission-related information to Pacific Gas and Electric Company's ("PG&E") marketing or merchant business unit ("PG&E Merchant").

Whereas, pursuant to the Federal Energy Regulatory Commission ("FERC") Standards of Conduct enacted through FERC Order No. 717 or its successor, PG&E's transmission planning group ("PG&E Transmission") is prohibited from sharing non-public transmission-related information with PG&E Merchant; and

Whereas, PG&E has issued a 2014 Energy Storage Request for Offer Protocol, dated [December 1, 2014], inviting interested parties to submit offers ("Offer") to sell power to PG&E ("ES RFO"), and Bidder has submitted an Offer(s) in response thereto containing non-public information related to the transmission requirements associated with the Offer(s); and

Whereas, PG&E, and its PG&E Merchant and PG&E Transmission units require access to nonpublic transmission-related information from Bidder in order to effectively evaluate Bidder's Offer(s), and Bidder recognizes that access to such non-public transmission-related information is necessary to allow PG&E and PG&E Merchant to effectively evaluate Bidder's Offer(s); and

Whereas, Bidder recognizes that PG&E Transmission should not be prohibited from sharing non-public transmission-related information with PG&E Merchant;

NOW THEREFORE, in consideration of the mutual promises and covenants between PG&E Merchant and Bidder in connection with the ES RFO, Bidder consents to and authorizes PG&E Transmission's disclosure of all non-public transmission-related information to PG&E Merchant to the extent that information relates to the Bidder's Offer.

IN WITNESS WHEREOF, Bidder has caused this Consent Agreement to be duly executed, effective and delivered by its proper and duly authorized officer as of the date set forth below.

BIDDER:

Signature:
------------

Name: \_\_\_\_\_

Title:

Date:			

# 2014 ES RFO

## **Credit and Finance Information**

Provide the following information for assessment of the financial viability of Participant. Include additional sheets and other materials with this Appendix as necessary. Financial information must be provided for the participant and any entity providing credit enhancement for the Participant. As necessary, please specify whether the information provided is for the Participant, its parent or an entity providing on the Participant's behalf, under any of the provisions of the PPA. All capitalized terms not defined herein, shall have the meaning provided in the RFO.

# A. Participant Identification and Credit Information:

- 1. Full Legal Name of Participant:
- 2. Describe in detail Participant's corporate structure. List the legal name of all owners of the project and their relative percentage ownership.
- 3. Provide two years of audited financial statements and year-to-date financial statement of Participant and/or guarantor.
- 4. List and describe any pending legal disputes.

# **B.** Financing Plan for Proposed Offer (As Applicable)

Provide a description of the project's financing plan during development, construction, and performance phases, as applicable. The plan should include:

- 1. Amount, source and timing of equity financing.
- 2. Amount of debt financing. Provide an explanation of amortization period and interest rate of long-term debt assumed.
- 3. Balance sheet versus limited recourse financing.
- 4. Willingness and ability to equity and/or balance sheet finance construction until financing is secured in order to ensure project schedule.
- 5. Outline of anticipated major terms and conditions of debt service:
  - i. Term of Loan: (years)
  - ii. Interest Rate(s) (%/year)
  - iii. Other key terms and conditions
  - iv. Amortization Schedule
- 6. For New and Expanded ES Facilities, provide an explanation of all actions taken to fix or hedge the Project costs to date and plans to fix or hedge the Project costs.

# 2014 ES RFO

# **Credit and Finance Information**

# C. Prior Project Financing by Participant

List the project name; date placed; who financed the project; the amount of debt, equity and total capital; and the major financial terms.

PG&E

2014 ES RFO

Form of Letter of Credit

## FORM OF LETTER OF CREDIT

Issuing Bank Letterhead and Address

## STANDBY LETTER OF CREDIT NO. XXXXXXXX

**Date:** [insert issue date]

Beneficiary: Pacific Gas and Electric Company

77 Beale Street, Mail Code B28L San Francisco, CA 94105 Attention: Credit Risk Management

Letter of Credit Amount: [insert amount]

**Expiry Date:** [insert date that is one (1) year from offer date]

Ladies and Gentlemen:

By order of [insert name of Applicant] ("Applicant"), we hereby issue in favor of Pacific Gas and Electric Company (the "Beneficiary") our irrevocable standby letter of credit No. [insert number of letter of credit] ("Letter of Credit"), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ [insert amount in figures followed by (amount in words)] ("Letter of Credit Amount"). This Letter of Credit is available with [insert name of issuing bank, and the city and state in which it is located] by sight payment, at our offices located at the address stated below, effective immediately, and it will expire at our close of business on [insert expiry date] (the "Expiry Date").

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

1. Beneficiary's signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of Credit No. **[insert number]** and stating the amount of the demand; and

2. One of the following statements signed by an authorized representative or officer of Beneficiary:

A. **[Insert name of entity submitting an offer under PG&E's Energy Storage Request for Offers Protocol]** has breached Beneficiary's Energy Storage Request for Offers Protocol or the accompanying Agreement and forfeited the Offer Deposit, which entitles Beneficiary to draw the entire Letter of Credit Amount under Letter of Credit No.[insert number]; or

Applicant: [Insert name and address of Applicant]

# Form of Letter of Credit

B. **[Insert name of entity submitting an offer under PG&E's Energy Storage Protocol]** has entered into one or more agreement(s) (the "Agreement(s)") with Beneficiary in connection with Beneficiary's Energy Storage Request for Offers Protocol and has failed to post security pursuant to the terms of the Agreement(s); or

C. Letter of Credit No. [insert number] will expire in thirty (30) days or less and [insert name of entity submitting an offer under PG&E's Energy Storage Request for Offers Protocol] has not provided replacement security acceptable to Beneficiary.

Special Conditions:

- 1. Partial and multiple drawings under this Letter of Credit are allowed;
- 2. All banking charges associated with this Letter of Credit are for the account of the Applicant; and
- 3. This Letter of Credit is not transferable.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at **[insert issuing bank's address for drawings]**.

All demands for payment shall be made by presentation of originals or copies of documents, or by facsimile transmission of documents to **[insert fax number]**, Attention: **[insert name of issuing bank's receiving department]**, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at **[insert phone number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit will be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision,* International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we will honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly.

The law of the State of New York shall apply to any matters not covered by the UCP 600.

## 2014 ES RFO

Form of Letter of Credit For telephone assistance regarding this Letter of Credit, please contact us at [insert number and any other necessary details].

Very truly yours,

# [insert name of issuing bank]

By: \_\_\_\_\_

Name:

Title:

Authorized Signature	
[print or type name]	_
	×

PG&E

Appendix E2

Form of Letter of Credit Exhibit A

## SIGHT DRAFT

TO [INSERT NAME AND ADDRESS OF PAYING BANK]

AMOUNT: \$\_\_\_\_\_

DATE: \_\_\_\_\_

AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF PACIFIC GAS AND ELECTRIC COMPANY THE AMOUNT OF U.S.\$ (\_\_\_\_\_\_U.S. DOLLARS)

DRAWN UNDER [INSERT NAME OF ISSUING BANK] LETTER OF CREDIT NO. XXXXXX.

REMIT FUNDS AS FOLLOWS:

[INSERT PAYMENT INSTRUCTIONS]

DRAWER

BY:

NAME AND TITLE

Name (as shown on your income tax return)

page 2.	Business name/disregarded entity name, if different from above		
uo	Check appropriate box for federal tax classification:	Trust/estate	Exemptions (see instructions):
on de			Exempt payee code (if any)
Print or type c Instruction	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partner	ship) ►	Exemption from FATCA reporting code (if any)
Prin c Ins	□ Other (see instructions) ►		
Print or type Specific Instructions	Address (number, street, and apt. or suite no.)	Requester's name a	and address (optional)
See S	City, state, and ZIP code		
	List account number(s) here (optional)		
Pa	t I Taxpayer Identification Number (TIN)		
to avo reside entitie	your TIN in the appropriate box. The TIN provided must match the name given on the "Name bid backup withholding. For individuals, this is your social security number (SSN). However, for ent alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other es, it is your employer identification number (EIN). If you do not have a number, see <i>How to ge</i> n page 3.	ra	
	If the account is in more than one name, see the chart on page 4 for guidelines on whose er to enter.	Employer	identification number
Par	t II Certification	· · · ·	· · · · ·

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below), and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	U.S. person ►	Date ►
Sign	Signature of	

#### **General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** The IRS has created a page on IRS.gov for information about Form W-9, at *www.irs.gov/w9*. Information about any future developments affecting Form W-9 (such as legislation enacted after we release it) will be posted on that page.

#### **Purpose of Form**

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in settlement of payment card and third party network transactions, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the

withholding tax on foreign partners' share of effectively connected income, and 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are

exempt from the FATCA reporting, is correct.

**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien,

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,

- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding atx. Therefore, if you are a U.S. person that is a partner in a partnership to conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

• In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity,

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust, and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

# Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt* payee code on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships on page 1.

What is FATCA reporting? The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

#### **Updating Your Information**

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

#### Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

#### **Specific Instructions**

#### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the	Э
"Name" line and any business, trade, or "doing business as (DBA) name" on th	e
"Business name/disregarded entity name" line.	

**Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulation section 301.7701-2(c)(2)(iii). Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the disregarded entity anem" line. If the complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

**Note.** Check the appropriate box for the U.S. federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the U.S. federal tax classification in the space provided. If you are an LLC that is treated as a partnership for U.S. federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation, as appropriate. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for U.S. federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

**Other entities.** Enter your business name as shown on required U.S. federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

#### Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the *Exemptions* box, any code(s) that may apply to you. See *Exempt payee code* and *Exemption from FATCA reporting code* on page 3.

Exempt payee code. Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends. Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following codes identify payees that are exempt from backup withholding:

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3-A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

 $4-{\rm A}$  foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6-A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States

7-A futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

 $12\mathchar`-A$  middleman known in the investment community as a nominee or custodian

13-A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>1</sup>See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup>However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Reg. section 1.1472-1(c)(1)(i)

E-A corporation that is a member of the same expanded affiliated group as a corporation described in Reg. section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

 $\rm H-A$  regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J-A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

#### Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

#### Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

#### What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
<ol> <li>Individual</li> <li>Two or more individuals (joint account)</li> </ol>	The individual The actual owner of the account or, if combined funds, the first individual on the account '
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
<ul> <li>4. a. The usual revocable savings trust (grantor is also trustee)</li> <li>b. So-called trust account that is not a legal or valid trust under state law</li> </ul>	The grantor-trustee <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
<ol> <li>Disregarded entity not owned by an individual</li> </ol>	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
<ol> <li>Association, club, religious, charitable, educational, or other tax-exempt organization</li> </ol>	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup>List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup>You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

#### Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- · Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- · Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to minic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.govlidtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

#### **Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

#### **ENERGY STORAGE AGREEMENT**

between

#### PACIFIC GAS AND ELECTRIC COMPANY (as "Buyer")

and

(as "Seller")

**Pro Forma Energy Storage Agreement** 

THIS TEMPLATE IS DEVELOPED FOR USE WITH NEW PROJECTS THAT ARE INTERCONNECTED WITH THE CAISO AND STANDALONE RESOURCES (NOT DIRECTLY CONNECTED TO ANOTHER GENERATION FACILITY)

TERMS THAT ARE BOXED AND SHADED IN LIGHT YELLOW AND/OR BRACKETED AND IN BLUE FONT ARE EITHER BUYER COMMENTS OR GENERATING FACILITY TYPE SPECIFIC COMMENTS THAT SHOULD BE REMOVED, ACCEPTED OR COMPLETED, AS APPLICABLE.

PG&E Energy Storage Agreement Form; February, 2014

# **ENERGY STORAGE AGREEMENT**

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#### **ENERGY STORAGE AGREEMENT**

This Energy Storage Agreement is made by and between Pacific Gas and Electric Company, a California corporation ("PG&E", and as further defined herein, "Buyer") and \_\_\_\_\_\_, a *[identify State]* [corporation/limited liability company] ("Seller") as of the Execution Date. Seller and Buyer are referred to individually as "Party" or collectively as "Parties". Buyer and Seller hereby agree to the following:

#### **ARTICLE ONE: GOVERNING TERMS**

1.1 <u>Entire Agreement</u>. This Energy Storage Agreement, together with each and every appendix, attachment, amendment, schedule and written supplements hereto, to the extent those are executed by the Parties, constitutes the entire agreement of the Parties (the "Agreement") as to the matters set forth herein.

1.2 <u>Interpretation</u>. The following rules of interpretation shall apply:

(a) The term "including" shall mean "including without limitation"; the term "calendar year" shall mean the period of months from January 1 through and including December 31; the term "month" shall mean a calendar month unless otherwise indicated, and a "day" shall be a 24-hour period beginning at 12:00:01 a.m. and ending at 12:00:00 midnight; provided that a "day" may be 23 or 25 hours on those days on which daylight savings time begins or ends, respectively.

(b) Unless otherwise specified herein, where the consent of a Party is required, such consent shall not be unreasonably withheld or unreasonably delayed.

(c) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies unless otherwise specified.

(d) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in <u>Appendix I</u>, unless otherwise specified.

(e) References in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, limited liability companies, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.

(f) Words not otherwise defined herein that have well known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings. Words referring to market rules, activities and practices shall have the meaning generally ascribed to such words in California.

(g) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.

(h) Any reference in this Agreement to any natural person, Governmental Authority, corporation, limited liability company, partnership or other legal entity includes its permitted successors

and assigns or to any natural person, Governmental Authority, corporation, limited liability company, partnership or other legal entity succeeding to its functions.

(i) All references to dollars or "\$" are to U.S. dollars.

(j) When an action is required to be completed on a Business Day, such action must be completed prior to 5:00 p.m. on such day, Pacific prevailing time, and actions occurring after 5:00 p.m. (such as the delivery of a Notice) will be deemed to have occurred on the following Business Day.

1.3 <u>Recordings</u>. Unless a Party expressly objects to a Recording at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Agreement related to the scheduling of any Product, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement, subject to the confidentiality provisions of Article Twenty-Four. Each Party waives any further notice of such monitoring or Recording and agrees to notify its officers and employees of such monitoring or Recording and to obtain any necessary consent of such officers and employees. Failure of a Party either to provide such notification or obtain such consent shall not in any way limit the use of the Recordings pursuant to this Agreement.

1.4 <u>Authorized Representatives</u>. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a schedule or dispatch order for the delivery or acceptance of any Product or make or receive other Notices on behalf of such Party ("Authorized Representative") and in connection with such Notices and specify the scope of their individual authority and responsibilities. Either Party may change its designation of such persons and the scope of their individual authorities and responsibilities from time to time in its sole discretion by providing Notice.

1.5 <u>No Dedication</u>. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any Person not a Party to this Agreement. No undertaking by one Party to the other Party under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or the public, nor affect the status of Buyer as an independent public utility corporation or Seller as an independent individual or entity.

1.6 <u>Governing Law</u>. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

## **ARTICLE TWO: TERM**

## 2.1 <u>Term</u>.

(a) As used herein "Contract Term" means the term that commences upon the Execution Date and, unless earlier terminated pursuant to Article Five or Article Fourteen, will continue throughout the Delivery Term and until the date as of which all obligations arising under this Agreement, including any compensation for the Product, Termination Payment, indemnification payments or other damages, are paid in full (whether directly or indirectly, such as through set-off or netting) and the

collateral is released and/or returned as applicable. All provisions relating to invoicing, payment, delivery, settlement of other liabilities incurred pursuant to this Agreement and dispute resolution shall survive for the period necessary to effectuate the rights of the Party benefited by such provision except as otherwise specified herein. Notwithstanding anything to the contrary in this Agreement, (i) all rights under Article Twenty (Indemnities) and any other indemnity rights shall survive the end of the Contract Term for an additional twelve (12) months; (ii) all rights and obligations under Article Twenty-Four (Confidentiality) shall survive the end of the Contract Term for an additional two (2) years; and (iii) all provisions relating to limitations of liability shall survive without limit.

(b) As used herein "Delivery Term" means the period commencing on the Initial Delivery Date and continuing for a period of [ten (10)] Contract Years from the Initial Delivery Date unless earlier terminated pursuant to Article Five. *[Seller to insert Delivery Term consistent with 2014 Energy Storage Solicitation offer]* 

(c) As used herein, "Initial Delivery Date" means the date that is the later of (i) (as may be extended in accordance with Section 14.1(e)) *[Seller to insert date, which shall be the first date of a month]* (the "Expected Initial Delivery Date"); provided that the CPUC Approval Condition Precedent and the Conditions Precedent set forth in Article Seventeen have been satisfied; or (ii) the first day of the month directly following satisfaction of the CPUC Approval Condition Precedent and Conditions Precedent pursuant to the terms set forth in Article Seventeen.

(i) The Parties shall execute and exchange the "Initial Delivery Date Confirmation Letter attached hereto as <u>Appendix IV</u> on the Initial Delivery Date.

2.2 <u>Binding Nature</u>.

(a) <u>Upon Execution Date</u>. This Agreement shall be effective and binding as of the Execution Date only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under:

- (i) Articles I, II, XIV, and XX XVI; and
- (ii) Section 3.5;
- (iii) Sections 5.1(a)(i)-(iv), 5.1(b)(i)-(iv) and 5.2 through 5.4;
- (iv) Section 6.3;
- (v) Section 11.1(d)(ii), and 11.2; and
- (vi) Section 13.4.

(b) <u>Upon Effective Date</u>. This Agreement shall be in full force and effect, enforceable and binding in all respects, upon occurrence of the Effective Date.

2.3 <u>CPUC Approval</u>. If CPUC Approval has not occurred on or before three hundred sixty five (365) days from the date on which Buyer files this Agreement with the CPUC seeking CPUC Approval ("CPUC Approval Condition Precedent"), then either Party may terminate this Agreement effective upon Notice to the other Party, unless such approval has been waived in writing by both Parties. Within ten (10) Business Days of such termination, Buyer shall return the Project Development Security. Following the return of the Project Development Security, neither Party shall have any obligation or liability to the other by reason of such termination.

### **ARTICLE THREE: TRANSACTION**

3.1 <u>Purchase and Sale Obligation</u>. During the Delivery Term, Seller shall sell and make available to Buyer and Buyer shall accept and pay, in accordance with the provisions of this Agreement, for all the Monthly Contract Capacity of the Units which shall convey to Buyer the right to receive the Product provided by the Units, including Capacity and Capacity Attributes in excess of the Monthly Contract Capacity and pursuant to the terms and conditions contained herein.

3.2 Resource Adequacy Obligation. Seller agrees that the Units providing the Product to Buyer hereunder meets and will continue to meet all requirements necessary to qualify as a resource capable of contributing to Buyer's Resource Adequacy Requirements ("RAR") or similar successor requirements at all times during the Delivery Term. Seller agrees that it will take all measures necessary so that each Unit's Capacity qualifies as RA Capacity; provided, however, that no such action shall require Seller to modify the Project or to operate the Project in a manner that is inconsistent with the Operational Limitations set forth in <u>Appendix II</u>. In addition, the Parties will execute any and all documents or instruments reasonably necessary to enable Buyer to use fully such RA Capacity to satisfy Buyer's RAR. At its sole discretion, Buyer may re-sell or use for another purpose all or a portion of the Capacity Attributes. If a centralized capacity market develops within the CAISO region, Buyer will have exclusive rights to offer, bid, or otherwise submit the Capacity and/or Capacity Attributes for re-sale in such market, and retain and receive any and all related revenues. Seller's obligations pursuant to this Section 3.2 shall include the obligations set forth in subsections 3.2(a) – (d) below:

(a) Seller shall take all actions necessary to register, certify or qualify the Facility's Capacity and/or Capacity Attributes to be recognized and counted as RA Capacity, subject to the Operational Limitations set forth in <u>Appendix II</u>. This includes following requirements the CPUC has established and may establish in the future, including calculation of RA Capacity over all hours required for RAR eligibility, and delivery of the RA Capacity to Buyer.

(b) Seller shall comply with the applicable requirements set forth in the CAISO Tariff to ensure Buyer is able utilize RA Capacity to meet Buyer's RAR which may include coordinating with Buyer to meet the applicable requirements set forth in the CAISO Tariff.

(c) Seller shall comply with PG&E's Outage Protocol and Notifications specified in Section 10.2 and <u>Appendix III</u>.

(d) Seller shall obtain and maintain Full Capacity Deliverability Status as determined by the CAISO for the Units as of the Initial Delivery Date and throughout the Delivery Term.

#### 3.3 <u>Control; Exclusivity; Rights to Output and Payments</u>.

(a) Seller shall at all times during the Contract Term retain operational control of each and all Units, be responsible for or cause Seller's agent to be responsible for, all operation and maintenance of each and all Units and Seller will bear all costs related to development, construction, ownership, operation and maintenance of each and all Units.

(b) Buyer shall have the exclusive right to any and all components of the Product from each Unit, and Seller shall not dispatch or operate a Unit, or any portion thereof, or sell any Product or any element thereof associated with a Unit during the Delivery Term, to any Person other than Buyer

other than pursuant to an Instructed Operation. For the avoidance of doubt, during the Delivery Term, Seller shall not cause the Unit to become subject to an RMR agreement or any other obligation to operate a Unit or deliver a Product to any other Person other than pursuant to an Instructed Operation, and Buyer shall have the exclusive right to enter into an RMR agreement with respect to any Unit and/or resell any Product from any Unit, provided in each case that the RMR agreement or resale would not result in a violation of the Operational Limitations of the affected Unit.

(c) Subject to the reporting requirements of Section 10.1, nothing herein shall prevent Seller from complying with Instructed Operations; provided that if Seller receives an Instructed Operation other than through Buyer, it should advise the entity issuing the Instructed Operation that such communications are to be made to its Scheduling Coordinator, and in any event, Seller shall promptly report such event in accordance with Section 10.1 and <u>Appendix III</u>.

(d) Seller acknowledges and agrees that Buyer may take whatever measures it elects to protest, challenge, eliminate, institute or modify any Instructed Operation, which may include communicating directly with the Governmental Authority or Transmission Provider, as applicable, responsible for such Instructed Operation.

(e) To the extent that Seller receives any payment associated with the Product or any component thereof from a Unit during the Delivery Term, including non-Energy or fixed payments received for or in connection with RAR, Instructed Operations or any RMR agreement, from any Person (including the Transmission Provider) other than Buyer, Seller shall remit such payment to Buyer ("Third Party Payments"); provided that, for the avoidance of doubt, nothing herein precludes Seller from retaining credits related to Transmission Upgrades as contemplated pursuant to Section 3.5. Invoicing and payment for all amounts due from one Party to the other Party as necessary to implement this provision shall be done pursuant to Article Twelve.

3.4 <u>Unit Modifications</u>. Absent the written consent of Buyer, which may be withheld or delayed at Buyer's sole discretion until such time as the terms of this Section 3.4 are satisfied, Seller shall not, and shall not permit any other Person to:

(a) undertake any construction at or modification of the Unit(s) or the Facility; or

(b) modify the Capacity of the Units that are committed to Buyer (as compared to its Design Capacity); or

(c) take any other action that would, or may reasonably be expected to, impair or limit the ability of a Unit to supply the Product to the Buyer or the ability of Seller to deliver any and all components of the Product that the Unit is capable of producing, as set forth in <u>Appendix II</u>, as measured at the Electrical Delivery Point.

(d) Nothing in this Section 3.4 shall be deemed to limit or impair the ability of the Seller to perform or cause to be performed routine maintenance in the ordinary course of business, including those that may result in restoring applicable Design Capacity or Guaranteed Efficiency lost through degradation, subject to the provisions of Section 10.2.

3.5 <u>Separation of Functions</u>. The Parties acknowledge that the Parties have no rights against each other or obligations to each other under this Agreement with respect to any relationship between the Parties in which PG&E is acting in its capacity as an owner or provider of electrical interconnection or transmission service. If, in accordance with the applicable tariffs, rules, or agreements governing Seller's arrangements for Transmission Upgrades, Seller is entitled to receive a credit, repayment or other

rights or privileges as a result of funding the Transmission Upgrades, nothing in this Agreement shall impair or prohibit Seller from retaining those credits, repayments, rights or privileges for its use and benefit. Regardless of whether PG&E owns or operates the interconnecting transmission system, under no circumstances will PG&E in its capacity as a Buyer under this Agreement be responsible for Seller's interconnection arrangements or costs nor any credit, repayment or other rights or privileges due to Seller as a result of its funding of the Transmission Upgrades. Buyer is not responsible for or liable in any way for any delay in the Initial Delivery Date owing to electric interconnection or transmission service, and Seller's non-performance of any provision of this Agreement shall not be excused. The Parties further acknowledge that PG&E is subject to regulations requiring the separation of its transmission and merchant functions pursuant to FERC's Standards of Conduct requirements, as set forth at 18 C.F.R. Part 358, as may be amended or modified from time to time.

3.6 <u>No Replacement Product</u>. In no event shall Seller have the right to procure and substitute the Product or any element of the Product from a source other than the Units designated by Buyer for sale or delivery to Buyer under this Agreement, including during an Outage.

#### **ARTICLE FOUR: COMPENSATION**

#### 4.1 <u>Product Compensation</u>.

(a) Price. During the Delivery Term, Buyer shall pay Seller for Product delivered in accordance with the terms of this Agreement at the applicable prices set forth below:

follows:

(i) The Capacity Payment Price ("CPP") in each Contract Year shall be as

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<b>Contract Year</b>	CPP (\$/kW-year)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

(ii) The Variable O&M Price ("VOMP") shall be as follows:

Contract Year	VOMP (\$/MWh)
1	
2	
3	
4	
5	
6	
7	
8	
9	

Contract Year	VOMP (\$/MWh)
10	

(b) <u>Product Payment Obligations</u>. During each month of the Delivery Term, Buyer shall pay Seller for Product delivered to Buyer, in arrears, the total compensation  $(TC_m)$  calculated pursuant to the equation below using the component parts described in detail in this Article Four:

 $TC_m = MFP_m + MVP_m + Other Payment Adjustments$ 

(i) <u>Monthly Fixed Payment</u>. During each month of the Delivery Term, Buyer shall pay Seller for Product delivered to Buyer, in arrears, a monthly fixed payment ("Monthly Fixed Payment" or "MFP") for the Units, as full payment for the right to receive the Product and the delivery of the Product associated with the Units, determined as follows.

 $MFP_m = CPP \times MAF_m \times MCC_m \times max [(AA_m - GEA_m), 0]$ 

where,

MFP<sub>*m*</sub> is the Monthly Fixed Payment for the subject month;

CPP is the Capacity Payment Price;

 $MAF_m$  is the monthly allocation factor set forth in <u>Appendix VIII</u> for such month; provided that at least ninety (90) days prior to a start of the next calendar year, Buyer may Notify Seller of modifications to <u>Appendix VIII</u>. Buyer may not modify <u>Appendix VIII</u> such that any individual month has a percentage allocation of less than four percent (4%) or greater than fifteen percent (15%); or such that the sum of the twelve products of the MFP for each month multiplied by the applicable MCC for that month is less than it would have been prior to the modification. The sum of the twelve (12) monthly allocation factors in any calendar year must equal one hundred percent (100%).

 $MCC_m$  is the Monthly Contract Capacity for such month as adjusted in accordance with Section 4.2 and Article Eleven;

 $AA_m$  is the Availability Adjustment for such month, determined pursuant to

Section 4.3; and

 $GEA_m$  is the Guaranteed Efficiency Adjustment for such month, determined pursuant to Section 4.4.

Examples of the calculation of the Monthly Fixed Payment are provided in

Appendix XV.

(ii) <u>Monthly Variable Payment</u>. During each month of the Delivery Term, Buyer shall pay Seller, in arrears, a monthly variable payment ("Monthly Variable Payment" or "MVP") for each Unit, as payment for all of the Energy and Other Product components of Product provided from the Unit by Seller with respect to Scheduled Operations during the subject month as follows.

 $MVP_m = \sum \min (Delivered Discharge Energy_i, Buyer's Discharge Schedule_i) \times VOMP_v$ 

where,

 $\sum$  is from *i*=1 to *n*;

*m* = relevant month "m" in which a MVP payment is made;

*i* = the Settlement Interval in month "*m*";

n = total number of Settlement Interval in month "m";

 $VOMP_y =$  the VOMP in Contract Year "y" corresponding to month "m".

An example of the Monthly Variable Payment calculation is provided in

#### Appendix XVI.

(iii) <u>Other Payment Adjustments</u>. "Other Payment Adjustments" include other compensatory requirements listed in Section 12.1.

4.2 <u>Monthly Contract Capacity</u>. The Monthly Contract Capacity shall equal the Expected Monthly Contract Capacity as set forth in <u>Appendix II</u>, subject to adjustment as provided in Section 4.2(a) below.

(a) Adjustments to Monthly Contract Capacity. During the Delivery Term, the Monthly Contract Capacity shall be adjusted downward at the start of each new Contract Year by the Annual Capacity Degradation Rate ("ACDR"), if applicable; provided that Buyer also has the right to adjust the Monthly Contract Capacity after a Performance Test as set forth in Article Eleven. The adjustments to the Monthly Contract Capacity are calculated as follows:

 $AMCC = min [(EMCC \times (1 - ACDR)), TCR]$ 

where:

AMCC = Adjusted Monthly Contract Capacity

EMCC = Effective Monthly Contract Capacity which is the MCC values in effect for the prior Contract Year

ACDR = Annual Capacity Degradation Rate specified in Appendix II

TCR = Tested Capacity Results which is the MCC values as adjusted by the most recent Performance Test results.

Examples of the Monthly Contract Capacity adjustment calculations are provided in <u>Appendix XVII</u>.

4.3 <u>Availability</u>.

(a) <u>Guaranteed Availability</u>. The "Guaranteed Availability" of the Units is:

Summer Months: ninety-eight percent (98.0%) Availability

Non-Summer Months: ninety-six percent (96.0%) Availability

(b) <u>Definition and Calculation of "Availability"</u>. Seller shall calculate the Availability of the Units on a monthly basis as a percentage measurement using the formula set forth below ("Availability"):

Availability<sub>m</sub> =  $TPE_m/[(MCC_m) \times (MNTHHRS_m-MAINTHRS_m)]$ 

where:

TPE<sub>m</sub> is the total amount of Energy (measured in MWh) that the Units could have charged or produced for the month ("m") to which the calculation applies if the Units had been scheduled at their full Monthly Contract Capacity ("MCC") for such month (measured in MW) for every hour in which the Units were available to operate for Buyer less the Energy which could have been produced due to MAINTHRS<sub>m</sub>, UNAVAILHRS<sub>m</sub>, and UNAVAILPRODHRS<sub>m</sub> (as defined below). To the extent the Units were unavailable to Buyer due to Instructed Operations, Excused Events, or Operational Limitations in <u>Appendix II</u>, the Units shall be deemed to have been available for purposes of determining TPE<sub>m</sub> and therefore no deduction is made for such hours.

 $TPE_m$  can be expressed algebraically as follows:

 $TPE_m = (MCC_m) \times (MNTHHRS_m-MAINTHRS_m-UNAVAILHRS_m - UNAVAILPRODHRS_m)$ 

where:

 $MCC_m$  is the Monthly Contract Capacity of the Units, measured in MW.

 $MNTHHRS_m$  is the total amount of hours for the month.

MAINTHRS<sub>m</sub> is the total amount of hours that the Units were unavailable due to Excused Scheduled Maintenance Outages or Force Majeure declared by Seller during the month, provided that the number of hours of Outages due to Excused Scheduled Maintenance Outages shall not exceed the maximum number of hours per year permitted for Excused Scheduled Maintenance Outages pursuant to Section 10.2(e)(iii) and the number of hours of Outages due to Force Majeure declared by Seller shall not exceed the number of Excused Hours available to the Seller at the end of the applicable month. An Excused Scheduled Maintenance Outage or Force Majeure (declared by Seller) that results in partial Outage of the Units or occurs less than a full hour will count as an equivalent percentage of the applicable hour(s) for this calculation. For example, if the Units' capacity was reduced by ten percent (10%) for twenty (20) hours due to an Excused Scheduled Maintenance Outage for two (2) full hours.

UNAVAILHRS<sub>m</sub>, consists of each hour or partial hour in which the Units were unavailable to deliver Energy to Buyer or unable to accept Energy due to (i) a Forced Outage; (ii) an Unexcused Scheduled Maintenance Outage; (iii) Force Majeure declared by Seller, but only to the extent the number of hours of Force Majeure exceed the cumulative number of Excused Hours available to the Seller as of the end of the applicable month; (iv) an extension of an Excused Scheduled Maintenance Outage from its original Outage schedule that was not Notified to Buyer prior to the timelines specified in Section 10.2; (v) any Notice of Unit availability that is below the Minimum Load of a given Unit (per <u>Appendix II</u>) in which case all such hours when availability is below Minimum Load will be counted as unavailable.

 $UNAVAILPRODHRS_m$  consists of each hour or partial hour in which the Units (i) were unable to provide Other Products as specified in <u>Appendix II</u> due to an event that inhibits the

Unit's capability to provide such Other Products but not its ability to deliver Energy; or (ii) inability of Seller to maintain certification of any Other Products as specified in <u>Appendix II</u>, provided that for clause (i) and (ii) that only twenty percent (20%) of the amount of Capacity unavailable to provide such Other Products shall be counted as unavailable. Any hour or partial hour considered unavailable for the purposes of UNAVAILHRS<sub>m</sub> herein shall not be considered UNAVAILPRODHRS<sub>m</sub>.

Hours in which the Units are deemed unavailable shall be included in the determination of UNAVAILHRS<sub>m</sub> or UNAVAILPRODHRS<sub>m</sub> to the extent of the Units' unavailability (which may be less than one hundred percent (100%)), such that  $TPE_m$  reflects a proportional downward adjustment from the MCC for deratings, partial Outages and partial hours of unavailability of the Units or any Other Products, as well as for full hours in which the Units were entirely unavailable.

If Seller identifies the Units as unavailable, in whole or in part, for any hour, the Units shall be deemed unavailable for that hour (to the extent of such unavailability) for purposes of the Availability calculation, provided that if Seller provides a revised Notice, indicating the Units are available for an hour in which they were previously deemed unavailable, by 5:00 a.m. of the morning Buyer schedules or bids the Units in the Day-Ahead Market, all of the available Capacity of the Units will be deemed to be available for such hour for purposes of determining TPE<sub>m</sub>; and if Seller provides a revised Notice, indicating the Units are available for an hour in which they were previously deemed unavailable, at least sixty (60) minutes prior to the time the Buyer is required to schedule or bid the Units in the Real-Time Market, and the Units are dispatched in the Real-Time Market, all of the available Capacity of the Units will be deemed to be available for such hour for such hour for purposes of determining TPE<sub>m</sub>.

Sample calculations of "Availability" are set forth in <u>Appendix XVIII</u> and includes the application of the Availability Adjustment described in Section 4.3(c) below.

The Availability calculation shall be subject to audit by Buyer pursuant to the general audit rights set forth in Section 21.3.

(c) <u>Availability Adjustment</u>. During each month of the Delivery Term in which the Availability of the Units is less than the applicable Guaranteed Availability, the Availability Adjustment ("AA"), measured as a percentage, shall be determined as follows:

For Summer Months:

If Availability is greater than or equal to 98%, then AA=100%; If Availability is less than 98%, but not less than 70%, then AA = 100% - [(98% - Availability) x 2]; and If Availability is less than 70% then AA=0

For Non-Summer Months:

If Availability is greater than or equal to 96%, then AA=100%; If Availability is less than 96%, but not less than 60%, then AA = 100% - [(96% - Availability) x 2]; and If Availability is less than 60%, then AA=0 4.4 <u>Guaranteed Efficiency</u>.

(a) <u>Guaranteed Efficiency</u>. The Guaranteed Efficiency of the Units is set forth in <u>Appendix II</u>, and is measured as a percentage.

(b) <u>Definition and Calculation of Actual Efficiency</u>. Seller shall calculate the efficiency of the Units on a monthly basis as a percentage measurement using the formula set forth below ("Actual Efficiency"):

Actual Efficiency<sub>m</sub> =  $(\sum \text{Delivered Discharge Energy}_i + AE_{end} - AE_{beg})$ ( $\sum \text{Delivered Charging Energy}_i$ )

> $\sum$  is from *i*=1 to *n*; *m* = relevant month "*m*" in which a MFP payment is made; *i* = the Settlement Interval in month "*m*"; *n* = total number of Settlement Intervals in month "*m*"; AE<sub>end</sub> is the amount of energy (expressed in MWh) stored in the Unit available for discharge at the end of the last Settlement Interval in month "*m*"; and AE<sub>beg</sub> is the amount of energy (expressed in MWh) stored in the Unit available for discharge at the end of the last Settlement Interval in the month of energy (expressed in MWh) stored in the Unit available for discharge at the end of the last Settlement Interval in the month preceding month "*m*".

Sample calculations of "Actual Efficiency" are set forth in <u>Appendix XIX</u> and include the application of the Guaranteed Efficiency Adjustment described in Section 4.4(c) below.

The calculation of "Actual Efficiency" shall be subject to audit by Buyer pursuant to the general audit rights set forth in Section 21.3.

(c) <u>Guaranteed Efficiency Adjustment</u>. During each month of the Delivery Term, the Guaranteed Efficiency Adjustment ("GEA"), measured as a percentage, shall be determined as follows:

If Actual Efficiency is greater than or equal to the Guaranteed Efficiency, then GEA = 0%; If Actual Efficiency is less than Guaranteed Efficiency, then GEA = Guaranteed Efficiency - Actual Efficiency<sub>m</sub>

4.5 <u>Deviations</u>.

