Docket:	:	A.12-03-026
Exhibit Number	:	
Commissioner	:	Michael R. Peevey
Admin. Law Judge	:	Hallie Yacknin
DRA Project Mgr.	:	Yuliya Shmidt
	:	
DRA Witnesses		Yuliya Shmidt
		Selena Huang

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

PREPARED TESTIMONY ON THE APPLICATION OF PACIFIC GAS AND ELECTIC COMPANY (U 902 E) FOR APPROVAL OF AMENDED PURCHASE AND SALE AGREEMENT BETWEEN PACIFIC GAS AND ELECTIC COMPNAY AND CONTRA COSTA GENERATING STATION LLC AND FOR ADOPTION OF COST RECOVERY AND RATEMAKING MECHANISMS

[PUBLIC VERSION]

San Francisco, California
July 23, 2012

TABLE OF CONTENTS

Page

CHAPTER 1. INTRODUCTION 1-1

CHAPTER 2. DETERMINATION OF NEED 2-1

I. PG&E's reference to CAISO statements on flexibility studies cannot support a finding of need for the Oakley project. 2-1

A. PG&E's entire evidentiary showing of need for the Oakley plant originates from CAISO studies that were considered in the 2010 LTPP. 2-2

B. The Commission and settling parties in the 2010 LTPP determined that the CAISO's renewable integration study results did not demonstrate a need for new generation. 2-4

C. There is no evidence that approval of the Oakley project will facilitate additional retirements of Once-Through Cooling (OTC) facilities. 2-6

II. If additional needs arise for flexible resources to support renewable integration by 2020, they can be met with other resources...................... 2-7

A. The Commission may approve other new generation projects to meet local capacity needs that could eliminate any need for the Oakley plant. 2-7

B. As PG&E admits, there are other alternatives for meeting system flexibility needs than Oakley. 2-9

C. Other market and administrative developments may reduce the need for additional flexible resources. 2-10

D. The Commission should deny the application and defer any authorization for new flexible resources until after a decision on flexibility is made in the 2012 LTPP. 2-11

III. Over-procurement carries substantial costs and undesirable consequences.. 2-12

CHAPTER 3. REASONABLENESS AND COST COMPETITIVENESS OF THE AMENDED PSA 3-1

I. There is an insufficient basis to conclude that the UOG Oakley facility is competitive today compared to other alternatives. 3-1

A. Because the Commission has not defined what flexible operating characteristics are needed, there is no basis to conclude that Oakley is the least-cost, best-fit option to meet flexibility needs. 3-1

B. Technological advancements for increasing operating flexibility have been implemented since the 2008 LTRFO. 3-2

II. The Amended PSA cannot be deemed "competitive" based on the results from the 2008 LTRFO. 3-4

A. The results of the 2008 RFO are outdated 3-4

B. The Net Market Valuation of the Oakley offer is outdated. 3-5

C. Developing equivalent comparisons between utility-owned projects and PPA offers is difficult and results may be skewed. 3-6

III. If additional flexible resources are needed, PG&E can conduct an RFO to assess current competitive options based on specific characteristics determined to be needed from flexible resources. 3-6

CHAPTER 4. COST RECOVERY AND RATEMAKING PROPOSALS 4-1

I. PG&E's Requested Cost Recovery for Initial Capital Costs, O&M Expenses, and Initial Revenue Requirements 4-1

A. Initial Revenue Requirement 4-1

B. PG&E's Estimated O&M Expenses 4-2

C. Capital Costs 4-4

II. The Amended PSA terms relating to the SVA are unreasonable. 4-7

APPENDIX – WITNESS QUALIFICATIONS

CERTIFICATE OF SERVICE

CHAPTER 1. INTRODUCTION

On March 30, 2012 Pacific Gas & Electric Company ("PG&E") filed the instant Application for Approval of Amended Purchase and Sale Agreement (PSA) Between Pacific Gas and Electric Company and Contra Costa Generating Station LLC and for Adoption of Cost Recovery and Ratemaking Mechanisms. Two months later, on May 21, 2012, PG&E submitted Prepared Testimony in support of the Application. The Division of Ratepayer Advocates ("DRA") opposes the instant application and urges the Commission to deny it or, at a minimum, dismiss it without prejudice as premature and filed without authorization of need.

This is PG&E's third attempt to gain approval for the Oakley Project, which comes with a $1.5 Billion price tag for ratepayers in just the first eight years of the Project's life.[1] The Commission should reject the Oakley PSA because PG&E cannot prove that it is needed. The only evidence PG&E has submitted to support a finding of need was considered in the recently concluded 2010 Long Term Procurement Planning (LTPP) proceeding and determined insufficient to demonstrate a need for new resources through 2020. The Commission, the California Independent System Operator (CAISO), and stakeholders are engaged in significant ongoing efforts to define what operational "flexibility" means and how much is needed in the 2012 LTPP and Resource Adequacy (RA) proceedings (Rulemakings 12-03-014 and R.11-10-023). Approving Oakley before these key determinations are made on flexibility needs would be premature and inefficient. Further, even if there is a need for Oakley, there is insufficient evidence to conclude that the benefits and costs of Oakley are competitive *today*.

Finally, because this is a PSA and not a Purchase Power Agreement (PPA), PG&E's ratepayers bear the risks associated with some capital cost increases as well as ongoing, long-term Operations & Maintenance (O&M) costs for this new technology. Accordingly, even if the Commission approves the amended PSA, it should include conditions to protect ratepayers from under-performance or an increase in initial capital or O&M costs.

Accordingly, DRA recommends that the Commission deny the Application in its entirety for at least the following reasons:

---

[1] PG&E Prepared Testimony, Public Version, July 18, 2012, p.6-1.

- The current application does not fulfill the requirement of Decision ("D.") 10-07-045 that the final results of a CAISO study demonstrate significant negative reliability risks of integrating the 33% Renewables Portfolio Standard[2] (per Scoping Memo Issue 1(d)(ii));[3]
- There is no other authority that can support approval of the application;
- The contract is not reasonable because it has not been shown to be competitive in today's market, and there is no basis to conclude that it is or would remain competitive compared to other options that may be available today; and
- The proposed ratemaking and cost recovery treatment is unreasonable.

Chapter 2 below discusses authority and need, Chapter 3 reasonableness of the contract, and Chapter 4 the cost recovery and ratemaking proposals.

---

[2] D.10-07-045, p.41.

[3] See Assigned Commissioner's Scoping Memo and Ruling (Scoping Memo), A.12-03-026, May 25, 2012, p.3.

CHAPTER 2. DETERMINATION OF NEED

I. PG&E's reference to CAISO statements on flexibility studies cannot support a finding of need for the Oakley project.

PG&E claims that it is resubmitting the Oakley Application under the provision of D.10-07-045 that requires "the final results from the CAISO Renewable Integration Study demonstrate that, even with the projects approved by the Commission, there are significant negative reliability risks from integrating a 33% Renewables Portfolio Standard."[4] PG&E stipulates that the other authorized conditions for renewing this application pursuant to D.10-07-045 do not apply, and accordingly does not base its request for authority on those two conditions.[5]

PG&E's evidence of need consists entirely of CAISO comments that do not, and cannot, comprise "final results" demonstrating that "significant negative reliability risks" exist without Oakley. All of PG&E's evidence of need is from, or derived from, the CAISO modeling and study results that were submitted in the CAISO's July 1, 2011 Testimony in the 2010 LTPP. Specifically, PG&E relies upon:

- The CAISO's Comments and testimony submitted in the 2010 Long-Term Procurement Plan ("LTPP")[6]
- The Sutter Waiver Request filed by the CAISO before the Federal Energy Regulatory Commission ("FERC")[7]
- The CAISO Straw Proposal on Flexible Capacity Procurement issued March 7, 2012[8],
- A report from Steve Berberich, the CAISO CEO, to the CAISO Board[9].

