

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

ENERGY DIVISION

RESOLUTION E-4956

October 25, 2018

**REDACTED RESOLUTION**

Resolution E-4956: Approves, with modifications Pacific Gas and Electric Company (PG&E) Distributed Energy Resource (DER) Procurement for the IDER Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot) Pursuant to Resolution E-4889 and D.16-12-036.

PROPOSED OUTCOME:

- This Resolution approves with modifications PG&E's AL 5096-E/5096-E-A.
- Approves PG&E's request to procure a distributed energy resource (DER) solution for the IDER Incentive Pilot Candidate Project at the Gonzales Substation (Gonzales, CA) described herein.
- Resolves and clarifies services adopted in Resolution (Res.) E-4889 that may qualify as incremental resources.
- Clarifies concepts adopted in Res. E-4889 that apply to PG&E's AL 5096-E/5096-E-A.

SAFETY CONSIDERATIONS:

- PG&E proposes contingency plans in the event a DER solution fails to meet the need identified by the Utility.

ESTIMATED COST: Unknown at this time.

By PG&E AL 5096-E filed on June 16, 2017 and compliance supplemental AL 5096-E-A filed on May 1, 2018.

**SUMMARY**

This Resolution approves with modifications PG&E's AL requesting Commission approval to procure a DER solution for the IDER Incentive Pilot Candidate Project at the Gonzales Substation.

This Resolution also clarifies concepts adopted in Res. E-4889 needed to achieve the principles of Decision (D.) 16-12-036 that the solicitation is technology neutral.

## **BACKGROUND**

On October 2014, the Commission established Rulemaking (R.) 14-10-003 to consider developing and adopting a regulatory framework that provides consistent policy direction for demand-side resource programs. The Assigned Commissioner and Administrative Law Judge issued three scoping memos due to the complexity of the issues in the proceeding and after conducting several workshops, the Commission in D.15-09-022 expanded the scope to focus on the integration of DERs in a holistic way and conjoin the proceeding with the Distribution Resource Plan (DRP) proceeding (R.14-08-013) in implementation of Assembly Bill (AB) 327 (Perea, 2013).<sup>1</sup>

On March 24, 2016, the Commission issued a ruling establishing the Competitive Solicitation Framework working group (working group) tasked with developing a framework to procure DERs to meet distribution grid needs in areas identified in the DRP proceeding. On August 1, 2016, the working group filed its final report with recommendations for the Competitive Solicitation Framework.

On December 22, 2016, the Commission issued D. 16-12-036 adopting the consensus working group's recommendations from the final report (report). The decision also approved a pilot incentive mechanism structured as a four percent pre-tax regulatory incentive. To test the Competitive Solicitation Framework, the decision required the Utilities to each identify one project where the deployment of DERs on the system would displace or defer the need for capital investments on traditional distribution infrastructure. To test the incentive mechanism, the Utilities are encouraged to select up to three additional projects.

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<sup>1</sup> Public Utilities Code Section 769.

D.16-12-036 identified steps for the completion of the pilot and directed the Utilities to file a Tier 3 Advice Letter requesting Commission approval to procure a DER solution for the candidate project(s) they selected for the pilot.

On June 16, 2017 PG&E filed AL 5096-E requesting approval to launch its IDER pilot solicitation. In this filing, PG&E selected one deferral project, the Santa Rosa (Rincon Substation) Project for the pilot.

On November 9, 2017, the Office of Ratepayer Advocates (ORA) filed a petition for modification (PTM) of D.16-12-036 requesting the Commission revise the decision to require PG&E, San Diego Gas & Electric Company (SDG&E), and Southern California Edison (SCE) (jointly, the Utilities) to use or apply general rate case budgets to fund the pilot.

On June 22, 2018, the Commission issued D.18-06-010, granting in part ORA's PTM to prevent double recovery of both a previously authorized capital project and a DER project through D.16-12-036. It required that utility spending for D.16-12-036 DER pilot projects be recovered through previously authorized distribution capital project spending from the utility's general rate case.

On December 19, 2017, the Commission issued Res. E-4889, approving SCE and SDG&E's ALs and concepts that also apply to PG&E's AL. It directed SCE and SDG&E to file compliance supplemental ALs no later than seven (7) days from the date the resolution was adopted and PG&E to file its compliance supplemental AL on May 1, 2018.<sup>2</sup>

#### **Advice Letter (AL) 5096-E/5096-E-A**

On October 17, 2017 PG&E requested a delay in consideration of the Rincon Substation project due to the Santa Rosa fire that affected the location of the project selected.

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<sup>2</sup> PG&E requested an extension to file its supplemental compliance filing to AL 5096-E to May 1, 2018 due to the severe damage caused by the recent fires in the Santa Rosa area. While Res. E-4889 resolved many technical and policy issues that also applied to PG&E's AL 5096-E, issues specific to PG&E are addressed separately, in this resolution.

On December 19, 2017 the Commission issued Res. E-4889, approving PG&E's request and directed PG&E to file its compliance supplemental AL on May 1, 2018. Res. E-4889 also directed PG&E to provide a detailed explanation of its decision to cancel the Rincon Substation project, a full report on learnings and insights on the project preceding its cancellations; and a proposal to solicit, evaluate, and implement Distributed Energy Resource (DER) distribution deferral solutions at appropriate locations in accordance with D. 16-12-036.<sup>3</sup>

On May 1, 2018, PG&E filed its compliance supplemental AL and identified an alternate location for the IDER pilot, the Gonzales Substation project. PG&E also indicated that it is studying the feasibility of at least one additional project for resiliency (microgrid) services. PG&E states that it is currently analyzing possible project locations, assessing the potential for DERs to provide a cost-effective solution, and will submit a separate advice letter within 180 days from the May 1, 2018 filing if it finds a viable project.<sup>4</sup>

In response to Commission direction in Res. E-4889, PG&E addresses the following:

*Decision to Cancel Distribution Deferral Opportunity at Rincon Substation*

In October 2017, PG&E requested an extension to file their supplemental compliance filing to May 1, 2018 because the Rincon Substation Project, located in the Santa Rosa burn zone, required testing and assessment of possible internal damage. After its study, PG&E determined that there was no material damage to the Rincon Substation. However, PG&E also observed that approximately 70 structures served by the Rincon Substation experienced property damage or destruction which resulted to approximately 1 MW of load reduction.