(a) <u>Deviation Charges</u>. Seller shall compensate Buyer for the Unit's Uninstructed Deviations ("Deviation Charges"), except to the extent any such obligations or liabilities arise as a result of any act or omission of Buyer in its role as Scheduling Coordinator. Each month, Seller shall owe Buyer the sum (if positive) or Buyer shall owe Seller the sum (if negative) of Deviation Charges for each Settlement Interval as follows:

 $DC_m = \sum (Dispatch_i - Delivered Energy_i) \times RTP_i$ 

where,

 $DC_m$  is the Deviation Charge for month "*m*";

∑ is from *i*=1 to *n*; i = the Settlement Interval in month "*m*"; n = total number of Settlement Intervals in month "*m*"; Dispatch<sub>i</sub> = the ADS dispatch instructions corresponding to Settlement Interval "*i*"; Delivered Energy<sub>i</sub> = the output from the Unit's Electric Revenue Meter corresponding to Settlement Interval "*i*"; and RTP<sub>i</sub> = the Real-time Price corresponding to Settlement Interval "*i*", and available through CAISO (through their OASIS or similar successor system).

If the net amount of Deviation Charges is positive for the month, Seller shall owe Buyer the positive amount; and if the net amount of such charges is negative for the month, Buyer shall owe that amount to Seller. Seller and Buyer acknowledge and agree that if Seller Notifies Buyer of updated availability of the Unit(s) after such time as Buyer has bid or scheduled the Units with the CAISO for any particular period of time, Buyer will take action to notify the CAISO of the Unit(s') updated availability, which action does not eliminate Seller's responsibility of Deviation Charges for such period of time. Invoicing and payment for all amounts due from one Party to the other Party as necessary to implement this provision shall be done pursuant to Article Twelve. An example of the calculation of Deviation Charges is provided in <u>Appendix XX</u>.

(b) <u>Forced Outage Compensation</u>. On a monthly basis, Seller shall compensate Buyer during Forced Outage events, whether full Unit Outage or partial derates, during hours in which the Unit is experiencing a Forced Outage and has a market award or schedule in the Day-Ahead Market or Real-Time Market, as specified below ("Forced Outage Compensation"). Seller shall pay Buyer a Forced Outage Compensation for each Settlement Interval in the Forced Outage Evaluation Period as follows:

(i) If (A) the Unit is experiencing a Forced Outage, (B) there exists a schedule or award for the Unit in the Day-Ahead Market or Real-Time Market for the hour or partial hour of a given Settlement Interval that calls upon the Unit to discharge Energy, and (C) Imbalance Energy is negative for that Settlement Interval, then:

 $FOC_i = (RT Price_i - Awarded Price_i) \times Abs(IE_i)$ 

where:

FOC<sub>i</sub> is the Forced Outage Compensation in interval i within the Forced

Outage Evaluation Period;

RT Price<sub>i</sub> is the Real-Time Price for Settlement Interval *i*;

Awarded Price<sub>i</sub> is the Day-Ahead Price or Real-Time Price for Settlement Interval *i* applicable to the market award or schedule,

 $IE_i$  is the Imbalance Energy in Settlement Interval *i*.

(ii) If (A) the Unit is experiencing a Forced Outage, (B) there exists a schedule or award for the Unit in the Day-Ahead Market or Real-Time Market for the hour or partial hour of a given Settlement Interval that calls upon the Unit to charge Energy, and (C) Imbalance Energy is negative for that Settlement Interval, then:

 $FOC_i = (Awarded Price_i - RT Price_i) \times Abs(IE_i)$ 

where:

FOC<sub>i</sub> is the Forced Outage Compensation in interval i within the Forced

Outage Evaluation Period;

RT Price<sub>*i*</sub> is the Real-Time Price for Settlement Interval *i*;

Awarded Price<sub>i</sub> is the Day-Ahead Price or Real-Time Price for Settlement Interval *i* applicable to the market award or schedule,

IE<sub>i</sub> is the Imbalance Energy in Settlement Interval *i*.

(iii) Seller shall pay no Forced Outage Compensation in Settlement Intervals that are not part of a Forced Outage Evaluation Period. On a monthly basis, Buyer shall sum the Forced Outage Compensation for all Settlement Intervals within any Forced Outage Evaluation Period in the month to determine the total Forced Outage Compensation due to Buyer from Seller, if any. If the sum of the Forced Outage Compensation for all Settlement Intervals within Forced Outage Evaluation Periods is negative, the Forced Outage Compensation for that month will be zero. In no case will Buyer owe or pay Seller Forced Outage Compensation. An example of the Forced Outage Compensation calculation applicable to Section 4.5(b)(i) is provided in Table 1 of Appendix XXI; an example of the Forced Outage Compensation applicable to Section 4.5(b)(ii) is provided in Table 2 of Appendix XXI.

(c) <u>Other Products Charges</u>. During the Delivery Term, Seller shall be liable for any costs, charges, or penalties assessed by the CAISO to Buyer in its role as Scheduling Coordinator that are related to the Unit(s) failure to pass an audit, verification or compliance test of any Other Products available to Buyer ("Other Products Charges"). Invoicing and payment for Other Products Charges shall be done pursuant to Article Twelve on a monthly basis.

## **ARTICLE FIVE: EVENTS OF DEFAULT; REMEDIES**

5.1 <u>Events of Default</u>.

(a) Seller will be deemed a Defaulting Party upon the occurrence of any of the following (each a "Seller's Event of Default"):

(i) Any asset of Seller that is material to its performance under this Agreement is taken by or is subject to any attachment by any creditor of or claimant against Seller and the attachment is not disposed of within twenty-one (21) days after its levy.

(ii) Seller applies for, consents to, or acquiesces in the appointment of a trustee, receiver or custodian of its assets, or the initiation of a bankruptcy, reorganization, debt arrangement, moratorium or any other proceeding under bankruptcy laws, and Seller fails to provide alternate collateral acceptable to Buyer within ten (10) Business Days of Buyer's demand therefor pursuant to Sections 13.3, 13.4, and 13.5.

(iii) Seller fails to satisfy the creditworthiness and collateral requirements pursuant to Sections 13.3, 13.4, and 13.5.

(iv) Upon the occurrence of any material misrepresentation or omission in any metering (or submetering), Performance Test results, or any report or Notice of a Unit's availability and capability or Outage required to be made or delivered by Seller to Buyer, or undue delay or withholding of such data, report or Notice of a Unit's availability and capability or Outage, which misrepresentation, omission or undue delay or withholding is not cured within ten (10) Business days of Buyer's demand therefor.

(v) At the Electrical Delivery Point, Seller intentionally or knowingly delivers, or attempts to deliver, Energy that was not in fact stored by the Unit.

(vi) Seller fails to satisfy the requirement for Construction Start Date by the Guaranteed Construction Start Date, as extended by the Allowed Delay in accordance with Section 14.1(d), or satisfy all of the requirements set forth in Section 17.1 for Initial Delivery Date by the Expected Initial Delivery Date after the Cure Period has lapsed, and in the case of either the Guaranteed Construction Start Date or the Expected Initial Delivery Date after the delay for Force Majeure, as set forth in Section 14.1(d) or (e) has lapsed.

(vii) Seller fails to comply with obligations set forth in Section 3.2 ("Resource Adequacy Obligations").

(viii) During the Delivery Term, the Units' Availability, measured exclusive of unavailability due to Force Majeure, averages less than seventy percent (70%) over a rolling twelve (12) month period;

(ix) The Tested Capacity of all the Units (cumulatively) adjusted to ISO Conditions is less than eighty percent (80%) of the amount equal to the Design Capacity adjusted downward by the applicable Cumulative Degradation (for a reason other than Force Majeure), unless Seller is able to demonstrate a Tested Capacity for all of the Units (cumulatively) in excess of eighty-five percent (85%) of the amount equal to the Design Capacity adjusted downward by the applicable Cumulative Degradation within six (6) months of the date on which the Tested Capacity of less than eighty percent (80%) was established;

(x) The Tested Capacity of the Units adjusted to ISO Conditions shall not be less than ninety-five percent (95%) of the Tested Capacity as determined in the last Performance Test in the previous Contract Year (adjusted to ISO Conditions).

(xi) During the Delivery Term if the Units are not subject to a Force Majeure Failure, but the Units' Actual Efficiency calculated in accordance with Section 4.4(b) is ten percent (10%) or more below the Guaranteed Efficiency each month over a rolling twelve (12) month period; provided that if Seller is subject to a Force Majeure (other than Force Majeure Failure) that causes the Units to fall below this threshold, then the applicable period to calculate the averages shall be a rolling eighteen (18) month period; or

(xii) Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the Product, or any portion thereof, to any party other than Buyer or the CAISO during the Delivery Period.

(b) Either Party will be deemed a Defaulting Party upon the occurrence of any of the following (each a "Party's Event of Default"):

(i) A Party applies for, consents to, or acquiesces in the appointment of a trustee, receiver or custodian of its assets (including, in the case of Seller, for a substantial part of the Units), or the initiation of a bankruptcy, reorganization, debt arrangement, moratorium or any other proceeding under bankruptcy laws.

(ii) Absent the consent or acquiescence of a Party, appointment of a trustee, receiver or custodian of its assets (including in the case of Seller, for a substantial part of the Units), or the initiation of a bankruptcy, reorganization, debt arrangement, moratorium or any other proceeding under bankruptcy laws, which in either case, is not dismissed within sixty (60) days.

(iii) A Party fails to pay an amount when due and such failure continues for ten (10) Business Days after Notice thereof is received by the Party failing to make such payment.

(iv) Upon the occurrence of any material breach of any representation, warranty, or covenant made by a Party pursuant to Article Nineteen, if not cured within thirty (30) days after delivery of Notice from the other Party that any material representation or warranty made in this Agreement is false, misleading or erroneous in any material respect.

(v) A Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to another entity and at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving, or transferring entity fails to assume all of the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party;

(vi) A Party fails to perform any of its material obligations under this Agreement not otherwise addressed in this Section 5.1, and such default (which is not otherwise specified to be an Event of Default hereunder) continues for thirty (30) days after Notice thereof is received, specifying the failure; provided, however, that such period shall be extended for an additional reasonable period if cure cannot be effected in thirty (30) days and if corrective action, reasonably calculated to cure the default within a reasonable period of time, is instituted by the Defaulting Party within the thirty (30) day period and so long as such action is diligently pursued until such default is corrected, not to exceed one hundred twenty (120) days.

#### 5.2 <u>Early Termination</u>.

(a) If and for as long as an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party ("Non-Defaulting Party") shall have the right to (i) send Notice, designating a day, no earlier than the day such Notice is deemed to be received (as provided in Section 26.1) and no later than twenty (20) days after such Notice is deemed to be received (as provided in Section 26.1), as an early termination date of this Agreement ("Early Termination Date"), to accelerate all amounts owing between the Parties, end the Delivery Term effective as of the Early Termination Date and collect the Termination Payment; (ii) withhold any payments due to the Defaulting Party under this Agreement; (iii) suspend performance; and/or (iv) exercise any other right or remedy available at Law or in equity to the extent otherwise permitted under this Agreement.

(b) In the event of Early Termination, the Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date; provided that if the Event of Default occurs prior to the Initial Delivery Date and the Seller is the Defaulting Party, then the Damage Payment Amount shall be used in lieu of the Settlement Amount to calculate the Termination Payment. If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of the Terminated Transaction, the

Settlement Amount shall be zero. The Non-Defaulting Party shall not have to enter into any transactions to replace the Terminated Transaction in order to establish a Settlement Amount.

(c) As soon as practicable after establishing the Early Termination Date, the Non-Defaulting Party shall Notify the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective, if Seller is the Defaulting Party or within twenty (20) Business Days after such Notice is effective, if Buyer is the Defaulting Party.

(d) If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be resolved in accordance with Article Twenty-Three.

5.3 <u>Rights And Remedies Are Cumulative</u>. The rights and remedies of a Party pursuant to this Article Five shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement; provided that the Termination Payment shall be the sole remedy for damage due to termination of this Agreement (but shall not preclude recovery by a Party for other damages sustained as a result of an Event of Default).

5.4 <u>Waiver</u>. The Non-Defaulting Party shall be deemed to have waived its rights to declare an Early Termination Date and to demand remedies under Section 5.2, if (a) the Non-Defaulting Party fails to provide Notice of an Early Termination Date within one hundred eighty (180) days of the date on which the Event of Default becomes known, or reasonably knowable, to the Non-Defaulting Party and (b) the cause of the Event of Default is no longer continuing as of the date on which the Non-Defaulting Party issues its Notice declaring an Early Termination Date; provided, however, that the time period for providing Notice of an Early Termination Date and a demand for remedies will not be deemed waived if (i) the Defaulting Party has consented to an extension of time or (ii) the Non-Defaulting Party has provided Notice of the breach and the Defaulting Party has represented that it is seeking to cure and the delay in providing such Notice is in reliance by the Non-Defaulting Party on the good faith attempt by the Defaulting Party to cure. A Party may not withhold payments or suspend performance under Section 5.2 for a period of more than twenty (20) Business Days unless an Early Termination Date has been declared, and Notice thereof given, in accordance with Section 5.2.

## ARTICLE SIX: ELECTRIC INTERCONNECTION AND TRANSMISSION

## 6.1 <u>Electrical Interconnection Facilities</u>.

(a) <u>Construction</u>. In accordance with Article Seventeen, it is solely Seller's obligation to cause the construction of such Electrical Interconnection Facilities, including metering and submetering facilities and Transmission Upgrades, as are needed to enable Seller to deliver the Product to and at the Electrical Delivery Point under this Agreement.

(b) <u>Maintenance of Electrical Interconnection Facilities</u>. Beginning with the Initial Delivery Date and at all times during the Delivery Term, Seller shall maintain and/or cause to be maintained, at its expense, the Electrical Interconnection Facilities such that the Electrical Interconnection Facilities are capable of delivering the Product that can be generated or charged using the Design Capacity in accordance with the terms of this Agreement to and at the Electrical Delivery Point during

each month as applicable (in addition to such other output of the Facility as the Electrical Interconnection Facilities are required to transmit) in accordance with the terms of this Agreement.

(c) <u>Queue Position</u>. Seller must not withdraw the Interconnection Queue Position identified in <u>Appendix II</u> or assign or transfer that Interconnection Queue Position to any entity or for the benefit of any other agreement other than this Agreement without Buyer's prior written consent

### 6.2 <u>Electric Transmission and Delivery</u>.

(a) <u>Electrical Delivery Point</u>. The "Electrical Delivery Point" shall be the specified point of interconnection for the Facility to the CAISO-controlled grid, and is identified in <u>Appendix II</u>.

(b) <u>Title and Risk of Loss</u>. Title to and risk of loss related to the Product shall transfer from Seller to Buyer from the Electrical Delivery Point.

(c) <u>Seller's Responsibility</u>. During the Delivery Term, Seller shall arrange, schedule and be responsible for electric interconnection, distribution and/or transmission service and any and all costs or charges imposed on or associated with the Product or its delivery of the Product, including electric distribution and/or transmission costs, distribution and/or transmission losses, congestion costs and all risks and costs associated with any distribution and/or transmission outages or curtailment up to and at the Electrical Delivery Point. Seller's interconnection, distribution, and/or transmission arrangements shall provide for Full Capacity Deliverability Status as of the Initial Delivery Date and throughout the Delivery Term.

(d) <u>Buyer's Responsibility</u>. During the Delivery Term, Buyer shall arrange, schedule and be responsible for electric transmission service and any and all costs or charges imposed on or associated with the Product or its receipt of the Product with respect to Scheduled Operations, including electric transmission costs, transmission losses, congestion costs and all risks and costs associated with any transmission outages or curtailment, from and after the Electrical Delivery Point.

(e) <u>Change of Market Structure</u>. In the event the CAISO implements changes in the market design such that Seller becomes exempt from, is reimbursed for or receives any refunds, credits or benefits from the CAISO for congestion charges or losses, whether due to congestion revenue rights, Locational Marginal Price (LMP) adjustments, market adjustment, invoice adjustments or any other CAISO market instruments associated with the delivery of Product in accordance with the terms of this Agreement (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall promptly Notify Buyer of such Reductions and transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions; provided that Buyer shall be responsible for CAISO charges or losses, and entitled to receive CAISO Reductions related to congestion or losses attributed to the LMP.

## 6.3 <u>Standards of Care</u>.

(a) <u>General Operations</u>. Seller shall comply with all applicable requirements of Law, the Transmission Provider, Governmental Approvals, the CAISO, NERC and WECC relating to the Facility and the Site and the transactions contemplated by this Agreement (including those related to development, construction, safety, ownership, maintenance, and/or operation of the Facility or the Site and the transactions contemplated by this Agreement and sale of Product therefrom). For the avoidance of doubt, Seller shall be responsible for procuring and maintaining, at its expense, all Governmental Approvals and all emissions credits required for operation of the Units throughout the Delivery Term in

compliance with Law and to permit operation of the Facility in accordance with this Agreement, including as specified in Section 17.1(d).

(b) <u>Transmission Provider and WECC Standards</u>. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the Transmission Provider, (ii) WECC scheduling practices and (iii) Prudent Electrical Practices.

(c) <u>Reliability Standard</u>. Seller agrees to abide by all (i) NERC, WECC and Transmission Provider reliability requirements and (ii) all of PG&E's applicable requirements regarding interconnection of the Units per this Agreement.

## ARTICLE SEVEN: CHARGING ENERGY OBLIGATIONS

#### 7.1 <u>Charging Energy Obligations</u>.

(a) Except as set forth in this Article Seven or as expressly set forth in this Agreement, during the Delivery Period, Buyer shall be responsible for managing, purchasing, scheduling, and transporting all of the Charging Energy of each Unit to the Electrical Delivery Point.

(b) Seller shall take any and all action necessary to deliver the Charging Energy at and from the Electrical Delivery Point to the Unit(s) in order to deliver the Product and Energy Storage Services in accordance with the terms of this Agreement, including maintenance, repair or replacement of equipment in Seller's possession or control used to deliver the Charging Energy to the Unit(s); provided that Seller shall only use the Charging Energy for Buyer's benefit.

(c) In its role as SC with respect to charging the Unit(s), Buyer shall be responsible for the electric energy costs associated with providing the Charging Energy up to the Electrical Delivery Point ("Charging Energy Costs"); *provided*, that Seller shall be responsible for the Charging Energy Costs arising out of or pertaining to a Seller Performance Test. Once Seller takes title to the Charging Energy, if Buyer then pays any electric energy costs which are Seller's responsibility under this Agreement, Buyer may then deduct the amount of such electric energy costs from any amounts due to Seller in accordance with Article Twelve.

(d) Each Party shall indemnify, defend and hold harmless the other Party from and against any claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control and title to the Charging Energy is vested in such Party in accordance with this Section 7.1.

7.2 <u>Station Use</u>. The Unit(s) will not serve Station Use and Seller shall be solely responsible for the purchase and delivery of electricity to serve Station Use and separately meter Station Use with the Station Use Metering Equipment.

## **ARTICLE EIGHT: ELECTRIC METERING**

## 8.1 <u>Electric Metering Requirements and Data</u>.

(a) At Buyer's specification: (i) the Product from the Units must be delivered through a single Electric Revenue Meter and that meter must be dedicated exclusively to all of the Units; or (ii) the Product from each Unit must be delivered through an Electric Revenue Meter dedicated exclusively to each respective Unit. All Energy must be measured by the Units' Electric Revenue Meter to be eligible for payment under this Agreement. Seller shall provide Buyer with access to all real-time meters, billing meters and back-up meters. Seller shall authorize Buyer to view the on-line meter data from the Electric Revenue Meter. Within Seller's Meter Service Agreement with the CAISO, Seller shall identify Buyer as an authorized user with "read only" privileges.

(b) Seller consents to Buyer obtaining Electric Revenue Meter data from the Transmission Provider, and all inspection, testing and calibration data and reports for the Electric Revenue Meters. Seller agrees to provide to Buyer all meter data, inspection, testing and calibration data and reports for the submeter(s) upon Buyer's request therefor.

(c) If the Transmission Provider makes any adjustment to any Electric Revenue Meter data for a given time period, Buyer shall incorporate such revisions in its next monthly invoices, or a subsequent monthly invoice, pursuant to Section 12.1, covering the entire applicable time period in order to conform fully such adjustments to the meter data. If Seller is the recipient of the meter information, Seller shall promptly provide the meter information to Buyer. Buyer shall submit any such revised invoice on the next date on which Buyer is to render an invoice in accordance with Section 12.1 provided that Buyer shall not be required to render an invoice sooner than twenty (20) days after the date on which Buyer receives such binding adjustment to the meter data. Payment or credit resulting from the adjustment shall be due on the first Monthly Payment Date following the submission of the invoice.

Meter Installation and Testing. Seller shall, at its sole cost and expense, cause the 8.2 installation, maintenance, operation and replacement (as needed) of a meter to be used as the Electric Revenue Meter and back-up meters, in accordance with the Transmission Provider's metering protocols, at the Electrical Delivery Point to determine the amount of the Energy produced by the Units and delivered to the Electrical Delivery Point. To the extent necessary to isolate data related to each Unit, Buyer may in its discretion, require Seller to cause the installation, maintenance, operation and replacement of electrical submeters, at Seller's sole cost and expense; provided that each such submeter shall be of revenue quality and sufficient for the purposes of providing the data contemplated by this Agreement. Each Electric Revenue Meter shall be locked or sealed only by, and the lock or seal shall be broken only by, the interconnecting utility or Transmission Provider, as applicable. Unless otherwise specified by Buyer, all of the submeters will be locked or sealed by both Parties, which locks or seals will only be broken by both Parties for inspection, testing or adjustment. The meters shall meet all specifications of the Transmission Provider, as applicable, and all meters and submeters shall be tested annually by Seller, who shall provide Buyer with not less than fourteen (14) days prior Notice of such tests. Testing procedures and standards for submeters shall be the same as for a comparable utility-owned meter. Buyer will have the right to have a representative present during such tests.

8.3 <u>Meter Maintenance</u>. All electric metering equipment and submeters, whether owned by Seller or by a third party, which are installed on Seller's side of the Electrical Delivery Point, as applicable, shall be operated, maintained and tested by and/or on behalf of Seller in accordance with Prudent Electrical Practices, in the case of the electric metering equipment; provided that if the electric metering equipment test is conducted by the interconnecting utility or the Transmission Provider, testing shall be conducted in accordance with the procedures and the standards generally applied by such utility or the Transmission Provider (as applicable).

8.4 <u>Meter Retesting</u>. Either Party may from time to time request a retest of the meters and/or submeters if it reasonably believes that one or more of them are not accurate within the tolerance limits established by the Transmission Provider, as applicable. The requesting Party shall pay for any such retest and shall provide the other Party with not less than fourteen (14) days prior Notice of such retest. Such other Party will have the right to have a representative present during such retest.
8.5 Adjustments. If any tested or retested meter is found to be not accurate within the tolerance limits established by the Transmission Provider, Seller shall promptly arrange for the correction or replacement of the meter, at its expense, and the Parties shall use the measurements from the back-up meters or submeters to determine the amount of the inaccuracy. If any tested or retested back-up meter and/or submeter is found to be not accurate within the tolerance limits (applying the same tolerance limits as applicable to the comparable utility-owned meter) and the Parties cannot otherwise agree as to the amount of the inaccuracy will be deemed to have occurred during the period from the date of discovery of the inaccuracy to the earlier of (a) one-half of the period from such discovery to the date of the last testing or retesting of the meter or submeter, as applicable, or (b) one hundred and eighty (180) days. Any amounts due by Buyer or to be refunded by Seller as a result of any meter that is not accurate within the tolerance limits will be invoiced by the Party owed such amount on the next date on which such Party is to render an invoice in accordance with Section 12.1 following discovery of such inaccuracy.

86 Meteorological Data. Seller must supply to Buyer ambient dry-bulb temperature data, relative humidity data, and barometric pressure data from the Site. The sensors and equipment used to measure and record this data must represent ambient conditions at the Site and must be installed in a way that the sensor readings are not adversely affected by buildings, vents, structures, or local obstacles. The siting of the equipment and sensors must be consistent with EPA guidelines for meteorological monitoring programs (EPA (2000) – Meteorological Monitoring Guidance for Regulatory Modeling Applications, EPA-454/R-99-005 Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711and EPA (2008) – Quality Assurance Handbook for Air Pollution Measurement Systems. EPA-454/B-08-002 Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711). Prior to installation of the sensors and other equipment described in this Section 8.6, Seller shall Notify Buyer of the proposed location of the meteorological equipment and sensors and Buyer may approve or disapprove of the location for commercially reasonable purposes. Any request by Buyer for Seller to change the placement of the meteorological equipment shall be performed at the cost of Seller. Such equipment as specified in this Section 8.6 shall be used for all meteorological purposes under the terms of this Agreement, including settlement and compensation purposes and testing. The sensors must meet the following specifications:

(a) <u>Dry Bulb Temperature</u>: accuracy: less than or equal to  $+/- 0.27^{\circ}$ C over the full range; range: -50 °C to + 50 °C; time constant: </= 5.5 seconds; linearity:  $+/- 0.3^{\circ}$ C

(b) <u>Relative Humidity</u>: accuracy: less than or equal to +/-1% from 0% to 100%; operating temperature range:  $-40^{\circ}$  C to  $+60^{\circ}$ C; stability: +/-1% RH over 12 months; response time: 10 seconds

(c) <u>Barometric Pressure</u>: accuracy: less than or equal to  $\pm 0.1\%$  over the full range; range: 600 to 1100 hPA; operating temperature range:  $-40^{\circ}$  C to  $\pm 55^{\circ}$  C; time constant: less than 10 ms to reach 90% final output with step function pressure input.

(d) All sensors, when new, must have a National Institute of Standards and Technology ("NIST") traceable calibration certificate. Seller must calibrate the meteorological sensors using transfer standards that are traceable to NIST at an interval not to exceed every six (6) months. The results of these calibrations must be kept in the project file for a minimum of five years and copies provided to the Buyer within thirty (30) days of the date of the calibration.

(e) Data collection of dry-bulb temperature, relative humidity, and barometric pressure must be consistent with Section 8.1.

8.7 <u>Real-Time Data Information Systems</u>. Seller shall deliver data to Buyer through a secure communication link installed and paid for by Seller in order to provide Buyer with access to the following data on a real-time and historical basis:

- (a) electrical output of each Unit;
- (b) Charging Energy for each Unit;
- (c) auxiliary power consumption, by Unit and Facility;
- (d) net plant electrical output at each Electric Revenue Meter;

(e) ambient dry bulb temperature, relative humidity and barometric pressure by Facility. (Buyer reserves the right to validate such data with information from publicly available from NOAA and nearby weather stations);

- (f) State of Charge data as specified by Buyer;
- (g) additional data as specified by Buyer for commercially reasonable purposes; and

(h) Seller shall also provide to Buyer, in a form reasonably acceptable to Buyer, read-only access to measurements collected by the supervisory control and data acquisition ("SCADA") system for the Facility commencing on the Initial Delivery Date.

In addition, all such data as described in this Section 8.7 shall be provided by Seller to Buyer on a daily basis, in a form acceptable to Buyer, not later than one (1) Business Day after each day of Product delivery, or in the case of daily recorded data disruption, no later than five (5) Business Days after the day of Product delivery, which in each case shall be used for settlement and compensation purposes. A disruption in real-time access to State of Charge data of more than one hundred and twenty (120) seconds shall be considered a Forced Outage until such time as the real-time access to the State of Charge data is restored. Seller shall maintain at least a minimum of one hundred and twenty (120) days historical data for all data required pursuant to this Section 8.7. If requested by Buyer, all such data described in this Section 8.7 shall also be provided by Seller to Buyer real-time in one (1) minute intervals in the form of a flat file to Buyer through a secure file transport protocol (FTP) system with an e-mail back up for each flat file submittal.

# ARTICLE NINE: STORAGE OF ELECTRIC ENERGY

9.1 <u>Storage of Electric Energy</u>. During the Delivery Term, Buyer shall be entitled to all benefits resulting from the stored electric energy, excluding any electric energy used for and during a Seller Performance Test.

9.2 <u>Title, Possession, and Risk of Loss</u>. During the Delivery Term, Buyer shall hold title to, possession of, and risk of loss of the (a) Delivered Charging Energy up to the Electrical Delivery Point, and (b) the Delivered Discharge Energy after the Electrical Delivery Point. During the Delivery Period, Seller shall have title to, possession of, and risk of loss of the (i) Delivered Charging Energy at and after the Electrical Delivery Point, and (ii) Delivered Discharge Energy up to and at the Electrical Delivery Point. Each Party shall indemnify, defend and hold harmless the other Party from and against any claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control and title to the Delivered Charging Energy and Delivered Discharge Energy is vested in such Party in accordance with Section 9.2.

## **ARTICLE TEN: SCHEDULING AND OUTAGES**

## 10.1 <u>Scheduling</u>.

(a) <u>Scheduling Coordinator Timeline and Requirements</u>. At least thirty (30) days before the beginning of the Delivery Term, Seller shall take all actions and execute and deliver to Buyer all documents necessary to authorize or designate Buyer, or Buyer's Third-Party Scheduling Coordinator, as Seller's SC, and Buyer or Third-Party SC, as applicable, shall take all actions and execute and deliver to Seller or CAISO all documents necessary to become and act as Seller's SC. If Buyer designates a Third-Party SC, then Buyer shall give Seller Notice of such designation at least ten (10) Business Days before the Third-Party SC assumes Scheduling Coordinator duties hereunder, and Seller shall be entitled to rely on such designation until it is revoked or a new Third-Party SC is appointed by Buyer upon similar Notice. Buyer shall be responsible for all acts and omissions of Third-Party SC and for all cost, charges and liabilities incurred by Third-Party SC to the same extent that Buyer would be responsible under this Agreement for such acts, omissions, costs, charges and liabilities if taken, omitted or incurred by Buyer directly.

(b) <u>Scheduling Coordinator Function</u>. During the Delivery Term, Buyer, or Buyer's Third-Party SC, will be the Scheduling Coordinator for the Units. Accordingly, Buyer shall be authorized and entitled to exercise all rights and obligations on behalf of the Seller that are customarily included in the responsibilities of the Scheduling Coordinator, including bidding and scheduling deliveries of the Product and Charging Energy (as applicable) from the Units throughout the Delivery Term, overseeing CAISO accounts and settlements related to the Units and the Product delivered from the Units, discussing and/or resolving disputes related thereto with the CAISO, and complying with all dispatch and bidding aspects of the Resource Adequacy Requirement. Notwithstanding the foregoing, depending on the timing of the Initial Delivery Date and the then-applicable standard scheduling protocols, Buyer will have the right, in accordance with then-applicable standard scheduling protocols, to bid or schedule the Units in advance of the Initial Delivery Date as necessary to commence deliveries of the Product (as applicable) on the Initial Delivery Date. In its capacity as Seller's representative to the CAISO, the Scheduling Coordinator shall be responsible for exercising due diligence in processing and validating all settlements for the Units and ensuring all settlements are valid.

(c) <u>Buyer's Dispatch Rights</u>. During the Delivery Term, Buyer shall have the exclusive right to bid, schedule, or designate any or all Units for the delivery of the Product and Charging Energy, in accordance with and up to the Operational Limitations set forth in <u>Appendix II</u>, in any CAISO forward, day-ahead, hour ahead, real-time or intra-day markets, and Seller shall take all reasonable steps within Prudent Electrical Practices to meet Buyer's dispatch instructions. The Operational Limitations specified in <u>Appendix II</u> shall allow Buyer to bid and/or schedule the Unit(s) for all hours of the day, seven (7) days per week for all available components of the Product, unless the Unit(s) are incapable of operations pursuant due to an Outage, or Excused Event, as specified in this Agreement.

(i) <u>Seller's Notices of Availability</u>. By 5:00 a.m. each day, commencing seven (7) calendar days prior to the Initial Delivery Date and continuing thereafter throughout the Delivery Term, Seller shall provide Buyer (A) a complete and accurate Notice of the expected availability of all relevant components of the Product of each Unit (as reasonably determined at that time) for that day and each of the next thirteen (13) days or such shorter period as the Buyer may specify from time to time and in the format per Buyer's specification, and (B) a disclosure of the existence and expected duration of any Outage or any Instructed Operation, the amount of Capacity affected by such Outage and the nature and effect of the Instructed Operation on each Unit's availability, regardless of whether or the extent to which a Unit is then or may be scheduled for operation; provided that (I) disclosure of Outages not previously Noticed or approved by Buyer pursuant to Section 10.2 shall not be deemed an Excused Scheduled Maintenance Outage unless explicitly approved as such by Buyer, and (II) any Notice of availability that is below a given Unit's Minimum Load per <u>Appendix II</u> shall be deemed fully unavailable for the purposes of bidding, scheduling or calculation of Availability pursuant to Section 4.3 for that Unit, and (III) such information shall be required only for days that are part of the Delivery Term. Buyer is authorized without liability to schedule up to and in accordance with the most recent availability Notice received from Seller.

Seller's Continuing Obligations. During the Delivery Term, to the extent (ii) not reported in the most recent availability Notice or pursuant to Section 10.2, Seller shall Notify Buyer as soon as reasonably practicable, in accordance with PG&E's Outage Reporting Protocols, of every Outage of a Unit, change in availability of the relevant portion of the Product or Charging Energy or imposition of an Instructed Operation, whether or not the Unit is scheduled for operation. Seller shall update Buyer periodically through the day as information becomes available as well as through availability Notices, with any revised estimates regarding the Unit's return to full output capability or release from or change in Instructed Operation and shall promptly provide Buyer Notice of any further change in the availability of a Unit or a portion of the Product for dispatch from that set forth in the last Notice provided, whether or not the Unit is scheduled for operation, including any developments that will affect the severity or duration of each Outage, availability and capability of the Unit to return to service after an Outage or scope and duration of the Instructed Operation. For Forced Outages, Seller shall Notify PG&E's Real-Time Desk within ten (10) minutes of the event as specified in Appendix III. During the Delivery Term, Seller shall cooperate with Buyer to promptly obtain and maintain CAISO certification for the Unit(s) of any and all Other Products provided that the Unit(s) are capable of providing such Other Products given the Operational Limitations set forth in Appendix II.

(iii) <u>Other Reporting Obligations</u>. Each Notice provided pursuant to Sections 10.1(c)(i) and 10.1(c)(ii) that includes an Outage shall include all such information concerning such Outage, change or limitation as the Transmission Provider may require to be reported by Seller or by Buyer, in its capacity as Buyer or as the Units' SC. Each such Notice from Seller to Buyer shall be made by providing Notice in accordance with the PG&E Outage Reporting Protocols as specified in <u>Appendix III</u>. During the Delivery Term, Buyer is responsible for providing to the Transmission Provider notice of each Outage to the extent required by Law, CAISO Tariff, the tariff of the interconnecting Transmission Provider, or contract. During the Delivery Term, each of Seller and Buyer shall promptly communicate to the other all information received by it from the Transmission Provider or other Governmental Authority regarding planned or in-progress Outages or Instructed Operations. Seller is responsible for providing regulatory bodies such as the FERC and the CPUC with Outage information (for example, NERC outage reporting requirements) as required by Law, tariff or regulation.

(iv) <u>Buyer's Schedule</u>. Buyer, as SC, shall bid or schedule the Unit(s) in accordance with Section 6.3 of this Agreement, CAISO protocols, and within Operational Limitations as set forth in <u>Appendix II</u>. Any CAISO market awards or schedules, Dispatch Instructions, Instructed Operations, or oral or written notification by Buyer to operate the Unit(s) in the requested manner shall be deemed "Buyer's Schedule," as it may be adjusted from time to time by the CAISO, Buyer, or Instructed Operations. For the avoidance of doubt, Buyer's Schedule can include Buyer's Charging Schedule and Buyer's Discharge Schedule. Notwithstanding Buyer's exclusive rights to schedule and require delivery of the Product from the Units during the Delivery Term, Buyer shall adjust Buyer's Schedule to the extent necessary to allow Seller to Start-Up, operate, curtail or Shut-Down the Units as required to comply with an Instructed Operation.

(v) <u>Seller's Operation</u>. During the Delivery Term, Seller shall dispatch and operate each Unit designated by Buyer as required to meet Buyer's Schedule as it may be adjusted from time to time in any CAISO markets, except when and to the extent (A) a Unit designated to operate is

incapable of operation due to an Outage (subject to the provisions for declaring and remedying Outages as set forth herein), or (B) operation or dispatch is prevented by an Excused Event. During the Delivery Term, Seller shall not dispatch and operate Units other than pursuant to Buyer or the CAISO's direction except as specifically contemplated herein. Seller shall acquire systems as necessary to respond to an electronic signal conveying real-time or intra-day instructions to operate the Units at the request of Buyer, Buyer's Third-Party SC, or the CAISO, and such systems must be in place prior to the Initial Delivery Date.

## 10.2 <u>Outage Notifications</u>.

(a) <u>Seller's Cooperation for Outage Submittals to CAISO</u>. Seller is responsible for providing to Buyer, in Buyer's capacity as the Units' SC, all information that Buyer requires to notify and/or secure CAISO approvals and to comply with WECC and CAISO requirements, as applicable, for all Scheduled Maintenance Outages and Forced Outages, including providing information to Buyer to secure changes to the proposed Maintenance Outage schedules when CAISO disapproves such schedules or cancels previously approved Scheduled Maintenance Outages.