Because these are the same materials the CAISO submitted in the 2010 LTPP and the Commission considered before approving the settlement agreement submitted in the 2010 LTPP,

---

[4] D.10-07-045, pp.40-41.

[5] Scoping Memo, p.4, footnote 4.

[6] PG&E Prepared Testimony, p.5-2.

[7] See PG&E's Prepared Testimony, p.5-2 and Attachment 1 to Chapter 5.

[8] PG&E's Prepared Testimony, p.5-3.

[9] PG&E's Prepared Testimony, p.5-4.

none of these materials are "final results" that demonstrate "significant negative reliability risks" as required under D.10-07-045[10] or any alternative theory of need.[11]

A. PG&E's entire evidentiary showing of need for the Oakley plant originates from CAISO studies that were considered in the 2010 LTPP.

While PG&E cites to a plethora of different CAISO numbers and CAISO statements to support its claim that the Oakley Project is needed, they all boil down to *one* set of results from the CAISO's high-load trajectory scenario analysis performed for the 2010 LTPP.[12] Even the analysis conducted for the Sutter Waiver Request is a derivation from the high load trajectory scenario results, adjusted for 2018 to assess the impacts of losing the Sutter plant.[13] Table 1 below illustrates the sources PG&E has cited for the information identified in support of PG&E's statement on the capacity need for new resources to support renewable integration.

Table 1. PG&E Sources for CAISO Statements on Flexible Capacity Needs

Capacity need identified in PG&E's Testimony	Sources as identified by PG&E[14]
a. 4,600 MW need for renewable integration (p.5-2)	CAISO's renewable integration studies filed in the 2010 LTPP (R.10-05-006) on July 1, 2011.
b. 800 MW for downward balancing flexibility (p.5-2)	"The 800 MW figure corresponds to the 856 MW of downward load following shortfall that the CAISO found in its renewable integration studies filed in the 2010 LTPP proceeding on July 1, 2011."
c. 2,535 MW deficiency in flexible capacity requirements (p.5-2)	CAISO's Sutter Waiver Request at FERC dated January 25, 2012.
d. 3,570 MW (corrected) of additional capacity needs (p.5-2)	"The 3,750 MW figure in PG&E's testimony is a typo, and should have been 3,570 MW." The source data for

[10] See Scoping Memo, issue 1(d).

[11] See Scoping Memo, issue 1(e).

[12] Attachment A (PG&E Response to DRA-03-005), Attachment B (PG&E Response to DRA-05-001).

[13] PG&E's Prepared Testimony, Attachment 1 to Chapter 5 (Sutter Waiver Request) Table 1 on p.31.

[14] Attachment A (PG&E Response to DRA-03-005).

	the 3,570 MW value is the CAISO's Sutter Waiver Request.
e. Shortfalls in excess of 500 MWs (p.5-4)	CAISO's renewable integration studies filed in the 2010 LTPP on July 1, 2011.
f. Shortfall of several thousand megawatts of ramping capacity (p.5-4)	CAISO's renewable integration studies filed in the 2010 LTPP on July 1, 2011.
g. 3,570 MW for meeting system-wide capacity needs (p.30, Attachment 1 to Chapter 5)	CAISO's Sutter Waiver Request at FERC dated January 25, 2012.

All of the data PG&E cites to support the need for Oakley derives from the CAISO's July 1, 2011 filing in the 2010 LTPP, in which the CAISO examined four different renewables integration scenarios plus one high-load, trajectory scenario run as a sensitivity analysis. In the Commission-mandated scenarios, there was no identified need for new resources.[15] Only the results of the high-load, trajectory sensitivity analysis showed a need for approximately 4,600 MW of new resources, but that scenario assumed 10% higher load than in the four mandated scenarios.[16]

Further, the materials the CAISO submitted in the "Sutter Waiver Request," are also derived from the 2010 LTPP analyses. In connection with a filing submitted to the Federal Regulatory Energy Commission, the CAISO estimated the need for conventional resources in 2018 to support its determination that Calpine's Sutter power plant should not be allowed to retire. But the 2018 scenario was based on the 2020 high-load trajectory sensitivity results modeled in the 2010 LTPP—the underlying modeling is the same and is simply an adjustment to the 2020 high-load, trajectory results for the year 2018.[17] In short, the Sutter Waiver information does not contain any new data or *new modeling results*; the results are derived from the high-load scenario modeled for the 2010 LTPP.

---

[15] Attachment D (Track I Direct Testimony of Mark Rothleder on Behalf of The California Independent System Operator Corporation in R.10-05-006, filed July 1, 2011), p.4, 43-44, and Slide 11.

[16] *Id.*, p.7 and Slide 11 of Exhibit 1.

[17] PG&E's Prepared Testimony, Attachment 1 to Chapter 5 (Sutter Waiver Request) p.31.

Further, even in the 2010 LTPP proceeding (R.10-05-006), the CAISO modeling results were never fully vetted because most intervenors participated in the settlement, which deferred any finding of need and was submitted prior to the filing of intervenor testimony. Subsequently, most parties did not rebut the CAISO studies nor comment on the need issues.

B. The Commission and settling parties in the 2010 LTPP determined that the CAISO's renewable integration study results did not demonstrate a need for new generation.

PG&E has not submitted any evidence of CAISO renewable integration studies demonstrating a need for additional resources other than study results that were already considered in the 2010 LTPP. But in that proceeding, the vast majority of the parties (the settling parties) and the Commission agreed that there is no evidence to support a finding of new need. PG&E itself states that, "twenty-six parties [among them PG&E] agreed that there was not a conclusive determination in the 2010 Long-Term Procurement Plan concerning 'whether or not there [was] need to add new capacity for renewable integration purposes through the year 2020.'"[18] As the Commission noted, "there is general agreement that further analysis is needed before any renewable integration resource need determination is made."[19] Moreover, the renewable integration studies modeled the CPUC-required scenarios which expressly *assumed* that Oakley was *not* operational.[20]

In the decision approving the Track 1 settlement, the Commission also expressly considered the entire record before finding no need for new resources. The decision approving the settlement specifically noted that *all* of the CAISO analyses were considered, including the CAISO's high-load trajectory scenario:

> As requested by the Commission, the CAISO developed a methodology for assessing renewable integration resource needs and applied this methodology with the assistance of the IOUs to assess the need for flexible capacity for the four CPUC-Required Scenarios and one other CPUC scenario analyzed by the CAISO.

---

[18] Attachment E (PG&E response to TURN-001-01).

[19] D.12-04-046, p. 6.

[20] Attachment F (Joint IOU Supporting Testimony in R.10-05-006, filed July 1, 2011) p.5-19.

