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Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program.	Rulemaking 11-05-005 (Filed May 5, 2011)

ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING COMMENTS ON STAFF PROPOSAL FOR A METHODOLOGY TO IMPLEMENT PROCUREMENT EXPENDITURE LIMITATIONS FOR THE RENEWABLES PORTFOLIO STANDARD PROGRAM

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1. Background

As part of the implementation of Senate Bill (SB) 2 (1X) (Simitian), Stats. 2011, ch. 1, the Commission must put in place a method for calculating and administering the new procurement expenditure limitations for procurement to meet the renewables portfolio standard (RPS) by all investor owned utilities (IOUs). The new statutory requirements are set out in Pub. Util. Code § 399.15(c)-(g).[1]

Prior to SB 2 (1X), there was a different statutory framework for addressing costs of procurement in the RPS program. Under SB 1078 (Sher), Stats. 2002, ch. 516 (the original RPS statute), and SB 107 (Simitian), Stats. 2006, ch. 464 (the statute in effect prior to SB 2 (1X)), the market price referent (MPR) required by prior Section 399.15(c) was calculated by Commission staff on an annual basis.[2] SB 1036 (Perata), Stats. 2007, ch. 685, provided for a limitation on the total above-market costs (i.e., cumulative costs above the MPR for RPS procurement contracts) expended by an IOU. The Commission created a mechanism to allocate the above-MPR funds to individual procurement contracts

[1] A copy of Sections 399.15(c)-(g) is attached as Attachment A. All further references to sections are to the Public Utilities Code, unless otherwise noted.

[2] See, e.g., Decision (D.) 03-06-071; D.04-06-015; D.05-12-042; D.08-10-026; Resolution (Res.) E-4298 (December 17, 2009); Res. E-4442 (December 1, 2011).

with prices above the MPR.[3] SB 2 (1X), by contrast, contains a broad mandate for the Commission to "establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard." (Section 399.15(c).)

Initial comments on this new mandate were presented by parties in response to the Administrative Law Judge's Ruling Requesting Comments on Procurement Expenditure Limitations for the Renewables Portfolio Standard Program (January 24, 2012) (Comment Ruling).[4] Since the initial comments were filed, there have been several important developments in the implementation of SB 2 (1X).

These developments include, but are not limited to:

- The Commission set out the fundamental rules for RPS compliance under the new requirements of SB 2 (1X) in D.12-06-038.

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[3] See Res. E-4199 (March 16, 2009).

[4] Comments were filed on February 16, 2012 by Alliance for Retail Energy Markets; Bear Valley Electric Service, a Division of Golden State Water Company (BVES), and California Pacific Electric Company, LLC (CalPeco) (jointly); California Municipal Utilities Association; California Wind Energy Association (CalWEA); Centennial West Clean Line LLC; Center for Energy Efficiency and Renewable Technologies (CEERT); City and County of San Francisco; Division of Ratepayer Advocates (DRA); Energy Producers and Users Coalition (EPUC), California Large Energy Consumers Association (CLECA), and California Manufacturers and Technology Association (CMTA) (jointly); Green Power Institute (GPI); Independent Energy Producers Association (IEP); Large-Scale Solar Association (LSA); Marin Energy Authority (MEA); Pacific Gas and Electric Company (PG&E); PacifiCorp; Recurrent Energy; San Diego Gas & Electric Company (SDG&E); Sierra Club California; Southern California Edison Company (SCE); The Utility Reform Network (TURN); TransWest Express LLC; and Union of Concerned Scientists (UCS).

Reply comments were filed on March 1, 2012 by BVES and CalPeco (jointly); CalWEA; CEERT; DRA; EPUC, CLECA, and CMTA (jointly); GPI; IEP; LSA; MEA; PG&E; PacifiCorp; SDG&E; SCE; TURN; and UCS.

- Energy Division staff developed a method for calculating the "renewable net short," (RNS) i.e., the amount of new RPS-eligible generation necessary for a retail seller to meet or exceed the applicable procurement quantity requirements adopted in D.11-12-020.[5] The RNS calculation has been used in the 2012 and 2013 RPS procurement plans.
- The Commission undertook initial implementation of the new procurement plan requirements set by SB 2 (1X) in D.12-11-016, the Commission's decision on 2012 RPS procurement plans.
- The Commission adopted standard contracts for the feed-in tariff program required by amended Section 399.20 in D.13-05-035.

2. Plan of This Ruling

This ruling presents for comment by parties a proposal by Energy Division staff for a methodology to set the procurement expenditure limitation (PEL) required by Section 399.15 (c)-(g).[6] The methodology is accompanied by a proposed model that uses the proposed methodology and quantitative information that is representative of data for each of the variables in the proposed methodology to provide examples of PELs that could result from the proposed methodology.

The proposed methodology and its broad rationale are presented first. Details of the components of the methodology are then explained and illustrated. The model is available at the Recent Updates section of the RPS section of the

[5] See Administrative Law Judge's Ruling (1) Adopting Renewable Net Short Calculation Methodology (2) Incorporating the Attached Methodology into the Record, and (3) Extending the Date for Filing Updates to 2012 Procurement Plans (August 2, 2012).

[6] Because the statute requires the Commission to establish a limitation "for each electrical corporation" (Section 399.15(c)), staff anticipates that the Commission would ultimate establish six limitations, one for each of PG&E; SDG&E; SCE; BVS; CalPeco; and PacifiCorp.

Commission's website.[7] The model is incorporated by reference into this ruling, as fully as though it were an attachment to the ruling.

At the end of this ruling is a series of questions seeking comment both on the staff proposal and on several issues related to it, including interpretation of some statutory directions and development of some assumptions that must be made in order to develop a viable methodology for the PEL.

If any parties wish to propose an alternative procurement expenditure limitation methodology and/or model, they should do so in a document that is separately filed and served, at the same time that comments are due on the staff proposal.

It is anticipated that Energy Division staff will convene a workshop to discuss the staff proposal and any alternatives that have been submitted. Parties will have additional opportunity to comment after the workshop.

3. Plan for Comments on This Ruling

Comments should respond to the staff proposal, the model, and potential inputs to the model, through answering the questions posed in this ruling. The question being responded to should be identified, but does not need to be reproduced. A response may address several questions, so long as all the questions in the group are clearly identified.

Comments should be complete in themselves and address the staff proposal and model. Comments should not incorporate by reference or attach a party's prior comments or reply comments in response to the initial Comment Ruling.

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[7] www.cpuc.ca.gov/PUC/energy/Renewables/index.htm.

Comments should be as specific and precise as possible. Legal arguments should be supported with specific citations. All comments should use publicly available materials (for example, the public description of a transaction in a resolution adopted by the Commission). All comments should specifically identify, with respect to each question, whether the potential sources of information addressed in the response to the question are public or confidential. If both public and confidential sources of information are identified, the comments should clearly identify which are public and which are confidential.

Parties may identify and comment on issues that are not addressed in the proposal, the model, and/or the questions below. Commenters doing so should clearly identify and explain the relevance of the additional issue(s).

If any parties wish to propose an alternative procurement expenditure limitation methodology or model, they should do so in a document that is separately filed and served, at the same time that comments are due on the staff proposal. If an alternative submission includes a spreadsheet or other mechanism for quantitative calculation, it should be "unlocked" and include instructions for use of the spreadsheet or other mechanism.

Parties may address any alternatives in separate comments on the alternatives. Comments on the alternatives must be separately filed and served at the same time as reply comments on the staff proposal. Reply comments on alternatives will not be allowed. Alternative proposals may be followed up at the workshop to be held by staff.

Comments may be filed and served not later than September 5, 2013. Alternative methodologies and/or models, if any, may be filed and served not later than September 5, 2013, in a document separate from the comments of the party or parties submitting the alternative methodology or model. Reply

comments may be filed and served not later than September 25, 2013. Comments responding to any alternative methodologies may be filed and served, in a document separate from any reply comments, not later than September 25, 2013.

4. Guiding Principles

In preparing their comments, parties should keep in mind general guiding principles for development of a procurement expenditure limitation. Such a limitation should:

- Rely on a transparent process;
- Reflect the expected costs of achieving and maintaining the 33% RPS goal;
- Realistically minimize the costs of achieving and maintaining the 33% RPS goal;
- Facilitate coordination and consistency between the RPS and the Commission's long-term procurement planning proceeding (LTPP);
- Encourage portfolio level optimization by IOUs.

5. Staff Proposal

5.1. Methodological Framework

Introduction

This Staff Proposal carries forward the process for determining RPS cost limitation used by the Commission since the initiation of the MPR, though the content of the proposed cost limitation methodology is different. Staff proposes that the Commission will adopt the procurement expenditure limitation methodology in a Commission decision. That decision will authorize Energy

Division staff to produce the PEL for each IOU by developing IOU-specific inputs for the PEL and then calculating the PEL for each IOU.[8]

The calculations made by staff for each IOU's PEL will be presented to the Commission in the form of a draft resolution. The draft resolution will seek Commission approval both for the PEL calculations and for the statutorily required finding that each IOU's PEL, as set forth in the draft resolution, "is set at a level that prevents disproportionate rate impacts." (Section 399.15(d)(1).)