(b) <u>Maintenance Outage Notification Timeline</u>. Seller shall Notify Buyer of its proposed Maintenance Outages for the Units in accordance with PG&E Outage Reporting Protocols in <u>Appendix III</u> for the specified time frames for periods during the Delivery Term, commencing prior to the Initial Delivery Date if necessary to meet the Notification timelines as follows:

(i) by July 1 of the prior calendar year, Notifying Buyer of the proposed Maintenance Outage schedule for the next calendar year; and

(ii) by the earlier of (A) ninety (90) days before the calendar month of delivery, or (B) forty-five (45) days prior to the delivery month's RA Monthly Compliance Showing, updating to the extent required the Maintenance Outage schedule previously Noticed to Buyer for the next twelve (12) months starting with the calendar month of delivery.

Scheduled Maintenance Outages and Excused Scheduled Maintenance Outages. (c) All Seller-proposed Maintenance Outages shall be reviewed by Buyer and subject to Buyer approval, not to be unreasonably withheld. Within twenty (20) Business Days after Buyer's receipt of Seller's Maintenance Outage schedule proposal, Buyer shall Notify Seller of Buyer's approval, or, if Buyer desires to modify a Seller-proposed Maintenance Outage prior to submittal to the CAISO, the Parties shall work together in good faith to accommodate the desired changes. Buyer, as the Units' SC, shall then submit the proposed Maintenance Outage schedule to the CAISO, which shall be subject to approval by the CAISO. If such Outage schedule is then approved by the CAISO, it shall be deemed a Scheduled Maintenance Outage, and Seller shall adhere to the timelines of the CAISO-approved Scheduled Maintenance Outage. Only those Scheduled Maintenance Outages that meet the submittal timelines in Section 10.2(b), do not violate the hourly limitations set forth in Section 10.2(e), are approved by the CAISO, and are approved in writing by Buyer in accordance with Appendix III (Section D), shall be deemed an Excused Scheduled Maintenance Outages. As noted in Appendix III, any change made to a previously approved Excused Scheduled Maintenance Outage outside of the approved window of time is deemed a new Outage request and is subject to re-approval from Buyer.

(d) <u>Buyer-Requested Changes to Scheduled Maintenance Outages</u>. At any time, Buyer may request that Seller re-schedule a Scheduled Maintenance Outage. Seller shall Notify Buyer of any incremental costs associated with the schedule change and propose an alternative schedule change, if any, that would entail lower incremental costs. If Buyer's proposed change is feasible and imposes no incremental costs (as compared to Seller's proposed schedule), or if Buyer agrees to pay the incremental costs, Seller shall use commercially reasonable efforts to accommodate Buyer's request and Buyer, as the Units' SC, shall communicate the change to the CAISO and seek CAISO approval for the revised schedule. However, unless it is transmitting to Seller a CAISO order, Buyer may not change a Scheduled Maintenance Outage unilaterally. If a previously Excused Scheduled Maintenance Outage is modified at the Buyer's Request less than ninety (90) days before the calendar month of delivery, the Outage shall remain an Excused Scheduled Maintenance Outage.

### (e) <u>Scheduled Maintenance Outage Restrictions</u>.

(i) Scheduled Maintenance Outages are prohibited during the Summer Months, absent written pre-approval by Buyer;

(ii) During Winter Months, there shall be no Scheduled Maintenance Outages during hours ending 0700 through 2200, Monday through Sunday, of each day, absent written pre-approval of Buyer;

(iii) Excused Scheduled Maintenance Outages for any Unit, whether full or partial, may not exceed [350 hours] total in any consecutive twelve (12) month period.

(f) <u>Short-term Outage Requests</u>. If Seller reasonably concludes that a Unit must be Shut-Down as soon as practicable to conduct maintenance that cannot be delayed until the next Excused Scheduled Maintenance Outage established in accordance with Sections 10.2(b) through 10.2(e), Seller shall Notify Buyer in accordance with the Forced Outage Reporting Protocol specified in <u>Appendix III</u> (Section C). If all of the criteria set forth in subsections (i) through (iii) below are met, then at Buyer's sole discretion, such Outage may be deemed an Excused Scheduled Maintenance Outage: (i) in consultation with Buyer, Seller is able to delay the Outage to occur in its entirety within a period acceptable to Buyer at its sole discretion that is also within seven (7) days, (ii) Seller receives Buyer's written approval as specified in <u>Appendix III</u> (Section D) after the initial notification, and (iii) the Outage does not exceed the limitations within Section 10.2(e)(iii).

Unexcused Scheduled Maintenance Outages. In the event Seller desires to take a (g) Unit out of service in a manner that would be recognized by the CAISO as a planned outage but does not otherwise comply with the timelines set forth in Sections 10.2(b) through 10.2(f) to be deemed an Excused Scheduled Maintenance Outage, Seller shall Notify Buyer of its proposed Maintenance Outage schedule for the Unit(s) by submitting Notice to Buyer in accordance with PG&E's Outage Reporting Protocols as promptly as possible upon determining the need for such maintenance. Buyer, as the SC, shall submit the proposed Maintenance Outages for the Unit(s) to the CAISO for approval in the form proposed by Seller. If such requested Outage is approved by CAISO, it will then be deemed by Buyer to be an "Unexcused Scheduled Maintenance Outage," and Seller shall adhere to the Outage schedule approved by the CAISO for that Outage. At any time, Buyer may request that Seller re-schedule its Unexcused Scheduled Maintenance Outage, in which case Seller shall Notify Buyer of any incremental costs associated with the schedule change and an alternative schedule change, if any, that would entail lower incremental costs. If Buyer's proposed change to Seller's Unexcused Scheduled Maintenance Outage Schedule is feasible and imposes no incremental costs (as compared to Seller's proposed schedule) or if Buyer agrees to pay the incremental costs, Seller shall use commercially reasonable efforts to accommodate Buyer's request and Buyer, as the SC, shall communicate the change to the CAISO and seek CAISO approval for the revised Unexcused Scheduled Maintenance Outage. However, unless it is transmitting to Seller a CAISO order, Buyer may not change Seller's Unexcused Scheduled Maintenance Outage schedule unilaterally.

(h) <u>Exclusions</u>. Any Unexcused Scheduled Maintenance Outage taken pursuant to Section 10.2(g) that does not also meet the requirements set forth in Sections 10.2(b) through 10.2(f) above for an Excused Scheduled Maintenance Outage shall be treated as unavailable during such periods for purposes of determining Availability as specified in Section 4.3. Reductions to the Monthly Fixed Payment due to reduced Availability will apply.

10.3 <u>Operating Procedures</u>. Prior to the Initial Delivery Date, the Parties shall mutually develop written procedures governing operations, not in contravention or amendment of any right or obligation set forth herein including, but not be limited to, (a) procedures for scheduling and dispatch, (b) methods of day-to-day communications, (c) key personnel lists, (d) record keeping, and (e) such other procedures and protocols as the Parties deem appropriate for implementation of this Agreement (the "Operating Procedures"); *provided* that failure to agree on such procedures shall not relieve either of the Parties of its obligations under this Agreement. The Operating Procedures are provided in <u>Appendix VII</u>.

10.4 <u>Changes to Scheduling and Outage Procedures</u>. Notwithstanding Section 10.3, Buyer may, unilaterally and after providing Seller with prior Notice, change scheduling and outage procedures and requirements in <u>Appendix III</u> or <u>Appendix VII</u> to conform to changes instituted by the CAISO.

## ARTICLE ELEVEN: FORCE MAJEURE; PERFORMANCE TESTING AND INSPECTION

11.1 Force Majeure.

(a) <u>Effect of Force Majeure</u>. Subject to Section 5.1(a)(vi), a Party shall not be considered to be in default in the performance of its obligations to the extent that the failure or delay of its performance is due to a Force Majeure event, and the non-affected Party shall be excused from its corresponding performance obligations for the period of the affected Party's failure or delay of performance. Notwithstanding the foregoing, (i) a failure to make payments accrued prior to the Force Majeure event when due shall not be excused, and (ii) the unavailability of the Monthly Contract Capacity of the Units due to Force Majeure events declared by Seller will be deemed to be unavailable for purposes of determining Availability and the Availability Adjustment to the extent specified in Section 4.3. The burden of proof for establishing the existence and consequences of an event of Force Majeure lies with the Party initiating the claim.

(b) Notice of Force Majeure. In addition to satisfying the Notification provisions set forth in Section 10.1 and 10.2, as applicable, within two (2) Business Days of the commencement of an event of Force Majeure, the Party desiring to invoke the Force Majeure event as a cause for delay in its performance of, or failure to perform, any obligation (other than the payment of money) hereunder, shall provide the other Party with Notice in the form of a letter identifying the event of Force Majeure and describing in detail the particulars of the occurrence giving rise to the Force Majeure event including the expected duration, when known, and effect of such Force Majeure event. Failure to provide timely Notice constitutes a waiver of a claim of Force Majeure. Promptly, but in any event within ten (10) days after a Notice is given pursuant to the preceding sentence, the Parties shall meet to discuss the basis and terms upon which the arrangements set out in this Agreement shall be continued taking into account the effects of such event of Force Majeure.

(c) <u>Mitigation of Force Majeure</u>. The suspension of a Party's performance under the Agreement due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure event. A Party suspending performance due to Force Majeure shall take, or cause to be taken, such action as may be necessary to void, or nullify, or otherwise to mitigate, in all material respects, the effects of such event of Force Majeure. The Parties shall take all reasonable steps to resume normal performance under this Agreement after the cessation of any Force Majeure event.

(d) <u>Force Majeure Failure</u>. Buyer shall have the right, but not the obligation, to terminate this Agreement after the occurrence of the following:

(i) if during the Delivery Term:

(A) the Units' Availability, taking into account all hours of unavailability, including those due to Force Majeure (in excess of Excused Hours), averages less than sixty percent (60%) over a rolling 12-month period; or

(B) if the Tested Capacity of all the Units (cumulatively) adjusted to ISO Conditions is less than eighty percent (80%) of the amount equal to the Design Capacity adjusted downward by the applicable Cumulative Degradation due to an event of Force Majeure, unless Seller is able to demonstrate a Tested Capacity for all of the Units (cumulatively) in excess of eighty-five percent (85%) of the amount equal to the Design Capacity adjusted downward by the applicable Cumulative Degradation within (12) months of the date on which the Tested Capacity of less than eighty percent (80%) was established; or

(C) the Project is destroyed or rendered inoperable by an event of Force Majeure caused by a catastrophic natural disaster.

(ii) if prior to the Initial Delivery Date, as applicable, Seller is unable, due solely to a Force Majeure event, to achieve the Guaranteed Construction Start Date or other Critical Milestones, after applicable extensions or cure periods have run, as set forth in Section 14.1 and Appendix XII (in either case a "Force Majeure Development Failure").

### 11.2 <u>Performance Testing</u>.

(a) <u>Performance Testing Requirement</u>. Seller shall be obligated to conduct testing prior to and/or during the Delivery Term as specified in this Section 11.2. Such testing is deemed a "Performance Test" and may include an Initial Performance Test, a Buyer's Performance Test, or a Seller's Performance Test.

(i) Seller shall conduct an Initial Performance Test at least thirty (30) days prior to the Initial Delivery date, the results of which shall be applicable to Seller as of the Initial Delivery Date.

(ii) During each Contract Year of the Delivery Term, Buyer may request Seller to perform up to two Buyer's Performance Tests upon Notice of no less than twenty-four (24) hours. Buyer's decision to forgo any such test shall not be deemed a waiver of Buyer's right to require any subsequent test.

(b) <u>Performance Test Procedures</u>. Each Performance Test shall be conducted in general accordance with applicable CAISO Tariff requirements *[and if applicable: ASME Performance Test Code, depending on the technology of the Facility]*, and in accordance with the procedures set forth in subsections (i) through (vii) below, including additional procedures and protocols related to Performance Testing as mutually agreed between Buyer and Seller ("Test Procedures").

(i) If tests results are adjusted for ambient conditions, meteorological equipment used for Performance Testing shall include the same equipment as specified in Section 8.6.

(ii) The Energy output of the Units during the Performance Test shall be measured by the Electric Revenue Meter for Delivered Energy at the Electrical Delivery Point.

(iii) The Capacity of a Unit as demonstrated by a Performance Test ("Tested Capacity") shall be the metered Capacity, net of Station Use, of such Unit per hour (measured in megawatts), and adjusted for ambient conditions (if applicable).

(iv) Buyer may have a representative present at the Site at any time during a Performance Test, or alternatively, at Buyer's request, all necessary and requested test information shall be provided to Buyer during the test without the need of a Buyer representative on Site. Buyer has the right to require Seller's test engineer to be at the Site for the test.

(v) Performance Testing can include tests to verify the Capacity of the Unit (including charging or discharging mode) or to verify the Facility and/or Unit is performing in accordance with the Operational Limitations specified in <u>Appendix II</u>.

(vi) Performance Testing shall not be conducted during a Scheduled Maintenance Outage, Forced Outage or other Outage; provided that Seller has Notified Buyer of such Outage in accordance with <u>Appendix III</u>.

(vii) Seller shall prepare the Test Procedures based upon <u>Appendix VI-2</u> and provide the same to Buyer at least one-hundred and eighty (180) days prior to the Initial Delivery Date. The Parties shall finalize mutually acceptable Test Procedures at least thirty (30) days prior to the Initial Performance Test.

### (c) <u>Cost Responsibility. During the Delivery Term:</u>

(i) with respect to the Buyer's Performance Tests, Buyer shall accept all Energy produced during such testing;

(ii) with respect to Buyer's Performance Tests, Buyer shall make Charging Energy available as required to carry out such testing; and

(iii) additional cost responsibilities for Buyer's Performance Tests and Seller's Performance Tests are set forth in Sections 11.2(e) and 11.2(f), respectively.

(iv) During the Delivery Term, all Charging Energy supplied for a Seller's Performance Test and the Initial Performance Test shall be treated as Additional Energy; and

(v) Seller shall bear the costs or receive the benefits of operations, Start-Ups and Shut-Downs required for Seller's Performance Test and the Initial Performance Test, including any and all CAISO charges and in accordance with the provisions of Section 10.1, as applicable.

(d) <u>Capacity Adjustments</u>.

(i) For New Facilities, the Initial Performance Test shall be used to determine whether Seller has met the criteria to be declared Commercially Operable.

(ii) Performance Tests shall be used to determine whether the Units perform at the amount equal to the Design Capacity adjusted downward by the applicable Cumulative Degradation and to confirm and/or adjust (as appropriate) the Monthly Contract Capacities as follows: (A) If the Tested Capacity of the Units is less than ninety-nine percent (99%) of the applicable Monthly Contract Capacity as may be adjusted in accordance with Section 4.2, then, subject to Section 11.2(d)(ii)(B), the Monthly Contract Capacities shall equal the applicable Monthly Contract Capacities adjusted downward by a percentage equal to the positive percentage difference between the Tested Capacity and the applicable Monthly Contract Capacity. If the Tested Capacity of the Units adjusted to ISO Conditions is ninety-nine percent (99%) or more of the applicable Monthly Contract Capacity as may be adjusted in accordance with Section 4.2, then, no adjustments to the Monthly Contract Capacities shall be warranted until the next adjustment pursuant to Sections 4.2 or 11.2(d). Examples of the calculations of the Monthly Contract Capacity adjustments are provided in <u>Appendix XVII</u>.

(B) An adjustment to the Monthly Contract Capacities shall be effective as of the first day of the month following the month in which the Performance Test occurred, subject to Section 11.2(a).

(e) <u>Buyer's Performance Tests</u>. Buyer may request testing during the Delivery Term which shall be performed in accordance with the Test Procedures and upon no less than twenty-four (24) hours written Notice to Seller ("Buyer's Performance Test").

(i) If the results of a Buyer's Performance Test are outside the tolerance band specified within the Additional Test Procedures for such test, then Buyer will assess a penalty until such time as the deficiency is remedied by Seller as demonstrated by a Seller's Performance Test ("Performance Test Penalty"). Performance Test Penalties shall start on the first day after the Buyer's Performance Test indicates an operational deficiency and shall continue to be assessed until the first day after the operational deficiency is remedied by a Seller's Performance Test. A Performance Test Penalty shall be assessed within the Availability compensation calculation in Section 4.3 by considering all hours and partial hours during this period to be considered UNAVAILPRODHRS.

(ii) Prior to the commencement of a Buyer's Performance Test, Seller shall Notify Buyer of all costs of each Buyer's Performance Tests in excess of Seller's usual costs of responding to dispatch of the Units during a non-test period ("Additional Test Costs"), and such costs shall be borne by Buyer, if commercially reasonable. Buyer agrees to accept all Energy produced during a Buyer's Performance Test and make Charging Energy available as required for such testing at its expense. Seller's Additional Test Costs as approved by Buyer prior to the commencement of the additional Performance Test, shall be invoiced by Seller to Buyer and Buyer shall pay such costs, provided that invoicing and payment for all amounts due from one Party to the other Party as necessary to implement this provision shall be done pursuant to Article Twelve.

(f) <u>Seller's Performance Tests</u>. In the event that (i) as a result of a Performance Test, the Monthly Contract Capacities are adjusted downward pursuant to Section 11.2(d)(ii)(A), (ii) upon the completion of Scheduled Maintenance, or (iii) results of a Buyer's Performance Test are outside the tolerance band specified in the Additional Test Procedures, Seller may request an additional test ("Seller's Performance Test") to be performed. A Seller's Performance Test must commence no later than ten (10) Business Days after completion of the Buyer's Performance Test showing the low test results, or the completion of the Scheduled Maintenance (which shall be performed in accordance with Section 10.2, as applicable), and shall be performed in accordance with the Test Procedures, except that (A) Seller shall provide Buyer with Notice of its request to test and the proposed starting and end times of the Seller's Performance Test no later than three (3) Business Days before it commences; (B) Buyer shall evaluate Seller's proposal and, in its sole discretion, either grant such request or identify two alternative start and stop times from which Seller may elect, and to which Buyer will consent; and (C) if performance of the Seller's Performance Test would require operation of the Units during hours other than when Scheduled

Operations are occurring or require Start-Ups or Shut-Downs not required by Scheduled Operations, Buyer shall schedule the Unit with the CAISO (and such other Transmission Provider, if any, as applicable) accordingly. Notwithstanding the foregoing, operations, Start-Ups and Shut-Downs required for Seller's Performance Test that are not required for Scheduled Operations shall not be deemed to be part of Scheduled Operations. The Tested Capacity as determined through the Seller's Performance Test shall be used to determine the Monthly Contract Capacities in the same manner as the Tested Capacity determined through a Performance Test as provided in Section 11.2(d)(ii)(A) and (B).

(g) <u>Disputes</u>. If Buyer disputes the test results, as reported by Seller pursuant to this Section 11.2, in any respect, including the adjustment of the metered results to establish the Tested Capacity, the dispute shall be resolved in accordance with Article Twenty-Three (Dispute Resolution). Pending such resolution, the Monthly Contract Capacities shall be confirmed or adjusted as set forth in Section 11.2(d) based on the Tested Capacity as determined by Seller, provided that in the event that the dispute is resolved with a determination that the Tested Capacity as established by Seller is excessively high such that the Monthly Contract Capacities should have been adjusted downward, the invoices shall be adjusted retroactively in accordance with the revised Tested Capacity and revised Monthly Contract Capacities (notwithstanding any provision of this Agreement that requires prospective adjustment of the Monthly Contract Capacity), and Buyer may set off the overpaid amount, with interest calculated at the Interest Rate, from subsequent monthly payments, retroactive to the date on which the Monthly Contract Capacities should have been adjusted.

11.3 <u>Access Rights</u>. Buyer, its authorized agents, employees and inspectors shall, while observing safety requirements, have the right of ingress to and egress from the Units and the Facility at any time and for any purposes reasonably connected with this Agreement, including verification of the Units' availability or unavailability. Buyer shall make reasonable efforts to coordinate its emergency activities with the safety and security departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator's safety and security departments.

### ARTICLE TWELVE: PAYMENT AND NETTING

#### 12.1 Billing and Payment.

(a) On or before the fifteenth (15<sup>th</sup>) calendar day following each month of the Delivery Term, Seller shall invoice Buyer, in arrears, for all amounts due from Buyer to Seller under this Agreement, including, as applicable:

- (i) the Monthly Fixed Payment,
- (ii) the Monthly Variable Payment,
- (iii) Additional Test Costs,
- (iv) Governmental Charges Payment, and

(v) other compensatory adjustments required by this Agreement; including adjustments for Performance Tests;

- (vi) less Deviation Charges,
- (vii) less Third Party Payments, and

(viii) less Reductions.

(b) On or before the fifteenth (15<sup>th</sup>) calendar day following each month of the Delivery Term (unless otherwise noted below), Buyer shall invoice Seller, in arrears, for all amounts due from Seller to Buyer (or credited by Buyer to Seller) under this Agreement, including, as applicable:

(i) Delay Damages (which will be invoiced monthly prior to the Initial Delivery Date in accordance with Section 14.2(a)),

(ii) Other Products Charges, including those CAISO charges which have been charged to Buyer and not previously invoiced to Seller for which Seller is responsible for paying to Buyer pursuant to this Agreement,

(iii) Forced Outage Compensation,

(iv) other compensatory adjustments required by this Agreement, including adjustments for Performance Tests, and

(v) Governmental Charges Payment.

For the avoidance of doubt, Settlement Data from the CAISO for the Units shall be used to represent Buyer's Schedule, as applicable, in all payment calculations performed pursuant to this Section 12.1. If Seller does not have access to this data, Buyer shall provide Seller with such data no later than five (5) Business Days after the close of each calendar month. If, in any Settlement Interval, Settlement Data is unavailable, the Parties shall base Buyer's Schedule for that Settlement Interval, if applicable, on (A) any oral or electronic record of dispatch instructions from Buyer or the CAISO, or if the records of this subsection (A) are not available, then Buyer's Schedule shall be based on (B) ADS dispatch instructions, or if the records and instructions of both subsections (A) and (B) are not available, then Buyer's Schedule shall be based on (C) Delivered Charging Energy and Delivered Energy for the Units. In each case, invoices shall include amounts accrued under this Agreement in the preceding month, provided that to the extent the determination of amounts due under this Agreement are based on invoices rendered by the CAISO or Governmental Authorities in the preceding month, the Parties acknowledge and agree that such amounts may relate to prior calendar months, as adjusted from time to time.

12.2 <u>Netting</u>. If each Party is required to pay the other an amount in the same month pursuant to this Agreement, then the Party owing the greater aggregate amount will pay to the other Party the difference between the amounts owed. Buyer is expressly authorized to set off from any of its payments hereunder an amount owed by Seller to Buyer in accordance with this Agreement.

12.3 <u>Payment</u>. Payment of all undisputed amounts owed shall be due by the later of ten (10) days after delivery of the owed Party's invoice or the twentieth day of the month ("Monthly Payment Date"). If either the invoice due date or Monthly Payment Date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the Monthly Payment Date will be deemed delinquent and will accrue interest at the Interest Rate, such interest to be calculated from and including the Monthly Payment Date to but excluding the date the delinquent amount is paid in full.

12.4 <u>Disputes and Adjustments of Invoices</u>. In the event an invoice or portion thereof or any other claim or adjustments arising hereunder, is disputed, payment of the undisputed portion of the

invoice shall be required to be made when due, with Notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. The Parties agree to use good faith efforts to resolve the dispute or identify the adjustment as soon as possible in accordance with the provisions of Article Twenty-Three (Dispute Resolution). Upon resolution of the dispute or calculation of the adjustment, any required payment shall be made within fifteen (15) calendar days of such resolution along with interest accrued at the Interest Rate from and including the due date, but excluding the date on which the payment is made. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent invoices, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is Notified in accordance with this Section 12.4 within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance giving rise to the payment obligation occurred (or in the case of amounts based on CAISO within twelve (12) months after the close of the month during which such invoice or revised invoice giving rise to the payment obligation was rendered), the right to payment for such performance is waived.

## ARTICLE THIRTEEN: CREDIT AND COLLATERAL REQUIREMENTS

13.1 <u>Buyer Financial Information</u>. If requested by Seller, Buyer shall deliver to Seller (a) within one hundred twenty (120) days after the end of each fiscal year with respect to PG&E Corporation, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (b) within sixty (60) days after the end of each of Buyer's first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for each accounting period prepared in accordance with Generally Accepted Accounting Principles. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available on www.pge-corp.com or on the SEC EDGAR information retrieval system; provided however, that should such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default, so long as such statements are provided to Seller upon their completion and filing with the SEC.

13.2 <u>Seller Financial Information</u>. If requested by Buyer, Seller shall deliver to Buyer (a) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing unaudited consolidated financial statements for such fiscal year (or audited consolidated financial statements for such fiscal year if otherwise available) and (b) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of such Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with Generally Accepted Accounting Principles.

13.3 <u>Grant of Security Interest/Remedies</u>. To secure its obligations under this Agreement and to the extent Seller delivers the Performance Assurance hereunder, Seller hereby grants to Buyer, as the secured party, a first priority security interest in, and lien on (and right of setoff against), and assignment of, all such Performance Assurance posted with Buyer in the form of cash collateral and cash-equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer. Within thirty (30) days of the delivery of the Performance Assurance, Seller agrees to take such action as Buyer reasonably requires in order to perfect a first-priority security interest in, and lien on (and right of setoff against), such Performance Assurance and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence, and during the continuation, of an Event of Default or an Early

Termination Date, Buyer, as the Non-Defaulting Party, may do any one or more of the following: (a) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under the Law then in effect; (b) exercise its rights of setoff against any and all property of Seller, as the Defaulting Party, in the possession of the Buyer or Buyer's agent; (c) draw on any outstanding Letter of Credit issued for its benefit; and (d) liquidate all Performance Assurance, then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to the Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## 13.4 <u>Performance Assurance</u>.

(a) <u>Performance Assurance</u>. Seller agrees to deliver to Buyer Performance Assurance in a form acceptable to Buyer to secure its obligations under this Agreement, which Performance Assurance Seller shall maintain in full force and effect for the period posted with Buyer, as follows:

(i) <u>Project Development Security</u>. The Project Development Security shall be in the form of *[specify cash or Letter of Credit]*, and shall be posted by Seller as follows:

(A) Seller shall post Project Development Security in the amount of dollars (\$\_.00) *[insert dollar amount equal to \$15.00/kW multiplied by the Design Capacity]* within ten (10) Business Days following the Execution Date; and

(B) Seller shall post additional Project Development Security in the amount of \_\_\_\_\_\_ dollars (\$\_\_\_\_.00) *[insert dollar amount equal to \$45.00/kW multiplied by the Design Capacity]* (for a total posted amount of sixty dollars (\$60.00) per kW multiplied by the Design Capacity) within ten (10) Business Days following Buyer's Notice to Seller that the CPUC Approval Condition Precedent has been satisfied.

(ii) <u>Delivery Term Security</u>. Prior to the Initial Delivery Date, Seller shall post Delivery Term Security in the amount equal to <u>dollars</u> dollars (\$\_\_\_00) *[amount to be discussed during negotiations]* and in the form of *[specify cash or Letter of Credit]*; provided that, with Buyer's consent, Seller may elect to apply the Project Development Security posted pursuant to Section 13.4(a)(i) toward the Delivery Term Security posted pursuant to this Section 13.4(a)(i).

(iii) The amount of Performance Assurance required under this Agreement shall not be deemed a limitation of damages. For the avoidance of doubt, Buyer shall have no obligation to post collateral under this Agreement.

(b) <u>Use of Project Development Security</u>. Buyer shall be entitled to draw upon the Project Development Security posted by Seller for Delay Damages in accordance with Section 14.2(a) until such time as the Project Development Security is exhausted. Buyer shall also be entitled to draw upon the Project Development Security for any damages arising upon Buyer's declaration of an Early Termination Date.

(c) <u>Return of Project Development Security</u>. If, after the Initial Delivery Date, no damages are due and owing to Buyer under this Agreement, then Seller shall no longer be required to maintain the Project Development Security, and Buyer shall return to Seller the Project Development

Security, less any amounts drawn in accordance with Section 13.4(b). The Project Development Security (or portion thereof) due to Seller shall be returned to Seller within five (5) Business Days of Seller's provision of the Delivery Term Security unless, with Buyer's consent, Seller elects to apply the Project Development Security posted pursuant to Section 13.4(a)(i) toward the Delivery Term Security posted pursuant to Section 13.4(a)(i).

(d) <u>Payment and Transfer of Interest</u>. Buyer shall pay interest on cash held as Performance Assurance, at the Interest Rate and on the Interest Payment Date. All accrued interest on the unused cash Performance Assurance, shall be transferred to Seller in the form of cash by wire transfer to the bank account specified under "Wire Transfer" in <u>Appendix XIV</u> (Notices).

(e) <u>Return of Delivery Term Security</u>. Buyer shall return the unused portion of Delivery Term Security, including the payment of any interest due thereon, pursuant to Section 13.4(d) above, to Seller promptly after the following has occurred: (i) the Contract Term has ended, or subject to Section 5.2, an Early Termination Date has occurred, as applicable; and (ii) all payment obligations of the Seller arising under this Agreement, including the Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

13.5 <u>Letter of Credit</u>. Performance Assurance provided in the form of a Letter of Credit (see <u>Appendix IX</u>) shall be subject to the following provisions:

(a) If Seller has provided a Letter of Credit pursuant to any of the applicable provisions in this Article Thirteen, then Seller shall renew or cause the renewal of each outstanding Letter of Credit on a timely basis in accordance with this Agreement.

(b) In the event the issuer of such Letter of Credit at any time (x) fails to maintain the requirements of an Eligible LC Bank or Letter of Credit, (y) indicates its intent not to renew such Letter of Credit, or (z) fails to honor Buyer's properly documented request to draw on such Letter of Credit, Seller shall cure such occurrence by complying with either subsections 13.5(b)(i) or (ii) below in an amount equal to the outstanding Letter of Credit, and by completing the action within five (5) Business Days after the date of Buyer's Notice to Seller of an occurrence listed in this subsection (Seller's compliance with either subsections (i) or (ii) below is considered the "Cure"):

(i) providing a substitute Letter of Credit that is issued by an Eligible LC Bank, other than the bank which is the subject of Buyer's Notice to Seller in Section 13.5(b) above, or

(ii) posting cash.

If Seller fails to Cure or if such Letter of Credit expires or terminates without a full draw thereon by Buyer, or fails or ceases to be in full force and effect at any time that such Letter of Credit is required pursuant to the terms of this Agreement, then Seller shall have failed to meet the creditworthiness or collateral requirements of Article Thirteen.

(c) Notwithstanding the foregoing in Section 13.5(b), if, at any time, the issuer of such Letter of Credit has a Credit Rating on "credit watch" negative or developing by S&P, or is on Moody's "watch list" under review for downgrade or uncertain ratings action (either a "Watch"), then Buyer may make a demand to Seller by Notice ("LC Notice") to provide a substitute Letter of Credit that is issued by an Eligible LC Bank, other than the bank on a Watch ("Substitute Letter of Credit"). The Parties shall have thirty (30) Business Days from the LC Notice to negotiate a Substitute Letter of Credit ("Substitute Bank Period").

(i) If the Parties do not agree to a Substitute Letter of Credit by the end of the Substitute Bank Period, then Buyer shall provide Seller with Notice within five (5) Business Days following the expiration of the Substitute Bank Period ("Ineligible LC Bank Notice Period") that either:

(A) Buyer agrees to continue accepting the then currently outstanding Letter of Credit from the bank that is the subject of the LC Notice, but such bank shall no longer be an Eligible LC Bank ("Ineligible LC Bank") and Buyer will not accept future or renewals of Letters of Credit from the Ineligible LC Bank; or

(B) the bank that is the subject of the LC Notice is an Ineligible LC Bank and Seller shall then have thirty (30) days from the date of Buyer's Notice to Cure pursuant to Section 13.5(b) and, if Seller fails to Cure, then the last paragraph in Section 13.5(b) shall apply to Seller.

(ii) If the Parties have not agreed to a Substitute Letter of Credit and Buyer fails to provide a Notice during the Ineligible LC Bank Notice Period above, then Seller may continue providing the Letter of Credit posted immediately prior to the LC Notice.

(d) In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.

## ARTICLE FOURTEEN: PROJECT DEVELOPMENT REQUIREMENTS AND SUPPLIER DIVERSITY

## 14.1 <u>Construction Milestones</u>.

(a) <u>Design, Development and Construction</u>. As between Buyer and Seller, Seller shall have sole responsibility for designing and constructing (or causing the design and construction) of the Facility, Transmission Upgrades (if any) and all related metering and submetering facilities, including the obligation to perform all studies, including environmental studies, pay all fees, obtain all necessary Governmental Approvals and execute all necessary agreements with the Transmission Provider and the Participating Transmission Owner for the Electrical Interconnection Facilities, Transmission Upgrades necessary for the ownership, construction, operation and maintenance of the Units and delivery of Seller's Product. All Electrical Interconnection Facilities, including metering and submetering facilities and Transmission Upgrades must be of sufficient capacity as of the Initial Delivery Date to permit the Units to operate at all times during each month at the Design Capacity (in addition to such capacity as required for units located at the Facility that are not committed to Buyer). Metering and submetering facilities must meet such additional specifications as set forth in Section 8.1.

# (b) <u>Critical Milestones</u>.

(i) The Parties agree time is of the essence in regards to the Agreement. As such, the Parties also agree certain Critical Milestones must be achieved in a timely fashion or Buyer will suffer damages. Seller shall cause the development and construction of the Facility to meet each of the Critical Milestones by the dates set forth in <u>Appendix XII</u>.

(ii) Documentation and Remedial Action Plan. Seller shall provide Buyer with any requested documentation to support the achievement of Critical Milestones within ten (10) Business Days of receipt of such request by Seller. If Seller misses any Critical Milestone by more than thirty (30) days, except as the result of Force Majeure, Seller shall submit to Buyer, within ten (10) Business Days of such missed Critical Milestone completion date, a remedial action plan ("Remedial

Action Plan"), which is outlined in the Monthly Construction Progress Report (<u>Appendix XIII</u>) and requires Seller to provide a detailed description of its proposed course of action to achieve the missed Critical Milestones and all subsequent Critical Milestones by the Initial Delivery Date; provided, that delivery of any Remedial Action Plan shall not relieve Seller of its obligation to meet any subsequent Critical Milestones and the Expected Initial Delivery Date.

(c) <u>Guaranteed Construction Start Date</u>. The Construction Start Date shall occur no later than *[insert date]* (the "Guaranteed Construction Start Date"), except as may be extended by Force Majeure or for an Allowed Delay, as provided in Section 14.1(d).

(d) Extension of Guaranteed Construction Start Date. The Guaranteed Construction Start Date shall be extended on a day-for-day basis without the payment of Delay Damages, due to Force Majeure or Allowed Delay not exceeding an aggregate extension of three hundred and sixty-five (365) days, to the extent that such Guaranteed Construction Start Date or Expected Initial Delivery Date is delayed as a result of an event of Force Majeure invoked by the Seller in accordance with Section 11.1; provided further that Seller works diligently to resolve the effect of the Force Majeure and provide evidence of its efforts promptly upon Buyer's written request; and further provided that the Initial Delivery Date, if extended, shall be the first day of the calendar month following the end of the event of Force Majeure. To the extent that the period between the Guaranteed Construction Start Date and Expected Initial Delivery Date is less than one year, Seller shall still be entitled to extend the Guaranteed Construction Start Date to a date that is beyond the Expected Initial Delivery Date, but Seller shall not be relieved from paying Delay Damages in connection with the failure to achieve the Expected Initial Delivery Date, except in the case of Force Majeure, as provided in Section 14.1(e) below.

(e) Extension of Initial Delivery Date. The Expected Initial Delivery Date shall be extended on a day-for-day basis without the payment of Delay Damages, not exceeding an aggregate extension of three hundred and sixty-five (365) days, to the extent that the Guaranteed Construction Start Date has been extended due to Force Majeure or Allowed Delay pursuant to Section 14.1(d) or due to a Force Majeure occurring after the Guaranteed Construction Start Date as invoked by Seller in accordance with Section 11.1; provided further that Seller works diligently to resolve the effect of the Force Majeure and provide evidence of its efforts promptly upon Buyer's written request; further provided that the Initial Delivery Date, if extended, shall be the first day of the calendar month following the end of the event of Force Majeure and the foregoing extension of the Expected Initial Delivery Date shall continue until such day. For sake of certainty the three hundred and sixty-five (365) day extension shall include any Allowed Delay invoked by Seller in connection with the Guaranteed Construction Start Date provided in Section 14.1(d) above, but Seller shall not be entitled to a day-for-day extension due to such Allowed Delay.

(f) If Seller claims an Allowed Delay or Force Majeure, Seller shall provide Buyer with sixty (60) days' Notice prior to the Guaranteed Construction Start Date or Expected Initial Delivery Date, as applicable.

(g) <u>Reports</u>. Within five (5) Business Days after the close of each calendar month between the Execution Date and the Initial Delivery Date, Seller shall provide to Buyer a Monthly Construction Progress Report addressing each of the Critical Milestones and such other Milestones as set forth pursuant to the Monthly Construction Progress Report including projected time to completion, and the Parties agree to regularly scheduled meetings between representatives of Buyer and Seller to review such monthly reports and discuss Seller's construction progress. Buyer shall have the right, during business hours and upon at least twenty-four (24) hours' Notice, to inspect the Site and/or on-Site Seller data and information pertaining to the Units and otherwise inspect or audit to enforce its rights pursuant to this Section 14.1.

