Application No.: A.13-06-____ Exhibit No.: _____ Witness: Juancho Eekhout

Application of San Diego Gas & Electric Company (U 902 E) to Fill Local Capacity Requirement Need Identified in D.13-03-029.

Application 13-06-_____ (Filed June 21, 2013)

PREPARED TESTIMONY OF

JUANCHO EEKHOUT

ON BEHALF OF

SAN DIEGO GAS & ELECTRIC COMPANY

****PUBLIC VERSION****

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

June 21, 2013

SB GT&S 0702799

	PUBLIC (REDACTED) VERSION	
1	PREPARED TESTIMONY OF	
2	JUANCHO EEKHOUT	
3	ON BEHALF OF	
4	SAN DIEGO GAS & ELECTRIC COMPANY	
5	Q1: Please state your name and business title.	
6	A1: I am Juancho Eekhout, Director of Strategic Planning and New Products & Services at	
7	San Diego Gas & Electric Company ("SDG&E"). I was Director of Origination and Portfolio	
8	Design for most of the time that SDG&E negotiated the latest (sixth) amendment to the Power	
9	Purchase Tolling Agreement ("PPTA") with Pio Pico Energy Center, LLC ("Pio Pico")	
10	(collectively, the "Amended PPTA").	
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12	Q2: What is the purpose of your testimony?	
13	A2: I am testifying to describe why the Amended PPTA with Pio Pico is the best option to	
14	meet the need identified by the California Public Utilities Commission ("Commission") in	
15	Decision ("D.") 13-03-029, Decision Determining San Diego Gas & Electric Company's Local	
16	Capacity Requirement and Granting Partial Authority to Enter into Purchase Power Tolling	
17	Agreement ("SDG&E's Local Capacity Requirement or LCR Decision").	
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19	Q3: Please summarize your testimony.	
20	A3: The Commission's determination in SDG&E's LCR Decision (at p. 2) confirms that	
21	SDG&E needs to procure additional LCR resources. Specifically, the Commission states:	
22 23 24 25	This decision determines a local capacity requirement need and directs San Diego Gas & Electric Company to procure up to 298 megawatts of local generation capacity beginning in 2018. This decision grants San Diego Gas & Electric Company authority to enter into a purchase power	

	tolling agreement with Escondido Energy Center. This decision denies authority to enter into purchase power tolling agreements with Pio Pico Energy Center and Quail Brush Power, without prejudice to a renewed application for their approval, if amended to match the timing of the identified need, or upon a different showing of need.		
) 7	My testimony will address: (1) how SDG&E's choice to amend and re-file for approval of the		
;	Amended PPTA with Pio Pico is consistent with SDG&E's LCR Decision; (2) why the		
)	Amended PPTA is the best option for customers to fulfill the need found in SDG&E's LCR		
)	Decision, as opposed to running a new Request for Offers ("RFO"); (3) what other benefits the		
	Amended PPTA provides customers; (4) the alternative resources SDG&E considered to fulfill		
2	this local capacity need; and (5) SDG&E's request that the Commission find that the Amended		
	PPTA is subject to the Cost Allocation Methodology ("CAM") for all customers in SDG&E's		
-	service area.		
	In summary, the key benefits of the Amended PPTA include:		
)	Shovel-Ready Access to State-of-the-Art Peaking Capacity: The Amended		
r	PPTA, which has been amended to start on June 1, 2017, will provide SDG&E		
5	with access to a fully-permitted, ¹ state-of-the-art, California Independent		
)	System Operator ("CAISO")-deliverable peaking facility, ideally suited to meet		
)	the local capacity requirement need that the Commission identified in SDG&E's		
	LCR Decision and to provide valuable operational flexibility. ²		
	□ <u>Competitive Pricing</u> : The Amended PPTA is competitively priced. In an		
	environment of rising construction costs, the Amended PPTA holds the capacity		

¹ SDG&E understands that there is a pending appeal of Pio Pico's Environmental Protection Agency ("EPA") permit, but that it is expected to be favorably resolved in the near future.

² This operational flexibility will assist in accommodating increasing amounts of intermittent renewables within the CAISO balancing authority. With 3 GE LMS 100s, Pio Pico is anticipated to be able to reach 300 MWs within 10 minutes. This is faster than a typical combined cycle facility.

1		price at the same level that SDG&E submitted for approval in its original
2	application (A.11-05-023), which arose out of SDG&E's 2009 RFO.	
3		A Commercial Operation Date ("COD") of September 1, 2015 that Enhances
4		Reliability before the PPTA start date: The Amended PPTA requires Pio Pico
5		to achieve COD by September 1, 2015, almost two years before the PPTA start
6		date. This gives customers in San Diego additional reliability benefits between
7		COD and the PPTA start date.
8		Enhanced Commercial Position to Customers in the Local Resource Adequacy
9		("RA") Market: Pio Pico will add diversity to the relatively small group of
10		sellers of local RA in San Diego and with that enhance the commercial position
11		of SDG&E and other Load-Serving Entities ("LSEs") responsible for procuring
12		local RA.
13		Commitment to Diverse Business Enterprises ("DBEs"): The Amended PPTA
14		requires Pio Pico to spend a specified minimum of its Engineering, Procurement
15		and Construction ("EPC") dollars and non-fuel Operations and Maintenance
16		("O&M") on DBEs. SDG&E believes this transaction furthers the
17	Commission's goals in this area and helps prove it is possible to gradually	
18	increase DBEs' presence in electric procurement.	
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20	Q4:	How does SDG&E's LCR Decision allow SDG&E to meet the identified need?
21	A4:	In SDG&E's LCR Decision, the Commission allows SDG&E to meet the identified need
22	in one	of two ways: (1) by submitting for approval a PPTA with either Pio Pico or the Quail
23	Brush	Generation Project ("Quail Brush") that has been amended to correspond to the timing of

the identified need; or (2) by conducting a new solicitation for new resources to meet the identified need.³

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Q5: Please explain why SDG&E believes that the Amended PPTA with Pio Pico is the best way to meet the identified need.

A5: After having considered other alternative resources to meet this need (please refer to Question 8), SDG&E believes that the Amended PPTA with Pio Pico is the best way to meet the identified need because: (1) Pio Pico is most likely the only viable gas-fired conventional unit to meet the size of the identified need within the available time; (2) the Amended PPTA is cost competitive and highly valuable for customers; and (3) issuing a new RFO would likely result in options that are not viable and/or not cost-effective. I address each of these reasons in more detail below.

1. Pio Pico is most likely the only viable unit that is available to meet the identified need from a timing and size perspective.

From a timing perspective, the Commission has recently found that the lead time for conventional gas-fired plants can take seven to nine years.⁴ Therefore, the group of potential projects that are able to meet this need by 2018 narrows to units that today are well-advanced in the development cycle. In this case, approval by the California Energy Commission ("CEC") is one key proxy for well-advanced development status. At present, within the area eligible to meet local need in San Diego, there are three yet-to-be-constructed CEC-approved gas-fired conventional power projects that potentially could meet the identified need. A fourth project,

³ SDG&E's LCR Decision, p. 27 (Ordering Paragraph 3).

⁴ D.13-02-015, Southern California Edison's ("SCE") recent LCR decision (at p. 63): "we take seriously the ISO's concern (seconded by SCE and others) that there are some procurement opportunities associated with gas-fired plants which may be lost if there is a delay in moving forward, due to a likely seven to nine year lead time."

Quail Brush, suspended its CEC application in April of 2013.⁵ The first of the CEC-approved projects is the Escondido Energy Center, a 45 MW repowered gas turbine. SDG&E's LCR Decision already authorizes SDG&E to move forward with its PPTA with this facility and the Commission's need finding of 298 MW already takes into account this unit coming online. Second is the Carlsbad Energy Center. At about 550 MW, this project's size exceeds the identified need and it is fair to say it would not be able to secure financing to be built without a PPTA. This leaves the third project, Pio Pico. From a timing perspective, Pio Pico not only has obtained CEC approval, but it also has a PPTA, a fully executed Large Generator Interconnection Agreement ("LGIA"), a fully executed EPC agreement, and, we understand, has acquired all of its major equipment, which will start being delivered to the site in the summer of 2013; all of this in combination makes Pio Pico a very viable project to meet the need within this timeframe. At 305 MW, Pio Pico also fits the size of the need found by the Commission.

2. The amended Pio Pico transaction is cost competitive and highly valuable for

customers.

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SDG&E has worked with Pio Pico over the past few months to amend the PPTA so that its start date is closely aligned with the directives in SDG&E's LCR Decision. In addition, the overall commercial package negotiated continues to be as or more attractive to customers than the original contract filed, which was found to be competitive in the 2009 RFO and not contested on this aspect in the long-litigated proceeding leading to SDG&E's LCR Decision. Although the parties have tried to keep changes to a minimum, terms other than the start date must also be

⁵ In response to SDG&E's LCR Decision, Quail Brush filed a Request for Project Suspension at the CEC on April 8, 2013. On April 16, 2013, the CEC issued an Order Suspending Proceedings until April 15, 2014. http://www.energy.ca.gov/sitingcases/quailbrush/

1	amended in order to reflect the current status of the project. Relative to the original PPTA filed, ⁶	
2	the key commercial aspects of the amendment include: (i) no changes in the capacity price or the	
3	base period by which the fixed O&M charges escalate; (ii) a June 1, 2017 ⁷ PPTA start date, (iii)	
4	a COD of September 1, 2015, making this plant's capacity available to meet San Diego's	
5	requirements for almost two years before the PPTA starts; ⁸ (iv) a contract term that has been	
6	extended by 5 years to 25; and (v) a new milestone schedule and dates for certain conditions	
7	precedent ("CPs"). The Amended PPTA can be found in the Confidential Appendix E. ⁹	
8	The balance of the gives and takes in the Amended PPTA benefit customers. In	
9	particular, the amended Pio Pico PPTA yields a more favorable Bid Ranking Price ("BRP")	
10	relative to the BRP of the PPTA previously filed (lower by	
11	drivers behind this result are the delay in the start date and the decrease in the transmission cost	
12	estimates that the CAISO provided for the project since SDG&E initially evaluated it. ¹⁰ The	
13	BRP measures the "all-in" economics to customers. Those economics in the Amended PPTA are	
14	about better on a \$/kW-yr basis. A Least Cost Best Fit Pricing, Bid Ranking Price Analysis	
15	is included in Confidential Appendix B.1. It is worth noting that, even if the lower transmission	

 ⁶ The first five amendments to the PPTA did not result in material commercial changes to the transaction as they were mostly focused on updating dates in the Conditions Precedent or milestones to reflect the timing of issuance of SDG&E's LCR Decision.