In their 2017 distribution planning study, completed in January 2018, PG&E noted that due to unusually hot conditions in the 2017 summer months, the peak load at the Rincon substation increased by approximately 5 MWs. PG&E also received two large commercial customer applications seeking service

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<sup>3</sup> Res. E-4889, Ordering Paragraph (OP) #4, p. 57.

<sup>4</sup> PG&E AL 5096-E-A., p.6.

interconnections to the Rincon substation thereby creating the need for additional capacity for several Santa Rose feeders starting in 2019. This prompted PG&E to initiate a pilot program to reconductor additional feeders and perform a series of load transfers to address the capacity needs. This study resulted in a lower cost alternative solution.

Given all these factors, PG&E determined that the potential for a cost effective DER solution to meet the need at the Rincon substation was no longer feasible therefore, PG&E decided to cancel the Rincon Substation project and proposed an alternate project.<sup>5</sup>

### Lessons and Insights

The decision to cancel the Rincon Substation project provided PG&E with lessons regarding procurement challenges due to uncertainty in load forecasting and flexibility in distribution planning.

In addition, PG&E points to general lessons and insights from the Utilities' IDER pilot programs, Energy Division's June 30, 2017 Staff Proposal on a Distribution Investment Deferral Framework (DIDF), and DRP Track 3 Issues; including DER Growth Scenarios and the Commission adopted DIDF in Decision 18-02-004. PG&E also points to their recently filed comments on the February 12, 2018 Amended Scoping Memo and Joint Ruling of the Assigned Commissioner and Administrative Law Judge (R.14-10-003) regarding streamlining the RFO process.

Below lists some of PG&E's lessons learned:

1. While certainty is a key metric in identifying suitable deferral projects, there are inherent uncertainties in load forecasting on all distribution circuits.
2. Direct impacts in load forecasting as well as indirect impacts on surrounding load pockets should be considered in distribution planning.
3. The scope and cost of preferred wires alternative and timing and magnitude of a forecasted capacity deficiency are liable to change from year to year as systems conditions and customer needs evolve.

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<sup>5</sup> *Id.*, pp. 2-4.

4. Limitations of needing to forecast distribution projects at least three years in advance to be deferred by DERs sourced by the RFO process can be resolved through a streamlined solicitation process.<sup>6</sup>

### **Gonzales Substation Project**

In PG&E's supplemental AL 5096-E-A, PG&E explains that the Gonzales Substation located in Monterey County will require approximately 2 Megawatts (MW) of additional distribution capacity in the summer of 2021.

Gonzales Bank 3<sup>7</sup> includes 1,886 electric service points with a customer base of residential (1,665 service points), commercial and industrial (166 service points), and agricultural (56 service points). PG&E is targeting to procure up to 0.5 MW under the following conditions:

- Delivery Term: 5 years
- Delivery Months: June through September
- Delivery Days: Weekdays only
- Delivery Hours:
  - 8:00 a.m. – 12:00 p.m.
  - 5:00 p.m. – 9:00 p.m.

Gonzales Bank 4<sup>8</sup> includes 1,207 electric service points with a customer base of residential (829 service points), commercial and industrial (173 service points), and agricultural (205 service points). PG&E is targeting to procure up to 1.5 MW under the following conditions:

- Delivery Term: 5 years
- Delivery Months: June through September
- Delivery Days: Every day of the week
- Delivery Hours:
  - 8:00 a.m. – 12:00 p.m.
  - 12:00 p.m. – 4:00 p.m.

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<sup>6</sup> *Id.*, pp. 4-5.

<sup>7</sup> PG&E AL 5096-E-A, Attachment A, p. 2.

<sup>8</sup> *Id.*, p.5.

PG&amp;E AL 5096-E/5096-E-A/ma1

- 8:00 a.m. – 4:00 p.m.

Dispatchable resources may be called on a day-ahead basis up to six times a month for not more than three consecutive days and for not more than 12 days total during the summer period.<sup>9</sup>

PG&E requires that behind the meter (BTM) resources effectively and verifiably reduce system load of retail customers taking service from the Gonzales Substation during the months and hours described above. In front of the meter (IFOM) resources should effectively and verifiably increase in area generation during the months and hours described above. Additional capacity needs to be available on or before June 2021 and must be maintained at least through end of September 2025.<sup>10</sup>

#### Offer Eligibility

PG&E states that Offers may be for projects location in-front-of-the-meter or behind the meter and must be a DER, which include:

- Demand Response
- Energy Storage
- Energy Efficiency
- Permanent Load Shift
- Renewable Distributed Generation
- Electric Vehicles

PG&E will consider a minimum capacity bid of 250 kilowatt (kW) in 250 kW increments and maximum bid up to 1,500 kW.<sup>11</sup>

#### Project Screens

To meet the May 1, 2018 supplemental filing deadline mandated by Res. E-4889, PG&E used an accelerated distribution planning process to identify potential IDER projects that could replace the Rincon Substation Project. PG&E

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<sup>9</sup> PG&E AL 5096-E-A p. 8 and Attachment B1, RFO Protocol, p. 7.

<sup>10</sup> PG&E AL 5096-E-A, pp. 7-8.

<sup>11</sup> *Id.*, p.11.

updated its load forecast used in the previous annual planning cycle and applied two screens to determine the most viable project.