Staff proposes a methodology for setting the PEL that is based on the factors set out in Section 399.15(c) and (d).[9] As explained in detail below, the

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[8] This would be analogous to the process for the MPR that was set up in D.05-12-042.

[9] These sections mandate that:

> (c) The commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard. In establishing this limitation, the commission shall rely on the following:
>
> (1) The most recent renewable energy procurement plan.
>
> (2) Procurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources.
>
> (3) The potential that some planned resource additions may be delayed or canceled.
>
> (d) In developing the limitation pursuant to subdivision (c), the commission shall ensure all of the following:
>
> (1) The limitation is set at a level that prevents disproportionate rate impacts.
>
> (2) The costs of all procurement credited toward achieving the renewables portfolio standard are counted towards the limitation.
>
> (3) Procurement expenditures do not include any indirect expenses, including imbalance energy charges, sale of excess energy, decreased generation from existing resources, transmission upgrades, or the costs associated with relicensing any utility-owned hydroelectric facilities.

proposed PEL methodology uses a ratio of an IOU's RPS procurement expenditures to the IOU's total revenue requirement; i.e.,

$$\frac{\text{IOU's RPS procurement expenditures}}{\text{IOU's total revenue requirement}}$$

The numerator consists of the actual or forecasted (as relevant; see §§ 5.2.1.1., 5.2.1.2, below) money spent by the IOU to fulfill its PPAs and operate its UOG facilities for its RPS procurement in each of the 10 years of the PEL period.

The denominator consists of the forecasted total revenue requirement (the initial year equals the IOU's effective revenue requirement, escalated by 2.75%, and then with each succeeding year escalated by 2.75%; see § 5.2.2., below) for the IOU in each of the 10 years of the PEL period.

For purposes of the PEL calculation, the "total revenue requirement" consists of:

1. the effective revenue requirement established in the IOU's most recent general rate case (GRC),[10] plus
2. the effective total transmission revenue requirement authorized by the Federal Energy Regulatory Commission, plus
3. any other Commission-authorized effective revenue requirements that contribute to rates.

This ratio and its inputs, set out further below, implement the statutory elements in Section 399.15(c) by:

- Making RPS procurement expenditures the numerator [§ 5.1.2, below];

[10] Thus, if year 1 of the PEL is the second attrition year of the GRC, the GRC component of the "total revenue requirement" will be the effective revenue requirement for the second attrition year of the GRC.

- Relying on the "RPS net short" calculation made by IOUs according to the Commission-authorized methodology established in the RPS proceeding to account for the potential that some planned resource additions may be delayed or cancelled [§ 5.2.1.3, below].

The ratio and its inputs implement the statutory directions in Section 399.15(d) by:

- Using the ratio to ground a Commission determination that the PEL is set at a level that avoids disproportionate rate impacts [§ 5.1.3, below];
- Including in the numerator all procurement credited toward RPS compliance [§ 5.1.2, below];
- Identifying excluded indirect expenses [§§ 5.2.1 and 6, below].

5.1.1. Timeframe: 10-year period, Forward and Rolling

The obligation to comply with the RPS program continues indefinitely. (Section 399.15(b)(2)(B).) Thus, the PEL should be able to efficiently accommodate the long-term timeframe of the RPS program and the dynamics of an IOU's RPS portfolio. From this perspective, Staff proposes the PEL should be structured as a rolling 10-year account of actual and forecasted RPS procurement expenditures.

In order for the procurement expenditure limitation to effectively place a limit on procurement made by a utility to meet its RPS procurement quantity requirement, Staff proposes a cost containment framework that is forward looking rather than retrospective. The forward looking methodology includes all RPS procurement expenditures expected to be incurred during the 10-year

period,[11] that is, it does not ignore committed procurement from existing contracts, as explained in detail below.

A multi-year timeframe accounts for the dynamic quality of an IOU's RPS portfolio and will provide flexibility for IOUs to manage RPS procurement expenditures at a portfolio level.[12] Specifically, Staff proposes that the initial PEL cover years 2014-2023. The "rolling" element of the PEL will be reflected in updates to the PEL inputs, and assumptions every two years. For example, assuming an initial PEL period of 2014 - 2023, each IOU's PEL will be reset in 2015 for the next 10-year period (2016 - 2025); and in 2017 for the 2018 - 2027 PEL period.

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[11] Once an IOU receives Commission approval of an RPS power purchase agreement or utility-owned generation (UOG) facility, the associated expenditures are recovered from ratepayers as authorized by the Commission.

[12] An IOU's RPS portfolio is dynamic for several reasons. These dynamics impact the IOU's RPS compliance position, as well as the level of RPS procurement expenditures in any given year.

- Annual generation from intermittent renewable resources will vary from year to year; thus actual expenditures for these resources will vary.
- Projects in development may achieve commercial operation later than expected resulting in lower procurement expenditures in the near term, or contracts may be terminated prior to a project achieving commercial operation.
- In any given year, RPS contracts may expire, impacting total procurement expenditures.
- RPS procurement quantity requirements are a function of retail sales, thus changes in an IOU's load can impact RPS procurement requirements.

5.1.2. All RPS Procurement Included in Procurement Expenditure Limitation

Section 399.15(d)(3) directs that the costs of all procurement used to meet the RPS should be included in the PEL. Staff proposes that the PEL include RPS expenditures associated with all RPS procurement and sales, specifically:

a. All RPS procurement between an IOU and an independent power producer or marketer, regardless of when the contract was executed, when the facility achieved commercial operation, or the procurement program in which the contract/facility participated.[13]

b. All RPS-eligible UOG facilities.

5.1.3. Process for Commission Determination of PEL

The Staff Proposal anticipates that the Commission would initially adopt a decision that sets the methodology for calculating the PEL and contains criteria by which the Commission will determine whether the PEL for each IOU is set at a level that prevents disproportionate rate impact. Staff anticipates that this initial decision would also direct staff, in consultation with the parties, to develop a method for calculating each IOU's PEL.

Staff would then make the PEL calculations and embody them in a draft resolution for Commission approval. The draft resolution would also require the Commission's finding that each PEL was set so as to prevent disproportionate rate impact. Staff anticipates that it would be possible for the Commission to

[13] For example, contracts with renewable qualifying facilities executed prior to the existence of California's RPS program; contracts resulting from RPS solicitations or bilateral negotiations; contracts resulting from IOU solar photovoltaic programs; contracts resulting from the Renewable Auction Mechanism (RAM); or feed-in tariff (FIT) contracts.

decide that the PEL for one or more IOUs did not meet the criteria for prevention of disproportionate rate impact, and in that case the Commission would adopt a different PEL that did meet the criteria.

5.2. Procurement Expenditure Limitation Methodology

Summary

Staff proposes the RPS procurement expenditure limitation should be based on the ratio of an IOU's RPS procurement expenditures relative to the IOU's total revenue requirement. To calculate an IOU's PEL, staff will forecast an IOU's expected ratio of procurement expenditures to revenue requirement for each year within the 10-year period. These will be known as the initial PEL ratios. Then, staff proposes that the Commission adopt an IOU's PEL equal to the highest initial PEL ratio, or highest annual percentage amount, within the 10-year PEL period,[14] provided that the Commission determines that that procurement expenditure limitation ratio prevents a disproportionate rate impact. (Section 399.15(d)(1).)

To monitor and assess an IOU's ongoing procurement expenditures relative to its PEL, it is important to consider that the IOUs' RPS procurement expenditures may vary significantly from year to year, and future IOU revenue requirements are uncertain. Staff proposes that the ongoing measuring of an IOU's RPS procurement expenditures against the adopted PEL should be based on the average ratio of annual RPS procurement expenditures to annual revenue

[14] At a high level of generality, this is expressed by the formula:

$$\frac{\text{IOU's RPS procurement expenditures}}{\text{IOU's total revenue requirement}}$$

requirements over the 10-year PEL period. The recalculated ratios used for this assessment will be known as the updated PEL ratios.

The example in Table 1, below, shows a hypothetical IOU's initial PEL ratios ranging from 14% to 23% within the 2014 - 2023 PEL period. As proposed by staff, the procurement expenditure in this example would be set at 23%, the highest initial annual percentage amount, provided that it is determined by the Commission that the highest percentage in that period is sufficient to prevent disproportionate rate impacts.[15] To stay within its procurement expenditure limitation, an IOU's updated average PEL ratio over a 10-year period could not exceed 23%.

Table 1: Illustrative Example of PEL Methodology

Illustrative Example of Proposed PEL Methodolgy	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
RPS Procurement Expenditures ($million)	145	145	186	226	229	252	278	269	260	261
Revenue Requirement ($million)	1,027.5	1,055.8	1,084.8	1,114.6	1,145.3	1,176.8	1,209.1	1,242.4	1,276.5	1,311.7
RPS Procurement Expenditures as % of Revenue Requirement (Annual)	14.1%	13.7%	17.1%	20.3%	20.0%	21.4%	23.0%	21.7%	20.4%	19.9%
Procurement Expenditure Limitation	23%									

[15] It is important to note, as explained below, that in this example, the IOU's annual ratio of RPS procurement expenditures to revenue requirement may exceed 23% in one or more years as actual expenditures are incurred in 2014 and 2015, or forecasted expenditures, change, without exceeding the PEL, if the average forecasted ratio over the 10-year PEL period is not greater than 23%. A more detailed illustration is included in Attachment D.