⁷ Section 2.9 of the Amended PPTA also allows for the possibility that the Commission could adopt an earlier PPTA start date than June 1, 2017.

⁸ SDG&E or other LSEs could enter into an RA contract with Pio Pico for the period between September 1, 2015 and June 1, 2017 to meet their RA requirements. At the time of the filing of this Application, SDG&E is negotiating terms with Pio Pico on a price-competitive RA contract for 2016-2017 and intends, to the extent terms can be agreed upon by both parties, to enter into an RA agreement to be filed for approval separately.

⁹ Appendix A contains a declaration describing the basis for the confidentiality of certain aspects of this testimony and other appendices.

¹⁰ Pio Pico's original CAISO Phase 2 interconnection study, dated August 24, 2011, estimated that the project would trigger approximately million in upgrade costs. A revised study, dated February 10, 2012, reduced that estimate to approximately million. As set forth in the Large Generator Interconnection Agreement Among Pio Pico Energy Center, LLC and San Diego Gas & Electric Company and California Independent System Operator Corporation (dated September 14, 2012), with these upgrades in place, Pio Pico will achieve Full Capacity Deliverability Status and, subject to the CAISO's annual deliverability assessment for each RA compliance year, will count towards San Diego area LCR.

costs are not taken into account, the BRP of the amended PPTA would still be better than the PPTA previously filed and would still be shortlisted among the 2009 RFO bids.

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Moreover, the total costs to customers (capacity and fixed O&M charges) in the Amended PPTA results in the lowest cost alternative, as measured in present value dollar terms, when compared to either (i) the total costs of the PPTA originally filed, or (ii) a proposal provided by Pio Pico with a January 1, 2018 start date. See Confidential Appendix B.2. The key drivers behind this result are: (i) the favorable timing effect of selecting a PPTA with a start date of June 1, 2017 instead of about 3 years earlier (as previously filed); and (ii) the mathematical higher capacity costs in the PPTA option with start date of January 1, 2018

3. It is unlikely that an RFO would result in viable options at lower prices.

As mentioned above, the Commission has acknowledged that there can be a 7 to 9-year lead time to develop, permit and construct new gas-fired facilities; nonetheless, SDG&E considered the possibility of attempting to solicit LCR resources in time for a 2018 online date. In SDG&E's opinion, which has been seconded by the Independent Evaluator's ("IE") report, such an RFO is not likely to result in a viable and less expensive option because: (1) capital costs for these types of plants have increased¹¹ since the 2009 RFO conducted by SDG&E (whereby Pio Pico was found competitive) and (2) the small number of permitted facilities in the San Diego area is not likely to provide the type of robust competition that would result in competitive pricing or certainty of delivery. In SCE's LCR decision, the Commission determined that it is reasonable to allow bilateral contracts in lieu of an RFO when generation resource alternatives are limited.¹² With regard to the two CEC-approved facilities in SDG&E's local area: (i) the Carlsbad Energy Center, which bid in the 2009 RFO but was not selected due

¹¹ Based on the IHS CERA Power Capital Cost Index. For details, please refer to the IE report in Appendix D (there is both a public and confidential version of the IE report).

¹² D.13-02-015 at p. 83. SCE had argued that RFOs "may not yield competitive or cost-effective results."

to price, would likely have to offer an even higher price in a new RFO given recent capital cost increases and/or the fact that the PPTA available would be for materially less than the full capacity of the project of the ~550 MW offered and (ii) Pio Pico also likely would offer a higher price upon understanding their competitive positioning in such new RFO and pricing-in the risks associated with the delayed construction of a 2018 start date.

Q6: Why would a PPTA start date of January 1, 2018 be more expensive than SDG&E's proposed PPTA start date of June 1, 2017?

9 A6: SDG&E's proposed amended PPTA with a start date of June 1, 2017 is cheaper because 10 this date allows the developer to keep certain key existing agreements in place (for example the 11 EPC contract and the turbine order) as well as realize lower financing costs (when compared 12 with a start date in 2018). SDG&E asked Pio Pico for an offer with a PPTA start date of January 1, 2018 and, as explained above, the capacity price was higher in light of the increased risks the 13 14 developer would face. Pio Pico explained that the drivers behind the increase are due to 15 increased development and financial risks. Delaying construction to achieve a January 1, 2018 16 COD would likely affect the project's current highly-viable status as Pio Pico could lose its 17 CAISO interconnection queue position, relevant permits and land arrangements could expire, and interest rates could increase. For customers, the 2018 PPTA start option would result in 18 19 significantly higher costs as the "savings" from delaying the PPTA start date by seven months does not outweigh the additional "costs" from higher capacity prices that would be incurred for 20 21 the entire contract length.

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Q7: What other customer benefits does the Amended PPTA with Pio Pico bring to customers?

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A7: In addition to being the most viable and cost effective way to meet the 298 MW local capacity need, the Amended PPTA with Pio Pico provides three key additional benefits.

1. The September 1, 2015 COD Improves Reliability before the PPTA starts.

As part of the commercial package negotiated, Pio Pico agreed to a PPTA start date of June 1, 2017 but to a COD of September 1, 2015, effectively making this resource available, should it be needed, to provide capacity to meet the region's resource requirements from that date forward. It is important to note that over the past 12 years, approximately 83% (10 out of 12) of the annual load peaks have occurred on or after September 1. The September 1, 2015 COD provides the local grid with "insurance" that effectively translates into additional reliability to the local grid and therefore to all customers in San Diego. This is particularly important in light of the retirement of the San Onofre Nuclear Generating Station ("SONGS") announced by SCE on June 7, 2013. The implications of the retirement of SONGS for San Diego local capacity will be considered in Track 4 of the Long Term Procurement Plan proceeding ("LTPP") and will likely result in an increased local capacity need for the San Diego area (in addition to the 298 MW mentioned above).¹³ Pio Pico will secure Full Capacity Deliverability Status ("FCDS") from the CAISO upon completion of a minor transmission line rearrangement. With this status, it is almost certain Pio Pico will be deemed deliverable by the CAISO for all years

¹³ The CAISO is developing a study to assess the additional local reliability needs in the Los Angeles Basin local area and the San Diego sub-area resulting from the retirement of SONGS, which will be considered in Track 4 of the LTPP. Once a decision is issued in Track 4 of the LTPP, SDG&E can begin the procurement process (solicitation, contract negotiations, project development and construction), which, as discussed herein, will take years. Pio Pico, on the other hand, is poised to begin commercial operations by September 1, 2015.

beginning with its September 1, 2015 COD date.¹⁴ SDG&E respectfully urges the Commission not to delay the outcome of this proceeding until the conclusion of Track 4 of the LTPP as doing so could result in a lost opportunity to improve local reliability in San Diego as early as 2015.

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2. The September 1, 2015 COD puts SDG&E and LSEs in San Diego in a better commercial position to procure local RA in 2015-2017.

6 As explained above, the Amended PPTA requires Pio Pico to achieve COD by September 7 1, 2015. This translates into more purchasing options to SDG&E and all LSEs to procure local 8 San Diego RA between the time the project achieves COD and the commencement of the 9 Amended PPTA (June 1, 2017) The addition of Pio Pico as a seller in the RA market adds 10 diversity to the relatively small group of sellers of local RA and therefore puts SDG&E and other LSEs responsible for procuring local RA in San Diego in a better commercial position. In this 12 regard, SDG&E is in the process of negotiating an RA transaction with Pio Pico, which will be 13 subject to separate Commission approval, for significant portions of the 2016-2017 time period, 14 at prices more attractive than relevant comparables. It is worth noting that the operational 15 flexibility of Pio Pico and the terms of both the Amended PPTA and the proposed RA contract 16 should allow SDG&E to count the "flexible attributes" of Pio Pico towards the flexible 17 requirements of the CAISO if the capacity market requirements change in the future, as 18 anticipated.

3. Pio Pico has committed to conduct some of its business with DBEs.

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In May of 2011, the Commission issued D.11-05-019, which, building on General Order ("GO")-156, ordered the Investor Owned Utilities ("IOUs") to begin reporting expenditures with

¹⁴ The deliverability of all existing and under construction generating resources is reviewed annually by the CAISO for use in the upcoming RA compliance year. In this regard, Pio Pico will be treated no differently than all other RA resources throughout the State.

1	DBEs ¹⁵ within electric procurement. Each IOU is conducting its own efforts and have also	
2	worked together on the Supplier Diversity Roundtable to identify ways to enable the entry of	
3	DBEs into electric procurement, which is a highly capital intensive and specialized sector. In	
4	early 2013, the IOUs reported 2012 expenditures and it is fair to say that although some progress	
5	has been made, the industry is at the beginning of this journey. In the Amended PPTA, Pio Pico	
6	has committed to spend contractors on DBE subcontractors during the construction of the plant	
7	and to conduct efforts to spend at least of the plant's non-fuel O&M on DBE contractors.	
8	This is the first DBE commitment SDG&E has negotiated for a conventional generation PPTA.	
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10	Q8: What other alternative resources did SDG&E consider to fill this local capacity	
11	need?	
12	A8: SDG&E is very supportive of renewable energy and has a very strong Renewable	
13	Portfolio Standard ("RPS") portfolio and recent track record. SDG&E has delivered renewable	
14	energy in excess of 20% both in 2011 and 2012 and is on track to meet the State's 33%	
15	requirement by 2020.	
	requirement by 2020.	
16	requirement by 2020. Even though SDG&E already has a portfolio of RPS contacts that currently appear	
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	Even though SDG&E already has a portfolio of RPS contacts that currently appear	
17	Even though SDG&E already has a portfolio of RPS contacts that currently appear capable of meeting the 33% RPS requirement by 2020, SDG&E looked into the possibility of	
17 18	Even though SDG&E already has a portfolio of RPS contacts that currently appear capable of meeting the 33% RPS requirement by 2020, SDG&E looked into the possibility of fulfilling the local capacity need that the Commission identified in SDG&E's LCR Decision with	

 ¹⁵ As the Commission explained in D.11-05-019 (at p. 8, fn. 7), "DBEs" is a collective reference that is intended to include a broad range of women, minority, and disabled veteran-owned business enterprises ("WMDVBEs").
 ¹⁶ This calculation was made assuming, very optimistically, that all the proposed projects still exist and would be deemed deliverable. In reality, the amount of local capacity available (subject to successful development and

these projects are not attractive to use them as a partial solution to fill the 298 MW need. In particular, of the hundreds of new utility scale projects evaluated by SDG&E since 2009, only 12 potentially are in our local area (1 biomass and 11 solar).¹⁷ Confidential Appendix C includes the list of proposed projects.