- **Project Timing screen** ensures that cost effective DER solutions procured have sufficient time to fully deploy and begin commercial operation prior to the projected need for the distribution services being provided by the DERs.
- **Distribution Services screen** determines which service(s) are needed to address the need.<sup>12</sup>

#### Project Selection

PG&E considered two prioritization metrics to determine which project(s) ranked the highest. These include:

- **Project timing certainty** – determines that projects driven by individual customer load growth estimates, projects where the estimated circuit size or bank deficiency is low relative to the size of the total circuit or bank load and projects where the estimated deficiency is further out on the forecast horizon are given low priority than projects driven by more general load growth.
- **Market criterion** – determines the feasibility of acquiring the needed DERs in the local market. Projects driven by individual customer load growth estimates, projects where the estimated circuit size or bank deficiency is low relative to the size of the total circuit or bank load and projects where the estimated deficiency is near term are given lower priority than projects driven by more general area growth projections.<sup>13</sup>

#### Customer Engagement Support

PG&E offers the following customer acquisition support services to bidders who see this as a benefit in their program design:

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<sup>12</sup> *Id.*, pp. 2-3.

<sup>13</sup> *Id.*, pp. 3-4.



1. **Co-Branding** – PG&E will collaborate and allow the use of its logo and branding to enhance marketing efforts. All co-branding materials must meet PG&E’s co-branding guidelines and approved by PG&E prior to dissemination/communication. PG&E will approve co-branding services on a case-by-case basis.<sup>14</sup>
2. **Marketing and Outreach Support** – PG&E will make available its marketing and customer relationship specialists to provide support and coordinate with participants in program implementation, execution and Commission approval processes.<sup>15</sup>
3. **Data Access** – PG&E will provide access to customer data sets for the project area subject to their rules on customer data privacy and security. PG&E will require participants to pass a third-party data security review prior to the release of any data.<sup>16</sup>

PG&E will require participants who use any of these services to provide two offers; one offer incorporating any of PG&E’s support services and the second without.<sup>17</sup>

### Incrementality Methodology

PG&E provides two approaches to incrementality:

- 1) Similar to SCE and SDG&E’s method, PG&E determined a hybrid approach of Methods Four and Five from the CSFWG Final Report<sup>18</sup> will reasonably determine whether offers provide incremental services beyond what would already be realized from sourcing authorized from other proceedings. Method Four allows PG&E to consider the resources included in the offers provided. Method Five will allow PG&E to consider not just the resource but also the attributes of a DER that has not been sourced through other

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<sup>14</sup> PG&E AL 5096-E-A, Attachment B1, Draft Solicitation Protocol, p.9.

<sup>15</sup> *Id.*, p.10.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Id.*, p.11.

<sup>18</sup> CSFWG Final Report, August 1, 2016, pp. 26 – 29.

mechanisms. Using the hybrid methodology, Method Four divides the offers into three tranches:

**Tranche 1 - Wholly Incremental** – IDER offers which provide technologies and services not already being sourced or reasonably expected to be sourced through another utility procurement, program, or tariff, and that meet specific identified distribution needs are categorized into Tranche One.

**Tranche 2 – Partially Incremental** – IDER offers in which some portion of the technology or service is already incentivized through another authorized utility procurement, program, or tariff, and that meet specific identified distribution needs are categorized into Tranche Two. PG&E will only consider that portion of the offer that provides enhancement to the existing project as incremental.

**Tranche 3 – Not Incremental** – IDER offers which provide technologies or services already sourced under another authorized utility procurement, program or tariff that meet the identified distribution need and that provide no clearly discernable incremental value beyond current offerings.

PG&E explains that this hybrid approach is consistent with the principles adopted in D. 16-12-036, including ensuring that customers do not pay twice for the same service.<sup>19</sup>

- 2) **Overlap Method** – PG&E provides Energy Efficiency (EE) participants only with a second option they may choose as an alternative to the above methods. This method provides EE participants a pre-specified overlap factor of 15% which will be discounted from their proposals to reflect the overlap between the proposal and EE resources that are projected to be deployed in the local area.<sup>20</sup>

### Contingency Planning

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<sup>19</sup> PG&E AL 5096-E, p. 11

<sup>20</sup> PG&E AL 5096-E-A, Attachment B1, Draft Solicitation Protocol, p.11.

The Utilities discussed Contingency Planning during Distribution Planning Advisory Group (DPAG) Meeting #6 and characterized key contingencies as:

- contingencies that arise during solicitation and contract negotiation phase,
- contingencies that arise during the deployment state after a contract has been awarded, and
- contingencies that arise during operational state after the DER(s) have been deployed.

In response to concerns raised by the DPAG, PG&E proposes the following to address contingencies that come up:

- **Root Cause Analysis**

- If a contingency arises during the solicitation or contract negotiation stage, PG&E will conduct a root cause analysis and determine best alternative solution(s). If the cause of the contingency is a problem with the solicitation process, and time and regulatory process allow, PG&E will consider running another solicitation process, otherwise PG&E will move forward with the best alternative wires solution.
- If a contingency arises during the project deployment or operations stage, PG&E will conduct a root cause analysis and determine best alternative solution(s). If the result of the analysis, time and regulatory process allow, PG&E will first seek to replace the failed DER with the best alternative DER, otherwise PG&E will move forward with the best alternative wires solution.

If, however, there are no cost-effective replacement DER contracts available, PG&E states that it will install a traditional distribution infrastructure to meet the distribution need.<sup>21</sup>

- **DER(s) Procurement in Tranches**

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<sup>21</sup> *Id.*, p. 13.

PG&E proposes to procure DER(s) in tranches in order to mitigate contingencies related to changes in the timing and/or size of need. In this case, PG&E will consider bids before the project's planned in-service date thus providing PG&E time to test the DER solution prior to the in-service date.<sup>22</sup>

## **NOTICE**

Notices of PG&E AL 5096-E/5096-E-A were published in the Commission's Daily Calendar. PG&E states that copies of their ALs were mailed and distributed in accordance with Section 4 of General Order 96-B.

## **PROTESTS AND RESPONSES TO PROTESTS**

The Office of Ratepayer Advocates (ORA), California Energy Storage Alliance (CESA), OhmConnect Inc. (OhmConnect), Tesla Inc. (Tesla), and the California Efficiency + Demand Management Council (CEDMC) filed protests to PG&E's AL 5096-E for the Santa Rosa Rincon Project. PG&E filed their response on July 20, 2017.