> The results show no need to add capacity for renewable integration purposes above the capacity available in the four scenarios for the planning period addressed in this LTPP cycle (2012-2020). The additional scenario studied by the CAISO did show need.[21]

Nevertheless, the Commission found, "there is clear evidence on the record that additional generation is not needed by 2020."[22]

Although renewable integration studies are ongoing in the 2012 LTPP, no further modeling analysis has been completed or results issued since the CAISO's 2010 LTPP testimony. Thus, PG&E's application essentially asks for a finding of need outside of the current LTPP that would be directly contrary to the conclusions reached in D.12-04-046 while being based on the very same information. But if the Commission is now prepared to reverse-course and find that the high-load trajectory scenario is more reasonable than the Commission's mandated planning scenarios that would constitute a modification of D.12-04-046. If it does that, the Commission should give all of the parties to the 2010 LTPP notice and an opportunity to be heard on any decision to change the prior Commission's Decision concluding Track 1 of the 2010 LTPP.

In short, the entirety of PG&E's claim of new capacity need rests upon one scenario the CAISO submitted in the 2010 LTPP. The conclusions PG&E cites have already been considered by the Commission in the 2010 LTPP proceeding and, consistent with a settlement agreement that PG&E and the CAISO both signed, were found *not* to demonstrate a need for new resources through the 2020 planning horizon. Accordingly, the Commission should deny the Application and defer consideration of the Oakley Project in (or following) decisions on flexibility issues from the 2012 LTPP, which is *currently ongoing* and in which PG&E is an active participant. The Commission should not sanction this attempt to circumvent the appropriate processes for procuring new capacity by authorizing resources outside (and ahead) of the Commission's on-going LTPP proceedings.

---

[21] D.12-04-046, p. 7.

[22] *Id*., p. 8.

C. There is no evidence that approval of the Oakley project will facilitate additional retirements of Once-Through Cooling (OTC) facilities.

PG&E states that the Oakley project will facilitate "the retirement of certain existing, inefficient once-through cooling facilities."[23] But PG&E admits that it cannot guarantee that any such retirements will actually occur. Rather, PG&E admits that "an owner of a generation resource is the ultimate decision-maker who can commit to retire its plant. PG&E does not own any gas-fired OTC facilities, and therefore PG&E cannot directly commit to retire any of these OTC units that are owned by third parties."[24] Because PG&E has no direct control over the retirement of a single OTC facility, the Commission should reject any argument for approving Oakley on the basis of facilitating OTC retirements.

PG&E supports its claim that Oakley will facilitate the retirement of OTCs as follows:

> OTC facilities have much higher heat rates than the Oakley Project. As more resources are added to the system with lower variable costs (e.g., the Oakley Project), the older, less-efficient OTC facilities will be dispatched less. As those OTC facilities are dispatched less, revenues will decline, which facilitates their retirement for economic reasons, possibly prior to their SWRCB OTC compliance deadline. Besides the OTC units' reduction in revenue received in the energy market, PG&E, with Oakley in its resource mix, would have less of need to procure Resource Adequacy from the OTC units, which would further facilitate their retirement for economic reasons.[25]

In short, PG&E argues that approving Oakley *may* cause OTC facilities to be dispatched less, which may cause those facilities' revenues to decline. PG&E *may* also contract less with these facilities for Resource Adequacy which also may reduce their revenue streams. All of this *perhaps* will facilitate the retirement of these facilities for economic reasons and that *maybe* will occur ahead of their mandated retirement deadline. Basing ratepayer expenditures of over a billion dollars on such shaky reasoning would be a mistake.

---

[23] PG&E Prepared Testimony, p.1-1.

[24] Attachment G (PG&E response to DRA-02-004).

[25] *Id.*

In addition, the CAISO's renewable integration modeling and analyses for the 2010 LTPP *already* assumed significant OTC retirements pursuant to the CPUC planning assumptions.[26] Twenty-five plants were assumed to be retiring during the planning period amounting to almost 14,000 MW of capacity.[27] Thus, to base a finding of need for Oakley on PG&E's claim, the Commission would also have to find that Oakley would in fact "facilitate" the retirement of *more* OTC facilities (or on a faster timeline) than is already assumed in the analysis done in the 2010 LTPP. That proceeding found no demonstration of new need while already explicitly accounting for OTC retirements. In addition, the current 2012 LTPP is again considering the issue of OTC retirement.

II. If additional needs arise for flexible resources to support renewable integration by 2020, they can be met with other resources.

Even if the Commission determines that there is a need for additional resources to support renewables integration by 2020, PG&E has not convincingly demonstrated that the Oakley project is needed considering other potential approvals for resource additions, or that it is the least cost, best fit way to meet such needs.

The Commission is currently considering approving over 4,500 MW of new generation to meet local capacity requirements within the San Diego and Southern California Edison (SCE) service areas.[28] If locally-constrained areas are found to need new capacity, any resources built as a result will provide additional system-wide operational flexibility. Moreover, PG&E has not considered other options besides building new capacity to address renewable integration needs, but alternatives to Oakley should be considered.

A. The Commission may approve other new generation projects to meet local capacity needs that could eliminate any need for the Oakley plant.

PG&E does not claim (nor can it) that new capacity needs are specific to its service territory. By contrast, PG&E admits that the CAISO has indicated that any potential need for

[26] Attachment F (Joint IOU Supporting Testimony in R.10-05-006, filed July 1, 2011) pp.5-15 thru 5-22.

[27] *Id*.

[28] *See* A.11.05.023 and R.12-03-014.

flexible resources is a *system-wide* and *not* local: "the CAISO has not specified that the identified need for flexible capacity must be met by resources located in PG&E's service territory. The CAISO's studies…have determined system-wide need."[29] At the same time, PG&E's application ignores the possibility that the Commission will approve *other* new capacity builds in the near future (within locally constrained areas) that could reduce or eliminate altogether any remaining need for system flexibility.

First, San Diego Gas & Electric Company (SDG&E) has had an application pending for well over a year in which it seeks approval of 3 PPTAs to build 450 MW of new combined cycle gas turbines in the San Diego area.[30] A decision on the application is expected this fall.[31] This capacity was not assumed to be online in the CPUC-required scenarios modeled in the 2010 LTPP.[32]

Second, the Commission is currently determining if new resources are needed to meet local needs in SCE's service territory, under Track 1 of the 2012 LTPP. Track 1 will "consider authorizing procurement of new infrastructure for local reliability purposes," including "[w]hether additional capacity is required to meet local reliability needs in the Los Angeles Basin and Big Creek/Ventura area between 2014 and 2021, and, if so, how much."[33] The CAISO has alleged that the need for replacement resources due to OTC retirement is 430 MW in the Big Creek/Ventura areas and between 2,370 MW and 3,741 MW in the LA Basin under the Trajectory scenario.[34] A proposed decision on local reliability issues is expected to be issued before the end of this year.[35]

---

[29] Attachment H (PG&E Response to IEP-01-008).

[30] *See* A.11-05-023.

[31] Attachment I (Assigned Commissioner's Amended Scoping Memo and Ruling in A.11-05-023, March 12, 2012) p.5.

[32] Attachment F (Joint IOU Supporting Testimony in R.10-05-006, filed July 1, 2011) p.5-20.

[33] Attachment J (Scoping Memo and Ruling of Assigned Commissioner And Administrative Law Judge in R.12-03-014, May 17, 2012), p.5.

[34] Attachment K (Testimony of Robert Sparks on Behalf of the California Independent System Operator Corporation in R.12-03-014, May 23, 2012) Table 1 at p.6.

[35] Attachment J (Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge in R.12-03-014, May 17, 2012) p.8.