SDG&E is also supportive of Energy Efficiency ("EE") and Demand Response ("DR")
programs and options and will continue to procure all cost-effective EE and DR products.
However, it should be pointed out that the need the Commission identified in SDG&E's LCR
Decision was determined by reducing the CAISO's modeling results for what the Commission
felt were appropriate adjustments for uncommitted EE and DR. In this context, SDG&E
concluded it was not prudent to count on additional levels of EE and DR to fulfill the 298 MW
need the Commission identified in SDG&E's LCR Decision.

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Q9: What is the status of the permits for Pio Pico?

A9: Pio Pico has obtained all permits and approvals required to commence construction and
operation, pending the favorable resolution – expected shortly – of an appeal of the EPA's
Prevention of Significant Deterioration permit, which was issued in November 2012.
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construction) is likely less because many of these projects have already been cancelled, not all are seeking full deliverability status to count towards CAISO local capacity requirements, and a number of these seek deliverability on the same paths and thus may not all be able to achieve local status.

⁷ This total excludes projects located outside the local San Diego Area connected to the Sunrise Powerlink and projects offered in the Borrego Springs area, which is isolated by state park land and would require extensive transmission upgrades in order to accommodate any additional generating capacity beyond the solar projects which already exist at Borrego Springs.

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A10: Yes. Along with the Commission's approval of the Amended PPTA, SDG&E also is seeking the Commission's approval to recover the costs of the Amended PPTA through the Commission-approved CAM for the duration of the contract.¹⁸

As explained above, in SDG&E's LCR Decision, the Commission approved SDG&E's 6 proposed PPTA with the Escondido Energy Center.¹⁹ In SDG&E's LCR Decision, the 7 8 Commission also authorized SDG&E to recover the costs of the Escondido PPTA from all 9 bundled service, Direct Access ("DA") and Community Choice Aggregation ("CCA") customers 10 in SDG&E's service territory on a non-bypassable basis consistent with the CAM the 11 Commission had previously approved in D.11-05-005. In particular, the Commission in 12 SDG&E's LCR Decision authorized SDG&E to create a Local Generation Balancing Account 13 ("LGBA") to record the costs of the Escondido Energy Center and to recover those costs via a Local Generation Charge ("LGC") on an equal per kilowatt-hour basis by customer class.²⁰ 14 15 As with the Escondido Energy Center PPTA, SDG&E seeks in this Application authority 16 to record the costs of the Amended PPTA with Pio Pico in its LGBA and, upon commencement 17 of the Amended PPTA, to recover those costs via its LGC from all bundled service, DA and 18 CCA customers in its service territory on an equal per kilowatt-hour basis by customer class. 19 This is entirely appropriate because, but for the PPTA start dates, the 298 MW of local capacity requirement need that the Commission identified in SDG&E's LCR Decision - and which is the 20

¹⁸ If approved the net costs ("net capacity costs") would flow through the Local Generation Charge that was approved in SDG&E's LCR Decision.

¹⁹ SDG&E's LCR Decision is the subject of a pending application for rehearing on the applicability of CAM treatment to the costs and benefits associated with the Escondido Energy Center. The application for rehearing was filed jointly by the Alliance for Retail Energy Markets, the Direct Access Customer Coalition and the Western Power Trading Forum on April 29, 2013; SDG&E filed a response on May 14, 2013.

²⁰ SDG&E's LCR Decision at pp. 20-21, Findings of Fact 22 and 23, Conclusions of Law 10, 11 and 12 and Ordering Paragraphs 5 and 6.

subject of this Application – is indistinguishable from the 45 MW local capacity requirement	
need that the Escondido Energy Center will fill. ²¹	
Applying CAM treatment to the costs and benefits associated with the Amended PPTA	
also would be consistent with the Commission's CAM treatment of the costs and benefits	
associated with SCE's local capacity requirement need. ²²	
Q11: Why is Commission approval of the Amended PPTA required by December of	
2013?	
A11: As noted above, the Amended PPTA requires Pio Pico to achieve COD by September 1,	
2015. In order to achieve this milestone, which is valuable for customers as explained above, the	
Commission must promptly approve SDG&E's application so Pio Pico can secure financing,	
issue a Notice To Proceed to its EPC contractor and commence construction by the summer of	
2014. This concludes my testimony.	
 ²¹ SDG&E's LCR Decision at p. 18 ("we direct SDG&E to procure up to 298 MW of local capacity to come on-line beginning in 2018. This authorization is the equivalent of the high end of the range presented by the [CAISO's] four scenarios (343 MW), <i>less the 45 MW associated with the Escondido Energy Center</i>" (emphasis added). 	

²² D.13-02-015 (at Ordering Paragraph 15).

QUALIFICATIONS

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My name is Juancho Eekhout. My business address is 8315 Century Park Court, San Diego, CA 92123. I have been employed by SDG&E since February 2011. I served as the Director of Procurement and Portfolio Design in the Electric and Gas Procurement Department from February 2011 until April 2013 where I led the team responsible for the procurement of renewable energy and conventional resources beyond one year. I am currently serving as SDG&E's Director of Strategic Planning, New Products and Services.

Prior to this role, I was Director - Mergers & Acquisitions at Sempra Energy. Before joining Sempra, I worked for BP in a series of commercially-focused international roles.

I received a BA in Economics from the Andres Bello Catholic University in Caracas, Venezuela and a Masters degree in Public Policy from the University of Chicago.

I previously testified before the Commission in A.11-05-023 and the Long Term Procurement Plan proceeding, R.10-05-006.

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APPENDIX A

CONFIDENTIALITY DECLARATION OF JUANCHO EEKHOUT

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF JUANCHO EEKHOUT REGARDING CONFIDENTIALITY OF CERTAIN DATA

I, Juancho Eekhout, do declare as follows:

1. I am the Director of Strategic Planning and New Products and Services for San Diego Gas & Electric Company ("SDG&E"). I have reviewed my Prepared Direct Testimony (the "Testimony") in Support of the Application of SDG&E to Fill Local Capacity Requirement Need Identified in D.13-03-029, including Appendix B, C, D, and E submitted concurrently herewith the Testimony. In addition, I am personally familiar with the facts and representations in this Declaration. If called upon to testify, I could and would testify to the following based upon my personal knowledge and/or belief.

2. I hereby provide this Declaration in accordance with D.06-06-066, as modified by D.07-05-032, and D.08-04-023, to demonstrate that the confidential information ("Protected Information") provided in the Responses submitted concurrently herewith, fall within the scope of data protected pursuant to the IOU Matrix attached to D.06-06-066 (the "IOU Matrix").^{1/} In addition, the Commission has made clear that

^{1/} The Matrix is derived from the statutory protections extended to non-public market sensitive and trade secret information. (*See* D.06-06-066, *mimeo*, note 1, Ordering Paragraph 1). The Commission is obligated to act in a manner consistent with applicable law. The analysis of protection afforded under the Matrix must always produce a result that is consistent with the relevant underlying statutes; if information is eligible for statutory protection, it must be protected under the Matrix. (*See Southern California Edison Co. v. Public Utilities Comm.* 2000 Cal. App. LEXIS 995, *38-39) Thus, by claiming applicability of the Matrix, SDG&E relies upon and simultaneously claims the protection of Public Utilities Code §§ 454.5(g) and 583, Govt. Code § 6254(k) and General Order 66-C.

information must be protected where "it matches a Matrix category exactly . . . or

consists of information from which that information may be easily derived."²

3. I address below each of the following five features of Ordering Paragraph 2 in

D.06-06-066:

- □ That the material constitutes a particular type of data listed in the Matrix, *See table below*
- □ The category or categories in the Matrix to which the data corresponds, *See table below*
- □ That it is complying with the limitations on confidentiality specified in the Matrix for that type of data, *None of the confidential material has passed the time limit for confidential treatment in the Matrix*
- □ That the information is not already public, *Neither SDG&E*, the *Independent Evaluator nor Pio Pico has made the contract or analysis public* and
- □ That the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.^{3/} The confidential information is discrete and unique to this particular contract, and therefore cannot be aggregated or masked. Where possible, the confidential information is summarized; where summarization is not possible, it has been redacted.
- 4. <u>SDG&E's Protected Information</u>: As directed by the Commission, The

instant confidentiality request satisfies the requirements of D.06-06-066 $\frac{4}{2}$ because the

information contained in the Application provided by SDG&E is of the type of

information protected by the Matrix as follows:

^{2/} See, Administrative Law Judge's Ruling on San Diego Gas & Electric Company's April 3, 2007 Motion to File Data Under Seal, issued May 4, 2007 in R.06-05-027, p. 2 (emphasis added).

 $[\]frac{3}{2}$ D.06-06-066, as amended by D.07-05-032, *mimeo*, p. 81, Ordering Paragraph 2.

^{4/} See, Administrative Law Judge's Ruling on San Diego Gas & Electric Company's Motions to File Data Under Seal, issued April 30 in R.06-05-027, p. 7, Ordering Paragraph 3 ("In all future filings, SDG&E shall include with any request for confidentiality a table that lists the five D.06-06-066 Matrix requirements, and explains how each item of data meets the matrix").