This methodology accounts for the mandated increases in RPS procurement from 2011 to 2020, as set by Section 399.15 and implemented by the Commission in D.11-12-020.[16] The escalation from 20% of retail sales in the first compliance period to 33% in the third represents an increase of 65% in the amount of RPS-eligible generation a utility is required to procure. It is therefore inevitable that total RPS procurement costs will increase from current levels to meet the 33% RPS procurement requirement. The proposed methodology "bakes in" the steady increase in required procurement by setting the PEL at the highest projected percentage for any one year during the 10-year period. This methodology looks at an IOU's total cost of renewable procurement and not at the marginal cost of procuring renewable resources over other conventional sources of electric generation. The hypothetical cap of 23% illustrated above would not reflect a 23% ratepayer bill impact since the renewable procurement should offset part or all of the cost of procuring more conventional, non-RPS eligible sources of generation.

[16] Section 399.15(b)(2)(B) provides:

> In establishing quantities for the compliance period from January 1, 2011, to December 31, 2013, inclusive, the commission shall require procurement for each retail seller equal to an average of 20 percent of retail sales. For the following compliance periods, the quantities shall reflect reasonable progress in each of the intervening years sufficient to ensure that the procurement of electricity products from eligible renewable energy resources achieves 25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020. The commission shall require retail sellers to procure not less than 33 percent of retail sales of electricity products from eligible renewable energy resources in all subsequent years.

5.2.1. Calculation of Procurement Expenditures[17]

Section 399.15(c) provides that:

> In establishing this limitation, the commission shall rely on . . . [p]rocurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources.

Such expenditures will be used to calculate the numerator of a PEL ratio.

Staff proposes that procurement expenditures comprise:

1) the actual payments made by retail sellers for RPS procurement contracts, and

2) the revenue requirements associated with RPS-eligible UOG.

An IOU's initial RPS procurement expenditures will be based on forecasted annual procurement expenditures from executed contracts and UOG over the 10-year period.[18] The initial PEL will also likely include forecasted procurement expenditures associated with generic incremental procurement from contracts or utility ownership agreements not currently in the IOU's

[17] Section 399.15(d)(3) suggests that "procurement expenditures" may be a term of art, not simply a description of money spent, because the statute lists certain "indirect" expenses that should be excluded from the definition. This issue is explored in detail in Questions 5 and 6, below. The Staff Proposal does not take a position on this point, but uses "actual payments" to describe money spent. Parties' responses to the questions in this ruling will help illuminate the relationship, if any, of "actual payments" made for RPS procurement contracts to the statutory categorization of procurement expenses.

[18] PG&E, SCE, SDG&E, BVS, and CalPeco recently forecasted RPS costs, pursuant to the May 10, 2013 Assigned Commissioner Ruling that required submission of 2013 RPS procurement plans.

portfolio that are needed to meet RPS procurement quantity requirements. The incremental procurement "need" is the RNS.[19]

When calculating updated PEL ratios, actual expenditures (and revenue requirements) should be used, when available. For example, when reporting in 2015 its procurement expenditure status relative to an established PEL, an IOU would replace forecasted 2014 expenditures with actual expenditures for 2014.

Details of how procurement expenditures would be calculated are provided below.

5.2.1.1. Methodology for Calculating *Actual* Procurement Expenditures from Executed Contracts of Utility-Owned Generation

i. For contracts, procurement expenditures equals the actual payments made by the IOU to the seller (or sellers, in the case where firming and shaping services are contracted with a third party), in each past year during the PEL period. For example, procurement expenditures equal the time of delivery (TOD) adjusted contract price paid for each megawatt-hour (MWh) of generation.

ii. For utility-owned generation (UOG), procurement expenditures equal the actual revenue requirement associated with the RPS-eligible facility or facilities in each past year during the PEL period.

[19] For example, if an IOU's renewable net short calculation shows that the IOU will not meet its procurement quantity requirements in the third compliance period, or subsequent procurement quantity requirements within the PEL period, the IOU's PEL will include forecasted procurement expenses associated with procurement needed to meet the renewable net short. The RNS calculation is where the statutory direction to account for "the potential that some planned resource additions may be delayed or canceled" is implemented. (See Section 399.15(c)(3).)

iii. Payments received by an IOU from RPS sales contracts should be subtracted from the procurement expenditures for the same contract that are counted towards the PEL.[20] For example, if in 2014 an IOU is forecasted to pay an RPS seller $500,000 according to the terms of a executed contract (Contract A), and the IOU has separately executed a contract (Contract B) to sell a portion of Contract A to another buyer for an estimated $450,000, then $500,000 would be added to the PEL and $450,000 would be subtracted. The result of these two transactions would be a $50,000 procurement expenditure in 2014.

5.2.1.2. Methodology for Calculating *Forecasted* Procurement Expenditures from Executed Contracts or Utility-Owned Generation

i. For contracts, procurement expenditures equal the forecasted payments made to the seller (or sellers in the case where firming and shaping services are contracted with a third party).

- In the case of an RPS facility that is operational, forecasted procurement expenditures should be forecasted in a manner consistent with the methodology used to forecast generation for the purpose of calculating the IOU's RNS.[21]

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[20] IOUs are permitted to execute RPS sales contracts, also referred to as "resale contracts." Guidance concerning IOU resale contracts was provided in D.12-11-016, Ordering Paragraph (OP) 17. Resale contracts are described in D.11-12-052, section 3.5.4, and specific rules are set in OP 4 and 5, with regards to contracts that are subject to the RPS portfolio content categories.

[21] If the capacity of the facility changed during the two past years or will change during the PEL period for any reason, forecasted procurement expenditures should take that into account. For example, if a new RPS facility is being developed and brought online in phases (e.g., 150 megawatts (MW)) over a three year period), forecasted procurement expenditures should be scaled up according to the expected generation amounts during the PEL period.

- In the case of executed contacts for facilities that will achieve commercial operation during the PEL period, forecasted procurement expenditures equal the levelized, TOD adjusted contract price multiplied by the total annual expected MWh generated in each year during the PEL period, consistent with the methodology used to forecast generation for the purpose of calculating the IOU's RNS.

ii. For UOG, procurement expenditures equal the forecasted revenue requirement associated with the RPS-eligible facility or facilities.

iii. Payments forecasted to be received by the IOU from executed RPS sales contracts should be subtracted from the procurement expenditures for the same contract that are counted towards the PEL.

5.2.1.3. Methodology for Calculating Forecasted Incremental Procurement Expenditures Associated with Renewable Net Short

During the initial PEL timeframe, it is likely that IOUs will need incremental RPS procurement or ownership agreements to achieve and maintain the 33% RPS procurement quantity requirements. The Commission, IOUs, and RPS stakeholders use the RNS methodology to approximate the quantity of renewable energy credits (RECs) needed above and beyond what is already in the IOU's portfolio to meet RPS procurement requirements.[22] The RNS

[22] The "REC" is the unit of accounting for RPS procurement and compliance. It represents one MWh of RPS-eligible generation. (Section 399.12(h)). It is used here to mean any RPS-eligible procurement. The term "unbundled REC" is used to describe RPS procurement that does not include purchase of the RPS-eligible energy from the generation.

calculation incorporates assumptions that "some planned resource additions may be delayed or canceled," a requirement of Section 399.15(c)(3).

IOUs file an RNS calculation that shows the quantity of MWh needed to meet RPS procurement quantity requirements over a 20-year period.[23] The current RNS methodology does not include a forecast of the cost associated with incremental procurement to fill an RNS. For the purpose of setting the PEL, Staff proposes that procurement expenditures associated with the RNS calculation should be based on resource costs taken from a publicly available source, such as the RPS Calculator.[24]

Taken together, RPS procurement expenditures for the proposed initial PEL period can be written as:

$$\textbf{Annual Procurement Expenditures}_{(n)} = (PE_a - RS_a) + (PE_f - RS_f) + PE_{RNS}$$

Where,

n	=	Each calendar year within 10-year PEL period
PE_a	=	Actual Procurement Expenditures from Executed Contracts and Utility-Owned Generation[25]
RS_a	=	Actual Revenues from Resale Contracts
PE_f	=	Forecasted Procurement Expenditures from Executed Contracts and Utility-Owned Generation

[23] IOUs submit RNS calculations in the RPS proceeding with each annual RPS procurement plan and annual RPS compliance report. (August 2, 2012 Administrative Law Judge Ruling, R.11-05-005).

[24] The most recent versions of the RPS Calculator is available here: http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/ltpp_history.htm

[25] "Actual Procurement Expenditures" are likely to be a factor only in evaluating an IOU's actual procurement relative to the established PEL, not in establishing the PEL for a prospective 10-year period.