Accordingly, the Commission may authorize, by the end of 2012 in the LTPP and/or SDG&E proceedings, upwards of 4,500 MW of new generation for locally-constrained areas throughout Southern California. Any new generation built to meet the local needs should also reduce (and might eliminate entirely) any *remaining residual* need for flexible resources to support renewable integration, including any needs found to support Oakley. Therefore, any decisions expected from these proceedings that authorize new generation should be considered *first*, and be appropriately accounted for, before the Commission can determine if there is any further need for flexible resources that should borne by PG&E's ratepayers.

B. As PG&E admits, there are other alternatives for meeting system flexibility needs than Oakley.

PG&E identifies three large, gas-fired projects which are currently in development and are "viable alternatives to the Oakley Project."[36] These three facilities are [redacted] and [redacted].[37]

According to PG&E, to be considered an alternative to Oakley, a project must have the potential to come online prior to 2018. The project must [redacted][38] PG&E claims that the three facilities enumerated above are not viable alternatives because they face development challenges which may prevent them from coming online prior to 2018, such as [redacted][39] But Oakley too is facing [redacted], for example, and therefore it is not clear why these facilities cannot be considered as viable alternatives to Oakley. Further, [redacted] and the [redacted] have all been approved by the California Energy Commission.[40]

---

[36] PG&E Prepared Testimony, p.5-11 and 5-12.

[37] Attachment L (PG&E response to TURN-03-017).

[38] Attachment M (PG&E Response to IEP-01-010).

[39] Attachment L (PG&E response to TURN-03-017).

[40] Attachment N (confidential).

PG&E has not compared the Oakley proposal to these possibilities and has seemingly never seriously entertained these alternatives. In addition, only one of the facilities above [redacted] was included in the original need modeling performed by the CAISO in the 2010 LTPP.[41] If or when these additional facilities come online, and regardless of which IOU they have contracted with, these plants will also serve system flexibility needs. Therefore, they should also be considered as alternatives to Oakley to meet system flexibility needs (assuming any such needs exist).

C. Other market and administrative developments may reduce the need for additional flexible resources.

A number of new initiatives are under way to better integrate renewable resources without the need to purchase massive amounts of back-up generation. For example, the CAISO is developing a new Flexible Ramping Product to procure ramping capability via economic bids.[42] The intent of the effort is to develop "market-based flexible ramping products to address the operational needs in real-time market facing the upcoming challenges from increasing renewable penetration."[43] FERC order No. 764 issued June 22, 2012 also seeks to "remove[] barriers to the integration of variable energy resources by requiring each public utility transmission provider to: (1) offer intra-hourly transmission scheduling; and, (2) incorporate provisions into the *pro forma* Large Generator Interconnection Agreement requiring interconnection customers whose generating facilities are variable energy resources to provide meteorological and forced outage data to the public utility transmission provider for the purpose of power production forecasting."[44] Changes to the CAISO modeling software and market structures, or emerging technologies such as storage, could also reduce the need to rely on conventional *gas* generation to provide additional support for renewable resource integration. PG&E should demonstrate that the claimed need for Oakley cannot be met or reduced through other means, especially through preferred resources. Demand response, energy storage, and

---

[41] Attachment F (Joint IOU Supporting Testimony in R.10-05-006, filed July 1, 2011) p.5-19.

[42] *See* http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleRampingProduct.aspx.

[43] *See* CAISO Flexible Ramping Products Draft Final Proposal, April 9, 2012, p.3. Available at http://www.caiso.com/Documents/DraftFinalProposal-FlexibleRampingProduct.pdf.

[44] Docket No. RM10-11-000, Order No. 764, Federal Energy Regulatory Commission, June 22, 2012, p.1.

other options could facilitate renewable integration. PG&E has not made any showing that Oakley is needed instead of other types of preferred resources to reduce system integration needs.

In short, a number of administrative, market, and technological changes are underway that should reduce the need to rely on new *conventional* capacity additions to facilitate renewables integration. Thus, whether there are additional needs for system flexibility and the best way to address them should be addressed in the ongoing 2012 LTPP. That is the proceeding where the appropriate stakeholders are conducting an ongoing examination and updating of modeling assumptions and methodology. The Commission should not step outside of this process and assess need rather than a one-off application.

D. The Commission should deny the application and defer any authorization for new flexible resources until after a decision on flexibility is made in the 2012 LTPP.

The 2012 LTPP is currently ongoing and is expected to make a determination for new need, both for general capacity and operational flexibility. New proposed scenarios are expected to be developed throughout this summer and fall, and will be used to perform updated studies on issues of system variability, including renewable integration on August 1, 2012.[45] The Local Area Needs determination and authorization is expected by the end of this year. Throughout 2013, the CAISO will be modeling the scenarios and the Commission will authorize a system-wide need determination. The modeling efforts are extremely complex and include at minimum four scenarios as well as various sensitivities for forecasting errors.[46] Recreating this type of effort in the instant proceeding—in which the CAISO is not even a party—is clearly inefficient at best, and likely impossible. There is a public interest in adhering to a reliable regulatory framework and deciding long-term procurement issues in the long-term procurement proceedings, rather than through individual applications.

---

[45] *See* Attachment O, slide 8.

[46] *See* Attachment O (descriptions of past and ongoing modeling efforts).

III. Over-procurement carries substantial costs and undesirable consequences.

Approving Oakley project may cause "over-procurement" given PG&E's lack of need for the proposed 600 MW of capacity. The Commission has in the past expressed concern that over procurement can lead to stranded assets and crowding out of preferred resources.[47] It has also expressed concern about the IOUs' overreliance on fossil-fuel generation:

> Each of the IOUs appears to assume fossil-fuel generation, for the most part, will be procured to fill their net short positions. The overarching problem in all three LTPPs is the absence of any scenario analysis regarding what types of resources the IOUs should use to fill their net short positions to best transition to the inevitably GHG-constrained world we are moving towards… We share the concern raised by many intervenors that the IOUs are filling, and are projecting to fill, their respective net short positions with conventional resources to the effect of there being no room in an IOUs' portfolio for other resources, or the conventional resources will be obsolete and result in large stranded costs.[48]

In addition, the Commission argued, "we will not adopt a general procurement framework that will allow the IOUs to crowd out preferred resources and/or systematically over-procure. This type of procurement would only lead to 'stranded assets' to the detriment of customers of all LSEs."[49] Regardless of how "viable" the Oakley project is, consistent with these policy statements the Commission should not approve a major new power plant when just last year the Commission found no demonstration of need for new resources.

---

[47] *See* D.07-12-052.

[48] *Id.*, p.6.

[49] *Id.*, p.96-97.

CHAPTER 3. REASONABLENESS AND COST COMPETITIVENESS OF THE AMENDED PSA

I. There is an insufficient basis to conclude that the UOG Oakley facility is competitive today compared to other alternatives.

The Assigned Commissioner's Ruling and Scoping Memorandum asks, "[i]s the Oakley PSA reasonable? This issue includes consideration of whether the Oakley project is the least-cost/best-fit alternative for meeting the identified need."[50] But PG&E fails to present evidence of the current benefits and costs of flexible generation options, including Oakley. First, the net market value of the Oakley offer is outdated, because the net market valuation curves have surely changed since 2008 RFO was conducted. While they can be recalculated today using new (current) forward energy curves, PG&E has not updated the Net Market Value (NMV) curve for Oakley since it analyzed the 2008 RFO results. Second, because PG&E has not analyzed any other alternatives for meeting any identified flexibility need, there is no basis to conclude that Oakley provides superior benefits or reduced costs compared to other alternatives available today that could provide any system flexibility that the Commission determines is needed.