ORA and Sunrun Inc. (Sunrun) filed protests to PG&E's AL 5096-E-A for the Gonzales Substation Project on May 21, 2018. PG&E filed their response on May 29, 2018.

Issues common to all utilities were addressed in Res. 4889-E and are listed under the Discussion Section of this Resolution. The following summarizes protests and responses filed specific to PG&E's AL 5096-E-A and the Gonzales Substation Project.

### *Incrementality*

- Sunrun recommends PG&E's incrementality requirement comply with Res. E-4889. Specifically, Sunrun recommends that PG&E revise its AL to clarify that altered operations met to ensure locational, temporal, and/or performance guarantees of the project are sufficiently incremental if those

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<sup>22</sup> *Id.*, pp.13-14.

operations provide services above and beyond what is expected under other programs.<sup>23</sup>

*Response:* PG&E does not believe changes are necessary. PG&E points to Section IV.B of its protocol table providing examples of what would be considered incremental.<sup>24</sup>

### Problems and Negative Impacts

- Sunrun requests clarification regarding PG&E's statement that "it does not want the DERs it procures through this RFO to create additional problems on the distribution system" and that "any DERs procured through this Solicitation must not operate in a manner that negatively impacts the system".<sup>25</sup>

*Response:* PG&E does not believe additional clarification is required.<sup>26</sup>

### Traditional Distribution Upgrade Data

- ORA requests the Commission require PG&E to provide sufficient detail regarding the Gonzales Substation Project including the sizes of Banks 3 and 4 which is required to calculate the cost-effectiveness cap.<sup>27</sup>

[REDACTED]

### Cost Effectiveness Cap is Too High

- ORA states that PG&E's proposed cost effectiveness cap is based on a forecast size of the traditional distribution project that is too high compared to the need. ORA requests the Commission require PG&E to provide additional information with regard to the size of the existing bank

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<sup>23</sup> Sunrun Protest to AL 5096-E-A, pp. 1-4.

<sup>24</sup> PG&E Response to Sunrun Protest, p. 3.

<sup>25</sup> Sunrun Protest to AL 5096-E-A, pp. 4-5.

<sup>26</sup> PG&E Response to Sunrun Protest, pp. 3-4.

<sup>27</sup> ORA Protest to AL 5096-E-A., pp.3-6.

and load forecasts needed to determine the size of the new bank which sets the foundation for the cost-effectiveness cap.<sup>28</sup>

[REDACTED]

### Safety and Reliability

- ORA recommends the Commission direct PG&E to show that the Gonzales substation project will be safely and reliably operated until the proposed 2021 start date.<sup>29</sup>

Response: PG&E states that the Gonzales Substation will be safely and reliably operated until the proposed 2021 date.<sup>30</sup>

## **DISCUSSION:**

We begin this discussion section by first listing those issues addressed in Res. E-4889 that apply to all three utilities including PG&E followed by those specific to PG&E's AL 5096-E-A and the Gonzales Substation Project.

### **A. Resolution E-4889**

Res. E-4889, approving with modification SCE's AL 3620-E/3620-E-A/3620-E-B and SDG&E's AL 3089-E to start the IDER solicitation process, addressed common issues and adopted concepts (listed below) that also apply to PG&E's AL 5096-E/5096-E-A.

### Incrementality

D.16-12-036 adopted principles the Utilities are required to use when determining their incremental methodology. These include:

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<sup>28</sup> ORA Protest to AL 5096-E-A, pp. 3-6.

<sup>29</sup> ORA Protest to AL 5096-E-A, p. 2.

<sup>30</sup> PG&E Response to ORA Protest, p.2.

- Ensuring that ratepayers are not paying twice for the same service;
- Ensuring the reliability of a service, i.e., ensure it is not counting on a service to be available when in fact the service might be time- or frequency-constrained and committed at another time, rendering it effectively unavailable for the distribution services sought in these pilots; and
- Recognizing that a DER is eligible to provide multiple incremental services and be compensated for each service.

As clarified in Res E-4889, “services offered by existing DERs that are above and beyond what is expected under other programs should be considered incremental. An example would be if a resource is compensated through a different program but in the IDER bid is expected to be operated in a different manner than business-as-usual, then this resource should be considered incremental.”<sup>31</sup> An example of this is NEM paired storage or SGIP storage since SGIP storage is not required to provide distribution deferral services that will be solicited in this RFO.

Moreover, while D.16-12-036 allows each utility to pursue a different incrementality method for the Incentive Pilot, we strongly encourage the utilities to be creative and open-minded in how it identifies and acknowledges incrementality ...”.<sup>32</sup>

In response to Sunrun’s protest, we note that PG&E’s incrementality methodology complies with Res. E-4889. Method Five requires that PG&E also consider the attributes of a DER that has not been sourced through other mechanisms. PG&E should state in their RFO materials which resources qualify on the basis of Method Five based on the attributes of the DER that have not been sourced through other mechanisms and consistent with principle #6 in the IDER CSFWG Report. This principle states “recognize that a distributed energy resource is eligible to provide multiple incremental services and be compensated

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<sup>31</sup> Res. E-4889, pp. 25-29.

<sup>32</sup> *Ibid.*

for each service.”<sup>33</sup> Therefore, with direction from Res. E-4889, we adopt PG&E’s Incremental Hybrid approach of Methods Four and Five from the CSFWG final report.

We direct PG&E to preview their RFO materials with Energy Division staff prior to issuance.

We agree with CESA’s comments to Draft Resolution 4956-E. As stated above, D. 16-12-036 already clarifies that DER solutions can provide multiple incremental services provided the service procured is not time or frequency constrained and committed at another time making it effectively unavailable for this pilot.

We also believe it is reasonable for the Independent Evaluator to include an assessment on how these bids were evaluated when reporting to the PRG. This promotes transparency with regard to the evaluation process.