RS_f = Forecasted Revenues from Resale Contracts

PE_{RNS} = Forecasted Procurement Expenditures to meet Renewable Net Short[26]

5.2.2. Forecasting Revenue Requirements

IOU revenue requirements can increase or decrease annually by small or large amounts, but in general, it is reasonable to expect that revenue requirements will increase over time. Staff proposes that the PEL methodology forecast IOU-specific annual revenue requirements based on the IOU's effective revenue requirement at the time the PEL is set, escalated at a steady rate throughout the PEL period to account for ongoing operations, inflation and changes in load (i.e., retail sales).[27] The proposal is a reasonable simplifying

[26] That is, procurement that is not currently under contract with the IOU or in the IOU's portfolio.

[27] IOUs implement authorized revenue requirements via the Commission's advice letter process. Effective electric revenue requirements for California's IOUs are referenced here:

PG&E Advice Letter 4096-E-A, Table 2, Line 66
http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC_4096-E-A.pdf

SCE Advice Letter 2834-E-A, Table 1, Line 48, Column 3
https://www.sce.com/NR/sc3/tm2/pdf/2834-E.pdf

SDG&E's January 1, 2013 effective revenue requirement of $3,141,307,076, based on Advice Letter 2443-E http://regarchive.sdge.com/tm2/pdf/2443-E.pdf

BVES's Advice Letter 260-E, based on D.10-03-016 and D.09-10-028.

http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/114920.PDF;
http://www.aswater.com/Organization/Rates_and_Regulations/Advice_Letters/Pending_/260-E_Notice_2012_Rates_Implementation.pdf

Footnote continued on next page

assumption for the relatively narrow purpose of setting an IOU's PEL. Specifically, Staff proposes that an IOU's annual revenue requirement during the initial PEL period be calculated as:

a. Effective revenue requirement in the year prior to the PEL period (e.g., January 2013 effective revenue requirement); and
b. Forecasted annual revenue requirement during PEL period (e.g., 2014-2023), based on a 2.75% annual escalation of effective revenue requirement.[28]

5.2.3. Monitoring the Procurement Expenditure Limitation

Monitoring an IOU's PEL can be incorporated into existing RPS procurement processes. The IOUs' annual procurement plans will include information that is necessary to implement and administer the PEL. Specifically, each IOU's RPS annual procurement plan includes the following information:

- Long-term forecast of supply and demand of RPS resources;
- Renewable net short calculation;
- Long-term forecast of total annual RPS procurement expenditures.

CalPeco's January 1, 2013 effective revenue requirement of approximately $77.965 million, based on Advice Letter 23-E.

http://www.libertyutilities.com/west/documents/advice_letters/121212_CalPeco_AL-23E.pdf

PacifiCorp's California January 1, 2013 effective revenue requirement of $104,029,996, based on Advice Letter 480-E; D.12-03-022 and Advice Letter 469-E; and, D.11-03-007 and Advice Letter 440-E.

[28] An annual escalation factor of 2.75% is consistent with the attrition adjustment adopted by the Commission in SDG&E's most recent GRC. (D.13-05-010, OP 4.) This value is similar to annual changes to IOU revenue requirements when averaged over the last 5 - 10 years.

In order for the IOUs, Commission staff, and RPS stakeholders to stay informed about an IOU's RPS compliance position and forecasted procurement expenditures relative to an established PEL, IOUs should also report to the Commission at key decision points along the procurement continuum. These key points are highlighted below and illustrated in the flow chart of the RPS procurement process, attached as Attachment C.

- **Long-term procurement planning process**.

  Staff proposes that information about an IOU's PEL should be considered in the development of RPS portfolios within the LTPP.[29]

- **Annual RPS procurement plan**.

  IOUs should include detailed information about the type of RPS procurement they seek authorization from the Commission to solicit bids for (e.g., 100 MW of baseload resources), the expected costs of the procurement, and why the preferred procurement provides the maximum value to the utility and its ratepayers. The Commission will assess the impact the requested procurement may have on the IOU's PEL.

- **RPS solicitation shortlisting process**.

  IOUs apply Commission authorized procurement preferences and least-cost, best-fit methodology to select a shortlist from solicited bids. IOUs must also evaluate the impact individual bids, and the

[29] One of the tasks within the Commission's LTPP proceeding is the development of "RPS Portfolios," which reflect a list of generating facilities and generic resources needed for California load serving entities to meet California's 33% RPS goal, under various scenarios. The purpose of developing RPS Portfolios is to better coordinate the state's resource planning and transmission planning efforts and to ensure that the transmission planning process includes a needs analysis necessary for the transmission permitting phase. The California Energy Commission participates in the proceeding and the RPS Portfolios are provided to the California Independent System Operator, pursuant to a May 2010 memorandum of understanding between the agencies.

shortlist in total, may have on the PEL, as well as the extent to which incremental procurement is needed to meet RPS procurement requirements.

- **Prior to executing an RPS contract or power purchase agreement, whether through a pre-approved standard contract, competitive solicitation, bilateral transaction, or UOG memorandum of understanding**.

  An IOU must analyze, and discuss with its procurement review group (PRG), the expected impact that the procurement will have on the IOU's PEL.

- **In any advice letter or application filed with the Commission that concerns RPS procurement that impacts an IOU's PEL.**

  An IOU's advice letter or application seeking approval of an RPS contract(s) or UOG must include information showing the impact that the proposed procurement is expected to have on the IOU's PEL.

- **When an existing contract expires, is terminated, is amended in a manner that impacts forecasted procurement expenditures, or project commercial operation is significantly delayed or accelerated.**

  These types of changes to the IOU's RPS portfolio should be discussed with the IOU's PRG and reflected in any subsequent update to the IOU's procurement expenditure limitation.

As an ongoing element of the PEL monitoring process, IOUs should also develop a range of strategies for proactive RPS portfolio management, to keep their RPS procurement activities aligned with their PELs. Such strategies might include, for example, applying excess procurement from prior compliance periods to meet RPS procurement quantity requirements in a current compliance period; deferring incremental contracting to later years; and/or selling excess RECs.

5.2.4. Insufficiency of PEL to Meet RPS Obligations

Section 399.15(f) addresses the potential situation in which an IOU may not meet its RPS requirements within the limits of its PEL. [30] In order to reduce the likelihood that such a situation would occur, IOUs should actively monitor their RPS procurement in relation to their PELs, as set forth in the previous section of the staff proposal.

If, however, an IOU is approaching the cost limitation, staff proposes that a series of formal steps be undertaken to determine the nature of the problems and allow the IOU to undertake RPS-eligible procurement in compliance with statutory requirements. Staff proposes the following steps:

1. An IOU (or staff, in reviewing an IOU's filings) determines that it has reached, or will soon reach, 90% of its PEL and has not yet met its RPS procurement requirements. For purposes of administration of the PEL only, "RPS procurement requirements" means 33% of the IOU's retail sales are obtained from RPS-eligible resources.

[30] Section 399.15(f) provides:

> If the cost limitation for an electrical corporation is insufficient to support the projected costs of meeting the renewables portfolio standard procurement requirements, the electrical corporation may refrain from entering into new contracts or constructing facilities beyond the quantity that can be procured within the limitation, unless eligible renewable energy resources can be procured without exceeding a de minimis increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5.

2. The IOU then makes a showing to the Commission that includes:

    a. An explanation of the feasible measures for proactive management of its RPS portfolio the IOU has taken to achieve its RPS procurement requirements within the PEL;

    b. A list of further feasible measures, if any, available to the IOU;

    c. A calculation of the likelihood that, even taking all feasible measures, the IOU will exceed its PEL without meeting its RPS procurement requirements;

    d. An analysis of whether the IOU can procure additional RPS-eligible resources without exceeding a de minimis increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5 (a condition of Section 399.15(f));

    e. If the IOU chooses to do so, a plan for continuing to procure RPS-eligible resources if the PEL is found to be insufficient to support the projected cost of meeting the IOU's RPS procurement requirements.

3. The required showing should be made in the form of a Tier 3 advice letter, following guidelines to be set by staff, in consultation with the parties.

4. If the Commission determines that the IOU's showing is adequate to meet the requirements of Section 399.15(f), the Commission would adopt the IOU's proposal in a resolution on the Tier 3 advice letter.

6. Questions for Comments

The following questions are intended to guide parties in providing comments. Some of the questions explicitly refer to the staff proposal. Some questions ask questions more broadly, about issues and assumptions necessary for the development of the PEL. The extensive set of questions is intended to

provide options for parties in framing their comments; it is not intended to require exhaustive treatment of each point raised in the questions.

Please identify the particular question or questions, if any, to which a comment responds. If a comment does not respond to a question, but rather to an element of the staff proposal directly, please identify the specific part of the staff proposal that is being addressed.

1. Section 399.15(e) mandates that the Commission assess whether each electrical corporation can "achieve a 33-percent renewables portfolio standard by December 31, 2020, and maintain that level thereafter, within the adopted cost limitations."

    - Does this require that the procurement expenditure limitation methodology extend beyond 2020? Explain why or why not.

2. Do you agree with Staff's proposal to use a rolling 10-year timeframe for setting and administering the PEL? Explain why or why not.

    - Do you support a rolling PEL timeframe, but spanning some other amount of time? Explain what time period is preferred and why.