## 14.2 <u>Expected Initial Delivery Date Cure Period; Termination Upon Delay</u>.

Expected Initial Delivery Date Cure Period. If the Seller has not achieved the (a)Initial Delivery Date as of the Expected Initial Delivery Date after giving effect to the Force Majeure extension under Section 14.1(d), then Seller, upon giving notice to Buyer at least thirty (30) days prior to the Expected Initial Delivery Date, may extend the Initial Delivery Date by a period not to exceed three hundred sixty five (365) days ("Cure Period") provided that Seller pays to Buyer liquidated damages in the amount of one-hundred and sixty dollars per day (\$160.00/day) multiplied by the Design Capacity, for each day of the Cure Period beginning with the day after the Expected Initial Delivery Date through and including the date on which the Initial Delivery Date occurs up to a maximum of three-hundred and sixty five (365) days (any portion of which, or all, such payments are "Delay Damages"). If Delay Damages are due, then Buyer shall provide Notice to Seller of the amounts due and Buyer may draw such amounts due from the Project Development Security, provided that if the Project Development Security is not adequate to compensate Buyer for Delay Damages, Buyer shall invoice Seller for the amount still owed to Buyer on a monthly basis during the period of the delay. Each Party agrees and acknowledges that (i) the damages that Buyer would incur due to Seller's delay in achieving the Expected Initial Delivery Date would be difficult or impossible to predict with certainty and (ii) the Delay Damages are an appropriate approximation of such damages.

(b) <u>Termination Upon Delay</u>. The Seller's failure to achieve the Initial Delivery Date within three hundred and sixty-five (365) days after the Expected Initial Delivery Date will constitute an Event of Default pursuant to Section 5.1(a)(vi) of this Agreement. If such an Event of Default occurs, then any time prior to the occurrence of the Initial Delivery Date, Buyer may elect to exercise the remedies that are available upon an Event of Default pursuant to Article Five.

14.3 <u>Supplier Diversity</u>. Seller shall comply with Buyer's Supplier Diversity Program in accordance with <u>Appendix V</u>.

# **ARTICLE FIFTEEN:** [RESERVED] [This section is reserved for gas provisions, if applicable to the technology of the Project.]

# **ARTICLE SIXTEEN: GOVERNMENTAL CHARGES**

16.1 <u>Cooperation</u>. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

16.2 <u>Governmental Charges</u>. Seller shall pay or cause to be paid all taxes imposed by any Governmental Authority ("Governmental Charges") on or with respect to the Product or the Energy Storage Services arising before and at the Electrical Delivery Point, including (i) ad valorem taxes, (ii) taxes related to the operation or maintenance of the Units, the Facility, or the Site, (iii) taxes related to the provision of Energy Storage Services or the use or consumption of Charging Energy, and (iv) other taxes attributable to the Units, land, land rights or interests in land for the Units or the Facility. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product from the Electrical Delivery Point and Charging Energy to and at the Electrical Delivery Point. In the event a Party is required by Law to remit or pay Governmental Charges which are the other Party's responsibility hereunder, the Party that is assessed shall provide Notice to the Party that is responsible for such amounts due (together with supporting documentation), the assessed Party shall promptly pay such Governmental Charges when due and invoice the responsible Party in accordance with Article Twelve and the responsible Party shall reimburse the assessed Party in full in accordance with Article Twelve no later than the next Monthly Payment Date, with interest at the Interest Rate from and including the date on which the assessed Party pays the Governmental Charges until (but excluding) the date on which the responsible Party reimburses the assessed Party (cumulatively, the "Governmental Charges Payment"). Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges from which it is exempt under the Law; provided that an exempt Party shall bear the responsibility of proving its exemption as necessary to avoid the unjust imposition of the tax on the other Party.

## ARTICLE SEVENTEEN: CONDITIONS PRECEDENT TO INITIAL DELIVERY DATE

17.1 <u>Conditions Precedent to the Initial Delivery Date</u>. Seller shall have provided Buyer with Notice of the expected occurrence of the Initial Delivery Date no later than thirty days prior to the Initial Delivery Date, and again immediately prior to the date it occurs. Seller shall take all actions and obtain all approvals necessary to meet the obligations of this Agreement and to deliver the Product to Buyer pursuant to the terms of the Agreement, which include those obligations set forth below (collectively the "Conditions Precedent"), which must be satisfied before the Initial Delivery Date or pursuant to the deadline specifically provided with respect to each Seller obligation below.

(a) At Seller's expense, Seller shall construct or cause to be constructed the Facility, which shall include the equipment and characteristics as described in <u>Appendix II</u>, to enable Seller to satisfy the obligations of the Seller herein.

(b) At Seller's expense, Seller shall construct or cause to be constructed the Electrical Interconnection Facilities such that the Electrical Interconnection Facilities are capable of delivering the Design Capacity to and at the Electrical Delivery Point during each month of the Delivery Term (in addition to any other output of the Facility as the Electrical Interconnection Facilities are required to transmit) and shall cause them to be placed into service, in each case, in accordance with the requirements of the interconnecting transmission owner and/or operator, and applicable rules, if any, of FERC, Transmission Provider, WECC and any other organization charged with reliability responsibilities or Governmental Authority.

(c) At Seller's expense, Seller shall cause any and all Transmission Upgrades required to enable the grid to accept delivery of the Design Capacity and maximum Charging Energy (in addition to any other output of the Facility) at all times during each month of the Delivery Term, to be constructed and placed into service, including, to the extent necessary, by funding the Transmission Upgrades. As required in Sections 3.2 and 6.2(c), Seller's interconnection, and/or transmission arrangements shall provide for Full Capacity Deliverability Status as of Initial Delivery Date and throughout the Delivery Term.

(d) At Seller's expense, Seller shall secure all Governmental Approvals required for the lawful operation and maintenance of the Facility, inclusive of the Electrical Interconnection Facilities, including all those related to environmental matters, as necessary to permit each Unit to operate according to the specifications described in <u>Appendix II</u>; and to demonstrate that Seller possesses emission credits necessary for such operation of the Units.

- (e) Seller shall have posted collateral as required by Section 13.4(a)(ii).
- (f) No default shall have occurred and remain uncured as of the Initial Delivery

Date.

(g) Seller shall have executed a CAISO Participating Generator Agreement (PGA) and/or a Participating Load Agreement (PLA), if applicable, and a Meter Service Agreement (MSA) (or

successor or similar forms of agreement providing for interconnected operation with the CAISO), which shall be in full force and effect.

(h) Seller shall have all necessary systems in place and demonstrated ability to provide Buyer with invoice settlement related meter data as required in Section 8.7.

(i) At least one hundred and eighty (180) days prior to the Initial Delivery Date, Seller must submit an update to <u>Appendix II</u> ("Operational Limitations") that is acceptable to Buyer in its reasonable discretion for use in the Master File.

(j) At least one hundred and twenty (120) days prior to the Initial Delivery Date, the CAISO shall have approved the Operational Limitations submitted by Seller for use in an updated Master File to represent the operational characteristics of the Units. If the CAISO does not approve all changes, the Parties shall work together to provide the CAISO with any documentation or certification that would enable CAISO's approval of the Operational Limitations to be used in an updated Master File for the Units. If the process to obtain CAISO approval of Master File data causes a delay to the Initial Delivery Date, such shall not be excused from satisfying the Initial Delivery Date requirements as of the Expected Initial Delivery Date, as may be extended due to Force Majeure. If requested by Buyer, Seller shall provide to Buyer a copy of its existing Master File data related to the Unit's Operational Limitations if Buyer is not the current SC for the Units.

(k) Prior to the Initial Delivery Date, Seller shall have achieved its CAISO Commercial Operation Date, completed a PMax Test, and received CAISO certification of any and all Other Products specified in <u>Appendix II</u> (including AGC if applicable).

(1) At least thirty (30) days before the Initial Delivery Date, the Commercial Operation Date shall have occurred and Seller shall have completed the provisions of Section 10.1(a) for designating Buyer or Buyer's Third Party SC, as Seller's SC.

(m) The Parties shall have finalized the mutually acceptable Test Procedures at least thirty (30) days prior to the Initial Delivery Date.

(n) Seller has provided Buyer with certification from an independent, non-Affiliate California registered professional mechanical engineer, that (i) Seller has designed and built the Project to have a *[Note to transactors: insert appropriate number of years based on technology]* year design life in accordance with Prudent Electrical Practices, and (ii) the design and construction of the Project was carried out by the original equipment manufacturer or other competent organization.

(o) Seller shall have all necessary systems in place to respond to an electronic signal conveying real-time or intra-day instructions to operate the Units at the request of Buyer, Buyer's Third-Party SC, or the CAISO in accordance with Section 10.1(c)(v).

# **ARTICLE EIGHTEEN: LIMITATIONS**

18.1 <u>Limitation of Remedies, Liability and Damages</u>. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY KIND, INCLUDING WITH RESPECT TO ANY UNIT, PRODUCT OR SERVICE PROVIDED BY EITHER PARTY HEREUNDER, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED EXCEPT TO THE EXTENT EXPRESSLY SET FORTH HEREIN. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN. THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE, PROVIDED THAT THE FOREGOING EXCLUSION SHALL NOT PRECLUDE RECOVERY BY A PARTY OF THE TERMINATION PAYMENT OR ANY LIQUIDATED DAMAGES EXPRESSLY HEREIN PROVIDED, NOR SHALL IT BE CONSTRUED TO LIMIT RECOVERY BY AN INDEMNITEE UNDER ANY INDEMNITY PROVISION IN RESPECT OF A THIRD PARTY CLAIM. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF ARTICLE TWENTY (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, INCLUDING FORFEITURES OF DEPOSITS, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEOUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

#### **ARTICLE NINETEEN: REPRESENTATIONS; WARRANTIES; COVENANTS**

19.1 <u>Representations and Warranties of Both Parties</u>. Each Party represents and warrants to the other Party that as of the Execution Date:

(a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation and is qualified to transact business in the State of California and in all jurisdictions where the ownership of its properties or its operations require such qualification, except where the failure to so qualify would not have a material adverse effect on its financial condition, its ability to own its properties or transact its business, or to carry out the transactions contemplated hereby;

(b) except for receipt of CPUC Approval, in the case of Buyer, and the Governmental Approvals necessary to install, operate and maintain the Project, in the case of Seller, it has all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;

(c) it has full power and authority to carry on its business as now conducted and to enter into, and carry out its obligations under this Agreement, and the execution, delivery and performance of this Agreement are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Law, rule, regulation, order or the like applicable to it;

(d) execution and delivery of this Agreement and performance or compliance with any provision hereof will not result in the creation or imposition of any lien upon its properties, or a breach of, or constitute a default under, or give to any other Persons any rights of termination, amendment, acceleration or cancellation of any agreement to which it is a party or by which any of its respective properties is bound or affected;

(e) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;

(f) it is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;

(g) there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(h) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(i) it is a "forward contract merchant" within the meaning of the United States Bankruptcy Code (as in effect as of the Execution Date of this Agreement);

(j) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement; and

(k) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement.

19.2 <u>General Covenants</u>. Each Party covenants that throughout the Contract Term:

(a) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation and qualified to conduct business in the State of California and in all jurisdictions where ownership of its properties or its operations require such qualifications, except where the failure to do so would not have a material adverse effect on its financial condition, its ability to own its properties or transact its business, or to carry out the transactions contemplated hereby;

(b) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement; and

(c) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Law applicable to it.

19.3 <u>Covenants of Seller</u>. Seller covenants to and for the benefit of Buyer that throughout the Contract Term (unless another time period is specified):

(a) it will deliver the Product to Buyer free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any Person;

(b) the Unit(s) shall at all times during the Contract Term be free and clear of all liens, security interests, claims and encumbrances or any interest thereto or therein by any Person except for purposes of Project financing or as otherwise agreed by Buyer as evidenced by its written consent;

(c) it will take no action or permit any Person (other than Buyer) to take any action that would impair in any way Buyer's ability to rely on the Units in order to satisfy its Resource Adequacy Requirement;

(d) it will report the emissions output from the Unit(s) to CARB for each emitting year as required by the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Title 17, California Code of Regulations, Sections 95100 to 95133) or any other authorized Governmental Authority having jurisdiction;

(e) if any of the Units qualify for Regulatory Must-Take Generation status, Seller and Buyer stipulate that each Unit shall have an RMTmax value of zero (0) MW, and Seller will not seek any scheduling priority or RMTmax value above zero (0) MW during the Delivery Term;

(f) it shall, upon the request of Buyer, submit a letter of concurrence in the form attached hereto as <u>Appendix X</u> indicating that with this Transaction Seller does not intend to transfer "ownership or control of generation capacity" from Seller to Buyer as the term "ownership or control of generation capacity" is used in 18 CFR § 35.42, as in effect on the Execution Date;

(g) it shall cooperate with Buyer to meet CAISO Tariff requirements; and

II.

(h) it shall operate the Units for the full Delivery Term in accordance with <u>Appendix</u>

19.4 <u>Representations and Warranties of Buyer</u>. Buyer represents and warrants to Seller that throughout the Delivery Term it will make Charging Energy available for Scheduled Operations free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any Person.

### ARTICLE TWENTY: INDEMNITIES AND INSURANCE

20.1 Indemnity by Seller. Seller shall release, defend, indemnify and hold harmless Buyer, its directors, officers, agents, attorneys, representatives and Affiliates ("Buyer Group") against and from any and all Indemnifiable Losses, which arise out of or relate to or are in any way connected with (i) the Energy Storage Services prior to and at the Electrical Delivery Point; (ii) the Product prior to and at the Electrical Delivery Point; (iii) the Product prior to and at the Electrical Delivery Point; (iii) Seller's ownership, development, construction, operation and/or maintenance of the Units, the Facility or the Site; (iv) Third Party Claims arising from Seller's actions or inactions, (v) Third Party Claims arising from Seller's breach of this Agreement or other agreements related to the development, construction, ownership, operation or maintenance of the Facility; (vi) any environmental matters associated with the Facility or the Site, including the disposal and transportation of Hazardous Substances by or on behalf of the Seller or at the Seller's direction or agreement; or (vii) resulting from Seller's violation of any applicable Law, or Transmission Provider, NERC or WECC or Reliability Organization requirements; in each case including any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to or destruction or economic loss of property belonging to Buyer, Seller, or others, excepting only such Indemnifiable

Losses, to the extent caused by the willful misconduct or gross negligence of a member of the Buyer Group.

20.2 Indemnity by Buyer. Buyer shall release, defend, indemnify and hold harmless Seller, its directors, officers, agents, attorneys, representatives and Affiliates ("Seller Group") against and from any and all Indemnifiable Losses, which arise out of or relate to or are in any way connected with (i) the Product after the Electrical Delivery Point; (ii) Third Party Claims resulting from Buyer's actions or inactions; (iii) Third Party Claims arising from Buyer's breach of this Agreement; or (iv) resulting from Buyer's violation of any applicable Law, or Transmission Provider, NERC or WECC or Reliability Organization requirements; in each case including any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to or destruction or economic loss of property belonging to Buyer, Seller, or others, excepting only such Indemnifiable Losses, to the extent caused by the willful misconduct or gross negligence of a member of the Seller Group. Notwithstanding any other provision of this Agreement, Buyer shall not indemnify the Seller Group for any actions or inactions of PG&E Transmission; provided that, subject to the understanding that nothing in this Agreement shall be construed as conferring on Seller or any member of the Seller Group any right or remedies with respect to PG&E Transmission, and nothing herein shall impair or limit Seller from exercising at any time any and all rights and remedies as it may have with respect to matters relating to PG&E Transmission.

### 20.3 Notice of Claim.

(a) <u>Notice of Claim</u>. Subject to the terms of this Agreement and upon obtaining knowledge of an Indemnifiable Loss for which it is entitled to indemnity under this Article Twenty, the Party seeking indemnification hereunder (the "Indemnitee") will promptly Notify the Party against whom indemnification is sought (the "Indemnitor") in writing of any damage, claim, loss, liability or expense which the Indemnitee has determined has given or could give rise to an Indemnifiable Loss under Sections 20.1 or 20.2. (The Notice is referred to as a "Notice of Claim"). A Notice of Claim will specify, in reasonable detail, the facts known to the Indemnitee regarding the Indemnifiable Loss.

(b) Notice of Third Party Claim. If an Indemnitee receives Notice of the assertion or commencement of a Third Party Claim against it with respect to which an Indemnitor is obligated to provide indemnification under this Agreement, such Indemnitee will give such Indemnitor a Notice of Claim as promptly as practicable, but in any event not later than seven (7) calendar days after such Indemnitee's receipt of Notice of such Third Party Claim. Such Notice of Claim will describe the Third Party Claim in reasonable detail, will include copies of all material written evidence thereof and will indicate, if reasonably practicable, the estimated amount of the Indemnifiable Loss that has been or may be sustained by the Indemnitee. The Indemnitor will have the right to participate in, or, by giving Notice to the Indemniter, to assume the defense of any Third Party Claim at such Indemnitor's own expense and by such Indemnitor's own counsel (as is reasonably satisfactory to the Indemnitee), and the Indemnitee will cooperate in good faith in such defense.

(c) <u>Direct Claim</u>. Any Direct Claim must be asserted by giving the Indemnitor Notice thereof, stating the nature of such claim in reasonable detail and indicating the estimated amount, if practicable. The Indemnitor will have a period of sixty (60) calendar days from receipt of such Notice within which to respond to such Direct Claim. If the Indemnitor does not respond within such sixty-day period, the Indemnitor will be deemed to have accepted such Direct Claim. If the Indemnitor rejects such Direct Claim, the Indemnitee will be free to seek enforcement of its rights to indemnification under this Agreement. (d) <u>Failure to Provide Notice</u>. A failure to give timely Notice or to include any specified information in any Notice as provided in this Section 20.3 will not affect the rights or obligations of any Party hereunder except and only to the extent that, as a result of such failure, any Party which was entitled to receive such Notice was deprived of its right to recover any payment under its applicable insurance coverage or was otherwise materially damaged as a direct result of such failure and, provided further, the Indemnitor is not obligated to indemnify the Indemnitee for the increased amount of any Indemnifiable Loss which would otherwise have been payable to the extent that the increase resulted from the failure to deliver timely a Notice of Claim.

20.4 Defense of Third Party Claims. If, within ten (10) calendar days after giving a Notice of Claim regarding a Third Party Claim to an Indemnitor pursuant to Section 20.3(b), an Indemnitee receives Notice from such Indemnitor that the Indemnitor has elected to assume the defense of such Third Party Claim as provided in the last sentence of Section 20.3(b), the Indemnitor will not be liable for any legal expenses subsequently incurred by the Indemnitee in connection with the defense thereof; provided, however, that if the Indemnitor fails to take reasonable steps necessary to defend diligently such Third Party Claim within ten (10) calendar days after receiving Notice from the Indemnitee that the Indemnitee believes the Indemnitor has failed to take such steps, or if the Indemnitor has not undertaken fully to indemnify the Indemnitee in respect of all Indemnifiable Losses relating to the matter, the Indemnitee may assume its own defense, and the Indemnitor will be liable for all reasonable costs or expenses, including attorneys' fees, paid or incurred in connection therewith. Without the prior written consent of the Indemnitee, the Indemnitor will not enter into any settlement of any Third Party Claim which would lead to liability or create any financial or other obligation on the part of the Indemnitee for which the Indemnitee is not entitled to indemnification hereunder; provided, however, that the Indemnitor may accept any settlement without the consent of the Indemnitee if such settlement provides a full release to the Indemnitee and no requirement that the Indemnitee acknowledge fault or culpability. If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation on the part of the Indemnitee for which the Indemnitee is not entitled to indemnification hereunder and the Indemnitor desires to accept and agrees to such offer, the Indemnitor will give Notice to the Indemnitee to that effect. If the Indemnitee fails to consent to such firm offer within ten (10) calendar days after its receipt of such Notice, the Indemnitee may continue to contest or defend such Third Party Claim and, in such event, the maximum liability of the Indemnitor to such Third Party Claim will be the amount of such settlement offer, plus reasonable costs and expenses paid or incurred by the Indemnitee up to the date of such Notice.

20.5 <u>Subrogation of Rights</u>. Upon making any indemnity payment, the Indemnitor will, to the extent of such indemnity payment, be subrogated to all rights of the Indemnitee against any Third Party in respect of the Indemnifiable Loss to which the indemnity payment relates; provided that (i) the Indemnitor is in compliance with its obligations under this Agreement in respect of such Indemnifiable Loss, and (ii) until the Indemnitee recovers full payment of its Indemnity payment are hereby made expressly subordinated and subjected in right of payment to the Indemnitee's rights against such Third Party. Without limiting the generality or effect of any other provision hereof, each such Indemnitee and Indemnitor shall execute upon request all instruments reasonably necessary to evidence and perfect the above-described subrogation and subordination rights.

20.6 <u>Rights and Remedies are Cumulative</u>. The rights and remedies of a Party pursuant to this Article Twenty shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

20.7 <u>Insurance</u>. Throughout the Contract Term, Seller shall, at its sole cost and expense, procure and maintain the following insurance coverage and be responsible for its subcontractors

maintaining sufficient limits of the appropriate insurance coverage. For the avoidance of doubt, the obligations of the Seller in this Section 20.7 constitute a material obligation of the Agreement.

## (a) <u>Workers' Compensation and Employers' Liability</u>.

(i) Workers' Compensation insurance indicating compliance with any applicable labor codes, acts, Laws or statutes, state or federal, where Seller performs Work.

(ii) Employers' Liability insurance shall not be less than one million dollars (\$1,000,000.00) for injury or death occurring as a result of each accident.

## (b) <u>Commercial General Liability</u>.

(i) Coverage shall be at least as broad as the Insurance Services Office (ISO) Commercial General Liability Coverage "occurrence" form, with no alterations to the coverage form.

(ii) The limit shall not be less than ten million dollars (\$10,000,000.00) each occurrence for bodily injury, property damage, personal injury and products/completed operations. Defense costs shall be provided as an additional benefit and not included within the limits of liability. Coverage limits may be satisfied using an umbrella or excess liability policy or an Owners Contractors Protective (OPC) policy.

(iii) Coverage shall:

(A) by "Additional Insured" endorsement add as insureds PG&E, its directors, officers, agents and employees with respect to liability arising out of the Work performed by or for the Seller. In the event the Commercial General Liability policy includes a "blanket endorsement by contract," the following language added to the certificate of insurance will satisfy Buyer's requirement: "PG&E, its directors, officers, agents and employees with respect to liability arising out of the Work performed by or for the Seller has been endorsed by blanket endorsement;"

(B) be endorsed (blanket or otherwise) to specify that the Seller's insurance is primary and that any insurance or self-insurance maintained by PG&E shall not contribute with it; and

(C) include a severability of interest clause.

(c) <u>Business Auto</u>.

(i) Coverage shall be at least as broad as the Insurance Services Office (ISO) Business Auto Coverage form covering Automobile Liability, code 1 "any auto."

(ii) The limit shall not be less than five million dollars (\$5,000,000.00) each accident for bodily injury and property damage.

(iii) If scope of Work involves hauling hazardous materials, coverage shall be endorsed in accordance with Section 30 of the Motor Carrier Act of 1980 (Category 2) and the CA 99 48 endorsement.

## (d) <u>All Risk Property Insurance</u>.

(i) During construction, an All Risk Property insurance policy including earthquake and flood (with sublimits as appropriate) shall be maintained during the course of Work being performed and include start-up and testing for installed equipment and delayed opening coverage. Policy shall include coverage for materials and equipment while under the care, custody and control of the Seller during the course of Work, at the Site, offsite or while in transit to the Site.

(ii) Coverage shall be written to cover the full replacement cost of the property (with sublimits as appropriate).

## (e) <u>Seller's Pollution Liability</u>.

(i) If the scope of Work involves areas of known pollutants or contaminants, pollution liability coverage shall be required to cover bodily injury, property damage, including clean-up costs and defense costs resulting from sudden, and accidental conditions, including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, hydrocarbons, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water course or body of water shall be maintained.

(ii) The limit shall not be less than one million dollars (\$1,000,000.00) each occurrence for bodily injury and property damage.

(iii) The policy shall endorse PG&E as additional insured.

(f) <u>Additional Insurance Provisions</u>.

(i) Before commencing performance of the Work, Seller shall furnish Buyer with certificates of insurance and endorsements of all required insurance for Seller.

(ii) The documentation shall state that coverage shall not be cancelled except after thirty (30) days prior written Notice has been given to Buyer.

(iii) Buyer currently uses a third-party vendor, Exigis, to confirm and collect insurance documents. Certificates of insurance and endorsements shall be signed and submitted by a person authorized by that insurer to issue certificates of insurance and endorsements on its behalf, and submitted via email or fax to Exigis or another vendor as Noticed by Buyer:

Certificate Holder: Pacific Gas and Electric Company c/o Exigis, LLC support@exigis.com Fax: (646) 755-3327

(iv) Reviews of such insurance may be conducted by Buyer on an annual

basis.

(v) Upon request, Seller shall furnish Buyer evidence of insurance for its

subcontractors.

(g) <u>Form And Content</u>. All policies or binders with respect to insurance maintained by Seller shall waive any right of subrogation of the insurers hereunder against PG&E, its officers,

directors, employees, agents and representatives of each of them, and any right of the insurers to any setoff or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under such policy.

## ARTICLE TWENTY-ONE: RECORDS AND AUDIT RIGHTS

21.1 <u>Operations Logs</u>. Seller shall maintain a complete and accurate log of all material operations on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, Outages, electrical characteristics of the generators and similar information relating to the availability, testing and operation of the Units and availability and production of the Product. Seller shall provide this information electronically to Buyer within thirty (30) days of Buyer's request.

## 21.2 <u>Records and Audit</u>.

(a) <u>Records and Audit</u>. Generally Accepted Accounting Principles and SEC rules require Buyer to evaluate if Buyer must consolidate Seller's financial information. Seller shall provide access to financial records and personnel required by Buyer to determine if consolidated financial reporting is required. If Buyer determines that consolidation is required, Buyer shall require the following during every calendar quarter for the Contract Term:

and

(i) Seller's unaudited financial statements and notes to financial statements;

(ii) financial schedules underlying the financial statements, all within fortyfive (45) days after the end of each fiscal quarter.

(b) Any information provided to Buyer pursuant to this Section 21.2 shall be considered confidential in accordance with the terms of this Agreement and shall only be disclosed on an aggregate basis with other entities for which Buyer has power purchase agreements. Buyer shall use this information only for financial statement purposes and shall share such information with (i) internal or external parties or (ii) regulatory, administrative or legal entities or authorities only as necessary in connection with the preparation and audit of Buyer's financial statements.

(c) The Parties shall, for five (5) years after creation or such longer period as may be required by applicable Law, each keep and maintain accurate and detailed records relating to the Units' hourly deliveries of the Product and such other information as required to support the amounts due and payable as between the Parties pursuant to this Agreement. Such records shall be made available by the Party holding such records to the other Party for inspection during normal business hours upon reasonable Notice.

(d) <u>Confidentiality</u>. Any information provided to Buyer pursuant to this Section 21.2 shall be considered Confidential Information in accordance with the terms of Article Twenty-Four.

21.3 <u>General Audit Right</u>. Each Party has the right, at its sole expense, during normal working hours, and after reasonable Notice, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge, or computation made pursuant to this Agreement. If such examination reveals any inaccuracy in any statement, the necessary adjustments shall be made promptly; provided that, if the examining Party raises its objection more than twelve (12) months after the date of the statement in question, that objection shall be deemed waived.

## **ARTICLE TWENTY-TWO: ASSIGNMENT**

22.1 <u>General Assignment</u>. Except as provided in Sections 22.2 and 22.3, neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld so long as among other things (a) the assignee assumes the transferring Party's payment and performance obligations under this Agreement, (b) the assignee agrees in writing to be bound by the terms and conditions hereof, (c) the transferring Party delivers evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill the assigning Party's obligations hereunder and (d) the transferring Party delivers such tax and enforceability assurance as the other Party may reasonably request.

22.2 <u>Assignment to Financing Providers.</u> Seller shall be permitted to assign this Agreement as collateral for any financing or refinancing of the Project with the prior written consent of the Buyer, which consent shall not be unreasonably withheld. If Buyer gives its consent, then such consent shall be in a form substantially similar to the Form of Consent to Assignment attached hereto as <u>Appendix XI</u> provided that (i) Buyer shall not be required to consent to any additional terms or conditions beyond those contained in <u>Appendix XI</u>, including extension of any cure periods or additional remedies for financing providers, and (ii) Seller shall be responsible at Buyer's request for Buyer's reasonable costs associated with the review, negotiation, execution and delivery of documents in connection with such assignment, attorneys' fees.

22.3 <u>Assignment in Connection with a Change in Control</u>. Any direct or indirect change of control of Seller (whether voluntary or by operation of Law) shall be deemed an assignment and shall require the prior written consent of Buyer, which consent shall not be unreasonably withheld.

22.4 <u>Unauthorized Assignment</u>. Any assignment or purported assignment in violation of this Article Twenty-Two is void.

# **ARTICLE TWENTY-THREE: DISPUTE RESOLUTION**

23.1 <u>Intent of the Parties</u>. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article Twenty-Three. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of this procedure.

### 23.2 <u>Management Negotiations</u>.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's Authorized Representative, or such other person designated in writing as a representative of the Party (each a "Manager"). Either Manager may request a meeting (in person or telephonically) to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place. If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies ("Executive(s)"), who shall have authority to settle the dispute. Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another written Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

(b) Within five (5) Business Days of the Referral Date the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) calendar days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet as often as they reasonably deem necessary to exchange relevant information and to attempt to resolve the dispute.

(c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.

(d) If the matter is not resolved within forty-five (45) calendar days of the Referral Date, or if the Party receiving the written request to meet, pursuant to subpart (b) above, refuses or does not meet within the thirty (30) calendar day period specified in subpart (b) above, either Party may initiate mediation of the controversy or claim according to the terms of the following Section 23.3.

23.3 Mediation. If the dispute cannot be so resolved by negotiation as set forth in Section 23.2 above, it shall be resolved at the request of any Party through a two-step dispute resolution process administered by JAMS. As the first step the Parties agree to mediate any controversy before a mediator from the JAMS panel, pursuant to JAMS's commercial mediation rules, in San Francisco, California. Either Party may begin mediation by serving a written demand for mediation. The mediator shall not have the authority to require, and neither Party may be compelled to engage in, any form of discovery prior to or in connection with the mediation. If within sixty (60) days after service of a written demand for mediation, the mediation does not result in resolution of the dispute, then the controversy shall be settled by arbitration conducted by a retired judge or justice from the JAMS panel conducted in San Francisco, California, administered by and in accordance with JAMS's Commercial Arbitration Rules ("Arbitration"). The period commencing from the date of the written demand for mediation until the appointment of a mediator shall be included within the sixty (60) day mediation period. Any mediator(s) and arbitrator(s) shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. Either Party may initiate Arbitration by filing with the JAMS a notice of intent to arbitrate within sixty (60) days of service of the written demand for mediation.

23.4 <u>Arbitration</u>. At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

(a) Each of the Parties shall submit to the arbitrator, in accordance with a schedule set by the arbitrator, offers in the form of the award it considers the arbitrator should make. If the arbitrator requires the Parties to submit more than one such offer, the arbitrator shall designate a deadline by which time the Parties shall submit their last and best offer. In such proceedings the arbitrator shall be limited to awarding only one of the two "last and best" offers submitted, and shall not determine an alternative or compromise remedy.

(b) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.

(c) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary. The California Superior Court of the City and County of San Francisco may enter judgment upon any award rendered by the arbitrator. The Parties are aware of the decision in *Advanced Micro Devices, Inc. v. Intel Corp., 9 Cal. 4th 362 (1994)*, and, except as modified by this Agreement, intend to limit the power of the arbitrator to that of a Superior Court judge enforcing California Law. The prevailing Party in this dispute resolution process is entitled to recover its costs and reasonable attorneys' fees.

(d) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before him.

(e) Except as may be required by Law, neither a Party nor an arbitrator may disclose the existence, content, or results of any Arbitration hereunder without the prior written consent of both Parties.

#### **ARTICLE TWENTY-FOUR: CONFIDENTIALITY**

24.1 <u>Confidential Information</u>. Throughout the Contract Term, neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder (the "Confidential Information") to a third party.

24.2 <u>Permitted Disclosures</u>. However, a Party may disclose Confidential Information to: (a) the Party's Affiliates and the Party's and its Affiliate's employees, lenders, counsel, accountants, advisors, equity investors, potential lenders or potential equity investors who have a need to know such information and have agreed to keep such terms confidential; (b) for disclosure to Buyer's Procurement Review Group, as defined in CPUC Decision (D.) 02-08-071 and made applicable to this Agreement by D.04-06-015, subject to a confidentiality agreement; (c) to the CPUC under seal for purposes of review; (d) disclosure of terms specified in and pursuant to this Article Twenty-Four of this Agreement; (e) in order to comply with any applicable Law or any exchange, control area or Transmission Provider rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (f); (f) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or FERC; or (g) as Buyer deems necessary in order to demonstrate the reasonableness of its actions to duly authorized Governmental Authority including the CPUC or any division thereof.

(i) <u>Procedure for Permitted Disclosures</u>. In connection with requests made pursuant to Section 24.2(e) ("Disclosure Order") and disclosures pursuant to Sections 24.2(f) or 24.2(g) ("Regulatory Disclosure") each Party shall, to the extent practicable, use reasonable efforts to: (A) notify the other Party prior to disclosing the Confidential Information and (B) prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (I) prohibited from complying with a Disclosure Order or making the Regulatory Disclosure or (II) liable to the other Party for monetary or other damages incurred in connection with such disclosures of the confidential information. 24.3 <u>Remedies</u>. Except as provided in Section 24.2(g)(i), the Parties shall be entitled to all remedies available at Law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

24.4 <u>Exceptions</u>. The confidentiality obligation hereunder shall not apply to any information that was or hereafter becomes available to the public other than as a result of a disclosure in violation of this Section. Further, notwithstanding any other provision of this Article Twenty-Four, at any time on or after the date on which the Buyer files its application with the CPUC seeking CPUC Approval of this Agreement, either Party shall be permitted to disclose the following, which shall not be considered to be Confidential Information: Party names, resource/fuel/technology type, Contract Term, Delivery Term, Site, Design Capacity, Expected Initial Delivery Date, and Electrical Delivery Point.

24.5 <u>Return of Confidential Information</u>. Upon termination or expiration of this Agreement, each Party will promptly return or certify the destruction of, if so requested by the other Party, any Confidential Information provided to it and will use commercially reasonable efforts to return any copies thereof that may have been provided to others in accordance with this Article Twenty-Four.

24.6 <u>Termination of Obligation</u>. The obligations of the Parties with respect to Confidential Information set forth in this Article Twenty-Four will remain in effect for a period of three (3) years from the Initial Delivery Date.

# **ARTICLE TWENTY-FIVE: GENERAL PROVISIONS**

General. This Agreement constitutes the entire agreement between the Parties relating to 25.1 its subject matter. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. No amendment or modification to this Agreement shall be enforceable unless reduced to a writing signed by all Parties; provided that, Appendix II shall be supplemented from time to time by Seller as expressly contemplated herein, Appendices III and VII may be revised unilaterally by Buyer in its sole discretion and Appendix VIII may be revised by Buyer unilaterally in accordance with Section 4.1(b). This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. PDF transmission will be the same as delivery of an original document; provided that at the request of either Party, the other Party will confirm PDF signatures by signing and delivering an original document; provided, however, that the execution and delivery of this Agreement and its counterparts shall be subject to Section 25.3. The Parties acknowledge and agree that this Agreement is a forward contract (within the meaning of the Bankruptcy Code, as in effect as of the Execution Date). This Agreement shall be binding on each Party's successors and permitted assigns.

25.2 <u>Severability</u>. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.

25.3 <u>Counterparts</u>. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by e-mail will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by e-mail will also deliver an originally executed counterpart, but the failure of any Party to deliver an

originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

25.4 <u>Mobile Sierra</u>. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to the FERC pursuant to the provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior written agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party, or the FERC acting sua sponte shall be the "public interest" standard of review set forth in *United States Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956).* 

#### **ARTICLE TWENTY-SIX: NOTICES**

26.1 <u>Notices</u>. Whenever this Agreement requires or permits delivery of a "Notice" (or requires a Party to "Notify"), the Party with such right or obligation shall provide a written communication in the manner specified below; provided, however, that Notices of Outages or other intraday information regarding the Units' operations or availability are to be provided as required pursuant to Sections 10.1 and 10.2, and <u>Appendix III</u>; and provided further, that any scheduling and dispatching shall be done pursuant to the Operating Procedures. Invoices may be sent by e-mail. A Notice sent by e-mail will be recognized and shall be deemed received on the Business Day on which such Notice was transmitted if received before 5 p.m. Pacific prevailing time (and if received after 5 p.m., on the next Business Day) and a Notice by overnight mail or courier shall be deemed to have been received two Business Days after it was sent or such earlier time as is confirmed by the receiving Party unless it confirms a prior verbal communication, in which case any such Notice shall be deemed received on the day sent. <u>Appendix XIV</u> contains the names and addresses to be used for Notices.