### Contingency Plan

As stated in Res. E-4889, we adopted PG&E’s proposed contingency process:

“If a contingency were to occur during the solicitation phase, it will consult with the Independent Evaluator, Procurement Review Group and CPUC Energy Division staff. PG&E would enforce the contingency mitigations in accordance with the terms of the contracts if a contingency were to occur during the deployment and operations phase. It will seek Commission approval for the procurement and cost recovery of an alternative DER if it determines that it is cost effective to replace a failed DER with an alternative DER. If PG&E however, determines that it will implement a wires solution to address contingency, PG&E will seek regulatory guidance for approval and cost recovery for the recovery of the wires solution”.<sup>34</sup>

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<sup>33</sup> Decision 16-12-036, p. 19.

<sup>34</sup> PG&E AL 5096-E., pp. 12-14, Res. E-4889, pp. 29-31, Ordering Paragraph (OP) # 9, p. 57.



We reaffirm PG&E's Contingency Plan as previously adopted in Res. E-4889.

### Planning Assumptions

We agree with Sunrun's comments to Draft Resolution E-4956, to promote transparency, we require the utilities to provide distribution planning activity information such as resources the utilities are assuming will be deployed relevant to the utility's determination of residual need in the given area.

We also agree with CESA's comments to Draft Resolution E-4956 and require that PG&E provide distribution planning assumptions for the forecasted load and DER from the Grid Needs Assessment, and to provide peak hourly needs (amount by which the loading exceeds capacity for each bank for each hour in which excess loading is forecasted to take place) for the Gonzales Bank 3 and Bank 4 as part of their RFO materials. This information will assist developers in structuring their bids.

### Cost Effectiveness Cap

In response to concerns from parties regarding the potential for project cost manipulation, as directed by Res. E-4889, we require PG&E to provide two cost effectiveness cap updates via a letter to Commission's Energy Division IDER staff prior to receiving indicative offers and prior to receiving the final bids. This letter should also be served in redacted form to the R.14-10-003 service list.<sup>35</sup>

### Project Development Security & Delivery Term Security

As stated in Res. E-4889, since it is difficult to predict the risks for each DER without first examining the results of the IDER Solicitation process, at this time, the Commission will not administratively set the level of the security request but will consider addressing the security deposit issue during the evaluation of this pilot.<sup>36</sup> However, we require PG&E to explain in their pro forma documents the rationale behind each security request.<sup>37</sup>

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<sup>35</sup> Res. E-4889, p. 33, OP# 12, p.58.

<sup>36</sup> Res. E-4889, p. 35, OP# 12, p.58.

<sup>37</sup> Res. E-4889, p. 34, OP# 12, p.58

### Exporting Constraints

As stated in Res. E-4889, we “understand current interconnection rules are in place for resources that connect to the distribution system. Though we are not aware of any specific prohibition against Rule 21 or WDAT resources from also providing distribution services, Section D.3 in Rule 21 establishes that interconnection under Rule 21 neither provides nor limits a producer’s right to utilize the utility’s distribution or transmission system for the transmission, distribution, or wheeling of electric power.”

Therefore, we restate, PG&E “should not categorically exclude or prohibit behind-the-meter solutions that export energy to the grid from participating in the solicitation process. To the degree that these bids may be cost effective relative to other bids received, the Utilities should explain in the PRG meeting any jurisdictional or regulatory barriers that would prevent them from considering the contract. The Independent Evaluator should also include findings on the Utilities recommendations in its reports to the PRG”.<sup>38</sup>

### Customer Information

As explained in Res. E-4889<sup>39</sup>, bidders need certain customer information to help inform their bids, so they are able to provide meaningful bids. However, certain customer information is protected under the customer privacy and confidentiality requirements. In light of this, we require PG&E to include in their RFO documents as much customer information as possible while at the same time protecting customer’s privacy pursuant to the customer privacy and confidentiality requirements. Customer information may include the number of customers by customer segment or energy end-use and summary statistics on peak demand by customer segment.

### Metering and Proposed Measurement and Verification Requirements

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<sup>38</sup> Res. E-4889, pp 35-36, OP# 15, p.58.

<sup>39</sup> Res. E-4889, pp. 38-39, OP#13, p. 58.

PG&E states the amount of distribution services the project delivers, will be measured based on the project's technology, including:

- Energy storage: revenue-quality interval meter;
- Demand Response: CAISO baseline methodologies, based on revenue-quality customer interval meters;
- Distributed generation: revenue-quality interval meter for generation, agreed upon forecast methodology for curtailable generation; or
- Energy efficiency or permanent load shift: Parties' agreed upon methodology that incorporates metering against baseline.<sup>40</sup>

While PG&E recommends revenue-quality metering to support measurement, verification, and settlement, as directed by Res. E-4889, we also require PG&E to provide flexibility in its RFO materials that allow a developer to propose an alternative measurement and verification methodology which both PG&E and the developer can mutually agree on.<sup>41</sup>

### Timeline

As stated in Res. E-4889, in response to the utilities request, we clarify the following:<sup>42</sup>

- The four-month time period to complete the solicitation process as stated in Ordering Paragraph (OP) #16 of D.16-12-036 shall begin upon Commission adoption of this resolution.
- The six-month time period to meet with the PRG to allow a review of the proposed contracts and file a Tier 2 AL requesting Commission approval of the contract(s) as stated in OP# 17 of D.16-12-036 shall begin upon Commission adoption of this resolution.

We encourage PG&E to streamline the timeline where possible, but we stop short of Sunrun's recommendation that the Commission require PG&E to expedite the time to procure DER solutions. D. 16-12-036 requires the Utilities implement the Incentive Pilot utilizing the steps adopted in the same decision to test the effectiveness of the process. However, the Commission is addressing

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<sup>40</sup> PG&E AL 5096-E-A, Attachment B4, Appendix D, p.6.

<sup>41</sup> Res. E-4889, pp. 39-40.