    - Should the PEL timeframe span a fixed amount of time? If yes, please suggest an amount of time and justify the choice.

3. If a longer-term timeframe is required or preferred to implement and administer the PEL, what methodological framework can be established to:

    - account for the length of the majority of the IOUs' RPS contracts (e.g., 20+ years);

    - account for the need to contain RPS costs while enabling an IOU to maintain flexibility to optimize the value of its RPS portfolio.

        - Should the PEL framework extend over a period equal to the length of the longest term RPS contract, while the actual PEL

would apply on a rolling 10-year period, similar to the approach used in the current LTPP?[31]

- Should another process for incorporating the long-term RPS procurement time horizon be used?
- Please identify strengths and weaknesses of the approach chosen from both an analytical and practical (i.e., implementation by IOUs and by the Commission) perspective.

4. Should the PEL expire after an IOU achieves 33% of its retail sales from RPS-eligible resources for a compliance period? Why or why not? Should the PEL be reinstated if the IOU falls below 33% in a subsequent compliance period? Why or why not?

5. Section 399.15(c)(2) provides that, in establishing the procurement expenditure limitation, the Commission shall rely on "procurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources."

   Section 399.15(d)(3) provides that "procurement expenditures do not include any indirect expenses, including imbalance energy charges, sale of excess energy, decreased generation from existing resources, transmission upgrades, or the costs associated with relicensing any utility-owned hydroelectric facilities."

   This question 5, and the following question 6, explore these two statutory provisions and seek comment on how the Commission should interpret the different elements contained in these statutory provisions. In responding to both questions, please use the format provided in Attachment B, supplemented by narrative descriptions as necessary.

   In responding to this question 5, please respond without regard to whether the costs discussed might be considered "direct" or "indirect." In this case, please treat the "direct" and "indirect" expense columns in Attachment B as

[31] The LTPP forecasts statewide load and resources over a 20 year timeframe; however, any procurement authority authorized by the Commission is based on need determined within the next 10 years.

asking for the commenter's preliminary opinion as to how the listed expenses might be classified.

- Please list the most significant costs[32] of building eligible renewable energy resources.
- Please list the most significant costs of owning eligible renewable energy resources.
- Please list the most significant costs of operating eligible renewable energy resources.
- Please identify any significant costs of eligible renewable energy resources that are not included in the three categories listed above.
- Please identify any major differences in costs of building, owning and operating eligible renewable energy resources between different resource types (e.g. wind, solar, etc.)
- For each identified cost, please explain how that cost is currently covered in the contract price of an RPS procurement contact.
- For each identified cost that is not currently covered in the contract price of an RPS procurement contract, please identify whether or not that cost is directly attributable to the specific eligible renewable energy resource under contract.
- For each identified cost, please explain how that cost is currently recovered by an IOU for UOG.
- For each identified cost that is not currently covered in the contract price of an RPS procurement contract, please explain how that type of expense is accounted for by IOU. How is the cost of such an expense recovered by an IOU?

[32] For purposes of this ruling, a cost is "significant" if it contributes 5% or more of the total costs being discussed. Where a number of costs meet this test of significance, please rank them from largest contribution to costs to lowest contribution.

- Please indicate whether any of the identified procurement costs are incurred at a portfolio level that is not exclusively attributable to a specific RPS procurement contract.
    - How, if at all, do these costs differ depending on the resource mix of the IOU's renewable portfolio?
- For each cost identified in response to the previous question, please describe how a methodology for the procurement expenditure limitation should treat such costs. Please consider, without limitation:
    - Whether the entire cost should be included in the methodology;
    - Whether a proportional or allocated amount of the cost should be included in the methodology;
    - Whether the present value of costs that are incurred over several years should be used; and
    - Any other specific approaches that should be taken into account in developing the methodology.

6. Section 399.15(d)(3) provides:

Procurement expenditures do not include any indirect expenses, including imbalance energy charges, sale of excess energy, decreased generation from existing resources, transmission upgrades, or the costs associated with relicensing any utility-owned hydroelectric facilities.

- How should the Commission interpret the term "sale of excess energy?" Please provide examples of commercial usage to support your interpretation.
- How should the Commission interpret the term "decreased generation from existing resources?" Please provide examples of commercial usage to support your interpretation.

In responding to this question 6, commenters are asked to provide a list of expenses that should be classified as indirect using the format provided in Attachment B, supplemented by narrative descriptions as necessary. Please

note if there is a reason to consider a listed expense as both direct and indirect, or as varying in different circumstances. Please explain these choices.

- Please identify other expenditures, not listed in the statutory section above, that are generally considered to be "indirect expenses" of RPS procurement (e.g., interconnection costs, staffing costs).

- For each type of indirect expense (including those in the statutory section and those provided in response to this question), please explain how that expense is currently covered in the contract price of an RPS procurement contact.

- For each type of indirect expense (including those in the statutory section and those provided in response to this question), please explain how any type of expense that is not currently covered in the contract price is accounted for by an IOU. How is the cost of such an expense recovered by an IOU?

- For each type of indirect expense (including those in the statutory section and those provided in response to this question), please explain how that cost is currently recovered by an IOU for UOG.

- For each type of indirect expense (including those in the statutory section and those provided in response to this question), please explain if the expense is significant. If it is not, please explain why not.

    - Please indicate whether any of the identified indirect expenses (including those in the statutory section and those provided in response to this question), are incurred at a portfolio level that is not exclusively attributable to a specific RPS procurement contract. How, if at all, do these costs differ depending on the resource mix of the renewable portfolio?

- For each type of indirect expense (including those in the statutory section and those provided in response to this question), please describe how a methodology for the PEL should treat such expenses. Please consider, without limitation:

    - Whether the entire cost should be included in the methodology;

- Whether a proportional or allocated amount of the cost should be included in the methodology;
- Whether the present value of costs that are incurred over several years should be used; and
- Any other specific approaches that should be taken into account in developing the methodology.

7. Section 399.15(d)(2) provides that "the costs of all procurement credited toward achieving the renewables portfolio standard" will count towards the procurement expenditure limitation.

- For purposes of the PEL, how should an IOU's costs associated with RPS-eligible UOG facilities be accounted for? Is it necessary for this treatment to be comparable to the costs associated with a PPA?
  - How do UOG costs differ depending on resource type? How should these differences be treated in the PEL?
  - How, if at all, would the treatment of indirect costs associated with UOG differ from that of contracted resources?
  - Do you agree with Staff's proposal to use the annual revenue requirement associated with UOG facilities? What are the pros and cons of this approach?
  - Should a UOG facility's levelized cost of energy (LCOE) be used instead of revenue requirements? Explain why or why not.
    - If yes, identify specific costs that should or should not be included in the LCOE calculation for UOG facilities and a detailed methodology for calculating LCOE of UOG facilities.
  - Should some other method be used? Please describe and support the choice presented.
  - Please explain why your preferred methodology for accounting for UOG costs is appropriate for purposes of the RPS procurement expenditure limitation.

- How should the costs of contracts that set energy payments indexed to actual market prices at the time of generation be accounted for in future years?

- Please identify any other contractual arrangements that may need special consideration for purposes of the PEL, including how the costs of such arrangements should be accounted for in future years.

8. How should forecasted procurement expenditures be calculated for contracts with generation facilities that are already in operation?

    - Do you agree with Staff's proposal to rely on forecasted expenditures that are based on an IOU's RNS methodology?[33]

    - For the purpose of setting the PEL, should forecasted procurement expenditures be based on a historic average for each operating facility if historic generation data exist? If so, how many years should be averaged?

9. Do you support Staff's proposal to include executed contracts in the PEL methodology? Or, should only contracts that have been approved by the Commission be included? Why or why not?

10. What is the role of the RNS in setting the PEL?

    - Do you agree with Staff's proposal that the procurement expenditure limitation should use the most current RNS calculation method at the time the PEL methodology is employed? Please explain why or why not.

    - What criteria should be used to determine what types of resources should be assumed to fill the RNS? Please consider, without limitation:

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[33] Based on the Preliminary Annual RPS Compliance Reports, the IOUs generally forecast generation based on the expected or maximum amount that may be annually procured according to the contract. Using this method, it is reasonable to assume that annual forecasted procurement expenditures would be calculated based on the levelized, TOD adjusted price multiplied by the maximum generation amount that may be procured under the contract.

- Fuel and technology type;
- Facility size (e.g., 0-3 MW, 3-20 MW, 20-100 MW, 100 MW+);
- Program governing procurement (i.e., RPS solicitation, RAM, or Renewable Market Adjusting Tariff/FIT);
- UOG;
- PPAs with independent power producers;
- Utility portfolio optimization; and
- The estimated cost and value of the resource, by fuel type, technology type, and facility size.

- Do you support Staff's proposal to use the RPS Calculator as the source for resource costs to fulfill an IOU's RNS? Why or why not? Should some other source be used, for example, RPS bid prices submitted in response to an IOU's RPS solicitation? Please specify and explain your choice, including whether the information would be publicly available.

- What assumptions, if any, should be made with respect to indirect costs associated with RPS resources needed to fill the RNS?