A. Because the Commission has not defined what flexible operating characteristics are needed, there is no basis to conclude that Oakley is the least-cost, best-fit option to meet <u>flexibility</u> needs.

The Commission has not, to date, issued any Decision or made any determination about what "flexibility" needs exist or how they translate into operating characteristics that should be procured from resources under either the Resource Adequacy (RA) or LTPP proceedings. It is therefore premature to approve Oakley to meet "flexibility" needs or determine that Oakley is the least-cost, best-fit option to meet such needs when they are still undefined.

In Decision 12-06-025, the Commission recently declined to make a decision that defines what flexibility requirements will be under the RA program, and instead this issue is open for further consideration. A Commission decision is expected in time for the 2014 RA compliance year.[51] Moreover, as described above, the issue of how to translate flexible capacity attributes

---

[50] Assigned Commissioner's Ruling and Scoping Memorandum, May 25, 2012, p. 4.

[51] D.12-06-025 pp. 20-21.

into procurement to meet local reliability needs will be addressed in the Commission's 2012 LTPP proceeding.[52]

Until the utilities know the specific definitions of flexibility factors that should be used to assess the system/operational needs, there is no transparent means for evaluating the flexibility characteristics of specific generators (like Oakley) to determine if they are cost-effective or cost-competitive relative to other options. Thus, it is important to understand what operational or flexible attributes of proposed resources are relevant and how to value them in making procurement decisions under the RA and LTPP proceedings over the next several years *before* the Commission can decide that any specific resource, like Oakley, is a good or competitive fit to meet those needs. Other resources could provide better, more-advanced technologies and/or more cost effective solutions to meet specifically defined flexibility needs. Once it is clear specifically which characteristics are needed for renewable integration, the Oakley project can be evaluated and compared to other potential alternatives, to determine if it is the least-cost/best-fit resource. Accordingly, rather than attempting to assess Oakley's benefits relative to other projects that were submitted into an RFO conducted four years ago, the Commission should defer a determination on the Oakley facility until after need and procurement decisions issue from the 2012 LTPP.

B. Technological advancements for increasing operating flexibility have been implemented since the 2008 LTRFO.

Throughout its Prepared Testimony and Application, PG&E asserts that Oakley is a "state-of-the-art" combined-cycle facility.[53] But despite such claims, Oakley may not be the least cost-best fit option to meet system flexibility needs today because technology has continued to evolve since the 2008 LTRFO was conducted.

The landscape of what "flexible" technologies are available has changed since the 2008 LTRFO was conducted. In response to data requests regarding the competitiveness of its purported "state-of-the-art" technology, PG&E states that it is aware that some of the major

[52] Attachment J (2012 LTPP Scoping Memo) p. 10.

[53] PG&E Application, March 30, 2012 pp. 1, 4, 8; PG&E Prepared Testimony pp. 1-1; 1-2; 2-1; 3-2; 3-11.

combustion turbine manufactures provide products that are similar to GE's Rapid Response technology, including Siemens and Mitsubishi.[54] In early June of last year, Alstom announced its "next generation" KA26 combined-cycle power plant, which integrates flexibility using the extensively upgraded GT26 (50 Hz) gas turbine.[55] Oakley is not the only proposed project that could use flexible or "rapid response" technology in California.[56] PG&E cites two projects under construction in California using the Siemens Flex Plant design, and three projects are under development in California and intend to use Siemens rapid response technology.[57]

However, PG&E has not determined or evaluated the relative costs of selecting projects that use other new technologies to meet flexibility needs compared to the GE 7FA.05 technology.[58] It also appears that PG&E has not monitored trends in the cost or technological capabilities of new, flexible combined cycle generation over the past 4 years since it evaluated the results from the 2008 LTRFO.[59] Furthermore, PG&E states that it does not have information regarding market trends for costs of new combined cycle facilities.[60]

As explained above, the CAISO is developing new products and attempting to create more value for flexible resources by instituting flexible ramping products. PG&E has also not provided any information about how Oakley can monetize such revenues compared to other potential technologies or projects that could provide alternatives to the project.

Accordingly, PG&E has no basis to support its statements that the Oakley facility is "state of the art" today, or that remains more cost-effective relative to other potential alternatives.

---

[54] Attachment P (PG&E Response to IEP_001_13 (b)).

[55] Attachment Q (materials available at http://www.controleng.com/home/single-article/high-efficiency-gas-turbines-add-new-flexibility/9a6d35a104.html; http://www.alstom.com/power/fossil/gas-power/gas-turbines/gt24-gt26/).

[56] Attachment P (PG&E Response to IEP_001_13 (a)).

[57] *Id.* (PG&E Response to IEP_001_13 (c)).

[58] Attachment R (PG&E Response to DRA_003-09(b)(4)).

[59] Attachment S (PG&E Response to DRA_004-05).

[60] Attachment R (PG&E Response to DRA_003-09(b)(4)).

II. The Amended PSA cannot be deemed "competitive" based on the results from the 2008 LTRFO.

A. The results of the 2008 RFO are outdated

PG&E issued its 2008 Long-Term Request for Offers ("LTRFO") on April 1, 2008 with a requirement that new capacity had to be online <u>no later than</u> 2015.[61] PG&E received [redacted] offers[62] of which [redacted] were shortlisted.[63] Four of the resulting contracts were approved by the Commission, totaling 1157 MW of new resource additions in PG&E's service area, as shown in the table below.[64]

Table 2 - PG&E Facilities Added Resulting from 2008 LTRFO

Proceeding		Status	MW
Mariposa	A.09-10-017	Approved by D.09-10-017	184
GWF Tracy	A.09-10-022/034	Approved by D.10-07-042	145
Calpine Los Esteros	A.09-10-022/034	Approved by D.10-07-042	109
Mirant Marsh Landing	A.09-09-021	Approved by D.10-07-045	719
Total Additions			***1157***
Radback Contra Costa/Oakley	A.12-03-026	Pending	586

PG&E does not know whether the Oakley facility is cost-competitive, and whether it would be selected for a shortlist, if an RFO was conducted today. No RFO has been issued since April 1, 2008. Further, a critical requirement from the 2008 RFO—the online date—has changed: now, instead of coming online no *later* than 2015, the facility must not come online *earlier* than 2016.[65] PG&E has never evaluated how the bids and offers might have changed if other projects had been able to re-fresh or submit new bids for this different development time frame.

---

[61] Attachment U (PG&E's Prepared Testimony in A.09-09-021, September 30, 2009), Appendix 5.1 (Independent Evaluator Report) p. 1.

[62] *Id.*, Appendix 5.1 (Independent Evaluator Report) p. B-1.

[63] *Id.*, Appendix 1.2.

[64] See A.09-10-022/024 and A.09-09-021.

[65] See Attachment V (PG&E's Petition for Modification of Decision of 10-07-045, Aug. 23, 2010).

To determine whether Oakley's costs are just and reasonable, the Commission must know if they are competitive *today*. There is not sufficient information available in the instant proceeding to support a finding that the Oakley project costs are competitive compared to other new, flexible resources. Accordingly, even if the Commission *could* find a need for Oakley, any such need should be fulfilled only after PG&E conducts another RFO and compares the Oakley Project against current, updated offers from other facilities.