<sup>42</sup> *Id.*, pp 40-41.

methods to streamline the procurement process separately in the IDER Proceeding, R.14-10-003.

Calculation and Forecast of Expected Administrative Costs

We find PG&E's forecast of expected administrative costs for the pilot reasonable. These costs are pre-approved for recording and recovery and is subject to review by the Commission in PG&E's next General Rate Case. Only solicitation-related incremental administrative costs incurred after the launch of the pilot will be included in the cost effectiveness calculation.<sup>43</sup>

**B. PG&E Specific Issues**

Incrementality

In response to concerns raised by the DPAG in April 13, 2017, PG&E provides a second approach to incrementality for EE participants. PG&E plans to test the "Overlap Method" proposed by The California Efficiency + Demand Management Council. The Overlap Method provides a means to objectively quantify the incrementality of potential offers by discounting these offers a pre-specified overlap factor of 15%. The overlap factor represents the overlap between the proposal and EE resources that are included in the forecast and expected to be deployed in the local area.<sup>44</sup>

We applaud PG&E's willingness to test an alternative approach that may potentially offer bidders greater up-front certainty in determining incrementality for their proposed bids. Therefore, in addition to the Hybrid Approach discussed earlier in this resolution, we also adopt PG&E's "Overlap Method" approach to incrementality for EE only. Energy Efficiency bidders may elect to choose the Hybrid Approach as well.

Dispatchable Resources

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<sup>43</sup>*Id.*, p.41.

<sup>44</sup> PG&E AL 5096-E-A, Attachment B1, Draft Solicitation Protocol, p.11.

As noted earlier, PG&E's AL state that "Dispatchable resources may be called on a day-ahead basis up to 6 times a month for not more than 3 consecutive days and for not more than 12 days total during the summer loading period." We wish to clarify that this sentence pertains to dispatchable resources but does not state or imply that the RFO requirements for all offers require that they be dispatchable. PG&E's AL makes it clear that appropriately located EE and other non-dispatchable resources may be able to relieve substation loading and help defer distribution equipment upgrades.

Problems and Negative Impacts of DERs

In their protest, Sunrun requests clarification regarding PG&E's statement that "it does not want the DERs it procures through this RFO to create additional problems on the distribution system" and that "any DERs procured through this Solicitation must not operate in a manner that negatively impacts the system." Though Sunrun believes the language is intended to ensure DERs do not charge or discharge during certain periods, Sunrun explains that the ambiguous language could also lead to inefficiencies related to a developer's bid.<sup>45</sup>

In their response, PG&E agrees with Sunrun and reiterates that DERs PG&E procures to defer or displace the Gonzales Substation Project should not create additional problems on the distribution system.

We reject Sunrun's request. PG&E already provides clear direction about when projects may increase net loading on the system and when they may not.<sup>46</sup>

Traditional Distribution Upgrade Data

[REDACTED]

Cost Effectiveness Cap

[REDACTED]

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<sup>45</sup> Sunrun Protest to PG&E AL 5096-E-A, pp.4-5.

<sup>46</sup> PG&E AL 5096-E-A, Draft Solicitation Protocol, p. 9.

Safety and Reliability

ORA recommends the Commission direct PG&E to:

- Show that the Gonzales substation project will be safely and reliably operated until the proposed 2021 start date and
- Show that the Incentive Pilot will not compromise safety and reliability and that PG&E is able to ensure safe and reliable service after the conclusion of the Incentive Pilot.<sup>47</sup>

ORA points to PG&E's response to their Data Request where PG&E indicates a forecasted overload in Bank 4 beginning as early as 2018.

We reject ORA's recommendation. In their reply to ORA's protest, PG&E explains that they have temporarily re-rated the Gonzales Substation capacity by developing a custom rating for Bank 4, thus making it safe and reliable to operate until the proposed 2021 date.<sup>48</sup> According to the IPE, PG&E establishes custom ratings only in cases where the bank has been closely examined and transformer oil has been tested. This custom rating is limited to four hours maximum and will be removed in 2021. In the same response, PG&E also points to D.16-12-036 where PG&E is required to demonstrate that DERs selected will ensure safety and reliability. Last, we adopt PG&E's contingency plan in this resolution. PG&E's contingency plan includes contingencies starting from the solicitation or contract negotiation stage to the project deployment and operations stage. We believe that given all these factors, safety and reliability will not be compromised in the Gonzales Substation.

Flexibility in Procurement of DER Capacity

In comments to Draft Resolution E-4956, PAO recommends that due to inherent uncertainties associated with load forecasting, PG&E should allow for some flexibility in their procurement of DER capacity. PAO explains that the Independent Professional Engineer's Report indicates the potential for a 2MW

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<sup>47</sup> ORA Protest to AL 5096-E-A, p. 2.

<sup>48</sup> PG&E Response to ORA Protest, p.2.

capacity increase in additional load because of new agricultural customers which PG&E did not include within its current load forecast.<sup>49</sup>

PAO further explains that PG&E's contingency plan on implementing traditional solutions rather than taking steps to provide some degree of flexibility in the procurement of DER services to address changes in load reduces the cost effectiveness of this pilot. To mitigate this risk, PAO supports PG&E's proposal of procuring in tranches to mitigate contingencies related to changes in the timing and/or size of the identified need, extending up to the cost effectiveness cap.<sup>50</sup>

We agree with PAO's recommendation, implementing traditional solutions in addition to DER services procured for the five-year deferral period reduces the cost effectiveness of the pilot. Therefore, to mitigate contingencies related to changes in the size or need of the project, we require PG&E to implement its proposal to procure DERs in tranches extending up to the cost effectiveness cap.

We reject PAO's recommendation that PG&E recalculate the load forecast for the site prior to project development to tailor the need procured to the load forecast.<sup>51</sup> This is a pilot program. Any changes in process already adopted in D.16-12-036 and Res. 4889-E can cause further delay and uncertainty for market participants.