- What assumptions, if any, should be made about the portfolio content categories into which the procurement to fill the RNS will fall? Please specify the basis for the identified assumptions.

11. The RPS procurement expenditure limitation methodology proposed by Staff measures an IOU's total RPS procurement costs and not the marginal cost (or savings) associated with RPS procurement compared to conventional resources for electric generation and capacity.

    - Do you agree that this methodology is the appropriate means of setting the limitation on RPS procurement expenditures?

    - If you do not agree, what methodology should be used? Any alternate proposal must explain how it meets the requirements and provisions of Sections 399.15(c)-(g), in particular, Section 399.15(d)(1), which specifies that the PEL must be "set at a level that prevents disproportionate rate impacts."

Note, this ruling has specific requirements for how a party must present an alternative methodology.

12. The RPS procurement expenditure limitation methodology proposed by Staff measures an IOU's total RPS procurement costs and not the incremental costs for RPS procurement or ownership agreements to achieve and maintain the 33% RPS procurement quantity requirements.

    - Do you agree that this methodology is the appropriate means of setting the limitation on RPS procurement expenditures?

    Should the PEL apply only to the RNS (which by definition is necessary RPS-eligible procurement that has not yet been contracted for)? Why or why not?

13. Section 399.15(d)(1) specifies that the PEL must be "set at a level that prevents disproportionate rate impacts."

    The Staff proposal in effect sets the procurement expenditure limitation at the level at which the Commission determines that disproportionate rate impacts can be prevented.

    - Do you agree with Staff's proposal that the Commission use the ratio of RPS procurement expenditure to revenue requirement as the basis to determine whether a potential rate impact would be "disproportionate?" Explain why or why not.

    - Should the Commission use some other method as the basis to determine whether a potential rate impact would be "disproportionate?

        - Should the Commission use some other baseline as the denominator, e.g., the IOU's generation rate component of revenue requirements, as the basis to determine rate impact? Please explain and provide quantitative examples, if relevant.

        - Should the Commission use an evaluation of the costs and benefits of RPS-eligible resources compared to the costs and benefits of a scenario of procurement of the same volume of electricity from generation sources that are not RPS-eligible, e.g. , a combined cycle gas turbine generation facility? Please

explain and provide quantitative examples for how such a methodology would be employed, if relevant.

14. What criteria should the Commission use to determine whether the rate impact of a proposed PEL would, or would not, be "disproportionate?"

- Should different methodologies be used to set the PEL itself, according to the requirements set in Section 399.15(c), and the calculation that is used as the basis for the Commission to determine whether a potential rate impact is "disproportionate?" For example, for the purpose of determining whether RPS procurement costs will result in a disproportionate rate impact, should significant indirect costs[34] be added to RPS contract costs, even if the Commission interprets Section 399.15(d)(3)to prevent the use of such costs in setting the PEL? (i.e., such costs may not be part of the numerator in the PEL formula proposed by Staff.) Explain why or why not separate methodologies should be used.

- If separate methodologies should be used, what expenditures should the Commission include in its assessment of "disproportionate rate impacts?"

  - Procurement expenditures that do not include the indirect costs specified in Section 399.15(d)(3);

  - Procurement expenditures that do not include any indirect costs identified in your response to Question 6 above;

  - Procurement expenditures that include all direct costs identified in response to Question 5, above as well as the indirect costs specified in Section 399.15(d)(3);

  - Procurement expenditures that include all direct costs identified in response to Question 5, above as wells as all indirect costs identified in your response to Question 6, above.

[34] For example, the costs for interconnecting to the transmission system may be millions of dollars. These costs are not factored into RPS contracts, but are recovered from ratepayers after the generating facility achieves commercial operation.

- Some other set of procurement expenditures. Please specify and explain this choice.

- For purposes of the PEL, what adjustments, if any, should be made to the expenditures included in an IOU's revenue requirement in the denominator of the formula proposed by Staff? What specific adjustments should be made? Why or why not?

15. Over what time period should the Commission assess whether a potential rate impact is "disproportionate?" Please specify and explain your choice of time periods. For example,

    - The period of an IOU's most recent general rate case;
    - The current and/or next RPS compliance period (2011-2013; 2014-2016; 2017-2020; annually in 2021 and thereafter);
    - Through 2020;
    - Over a fixed ten-year period;
    - Over a rolling ten-year period;
    - Over the 20-year planning horizon used in the LTPP;
    - Some other time period. Please explain and justify the period chosen.

16. Do you agree with the Staff's proposal that the 10-year PEL methodology should forecast an increase in IOUs' total revenue requirements annually by 2.75%? Explain why or why not. If some other escalation rate should be used, explain why the proposed rate is preferred.

17. Section 399.15(c)(1) provides that, in establishing the procurement expenditure limitation, the Commission shall rely on, among other things, "the most recent renewable energy procurement plan."

    - Identify specific information that the Commission should request that IOUs provide in an annual RPS procurement plan to provide information for the PEL methodology. Please specify the element(s) of Sections 399.15(c)-(f) to which the identified information is relevant.

- For each item, please identify whether the information would be completely available publicly. If, in the opinion of the commenter, it would not be, please:
    - State why the information would not be completely publicly available, with appropriate legal citations if relevant;
    - Propose a method for increasing the public availability of the information within any legal constraints identified.

18. Do you agree with Staff's proposal that the IOUs should update inputs and assumptions at each key decision point along the procurement continuum? (See Attachment C.) Explain why or why not.

19. Do you agree with Staff's proposal for the PEL to be recalculated every two years? Why or why not? What other, time period would be preferable?

20. What process should be used to recalculate the PEL every two years? If a different time period should be used, should a different process be used, as well. Please explain any differences.

21. The IOUs utilize a standardized method to determine the net market value (NMV) of an RPS procurement contract using least-cost, best-fit criteria, as required by Section 399.13(a)(4)(A). [35] The NMV quantifies key direct and indirect cost factors and ensures that an IOU's RPS procurement decisions are based on the expected value of the procurement, rather than simply the identification of the contract with the lowest cost.

    The statutory limit on RPS procurement expenditures set by Section 399.15(c) does not interfere with or override the requirement for an IOU to select contracts based on NMV. However, a situation might occur in which an IOU would have to decide between a higher valued contract and a lower valued contract if the marginal higher valued contract may cause the IOU to exceed its PEL.

[35] The Commission most recently defined the methodology for calculating the NMV of RPS procurement contracts in OP 6 of D.12-11-016.

- What factors should guide an IOU's shortlisting decision in the situation described above?

- What factors should guide an IOU's contract execution decision in the situation described above?

- What factors should guide the Commission's review of an IOU's request for contract approval in the situation described above?

22. How, if at all, should the PEL methodology take account of new or emerging technologies or procurement requirements? (e.g., IOUs' investments in storage connected to distribution systems; or procurement necessary for local capacity requirements (see D.13-02-015).)

23. Should the PEL include a portfolio cost minimization strategy/framework? How would such a strategy be implemented as part of the PEL?

24. What is the role of "portfolio optimization" in implementing the PEL?

    - Please identify and describe methods used by IOUs to optimize their RPS portfolios and overall electricity portfolios (supply and demand).

    - Please identify the criteria by which an IOU optimizes its portfolio (e.g., cost, procuring sufficient energy and capacity to meet load, system reliability, etc.). Please identify and explain any system or process used to weight the identified criteria in the optimization process.

    - Please identify how an IOU uses the tools for RPS compliance (e.g., purchases of unbundled RECs, applying excess procurement in one compliance period to later compliance periods, etc.) to optimize the value of its RPS procurement.

    - Please identify any other elements of IOUs' management of their portfolios that could improve the effectiveness of the PEL.

25. Please identify any information necessary to provide the appropriate inputs for the PEL calculation, as it is described in the Staff Proposal. Please specify where each type of information may be found, and whether it is currently in public or in confidential form. If the information is kept confidential, please identify any publicly available information that would

be a satisfactory approximation, for purposes of the PEL. Please explain why the publicly available approximation would be appropriate.

26. Section 399.15(f) provides that:

> If the cost limitation for an electrical corporation is insufficient to support the projected costs of meeting the renewables portfolio standard procurement requirements, the electrical corporation may refrain from entering into new contracts or constructing facilities beyond the quantity that can be procured within the limitation, unless eligible renewable energy resources can be procured without exceeding a de minimis increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5.

- What criteria should the Commission use to determine that an IOU's PEL will be insufficient to support the projected cost of meeting the IOU's RPS procurement obligations? Please consider at least the following:
  - At what point in time should the determination be made?
  - For what time period into the future should the determination apply?
  - Taking into account forecasting error and other uncertainties in the RPS procurement process, what quantitative elements should be required in an IOU's showing?
- To whom and by what process should the showing be made? Staff proposes the Tier 3 advice letter process. Please comment on the appropriateness and effectiveness of that proposal.
- Should another process be used? Examples could be:
  - Showing made to, and decision made by, the Director of Energy Division;
  - Showing made by Tier 1 or Tier 2 advice letter;
  - Showing made by formal motion in the existing RPS proceeding;

- Some other method. Please explain your choice.