Description of Data	Matrix Category	Period of Confidentiality
Testimony: Page JE-7, Lines 8 and 9; fn 10.	Bid Information, Category VIII.A.	Raw Bid Data: Always Confidential.
Appendix D Independent Evaluator (IE) Report: Pg. 23, fn 15; Pg. 27, Par.1; Pg.32 numbered statement 4.		Summaries of bids (total MW, MWH, technology types, etc) are confidential until final contracts are submitted to CPUC for approval.
Testimony: Pg. JE-6, Line 10 and 14; Pg. JE-7, Lines 8; JE-11, Line 21.	Specific Quantitative Analysis,	Quantitative Analysis in Scoring and Evaluation of Bids
Confidential Appendix B Pricing Analysis: (all)	Category VIII.B.	Confidential for three years after winning bidders selected
Confidential Appendix C Analysis of Availability and Costs of Local Renewable Projects: (all)		
Appendix D IE Report: : Pgs. 24-25, fn 16 and fn 17, Exhibit 4; Pg. 27, discussion of Customer Economic Impacts/Benefits; Pg. 27, fn 21; Pgs. 28-31, Exhibit 5; Pg. 31, Par. H, Project Viability Assessment		
Testimony: Pg. JE-11, Lines 6 and 7.	Contract Terms and Conditions, Category VII.B.	Contract summaries public, including counterparty, resource type, location, capacity, expected
Confidential Appendix E – Amended PPTA: (all)		deliveries, delivery point, length of contract and online date.
Appendix D IE Report: Pg. 3, numbered statement 4 and 7; Pg. 6, Par. 1; Pgs. 13-19, Exhibit 2 and Summary of Amendments; Pgs. 20-23, Exhibit3; Pgs. 28-30, Exhibit 5; Pg. 28, fn 23; Pg. 25 fn 18; Pg. 29, fn 24.		Other terms confidential for three years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.

5. As an <u>alternative</u> basis for requesting confidential treatment, SDG&E submits that the Power Purchase Tolling Agreement ("PPTA") included as Appendix E is material, market sensitive, electric procurement-related information protected under Public Utilities ("P.U.") Code §§ 454.5(g) and 583, as well as trade secret information protected under Govt. Code § 6254(k). Disclosure of this information would place SDG&E at an unfair business disadvantage, thus triggering the protection of General Order 66-C.^{5/}

6. Public Utilities Code § 454.5(g) provides:

The commission shall adopt appropriate procedures to ensure the confidentiality of any market sensitive information submitted in an electrical corporation's proposed procurement plan or resulting from or related to its approved procurement plan, including, but not limited to, proposed or executed power purchase agreements, data request responses, or consultant reports, or any combination, provided that the Office of Ratepayer Advocates and other consumer groups that are nonmarket participants shall be provided access to this information under confidentiality procedures authorized by the commission.

7. General Order 66-C protects "[r]eports, records and information requested or required by the Commission which, if revealed, would place the regulated company at an unfair business disadvantage."

^{5/} This argument is offered in the alternative, not as a supplement to the claim that the data is protected under the IOU Matrix. California law supports the offering of arguments in the alternative. *See, Brandolino v. Lindsay*, 269 Cal. App. 2d 319, 324 (1969) (concluding that a plaintiff may plead inconsistent, mutually exclusive remedies, such as breach of contract and specific performance, in the same complaint); *Tanforan v. Tanforan*, 173 Cal. 270, 274 (1916) ("Since . . . inconsistent causes of action may be pleaded, it is not proper for the judge to force upon the plaintiff an election between those causes which he has a right to plead.")

8. Under the Public Records Act, Govt. Code § 6254(k), records subject to the privileges established in the Evidence Code are not required to be disclosed.^{6/} Evidence Code § 1060 provides a privilege for trade secrets, which Civil Code § 3426.1 defines, in pertinent part, as information that derives independent economic value from not being generally known to the public or to other persons who could obtain value from its disclosure.

9. Public Utilities Code § 583 establishes a right to confidential treatment of information otherwise protected by law.^{$\frac{7}{2}$}

10. If disclosed, the Protected Information could provide parties, with whom SDG&E is currently negotiating, insight into SDG&E's procurement strategies, which would give them an unfair negotiating advantage and could ultimately result in increased cost to ratepayers. In addition, if developers mistakenly perceive that SDG&E is not committed to assisting their projects, disclosure of the Protected Information could act as a disincentive to developers. Accordingly, pursuant to P.U. Code § 583, SDG&E seeks confidential treatment of this data, which falls within the scope of P.U. Code § 454.5(g), Evidence Code § 1060 and General Order 66-C.

11. Developers' Protected Information: The Protected Information also constitutes confidential trade secret information of the developer listed therein. SDG&E is required pursuant to the terms of the PPTA to protect non-public information. Some of the Protected Information in the PPTA relates directly to the viability of the project. Disclosure of this extremely sensitive information could harm the developer's ability to

 $[\]frac{6}{}$ See also Govt. Code § 6254.7(d).

¹/ See, D.06-06-066, mimeo, pp. 26-28.

negotiate necessary contracts and/or could invite interference with project development by competitors.

12. In accordance with its obligations under its PPTA and pursuant to the relevant statutory provisions described herein, SDG&E hereby requests that the Protected Information be protected from public disclosure.

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

Executed this 21st day of June, 2013 at San Diego, California.

Juancho Eekhout Director of Strategic Planning and New Products and Services San Diego Gas & Electric Company

APPENDIX B

Pricing Analyses (Redacted in its Entirety)

APPENDIX C

1

2

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4 5

Analysis of Availability of Local Renewable Projects (Redacted in its Entirety)

APPENDIX D

Independent Evaluator Report (Redacted Version)

Report of the Independent Evaluator Sixth Amendment to the Power Purchase Tolling Agreement Between San Diego Gas & Electric Company And Pio Pico Energy Center, LLC Public Version

June 2013

Merrimack Energy Group, Inc. 26 Shipway Place Charlestown, Mass. 02129 (781)856-0007

Merrimack



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A. Introduction

On June 7, 2013 San Diego Gas & Electric Company ("SDG&E") and Pio Pico Energy Center, LLC ("Pio Pico") reached an agreement on the Sixth Amendment to the Power Purchase Tolling Agreement ("PPTA" or "Agreement"), which was originally executed by the parties on February 2, 2011. The Sixth Amendment was negotiated in response to the California Public Utilities Commission ("CPUC" or "Commission") Decision Determining San Diego Gas & Electric Company's Local Capacity Requirement and Granting Partial Authority to Enter Into Purchase Power Tolling Agreements (Decision 13-03-029), issued on March 28, 2013.¹

Under the Sixth Amendment to the Agreement, which is the subject of this report, the following contract revisions as well as other changes to the original contract have been agreed to by the Parties:

- 1. The delivery term of the contract is now for 25 years instead of the original 20 years;
- 2. Section 2.7 of the Agreement has been modified by replacing the Initial Delivery Date of May 27, 2014 in the original PPTA with a revised Initial Delivery Date of June 1, 2017;
- 3. Capacity pricing has not changed from the original PPTA and the base period for the Fixed O&M charge remains as of the Expected Initial Delivery Date as in the original contract;
- 4. The level of credit requirements during the Construction Period has been while the credit requirements during the Delivery Period have
- 5. The Amendment seeks final and non-appealable CPUC approval no later than February 28, 2014;
- 6. The Amendment includes a revised Appendix 6.1(a) Milestone Schedule;
- 7. The Amendment adds a Seller Event of Default
- 8. The Buyer and Seller have also agreed to negotiate a separate arrangement for RA capacity during 2016 and a portion of 2017;

Contract negotiations on the Sixth Amendment to the PPTA between Pio Pico Energy Center and SDG&E were initiated in late March 2013 shortly after CPUC Decision 13-03-029 ("Decision") was issued. The Decision ordered that SDG&E is authorized to meet a local capacity requirement need of up to 298 MW beginning in 2018 by either issuing a new Request for Offers ("RFO") or, in the alternative by bringing an application for approval of purchase power tolling agreements with either Pio Pico Energy Center and/or Quail Brush Power amended to coordinate with the anticipated retirement in 2018 of

¹ The Decision was in response to Application 11-05-023 of San Diego Gas & Electric Company (U902E) for Authority to Enter into Purchase Power Tolling Agreements with Escondido Energy Center (45 MW), Pio Pico Energy Center (305 MW) and Quail Brush Power (100 MW), filed on May 19, 2011. These projects were selected via SDG&E's Request for Offers ("RFO") for Demand Response (DR) and Supply Resources, issued on June 9, 2009 and were classified as Product 2 projects.

once-through cooling ("OTC") generation units (Conclusions of Law No. 8, pages 25-26). SDG&E shall adjust the commencement date, as appropriate, to coordinate with the anticipated retirement of once-through cooling generation units and other changing conditions in its service territory.

SDG&E considered the option of issuing a new RFO to fill the 2018 need but concluded that it was not feasible to complete a new solicitation process in time to meet a 2018 delivery date. SDG&E also decided to retain an Independent Evaluator to monitor the contract negotiation process with Pio Pico for a contract amendment during the week of April 15, 2013 and Merrimack Energy was asked to serve as IE shortly thereafter.

B. Role of the Independent Evaluator

Regulatory Requirements For the Independent Evaluator

The IE review process resulted from a series of CPUC rulings and decisions affecting California's Investor-Owned Utilities ("IOUs"). Requirements for participation by an Independent Evaluator in utility solicitations are outlined in decisions D.04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28) and D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8) of the California Public Utilities Commission (Commission or CPUC).