#### SIGNATURES

#### **Agreement Execution**

In WITNESS WHEREOF, each Party has caused this Agreement to be duly executed by its authorized representative as of the dates provided below:

# [SELLER, a (include place of formation and business type)]

# PACIFIC GAS AND ELECTRIC COMPANY, a California corporation

 Signature:	Signature:
Name:	Name:
 Title:	Title:
Date:	Date:

## APPENDIX I GENERAL DEFINITIONS

"Abs" means absolute value.

"Actual Efficiency" has the meaning set forth in Section 4.4(b).

"Additional Test Costs" has the meaning set forth in Section 11.2(e)(ii).

"Additional Test Procedures" shall be as set forth in Appendix VI-2.

"Affiliate" of a Person means any other Person that (a) directly or indirectly controls the specified Person; (b) is controlled by or is under direct or indirect common control with the specified Person; or (c) is an officer, director, employee, representative or agent or subsidiary of the Person. For the purposes of this definition, "control", when used with respect to any specified Person, means the power to direct the management or policies of the specified Person, directly or indirectly, through one or more intermediaries, whether through the ownership of voting securities, partnership or limited liability company interests, by contract or otherwise.

"AGC" or "Automatic Generation Control" has the meaning set forth in the CAISO Tariff.

"Agreement" has the meaning ascribed in Section 1.1.

"Allowed Delay" means a delay for any reason other than Force Majeure that will cause the Seller to extend the Guaranteed Construction Start Date in accordance with Section 14.1(d).

"Ancillary Services" means regulation (including load following), spinning reserves, non-spinning reserves, and replacement reserves associated with the Units (in each case as defined by the CAISO Tariff), and all other similar products that may be developed by the CAISO and/or FERC as of the Execution Date or a future date during the Contract Term to maintain reliable operation of the CAISO grid.

"Annual Capacity Degradation Rate" or "ACDR" means the rate at which the Capacity of the Unit(s) will be reduced to account for expected degradation at the start of each Contract Year. The ACDR is measured as a percentage, and is set forth in <u>Appendix II</u>.

"Arbitration" has the meaning set forth in Section 23.3.

"Authorized Representative" has the meaning set forth in Section 1.4.

"Automated Dispatch System" or "ADS" has the meaning set forth in the CAISO Tariff.

"Availability" has the meaning set forth in Section 4.3(b).

"Availability Adjustment" or "AA" has the meaning set forth in Section 4.3(c).

"Available Capacity" means the maximum amount of Capacity that is expected to be available for Scheduled Operations as reasonably determined at the time which may be higher than the Design Capacity.

"Average Monthly Conditions" means, in relation to any month, the ambient conditions (temperature and humidity for the Site) based on the average of the monthly average temperatures and corresponding

humidity conditions of the ten (10) years prior to the latest available date in the current year for such month as provided by the National Climatic Data Center ("NCDC") at http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?WWDI~getstate~USA. The Average Monthly Conditions for the Facility are specified in <u>Appendix II</u>.

"Business Day" means any day except Saturday, Sunday, or a Federal Reserve member bank holiday.

"Buyer" means PG&E in its capacity as a purchaser of the Product and Energy Storage Services and other merchant functions, as distinct from the function of PG&E as a PTO.

"Buyer Group" has the meaning set forth in Section 20.1.

"Buyer's Performance Test" has the meaning set forth in Section 11.2(e).

"Buyer's Charging Schedule" means the portion of Buyer's Schedule which calls for the Unit to receive Charging Energy from the CAISO Grid.

"Buyer's Discharge Schedule" means the portion of Buyer's Schedule which calls for the Unit to discharge Energy to the CAISO Grid.

"Buyer's Schedule" has the meaning set forth in Section 10.1(c)(iv).

"CAISO" means the California Independent System Operator Corporation or any successor entity performing similar functions.

"CAISO Commercial Operation Date" means "Commercial Operation Date" as it is set forth in the CAISO Tariff.

"CAISO Grid" means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO's operational control.

"CAISO Interconnection Point" means, for Unit(s) interconnected directly to the CAISO Grid or to a Participating Transmission Owner, the Electrical Delivery Point, and for Unit(s) interconnected with a Transmission Provider other than the CAISO or a Participating Transmission Owner, the point at which the Product from the Unit(s) are delivered to the CAISO Grid.

"CAISO Tariff" means the CAISO Fifth Replacement FERC Electric Tariff and protocol provisions, including any CAISO-published procedures or business practice manuals, as it may be amended, supplemented or replaced (in whole or in part) from time to time.

"Capacity" means the maximum capability of a Unit to discharge or charge Energy measured in megawatts, net of Station Use but including any variation in the form of capacity including installed capacity, locational capacity or similar products.

"Capacity Attributes" means any current or future defined characteristic (including the ability to generate or charge at a given capacity level, provide Ancillary Services and ramp up or down at a given rate), certificate, tag, credit, flexibility, or dispatchability attribute, whether general in nature or specific as to the location or any other attribute of the Project, intended to commoditize or otherwise attribute value to any aspect of the ability of the Project to produce the Product, including, any accounting construct so that the Capacity subject to the Operational Limitations as specified in <u>Appendix II</u> may be counted toward a Resource Adequacy Requirement or any other measure by the CPUC, the CAISO, the FERC, or any other entity invested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other such products.

"Capacity Payment Price" or "CPP" is set forth in Section 4.1(a)(i).

"Cap-and-Trade Program" has the meaning set forth in the Cap-and Trade Regulations.

"Cap-and-Trade Regulations" means "California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms," (California Code of Regulations, Title 17, Subchapter 10, Climate Change, Article 5, Sections 95800 – 96023) of as it may be amended, supplemented or replaced (in part) from time to time.

"CARB" means the California Air Resources Board or successor entities with similar functions.

"CEC" means the California Energy Commission or any successor entity performing similar functions.

"Charging Energy" means the amount of Energy withdrawn from the Participating Transmission Owner's electrical system or the CAISO Grid to be stored by the Unit and discharged at a later time. Under no circumstances does Charging Energy include Station Use.

"Commercial Operation Date" means the date on which all Units at the Facility have become Commercially Operable.

"Commercially Operable" with respect to the Facility, is a condition occurring after such time as Mechanical Completion has occurred, commissioning is complete, the Facility has been shown by an Initial Performance Test, adjusted to ISO Conditions, to be capable of delivering at least ninety-nine percent (99%) of the Design Capacity as set forth in <u>Appendix II</u> to the CAISO Grid on a sustained basis, and the Facility (including each and every Unit) has been released by the EPC Contractor to Seller for commercial operations.

"Conditions Precedent" has the meaning set forth in Section 17.1.

"Construction Start Date" means the later to occur of the date on which Seller delivers to Buyer (a) a copy of the Notice to Proceed that Seller has delivered to the EPC Contractor for the Project, and (b) a written Certification substantially in the form attached hereto as <u>Appendix VI-1</u>.

"Contract Term" has the meaning set forth in Section 2.1(a).

"Contract Year" means a period of twelve (12) consecutive months; the first Contract Year shall commence on the Initial Delivery Date; and each subsequent Contract Year shall commence on the anniversary of the Initial Delivery Date. In the event of an Early Termination Date, the final Contract Year may be a period of less than twelve (12) consecutive months, and shall be the period commencing on the anniversary of the Initial Delivery Date last preceding the Early Termination Date through and including the Early Termination Date.

"Costs" means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace this Agreement; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.
"CPUC" or "Commission" means the California Public Utilities Commission or any successor entity performing similar functions.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approval of this Agreement in its entirety, including all related payments to be made by the Buyer and Buyer's proposed cost recovery treatment, subject only to CPUC review of the Buyer's administration of the Agreement;

(b) a finding that procurement under this Agreement counts as proposed by Buyer toward the energy storage target established by CPUC Decision 13-10-040, or any subsequent related decision(s).

CPUC Approval will be deemed to have occurred on the first day it can be legally determined that a final CPUC decision containing such findings has become non-appealable.

"CPUC Approval Condition Precedent" has the meaning set forth in Section 2.3.

"Credit Rating" means, with respect to any entity, (a) the rating then assigned to such entity's unsecured senior long-term debt obligations (not supported by third party credit enhancements), or (b) if such entity does not have a rating for its unsecured senior long-term debt obligations, then the rating assigned to such entity as an issuer rating by S&P and/or Moody's. If the entity is rated by both S&P and Moody's and such ratings are not equivalent, the lower of the two ratings shall determine the Credit Rating. If the entity is rated by either S&P or Moody's, but not both, then the available rating shall determine the Credit Rating.

"Critical Milestones" are specific actions which must be successfully completed by Seller by the dates specified in <u>Appendix XII</u>.

"Cumulative Degradation" means the amount equal to: [1 – (Annual Capacity Degradation Rate ^ number of Contract Years)]

"Cure" has the meaning set forth in Section 13.5(b).

"Cure Period" has the meaning set forth in Section 14.2(a).

"Damage Payment Amount" means the dollar amount equal to (a) the amount posted as Project Development Security pursuant to Section 13.4(a)(i)(A), less (b) amounts collected by Buyer as Delay Damages pursuant to Section 14.2(a).

"Day-Ahead Market" has the meaning set forth in the CAISO Tariff.

"Day-Ahead Price" means the LMP specific to a given Unit for a given hour for the Day-Ahead Market.

"Day-Ahead Schedule" has the meaning set forth in the CAISO Tariff that refers to the quantity of Energy cleared through the Day-Ahead Market for the Unit(s) that is issued one day prior to the operating day.

"Defaulting Party" means the Party that is subject to an Event of Default.

"Delay Damages" has the meaning set forth in Section 14.2.

"Delivered Charging Energy" means all Energy used to charge a given Unit as measured in MWh at the CAISO revenue meter of a given Unit based on a power factor of precisely one (1) and net of all Electrical Losses. For the avoidance of doubt, Delivered Charging Energy does not include Delivered Discharge Energy.

"Delivered Discharge Energy" means all Energy discharged from a given Unit as measured in MWh at the CAISO revenue meter of a given Unit based on a power factor of precisely one (1) and net of all Electrical Losses. For the avoidance of doubt, Delivered Discharge Energy does not include Delivered Charging Energy.

"Delivery Term" has the meaning set forth in Section 2.1(b).

"Delivery Term Security" means the collateral required of Seller, as specified and referred to in Section 13.4(a).

"Design Capacity" means, for the Facility (including each and every Unit), at the Execution Date, the maximum amount of capacity that the Facility can be expected to reliably and safely charge and discharge on a sustained basis, net of Station Use, as measured at the Electrical Delivery Point, at ISO Conditions, which is set forth in <u>Appendix II</u>.

"Deviation Charges" has the meaning set forth in Section 4.5(a).

"Direct Claim" means any claim by an Indemnitee on account of an Indemnifiable Loss which does not result from a Third Party Claim.

"Disclosing Party" has the meaning set forth in Section 24.2.

"Disclosure Order" has the meaning set forth in Section 24.2.

"Dispatch Instruction" has the meaning set forth in the CAISO Tariff that refers to an instruction by the CAISO for the Unit(s) to increase or decrease from a current operating level during Real-Time Market or any intra-day operations.

"Distribution Loss Factor" means a multiplier factor that reduces the amount of Energy produced by a Project connecting to a distribution system to account for the electrical distribution losses, including those related to distribution and transformation, occurring between the point of interconnection, where the Participating Transmission Owner's meter is physically located, and the first Point of Interconnection, as defined in the CAISO Tariff, with the CAISO Grid.

"Distribution Upgrades" has the meaning set forth in the CAISO Tariff or Participating TO's tariff, as applicable.

"Early Termination Date" has the meaning set forth in Section 5.2.

"Effective Date" means the date on which the CPUC Approval Condition Precedent set forth in Section 2.3 has been satisfied or waived in writing by both Parties.

"Electric Revenue Meter" means the measurement device(s) used by the interconnecting Transmission Provider to measure deliveries of any and all components of the Product for purposes of billing. "Electric System Upgrades" means any Network Upgrades (as defined in the CAISO Tariff), Distribution Upgrades, or Interconnection Facilities (as defined in the CAISO Tariff) that are determined to be necessary by the CAISO or Participating Transmission Owner, as applicable, to physically and electrically interconnect the Project to the Participating Transmission Owner's electric system for receipt of Energy at the Point of Interconnection (as defined in the CAISO Tariff) if connecting to the CAISO Grid, or the CAISO Interconnection Point, if connecting to a part of the Participating TO's electric system that is not part of the CAISO Grid.

"Electrical Delivery Point" has the meaning set forth in Section 6.2(a).

"Electrical Interconnection Facilities" means the apparatus required to safely and reliably interconnect with and deliver the Product at the Design Capacity to the Electrical Delivery Point by means of either the electric distribution system or the CAISO Grid, including connection, transformation, switching, metering, communications, control, and safety equipment, such as equipment required to protect (a) the electric systems of the Transmission Provider and electric distribution provider (or other transmission systems directly or indirectly interconnected to the electric distribution provider and/or the Transmission Provider) and the electric distribution provider's customers from faults occurring at the Units, and (b) the Units from faults occurring on the electric systems of the electric distribution provider or the Transmission Provider, or on other directly or indirectly interconnected transmission systems.

"Electrical Losses" means all applicable losses, including any transmission or transformation losses or the Distribution Loss Factor, if applicable, between the CAISO revenue meter and the Electrical Delivery Point, but only to the extent the CAISO revenue meter is not already adjusted to reflect such losses.

"Eligible LC Bank" means either a U.S. commercial bank, or a foreign bank issuing a Letter of Credit through its U.S. branch; and in each case the issuing U.S. commercial bank or foreign bank must be acceptable to Buyer in its sole discretion and such bank must have a Credit Rating of at least: (a) "A-, with a stable designation" from S&P and "A3, with a stable designation" from Moody's, if such bank is rated by both S&P and Moody's; or (b) "A-, with a stable designation" from S&P or "A3, with a stable designation" from S&P or "A3, with a stable designation" from Moody's, if such bank is rated by either S&P or Moody's, but not both, even if such bank was rated by both S&P and Moody's as of the date of issuance of the Letter of Credit but ceases to be rated by either, but not both of those ratings agencies.

"Emergency" means an actual or imminent condition or situation, which jeopardizes PG&E electric system integrity or the integrity of other systems to which PG&E is connected, as determined by PG&E in its sole discretion, or any condition so defined and declared by the Transmission Provider.

"Energy" means three-phase, 60-cycle alternating current electric energy, measured in MWhs and net of Station Use.

"Energy Storage Services" means the process whereby Buyer makes Charging Energy available to the Units at the Electrical Delivery Point, Seller accepts such Charging Energy and utilizes it to operate its Units to convert the Charging Energy into the Product (as required in accordance with the terms of the Agreement) and the converted Charging Energy is redelivered to Buyer in the form of the Product at the Electrical Delivery Point.

"EPA" means the U.S Environmental Protection Agency.

"EPC Contract" means the Seller's engineering, procurement and construction contract with the EPC Contractor.

"EPC Contractor" means Seller's engineering, procurement and construction contractor or such Person performing those functions.

"Equitable Defenses" means any bankruptcy, insolvency, reorganization and other Laws affecting creditors' rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

"Event of Default" means a Seller's Event of Default and/or a Party's Event of Default.

"Excused Event" means (a) Buyer's failure to cause Charging Energy to be available to Seller at the Electrical Delivery Point, (b) the Buyer's failure to take Product from and after the Electrical Delivery Point, and (c) an event of Force Majeure that is claimed by Buyer.

"Excused Hours" means the number of hours equal to (a) the maximum number of Excused Scheduled Maintenance Outage hours permitted pursuant to Section 10.2(e)(iii) beginning with the Initial Delivery Date and continuing through the date on which the determination is made less the number of hours used for Excused Scheduled Maintenance Outages or Force Majeure during such period; plus (b) at Seller's option and upon Notice by Seller to Buyer, an additional number of "borrowed" hours to be designated by Seller that does not exceed a cumulative amount of one thousand (1000) hours per Force Majeure event, nor, cumulatively, the number of hours for Excused Scheduled Maintenance Outages available under Section 10.2(e)(iii) remaining, as of the date of the Notice, in the lesser of the five (5) years following the date of the Notice is received by Buyer shall be reduced by (i) one-fifth of the total amount of "borrowed" hours as set forth in such Notice or, (ii) if less than five (5) years are remaining in the Contract Term as of the date of such Notice, then by one (1) divided by the remaining years in the Contract Term as of the Notice.

"Excused Scheduled Maintenance Outage" is a Scheduled Maintenance Outage taken by Seller that (a) complies with the requirements set forth in Section 10.2(b) through 10.2(f), (b) Buyer has approved via Notice as described in <u>Appendix III</u>, Part D, (c) was not modified less than ninety (90) days prior to the calendar month of delivery except (i) as permitted under Section 10.2(d) or (ii) if shortened within the Excused Scheduled Maintenance Outage window as scheduled and approved on ninety (90) days prior to the calendar month of delivery. Any Scheduled Maintenance Outage that is not an Excused Scheduled Maintenance Outage shall be considered an Unexcused Scheduled Maintenance Outage.

"Execution Date" means the latest signature date from each of the duly authorized representatives of each of Buyer and Seller, as such signature is found on the signature page of this Agreement.

"Executive" has the meaning set forth in Section 23.2(a).

"Expected Energy" has the meaning set forth in the CAISO Tariff.

"Expected Initial Delivery Date" has the meaning set forth in Section 2.1(c).

"Facility" means the generation facility described in <u>Appendix II</u>, consisting of one or more Units committed to Buyer and the Electrical Interconnection Facilities including other Units, that generate, consume or store energy in any form, and any and all other Units (whether complete or under construction) that are owned, operated or controlled by Seller or any Affiliate of Seller and located on the same Site or adjacent sites and/or use the same Electrical Interconnection Facilities; provided that for purposes of Section 3.4, a "Facility" shall further include any electrical generating facilities that are

deemed by any Governmental Authority to be part of the same facility or at the same location as the Units.

"FERC" means the Federal Energy Regulatory Commission.

"Force Majeure" shall mean (a) any event or circumstance to the extent beyond the control of, and not the result of the negligence of, or caused by, the Party seeking to have its performance obligation excused thereby, which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it has been unable to overcome, including: (i) acts of God, including landslide, lightning, earthquake, storm, hurricane, flood, drought, tornado, or other natural disasters and weather related events affecting an entire region which caused failure of performance; (ii) fire or explosions; (iii) transportation accidents affecting delivery of equipment only if such accident occurs prior to the Commercial Operation Date; (iv) sabotage, riot, acts of terrorism, war and acts of public enemy; or (v) restraint by court order or other Governmental Authority, and (b) not include (i) a failure of performance of any Third Party, including any party providing electric transmission service, except to the extent that such failure was caused by an event that would otherwise satisfy the definition of a Force Majeure event as defined above, (ii) breakage or malfunction of equipment, (except to the extent that such failure was caused by an event that would otherwise satisfy the definition of a Force Majeure event as defined above); (iii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's affiliates, the EPC Contractor or subcontractors thereof or any other Third Party employed by Seller to work on the Project; (iv) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement; (v) Seller's inability to obtain permits or approvals of any type for the construction, operation or maintenance of the Project, unless caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above; (vi) Seller's inability to complete interconnection or Electric System Upgrades by the Expected Initial Delivery Date, unless such delay is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above; (vii) Seller's inability to obtain sufficient fuel, power or materials to operate the Project, except if Seller's inability to obtain sufficient fuel, power or materials is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above; (viii) Seller's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement; (ix) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iv) above; (x) a Party's inability to pay amounts due to the other Party under this Agreement, except if such inability is caused solely by a Force Majeure event that disables physical or electronic facilities necessary to transfer funds to the payee Party.

"Force Majeure Development Failure" has the meaning set forth in Section 11.1(d)(ii).

"Forced Outage" means (a) any unplanned reduction or suspension of the electrical output from a Unit or unavailability of a Product in whole or in part from a Unit in response to a mechanical, electrical, or hydraulic control system trip or operator-initiated trip in response to an alarm or equipment malfunction, (b) any other unavailability of a Unit for operation, in whole or in part, for maintenance or repair that is not a Scheduled Maintenance Outage and not the result of Force Majeure, or (c) unavailability to Buyer of State of Charge data, pursuant to the terms of Section 8.7.

"Forced Outage Compensation" has the meaning set forth in Section 4.5(b).

"Forced Outage Evaluation Period" means the period starting from the beginning of the Forced Outage event (as specified in SLIC) and continuing (a) through to the end of the first calendar day of the Forced Outage if the Forced Outage was reported prior to 5:00 a.m. on that day, or (b) through the end of the second calendar day of the Forced Outage if the Forced Outage was reported after 5:00 a.m. on the day the Forced Outage began.

"Full Capacity Deliverability Status" has the meaning set forth in the CAISO Tariff such that Seller has the ability to deliver at the Electrical Delivery Point any and all components of the Product associated with the Unit(s) and the Buyer can receive all the market value of the Product, including Capacity and Capacity Attributes, associated with the Unit(s). Seller is responsible for any and all costs associated with obtaining and maintaining Full Capacity Deliverability Status for the Unit(s).

"Gains" means, with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement, determined in a commercially reasonable manner. Factors used in determining economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading platforms (e.g., NYMEX), all of which should be calculated for the remaining Delivery Term to determine the value of the Product.

"Generator Interconnection Agreement" or "GIA" means, for Projects interconnecting at the transmission level, the agreement and associated documents (or any successor agreement and associated documentation approved by FERC) by and among Seller, the Participating Transmission Owner, and the CAISO governing the terms and conditions of Seller's interconnection with the CAISO Grid, including any description of the plan for interconnecting to the CAISO Grid. For Projects interconnecting at the distribution level, it means the agreement and associated documents (or any successor agreement and associated documentation) by and between Seller and the Participating Transmission Owner governing the terms and conditions of Seller's interconnection with the Participating TO's distribution system, including any description of the plan for interconnecting to Participating TO's distribution system.

"Generator Interconnection Process" or "GIP" means the Generator Interconnection Procedures set forth in the CAISO Tariff or Participating TO's tariff, as applicable, and associated documents; provided that if the GIP is replaced by such other successor procedures governing interconnection (a) to the CAISO Grid or Participating TO's distribution system, as applicable, or (b) of generating facilities with an expected net capacity equal to or greater than the Project's Contract Capacity, the term "GIP" shall then apply to such successor procedure.

"Governmental Approval" means all authorizations, consents, approvals, waivers, exceptions, variances, filings, Permits, orders, licenses, exemptions, notices to and declarations of or with any Governmental Authority and shall include those siting and operating Permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the use and operation of the Units or related Project.

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"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

"Governmental Charges" has the meaning set forth in Section 16.2.

"Governmental Charges Payment" has the meaning set forth in Section 16.2.

"Greenhouse Gas" or "GHG" means carbon dioxide ( $CO_2$ ), nitrous oxide ( $N_2O$ ), methane ( $CH_4$ ), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ( $SF_6$ ) and other fluorinated greenhouse gases as defined in the Cap-and-Trade Regulations.

"Guaranteed Availability" has the meaning set forth in Section 4.3.

"Guaranteed Efficiency" means a guaranteed measure for the ratio of the Delivered Discharge Energy to Delivered Charging Energy of the Units, and is exclusive of Station Use. The Guaranteed Efficiency Ratio for the Units is set forth in <u>Appendix II</u>, and is measured as a percentage.

"Hazardous Substance" means, collectively, (a) any chemical, material or substance that is listed or regulated under applicable Laws as a "hazardous" or "toxic" substance or waste, or as a "contaminant" or "pollutant" or words of similar import, (b) any petroleum or petroleum products, flammable materials, explosives, radioactive materials, asbestos, urea formaldehyde foam insulation, and transformers or other equipment that contain polychlorinated biphenyls ("PCBs"), and (c) any other chemical or other material or substance, exposure to which is prohibited, limited or regulated by any Laws.

"Imbalance Energy" or "IE" shall mean the Unit's deviation from its market award or schedule in either the Day-Ahead Market or Real-Time Market, positive or negative, as measured by Settlement Data from CAISO. Imbalance Energy shall be calculated as Settlement Data minus the applicable market award or schedule from the Day-Ahead Market or Real-Time Market.

"Indemnifiable Loss" means any and all damages, claims, losses, liabilities, obligations, costs and expenses, including reasonable legal, accounting and other expenses, and the costs and expenses of any and all actions, suits, proceedings, demands (by any Person, including any Governmental Authority), assessments, judgments, settlements and compromises.

"Indemnitee" has the meaning set forth in Section 20.3(a).

"Indemnitor" has the meaning set forth in Section 20.3(a).

"Ineligible LC Bank" has the meaning set forth in Section 13.5(c)(i)(A).

"Ineligible LC Bank Notice Period" has the meaning set forth in Section 13.5(c)(i).

"Initial Delivery Date" is the date that will occur as specified in Section 2.1(c).

"Initial Negotiation End Date" has the meaning set forth in Section 23.2(a).

"Initial Performance Test" is a test of the Units' capability to deliver Energy conducted prior to the Initial Delivery Date in the case of new resources, or in the case of other resources, before or after the Initial Delivery Date as determined by Buyer, in each case in accordance with the Test Procedures and Section 11.2.

"Instructed Operation(s)" means (a) an Operational Order, (b) a mandatory direction of the Transmission Provider, (c) as required pursuant to the Seller's CAISO Participating Generator Agreement (explicitly incorporating the CAISO Tariff), or (d) a directive from the CAISO, Reliability Coordinator, Scheduling Coordinator, or any other entity having similar authority or performing similar functions during the Delivery Term, to charge, curtail or increase output for reasons including, (i) Emergencies, (ii) System Emergencies, (iii) reliability needs including voltage support, or (iv) any warning of an anticipated System Emergency, or warning of an imminent condition or situation, such as an overgeneration, which jeopardizes the CAISO's electric system integrity or the integrity of other systems to which the CAISO is connected.

"Interconnection Queue Position" is the order of Seller's valid request for interconnection relative to all other valid interconnection requests, as specified in <u>Appendix II</u>.

"Interconnection Study" or "Interconnection Studies" means any of the studies defined in the Tariff or any Participating TO's tariff that reflect methodology and costs to interconnect the Project to the Participating TO's electric grid.

"Interest Payment Date" means the date of returning unused Performance Assurance held in the form of cash.

"Interest Rate" means the rate per annum equal to the "Monthly" Federal Funds Rate (as reset on a monthly basis based on the latest month for which such rate is available) as reported in Federal Reserve Bank Publication H.15-519, or its successor publication.

"ISO Conditions" means 59 degrees Fahrenheit and sixty percent (60%) relative humidity and the associated Site standard barometric pressure at the Site elevation specified in <u>Appendix II</u>.

"JAMS" means JAMS, Inc. or its successor entity, a judicial arbitration and mediation service.

"Law" means any statute, law, treaty, rule, regulation, ordinance, code, Permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective during the Contract Term; or any binding interpretation of the foregoing.

"LC Notice" has the meaning set forth in Section 13.5(c).

"Letter of Credit" means an irrevocable, non-transferable standby letter of credit, the form of which must be substantially as contained in <u>Appendix IX</u> to this Agreement; provided, that if the issuer is a U.S. branch of a foreign commercial bank, Buyer may require changes to such form; the issuer must be an Eligible LC Bank on the date of Transfer; and the issuing Letter of Credit amount may not be greater than the Maximum Issuing Amount if the total amount of collateral posted by the Seller in the form of Letter of Credit exceeds ten million dollars (\$10,000,000.00) on the date of Transfer.

"Locational Marginal Price (LMP)" has the meaning set forth in the CAISO Tariff.

"Losses" means, with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include reference to information either available to it internally or supplied by one or more third parties including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading platforms (e.g. NYMEX), all of which should be calculated for the remaining Delivery Term to determine the value of the Product. If the Non-Defaulting Party is the Seller, then "Losses" shall exclude any loss of federal or state tax credits, grants, or benefits related to the Project or generation therefrom or any costs or fees related to the Site or Project. "LSEs" means load-serving entities.

"Maintenance Outage" means removing the equipment, or any portion thereof, from service availability, in whole or in part, for inspection and/or general overhaul of one or more major equipment groups of the type that is (a) necessary to reliably maintain the Units, (b) cannot be reasonably conducted during the Units' operations, (c) causes the Available Capacity for the Units to be reduced to less than one hundred percent (100%) of its Monthly Contract Capacity.

"Manager" has the meaning set forth in Section 23.2(a).

"Master File" has the meaning set forth in the CAISO Tariff.

"Maximum Issuing Amount" means the amount of a Letter of Credit to be issued by an Eligible LC Bank, which cannot exceed the lesser of (a) sixty percent (60%) of the total collateral posted by Seller in the form of Letter of Credit including the Letter of Credit to be issued or (b) twenty-five million dollars (\$25,000,000.00), without Buyer's prior written consent.

"Mechanical Completion" means, as to a Unit, and except for minor items of work that would not affect the safety and/or performance or operation of the Facility such as painting, landscaping and so forth, when (a) all materials and equipment required to be installed by the EPC Contractor for the Unit have been installed, calibrated, loop checked and checked for alignment, lubrication, rotation and hydrostatic and pneumatic pressure integrity; (b) all systems required to be installed by the EPC Contractor have been installed and tested at significant loads; (c) such systems have been flushed and cleaned out as necessary; (d) all such equipment and systems have been fully operated in a safe and prudent manner at nominal ratings and have been installed in a manner that does not (i) void any subcontractor or vendor equipment, system or other warranties or (ii) violate any Governmental Approvals; and (e) all systems required to be installed by the EPC Contractor and necessary for power generation are ready to commence testing and operations, the distributed control system for the Facility is operational and the continuous emissions monitoring system has been installed.

"Meter Service Agreement (MSA)" has the meaning set forth in the CAISO Tariff.

"Minimum Down Time" shall mean the amount of time that a Unit must stay off-line after a Shut-Down prior to the next Start-Up, as specified in <u>Appendix II</u> (Operational Limitations).

"Minimum Load" means, for a Unit, the minimum operating level at which it can operate at a continuous sustained level as specified in <u>Appendix II</u>.

"Minimum Run Time" shall mean the amount of time that a Unit must stay on-line after a Start-Up prior to being Shut-Down as specified in <u>Appendix II</u> (Operational Limitations).

"Monthly Construction Progress Report" means the report similar in form and content attached hereto as <u>Appendix XIII</u>.

"Monthly Contract Capacity" or "MCC" means the maximum amount of Capacity from the Units that Seller has committed to sell to Buyer during such month, and that is capable of being discharged in such month. Prior to the Initial Delivery Date, the Monthly Contract Capacity for the Units shall be equal to the megawatt amount that is applicable in such month as set forth in <u>Appendix II</u>, which shall be equal to the Design Capacity of the Units, reasonably adjusted (if necessary due to the technology of the Units) for Average Monthly Conditions. On and after the Initial Delivery Date, the Monthly Contract Capacity for the Units shall be established pursuant to Sections 4.2 and 11.2. "Monthly Fixed Payment" or "MFP" has the meaning set forth in Section 4.1(b)(i).

"Monthly Payment Date" has the meaning set forth in Section 12.3.

"Monthly Variable Payment" or "MVP" has the meaning set forth in Section 4.1.

"Moody's" means Moody's Investors Service, Inc., or its successor.

"MRTU" means Market Redesign and Technology Upgrade, as such term is used by the CAISO to describe new market structures and rules expected to become effective in 2008, or a successor program.

"MW" means megawatts.

"NERC" means the North American Electric Reliability Corporation.

"Non-Defaulting Party" has the meaning set forth in Section 5.2.

"Non-Spinning Reserves" has the meaning set forth in the CAISO Tariff.

"Non-Summer Months" means the calendar months of January, February, March, April, October, November and December.

"Notice" unless otherwise specified in the Agreement, means a written communication which is delivered by hand delivery, United States Mail, overnight courier service or electronic messaging (e-mail), and in the manner required by Section 26.1, as applicable to a given communication.

"Notice of Claim" has the meaning set forth in Section 20.3(a).

"Notify" means to provide a Notice.

"Operating Procedures" has the meaning set forth in Section 10.3 and are provided in Appendix VII.

"Operational Limitations" of a Unit are the parameters set forth in <u>Appendix II</u>, describing the physical capabilities of the Unit, including the time required for Start-Up, ramp rate, the limitation on the number of Scheduled Start-Ups per Contract Year and the minimum operating limits for the Units.

"Operational Order" means a mandate issued by a Governmental Authority which the Seller has no discretion to ignore or avoid, to offer or provide a Product or to Start-Up, Shut-Down, curtail or operate a Unit. An Operational Order would include, for example, a mandate issued by the U.S. Secretary of Energy to offer Capacity or Energy or to operate a Unit during an Emergency. In contrast, by way of further example, a legal obligation to test a Unit for the purpose of maintaining its Governmental Approvals is not considered an Operational Order.

"Other Emissions" means the emissions of carbon monoxide (CO), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), or any other non-CO<sub>2</sub> gases from the operation of the Unit(s).

"Other Payment Adjustments" has the meaning set forth in Section 4.1(b)(iii).

"Other Products" shall mean, for each Unit, if applicable as set forth in <u>Appendix II</u>: (a) all Ancillary Services that a Unit is capable of producing; (b) black start capability; (c) rights associated with Resource Adequacy Requirements; (d) all thermal and/or mechanical energy produced by the Units; (e) flexible ramping product; and (f) all products or services similar to the foregoing which can be produced by or are associated with the Capacity or Capacity Attributes of the Unit, as that portion of the Product is defined, during the Delivery Term.

"Other Products Charge" has the meaning set forth in Section 4.5(c).

"Outage" means the partial or full unavailability or inability of the Units to operate at one hundred percent (100%) of its Monthly Contract Capacity, including any derating or inability to produce or make available a Product (other than as disclosed in <u>Appendix II</u> as an Operational Limitation).

"Participating Generator Agreement" or "PGA" has the meaning set forth in the CAISO Tariff.

"Participating Load Agreement" or "PLA" has the meaning set forth in the CAISO Tariff.

"Participating Transmission Owner" or "Participating TO" means an entity that (i) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities and/or has control of such facilities and/or entitlements to be made part of the CAISO Grid.

"Party's Event of Default" has the meaning set forth in Section 5.1(b).

"Peak July Conditions" means the ambient conditions (temperature and humidity for the Site) based on the average of the monthly maximum peak temperatures and corresponding humidity conditions of the ten years prior to the current year for the month of July as provided by the National Climatic Data Center ("NCDC") at http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?WWDI~getstate~USA . Peak July Conditions for the Facility are specified in <u>Appendix II</u>.

"Performance Assurance" means collateral provided by Seller to Buyer to secure Seller's obligations under this Agreement and includes Project Development Security and Delivery Term Security. Buyer only accepts two forms of collateral to satisfy the Performance Assurance obligations: (a) cash via wire transfer in immediately available funds or (b) Letter of Credit.

"Performance Test" has the meaning set forth in Section 11.2(a).

"Permit" means any waiver, exemption, variance, franchise, permit, authorization, consent, ruling, certification, license or similar order of or from, or filing or registration with, or notice to, any Governmental Authority that authorizes, approves, limits or imposes conditions upon a specified activity.

"Person" means an individual, partnership, joint venture, corporation, limited liability company, trust, association or unincorporated organization, or any Governmental Authority.

"PG&E" means Pacific Gas and Electric Company.

"PG&E Transmission" means PG&E in its capacity as a provider of electric transmission, including matters related to interconnection for such services.

"PG&E's Outage Reporting Protocols" means the instructions and procedures to be established by PG&E from time to time for reporting Outages and Available Capacity of the Unit(s). PG&E's Outage Reporting Protocols as in effect as of the Execution Date are attached hereto as <u>Appendix III</u> and may be revised unilaterally by PG&E from time to time with reasonable advance Notice to Seller.

"PMax" has the meaning set forth in the CAISO Tariff.

"Product" shall mean each and all of Energy, Capacity, Capacity Attributes, and, to the extent applicable as set forth in <u>Appendix II</u>, each and all of the Other Products, as defined herein, all of which shall be delivered for Buyer's exclusive use on a real-time basis net of real-time Station Use pursuant to the terms of this Agreement.

"Project" means the Facility and all rights, obligations and assets associated with ownership and operation of the Facility.

"Project Development Security" is the collateral required of Seller, as specified and referred to in Section 13.4.

"Prudent Electrical Practices" means those practices, methods, applicable codes and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, that could have been expected to accomplish a desired result at reasonable cost consistent with good business practices, reliability, safety and expedition. Prudent Electrical Practices are not intended to be limited to the optimum practices, methods, or acts to the exclusion of others, but rather to those practices, methods and acts generally accepted or approved by a significant portion of the electric power industry in the relevant region, during the relevant time period, as described in the immediately preceding sentence.

"RA Capacity" means Capacity that Buyer can utilize to satisfy its Resource Adequacy Requirements pursuant to rules established by the CAISO or CPUC, or successor capacity value mechanism administered by the CPUC and/or the CAISO.

"RA Monthly Compliance Showing" means the earlier of (i) the monthly RAR compliance or advisory showings (or similar or successor showings) or (ii) monthly compliance or advisory showings (or similar or successor showings) for other Capacity Attributes, which in each case, an LSE is required to make to the CPUC pursuant to CPUC decisions, to the CAISO pursuant to the CAISO Tariff, or to any Governmental Body having jurisdiction for RAR.