B. The Net Market Valuation of the Oakley offer is outdated.

PG&E used a market valuation, also known as Net Market Value calculation, to help develop its shortlist from the 2008 LTRFO.[66] The Market Value weighs the costs (including transmission costs), and the benefits (including the energy and capacity values), of each offer.[67] As PG&E explains,

> [A]n Offer's cost is reflected in the Offer's pricing. An Offer's benefits are the market value of the energy, capacity, and ancillary services offered. These costs and benefits may include: fixed and variable costs; transaction costs, such as market bid-ask spreads; location-specific value, as represented by locational price differentiation; and operating flexibility, as represented by option value. The risks and uncertainties associated with an Offer's costs and benefits will be considered as part of Market Valuation.[68]

Although the pricing of the offer has remained presumably the same, almost every other variable needs to be refreshed to obtain an understanding of the value of the offer today: energy value, capacity value, ancillary services' value, and the variable costs. Further, PG&E's analysis from 2008 does not attempt to quantify the potential benefits of that various proposals could provide if the CAISO implements its proposal for flexible ramping products. In addition, PG&E used estimates of transmission costs that emerged from the Transmission Ranking Cost Reports

---

[66] Attachment U, Appendix 5.1 (Independent Evaluator Report) p.4.

[67] *Id.*, Appendix 5.1 (Independent Evaluator Report) p.4.

[68] *Id.*, Appendix 1.4, p. 1; see also PG&E's "All Source Long-Term Request for Offers", April 1, 2008, p. 13, available at http://www.pge.com/includes/docs/word_xls/b2b/wholesaleelectricsuppliersolicitation/2008LTRFO/LTRFO040108.doc.

(TRCRs), a preliminary estimate of transmission costs.[69] Although the CAISO has now completed cluster studies and issued much more accurate estimates of the transmission cost of the facility, PG&E has not explained how the study results impacted the prices or relative competitiveness of projects bid into the 2008 LTRFO.

C. Developing equivalent comparisons between utility-owned projects and PPA offers is difficult and results may be skewed.

As the Commission noted, in D.12-04-046, offers for utility-owned generation (UOG) "tend to be difficult to compare" to PPA offers due to their structural differences.[70] DRA further agrees with the Commission that at minimum, an "appearance of favoritism" will be present whenever a utility selects a UOG option over PPA options in an RFO.[71] Further, the Oakley project's costs have been amortized over 30 years and not over the same term as the other PPAs that were bid into the 2008 RFO. This automatically makes it difficult to come up with a fair assessment of how Oakley's costs compare to the other PPAs submitted into the 2008 LTRFO. .

III. If additional flexible resources are needed, PG&E can conduct an RFO to assess current competitive options based on specific characteristics determined to be needed from flexible resources.

If the Commission determines in the 2012 LTPP that there is any residual system flexibility need after considering authorizations to meet LCRs, PG&E should conduct an RFO to fill that specific need using the most current and cost-competitive resources. That RFO can and should be based on the flexibility determination from the LTPP proceeding on what specific resource characteristics are needed for "flexibility." At that point independent generator projects under active development can bid in *or* PG&E can bring the Oakley Project under the CPCN process. If PG&E can demonstrate that Oakley is the most competitive and best-fit resource for the need, then it would be appropriate to approve the project.

It is reasonable to expect that other resources will be able to fill any Commission-determined need for additional flexible resources. PG&E claims that at least a six-year

---

[69] Attachment W (PG&E Response to DRA-02-006).

[70] D.12-04-046, p.28.

[71] *Id.*, p.31.

development timeline is necessary to develop a new generation project.[72] But the Commission and parties found in the LTPP proceeding that there was no demonstration of need for new resources through the year 2020.[73] Thus, there is sufficient time to conduct a fair and competitive solicitation for a resource to fill new need caused by renewable integration with either the Oakley Project if it wins a fair and updated solicitation or even a brand-new facility.

Further, a decision on whether there is any residual system need for new resources could issue from Track 2 of the 2012 LTPP well before the "drop dead" date for CPUC approval under the Amended PSA.[74] This determination would also account for new resources that are authorized in Track 1 of the 2012 LTPP or the SDG&E proceeding to meet local capacity needs.[75] The primary reasoning presented for the rush to approve Oakley is PG&E's "understanding" that major equipment won't be purchased until after approval.[76] In reality there is plenty of time to wait for a determination on system needs from Track 2 of the 2012 LTPP.

Once the Commission has that determination it can further evaluate whether there is time to run a fair and competitive solicitation, allow refreshed bids, or otherwise assess the current market value of new flexible projects relative to Oakley. The Commission should not rely solely on outdated solicitation results from 2008 to decide on the reasonableness of a 30-year commitment for PG&E's ratepayers to a project that costs over $1.5 billion dollars (nominally) in the first eight years alone.[77]

---

[72] PG&E's Prepared Testimony, p.5-6.

[73] D.12-04-046, p. 10.

[74] Compare Amended PSA, Section 10.1(a) with 2012 LTPP Scoping Memo at 10, which anticipates performing updated studies relating to system variability, such as renewable integration, in 2013.

[75] *Id.*

[76] Attachment X (PG&E's response to CBE-01-008).

[77] PG&E Prepared Testimony p. 6-1.

CHAPTER 4. COST RECOVERY AND RATEMAKING PROPOSALS

I. PG&E's Requested Cost Recovery for Initial Capital Costs, O&M Expenses, and Initial Revenue Requirements

PG&E requests that the ratemaking and cost recovery proposed in the Partial Settlement Agreement (Settlement) from the original application for approval of the Oakley project (A.09-09-021) also be adopted here.[78] However, the Settlement is not applicable to the current Application, and thus it would not be valid to bind parties to this proceeding to the prior settlement agreement as it relates to Oakley.[79] Critical aspects of the Oakley project have changed since the signing of the Settlement on ratemaking and cost recovery in A.09-09-021, which renders the Settlement no longer applicable to the project. For instance, the online date of the Oakley plant has changed from 2014 to 2016. In addition, as explained above, it is not at all clear that the Oakley project is cost-competitive or the best-fit project in today's environment. Therefore, the prior settlement should not be applied to, nor can it be binding upon, the parties to the current application.[80]

If the Commission decides to approve Oakley, DRA recommends adopting limitations on PG&E's proposed cost recovery and ratemaking mechanism, as described below. These limitations will ensure that PG&E recovers no more costs than are just and reasonable, and will further protect the public interest in striking an appropriate balance of incentives for utilities to submit accurate bids for PSA costs into their own resource solicitations.

A. Initial Revenue Requirement

PG&E requests an initial revenue requirement that totals over $1.54 billion (nominal dollars) over *just* the first eight years of operations.[81] The initial annual revenue requirement is based on the initial O&M estimate and the capital cost discussed below. PG&E proposes to adjust the initial revenue requirement prior to commercial operation, and at the end of each

---

[78] PG&E Application, March 30, 2012 p. 21; PG&E Prepared Testimony p. 6-1.

[79] PG&E itself recognizes that, because this is a new application seeking approval of the Oakley Project, the Settlement is not binding on the settling parties for the purposes of this application. PG&E Prepared Testimony p. 6-2.

[80] Portions of the Settlement that address facilities other than the Oakley plant are still in effect.