In the CPUC's December 16, 2004 decision on long-term resource procurement (Decision 04-12-048), the CPUC required the use of an IE by investor-owned utilities (IOUs) in resource solicitations where there are affiliate, IOU-built or turnkey bidders. The CPUC generally endorsed the guidelines issued by the Federal Energy Regulatory Commission (FERC) for independent evaluation where an affiliate of the purchaser is a bidder in a competitive solicitation, but stated that the role of the IE would not be to make binding decisions on behalf of the utilities or administer the entire process.²

In Decision 06-05-039 (May 25, 2006), the Commission required each IOU to employ an Independent Evaluator regarding all RFOs issued pursuant to the RPS, regardless of whether there are any utility-owned or affiliate-owned projects under consideration. In addition, the Commission directed the IE for each RFO to provide separate reports (a preliminary report with the shortlist and final reports with IOU advice letters to approve contracts) on the entire bid, solicitation, evaluation and selection process, with the reports submitted to the utility, PRG and Commission and made available to the public (subject to confidential treatment of protected information).

Decision 07-12-052, Conclusion of Law, Item 24, states "IEs are valuable to the procurement process and we direct the IOUs to utilize IEs according to the parameters established in this decision and in D.04-12-048." On page 140, the Decision also states:

² Decision 04-12-048 at 129-37. The FERC guidelines are set forth in Ameren Energy Generating Company, 108 FERC ¶ 61,081 (June 29, 2004).

"Further, given that IOUs may not know with certainty whether or not it or its affiliate will bid on a particular solicitation, the Commission requires that an IE be utilized for all competitive RFOs that seek products of more than three months in duration."

The requirements for the Report of the Independent Evaluator (IE) regarding a contract amendment are described in Public Utilities Commission of the State of California Resolution E-4199 (March 12, 2009). While the Resolution requires that if a developer requests an amendment to an approved contract that affects the contract price, the IOU should re-evaluate the competitiveness of the amended project as compared to the projects that the IOU is negotiating with and to its most recent shortlist.³ In addition, Resolution E-4199 describes the requirements of the report of the IE regarding a contract amendment.

While the provisions of Resolution E-4199 may provide some guidance, this case is different in that Resolution E-4199 is limited to certain aspects of RPS contracts. The original contract executed by SDG&E and Pio Pico was not approved by the CPUC and SDG&E is submitting this Amendment as one of the two options identified in Commission Decision D.13-03-029.

Description of Key IE Roles

Merrimack Energy was selected by SDG&E to serve as IE in mid-April, 2013. Merrimack Energy participated in several calls with the SDG&E project team lead to discuss the background to the project, including the Commission's Decision, original Power Purchase Tolling Agreement, and amendments, notably the Sixth Amendment, and the utility's basis for pursuing the contract amendment. The IE also discussed options with SDG&E for the Sixth Amendment as well as requesting a call with Pio Pico to assess the status of the Pio Pico project and opportunities for meeting a 2018 contract initiation date.⁴ The IE has also relied upon experiences with other recent solicitations for new conventional generation resources to support opinions.

In addition, the IE participated in the May 17, 2013 meeting of SDG&E's Cost Allocation Mechanism (CAM) and Procurement Review Group (PRG). At the meeting, SDG&E discussed the two options included in the CPUC Decision (i.e. issue a new RFO

³ Resolution E-4199 also requires that the IOU must provide a sufficient showing in the Advice Letter that the amended contract is competitive based on current market data. Additionally, contracts that are re-filed with the Commission for approval of an amendment that affects an approved contract's price have to explain why the contract change is needed, and provide all relevant data to justify the change.

⁴ Merrimack Energy submitted several questions to Pio Pico prior to the conference call. The questions submitted by Merrimack Energy focused on the following issues: (1) Pio Pico's willingness to offer a 2018 Expected Initial Delivery Date for the project, the contract pricing associated with a 2018 initial delivery date, and the associated implications for the project; (2) Pio Pico's perspective on recent trends in capital costs for power generation projects including turbines, balance of plant costs, EPC costs and other costs affecting the economics of the project. One of Merrimack Energy's objectives was to assess Pio Pico's view of power market costs relative to the experiences of the IE to assess the reasonableness of the options available.

or amend the Pio Pico and/or Quail Brush PPTAs). SDG&E also discussed the two options which SDG&E and Pio Pico had been negotiating. Option 1 included a new PPTA with an Initial Delivery Date of 5/1/2017. The contract capacity rate would remain

based on this delivery date. Option 2 included a new PPTA Initial Delivery Date of 1/1/2018 with an increase in the capacity price **Contract Contract**. Under both cases, the Pio Pico project would have an on-line date of September 1, 2015 and the project would operate as a merchant plant until the PPTA goes into effect. SDG&E also indicated that SDG&E and Pio Pico were negotiating a Resource Adequacy Contract for RA delivery during the 2016 – 2017 timeframe.

During the meeting, a representative of the CAM group questioned whether Pio Pico would be willing to offer an Initial Delivery Date of 6/1/2017, because May is typically a high water month. SDG&E indicated it would inquire whether Pio Pico would be willing to offer an Initial Delivery Date of 6/1/2017 during its negotiation session.

Subsequent to the PRG/CAM meeting, the parties held several negotiating sessions and exchanged mark-ups to the Sixth Amendment to the contract. The IE monitored several negotiation sessions between the parties attempting to resolve outstanding issues through to the final agreement and execution of the Sixth Amendment on June 7, 2013.

The IE's role in this process is limited to rendering an opinion whether the Amendment is reasonable for SDG&E's ratepayers and whether a contract amendment with Pio Pico is preferable to issuing a new RFO to meet a 2018 need. The IE is not rendering an assessment as to the need for the power or whether or not the selection of Pio Pico was a reasonable decision from the 2009 RFO.⁵ This report, therefore, addresses the following issues:

- 1. Provides a brief review of the Commission's Decision (D.13-03-029) issued on March 28, 2013 as background to the options available to SDG&E;
- 2. Provides a description of the provisions of the original Power Purchase Tolling Agreement and subsequent contract amendments leading up to the Sixth Amendment to the PPTA and the negotiation process associated with the Amendment;
- 3. An assessment of whether issuance of a new Request for Offer process would be a reasonable and effective approach for procuring the required local generation capacity for a 2018 need date;

⁵ In its Independent Evaluator Report on the RFO process, Van Horn Consulting, the IE, concluded that SDG&E conducted a fair and competitive RFO process and the evaluations demonstrated that the three contracts have lower bid-ranking costs than the other offers received for Product 2. The IE also recommended that the Commission approve all three contracts (see Public Version of Independent Evaluator's Report – Product 2: Local Generation and SDG&E's June 9, 2009 RFO for Demand Response and Supply Resources, May 18, 2011.

4. A reasonableness assessment of the revised provisions in the Sixth Amendment and whether or not the provisions of the Amendment provide an overall benefit to SDG&E's ratepayers.

C. Commission Decision 13-03-029

On March 21, 2013 the California Public Utilities Commission rendered its Decision (D.13-03-029) with regard to the Application of San Diego Gas & Electric Company (U902E) for Authority to Enter into Purchase Power Tolling Agreements with Escondido Energy Center, Pio Pico Energy Center and Quail Brush Power. In its Decision, the Commission directed SDG&E to procure up to 298 megawatts of local generation capacity beginning in 2018. This decision granted SDG&E authority to enter into a purchase power tolling agreement with Escondido Energy Center for 45 MW. The decision denied SDG&E the authority to enter into purchase power tolling agreements with Pio Pico Energy Center (305 MW) and Quail Brush Power (100 MW) on the basis that the projects are not needed under any scenario until 2018. The Commission directed SDG&E to conduct an RFO for new generation to meet this potential local capacity need (or, in the alternative), to bring an application for approval of either of the existing PPTA's amended to match the timing of any such need.

The issues addressed in the proceeding are summarized of page 4 of the Decision. They include:

- 1. How much new generation, if any, does SDG&E require to meet its Local Capacity Requirement ("LCR") for the planning horizon 2011 to 2020?
- 2. Is there a need for the Purchase Power Tolling Agreements (PPTA) to meet the LCR or for other reasons?
- 3. Are the PPTAs cost-effective and reasonable?
- 4. What is the appropriate rate treatment for the costs of the PPTAs?

In denying the approval of the Pio Pico Energy Center and the Quail Brush Power projects, the Commission concluded that there is no need for the new LCR capacity represented by the PPTAs until early 2018, and then only under the assumption that the Encina OTC units retire. The Commission also concluded that it would not be reasonable to pay for that excess capacity for four of the 20-year terms of the PPTAs.

In its Decision, the Commission directed SDG&E to procure up to 298 MW of local capacity to come on-line beginning in 2018. According to the Decision, "this authorization is the equivalent of the high end of the range presented by the four scenarios (343 MW), less the 45 MW associated with Escondido Energy Center. SDG&E may seek to meet this need using either the Quail Brush Power project or the Pio Pico Energy Center project, if the proposed PPTAs are amended to correspond to the

identified need and the anticipated retirement in 2018 of once-through cooling generation units. Otherwise, SDG&E should expeditiously issue an RFO for this need recognizing, as bidders must likewise, that when it brings an application for approval of the RFO results, we will take into consideration material intervening events and circumstances".

D. Options Assessment

As noted, the Commission's Decision identified two options for SDG&E to consider:

- 1. Expeditiously issue an RFO for the need identified;
- 2. Amend the PPTA with Pio Pico Energy Center or Quail Brush Power projects to correspond to the identified need in the 2018 timeframe.

As noted, SDG&E decided to initially pursue an amended PPTA with Pio Pico Energy Center. SDG&E stated in its CAM/PRG presentation that "after considering alternatives and given time limitations, SDG&E has concluded the most cost-effective and viable way to fill approved need for local capacity is by amending the Pio Pico PPTA consistent with the Decision." SDG&E concluded that there would not be sufficient time to complete a solicitation process⁶ and the cost for securing such power under an RFO process would likely be higher.