"Real-Time Desk" means PG&E's merchant generation desk that supervises the operation of PG&E's portfolio within the Real-Time Market. The contact information for the Real-Time Desk is specified in <u>Appendix III</u>.

"Real-Time Market" means any existing or future intra-day market conducted by the CAISO occurring after the Day-Ahead Market.

"Real-Time Price" means the LMP specific to a given Unit at a given Settlement Interval within the Real-Time Market.

"Recording" has the meaning set forth in Section 1.3.

"Reductions" has the meaning set forth in Section 6.2(e).

"Referral Date" has the meaning set forth in Section 23.2(a).

"Regulation" has the meaning set forth in the CAISO Tariff.

"Regulatory Must-Run Generation" has the meaning set forth in the CAISO Tariff.

"Regulatory Must-Take Generation" has the meaning set forth in the CAISO Tariff.

"Reliability Organization" means an "Electric Reliability Organization" as defined in Section 215(a)(2) of the Federal Power Act or a "regional entity" as defined in Section 215(a)(7) of the Federal Power Act.

"Resource Adequacy Requirement" or "RAR" means the resource adequacy requirements established for LSEs by the CPUC pursuant to relevant CPUC decisions, or by any other governmental body having jurisdiction.

"RMR" means Reliability Must-Run or similar reliability requirements set forth by the CAISO Tariff regarding the operations of the Unit(s).

"RMTmax" is the maximum capacity eligible for Regulatory Must-Take Generation scheduling after qualifying per CAISO Tariff requirements.

"S&P" means Standard and Poor's Financial Services, LLC (a subsidiary of The McGraw-Hill Companies, Inc.) or its successor.

"Scheduled Energy" means Energy generated in response to Scheduled Operations and delivered to Buyer at the Electrical Delivery Point for its account.

"Scheduled Maintenance" means a Maintenance Outage that has been Noticed to Buyer prior to the CAISO deadline for planned outage submittals, and approved by the CAISO as a planned outage.

"Scheduled Maintenance Outage" is the period in which there is Scheduled Maintenance. A Scheduled Maintenance Outage can be either an Excused Scheduled Maintenance Outage or an Unexcused Scheduled Maintenance Outage.

"Scheduled Operations" means operation of a Unit as required to (i) satisfy Buyer's Schedule (including Instructed Operations); and/or (ii) perform an Initial Performance Test, a Buyer's Performance Test, or an Operational Limitations Test. Settlement Data shall be used to represent Scheduled Operations for any settlement related purposes.

"Scheduled Shut-Down" means a Shut-Down required by Scheduled Operations. Cessation of operations due to Outages or an action of Seller that is not required for Scheduled Operations is not a Scheduled Shut-Down.

"Scheduled Start-Up" means a Start-Up required for Scheduled Operations following a Scheduled Shut-Down.

"Scheduling Coordinator" or "SC" has the meaning set forth the CAISO Tariff. Under the terms of this Agreement, the SC may be Buyer or Buyer's designated agent (i.e., third-party).

"Seller Group" has the meaning set forth in Section 20.2.

"Seller's Event of Default" has the meaning set forth in Section 5.1(a).

"Seller's Performance Test" has the meaning set forth in Section 11.2(f).

"Settlement Amount" means the amount equal to the aggregate of the Losses and Costs of the Non-Defaulting Party, offset by its Gains, if any, calculated by the Non-Defaulting Party as of the Early Termination Date, which the Non-Defaulting Party incurs as a result of the termination of this Agreement. The Settlement Amount is expressed in U.S. dollars, and shall never be less than zero.

"Settlement Data" means settlement data used by CAISO to represent total Energy that is expected to be generated by Unit for a given period in real-time, and is currently referred to as total Expected Energy.

"Settlement Interval" has the meaning set forth in the CAISO Tariff.

"Shut-Down" means the action of causing the Units to cease producing Energy and/or Other Products.

"Site" means the real property on which the Facility is located, as identified in Appendix II.

"SLIC" means Scheduling and Logging for the ISO of California, or any successor applications that allow Scheduling Coordinators to notify CAISO of unit availability and Outages.

"Spinning Reserves" has the meaning set forth in the CAISO Tariff.

"Start-Up" means the action of bringing a Unit from non-operation to operation at the Unit's Minimum Load, as specified in <u>Appendix II</u>, and the Unit operates at steady state mode for a minimum of the lesser of one hour or Minimum Run Time (per <u>Appendix II</u>).

"State of Charge" or "SOC" means the amount of electric energy in a Unit expressed as a percent of the maximum amount of electric energy a Unit is capable of storing (e.g., 80% SOC).

"Station Use" means the electrical load of the Project's auxiliary equipment that is necessary for operation of the Unit(s) as set forth in <u>Appendix II</u>. The auxiliary equipment includes, but is not limited, to forced and induced draft fans, air conditioner systems, heating systems, cooling towers, plant lighting and control systems.

"Station Use Metering Equipment" means, for the Project, a CAISO-approved revenue quality meter or meters, CAISO-approved data processing gateway or remote intelligence gateway, telemetering equipment and data acquisition services sufficient for monitoring, recording and reporting, in real time, all electric energy consumed by the Project for Station Use.

"Substitute Bank Period" has the meaning set forth in Section 13.5(c).

"Substitute Letter of Credit" has the meaning set forth in Section 13.5(c).

"Successful Scheduled Start-Up" means a Start-Up which meets the requirements of a Successful Start-Up and a Scheduled Start-Up.

"Successful Start-Up" means that the combustion turbine has completed Start-Up no later than 30 minutes after the time required by Buyer's Schedule and is online for at least the Minimum Run Time as defined for a given Unit per <u>Appendix II</u>.

"Summer Month(s)" means the calendar months of May, June, July, August and September.

"System Emergency" has the meaning set forth in the CAISO Tariff.

"Termination Payment" means the payment amount equal to the sum of (a) and (b), where (a) is the Settlement Amount or Damage Payment Amount, as applicable, and (b) is the sum of all amounts owed by the Defaulting Party to the Non-Defaulting Party under this Agreement, less any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date.

"Test Procedures" has the meaning set forth in Section 11.2(b).

"Tested Capacity" has the meaning set forth in Section 11.2(b)(iii).

"Third Party" means a Person that is not a member of the Buyer Group or the Seller Group.

"Third Party Claim" means a claim, suit or similar demand by a Third Party.

"Third Party Payments" has the meaning set forth in Section 3.3(e).

"Transfer" with respect to Letters of Credit means the delivery of the Letter of Credit conforming to the requirements of this Agreement, by Seller or an Eligible LC Bank to Buyer or delivery of an executed amendment to such Letter of Credit (extending the term or varying the amount available to Buyer thereunder if acceptable to Buyer) by Seller or Eligible LC Bank to Buyer.

"Transmission Provider" means the CAISO or such other electric utility or transmission operator to which the Unit(s) interconnect.

"Transmission Upgrades" are any additions and/or reinforcements to an electric transmission system that are required as a result of the interconnection of the Units to that transmission system or an interconnected transmission system and/or to permit delivery of the Product into the electric transmission system at the Electrical Delivery Point safely and reliably, in the quantities and at the times at which delivery of the relevant portion of the Product may be required under this Agreement, up to and including quantities that can be produced utilizing all of the Design Capacity, including upgrades to the network at points beyond the Electrical Delivery Point.

"Unexcused Scheduled Maintenance Outage" has the meaning set forth in Section 10.2(g).

"Uninstructed Deviation" has the meaning set forth in the CAISO Tariff.

"Unit" (or "Units," if more than one), means a *[insert type of technology; i.e. battery, flywheel, etc.]* as more particularly described in <u>Appendix II</u> and all appurtenant facilities and equipment from which Seller has agreed to provide the Product to Buyer pursuant to this Agreement. *[Modify as appropriate to the Facility.]* 

"Variable O&M Price" or "VOMP" is set forth in Section 4.1(a)(ii).

"Watch" has the meaning set forth in Section 13.5(c).

"WECC" means the Western Electricity Coordinating Council or its successor entity with similar functions.

"Winter Months" means the calendar months of December and January.

"Work" means (a) work or operations performed by a Party or on a Party's behalf; and (b) materials, parts or equipment furnished in connection with such work or operations; including (i) warranties or

representations made at any time with respect to the fitness, quality, durability, performance or use of "a Party's work"; and (ii) the providing of or failure to provide warnings or instructions.

# APPENDIX II DESCRIPTION OF FACILITY, UNITS AND OPERATIONAL LIMITATIONS

# FACILITY DESCRIPTION

Facility name:

Facility Site name:

Facility physical address:

Total number of units at the Facility (committed and not committed to Buyer):

Number of Units at the Facility committed to Buyer: (with associated facilities, as described below)

Facility elevation: feet above sea level

Facility latitude: \_\_\_\_ (decimal form)

Facility longitude: \_\_\_\_ (decimal form)

## UNIT(S) DESCRIPTION

Units (for each unit committed to Buyer):

Unit name:

Technology type:

Specific Unit description: [Provide detailed Unit(s) description]

Design Capacity: \_\_\_\_ MW (maximum discharge capacity)

Minimum Load of each Unit (at ISO Conditions): \_\_\_\_ MW (should be negative to account for charging energy)

Interconnection. The Electrical Delivery Point for the Unit is described as follows:

Distribution area:
Congestion zone:
Demand zone:
Delivery Point: (which is the physical interconnection point to the CAISO Grid with a corresponding PNode of [insert])

CAISO Resource ID:

Delivery Point address:

Additional Information:

[Provide one line diagram for Unit(s)]

## **OPERATIONAL LIMITATIONS**

#### **Charging and Discharging**

#### **Charging**

Maximum State-of-Charge capability (MW-Hrs):

Maximum operational charge rate (MW/Hr):

Maximum AGC charge/discharge rate (MW/Hr):

Other characteristics or limitations:

[e.g. As applicable, Describe ramp rates for each Unit operating independently and for all Units operating simultaneously. If Unit ramp rates vary based on Unit loading level, please provide a ramp rate for each segment within the operational range in which it differs.]

## **Discharging**

Minimum State-of-Charge capability (MW-Hrs):

Maximum operational discharge rate (MW/Hr):

Maximum AGC charge/discharge rate (MW/Hr):

Other characteristics or limitations:

[e.g. As applicable, describe ramp rates for each Unit operating independently and for all Units operating simultaneously. If Unit ramp rates vary based on Unit loading level, please provide a ramp rate for each segment within the operational range in which it differs.]

Guaranteed Efficiency: \_\_\_\_\_%

[This discharge/charge ratio should be exclusive of Station Use.]

#### Cycle Limitations:

[Insert applicable cycle limitations per hour, day, month or cumulative total by year that are applicable to the Unit during the Delivery Term]

[Insert preferred definition and measure of "cycle".]

#### **Starts and other Run Time Limitations**

[For the purpose of filling out this Appendix, Start-up Time is the amount of time needed to bring a Unit from non-operation to operation. If applicable, provide start-up time for each Unit.]

Start-Up time: minutes

[Describe start limitations for each Unit operating independently and for all Units simultaneously. Include any daily and/or annual start limitations. Insert constraints, if any, on run hours and a brief description of the reason for such constraint(s). If possible, Seller shall provide a formula for annual dispatch purposes that provides Buyer more flexibility to operate the Facility.]

Start limitations:

Run hour limitations:

# [Describe minimum times for each Unit operating independently and for all Units operating simultaneously.]

The Minimum Run Time after a start is minutes.

The Minimum Down Time after a shutdown is minutes.

#### **Other Products, including Ancillary Services**

Other Products, at ISO conditions, normal efficiency mode:

Spinning Reserves:		MWs; Range:	
Non Spinning Reserves:		MWs; Range:	
Regulation up:		MWs; Range	:
Regulation down:		MWs; Range:	
Black start capability (if applicable):			
Other:			

[Seller must provide CAISO certification (if required) for all Other Products specified in this section prior to the Initial Delivery Date.]

#### **Other Restrictions**:

[Provide a description of any other operational limitations not covered above, including forbidden operating regions]

#### **Capacity Degradation**:

Annual Capacity Degradation Rate: \_\_\_\_% per Contract Year

[Seller can also specify percentage degradation tied to the number of cycles per Contract Year]

# Contract Capacity:

Table 1 Design Capacity Table				
	Dry Bulb Temperature °F	Relative Humidity (%)	Barometric Pressure (psia)	Design Capacity (MW)
ISO Conditions (at Facility elevation)	59	60		
Peak July conditions (at Facility elevation)				

[If there are ambient conditions that impact Monthly Contract Capacity, please complete Table 2 or alternative graph or table. If ambient conditions do not impact the Monthly Contract Capacity, fill out Table 3]

Table 2				
	Average Monthly Conditions			
Month	Dry Bulb Temperature (deg F)	Wet Bulb Temperature (deg. F)	Relative Humidity (%)	Expected Monthly Contract Capacity (MW)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

Month	Expected Monthly Contract Capacity (MW)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

Table 3

# APPENDIX III PG&E OUTAGE REPORTING PROTOCOLS

# A. NOTIFICATION REQUIREMENTS FOR ROUTINE START-UP AND SHUTDOWNS

Prior to paralleling or after disconnecting from the electric system, ALWAYS follow your balancing authority rules and notify the applicable Participating Transmission Owner's (PTO) local switching center as follows:

- Call the applicable PTO local switching center to advise of the intent to parallel before any Start-Up.
- Call the applicable PTO local switching center after the unit has been paralleled and report the parallel time and intended unit output.
- Call the applicable PTO local switching center after any separation and report the separation time as well as the date and time estimate for return to service.

# B. <u>SUBMISSION OF AVAILABLE CAPACITY AND SCHEDULED</u> <u>MAINTENANCE OUTAGES</u>

- 1. Submit information by posting to PG&E's web-based system, which is located at www.pge.com under "Business to Business," or other PG&E-approved website. Once directed to the appropriate page, enter the username and password assigned by PG&E's bilateral settlements group.
- 2. If the website is unavailable, then implement the procedures set forth below:
  - a. For all email correspondence, enter the following in the email subject field: Delivery Date Range, Contract Name, Email Purpose (For example: "dd/mm/yyyy through dd/mm/yyyy XYZ Company Project #2 Daily Available Capacity").
  - b. For the Annual Forecasts of Maintenance Outages, email to DAenergy@pge.com, Bilat\_Settlements@pge.com and ESMOutageCoordinator@pge.com.
  - c. For Monthly Forecasts of Maintenance Outages, email to DAenergy@pge.com and ESMOutageCoordinator@pge.com.
  - d. For Daily Forecasts of Available Capacity after fourteen (14) hours before the WECC Preschedule Day, but before the CAISO deadline for submitting Day-Ahead Schedules, call primary phone (415) 973-1971 or backup phone (415) 973-4500. Also send email to DAenergy@pge.com.
  - e. For Hourly Forecasts of Available Capacity, call PG&E's Real-Time Desk at (415) 973-4500 and email to RealTime@pge.com.
  - f. For Scheduled Maintenance Outages, complete the specifics below and submit by email to MerchantOutages@pge.com, DAenergy@pge.com Bilat\_Settlements@pge.com, and ESMOutageCoordinator@pge.com.

- i. Email subject Field: dd/mm/yyyy through dd/mm/yyyy XYZ Company Project #2 Outage Notification
- ii. Email body:
  - 1. Type of Outage: Scheduled Maintenance Outage including whether Seller considers the Outage to be eligible as an Excused Scheduled Maintenance Outage. Confirmation of Excused Scheduled Maintenance Outages will be provided in writing by Buyer in accordance with Section 3.8(c).
  - 2. Outage start date and time
  - 3. Estimated or actual end date and time for Outage
  - 4. Primary and secondary causes of Outage
  - 5. Equipment description and nature of work being performed. For generation outages, include NERC Generation Availability Data System (GADS) numbers (as available) that identify the specific equipment and type of work that affect restrictions. Include additional equipment designations as available (e.g., West boiler feed pump versus East or Center boiler feed pump.)
  - 6. Contact name: first and last name of the individual at the Unit
  - 7. Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted
  - 8. Text description of additional information as needed, including, changes to a previously scheduled Outage, links/cross-references to related outage cards and log entries, outage classifications per the CAISO Tariff, etc.

# C. <u>FORCED OUTAGE REPORTING</u>

- 1. Forced Outages Seller shall notify PG&E Real-Time Desk orally at (415) 973-4500 within 10 minutes.
  - a. Verbal notification shall include time of forced outage, cause, current availability and estimated return date and time.
- 2. After orally notifying PG&E Real-Time Desk of the Forced Outage, Seller shall also put forth commercially reasonable efforts to notify PG&E settlements via PG&E's electronic website, which is located at www.pge.com under "Business to Business," or other PG&E approved website. Once directed to the appropriate page, Seller will be required to enter a username and password, which will be assigned by PG&E's bilateral settlements group.
- 3. If the website is unavailable, submit the following information via email to Bilat\_Settlements@pge.com and MerchantOutages@pge.com.

a. Email subject Field: dd/mm/yyyy through dd/mm/yyyy XYZ Company Project #2 Outage Notification

- b. Email body:
  - 1. Type of Outage: Forced Outage
  - 2. Outage start date and time
  - 3. Estimated or actual end date and time for Outage
  - 4. Primary and secondary causes of Forced Outage, including a detailed description of specific equipment involved and the nature of the problem or condition.
  - 5. Equipment description and nature of work being performed. For generation outages, include NERC Generation Availability Data System (GADS) numbers (as available) that identify the specific equipment and type of work that affect restrictions. Include additional equipment designations as available (e.g., West boiler feed pump versus East or Center boiler feed pump.)
  - 6. Contact name: first and last name of the individual at the Unit
  - 7. Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted
  - 8. Text description of additional information as needed, including, changes to a previously scheduled Outage, links/cross-references to related outage cards and log entries, outage classifications per the CAISO Tariff, etc.
  - 9. Associated events, e.g. operation of Special Protection Schemes
  - 10. Impact on CAISO-controlled Grid

# D. <u>APPROVAL OF EXCUSED SCHEDULED MAINTENANCE OUTAGES</u>

For an Outage to be deemed an Excused Scheduled Maintenance Outage, Seller must have received a Notice from Buyer's Outage Coordinator indicating Buyer's approval. The approval Notice from Buyer to Seller will confirm:

- 1. The requested Outage meets all of the criteria for Excused Scheduled Maintenance Outages specified in Section 10.3; and
- The Outage must take place within the approved window of time starting [\_\_\_\_] and ending [\_\_\_\_]. Any hours or partial hours outside of the requested and approved Outage window will not be Excused Hours.

3. Any change made to the approved Excused Scheduled Maintenance Outage outside of the approved window of time listed above is deemed a new Outage request and is subject to re-approval from Buyer.

## **APPENDIX IV**

## INITIAL DELIVERY DATE CONFIRMATION LETTER

In accordance with the terms of that certain Energy Storage Agreement dated \_\_\_\_\_ ("Agreement") by and between \_\_\_\_\_ ("Buyer") and \_\_\_\_\_ ("Seller"), and Section 2.1(c) of that Agreement, this letter ("Initial Delivery Date Confirmation Letter") serves to document the Parties' further agreement that the Conditions Precedent to the occurrence of the Initial Delivery Date have been satisfied or waived in writing by Buyer. All capitalized terms not defined herein shall have the meaning set forth in the Agreement.

Additionally Seller provides the following FERC Tariff information, if applicable, for reference purposes only:

Tariff:

Dated:

Docket Number:

IN WITNESS WHEREOF, each Party has caused this Initial Delivery Date Confirmation Letter to be duly executed by its authorized representative as of the date of last signature provided below:

[SELLER]

## PACIFIC GAS AND ELECTRIC COMPANY

Signature:	Signature:	
Name:	Name:	
Title:	Title:	
Date:	Date:	

## **APPENDIX V**

#### SUPPLIER DIVERSITY PROGRAM

- 1. Seller shall provide Women-, Minority-, and service Disabled Veteran-owned Business Enterprises, as verified pursuant to the procedures prescribed in Section 2 of CPUC General Order 156 ("WMDVBE"), the maximum practicable opportunity to participate in the performance of work supporting Seller's construction, operation, and maintenance of the Project. General Order 156 can be found on http://www.cpuc.ca.gov/puc/documents/go.htm.
- 2. Upon request from Buyer, Seller shall provide a separate "Supplier Plan" consisting of a specific list of suppliers that may participate in the performance of the work supporting the construction of the Project prior to the Expected Initial Delivery Date and operation and maintenance of the Project after the Initial Energy Delivery Date, and a statement setting forth any additional efforts Seller will employ to increase the participation of WMDVBE suppliers supporting the construction, operation and maintenance of the Project.
- 3. Upon request from Buyer, but no less than once per 365 day period of time between the Execution Date and the end of the Delivery Term, Seller shall report its spending with WMDVBE suppliers per instructions to be provided by Buyer.
- 4. Targets.
  - a) Seller's supplier diversity spending target for work supporting the construction of the Project prior to the Expected Initial Delivery Date is percent (\_\_%) as measured relative to Seller's total expenditures on construction of the Project prior to the Expected Initial Delivery Date, and;
- 5. Seller shall use good faith efforts in meeting the requirements of this <u>Appendix V</u> which obligation to use good faith efforts shall be material obligations.

# **APPENDIX VI**

## CONSTRUCTION START CERTIFICATION FORM AND PERFORMANCE TEST PROCEDURES

Appendix VI-1: CONSTRUCTION START FORM OF CERTIFICATION

<u>Appendix VI-2</u>: PERFORMANCE TEST PROCEDURES OUTLINE

#### **APPENDIX VI-1**

#### **CONSTRUCTION START** FORM OF CERTIFICATION

(Date)

Director Contract Management and Settlements Pacific Gas and Electric Company 77 Beale Street, Mail Code N12E San Francisco, CA 94105-1702

#### Re: Construction Start Date

This certification ("Certification") of the Construction Start Date is delivered by ("Seller") to Pacific Gas and Electric Company ("Buyer") in accordance with the terms of that certain Energy Storage Agreement dated \_\_\_\_\_ ("Agreement") by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement. Seller hereby certifies and represents to Buyer all of the following:

- a) the EPC Contract related to the Project was executed on \_\_\_\_\_;
- b) [permitting agency name] \_ issued grading permits to the Seller on \_\_\_\_\_; and
- c) the Notice to Proceed was issued on \_\_\_\_\_\_ (attached), and.
  d) mobilization at the Project Site commenced on \_\_\_\_\_\_.

IN WITNESS WHEREOF, the undersigned has executed this certificate on behalf of the Seller as of the day of .

(Seller)

(Name)

(Position)

[LICENSED PROFESSIONAL ENGINEER]

By: \_\_\_\_\_

Name:

Title: \_\_\_\_\_\_

Date:

# APPENDIX VI-2 PERFORMANCE TEST PROCEDURES OUTLINE

# **Additional Test Procedures**

[To be inserted later depending upon the technology]

# APPENDIX VII OPERATING PROCEDURES

[Pursuant to Section 10.3, the Operating Procedures shall be developed and added as <u>Appendix VII</u> prior to the Initial Delivery Date.]

# **APPENDIX VIII**

# MONTHLY ALLOCATION FACTORS

Month	Monthly Allocation Factor
January	8.34%
February	8.34%
March	8.33%
April	8.33%
May	8.33%
June	8.33%
July	8.33%
August	8.33%
September	8.33%
October	8.33%
November	8.34%
December	8.34%

# **APPENDIX IX**

## FORM OF LETTER OF CREDIT

#### **Issuing Bank Letterhead and Address**

## **STANDBY LETTER OF CREDIT NO. XXXXXXX**

#### Date: *[insert issue date]*

**Beneficiary:** Pacific Gas and Electric Company

Applicant: [Insert name and address of Applicant]

77 Beale Street, Mail Code B28L San Francisco, CA 94105 Attention: Credit Risk Management

#### Letter of Credit Amount: *[insert amount]*

Expiry Date: *[insert expiry date]* 

Ladies and Gentlemen:

By order of *[insert name of Applicant]* ("Applicant"), we hereby issue in favor of Pacific Gas and Electric Company (the "Beneficiary") our irrevocable standby letter of credit No. *[insert number of letter of credit* ("Letter of Credit"), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ [insert amount in figures followed by (amount in words)] ("Letter of Credit Amount"). This Letter of Credit is available with *[insert name of issuing bank, and the city and state in* which it is located by sight payment, at our offices located at the address stated below, effective immediately, and it will expire at our close of business on *[insert expiry date]* (the "Expiry Date").

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

Beneficiary's signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of 1. Credit No. [insert number] and stating the amount of the demand; and

2. One of the following statements signed by an authorized representative or officer of Beneficiary:

A. "Pursuant to the terms of that certain *[insert name of Agreement]* (the "Agreement"), dated [insert date of the Agreement], between Beneficiary and [insert name of Seller under the Agreement], Beneficiary is entitled to draw under Letter of Credit No. [insert number] amounts owed by *[insert name of Seller under the Agreement]* under the Agreement; or

B. "Letter of Credit No. *[insert number]* will expire in thirty (30) days or less and *[insert name of Seller under the Agreement* has not provided replacement security acceptable to Beneficiary.

Special Conditions:

- Partial and multiple drawings under this Letter of Credit are allowed; 1.
- 2 All banking charges associated with this Letter of Credit are for the account of the Applicant;

- 3. This Letter of Credit is not transferable; and
- 4. The Expiry Date of this Letter of Credit shall be automatically extended without a written amendment hereto for a period of one (1) year and on each successive Expiry Date, unless at least sixty (60) days before the then current Expiry Date, we notify you by registered mail or courier that we elect not to extend the Expiry Date of this Letter of Credit for such additional period.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at *[insert issuing bank's address for drawings]*.

All demands for payment shall be made by presentation of originals or copies of documents; or by facsimile transmission of documents to *[insert fax number]*, Attention: *[insert name of issuing bank's receiving department]*, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at *[insert phone number]* to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit will be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision,* International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we will honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly.

The law of the State of New York shall apply to any matters not covered by the UCP 600.

For telephone assistance regarding this Letter of Credit, please contact us at *[insert number and any* other necessary details].

Very truly yours,

[insert name of issuing bank]

By: \_\_\_\_\_\_Authorized Signature

Name: *[print or type name]* 

Title: *[print or type title]* 

## Exhibit A to Appendix IX Form of Letter of Credit **SIGHT DRAFT**

ТО

[INSERT NAME AND ADDRESS OF PAYING BANK]

AMOUNT: \$\_\_\_\_\_

DATE:

AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF PACIFIC GAS AND ELECTRIC COMPANY THE AMOUNT OF U.S.\$\_\_\_\_\_U.S. DOLLARS)

DRAWN UNDER **[INSERT NAME OF ISSUING BANK]** LETTER OF CREDIT NO. XXXXXX.

**REMIT FUNDS AS FOLLOWS:** 

[INSERT PAYMENT INSTRUCTIONS]

DRAWER

BY: \_\_\_\_\_\_\_NAME AND TITLE
#### **APPENDIX XVI**

#### FORM OF LETTER OF CONCURRENCE

[Date]

[Name] [Position] [Company] [Address]

Re: Letter of Concurrence Regarding Control of [Name] Unit

This letter sets forth the understanding of the degree of control exercised by Pacific Gas and Electric Company ("PG&E") and *[Company Name]* with respect to *[Unit Name]* (the "Facility") for the purposes of facilitating compliance with the requirements of the Federal Energy Regulatory Commission's ("Commission") Order No. 697.<sup>1</sup> Specifically, Order No. 697 requires that sellers filing an application for market-based rates, an updated market power analysis, or a required change in status report with regard to generation specify the party or parties they believe have control of the generation facility and extent to which each party holds control.<sup>2</sup> The Commission further requires that "a seller making such an affirmative statement seek a 'letter of concurrence' from other affected parties identifying the degree to which each party controls a facility and submit these letters with its filing."<sup>3</sup>

PG&E and [*Company Name*] have executed an energy storage agreement (the "Agreement") with regard to the Facility. The Facility is a [*XX*] MW [*description*] facility located in [*County, State*]. Pursuant to the Agreement, [*Company Name*] does not intend to transfer "ownership or control of generation capacity" from [*Company Name*] to PG&E as the term "ownership or control of generation capacity" is used in 18 CFR § 35.42.

If you concur with the statements made in this letter, please countersign the letter and send a copy to me.

Best regards,

*[Author] [Position]* Pacific Gas and Electric Company

<sup>&</sup>lt;sup>1</sup> Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, Order No. 697 at P 186-187, FERC Stats. & Regs. ¶ 31,252, clarified, 121 FERC ¶ 61,260 (2007), order on reh'g, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 (2008), clarified, 124 FERC ¶ 61,055 (2008), order on reh'g, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), order on reh'g, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), order on reh'g, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305 (2010).

<sup>&</sup>lt;sup>2</sup> Order No. 697 at P 186.

<sup>&</sup>lt;sup>3</sup> Order No. 697 at P 187.

#### **Concurring Statement**

On behalf of [Company Name], I am authorized to countersign this letter in concurrence with its content.

By: \_\_\_\_\_ [Name] [Company Position] [Company Name]

#### **APPENDIX XI – FORM OF CONSENT TO ASSIGNMENT**

#### CONSENT AND AGREEMENT

This CONSENT AND AGREEMENT ("Consent and Agreement") is entered into as of [\_\_\_\_\_\_, 2\_\_\_], between PACIFIC GAS AND ELECTRIC COMPANY ("PG&E"), and [\_\_\_\_\_\_], as collateral agent<sup>1</sup> (in such capacity, "Financing Provider"), for the benefit of various financial institutions (collectively, the "Secured Parties") providing financing to [\_\_\_\_] ("Seller"). PG&E, Seller, and the Financing Provider shall each individually be referred to as a "Party" and collectively as the "Parties".

#### Recitals

A. Pursuant to that certain Energy Storage Agreement dated as of \_\_\_\_\_\_, 2\_\_\_ (as amended, modified, supplemented or restated from time to time, as including all related agreements, instruments and documents, collectively, the "Assigned Agreement") between PG&E and Seller, PG&E has agreed to purchase energy from Seller.

B. The Secured Parties have provided, or have agreed to provide, to Seller financing (including a financing lease) pursuant to one or more agreements (the "Financing Documents"), and require that Financing Provider be provided certain rights with respect to the "Assigned Agreement" and the "Assigned Agreement Accounts," each as defined below, in connection with such financing.

C. In consideration for the execution and delivery of the Assigned Agreement, PG&E has agreed to enter into this Consent and Agreement for the benefit of Seller.

#### Agreement

1. <u>Definitions</u>. Any capitalized term used but not defined herein shall have the meaning specified for such term in the Assigned Agreement.

2. <u>Consent</u>. Subject to the terms and conditions below, PG&E consents to and approves the pledge and assignment by Seller to Financing Provider pursuant to the [Security Agreement] of (a) the Assigned Agreement, and (b) the accounts, revenues and proceeds of the Assigned Agreement (collectively, the "Assigned Agreement Accounts").

3. <u>Limitations on Assignment</u>. Financing Provider acknowledges and confirms that, notwithstanding any provision to the contrary under applicable law or in any Financing Document executed by Seller, Financing Provider shall not assume, sell or otherwise dispose of the Assigned Agreement (whether by foreclosure sale, conveyance in lieu of foreclosure or otherwise) unless, on or before the date of any such assumption, sale or disposition, Financing Provider or any third party, as the case may be, assuming, purchasing or otherwise acquiring the Assigned Agreement (a) cures any and all defaults of Seller under the Assigned Agreement which are capable of being cured and which are not personal to the Seller, (b) executes and delivers to PG&E a written assumption of all of Seller's rights and obligations under the Assigned Agreement in form and substance reasonably satisfactory to PG&E, (c) otherwise satisfies and complies with all requirements of the Assigned Agreement, (d) provides such tax and enforceability assurance as PG&E may reasonably request, and (e) is a Permitted Transferee (as defined below). Financing Provider further acknowledges that the assignment of the Assigned Agreement and the Assigned Agreement Accounts is for security purposes only and that Financing Provider has no

 $<sup>\</sup>frac{1}{2}$  This form assumes that a collateral agent will hold the security on behalf of a syndicate of lenders and therefore, the consent would be signed by the collateral agent in such capacity for the benefit of the secured parties. If that is not the case, please modify.

rights under the Assigned Agreement or the Assigned Agreement Accounts to enforce the provisions of the Assigned Agreement or the Assigned Agreement Accounts unless and until an event of default has occurred and is continuing under the Financing Documents between Seller and Financing Provider (a "Financing Default"), in which case Financing Provider shall be entitled to all of the rights and benefits and subject to all of the obligations which Seller then has or may have under the Assigned Agreement to the same extent and in the same manner as if Financing Provider were an original party to the Assigned Agreement.

"<u>Permitted Transferee</u>" means any person or entity who is reasonably acceptable to PG&E. Financing Provider may from time to time, following the occurrence of a Financing Default, Notify PG&E in writing of the identity of a proposed transferee of the Assigned Agreement, which proposed transferee may include Financing Provider, in connection with the enforcement of Financing Provider's rights under the Financing Documents, and PG&E shall, within thirty (30) business days of its receipt of such written Notice, confirm to Financing Provider whether or not such proposed transferee is a "Permitted Transferee" (together with a written statement of the reason(s) for any negative determination) it being understood that if PG&E shall fail to so respond within such thirty (30) business day period such proposed transferee shall be deemed to be a "Permitted Transferee".

#### 4. <u>Cure Rights</u>.

(a) <u>Notice to Financing Provider by PG&E</u>. PG&E shall, concurrently with the delivery of any Notice of an event of default under the Assigned Agreement (each, an "Event of Default") to Seller (a "Default Notice"), provide a copy of such Default Notice to Financing Provider pursuant to <u>Section 9(a)</u> of this Consent and Agreement. In addition, Seller shall provide a copy of the Default Notice to Financing Provider the next business day after receipt from PG&E, independent of any agreement of PG&E to deliver such Default Notice.

(b) <u>Cure Period Available to Financing Provider Prior to Any Termination by PG&E</u>. Upon the occurrence of an Event of Default, subject to (i) the expiration of the relevant cure periods provided to Seller under the Assigned Agreement, and (ii) <u>Section 4(a)</u> above, PG&E shall not terminate the Assigned Agreement unless it or Seller provides Financing Provider with Notice of the Event of Default and affords Financing Provider an Additional Cure Period (as defined below) to cure such Event of Default. For purposes of this Agreement "Additional Cure Period" means (i) with respect to a monetary default, ten (10) days in addition to the cure period (if any) provided to Seller in the Assigned Agreement, and (ii) with respect to a non-monetary default, thirty (30) days in addition to the cure period (if any) provided to Seller in the Assigned Agreement.

(c) <u>Failure by PG&E to Deliver Default Notice</u>. If neither PG&E nor Seller delivers a Default Notice to Financing Provider as provided in <u>Section 4(a)</u>, the Financing Provider's applicable cure period shall begin on the date on which Notice of an Event of Default is delivered to Financing Provider by either PG&E or Seller. Except for a delay in the commencement of the cure period for Financing Provider and a delay in PG&E's ability to terminate the Assigned Agreement (in each case only if both PG&E and Seller fail to deliver notice of an Event of Default to Financing Provider), failure of PG&E to deliver any Default Notice shall not waive PG&E's right to take any action under the Assigned Agreement and will not subject PG&E to any damages or liability for failure to provide such Notice.

(d) <u>Extension for Foreclosure Proceedings</u>. If possession of the Project (as defined in the Assigned Agreement) is necessary for Financing Provider to cure an Event of Default and Financing Provider commences foreclosure proceedings against Seller within thirty (30) days of receiving Notice of an Event of Default from PG&E or Seller, whichever is received first, Financing Provider shall be

allowed a reasonable additional period to complete such foreclosure proceedings, such period not to exceed ninety (90) days; provided, however, that Financing Provider shall provide a written Notice to PG&E that it intends to commence foreclosure proceedings with respect to Seller within ten (10) business days of receiving a Notice of such Event of Default from PG&E or Seller, whichever is received first. In the event Financing Provider succeeds to Seller's interest in the Project as a result of foreclosure proceedings, the Financing Provider or a purchaser or grantee pursuant to such foreclosure shall be subject to the requirements of Section 3 of this Consent and Agreement.

5. <u>Setoffs and Deductions</u>. Each of Seller and Financing Provider agrees that PG&E shall have the right to set off or deduct from payments due to Seller each and every amount due PG&E from Seller whether or not arising out of or in connection with the Assigned Agreement. Financing Provider further agrees that it takes the assignment for security purposes of the Assigned Agreement and the Assigned Agreement Accounts subject to any defenses or causes of action PG&E may have against Seller.

6. <u>No Representation or Warranty</u>. Seller and Financing Provider each recognizes and acknowledges that PG&E makes no representation or warranty, express or implied, that Seller has any right, title, or interest in the Assigned Agreement or as to the priority of the assignment for security purposes of the Assigned Agreement or the Assigned Agreement Accounts. Financing Provider is responsible for satisfying itself as to the existence and extent of Seller's right, title, and interest in the Assigned Agreement, and Financing Provider releases PG&E from any liability resulting from the assignment for security purposes of the Assigned Agreement and the Assigned Agreement Accounts.

7. <u>Amendment to Assigned Agreement</u>. Financing Provider acknowledges and agrees that PG&E may agree with Seller to modify or amend the Assigned Agreement, and that PG&E is not obligated to Notify Financing Provider of any such amendment or modification to the Assigned Agreement. Financing Provider hereby releases PG&E from all liability arising out of or in connection with the making of any amendment or modification to the Assigned Agreement.