27. How should the Commission interpret "a de minimis increase in rates?" Please specify and justify the choice made.

    - Compared to the established procurement expenditure limitation for the IOU at risk of exceeding it?
    - Compared to an IOU's total effective revenue requirement?
    - Compared to an IOU's revenue requirement for RPS-eligible procurement?
    - Compared to an IOU's revenue requirement for generation that is not RPS-eligible procurement?
    - Compared to the rates set in an IOU's most current GRC? If so, which rates?
    - Compared to a projection of an IOU's total revenue requirement at some point in the future? If so, what point?
    - Compared to the IOU's projected total electric generation portfolio costs at some point in the future? If so, what point?
    - As an absolute percentage of one of the above quantities?
    - As a proportion determined in some other way?
    - Based on the net market value (as described in Question 21 above) of the new contracts or facilities available to the IOU?
    - Using some other baseline?

- What costs should be included in determining whether "eligible renewable energy resources can be procured without exceeding a de minimis increase in rates"? Please use the information contained in your responses to Questions 5 and 6, above, as well as any additional information that may be relevant.

- What timeframe should be considered when evaluating whether additional resources can be procured without exceeding a de minimis increase in rates? Why?

- How should the Commission interpret "consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5?"
    - Does this clause require any independent quantitative representation?
    - Does this clause express a qualitative requirement that the RPS-eligible procurement be consistent with other Commission procurement planning requirements?
    - Please propose any other interpretation for this language. Please explain the basis for the choice proposed.

28. Section 399.15(b)(3) provides that "a retail seller may voluntarily increase its procurement of eligible renewable energy resources beyond the renewables portfolio standard procurement requirements."

    - How, if at all, should such voluntary increases in RPS procurement be accounted for in the PEL methodology?
    - Should voluntary RPS procurement be allowed if it would cause an IOU to exceed its PEL?
    - Should voluntary procurement be allowed if it would cause an IOU to come close to exceeding its PEL? What is an acceptable range?
    - What criteria should be used to determine which UOG or contracted for resources are considered "voluntary procurement?"
    - Should the Commission interpret Section 399.15(f) as not allowing an IOU to undertake voluntary procurement that would exceed its PEL expenditure limitation? In responding, please consider that the process described in Section 399.15(b)(3) applies <u>if</u> "the projected costs of meeting the renewables portfolio standard <u>procurement requirements</u>" would exceed the limitation (emphasis added). Please explain and justify your response.

29. Section 399.15(c) provides that, "the commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables

portfolio standard." The Legislature has also established unique rules for IOUs that meet the criteria set forth in Sections 399.17 and 399.18.

- Should the Commission use a different methodology for the for an IOU that is subject to the requirements of Section 399.17?
    - If yes, please explain the basis for a different methodology and the criteria the Commission should consider in setting the procurement expenditure limitation for an IOU that is subject to the requirements of Section 399.17. Please consider, without limitation, each area identified in the staff proposal and all prior questions.
- Should the Commission use a different methodology for the procurement expenditure limitation for an IOU that is subject to the requirements of Section 399.18?
    - If yes, please explain the basis for a different methodology and the criteria the Commission should consider in setting the procurement expenditure limitation for an IOU that is subject to the requirements of Section 399.18. Please consider, without limitation, each area identified in the staff proposal and all prior questions.

7. Next Steps

Energy Division staff will convene a workshop at which parties may discuss the staff's proposed methodology and model, as well as any alternative methodologies and/or models proposed by parties. The workshop will also address any issues related to the appropriate inputs to the relevant methodologies and models.

Parties will have an opportunity to file and serve post-workshop comments and reply comments. It is anticipated that the record for this aspect of the proceeding will be closed after the filing of reply comments.

IT IS RULED that:

1. Comments of not more than 50 pages, addressing the staff proposal and the issues identified in this ruling, may be filed and served not later than September 5, 2013.

2. Any alternative methodology or model for setting the procurement expenditure limitation may be filed and served not later than September 5, 2013. Any alternative methodology or model must be presented in a document separate from the party's comments, and must be separately filed and served.

3. Reply comments of not more than 30 pages may be filed and served not later than September 25, 2013.

4. Comments of not more than 30 pages on any alternative methodology or model may be filed and served, separately from any reply comments, not later than September 25, 2013.

5. In addition to service by electronic mail, paper copies of comments, reply comments, and any alternative methodologies or models must be promptly provided to Administrative Law Judge Anne Simon.

Dated July 23, 2013, at San Francisco, California.

/s/ REGINA M. DeANGELIS for
Anne E. Simon
Administrative Law Judge

ATTACHMENT A

Section 399.15(c)—(g) of Public Utilities Code
(Enacted by Senate Bill 2 (1X), Stats. 2011, ch. 1)

ATTACHMENT A
Section 399.15(c)—(g) of Public Utilities Code
(Enacted by Senate Bill 2 (1X), Stats. 2011, ch. 1)

(c) The commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard. In establishing this limitation, the commission shall rely on the following:
(1) The most recent renewable energy procurement plan.
(2) Procurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources.
(3) The potential that some planned resource additions may be delayed or canceled.
(d) In developing the limitation pursuant to subdivision (c), the commission shall ensure all of the following:
(1) The limitation is set at a level that prevents disproportionate rate impacts.
(2) The costs of all procurement credited toward achieving the renewables portfolio standard are counted towards the limitation.
(3) Procurement expenditures do not include any indirect expenses, including imbalance energy charges, sale of excess energy, decreased generation from existing resources, transmission upgrades, or the costs associated with relicensing any utility-owned hydroelectric facilities.
(e) (1) No later than January 1, 2016, the commission shall prepare a report to the Legislature assessing whether each electrical corporation can achieve a 33-percent renewables portfolio standard by December 31, 2020, and maintain that level thereafter, within the adopted cost limitations. If the commission determines that it is necessary to change the limitation for procurement costs incurred by any electrical corporation after that date, it may propose a revised cap consistent with the criteria in subdivisions (c) and (d). The proposed modifications shall take effect no earlier than January 1, 2017.
(2) Notwithstanding Section 10231.5 of the Government Code, the requirement for submitting a report imposed under paragraph (1) is inoperative on January 1, 2021.
(3) A report to be submitted pursuant to paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.
(f) If the cost limitation for an electrical corporation is insufficient to support the projected costs of meeting the renewables portfolio standard procurement requirements, the electrical corporation may refrain from entering into new contracts or constructing facilities beyond the quantity that can be procured within the limitation, unless eligible renewable energy resources can be procured without exceeding a de minimis increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5.
(g) (1) The commission shall monitor the status of the cost limitation for each electrical corporation in order to ensure compliance with this article.

(2) If the commission determines that an electrical corporation may exceed its cost limitation prior to achieving the renewables portfolio standard procurement requirements, the commission shall do both of the following within 60 days of making that determination:
(A) Investigate and identify the reasons why the electrical corporation may exceed its annual cost limitation.
(B) Notify the appropriate policy and fiscal committees of the Legislature that the electrical corporation may exceed its cost limitation, and include the reasons why the electrical corporation may exceed its cost limitation.

(End of Attachment A)

ATTACHMENT B

Formatting for List of Expenses

ATTACHMENT B

Formatting for List of Expenses

For purposes of this ruling, a cost is "significant" if it contributes 5% or more of the total costs being discussed. Where a number of costs meet this test of significance, please rank them from largest contribution to costs to lowest contribution.

Row #	Cost Item (e.g., RPS energy, transmission system upgrades)	Cost Category (direct or indirect)	Source of Cost (building, owning, or operating RPS eligible renewable resources)	Source of Cost Recovery	Source of Procurement (PPA or UOG)
1					
2					
n					

(End of Attachment B)

ATTACHMENT C

Flow Chart of the RPS Procurement Process

ATTACHMENT C

Flow Chart of the RPS Procurement Process

The diagram below illustrates at a high level the RPS procurement process for California's IOUs, with the exception of PacifiCorp. The underlined text identifies where Energy Staff proposes that an IOU's procurement expenditure limitation (PEL) would be taken into consideration as RPS procurement decisions are made by IOUs, and the Commission, along the procurement continuum.