[81] PG&E Prepared Testimony, p. 6-1.

subsequent calendar year, to reflect changes in the initial O&M estimate, capital cost recovery, and the latest Commission–authorized cost of capital and franchise, uncollectible and property tax factors as discussed below. PG&E will begin accruing the revised initial revenue requirement for Year 1 in the Utility Generation Balancing Account (UGBA) as of the closing date of the Amended PSA. The UGBA accrual will be adjusted annually to reflect that latest revised initial revenue requirement, and the appropriate proration to the calendar year, in each Annual Energy True-Up (AET) following commercial operation.

DRA's Analysis and Recommendation

DRA recommends that any initial revenue requirement that is adopted as a result of the approval of Oakley should be fixed for the next *ten years* subject only to *reductions* to the capital costs that DRA suggests in Section C.

Fixing the revenue requirement for 10 years provides better alignment with O&M and capital cost recovery structures for independent generation projects that are funded through Power Purchase Agreements (PPAs) and are not utility owned generation (UOG) proposals. Subject to the reductions to the capital costs described in Section C, the Commission should require that the initial capital costs, capital additions, fixed and variable O&M of any UOG bid should be binding on PG&E—or any utility that seeks approval of a PSA—for the first ten years of the project's operation. By contrast, if PG&E is not held to account for its own forecasts of cost submitted in the PSA, and can escalate costs after the project achieves initial commercial operation, this creates an incentive for utilities to *underbid* the costs of a PSA, which could result in a resource selection process that is unfairly biased in favor of UOG proposals.

B. PG&E's Estimated O&M Expenses

PG&E has requested approval of O&M costs for (1) labor O&M, (2) Long-Term Service Agreement (LTSA) with General Electric (GE) and (3) other O&M—annual change in the Material Index used for the LTSA.[82]

[82] PG&E Prepared Testimony, Confidential Attachment 1 to Chapter 6.

1. Increases to initial O&M expense estimates

PG&E has generally agreed to cap O&M costs at the values used in the 2008 Long-Term Request for Offers (LTRFO) evaluation process for a period of eight years.[83] However, PG&E requests authority to adjust its O&M rates via an ***expedited advice letter process*** prior to the end of the eight-year period for: (1) delays in closing; (2) increased O&M caused by governmental agency requirements or changes in permitting assumptions; (3) changes in operating profile from the maximums assumed in the O&M forecast (i.e., 333 starts/year and 4329 operating hours/year); and (4) on a one time basis, PG&E may update the LTSA costs to reflect the terms and conditions in the final, executed contract.[84]

Following the conclusion of the initial 8-year period, PG&E seeks authority to propose revised O&M expense for the Oakley Project beginning with PG&E's 2024 GRC application, or a later applicable Test year GRC, or to submit an application for an increase in electric rates effective January 1, 2024 or later.[85]

DRA's Analysis and Recommendation

DRA recommends that the O&M expenses adopted in this proceeding should be fixed for the first ten years of Oakley's operations, to create a consistent approach between proposals for UOG and PPAs and to eliminate any incentives that approving PG&E's proposal would create for utilities to underestimate O&M costs in an application and then recover *higher* O&M costs after a UOG project has been approved.

Allowing PG&E to increase O&M costs after operations commence puts additional risks on ratepayers that would typically be borne by an independent developer under a PPA contract structure. The Oakley project will use a new technology that is not currently in operation at any other facility.[86] This creates more uncertainty whether the project will perform as promised. As

---

[83] Attachment T (PG&E Response to DRA _003_07).

[84] PG&E Prepared Testimony p. 6-2, emphasis added.

[85] The online date of the Oakley plant has changed from 2014 to 2016; thus PG&E may propose revised O&M expense for the Oakley Project with PG&E's 2026 GRC application or a later applicable Test year GRC, or propose revised O&M expenses for the Oakley Project by submitting an application for an increase in electric rates effective January 1, 2026 or later to reflect the change on the online date.

[86] Attachment Y (PG&E Response to DRA_002_01). PG&E also notes that it does not have the cost information for the two GE 7FA.05 gas turbines and is not aware of the price of individual equipment or

(continued on next page)

noted in D.12-04-046, where the Commission states, "utilities proposing UOG projects may want to align the O&M cost recovery terms for their project with those typically applicable to PPAs,"[87] DRA recommends that here, the Commission should establish cost caps for O&M for this UOG project to ensure a fair and equal treatment compared to PPA project bids.

Further, even if the Commission rejects DRA's recommendation to fix the O&M costs at the values presented in the application for the first 10 years, at the very least the Commission should require PG&E to file an *application* (or at least a Tier 3 advice letter), not an expedited advice letter, if it seeks authority to increase its O&M costs. In particular, PG&E should file an application if it seeks to increase costs during the first 8 years of operations on the basis of (1) delays in closing and (2) changes in permitting assumptions, because these conditions are not clearly defined or explained in the testimony.

PG&E states that any delay in the closing date may result in an increase in PG&E's costs for inflation, project oversight, and additional capitalized overheads.[88] However, DRA is unclear how PG&E defines the term, "delays in closing the Amended PSA." Accordingly, parties should be able to examine the basis for any increase in O&M to ensure that the purported delay is not due to events that occurred prior to this new application or events for which the developers expected and were compensated for in the cost of the plant.

2. Labor O&M expense estimates

DRA continues to examine PG&E's O&M costs and reserves the right to make additional recommendations should it be necessary at the time of hearing.

C. Capital Costs

1. Initial Capital Costs and Recovery of Costs in Excess of Initial Capital Cost Estimate

---

(continued from previous page)

components. Attachment R (PG&E Response to DRA _003_09).

[87] D.12-04-046 p.37.

[88] Attachment Z (PG&E Response to Energy Division Data Request _01-9-7).

PG&E requests approval to recover over [redacted] in initial capital costs for the Project.[89] Pursuant to Commission approval of PG&E's proposal, this amount would be included in rate base and recovered in rates without any further, or after-the-fact, reasonableness review.[90] PG&E further requests approval to recover *additional* capital costs that exceed its initial capital cost estimate through three $20 million "bands" of recovery. The first band would be passed through in rates at 100% recovery. The second $20 million band would be subject to 90%/10% sharing between ratepayers and shareholders, with PG&E recovering 90% of the additional capital costs from ratepayers that are $20-$40 million in excess of the initial capital cost estimate. The final $20 million band would allow PG&E to recover from ratepayers 80% of costs that are $40-$60 million above the initial capital cost estimates.[91] For rates effective January 1, 2024 or later, PG&E proposes there be no limitations on PG&E's ability to propose recovery of capital additions for the Oakley Project in a GRC or other application.[92]

DRA's Analysis and Recommendation

DRA recommends disallowing PG&E's proposal to recover costs in excess of the initial capital cost estimate. If costs are in excess of the initial capital cost estimate, PG&E should be required to file an application (or at least a Tier 3 Advice Letter) for approval of the costs and would have the responsibility to demonstrate such excess amounts were reasonable and should be recovered in rates.

DRA is concerned that the three $20 million "bands" provide a strong incentive for PG&E to spend more rather than managing costs within the initial capital cost estimates, because the overruns will further increase the total amount added to PG&E's rate base. Based on these three $20 million "bands" of recovery applicable to costs in excess of the target price, PG&E could add $54 million to the capital costs of the projects for recovery from ratepayers, at a cost

---

[89] PG&E Prepared Testimony, Confidential Attachment 1 to Chapter 6. This figure reflects a reduction of $24.5 million in contingency on Amended PSA costs and other costs. PG&E's Testimony only shows the proposed revenue requirement for the first eight years of the Oakley Project's operation. The total cost of the service life of the facility is about [redacted]. Attachment AA (PG&E Response to DRA _004_11 Atch01).