In the IE's view there are several criteria that would need to be considered with regard to SDG&E's decision to either issue another RFO or pursue an Amendment to the PPTA instead. For example, the conditions addressing issuance of a new RFO include the following:

- □ Can the RFO process be completed in time for meeting a proposed 2018 need date? This would include developing the RFO, issuing the RFO to the market, receiving the offers, evaluating the offers received, selecting the best resource options, negotiating and executing the contracts, applying for and securing Commission approval while still allowing adequate time for the project to be developed, financed and constructed?
- □ What have been the recent trends with regard to power project capital costs? Have project capital costs (including generating equipment, balance of plant, and Engineering, Procurement and Construction ("EPC") costs) decreased since the last RFO was issued in 2009? If there is evidence that capital costs or other fixed cost components for similar new generation resources have declined, this may be

⁶ In its May 17, 2013 presentation to the Meeting of SDG&E's CAM and PRG, SDG&E cited D.13-02-015 indicating that there is not sufficient time to complete a solicitation with the presence of robust competition since it would likely take 7-9 years to complete a solicitation process for conventional gas-fired generation resources. SDG&E has stated that it would likely cost more to issue a new RFO since CT and EPC pricing have not gone down. Also, SDG&E concluded that Pio Pico was likely the only feasible project based on its size relative to requirements and level of development,

one factor supporting issuance of another RFO because it would be expected that the decline in capital costs of a project would be reflected in lower bid pricing in a competitive solicitation process. On the other hand, if capital costs have increased it is possible or likely that bid prices would be higher if a new RFO is issued;

□ Is there evidence of a robust market for new generation resource options or existing resources to compete for the capacity solicited in a new RFO that will warrant a competitive process to meet the proposed in-service date for Local Capacity Requirements? Alternatively, does the Pio Pico project have a major competitive advantage given the status of project development? In such a situation, it may be possible or even likely that Pio Pico could be the only real alternative project to meet the 2018 in-service date. The lack of competitive options could allow Pio Pico to increase its bid price knowing there are no other reasonably competitive alternatives. The lack of a robust competitive market or the potential that Pio Pico could increase its price and still be the successful bidder would result in a negative outcome for ratepayers.

Each of the three criteria is discussed in more detail below based on current market information associated with SDG&E's Local Capacity Requirements.

Time for Completing the Solicitation Process

With regard to the first criteria, recent evidence illustrates that a 5-9 year time frame to complete a procurement process from issuance of the RFO to commercial operation of the resource selected is a reasonable estimate for California. For example, SDG&E issued its 2009 RFO in June 2009. Pio Pico's projected Expected Initial Delivery Date in the PPTA was listed as May 27, 2014, or approximately five years from issuance of the RFO to project in-service.

On the other hand, in CPUC Decision 13-02-015 (Decision Authorizing Long-Term Procurement for Local Capacity Requirements), issued on February 13, 2013 the CPUC found that an estimated seven to nine year lead time for conventional gas-fired generation was expected. The Decision stated:

"It is likely that some LCR procurement opportunities would be lost if there is a delay in approving a procurement process for the LA Basin local reliability area and the Big Creek/Ventura local reliability area, due to a seven to nine year lead time for conventional gas-fired resources" (page 122)

Thus, the IE would expect that a lead time of five⁷ to nine years is reasonable, with the lower level estimate likely only assuming that there are no delays in any of the key

⁷ Merrimack Energy recently served as IE for PacifiCorp's All Source RFP for 2016 Resources. The schedule was contained in the RFP document, which was approved by the Utah Public Service Commission. The schedule for the solicitation process was defined to be approximately 5 years from initial development of the RFP and approximately 4.5 years from issuance of the Final RFP. After issuance of the

milestones associated with the process and that the project developer generally absorbs risks by expediting project milestones.⁸ Given the current timeframe and assuming that SDG&E was able to issue an RFO by July 1, 2013, the entire process from evaluation and selection of bids to commercial operation would have to be 4.5 years to achieve a January 1, 2018 commercial operation date. This schedule would appear to be very optimistic and unlikely unless there are potential projects that have already initiated the project development process.

Power Project Cost Trends

For the second criteria, evidence available from market assessments and personal involvement and experience of the IE in the power generation market illustrates that capital costs for gas turbine projects have increased slightly between 2009 and 2012. Exhibit 1 provides recent information from the publicly available IHS CERA Power Capital Cost Index (PCCI). The PCCI tracks and forecasts the costs associated with the construction of a portfolio of 30 different power generation plants in North America. The PCCI tracks the costs of building coal, gas, wind, and nuclear power plants indexed to the year 2000. The index for non-Nuclear generation options is presented in Exhibit 1.

Date	Index Value (2000 = 100)
2000	100
2009 Q1	174
2009 Q3	174
2010 Q1	176
2010 Q3	176
2011 Q1	180
2011 Q3	180
2012 Q1	182
2012 Q3	184

Exhibit 1: Price Index for Non-Nuclear Power Plant Capital Costs 2009-2012

Based on the IHS CERA index, power plant costs have increased by 3.45% between 2009 and 2011. As the indices indicate, capital costs have continued to increase in 2012.

Based on this criterion, there would appear to be no price advantage associated with issuing another RFO. The results actually indicate that capital costs would likely be higher if a new RFO is issued, likely resulting in higher fixed costs (i.e. capacity prices). While debt costs may have remained stable or decreased slightly over this timeframe, we

final RFP, the schedule included four months for receipt of bids; four months for bid evaluation and selection; three months for contract negotiations; 120 days for Commission approval after PacifiCorp files its application for approval of the resource; and approximately three years for development of the project from Commission Approval of the contract to the proposed in-service date.

⁸ As an example, some developers may actually begin the project permitting process even before a contract is executed or approved to ensure it can expedite key development milestones and avoid delays in critical path elements.

would expect that the risk of higher interest rates during the project development cycle prior to financing would be built into the pricing for any project submitted.

The IE did submit several questions to Pio Pico to assess their view of current market generation costs and pricing and whether they could agree to a 2018 in-service date at the same price as included in the current PPTA. Pio Pico indicated it could maintain the price until 2017 based on agreements with contractors but could not maintain the same capital cost and Engineering, Procurement and Construction ("EPC") contract prices through 2017 into 2018. Pio Pico indicated it was still planning on constructing the project by 2015 and would operate the project as a merchant plant for a limited period. However, project risk and cost would increase with delays in the in-service date of the project and the initiation of the start of the PPTA with SDG&E.

These results confirm the recent experience of the IE with regard to recent activities for procurement of gas-fired combustion turbine or combined cycle projects in other regions of the US. This has included a range of gas-fired generation technologies, including a number of Tolling Agreements and Asset Purchase and Sale Agreements involving GE LMS 100 units, the same unit proposed by Pio Pico. The analysis has illustrated that the capital costs for combustion turbine projects such as the type of technology proposed by Pio Pico have increased slightly from 2009 to 2012, consistent with the IHS CERA index and the views of Pio Pico personnel.

Competitive Options

Criterion three applies to the presence of real or robust competition for power projects available to provide LCR to meet a 2018 in-service date. Based on discussions with SDG&E personnel, review of projects identified by the California Energy Commission, and other internet research, with the exception of the Quail Brush Power project,⁹ there does not appear to be any new power projects that are currently sufficiently along in the development process that could meet SDG&E's Local Capacity Requirement for 2018. Based on this research, there appear to be several existing projects in the San Diego area that may be possible competitors, including the potential repowering of the Encina Power Station, the CalPeak Border Energy Peakers (49.5 MW), and the Goal Line LP Power Plant (51.4 MW).

The Encina Power Station is owned and operated by Cabrillo Power I LLC ("Cabrillo").¹⁰ Recent information regarding the status of the Encina Power Station was provided by Cabrillo Power/NRG in response to a December 11, 2012 letter and questions from Thomas Howard, Executive Director of the State Water Resources Control Board regarding the Once-Through Cooling Policy Implementation Plan Update for Encina

⁹ On April 8, 2013, Quail Brush Generation Project filed an application with the California Energy Commission requesting a 12 month suspension of its Application for Certification filed on August 29, 2011.

¹⁰ The Encina Power Station consists of 5 steam boiler units (Units 1-5) with a combined capacity of approximately 939 MW and one approximately 15 MW peaking unit with black start capability.

Power Station. Cabrillo submitted its response to Mr. Howard's questions on January 30, 2013.

Cabrillo indicated it submitted its Once-Through Cooling ("OTC") Implementation Plan to the State Water Resources Control Board on March 30, 2011. In the Implementation Plan, Cabrillo stated that the Track 1 compliance for Units 1, 2 and 3 would be met through the replacement of the associated generation with the Carlsbad Energy Center Project ("CECP"), a California Energy Commission licensed project located on the Encina Power Station site.¹¹ The Carlsbad Energy Center Project is a 550 MW air-cooled combined cycle natural gas fired combined cycle plant.

In its response, Cabrillo stated that it continues to pursue Track 1 compliance for Units 1, 2, and 3. However, construction of the Carlsbad Energy Center Project is contingent upon successful financing, which in turn depends upon obtaining a Power Purchase Agreement ("PPA"). Without the net revenue certainty provided by a PPA, construction of the Carlsbad Energy Center Project would not be economically feasible. Accordingly, if the CECP cannot obtain a PPA and cannot obtain financing, then Cabrillo would expect to retire Units 1, 2 and 3 by December 31, 2017.¹²

In its response to the State Water Resources Control Board, Cabrillo stated that it no longer intends to pursue Track 2 compliance for Units 4 and 5. Instead, Cabrillo anticipates operating Units 4 and 5 in their current configuration until the OTC Policy compliance date of December 31, 2017 and then retiring the units. Cabrillo further stated that it has conducted further analysis of potential Track 2 compliance options. Cabrillo has determined that the implementation of technological and/or operational controls to achieve the requisite reductions at Units 4 and 5, while technologically and logistically feasible, may not be economical without a multi-year PPA that accounts for the capital expenditure and potential reduction in plant efficiency.

One of the issues with regard to the resource options available in conjunction with the CPUC decision is the size of the options available. The Carlsbad Energy Center Project is a 550 MW project. Since SDG&E's needs, as identified by the CPUC, is for approximately 300 MW, should the Carlsbad Energy Center be awarded a contract for 298 MW, it would essentially have 250 MW uncommitted as merchant capacity. The ability of the project to obtain financing assuming there is a PPA underlying only about 55% of the project capacity may present a significant challenge.

The other option would have to be a combination of several units to comprise the 298 MW of capacity required. Even if the Quail Brush project is able to overcome its local opposition and renew its application process for CEC approval, there does not appear to be sufficient capacity available in the San Diego area to supply 298 MW of capacity.