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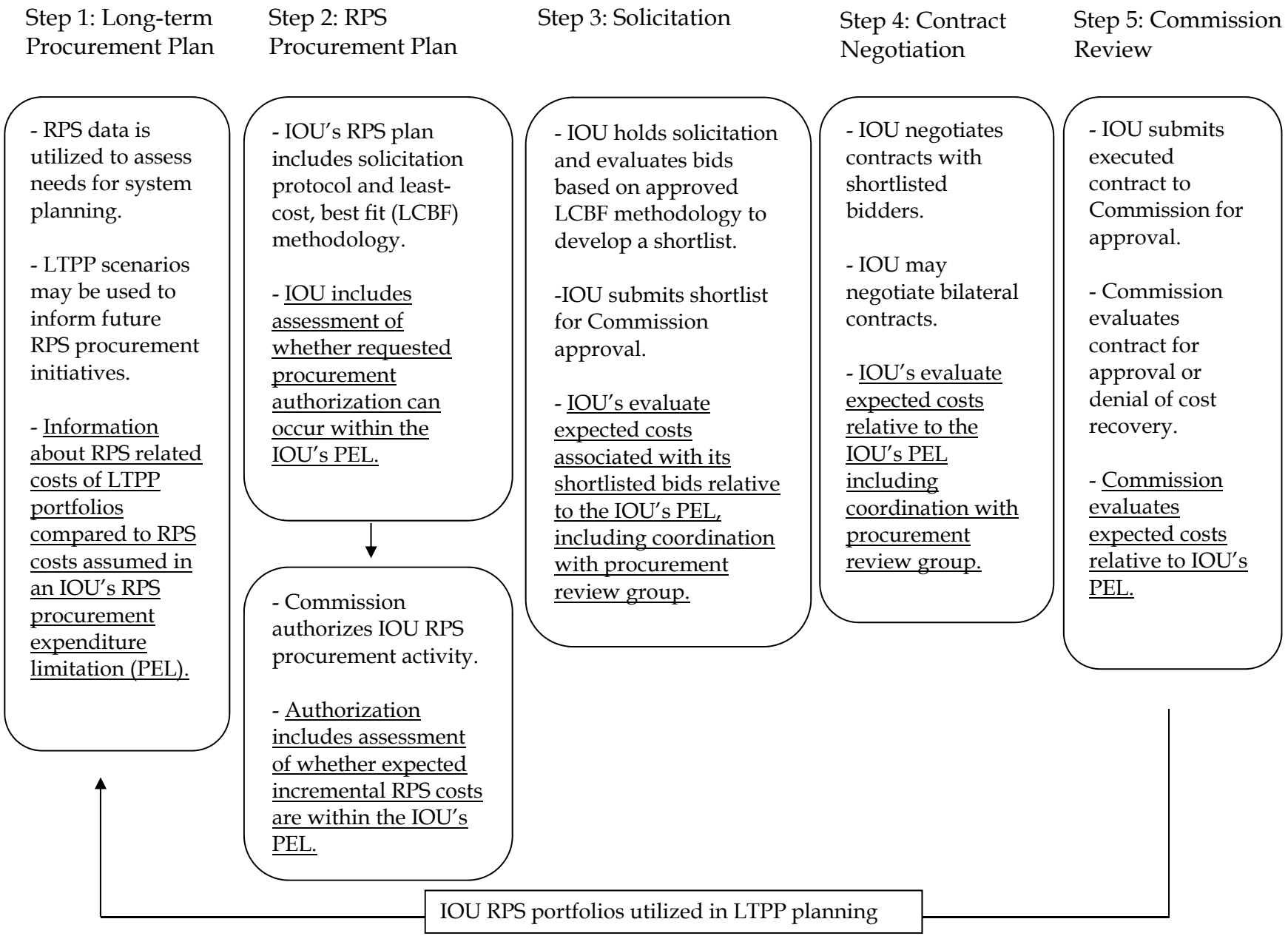
Step 1: Long-term Procurement Plan
Step 2: RPS Procurement Plan
Step 3: Solicitation
Step 4: Contract Negotiation
Step 5: Commission Review
- RPS data is utilized to assess needs for system planning.
- LTPP scenarios may be used to inform future RPS procurement initiatives.
- Information about RPS related costs of LTPP portfolios compared to RPS costs assumed in an IOU's RPS procurement expenditure limitation (PEL).
- IOU's RPS plan includes solicitation protocol and least-cost, best fit (LCBF) methodology.
- IOU includes assessment of whether requested procurement authorization can occur within the IOU's PEL.
- Commission authorizes IOU RPS procurement activity.
- Authorization includes assessment of whether expected incremental RPS costs are within the IOU's PEL.
- IOU holds solicitation and evaluates bids based on approved LCBF methodology to develop a shortlist.
-IOU submits shortlist for Commission approval.
- IOU's evaluate expected costs associated with its shortlisted bids relative to the IOU's PEL, including coordination with procurement review group.
- IOU negotiates contracts with shortlisted bidders.
- IOU may negotiate bilateral contracts.
- IOU's evaluate expected costs relative to the IOU's PEL including coordination with procurement review group.
- IOU submits executed contract to Commission for approval.
- Commission evaluates contract for approval or denial of cost recovery.
- Commission evaluates expected costs relative to IOU's PEL.
IOU RPS portfolios utilized in LTPP planning

ATTACHMENT D

Detailed Illustration of Proposed Methodology for Setting and Monitoring the PEL

ATTACHMENT D

Detailed Illustration of Proposed Methodology for Setting and Monitoring the PE

For illustrative purposes, Table 1 below shows hypothetical values for the variables necessary to calculate an IOU's procurement expenditure limitation (PEL). RPS procurement expenditures are forecasted for all executed contracts and any future procurement that is needed to meet an IOU's renewable net short (RNS). The forecasted RPS procurement expenditures from executed contracts include any adjustment made to the volume of expected generation from these contracts based on the IOU's RNS calculation.[1] An IOU may use excess procurement to meet a RNS, consistent with the RPS compliance rules established in Decision 12-06-038.

Table 2 compares an IOU's forecasted PEL ratios one year after the PEL has been set (e.g., in 2015 when an IOU submits its annual RPS procurement plan) to the initial PEL ratios and the PEL to determine if the IOU is within its limitation. Table 2 shows that the annual ratio of procurement expenditure to revenue requirement has changed in each year during the PEL period, with some years higher and some years lower. The IOU in this case would be reasonably within its PEL because the 10-year average of updated PEL ratios is less than 90% of the PEL, even though one year's ratio exceeds the PEL (i.e., year 2020).

[1] For example, if the IOU identified that a facility under contract, but not yet developed, has a 60% likelihood of achieving commercial operation, only 60% of the forecasted expenditures from that contract would be included in the PEL calculation.

Table 1: Illustrative Example of Methodology and Variables for Calculating the Procurement Expenditure Limitation (PEL)

Setting the PEL	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
RPS Costs - Online	$135	$135	$135	$135	$135	$135	$135	$115	$95	$85
RPS Costs - In Development	$10	$10	$40	$75	$75	$85	$100	$100	$100	$100
RNS Costs	$0	$0	$11	$16	$19	$32	$43	$54	$65	$76
Total RPS Costs ($million)	$145	$145	$186	$226	$229	$252	$278	$269	$260	$261
Revenue Requirement ($million)	$1,027.5	$1,055.8	$1,084.8	$1,114.6	$1,145.3	$1,176.8	$1,209.1	$1,242.4	$1,276.5	$1,311.7
Annual RPS Costs as % of Revenue Requirement	14.1%	13.7%	17.1%	20.3%	20.0%	21.4%	23.0%	21.7%	20.4%	19.9%
Procurement Expenditure Limitation (PEL, 2014-2023)	**23%**	- The IOU's PEL would be set at 23%, if adopted by the Commission. - Once the Commission adopts an IOU's PEL (e.g., 23% in this example) it is in place until the Commission adopts a new PEL. Staff proposes that the Commission would reset the PEL every two years.								

Table 2: Illustrative Example of Methodology and Variables for Evaluating Procurement Expenditures Relative to an Established the PEL

Monitoring the PEL ($million)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
RPS Costs - Online	$150	$145	$145	$145	$145	$145	$145	$125	$105	$95
RPS Costs - In Development	$0	$0	$15	$50	$50	$60	$145	$145	$145	$145
RNS Costs	$0	$0	$11	$20	$22	$35	$0	$0	$5	$5
Total RPS Costs* ($million)	$150	$145	$171	$215	$217	$240	$290	$270	$255	$245
Revenue Requirement ($million)	$1,027.5	$1,055.8	$1,084.8	$1,114.6	$1,145.3	$1,176.8	$1,209.1	$1,242.4	$1,276.5	$1,311.7
Annual RPS Costs as % of Revenue Requirement	14.6%	13.7%	15.8%	19.3%	18.9%	20.4%	24.0%	21.7%	20.0%	18.7%
Change from Initial Annual PEL Ratio	+0.5%	0.0%	-1.4%	-1.0%	-1.0%	-1.1%	+1.0%	+0.1%	-0.4%	-1.2%
10-year Annual Average RPS Costs as Percentage of Revenue Requirements	**19%**	- The IOU's updated procurement expenditure forecast shows increased annual ratios in several years, including one year where the percentage amount is higher than the PEL. The IOU is within its PEL because the 10-year annual average of 19% is less than the PEL of 23%.								
Procurement Expenditure Limitation (PEL, 2014-2023)	**23%**	- Also, the IOU's updated forecast shows that the 10-year annual average is less than 90% of the PEL Ratio. A 10-year annual average of 20.7 or more would trigger a showing by the IOU concerning the likelihood that the IOU may exceed its PEL and would include any measures the IOU may take to prevent exceeding the limitation. (90% of 23% = 20.7%)								

* For illustrative purposes, the total RPS costs in Table 2 show updated IOU forecasted procurement expenditures in 2015 that reflect the following changes: more RPS generation in 2014 than forecasted; two projects in development come online in 2014; one contract is terminated; two new contracts executed with 2020 delivery start dates; corresponding changes to RNS costs.

(End of Attachment D)