[90] PG&E Prepared Testimony, p. 6-3.

[91] *Id.*, pp. 6-3 to 6-4.

[92] *Id.*, p. 6-5.

of just $6 million to shareholders. Further, if PG&E can fully recover through rate base the additional $20 million of cost overruns without the need for an after-the-fact reasonableness review, that would effectively mean PG&E reduced the initial capital cost estimate by only $4.5 million relative to the original application, instead of reducing costs by $24.5 million as PG&E previously agreed to as a reduced contingency.[93]

Table 3: DRA's Calculation of PG&E's Recovery of Costs in Excess of Initial Capital Cost Estimate

Excess Costs	Recovery (Percentage)	Ratepayers' Share	Shareholders' Share
0-$20 million	100%	$20 million	$0
$20-40 million	90%	$18 million	$2 million
$40-$60 million	80%	$16 million	$4 million
	Total:	**$54 million**	**$6 million**

2. Capital additions after the eighth year of operations

DRA also recommends rejecting PG&E's proposal to seek recovery of capital additions for the Oakley Project in a GRC for rates effective January 1, 2024.[94] The Commission should not pre-approve future capital additions through this application. Rather, the need for and benefits of any potential future capital additions should be proposed through an application. PG&E is already proposing $345 million in capital additions to the project for years 5-8;[95] any approval for additional expenditures that could total hundreds of millions of dollars should be evaluated based on their merits when needed, not pre-approved here.

3. Changes to Initial Capital Cost Estimate

PG&E requests Commission authority, via an expedited advice letter filing, to revise the capital cost estimate if the following occur: (1) delays in closing the Amended PSA; or (2)

[93] *Id.*, Attachment 1 to Chapter 6.

[94] *Id* .pp. 6-4 to 6-5.

[95] *Id.*

operational Performance Enhancements; or (3) changes beyond PG&E's control, including new permit or regulatory requirements, greenhouse gas changes, and costs incurred under the Major Legal Change mechanism in the Amended PSA.[96]

DRA's Analysis and Recommendation

DRA does not oppose PG&E using the advice letter process to revise the capital cost estimates due to changes beyond PG&E's control, including new permit or regulatory requirements and greenhouse gas changes and costs incurred under the Major Legal Change mechanism in the Amended PSA. However, DRA *does* oppose using the advice letter process for revising the capital cost estimate due to (1) delays in closing the Amended PSA; or (2) operational Performance Enhancements.

The advice letter process is not an appropriate method to increase costs when there is no information or record available to determine the *reasonableness* of the additional capital costs. Even if the cost overruns are associated with changes beyond PG&E's control or other circumstances, they are too uncertain to pre-judge in this application and should be given more scrutiny and review than the lower level available (like Tier 1 or 2) through the advice letter process. In addition, PG&E should have had ample time since the last RFO was closed to determine what capital changes might arise before filing the current application.

Accordingly, with the exception for costs that are beyond PG&E's control such as new permit, regulatory requirements, and greenhouse gas changes, DRA recommends that the Commission grant authority for PG&E to increase the initial capital costs through an application, or at the very least a Tier 3 advice letter.

II. The Amended PSA terms relating to the SVA are unreasonable.

PG&E claims that under the Amended PSA, CCGS cannot sell power into the CAISO market as a merchant generator upon reaching commercial operation.[97] However, the Amended PSA does allow for CCGS to [redacted]

---

[96] *Id.* p. 6-4.

[97] Attachment BB (PG&E Response to DRA_002_Q13).

[redacted] pursuant to a [redacted] (SVA) between PG&E and CCGS.[98] PG&E will [redacted]

If the Oakley project [redacted] SVA, DRA recommends that the Commission adjust the initial capital costs of the plant to compensate ratepayers for the value of the [redacted] The Commission should also consider whether or how to adjust expected operations and maintenance costs or how to limit to account for any [redacted] Further, any O&M or capital cost increases that result from [redacted]

Since PG&E is fully depreciating the Oakley plant in 30 years under the proposal, DRA recommends that if the plant [redacted], then the initial capital costs should be reduced by [redacted][100] compared to the value proposed in the application, and the revenue requirements should also be reduced accordingly.

---

[98] See Attachment C (PG&E Response to DRA_05_010); Exhibit R to Amended PSA.

[99] Exhibit R to Amended PSA, section 4(II).

[100] [redacted] of 30 years.

WITNESS QUALIFICATIONS

List of DRA Witnesses and Sponsored Chapters

Chapter Number	Description Witness	
1	Introduction	Yuliya Shmidt
2	Determination of Need	Yuliya Shmidt
3	Reasonableness and Cost Competitiveness of the Amended PSA	Yuliya Shmidt and Selena Huang
4	Cost Recovery and Ratemaking Proposals	Selena Huang

QUALIFICATIONS AND PREPARED TESTIMONY

OF

YULIYA SHMIDT

Please state your name and address.

A.1 My name is Yuliya Shmidt. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2 By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission (CPUC) as a Public Utilities Regulatory Analyst V in the Division of Ratepayer Advocates' (DRA) Electricity Planning and Policy Branch.

Q.3 Please briefly describe your educational background and work experience.

A.3 I hold a Bachelor of Arts degree in environmental studies with an emphasis in policy from the University of California, Santa Cruz. I hold a Master of Environmental Science degree with an emphasis in policy from Yale University. I have worked for the Division of Ratepayer Advocates for four years, representing it on cases pertaining to: renewable procurement, conventional procurement, demand response, and energy efficiency.

Q.4 What is your area of responsibility in this proceeding?

A.4 I am sponsoring the following sections of DRA's Testimony: Chapter 1: Introduction, Chapter 2: Determination of Need, and Chapter 3: Reasonableness and Cost Competitiveness of the Amended PSA (Sections II and III).

Q.5 Does this conclude your statement of qualifications?

A.6 Yes.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
SELENA HUANG

Q.1 Please state your name and address.

A.1 My name is Selena Huang. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2 By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission (CPUC) as a Public Utilities Regulatory Analyst V in the Division of Ratepayer Advocates' (DRA) Electricity Planning and Policy Branch.

Q.3 Please briefly describe your educational background and work experience.

A.3 I received a Bachelor of Arts with a double major in Asian American Studies and Chinese, as well as a minor in English from the University of California, Davis. The relevant course work included policy and statistics. I also received a Master of Arts from Stanford University. Since joining DRA's Communications Policy Branch in January 2008, I have served as the lead technical analyst and project coordinator on a broad range of complex economics and policy issues on telecommunications. I have prepared protests, comments and analysis on issues such as broadband deployment and adoption, public purpose programs, consumer protection and cramming. In May 2012, I joined DRA's Electricity Planning and Policy Branch and have been examining procurement related issues.

Q.4 What is your area of responsibility in this proceeding?

A.4 I am sponsoring the following sections of DRA's Testimony: Chapter 3: Reasonableness and Cost Competitiveness of the Amended PSA (Section I) and Chapter 4: Cost Recovery and Ratemaking Proposals.

Q.5 Does this conclude your statement of qualifications?

A.6 Yes.