¹¹ Cabrillo filed its Application for Certification with the CEC and the corresponding air permit application in October 2007. On May 31, 2012, the CEC approved a license for the Carlsbad Energy Center.

¹² It is the IE's understanding based on discussions with SDG&E that the Carlsbad Energy Center Project submitted an offer into SDG&E's 2009 RFO but was not selected for the short list.

Based on assessment of the criteria identified by the IE and assessment of the local power market, it would appear that the option selected by SDG&E to aggressively negotiate an amendment to the PPTA with Pio Pico based on the Commission's decision is a reasonable option. While a new RFO would offer the best means to "test the market" and available competition, it is questionable whether a new RFO solicitation process could be completed on time. Furthermore, based on recent power generation market cost information for the type of resources required, it is probable that contract prices for capacity costs would be higher than under the Pio Pico contract. Finally, there would also appear to be uncertainty with regard to the availability of competitive options to meet a 2018 in-service date. All three conditions could lead to higher power costs resulting from the implementation of a new RFO to fill the 2018 need.

E. Description of the Contract and Amendments

The contract between Pio Pico Energy Center and SDG&E was originally executed on February 2, 2011. The parties subsequently executed five Amendments to the PPTA that are described below. A brief summary of the original contract and contract amendments are provided in this section of the Report.

Initial Power Purchase Agreement

Several of the primary provisions of the initial PPTA are listed in Exhibit 2 below.

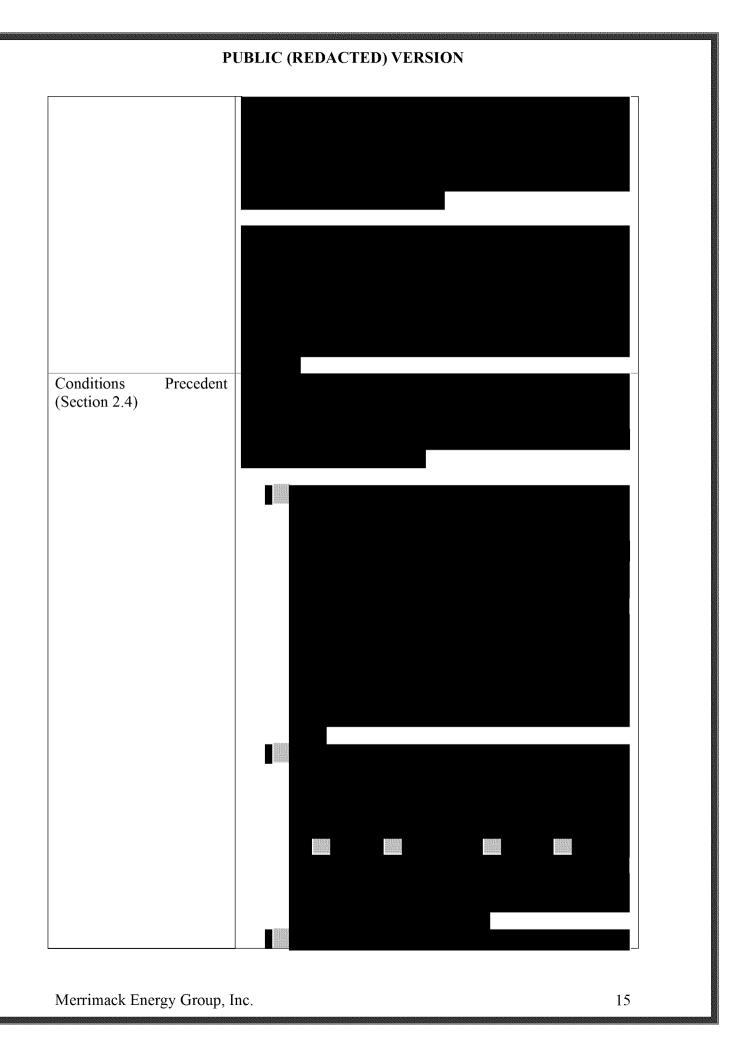
Provision and Reference						
Execution Date	February 2, 2011					
Contract Capacity	304.8 MW					
Product (Section 1.1)	Capacity, Energy, Ancillary Services, and Resource					
	Adequacy Benefits					
Project (Section 1.2)	The project consists of three GE LMS100 natural gas-fired, simple cycle gas turbine generating units.					
Project Location	Adjacent to the Otay Mesa power plant in the County of San					
	Diego.					
Term/Delivery Period	20 years – The Delivery Period shall be the period during					
(Section 2.8)	which the Product is available to Buyer, and will commence					
	at 12:01 a.m. PPT on the Initial Delivery Date and shall					
	continue until midnight on the day of the year in which the					
	20 th anniversary of the Initial Delivery Date occurs.					
Expected Initial Delivery	May 27, 2014					
Date (Section 2.7)						
Pricing Provisions						
Capacity Payment						
(Appendix 9.2)						

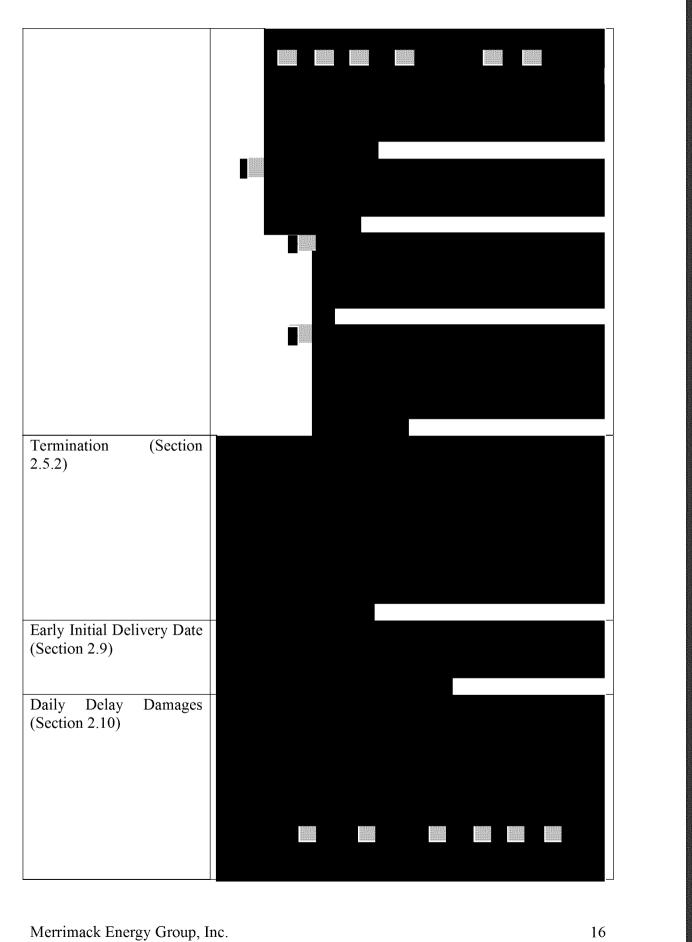
Exhibit 2: Summary of Key Provisions of PPTA Between SDG&E and Pio Pico

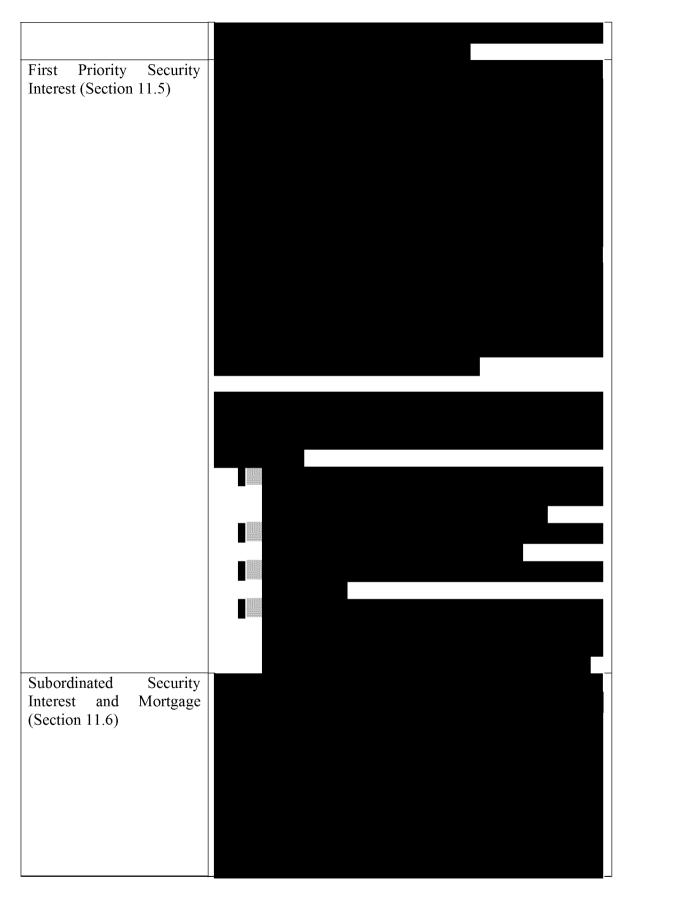
Variable O&M ("VOM") Charge (Appendix 9.3)	
Start-upCharges(Appendix 9.4)	
Event of Default – Equivalent Availability Factor (Section 3.2)	
Capacity Payment Penalty Section 9.2)	
Credit Requirements	
Pre-Construction Period (Section 11.2.1)	
Construction Period (Section 11.2.2)	
Delivery Period (Section 11.2.3)	
Guarantor (Section 11.4)	
Other	
Fuel Manager	
Conditions Precedent ("CP")	
Seller's Obligations (Section 2.3)	