8. <u>Payments under Assigned Agreement</u>. PG&E shall make all payments due to Seller under the Assigned Agreement from and after the date hereof to [\_\_\_\_\_], as depositary agent, to ABA No. [\_\_\_\_], Account No. [\_\_\_\_], and Seller hereby irrevocably consents to any and all such payments being made in such manner. Each of Seller, PG&E and Financing Provider agrees that each such payment by PG&E to such depositary agent of amounts due to Seller from PG&E under the Assigned Agreement shall satisfy PG&E's corresponding payment obligation under the Assigned Agreement.

#### 9. <u>Miscellaneous.</u>

(a) <u>Notices</u>. All Notices hereunder shall be in writing and shall be deemed received (i) at the close of business of the date of receipt, if delivered by hand or by other electronic means, or (ii) when signed for by recipient, if sent registered or certified mail, postage prepaid, provided such Notice was properly addressed to the appropriate address indicated on the signature page hereof or to such other address as a party may designate by prior written Notice to the other parties, at the address set forth below:

If to Financing Provider:

Name:	
Address:	
Attn <sup>.</sup>	

Telephone:	
Email:	
If to PG&E: Name:	
Address: Attn: Telephone:	
Email:	

(b) <u>No Assignment</u>. This Consent and Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of PG&E, and shall be binding on and inure to the benefit of the Financing Provider, the Secured Parties and their respective successors and permitted transferees and assigns under the [loan agreement] and [security agreement].

(c) <u>No Modification</u>. This Consent and Agreement is neither a modification of nor an amendment to the Assigned Agreement.

(d) <u>Choice of Law</u>. The parties hereto agree that this Consent and Agreement shall be construed and interpreted in accordance with the laws of the State of California, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

(e) <u>No Waiver</u>. No term, covenant or condition hereof shall be deemed waived and no breach excused unless such waiver or excuse shall be in writing and signed by the party claimed to have so waived or excused.

(f) <u>Counterparts</u>. This Consent and Agreement may be executed in one or more duplicate counterparts, and when executed and delivered by all the parties listed below, shall constitute a single binding agreement.

(g) <u>No Third Party Beneficiaries</u>. There are no third party beneficiaries to this Consent and Agreement.

(h) <u>Severability</u>. The invalidity or unenforceability of any provision of this Consent and Agreement shall not affect the validity or enforceability of any other provision of this Consent and Agreement, which shall remain in full force and effect.

(i) <u>Amendments</u>. This Consent and Agreement may be modified, amended, or rescinded only by writing expressly referring to this Consent and Agreement and signed by all parties hereto.

IN WITNESS WHEREOF, each of PG&E and Financing Provider has duly executed this Consent and Agreement as of the date first written above.

#### PACIFIC GAS AND ELECTRIC COMPANY (PG&E)

By:	_
Name:	-
Title:	

[	]
(Financing Provider), as collateral agent	

By:	
Name:	
Title:	

#### **ACKNOWLEDGEMENT**

The undersigned hereby acknowledges the Consent and Agreement set forth above, makes the agreements set forth therein as applicable to Seller, including the obligation of Seller to provide a copy of any Default Notice it receives from PG&E to Financing Provider the next business day after receipt by Seller, and confirms that the Financing Provider identified above and the Secured Parties have provided or are providing financing to the undersigned.

[	[name of Seller]
---	------------------

By:	
Name:	
Title:	

#### **APPENDIX XII**

#### **CRITICAL MILESTONES**

Critical Milestone	Due Date
Written evidence of control of the Site	
Execution of Generator Interconnection Agreement	
Completion of data submission to the California Energy Commission ("CEC")	
Receipt of CEC approval and all Permits necessary to commence construction by (which must be no later than 18 months after CPUC Approval for projects over 50 MW)	
Site readiness for construction, including receipt of any and all necessary zoning approvals, easements, rights of way, and rights to water and sewer access (subject to construction of facilities), as necessary	
Placement of order for major equipment including combustion turbines, steam turbines, HRSGs, and transformers	
Receipt of commitment for construction and permanent financing	
Close of construction financing	
Execution of the Engineering Procurement and Construction ("EPC") contract	
Issuance of EPC notice to proceed	
Guaranteed Construction Start Date	
Close of permanent financing	
Receipt of major equipment on-site	
Completion of electric interconnection	

#### **APPENDIX XIII**

#### FORM OF MONTHLY CONSTRUCTION PROGRESS REPORT

Monthly Progress Report

of

("Seller")

provided to

Pacific Gas and Electric Company

("Buyer")

[Date]

#### Instructions.

Any capitalized terms used in this report which are not defined herein shall have the meaning ascribed to them in the Energy Storage Agreement by and between \_\_\_\_\_, ("Seller") and Pacific Gas and Electric Company dated \_\_\_\_\_\_, (the "Agreement").

Seller shall review the status of each Critical Milestone of the construction schedule for the Units and related Project and Seller shall identify such matters referenced in clauses (i)-(v) below as known to Seller and which in Seller's reasonable judgment are expected to adversely affect the Schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that the Critical Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

(i) Any material matter or issue arising in connection with a Governmental Approval, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of a Law, actual or threatened opposition to the granting of a necessary Governmental Approval, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Units or related Project, attaining any Critical Milestone, or obtaining any contemplated agreements with other parties which are necessary for attaining any Critical Milestone or which otherwise reasonably could be expected to materially threaten Seller's ability to attain any Critical Milestone.

(ii) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller's business or prospects which reasonably could be expected to materially threaten financing of the Units or related Project, attainment of any Critical Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Critical Milestone or could otherwise reasonably be expected to materially threaten Seller's ability to attain any Critical Milestone;

(iii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller's ability to attain any Critical Milestone;

(iv) Any material change in the Seller's schedule for initiating or completing any material aspect of Project;

(v) The status of any matter or issue identified as outstanding in any prior Monthly Construction Progress Report and any material change in the Seller's proposed actions to remedy or overcome such matter or issue.

For guidance, each "overview" subsection shall include a summary of the status and progress of major activities associated with that section, whether planned, in progress, or completed, including relevant dates. Each "recent activities" subsection shall include details of activities during the previous month. Each "expected activities" subsection shall include a brief list of major activities planned for the current month.

Seller shall complete, certify, and deliver this form of Monthly Construction Progress Report to [\_\_\_\_\_\_], together with all attachments and exhibits, with copies of this report delivered to GCMTGroup@pge.com and [\_\_\_\_\_].

#### 1. Executive Summary

Please provide an overview of the project, including technology, size, location, and ownership.

Please provide a brief chronological cumulative summary of the **major** activities completed for each of the following aspects of the Project. Include the date each item was added to the summary (*e.g., in Critical Milestone section "January 2012 – notice of Construction Start Date milestone achieved was reported to PG&E on January 15, 2012" and in Construction section "January 2012 - Full Notice to Proceed was issued to EPC contractor on January 10, 2012"):* 

- 1.1 Critical Milestones
- **1.2 Governmental Approvals**
- 1.3 Financing
- **1.4 Property Acquisition**
- 1.5 Design and Engineering
- 1.6 Major Equipment procurement
- 1.7 Construction
- 1.8 Interconnection
- 1.9 Startup

#### 2. Critical Milestones

In this section, please include information on each Critical Milestone listed in <u>Appendix XII</u>, plus any additional significant milestones related to the project.

#### 2.1 Critical Milestone schedule

Please state the status and progress of each Critical Milestone. Provide the date of completion of completed Critical Milestone(s) and the expected date of completion of uncompleted Critical Milestone(s). The expected date is the current best estimate, and may change from time to time as better information becomes available.

# 2.2 Remedial Action Plan (applicable if Seller fails to achieve Critical Milestone by the Critical Milestone Date)

Please describe in detail any delays (actual or anticipated) beyond the scheduled Critical Milestone dates. Describe the cause of the delay (e.g., governmental approvals, financing, property acquisition, design activities, equipment procurement, project construction, interconnection, or any other factor). Describe Seller's Remedial Action Plan which shall include detailed plans to achieve the missed Critical Milestone and subsequent Critical Milestones.

#### 3. <u>Governmental Approvals</u>

In this section, please include information on each of the Material Governmental Approvals required for the construction of the Units and the status thereof. List the applicable government agency, the type of application/approval requested, and the dates (expected or actual) of significant activity. Significant activity includes, but is not limited to, application submission, notice of complete application, notice of preparation, public hearing or comment period, draft documents and/or approvals, final documents and/or approvals, notice of determination, and/or issuance of permit. If the government agency maintains a website with information on the approval process for the project, please provide a link.

#### 3.1 Environmental Impact Report/Statement (EIR/EIS)

Please describe the environmental review process and each of the primary Governmental Approval(s) to be obtained for the project. Provide the status and completion date (expected or actual) of each significant activity in the process.

#### **3.2 Other Governmental Approvals**

Please describe each of the other major Governmental Approvals to be obtained for the Project. Provide the status and completion date (expected or actual) of each significant activity.

#### 3.3 Recent Governmental Approval activities

Please describe in detail the Governmental Approval activities that occurred during the previous calendar month.

#### 3.4 Expected Governmental Approval activities

Please list all Governmental Approval activities that are expected to be performed during the current calendar month.

#### 3.5 Governmental Approval Notices received

Please attach to this Monthly Progress Report copies of any Notices related to Governmental Approval activities received during the previous calendar month.

#### 4. Financing Activities

In this section, please include information on each separate phase of financing for the project. Include information on debt, equity, and/or federal or state loans or grants.

#### 4.1 **Overview of financing activities**

Please provide a summary of the status and progress of each major financing activity, including the date of execution of significant documents, and information on the expected timing of future significant activities.

#### 4.2 Recent financing activities

Please describe in detail the financing activities that occurred during the previous calendar month.

#### 4.3 Expected financing activities

Please list the financing activities that are expected to be performed during the current calendar month.

#### 5. Property Acquisition Activities

In this section, please include information on property acquisition or site control activities for the project.

#### 5.1 Overview of property acquisition activities

Please provide a summary of the status and progress of each major property acquisition activity, including the date of execution of significant documents, and information on the expected timing of future significant activities.

#### 5.2 Recent property acquisition activities

Please describe in detail the property acquisition activities that occurred during the previous calendar month.

#### 5.3 Expected property acquisition activities

Please list the property acquisition activities that are expected to be performed during the current calendar month.

#### 6. <u>Design and Engineering Activities</u>

In this section, please include information on the status of design and engineering for the project.

#### 6.1 **Overview of design activities**

Please provide a summary of the status and progress of each major design or engineering activity, including dates of completion of significant activities and expected timing of future activities.

#### 6.2 Recent design activities

Please describe in detail the design activities that occurred during the previous calendar month.

#### 6.3 Expected design activities

Please list the design activities that are expected to be performed during the current calendar month.

#### 7. <u>Major Equipment Procurement</u>

In this section, please include information on all major equipment to be procured for all portions of the project to be completed by Seller, including switchyards, substations and any other interconnection equipment, in addition to generating and auxiliary equipment.

#### 7.1 Overview of major equipment procurement activities

For each type of equipment, list the number of each major item to be procured, the manufacturer, model number (if applicable), and rating. List the delivery schedule (expected or actual as applicable), breaking out the number of each item (to be) procured or delivered in each month.

#### 7.2 Recent major equipment procurement activities

Please describe in detail the major equipment procurement activities that occurred during the previous calendar month.

#### 7.3 Expected major equipment procurement activities

Please list the major equipment procurement activities that are expected to be performed during the current calendar month.

#### 8. <u>Construction Activities</u>

In this section, please include information on the status of any construction-related factors that may affect the ability of the project to deliver Energy to the Buyer. Include information on the project infrastructure, generating equipment, and major auxiliary equipment. Also include information on the substations, switchyards, gen-ties, telecommunications equipment or other interconnection facilities that are the direct responsibility of the project.

#### 8.1 Overview of major construction activities

Please provide a summary of the status and progress of each major construction activity for all portions of the project, including a schedule showing expected or actual dates as applicable. Provide the name of the EPC Contractor, the date of execution of the EPC contract, and the date of issuance of a full notice to proceed (or equivalent). For each major type of equipment, break out the number of each item (to be) installed and/or commissioned in each month.

#### 8.2 Recent construction activities

Please describe in detail the construction activities that occurred during the previous calendar month.

#### 8.3 Expected construction activities

Please list the interconnection activities that are expected to be performed during the current calendar month.

#### 8.4 EPC Contractor Monthly Construction Progress Report

Please attach a copy of the Monthly Construction Progress Reports received during the previous calendar month from the EPC Contractor pursuant to the construction contract between Seller and EPC Contractor, certified by the EPC Contractor as being true and correct as of the date issued.

#### 8.5 Look-ahead construction schedule

Please provide a look-ahead construction schedule covering at least three months.

#### 8.6 OSHA Recordables

Please list all OSHA recordables from the previous calendar month.

#### 8.7 Work stoppages

Please describe any work stoppage from the previous calendar month and its effect on the construction schedule.

#### 9. Interconnection Activities

In this section, please include information on interconnection-related factors that may affect the ability of the project to deliver energy to the Buyer. Include information on the status of interconnection studies, Interconnection Agreements, design and construction of interconnection facilities (e.g., substations, switchyards, gen-ties, network upgrades, system protection schemes, telecommunications equipment to the extent not already covered in the project construction information in Section 9), and grid outage and/or interconnection schedules.

#### 9.1 Overview of interconnection activities

Please provide a summary of the status and progress of each major interconnection activity including dates of completion of significant activities and expected timing of future activities.

#### 9.2 Recent interconnection activities

Please describe in detail the interconnection activities that occurred during the previous calendar month.

#### 9.3 Expected interconnection activities

Please list the interconnection activities that are expected to be performed during the current calendar month.

#### 10. <u>Startup</u>

In this section, please include information on the status of activities related to preparation for Energy delivery and commercial operation, including equipment testing, commissioning, release to operations, requirements of the grid operator, and any other activities that must be conducted before the project may deliver energy to the grid and/or declare Commercial Operation.

#### **10.1** Overview of startup activities

Please provide a summary of the status and progress of each major startup activity including dates of completion of significant activities and expected timing of future activities.

#### **10.2** Recent startup activities

Please describe in detail the startup activities that occurred during the previous calendar month.

#### **10.3** Expected startup activities

Please list the startup activities that are expected to be performed during the current calendar month.

I, \_\_\_\_\_, on behalf of and as an authorized representative of \_\_\_\_\_, do hereby certify that any and all information contained in this Seller's Monthly Construction Progress Report is true and accurate, and reflects, to the best of my knowledge, the current status of the construction of the Units as of the date specified below.

By:

Name:			

Title:\_\_\_\_\_

Date:
-------

#### APPENDIX XIV NOTICES

Name: [Seller's Name], a [include place of formation and business type] ("Seller")

All Notices:

Delivery Address: Street: City: State: Zip:

Mail Address: (if different from above)

Attn:

Phone:

**Invoices and Payments:** Attn:

Phone:

#### **Scheduling:**

Attn: Phone: Back-up Phone:

#### Wire Transfer:

BNK: ACCT Title: ABA: ACCT: DUNS: Federal Tax ID Number:

#### **Credit and Collections:**

Attn: Phone:

## With additional Notices of an Event of Default to Contract Manager:

Attn:

Phone: \_\_\_\_\_

Name: Pacific Gas and Electric Company, a California corporation ("Buyer" or "PG&E") All Notices:

#### **Delivery Address:**

77 Beale Street, Mail Code N12E San Francisco, CA 94105-1702

#### Mail Address:

P.O. Box 770000, Mail Code N12E San Francisco, CA 94177 Attn: Candice Chan (CWW9@pge.com) Director, Energy Contract Mgmt & Settlements Phone: (415) 973-7780

#### **Invoices and Payments:**

Attn: Azmat Mukhtar (ASM3@pge.com) Manager, Bilateral Settlements Phone: (415) 973-4277

#### Scheduling:

Attn: DA Operations (DAENERGY@pge.com) Phone: (415) 973-1971 Back-up Phone: (415) 973-4500

#### Wire Transfer:

BNK: Mellon Bank of New England, N.A. ACC Title: PG&E ABA: 059994 ACCT: 011001234 DUNS: 556650034 Federal Tax ID Number: 94-0742640

#### **Credit and Collections:**

Attn: Credit Risk Management Phone: (415) 973-4414

# With additional Notices of an Event of Default to Contract Manager:

Attn: Mark Zimmermann (MWZ1@pge.com) Manager, Contract Management Phone: (415) 973-6515

#### APPENDIX XV

#### EXAMPLE OF MONTHLY FIXED PAYMENT CALCULATION

Month	MAF	MCC (MW)	AA	GEA	MFP (\$)
January	8.34%	100.0	100.00%	0.00%	\$1,251,000.00
February	8.34%	100.0	100.00%	0.00%	\$1,251,000.00
March	8.33%	100.0	100.00%	0.00%	\$1,249,500.00
April	8.33%	100.0	100.00%	0.00%	\$1,249,500.00
May	8.33%	100.0	100.00%	1.50%	\$1,230,757.50
June	8.33%	100.0	100.00%	7.20%	\$1,159,536.00
July	8.33%	100.0	100.00%	2.30%	\$1,220,761.50
August	8.33%	100.0	100.00%	0.00%	\$1,249,500.00
September	8.33%	100.0	100.00%	0.00%	\$1,249,500.00
October	8.33%	100.0	100.00%	0.00%	\$1,249,500.00
November	8.34%	100.0	95.54%	0.00%	\$1,195,205.40
December	8.34%	100.0	100.00%	0.00%	\$1,251,000.00

CPP = \$150.00 per kW-year

The Monthly Fixed Payment (MFP) = CPP x MAF<sub>m</sub> x MCC<sub>m</sub> x max [(AA<sub>m</sub> - GEA<sub>m</sub>), 0]

#### **APPENDIX XVI**

Hour	Settlement Interval	Delivered Discharge Energy (MWh)	Buyer's Discharge Schedule (MWh)	Delivered Discharge Energy or Buyer's Discharge Schedule (MWh)	VOMP (\$/MWh)	MVP for each Settlement Interval (\$)
1	1	0	0	0	\$5.00	\$0.00
1	2	0	0	0	\$5.00	\$0.00
1	3	0	0	0	\$5.00	\$0.00
1	4	0	80	0	\$5.00	\$0.00
1	5	82	80	80	\$5.00	\$400.00
1	6	82	80	80	\$5.00	\$400.00
2	1	82	80	80	\$5.00	\$400.00
2	2	82	80	80	\$5.00	\$400.00
2	3	82	80	80	\$5.00	\$400.00
2	4	82	80	80	\$5.00	\$400.00
2	5	89	90	89	\$5.00	\$445.00
2	6	89	90	89	\$5.00	\$445.00
3	1	89	90	89	\$5.00	\$445.00
3	2	89	90	89	\$5.00	\$445.00
3	3	89	90	89	\$5.00	\$445.00
3	4	89	90	89	\$5.00	\$445.00
3	5	91	92	91	\$5.00	\$455.00
3	6	91	92	91	\$5.00	\$455.00
4	1	91	92	91	\$5.00	\$455.00
4	2	91	92	91	\$5.00	\$455.00
4	3	91	92	91	\$5.00	\$455.00
4	4	91	92	91	\$5.00	\$455.00
4	5	91	92	91	\$5.00	\$455.00
4	6	91	92	91	\$5.00	\$455.00
5	1	80	80	80	\$5.00	\$400.00
5	2	80	80	80	\$5.00	\$400.00
5	3	80	80	80	\$5.00	\$400.00
5	4	80	80	80	\$5.00	\$400.00
5	5	80	80	80	\$5.00	\$400.00
5	6	80	80	80	\$5.00	\$400.00
					Total Monthly Variable Payment to Seller	\$11,110.00

#### EXAMPLE OF MONTHLY VARIABLE PAYMENT CALCULATION

#### **APPENDIX XVII**

#### EXAMPLES OF MONTHLY CONTRACT CAPACITY ADJUSTMENT CALCULATION

Month	EMCC (Pursuant to <u>Appendix II</u> )	TCR	AMCC	TCR	AMCC	
IVIOIILII	Start of	During Contract	Start of	During Contract	Start of	
	Contract Year 1	Year 1	Contract Year 2	Year 2	Contract Year 3	
January	100.0	99.1	99.0	98.0	98.0	
February	100.0	99.1	99.0	98.0	98.0	
March	100.0	99.1	99.0	98.0	98.0	
April	100.0	99.1	99.0	98.0	98.0	
May	100.0	99.1	99.0	98.0	98.0	
June	100.0	99.1	99.0	98.0	98.0	
July	100.0	99.1	99.0	98.0	98.0	
August	100.0	99.1	99.0	98.0	98.0	
September	100.0	99.1	99.0	98.0	98.0	
October	100.0	99.1	99.0	98.0	98.0	
November	100.0	99.1	99.0	98.0	98.0	
December	100.0	99.1	99.0	98.0	98.0	

ACDR = 1.0%

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# **EXAMPLES OF AVAILABILITY ADJUSTMENT CALCULATION**

Capacity Payment Price (CPP)	
Monthly Allocation Factor (MAF) - Nov	00
Guaranteed Availability - Nov	
Monthly Contract Capacity (MCC) - Nov	
Num. Hours in Month	_

\$150.00 per KW-yr 3.34% 96% MCC= 100 MW MNTHRS= 720 hours Availability = MCC \* (MNTHRS - MAINTHRS - UNAVAILHRS - UNAVAILPRODHRS) MCC \* (MNTHRS - MAINTHRS )

where TPE = MCC \* (MNTHRS - MAINTHRS - UNAVAILHRS )

Monthly Fixed Payment (MFP): CPP \* MAF \* MCC \* max [(AA-GEA),0] The above data applies to Examples 1 through 3 below.

# Example 1:

Unit had a full plant Excused Scheduled Maintenance Outage from 11/01 0100 through 11/10 0130.

2. Unit had a Force Majeure event where the Unit had a derate of 50 MW (50%) from 11/12 0700 through 11/12 0830.

MAINTHRS = 216.50 hours (216.5 hours x 100%) MAINTHRS = 0.75 hours (1.5 hours x 50%) UNAVAILHRS = 31.32 hours (313.25 hours x 10%)

3. Unit had a Forced Outage from 11/17 0245 through 11/30 0400 where the Unit had a derate of 10MW (10%).

Seller has not exceeded the number of Excused Hours or the number of allowed Excused Scheduled Maintenance Hours for the year.

 $\frac{\text{Monthly Totals}}{\text{MAINTHRS}} = 217.25 \text{ hours} \\ \text{MAINTHRS} = 31.32 \text{ hours} \\ \text{UNAVAILPRODHRS} = 31.32 \text{ hours} \\ \text{Availability} = 0.00 \text{ hours} \\ \text{Availability} = 100 \times (720 - 217.25 - 31.32 - 0) \\ 100 \times (720 - 217.25) \\ \text{Availability} = 93.77\% \\ \text{Availability} = 93.77\% \\ \text{Model in the availability} = 0.00 \text{ from } 1.00\% \\ \text{Model in the availability} = 0.00\% \\ \text{Model in the availabi$ 

Availability Adjustment (AA) = 100% - [ (96% -93.77%)\*2] AA = 95.54% GEA = 0.00%

MFP = [(\$150,000/MW-yr)] \* 0.0834 \* 100 \* 0.9554] MFP = \$ 1,195,205.40 PG&E Energy Storage Agreement Form; February, 2014

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was 100% out.         UNAVAILHRS =         0.75 hours         (0.75 hours x 100%)           UNAVAILHRS =         26.75 hours         (26.75 hours x 100%)           gh 11/26 1815.         MAINTHRS =         6.31 hours         (25.25 hours x 25%)		ility of 96%, AA = 100%			0 through 11/30 2200. UNAVAILHRS = 37.90 hours (379 hours x 10%) e (50% of MCC). Since 10% of Up at only 20% penalty. UNAVAILPRODHRS = 30.32 hours (379 hours x 40% x 20%)	UNAVAILHRS = 33.00 hours	UNAVAILPRODHRS = 13.60 hours (140 hours x 20%)				
<ol> <li>Unit had an extension of an Excused Scheduled Maintenance Outage from 11/20 0300 to 11/20 0345 where it was 100% out.</li> <li>Unit had a full plant Unexcused Scheduled Maintenance Outage from 11/02 0500 to 11/03 0745.</li> <li>Unit had a 25 MW (25%) derate that was an Excused Scheduled Maintenance Outage from 11/25 1700 through 11/26 1815.</li> </ol>	Monthly Totals     6.31 hours       MAINTHRS =     6.31 hours       UNAVAILHRS =     27.50 hours       UNAVAILPRODHRS =     0.00 hours	Availability =       100 * (720 - 6.31) - 27.5-0)         Availability =       96.15%         Availability =       96.15%         AA =       100.00%         GEA =       0.00%	MFP = [(\$150,000/MW-yr)] * 0.0834 * 100 * 1] MFP = \$ 1,251,000.00	Example 3:	<ol> <li>Unit had a partial Forced Outage that derated the capacity 10 MW (10% of MCC) which took place 11/15 0300 through 11/30 2200.</li> <li>During this same period of the Forced Outage, the Unit was also not able to provide 50 MW of Reg Up service (50% of MCC). Since 10% of MCC will already be counted as unavailable for Energy, only 40 MW (40%) will be counted as unavailable for Reg Up at only 20% penalty.</li> </ol>	<ol> <li>Unit had a Force Majeure event from 11/06 0700 through 11/07 1600 where 100% of unit was out. Seller has already surpassed it allowed Excused Hours for the Contract Year.</li> <li>Unit had lost its ability to provide Non-Spin (100% of MCC) due to issues with maintaining certification for the period of 11/1 0200 to 11/3</li> </ol>	2200.	Monthly Totals     0.00 hours       MAINTHRS =     0.00 hours       UNAVAILHRS =     70.90 hours       UNAVAILPRODHRS =     43.92 hours	Availability = <u>100 * (720 - 0 - 70.9- 43.92)</u> 100 * (720 - 0) Availability = 84.05% Availability Adjustment (AA) = 100% -[ (96% -84.05%)*2] AA = 76.10%	MFP = [(\$150,000/MW-yr)] * 0.0834 * 100 * 0.761] MFP = \$ 952,011.00	

Example 2:

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#### **APPENDIX XIX**

#### EXAMPLES OF GUARANTEED EFFICIENCY ADJUSTMENT CALCULATION

Month	Guaranteed Efficiency	Delivered Discharge Energy (MWh)	AE <sub>end</sub>	Delivered Charging Energy (MWh)	AE <sub>beg</sub>	Actual Efficiency	GEA
January	80.0%	9,156.1	94.7%	10,966.0	50.0%	83.5%	0.0%
February	80.0%	7,834.6	16.1%	9,554.0	56.1%	82.0%	0.0%
March	80.0%	6,818.0	18.0%	8,396.0	81.2%	81.2%	0.0%
April	80.0%	9,091.1	94.0%	11,294.0	44.8%	80.5%	0.0%
May	80.0%	9,270.2	6.6%	11,809.0	22.9%	78.5%	1.5%
June	80.0%	8,037.9	13.2%	11,041.0	18.8%	72.8%	7.2%
July	80.0%	7,312.9	20.1%	9,411.0	93.4%	77.7%	2.3%
August	80.0%	8,189.3	59.2%	10,148.0	54.0%	80.7%	0.0%
September	80.0%	6,654.9	9.5%	8,155.0	62.9%	81.6%	0.0%
October	80.0%	8,800.9	85.5%	10,490.0	74.6%	83.9%	0.0%
November	80.0%	6,912.2	50.3%	8,229.0	41.7%	84.0%	0.0%
December	80.0%	6,625.2	51.1%	8,210.0	27.9%	80.7%	0.0%

#### APPENDIX XX EXAMPLES OF DEVIATION CHARGES CALCULATION

	Case 1	Case 2
Dispatch (MWh)	20.0	20.0
Delivered Discharge Energy (MWh)	19.0	21.0
Real Time Price (\$/MWh)	\$50	\$50
Amount of Uninstructed Deviation (MWh)	-1.0	1.0
CAISO payment (charge) to Buyer for Uninstructed Deviation (\$)	(\$50)	\$50
Seller payment to Buyer (Buyer payment to Seller) of Deviation Charges under Section 4.5(a) (\$)	\$50	(\$50)
Net Impact to Buyer (\$)	\$0	\$0

	Case 3	Case 4
Dispatch (MWh)	-20.0	-20.0
Delivered Charging Energy (MWh)	-19.0	-21.0
Real Time Price (\$/MWh)	\$50	\$50
Amount of Uninstructed Deviation (MWh)	1.0	-1.0
CAISO payment (charge) to Buyer for Uninstructed Deviation (\$)	\$50	(\$50)
Seller payment to Buyer (Buyer payment to Seller) of Deviation Charges under Section 4.5(a) (\$)	(\$50)	\$50
Net Impact to Buyer (\$)	\$0	\$0

#### APPENDIX XXI EXAMPLES OF FORCED OUTAGE COMPENSATION CALCULATION

#### Table 1

Discharge Energy

Forced Outage Evaluation Period (% of Contract Capacity)	Hour	Settlement Interval	Awarded Price (\$/MWh)	Day Ahead Schedule (MWh)	RT Price (\$/MWh)	Real-Time Dispatch Instruction (MWh)	IE (MWh)	Real Time Price minus Awarded Price (\$/MWh)	Forced Outage Compensation (\$)
No Forced Outage	1	1	\$50	0	\$69	0	0	\$19	\$0
No Forced Outage	1	2	\$50	0	\$84	0	0	\$34	\$0
No Forced Outage	1	3	\$50	0	\$84	0	0	\$34	\$0
No Forced Outage	1	4	\$50	0	\$46	0	0	(\$4)	\$0
No Forced Outage	1	5	\$50	0	\$80	0	0	\$30	\$0
No Forced Outage	1	6	\$50	0	\$62	0	0	\$12	\$0
No Forced Outage	2	1	\$51	20	\$46	20	0	(\$5)	\$0
No Forced Outage	2	2	\$51	20	\$91	20	0	\$40	\$0
No Forced Outage	2	3	\$51	20	\$47	20	0	(\$4)	\$0
No Forced Outage	2	4	\$51	20	\$73	20	0	\$22	\$0
No Forced Outage	2	5	\$51	20	\$60	20	0	\$9	\$0
No Forced Outage	2	6	\$51	20	\$93	20	0	\$42	\$0
No Forced Outage	3	1	\$55	20	\$51	20	0	(\$4)	\$0
No Forced Outage	3	2	\$55	20	\$83	20	0	\$28	\$0
No Forced Outage	3	3	\$55	20	\$100	20	0	\$45	\$0
50%	3	4	\$55	20	\$89	10	-10	\$34	\$340
50%	3	5	\$55	20	\$93	10	-10	\$38	\$380
50%	3	6	\$55	20	\$20	10	-10	(\$35)	\$0
50%	4	1	\$54	20	\$60	10	-10	\$6	\$60
50%	4	2	\$54	20	\$35	10	-10	(\$19)	\$0
50%	4	3	\$54	20	\$82	10	-10	\$28	\$280
100%	4	4	\$54	20	\$73	0	-20	\$19	\$380
100%	4	5	\$54	20	\$45	0	-20	(\$9)	\$0
100%	4	6	\$54	0	\$49	0	0	(\$5)	\$0
100%	5	1	\$53	0	\$75	0	0	\$22	\$0
100%	5	2	\$53	0	\$22	0	0	(\$31)	\$0
100%	5	3	\$53	0	\$13	0	0	(\$40)	\$0
100%	5	4	\$53	0	\$81	0	0	\$28	\$0
100%	5	5	\$53	0	\$92	0	0	\$39	\$0
100%	5	6	\$53	0	\$92	0	0	\$39	\$0
100%	6	1	\$49	20	\$94	0	-20	\$45	\$900
100%	6	2	\$49	20	\$61	0	-20	\$12	\$240
100%	6	3	\$49	20	\$60	0	-20	\$11	\$220
100%	6	4	\$49	20	\$18	0	-20	(\$31)	\$0
100%	6	5	\$49	20	\$85	0	-20	\$36	\$720
100%	6	6	\$49	20	\$24	0	-20	(\$25)	\$0
100%	7	1	\$48	20	\$95	0	-20	\$47	\$940
100%	7	2	\$48	20	\$26	0	-20	(\$22)	\$0
100%	7	3	\$48	20	\$60	0	-20	\$12	\$240
100%	7	4	\$48	0	\$90	0	0	\$42	\$0
100%	7	5	\$48	0	\$96	0	0	\$48	\$0
100%	7	6	\$48	0	\$79	0	0	\$31	\$0

Total Forced Outage Compensation \$4,700

#### Table 2

#### Charge Energy

Forced Outage Evaluation Period (% of Contract Capacity)	Hour	Settlement Interval	Awarded Price (\$/MWh)	Day Ahead Schedule (MWh)	RT Price (\$/MWh)	Real-Time Dispatch Instruction (MWh)	IE (MWh)	Awarded Price minus Real Time Price (\$/MWh)	Forced Outage Compensation (\$)
No Forced Outage	1	1	\$50	0	\$69	0	0	(\$19)	\$0
No Forced Outage	1	2	\$50	0	\$84	0	0	(\$34)	\$0
No Forced Outage	1	3	\$50	0	\$84	0	0	(\$34)	\$0
No Forced Outage	1	4	\$50	0	\$46	0	0	\$4	\$0
No Forced Outage	1	5	\$50	0	\$80	0	0	(\$30)	\$0
No Forced Outage	1	6	\$50	0	\$62	0	0	(\$12)	\$0
No Forced Outage	2	1	\$51	-20	\$46	-20	0	\$5	\$0
No Forced Outage	2	2	\$51	-20	\$91	-20	0	(\$40)	\$0
No Forced Outage	2	3	\$51	-20	\$47	-20	0	\$4	\$0
No Forced Outage	2	4	\$51	-20	\$73	-20	0	(\$22)	\$0
No Forced Outage	2	5	\$51	-20	\$60	-20	0	(\$9)	\$0
No Forced Outage	2	6	\$51	-20	\$93	-20	0	(\$42)	\$0
No Forced Outage	3	1	\$55	-20	\$51	-20	0	\$4	\$0
No Forced Outage	3	2	\$55	-20	\$83	-20	0	(\$28)	\$0
No Forced Outage	3	3	\$55	-20	\$100	-20	0	(\$45)	\$0
50%	3	4	\$55	-20	\$89	-10	10	(\$34)	\$0
50%	3	5	\$55	-20	\$93	-10	10	(\$38)	\$0
50%	3	6	\$55	-20	\$20	-10	10	\$35	\$350
50%	4	1	\$54	-20	\$60	-10	10	(\$6)	\$0
50%	4	2	\$54	-20	\$35	-10	10	\$19	\$190
50%	4	3	\$54	-20	\$82	-10	10	(\$28)	\$0
100%	4	4	\$54	-20	\$73	0	20	(\$19)	\$0
100%	4	5	\$54	-20	\$45	0	20	\$9	\$180
100%	4	6	\$54	0	\$49	0	0	\$5	\$0
100%	5	1	\$53	0	\$75	0	0	(\$22)	\$0
100%	5	2	\$53	0	\$22	0	0	\$31	\$0
100%	5	3	\$53	0	\$13	0	0	\$40	\$0
100%	5	4	\$53	0	\$81	0	0	(\$28)	\$0
100%	5	5	\$53	0	\$92	0	0	(\$39)	\$0
100%	5	6	\$53	0	\$92	0	0	(\$39)	\$0
100%	6	1	\$49	-20	\$94	0	20 20	(\$45)	\$0
100%	· ·	_	\$49		\$61	Ľ Š	=•	(\$12)	\$0
100%	6	3	\$49	-20	\$60	0	20	(\$11)	\$0
100%	6	4	\$49	-20	\$18 ©05	0	20	\$31	\$620
100% 100%	6	5	\$49 \$49	-20 -20	\$85 \$24	0	20 20	(\$36) \$25	\$0 \$500
100%	7	6	\$49 \$48	-20 -20	\$24 \$95	0	20	7	
100%			\$48 \$48	-20 -20	\$95 \$26	-		(\$47) \$22	\$0 \$140
	7	2			1 -	0	20 20		\$440
100% 100%	7	3	\$48 \$48	-20 0	\$60 \$90	0	20	(\$12)	\$0 \$0
100%	7	4		0		0	0	(\$42)	+ -
100%	7	5	\$48 \$48	0	\$96 \$79	0	0	(\$48)	\$0 \$0
100%	1	6	\$48	0	\$79	0	0	(\$31)	\$0

Total Forced Outage Compensation \$2,280

END OF ENERGY STORAGE AGREEMENT

#### 2014 ES RFO Purchase and Sale Agreement (PSA) Term Sheet for Turnkey Projects

#### KEY COMMERCIAL TERMS OF PURCHASE AND SALE AGREEMENT FOR ENERGY STORAGE FACILITY

#### CONFIDENTIAL SUMMARY OF PRINCIPAL COMMERCIAL TERMS

This Key Commercial Terms of Purchase and Sale Agreement for an Energy Storage Facility (New Construction) ("**Term Sheet**") is the "Term Sheet" referred to in the Energy Storage Request for Offers Solicitation Protocol, dated \_\_\_\_\_, 2014 (the "**Protocol**"). All capitalized terms not defined herein shall have the meaning set forth in the Protocol.