#### Tariff Based Procurement Approach

In comments to Draft Resolution E-4956, Sunrun urges the Commission look beyond the solicitation process and incorporate standard tariffs mechanism.

We reject Sunrun's request. The purpose of this pilot is to test the Competitive Solicitation Process. Sunrun's request is beyond the scope of this pilot. However, we note that the Commission will address the tariff-based procurement approach separately in the IDER proceeding, R.14-10-003.

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<sup>49</sup> *Ibid.*

<sup>50</sup> *Id.*, pp. 4-5.

<sup>51</sup> *Id.*, p.5.

**CONFIDENTIAL INFORMATION**

The Commission, in implementing Section 454.5(g), has determined in D.16-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in the contract. Such information, including price, is confidential for three years from the date the contract states that energy deliveries begin, or until one year following contract expiration, except contracts between IOUs and their affiliates, which are public.

The confidential appendices marked "[REDACTED]" in the public copy of this resolution remain confidential at this time.

**COMMENTS**

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today."

On October 1, 2018, Sunrun, CESA, and the Public Advocates Office (PAO) filed comments on Draft Resolution (DR) E-4956. The following summarizes comments filed organized by topic. We discuss our findings and determinations in response to comments in the Discussion section above.

**Incrementality**

Similar to the Multi-Use-Application rules adopted in Decision (D.) 18-01-003, CESA recommends that PG&E allow DER solutions to provide other reliability or non-reliability services outside of the defined time periods for the identified need. This includes solutions that are able to differentiate and



allocate a certain amount of capacity to PG&E's solicited distribution capacity need. CESA explains that this "value stacking" system may result to more cost-effective outcomes for ratepayers.<sup>52</sup>

CESA also recommends the Commission direct the Independent Evaluator to include an assessment on how PG&E evaluated bids received in accordance with D.18-01-003 when reporting to the PRG.<sup>53</sup>

### Planning Assumptions

CESA recommends PG&E provide granular planning assumptions for the forecasted growth of different DER types and the expected load/generation profiles of forecasted DER types.<sup>54</sup> Sunrun recommends the Commission require rather than encourage, the utilities provide distribution planning activity information as part of their RFO materials.<sup>55</sup> CESA and Sunrun explain that this information provides important value to DER providers on how to structure their bids and allow for a fair assessment on the incrementality of bids.<sup>56</sup>

### Cost Effectiveness Cap

[REDACTED]

### Flexibility in Procurement of DER Capacity

PAO recommends that due to inherent uncertainties associated with load forecasting, PG&E should allow for some flexibility in their procurement of DER capacity. PAO explains that the Independent Professional Engineer's Report indicates the potential for a 2MW capacity increase in additional load because of new agricultural customers which PG&E did not include within its current load forecast.<sup>57</sup>

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<sup>52</sup> CESA Comments to DR 4956-E, p.2

<sup>53</sup> *Id.*, pp. 2-3.

<sup>54</sup> *Id.*, p. 3.

<sup>55</sup> Sunrun Comments to DR 4956-E, pp. 1-2.

<sup>56</sup> CESA Comments to DR 4956-E, p.3, Sunrun Comments to DR 4956-E, p.2.

<sup>57</sup> *Ibid.*

PAO further explains that PG&E's contingency plan on implementing traditional solutions rather than taking steps to provide some degree of flexibility in the procurement of DER services to address changes in load reduces the cost effectiveness of this pilot. To mitigate this risk, PAO supports PG&E's proposal of procuring in tranches to mitigate contingencies related to changes in the timing and/or size of the identified need, extending up to the cost effectiveness cap.<sup>58</sup>

PAO also recommends that PG&E recalculate the load forecast for the site prior to project development to tailor the need procured to the load forecast.<sup>59</sup>

### Timeline

Sunrun urges the Commission to require PG&E expedite the timeline to procure DER solutions to the extent feasible. Sunrun explains that given PG&E's delay in initiating the RFO and on-going lack of procurement of non-wires alternative solutions, time is of the essence.<sup>60</sup>

### Tariff Based Procurement Approach

Sunrun urges the Commission look beyond the solicitation process and incorporate standard tariffs mechanism. Sunrun explains that without additional mechanisms, the IDER Incentive Pilot experience to date demonstrated that the process may continue to fall short in delivering DER procurement opportunities.<sup>61</sup>

## **FINDINGS**

1. D. 16-12-036 directed the PG&E to file a Tier 3 Advice Letter requesting Commission approval to procure a DER solution for the project(s) they selected for the Incentive Pilot.

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<sup>58</sup> *Id.*, pp. 4-5.

<sup>59</sup> *Id.*, p.5.

<sup>60</sup> Sun Comments to DR 4956-E, p.2.

<sup>61</sup> Sunrun Comments to DR 4956-E, p. 1.

2. On June 16, 2017, PG&E filed AL 3855-G/5096-E requesting approval to launch its IDER Incentive Pilot solicitation to procure DER(s) for the Santa Rosa project. On June 14, 2017, PG&E filed substitute sheets removing the gas advice letter number referencing only AL 5096-E. On October 2017, 2017, PG&E requested a 60-day extension of AL 5096-E due to the severe damage caused by the fires in the Santa Rosa area.
3. D. 16-12-036 determined that the utilities may propose an incrementality method for the pilot.
4. On December 14, 2017, the Commission adopted Resolution E-4889 approving concepts that also apply to PG&E's AL 5096-E.
5. Resolution E-4889 approved PG&E's request and directed PG&E to file a compliance supplemental AL no later than May 1, 2018, providing a detailed explanation of its decision to cancel the Rincon Substation Project; a full report on learnings and insights on the project preceding its cancellation; and a proposal to solicit, evaluate and implement DER distribution deferral solutions at appropriate locations in accordance with D.16-12-036.
6. Resolution E-4889 resolved and clarified services that may qualify as incremental resources.
7. Resolution E-4889 resolved and clarified issues included in the utilities Request for Offer materials including incrementality, contingency planning, planning assumptions, cost effectiveness cap, project development and security & delivery term security, exporting constraints, project timeline, developer's responsibility, customer information, metering and proposed measurement and verification requirements, timeline, and calculation and forecast of expected administrative costs.
8. On May 1, 2018, PG&E filed their supplemental filing, AL 5096-E-A, requesting approval to procure a DER solution for the Gonzales Substation project.
9. D.16-12-036 determined that the Utilities may propose an incrementality methodology for the Pilot.
10. PG&E in AL 5096-E-A offers customer engagement support services.
11. PG&E in AL 5096-E-A provides two approaches to incrementality.