Seller:	[Name of Respondent] ("Seller")
Buyer:	Pacific Gas and Electric Company ("PG&E")
Project:	[Participant should insert a description of the proposed new energy storage facility (the "Unit"), including descriptions and status of location and nature of real property interests (for facility, fee simple or long-term ground lease acceptable to PG&E for interconnection and transmission facilities, easements or rights-of-way acceptable to PG&E), technology, size in megawatts, location of point of interconnection within the California Independent System Operator Corporation ("CAISO") control area (the "Interconnection Point"), major equipment (by vendor and model) and other materials, equipment and assets, whether tangible or intangible (including water rights, land use and zoning approvals and applicable permits) to be sold and transferred to PG&E at the Closing (as defined below)] (collectively, the "Project").
Base Transaction:	The Seller will commit under an Energy Storage Purchase and Sale Agreement (" <b>PSA</b> ") to develop the Project (including obtaining all real property interests, permits and other authorizations and approvals required to construct and operate the Project), finance the Project, and cause the Project to be constructed, completed, tested and ready for placement into regular commercial operation by the Guaranteed Commercial Availability Date (as defined below) in accordance with the standards described below, all on a turnkey basis at its own risk and at no cost or expense to PG&E other than its payment of the Purchase Price (as defined below). Subject to the satisfaction of the conditions precedent to Closing, at the closing of the purchase and sale transaction contemplated hereby (the " <b>Closing</b> "), the Seller will sell, transfer, assign and deliver the Project to PG&E, and PG&E will purchase and accept the Project and pay to the Seller the initial component of the Purchase Price. Transfer of title to the Project and its components shall be affected by appropriate instruments, including a deed, bill of sale, and assignment agreements. At PG&E's election, in lieu of purchasing the various assets comprising the Project, it may purchase the entire ownership interest in a special-purpose entity owning the Project (the " <b>Project Company</b> "), and, if necessary, the Seller will be responsible for causing all such assets to be transferred to the Project Company prior to the Closing at no cost or expense to PG&E or the Project

Company. The date on which the Closing occurs shall be known as the "Closing Date."

> [PG&E is interested in discussing a contract structure that will best support PG&E's goal of purchasing a Project that meets PG&E's regulatory compliance and performance requirements while minimizing the aggregate initial and long-term cost to PG&E. While the fixed Purchase Price structure described in this Term Sheet will allow PG&E to meet its goal, PG&E recognizes that other pricing structures may also be appropriate. Accordingly, in addition to submitting an Offer using the fixed Purchase Price structure described above, Participants may include in their Offer an alternative pricing structure that, in their experience, would align the interests of the Participant with those of PG&E. Participants should describe proposed alternative structures in detail sufficient to allow PG&E to evaluate the costs and benefits of such structures and the efficacy of deviating from the fixed price structure PG&E strongly prefers that any proposed currently contemplated. alternative pricing structure include a deferred Purchase Price component.]

Operation and [To be developed further based on Project's technology type] Maintenance

Maintenance Agreement:

Project Design and Construction:

The Project will be a new, operational, fully permitted, turnkey energy storage facility that will comply with all applicable laws and permits, and all other requirements of the PSA, as well as have a design and planned economic life of not less than () years (the "Required Design"). The Seller shall enter into turnkey engineering, procurement and construction contract (the "EPC Contract") with a qualified and creditworthy contractor (the "EPC Contractor") acceptable to PG&E. PG&E shall have the right to review and approve the EPC Contract, and the EPC Contract shall at a minimum include terms and conditions at least as favorable to the Seller and PG&E as those set forth on Exhibit 1 hereto, including warranties regarding materials, workmanship and design of the entire Project (including major equipment) consistent with those set forth in "Seller's Extended Warranties" below. If at the time the PSA is executed the Seller has not yet entered into an EPC Contract, then the PSA shall include a detailed term sheet outlining the major terms and conditions of the EPC Contract.

The EPC Contract (or PSA, if the EPC Contract has not then been executed) shall also include a detailed Scope of Work/Technical Specification (the

"Specifications") for the Project that is consistent in form and substance with those customarily attached to EPC Contracts for facilities similar in size and technology to the Project. As between the Seller and PG&E, the Seller shall be responsible for the cost of any change orders that PG&E determines are necessary to ensure that the Project complies with the Specifications, the Required Design and the other requirements of the PSA.

- **PG&E Review and** PG&E will have inspection and approval rights acceptable to it that are **Approval Rights** customarily provided to owners under EPC Contracts; such rights shall include, but not be limited to: receipt of regular (at least monthly) construction reports, attendance at regular (at least monthly) progress meetings, the right to inspect the work (on-site and at equipment manufacturing facilities), the right to set hold points for design and construction, and the ability to review and approve significant design drawings, releases from hold points, all payment requests, all change orders, establishment of commissioning and start-up procedures (which should include component testing of major equipment), establishment of Performance Test criteria (which shall include, but not be limited to, applicable ASME Performance Test Codes), operating manuals, the conduct and results of all performance tests, and achievement of construction milestones (e.g., mechanical completion, substantial completion, final completion). PG&E would benefit from standard exculpatory language relieving it of obligations and liability with respect to any inspection, failure to inspect, approval or nonapproval of the work performed by the EPC Contractor or its vendors and subcontractors.
- **Project Financing:** The Seller shall be responsible for arranging and entering into any financing arrangements necessary to allow it to cause the Project to be developed, constructed, tested, completed and otherwise be ready for transfer to PG&E at the Closing. If the Project is to be financed on a limited recourse "project finance" basis, the Seller shall cause the terms of any such financing to provide that, at PG&E's election, it may in its sole discretion assume such financing at no cost. If PG&E does not elect to assume any such financing, any liens on the Project associated with such financing must be released prior to the Project's being transferred to PG&E at the Closing.

**Guarantees by the** The Seller shall provide the following guarantees:

Seller:

**Guaranteed Commercial Availability Date**: The Project shall be constructed, tested, completed and ready for transfer to the Seller, and all conditions precedent to Closing for which the Seller is responsible shall be satisfied, by not later than **[insert date]**.

Guaranteed Electrical Output: The Project shall produce average net electrical output (as measured at the Interconnection Point) during the Performance Test of not less than \_\_\_\_\_ kW at 100% output for a period of \_\_\_\_ minutes and then after \_\_\_ minutes of energy storage time, produce average net electrical output (as measured at the Interconnection Point) during the Performance Test of not less than \_\_\_\_\_ kW at 100% output for a period of \_\_\_\_ minutes [To be further developed based on Project's technology type]

**Guaranteed Efficiency**: The Project shall have a guaranteed measure for the ratio of the Delivered Discharge Energy to Delivered Charging

Energy of the Units, and is exclusive of Station Use. [To be further developed based on Project's technology type]

For purposes of this Term Sheet the following terms shall be defined as follows:

"Delivered Charging Energy" means all energy charged by a given Unit as measured in MWh at the CAISO revenue meter of a given Unit based on a power factor of precisely one (1) and net of all Electrical Losses. For the avoidance of doubt, Delivered Charging Energy does not include Delivered Discharge Energy.

"Delivered Discharge Energy" means all Energy discharged from a given Unit as measured in MWh at the CAISO revenue meter of a given Unit based on a power factor of precisely one (1) and net of all Electrical Losses. For the avoidance of doubt, Delivered Discharge Energy does not include Delivered Charging Energy.

"Distribution Loss Factor" means a multiplier factor that reduces the amount of Energy produced by a Project connecting to a distribution system to account for the electrical distribution losses, including those related to distribution and transformation, occurring between the point of interconnection, where the Participating Transmission Owner's meter is physically located, and the first Point of Interconnection, as defined in the CAISO Tariff, with the CAISO grid..

"Electrical Losses" means all applicable losses, including any transmission or transformation losses or the Distribution Loss Factor, if applicable, between the CAISO revenue meter and the specified point of interconnection between the Project and the CAISO grid, but only to the extent the CAISO revenue meter is not already adjusted to reflect such losses.

"Station Use" means the electrical load of the Project's auxiliary equipment that is necessary for operation of the Unit(s), to be specified by the Parties. The auxiliary equipment includes, but is not limited, to forced and induced draft fans, air conditioner systems, heating systems, cooling towers, plant lighting and control systems.

**Guaranteed Reliability:** The Project shall have a Guaranteed Reliability that demonstrates the performance of all Project attributes including but not limited to the full range of charging and discharging capabilities, including ramp rates over a period of \_\_\_\_\_ hours; and other products such as spinning reserves, non-spinning reserves, regulation up, regulation down, voltage control, etc. [To be further developed based on Project's technology type]

# [PERFORMANCE GUARANTEES WILL BE IDENTIFIED AS APPROPRIATE FOR SELECTED TECHNOLOGY]:

Guaranteed Emissions Limits: The emissions of the Project shall not exceed [identify any applicable emissions (including noise) and limits], and shall in

any event comply with all applicable laws and permits. [To be developed further based on Project's technology type.]

Liquidated Damages/ Termination Payment: Subject to force majeure delays not to exceed one hundred eighty (180) days in the aggregate, for each day (or part thereof) that the Closing is delayed beyond the Guaranteed Commercial Availability Date, the Seller shall pay to PG&E liquidated damages equal to (i) the result of (a) Guaranteed Electrical Output multiplied by (b) per MWh price of the output divided by (ii) 120 ("Delay Damages"). Such payment amount shall be supported by Security Deposit for the "Development" period, to be provided by Seller, as set forth in the Protocol.

In addition to receiving Delay Damages, if the Closing is delayed beyond the date that is no more than [one hundred eight (180)] days after the Guaranteed Commercial Availability Date (the "**Date Certain**"), PG&E may elect to terminate the PSA without liability or further obligation of any kind on the part of PG&E, and the Seller shall pay a termination payment to be mutually agreed upon prior to execution of the PSA (the "**Termination Payment**"). Such Termination Payment shall be calculated by PG&E in a commercially reasonable manner and calculated as of the date of the termination of the PSA

Purchase Price<br/>Reductions for<br/>Failure to Achieve<br/>Guarantees:For each kW by which average net electrical output during the Performance<br/>Test is less than the Guaranteed Electrical Output, the Purchase Price will be<br/>reduced by \$\_\_\_\_\_ [To be determined based upon proposed Commercial<br/>Availability Date and technology and product type.][OTHER PURCHASE PRICE REDUCTION PROVISIONS WILL BE<br/>IDENTIFIED AS APPROPRIATE BASED ON GUARANTEED<br/>PERFORMANCE VALUES]:

Minimum Performance Guarantees (Acceptance Criteria): If the following minimum performance criteria (the "Minimum Performance Guarantees") are not achieved during a single Performance Test (or, in the case of the Minimum Reliability, during the Reliability Test) prior to the Date Certain, PG&E shall have no obligation to purchase the Project and pay the Purchase Price, and the PG&E may terminate the PSA without liability or further obligation of any kind on the part of PG&E, and collect liquidated damages [in an amount to be determined based on the Project's technology type and estimated output] for Seller's failure to provide the Project:

Minimum Electrical Output: [To be further developed based on Project's technology type.]

Minimum Efficiency: [To be further developed based on Project's technology type.]

Minimum Reliability: [To be determined based on Project's technology type]

[OTHER MINIMUM PERFORMANCE CRITERIA WILL BE IDENTIFIED AS APPROPRIATE BASED ON GUARANTEED PERFORMANCE VALUES:

Minimum Emissions: [Must satisfy Guaranteed Emissions Limits, as applicable, and identify any applicable emissions (including noise) and

#### limits]

Release of Deferred Portion of Purchase Price:

Seller's Extended

Warranties:

# For the Seller to receive the deferred portion of the Purchase Price, the Project must achieve [STANDARDS/TESTS TO BE DETERMINED AS APPLICABLE FOR PROJECT'S TECHNOLOGY]

The Seller shall provide at least the following warranties (collectively, the "**Extended Warranties**") with respect to the Project commencing on the Closing Date:

General Warranty: All materials, equipment and systems incorporated into the Project shall be free of defects and deficiencies in materials, assembly and workmanship, new, unused and undamaged when installed, in compliance with the requirements of the PSA and the EPC Contract, suitable for use under the climatic and normal operating conditions extant at the site of the Project, and otherwise consistent with and in compliance with the Required Design. The construction, procurement and installation services included in the Project shall be performed with the Seller's and the EPC Contractor's best skill and judgment, in a good and workmanlike manner, in compliance with the requirements of the PSA and the EPC Contract, and shall otherwise be consistent with and in compliance with the Required Design. The completed Project shall perform its intended functions as a complete, integrated operating system as explicitly described and as can be reasonably inferred from the Contract. If PG&E notifies the Seller in writing during the General Warranty Period (as defined below), or no later than thirty (30) days after the expiration of the General Warranty Period, that a breach of the foregoing warranty has occurred during the General Warranty Period, the Seller shall correct (or cause to be corrected) the defects and deficiencies promptly at no cost to PG&E. The Seller's obligation to correct defects and deficiencies shall include labor, parts, transportation, factory repair and testing, dismantling, re-erecting, re-testing and commissioning. The "General Warranty Period" shall be one (1) year from the Closing Date, and if a component of the Project is altered, repaired or replaced pursuant to this warranty, one (1) year from the date of each such alteration, repair or replacement, as the case may be, regardless of number. The terms "defects" and deficiencies" shall not include damage arising from PG&E's misuse or negligence, acts of God or normal wear and tear.

**Design Warranty**: The design and engineering of the Project shall be performed in accordance with the standard of care, skill and diligence as would be provided by an engineering firm experienced in supplying similar services nationally in the United States of America to entities owning projects of technology, complexity and size similar to that of the Project, and otherwise in compliance with the Required Design. If PG&E notifies the Seller in writing during the Design Warranty Period (as defined below), or no later than thirty (30) days after expiration of the Design Warranty Period, that a breach of the design warranty has occurred within two (2) years after the Closing Date (the "**Design Warranty Period**"), the Seller promptly shall investigate and determine the source of the deficiency or defect, promptly correct or cause to be corrected final as-built drawings, if applicable, and promptly replace or cause to be replaced all equipment and materials associated with the defective design

and re-perform all other work necessary to cure the breach of the design warranty, all at no cost to PG&E.

The Seller shall enforce all corresponding warranties provided by the EPC Contractor and equipment vendors, and if the Seller fails to do so, PG&E shall have the right to enforce such warranties directly against the EPC Contractor and equipment vendors.

At PG&E's election, the Seller shall arrange for (or enter into and assign to PG&E at the Closing) long-term service agreements with respect to major Project equipment on terms acceptable to PG&E.

- **Warranty Guarantee:** In addition to the above-listed warranties, Seller shall enter into a longterm service agreement under which Seller performs or causes a third party to maintain, repair, or replace the storage equipment in a manner that guarantees the minimum performance requirements under the Agreement or Seller shall provide sufficient collateral to provide such guarantee.
- **Fuel Supply, if applicable:** As part of the Project the Seller shall be responsible for making any arrangements required to supply the Project with fuel in quantities sufficient to allow the Project to operate at its maximum design capacity, including payment of costs of any necessary interconnection facilities and system upgrades. If applicable this provision is applicable, prior to PG&E's purchase of the Project, the Seller will be responsible for arranging and paying for the supply and transportation to the Project of any fuel required by the Project, including fuel for the commissioning, start-up and testing of the Project. The Seller must also be able to demonstrate its financial ability to provide credit support to mitigate the fuel supply risk. Buyer will evaluate Seller's credit ability on a case by case basis.
- Interconnection The Seller shall be responsible for entering into, and paying all costs due under, **Facilities:** interconnection agreements that may be required to interconnect the Project and deliver electricity to PG&E's system at the Interconnection Point, including costs of any required interconnection facilities and system upgrades payable under each interconnecting utility's tariffs. [SELLERS SHOULD NOTE THAT THEY MAY BE ENTITLED TO RECEIVE A CASH EQUIVALENT REFUND OF THE COST OF NETWORK UPGRADES THEY FUND, WITH **APPLICABLE** INTEREST. THEN-CURRENT **TARIFFS** AND AGREEMENTS. SUCH REFUND WOULD NOT BE PAYABLE BY PG&E IN ITS CAPACITY AS PURCHASER UNDER THE PSA, BUT ONLY IN ITS CAPACITY AS AN INTERCONNECTING UTILITY.]

Seller's	The Seller would make customary representations and warranties for similar
Representations and Warranties:	asset acquisition transactions.
Seller's Covenants:	The Seller would make customary affirmative and negative covenants for

Conditions Precedent<br/>to Closing:PG&E's obligation to purchase the Project and pay the Purchase Price at the<br/>Closing shall be subject to the Seller's satisfaction of conditions precedent by<br/>not later than the Date Certain, including but not limited to the following:

- 1. Completion of construction of the Project in accordance with the Specifications, the Required Design, the requirements of the PSA, and the EPC Contract (other than minor punch list items acceptable to PG&E that do not affect the performance or reliability of the Project and for which arrangements satisfactory to PG&E are in place that will correct such items), and completion of all related and ancillary facilities required to allow the Project to operate commercially, including electrical and fuel interconnections for which the Seller is responsible, all in accordance with the PSA.
- 2. Completion of a Performance Test (or, solely, with respect to the demonstration of Minimum Electrical Output, Minimum Efficiency, Minimum Reliability, and Minimum Emissions) in which the Minimum Performance Guarantees are achieved.
- 3. Delivery to PG&E of an as-built survey of the Project site and as-built drawings for the Project, completed operating manuals for the Project and its major components, and recommended operating and maintenance procedures.
- 4. Assignment to PG&E of all warranties provided by the EPC Contractor and equipment vendors (but the Seller will retain the right to enforce such warranties directly during the period the Seller's corresponding warranties remain in effect).
- 5. Completion of a program in which employees of PG&E are trained by the Seller (or its qualified designee) in the operation and recommended maintenance of the Project.
- 6. The absence of any condition that would render the Project incapable of being operated as an integrated whole to store and produce energy and other electrical products consistent with the Project's approved design.
- 7. Receipt of all permits and other regulatory approvals required for operation of the Project, and receipt of all approvals necessary for the transfer of same and the Project Company, if applicable, to PG&E.
- 8. Receipt of all consents and approvals required for the Seller's sale and transfer to PG&E of the Project and the Project Company, if applicable.
- 9. Assets to be transferred to PG&E shall be free and clear of all liens and encumbrances, other than immaterial liens arising in the ordinary course of business that are satisfactory to PG&E in its sole discretion.
- 10. Absence of lawsuits or administrative proceedings (pending or threatened) (a) to restrain or prohibit, or to obtain damages or other relief in connection with, the PSA or any rights, assets or contracts to be transferred to PG&E under the PSA, or the consummation of the transactions contemplated by the PSA or any contracts to be transferred to PG&E under the PSA, or (b) that, if successful, could result in a material adverse effect on PG&E, the Facility or PG&E's ability to operate the Facility as contemplated.
- 11. Accuracy of the Seller's representations and warranties in the PSA.
- 12. Absence of any breach by the Seller of its covenants and agreements in the PSA.
- 13. Payment in full by the Seller of any Delay Damages.

- Indemnities: Each of the Seller and PG&E would provide customary indemnities regarding its breach of representations, warranties and covenants made in the PSA. In addition, the Seller would indemnify PG&E against claims and liabilities relating to the Project and the Seller for periods prior to and including the Closing Date (including, without limitation, indemnities with respect to potential public health and safety, environmental and remediation liabilities, tax liabilities, claims by third parties in respect of contract, tort and other liabilities, and liabilities arising under the Seller's agreements with the parties providing debt or equity financing for the Project). Seller shall further indemnify PG&E for all penalties assessed against PG&E by the CPUC to the extent that PG&E has included capacity from the Project towards any of its CPUC regulated compliance mandates to the extent caused by Seller's failure to deliver achieve the Guaranteed Commercial Availability Date, unless such failure is caused by Force Majeure, or PG&E's breach or default under the PSA.
- **Decommissioning:** Seller shall be solely responsible for the decommissioning of the Project, unless Buyer, at its sole option, elects to assume the cost and risk of such decommissioning upon prior notice to Seller. Regardless of which Party assumes the decommissioning risk, Seller shall provide a cost estimate and plan for the disposition of all equipment and environmental remediation for the Project
- **Taxes:**As between the Seller and PG&E, the Seller shall be responsible for payment of<br/>any sales and transfer taxes applicable to sale of the Project to PG&E.
- **Effectiveness of PSA:** The obligations of the Seller and PG&E under the PSA shall be subject to PG&E's receipt of approval from the CPUC, which approval must include among other findings, that PG&E's entry into the PSA, is reasonable and that the capacity meets the requirements for PG&E's energy storage obligations. The CPUC's approval, which will be defined in the PSA, must be satisfactory to PG&E in its sole discretion.
- **Default and Termination:** The PSA shall contain customary provisions regarding events of default and rights to terminate following uncured events of default. Defaults shall include delays in achieving critical Project milestones (e.g., commencement of physical construction, completion of foundation work, commencement of installation of key equipment, mechanical completion, and substantial completion). If the PSA is terminated prior to the Closing due to the Seller's default, the Seller shall pay to PG&E as liquidated damages an amount equal to the Termination Payment, as provided in "Liquidated Damages/ Termination Payment/ Purchase Price."
- Credit Support: The Seller's obligations to pay Delay Damages under the PSA shall be supported by a Security Deposit in the form of cash or a letter of credit in an amount equal to the sum of the aggregate amount of Delay Damages Seller could be obligated to pay, as provided in the "Liquidated Damages/Termination Payment" provision above. (See Section \_\_\_\_\_. of the Protocol). Such letter of credit must be from an issuer and in an amount satisfying the requirements set forth in Section \_\_\_\_\_\_ of the Protocol. Seller's other obligations under the PSA, including its obligations with respect to Extended Warranties, shall be supported by a letter of credit, as described in the preceding sentence, or cash.

Dispute Resolution:	All disputes that cannot be resolved after referral to senior management of the Seller and PG&E shall be resolved by mediation or arbitration. If arbitration is used, the resolution shall be determined exclusively through "baseball-style" arbitration conducted in San Francisco, California under the rules of the American Arbitration Association before a panel of three (3) arbitrators.
Governing Law:	California
Effect of Term Sheet; Non-Inclusive; Definitive Agreement	This Term Sheet does not contain all matters upon which agreement must be reached in order for the purchase and sale transaction contemplated hereby (the " <b>Transaction</b> ") to be completed. A binding commitment from PG&E with respect to the Transaction can only result from the execution and delivery of a mutually satisfactory PSA.

#### **CERTAIN KEY COMMERCIAL TERMS OF EPC CONTRACT**

Scope of Work: The work to be performed by Contractor (the "Work") will include, on a lump-sum, fixed-price, "turn-key basis," any and all work and services required or appropriate in connection with the design, engineering, procurement, construction, commissioning, start-up, demonstration, testing and completion of the Project, as well as the provision of all materials, equipment. machinery. tools. labor. supervision. transportation. administration, training and other services and items required to complete and deliver to Seller, and allow Seller or PG&E to commence operation of, the Project, fully tested, integrated and operational, designed and constructed to comply with Prudent Utility Standards, and any additional safety standards required by PG&E and to have a useful economic life of not less than years], and complying fully with all applicable laws, permits, codes and standards, and the requirements of the Power Purchase and Sale Agreement (the "PSA") to be entered into between Seller and PG&E (the "Standard of Care"). As part of the scope of Work, Contractor shall, among other things to be specifically set forth in the definitive Contract:

- 1. Provide detailed design engineering of the Project, including equipment specifications, all required civil works and Project structures, drawings, schedules, and coordination of engineering efforts of subcontractors;
- 2. Procure all materials and equipment to be incorporated in the Project;
- 3. Procure all subcontracts required to construct, start-up, and test the Project;
- 4. Provide handling of material, equipment and construction equipment, including, as necessary, inspection, expediting, shipping, unloading, receiving and customs clearance, transportation to and storage at the Project site (the "<u>Site</u>");
- 5. Ensure that all equipment, material, and articles and operating and safety control systems incorporated into the Project are new, unless otherwise agreed to by Seller, PG&E and Contractor;
- 6. Provide all labor and personnel required to construct, startup, and test the Project in accordance with Seller- and PG&E-approved test procedures;
- 7. Have full responsibility for care, custody and control and risk of loss of Project until Substantial Completion;
- 8. Provide Site security until Final Completion.

A complete scope of Work will be developed and attached to the definitive Contract, subject to Seller's and PG&E's approval. All Work shall be carried out in accordance with the requirements defined in the technical specifications developed and attached to the definitive Contract (the "<u>Technical Specifications</u>"). For the purposes hereof, "turn-key basis" shall be understood by the parties to mean that Contractor shall be obligated to perform all tasks required or contemplated by the scope of Work to deliver to Seller a completed and fully operational Project, including any and all work that is expressed or can be reasonably inferred from the Contract and/or necessary to complete the Project, including any and all testing through Project Completion, all in accordance with the Standard of Care.

- Price:
   A firm, fixed-price, lump sum equal to \$[\_\_\_\_] (the "Contract Amount"). Except as provided above, the Contract Amount is not subject to adjustment for any reason other than pursuant to a Scope Change authorized by Seller and approved by PG&E.
- **Definitions of Certain Milestones:** "<u>Mechanical Completion</u>" shall occur when: (i) the Project has been substantially completed; (ii) Contractor has completed initial start-up of each major system in the Project; (iii) Contractor is ready to commence (x) start-up and commissioning of the Project as an integrated whole and (y) the Performance Tests; (iv) Contractor has provided and each of Seller and PG&E has accepted the operating manuals for the Project (described in "Documentation" below), and (v) Contractor has provided its punch list to Seller and PG&E.

"Substantial Completion" shall occur when: (i) Mechanical Completion shall have occurred and the conditions thereto remain satisfied; (ii) Contractor has completed all Work (other than minor punch list items); (iii) Contractor has successfully concluded a single performance test in which all Performance Guarantees (as defined below) have been achieved (or, if the failure to achieve Performance Guarantees may be remedied by the payment of liquidated damages as set forth below, the Contractor has paid such liquidated damages); (iv) the Project is properly interconnected and synchronized with the grid; (v) the Project is capable of fully satisfying the requirements of the PSA; (vi) the Project is free from defects and all quality assurance issues have been resolved to Seller's and PG&E's satisfaction; (vii) the Project complies with all applicable laws and standards; and (viii) Contractor has provided and each of Seller and PG&E has accepted final as-built drawings required under the PSA.

"<u>Final Completion</u>" shall occur when: (i) Substantial Completion shall have occurred and the Project has been fully commissioned; (ii) Seller and PG&E agree that Substantial Completion has occurred and the conditions thereto remain satisfied; and (iii) all Work has been completed, including all punch list items.

Milestone Guarantees: Contractor will guarantee that:

 Mechanical Completion shall occur not later than the date that is [\_\_] months after the date on which construction of the Project commences (the "<u>Commencement Date</u>") (subject to adjustment for force majeure);

- 2. Substantial Completion shall occur not later than the date that is [\_\_] months after the Commencement Date (subject to adjustment for force majeure) (the "Substantial Completion Deadline"); and
- 3. Final Completion must occur within \_\_\_\_\_ days after Substantial Completion (subject to adjustment for force majeure) (the "<u>Project Completion Deadline</u>").

If Substantial Completion has not occurred by the Substantial Completion Deadline, Contractor shall pay to Seller as a rebate  $[____]$  for each day (or part thereof) of delay ("<u>Delay Damages</u>"), and if Final Completion has not occurred by the Project Completion Deadline, Contractor shall pay to Seller (or to PG&E if PG&E shall have purchased the Project after Substantial Completion) as a rebate  $[___]$  for each day (or part thereof) of delay.

**Performance Tests:** [STANDARDS/TESTS TO BE FURTHER DETERMINED AS APPLICABLE FOR PROJECT'S TECHNOLOGY] Performance tests (the ("<u>Performance Tests</u>") shall include guaranteed net electrical output, Reliability, Efficiency, and Emissions]. Specific Performance Test criteria (which shall include, but not be limited to, applicable ASME Overall Plant Performance requirements and applicable Performance Test Codes for major equipment) and procedures shall be developed by Contractor and approved by Seller and PG&E. The Performance Tests and Reliability Tests shall be observed and the results approved by Seller and PG&E and their respective engineering consultants.

Performance[STANDARDS/TESTS TO BE FURTHER DETERMINED ASGuarantees:APPLICABLE FOR PROJECT'S TECHNOLOGY] Seller guarantees that<br/>the Project shall achieve the following during a single Performance Test (or,<br/>solely in the case of the Reliability Guarantee, during a single Reliability<br/>Test):

Guaranteed Electrical Output - The Project shall produce average net electrical output (as measured at the Interconnection Point) during the Performance Test of not less than \_\_\_\_\_\_ kW at 100% output for a period of \_\_\_\_\_ minutes and then after \_\_\_\_\_ minutes of energy storage time, produce average net electrical output (as measured at the Interconnection Point) during the Performance Test of not less than \_\_\_\_\_\_ kW at 100% output for a period of \_\_\_\_\_ minutes. [To be further developed based on technology type]

**Guaranteed Efficiency**: The Project shall have a guaranteed measure for the ratio of the Delivered Discharge Energy to Delivered Charging Energy of the Units, and is exclusive of Station Use. **[To be further developed based on Project's technology type]** 

**Guaranteed Reliability:** The Project shall have a Guaranteed Reliability that demonstrates the performance of all Project attributes including but not limited to the full range of charging and discharging capabilities, including ramp rates over a period of \_\_\_\_ hours; and other products such as spinning reserves, non-spinning reserves, regulation up, regulation down, voltage control, etc. **[To be further developed based on Project's technology type]** 

<u>Guaranteed Emissions Limits</u> ("<u>Guaranteed Emissions Limits</u>") - The emissions of the Project shall not exceed [identify applicable emissions (including noise) and limits], and shall in any event comply with all applicable laws and permits. This is an absolute guarantee and cannot be remedied by the payment of liquidated damages. [To be determined based on Project's technology type.]

## [INCLUDE OTHER PERFORMANCE GUARANTEES AS APPROPRIATE FOR SELECTED TECHNOLOGY]

Warranties: Contractor shall provide a general warranty (the "<u>General Warranty</u>") encompassing the following:

- 1. an "Equipment Warranty" that all materials, equipment and systems provided as part of the Work shall be: free of defects in materials, assembly and workmanship; new, unused and undamaged when installed; in compliance with the applicable laws and standards; suitable for use under the climatic and normal operating conditions; and otherwise in compliance with the standards of performance contained in the Contract; and
- 2. a "Workmanship Warranty" that construction, procurement and installation services shall be performed with Contractor's best skill and judgment, in a good and workmanlike manner; in compliance with the applicable laws and standards, and otherwise in compliance with the standards of performance contained in the Contract. The completed Project shall perform its intended functions as a complete, integrated operating system and fully in accordance with the Technical Specifications.

The General Warranty shall remain in effect for at least 12 months from Substantial Completion or, if any warranty work is performed on a particular item during the warranty period, for at least 12 months thereafter; this is an "evergreen" warranty in that the warranty shall remain in effect until an item repaired or replaced under the warranty is free from defects or deficiencies for at least 12 consecutive months. If by not later than 30 days after the General Warranty period Seller notifies Contractor that a breach of the General Warranty has occurred within the General Warranty Period, Contractor shall, at its own cost and expense correct the defect.

Contractor also shall provide a design warranty (the "<u>Design Warranty</u>") to the effect that: (i) the design and engineering of the Project shall be performed in accordance with the standard of care, skill and diligence as would be provided by an engineering firm experienced in supplying similar services and in compliance with the standards of performance contained in the Contract; the completed Project will comply with the requirements of the Contract and the PSA, and with applicable laws and standards; and the final as-built drawings will be accurate and complete. The Design Warranty shall be in effect for a period of at least 24 months from Final Completion, and if notified of a deficiency no later than 30 days after the expiration of such period, Contractor shall promptly correct any design defect and repair, replace or re-perform all Work affected by the deficient design. The Contractor shall also procure standard warranties from suppliers or major equipment, which warranties shall be assigned to Seller following the General Warranty Period.

Contractor's warranties in favor of the Seller shall be freely assignable to PG&E.

- Scope Changes: Changes in the scope of Work, the Contract Amount, the payment schedule, the Project schedule, and the guaranteed Substantial Completion date may be made only by a scope change order approved by Seller and PG&E. Contractor shall not be entitled to any scope change order except as a result of force majeure; change in law imposing requirements more stringent than those in effect when the Contract was executed; and discovery of pre-existing hazardous materials at the Site.
- **Inspection Rights:** Seller, PG&E and its respective authorized representatives shall have the right to inspect the Work and the Site at any reasonable time, subject in all cases to Contractor's reasonable safety precautions. Such inspection of any part of the Work shall in no way relieve Contractor of its obligations to perform the Work in accordance with the Contract or impose any obligation or liability on Seller, PG&E or its representatives.
- **Intellectual Property Rights:** Contractor shall possess (or shall have the right to use) all patents, trademarks, service marks, trade names, and copyrights, and rights with respect to the foregoing, necessary to complete the Work. Contractor shall agree to indemnify, hold harmless and defend Seller from any claim or liability that may arise as a result of Contractor's failure to possess (or have the right to use) any such patents, trademarks, service marks, trade names, and copyrights, and rights with respect to the foregoing, necessary to complete the Work and allow the Project to be operated for its intended purpose.
- **Risk of Loss:** Care, custody and control of and risk of loss with respect to the Project shall remain with Contractor until Substantial Completion.
- Assignment: The Contract may not be assigned without approval by other party, except as required for financing. Seller's rights and obligations under the Contract may also be assigned to PG&E subject only to its agreeing to fulfill any then-outstanding obligations of Seller.
- PerformanceContractor's performance shall be secured by a guaranty of a creditworthy<br/>parent entity or other security acceptable to Seller and PG&E.

**Detailed Term Sheet** 

Counterparty and	
Project Name	
Agroomont Typo	
Agreement Type Delivery Term	
-	For Offer Variant A please select:   Energy Only   Full Capacity Deliverability
Capacity or Energy Only	For all other offer variants please specify capacity type (i.e. Variant $B = FCDS$ )
Commercial	
Operation Date	
Product	
FIGURE	
Price	
e.g. \$/kW-yr,	
\$/MWh	
Project Location/	
Delivery Point	
Force Majeure	
("FM") and FM	
Termination	
Provisions	
Guaranteed	
Milestones and	
other Key Limits	
Scheduling	
Coordinator	
Events of Default	
Delay Damages Termination	
Payment	
Calculation	
Project	
Development	
Security	
Delivery Term	
Security	

#### PG&E

#### Appendix H

#### 2014 ES RFO

**Detailed Term Sheet** 

Conditions	
Precedent	
Arbitration	
Representations	
and Warranties,	
Covenants	
Other Terms and	
Conditions:	

#### ES RFO

#### **Additional Project Information**

#### **Project Name:**

#### Additional Information Requested for Shortlisted Projects Only

- 1. Permitting Please update the table provided in Appendix B: *Table of Permits and Discretionary Approvals Required from Local, State, Federal, and/or Tribal Authorities for the Project and any Interconnection Upgrades.* List and describe any additional permits needed for the Project.
- Environmental Impacts Please update the table provided in Appendix B: *Table of Environmental Documentation, Impacts, and Mitigation*. List and describe any new studies undertaken and their results. Provide detailed summaries of Environmental Impacts and Impact Minimization/Mitigation measures.
- 3. Biological Resources (Wind Projects) For wind projects, provide a list and description of how the Project has contemplated or demonstrated conformance with the following, if applicable:
  - a. California Guidelines for Reducing Impact to Birds and Bats from Wind Energy Development (2007, California Energy Commission and California Department of Fish and Game), available at http://www.energy.ca.gov/windguidelines/
  - b. Final Voluntary Land-Based Wind Energy Guidelines (2012, United States Fish and Wildlife Service), available at http://www.fws.gov/windenergy/.
- 4. Water Quality and Supply Please provide the following information.
  - a. Describe all feasible measures to minimize water consumption.
  - b. Describe measures to minimize impacts of waste water discharge.
  - c. Describe any proposed water usage mitigation plan (that details water reuse, recycling, reduction of water use, or use of alternate/ new technologies).
  - d. Is the Project located in a water scarce area?
  - e. If the project is wet-cooled, describe the water quality compared to the CEC standards for wet cooling.
- 5. Land Use/Agriculture Please provide the following information.
  - a. For projects sited on designated agricultural land (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, or Grazing Land) and/or under Williamson Act Contract, indicate: 1) the process and status of cancellation/nullification of the Williamson Act Contract and 2) any proposed mitigation for the conversion or loss of farmland.
  - b. Is the Project or Gen-Tie located in proximity to environmentally sensitive and/or protected areas (such as critical habitat, Areas of Critical Environmental Concern,

#### ES RFO

PG&E

Desert Wildlife Management Areas, wilderness areas, proposed wilderness areas, proposed monument areas, wildlife corridors, etc.)?

- c. Is the Participant aware of any other development plans in the vicinity of the Project site?
- 6. Site Control Please provide the following information.
  - a. Provide documentation of all claims for site control listed in Appendix B, including direct ownership, leases, or options to own or lease the site, and of any easements or rights-of-way obtained for the Project.
  - b. For projects affecting multiple parcels, provide a map showing affected parcels, fee owner of each parcel, and status of site control for each parcel.
  - c. If the project is on Bureau of Land Management (BLM) land:
    - i. Identify the type of Right-of-Way (ROW) Grant obtained from the BLM,
    - ii. If not obtained, the stage of the ROW process the Project is in, and provide any supporting documentation (such as application or ROW Grant).