12. PG&E in AL 5096-E-A does not require that all resources bidding into the RFO be dispatchable

**THEREFORE, IT IS ORDERED THAT:**

1. Pacific Gas and Electric's Advice Letter 5096-E/5096-E-A requesting approval to procure DER solutions for Gonzales Substation Projects is approved.
2. Pacific Gas and Electric's two approaches to Incrementality, a hybrid approach of Methods Four and Five from the CSFWG Final Report and the Overlap Method for Energy Efficiency proposals, with direction from Resolution E-4889, is approved.
3. Pacific Gas and Electric's contingency plan is approved. Pacific Gas & Electric shall consult with the Independent Evaluator, Procurement Review Group and the Commission's Energy Division staff whenever a contingency occurs during the solicitation phase. Pacific Gas and Electric shall enforce the contingency mitigations in accordance with the terms of the contract if contingency were to occur during the deployment and operations phase.
4. Pacific Gas and Electric shall follow existing Commission approval and cost recovery processes in the event it becomes necessary to implement a traditional capital investment.
5. Pacific Gas and Electric shall provide distribution planning activity information, including planning assumptions for the forecasted load and DER growth from the Grid Needs Assessment and to provide peak hourly needs (amount by which the loading exceeds capacity for each bank for each hour in which excess loading is forecasted to take place) for the Gonzales Bank 3 and Bank 4 as part of their Request for Offer documents.
6. Pacific Gas and Electric shall provide two updates to the cost-effectiveness cap, if any, to the Commission's Energy Division Integrated Distributed Energy Resources staff via a letter prior to receiving indicative offers and prior to receiving the final bids. This letter must also be served in redacted form to the R.14-10-003 service list.
7. Pacific Gas and Electric shall explain in their pro forma documents the rationale, including the methodologies used for each security request.

8. Pacific Gas and Electric shall provide as much customer composition information as possible in their RFO materials while preserving customer privacy and confidentiality to help bidders understand the distributed energy resources potential of specific locations.
9. Pacific Gas and Electric shall state in their Request for Offer materials which resources qualify on the basis of Method Five based on the attributes of the Distributed Energy Resources that have not been sourced through other mechanisms and consistent with principle #6 in the Integrated Distributed Energy Resource Competitive Solicitation Framework Working Group Report.
10. Pacific Gas and Electric shall consult with potential bidders in providing clarification on the communications and monitoring requirements of the projects.
11. Pacific Gas and Electric shall not categorically exclude or prohibit behind-the-meter solutions that export energy to the grid from participating in the solicitation process.
12. Pacific Gas and Electric shall ensure a technology neutral, non-discriminatory level playing field for all eligible Distributed Energy Resources to participate in this Request for Offer.
13. Pacific Gas and Electric shall clearly communication in its Request for Offer materials which Distributed Energy Resources, programs, and tariffs are eligible, and which are not eligible and the basis for inclusion or exclusion of each resource type. For eligible resources, Pacific, Gas and Electric shall clearly explain in their Request for Offer materials the approach to incrementality so that potential bidders can gain a clear understanding of how incrementality is being measured in the solicitation.
14. To the degree that behind-the-meter solutions that export energy to the grid are cost effective relative to the other bids, Pacific Gas and Electric must explain jurisdictional or other regulatory barriers that may apply in considering the contract.
15. Pacific Gas and Electric shall provide business-as-usual distributed energy resource assumptions information in their Request for Offer materials which would help developers with their bids to understand the assumptions of forecasted Distributed Energy Resources.

16. Pacific Gas and Electric's forecast of expected administrative costs for the pilot solicitation is reasonable and pre-approved for recording in Pacific Gas and Electric's Administrative Memorandum Account for recovery and is subject to Commission review in Pacific Gas and Electric's General Rate Case.
17. Pacific, Gas, and Electric shall only include solicitation related incremental administrative costs incurred after the launch of the pilot in their cost effectiveness calculation.
18. Pacific Gas and Electric shall procure DERs in tranches extending up to the cost effectiveness cap to mitigate contingencies related to changes in the size or need of the project.
19. Pacific Gas and Electric shall prioritize and consider resources fueled by renewables prior to expanding procurement opportunities to non-renewable generation.
20. Pacific Gas & Electric shall preview their Request for Offer materials with Energy Division staff prior to issuance.
21. Pacific Gas and Electric shall work with the Independent Evaluator prior to Request for Offer issuance to achieve conformance with this Resolution, Resolution E-4889, and Decision 16-12-036, and shall meet and confer with Energy Division staff to keep them informed and to resolve any issues that may arise.

This Resolution is effective today.

I certify that the foregoing Resolution was duly introduced, passed, and adopted at a conference of the Public Utilities of the State of California held on October 25, 2018; the following Commissioners voting favorably thereon:

/s/ ALICE STEBBINS  
ALICE STEBBINS  
Executive Director

MICHAEL PICKER  
President

CARLA J. PETERMAN

LIANE M. RANDOLPH  
MARTHA GUZMAN ACEVES  
CLIFFORD RECHTSCHAFFEN  
Commissioners

**Confidential Appendix A**

Traditional Distribution Upgrade Data (p. 13)

[REDACTED]

Cost Effectiveness Cap is Too High (p.13)

[REDACTED]

Traditional Distribution Upgrade Data (p.20)

[REDACTED]

Cost Effectiveness Cap (p.20)

[REDACTED]

**COMMENTS:**

Cost Effectiveness Cap (p.24)