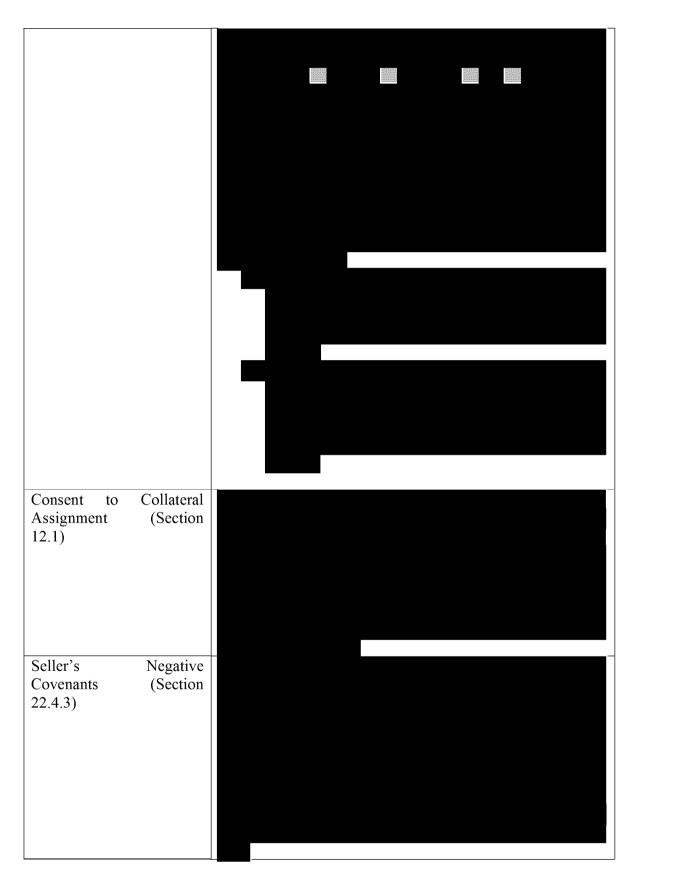
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First Amendment to PPTA

The First Amendment to the PPTA was executed on March 20, 2012.

Second Amendment to PPTA

The Second Amendment to the PPTA was executed on April 20, 2012.



Third Amendment to PPTA

The Third Amendment to the PPTA was executed on May 30, 2012.

Fourth Amendment to PPTA

The Fourth Amendment to the PPTA was executed on July 30, 2012. The focus was again on revising the date for meeting Conditions Precedent.

<u>Fift</u>	h Ame	ndment to P	<u>PTA</u>								
The	Fifth	Amendment	to the	PPTA	was	executed	on	January	29,	2013.	
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Sixth Amendment to the PPTA

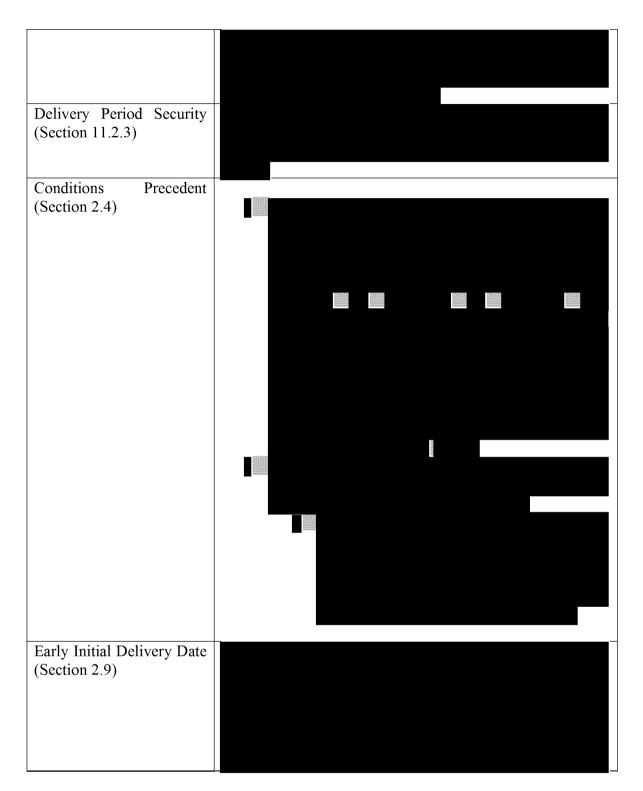
The Sixth Amendment to the PPTA was executed on June 7, 2013. The Sixth Amendment addresses the CPUC directive for SDG&E to either issue an RFO to fill the 298 MW of capacity required or negotiate an amendment to the agreement to reflect a 2018 need date. The revisions to the PPTA as reflected in the Sixth Amendment are summarized below in Exhibit 3.

Exhibit 3: Sixth Amendment to PPTA

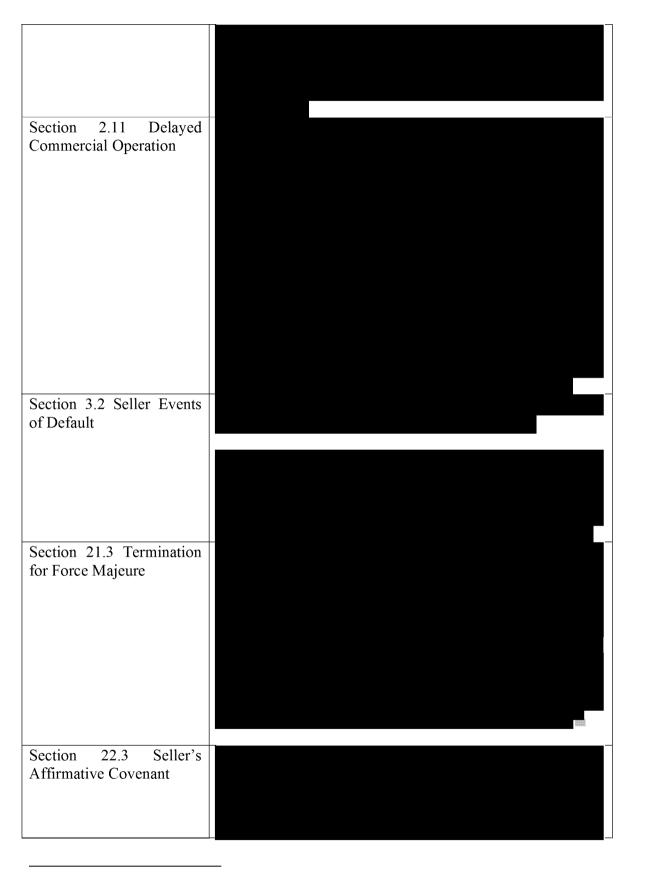
Provision and Reference	
Execution Date	June 7, 2013
Term/Delivery Period	25 years
(Section 2.8)	
Expected Initial Delivery	June 1, 2017 – This section replaces the date May 27, 2014
Date (Section 2.7)	with June 1, 2017.
Effectiveness of	
Agreement on and after	
CP Satisfaction Date	
(Section 2.6)	
Pricing Provisions	
Capacity Rate	
Variable O&M Charge	
Chart and Classes at	
Start-up Charges	
Cradit Paguiramanta	
Credit RequirementsCreditRequirements	
During Pre-Construction	
Period (Section 11.2.1)	
Credit During	
Construction Period	
(Section 11.2.2)	

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¹³ The definition of CPUC Approval is "CPUC Approval means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which approves this Agreement in its entirety including approval of the First Amendment, the Second Amendment, the Third Amendment, the Fourth Amendment, the Fifth Amendment, and this Sixth Amendment including payments to be made by the Buyer and such other matters as may be requested by Buyer in its application to the CPUC for approval, subject to CPUC review of the Buyer's administration of the Agreement.



¹⁴ Milestone 7 requires that turbines are delivered to the site by March 31, 2015.

Section 22.4.3 Selle Negative Covenants	**S		

F. Description of the Contract Amendment Negotiation Process

Upon selection as IE, SDG&E provided Merrimack Energy with copies of all documents exchanged between SDG&E and Pio Pico underlying the negotiations of the Sixth Amendment. SDG&E also provided the IE with copies of the original PPTA and copies of the previous five contract amendments.

The IE also had several extensive discussions with the SDG&E project lead to review the background for the Company's decisions, the status of negotiations with Pio Pico, and to identify outstanding issues. At the time the IE was retained, the outstanding issues associated with negotiation of the Sixth Amendment included:

- □ Revisions to the Expected Initial Delivery Date;
- Revisions to pricing to account for the implications of the revised Initial Delivery Date;



At the time of initial involvement by the IE, the parties were focusing on a 2017 Initial Delivery Date at the same capacity price or a 2018 Initial Delivery Date with a higher capacity price, based on the cost implications to the Seller associated with a delayed project in-service date in conjunction with its agreements with suppliers.¹⁵

¹⁵ Pio Pico indicated it was willing to maintain the contract capacity price **1** for a May 2017 Initial Delivery Date or a capacity price **1** for a January 1, 2018 Initial Delivery Date.

On May 17, 2013, a Cost Allocation Mechanism (CAM) Procurement Review Group (PRG) meeting was held by SDG&E to provide an update on several projects including the Pio Pico PPTA. SDG&E discussed the options available based on CPUC Decision 13-03-029, which allowed SDG&E the option to either issue a new RFO or amend the contract to reflect a need date of 2018. SDG&E outlined the basis for its preference to pursue an amended PPTA with Pio Pico and outlined the pricing provisions for two contract amendment options: one option with the same contract pricing as the existing PPTA but with a new Initial Delivery Date of May 1, 2017 and the other option with an Initial Delivery Date of January 1, 2018 but with an increased capacity price. SDG&E also discussed the option of negotiating a Resource Adequacy (RA) Contract with Pio Pico for the 2016-2017 timeframe during which Pio Pico would be operating as a merchant plant.

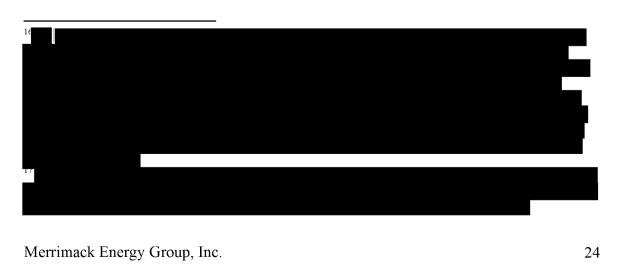
SDG&E also provided a summary of key provisions of the original agreement with Pio Pico as well as key provisions for the proposed amendment based on negotiations to date.

SDG&E also included a slide which provided a comparison of the Bid Ranking Prices ("BRP") for the cases including the Original Pio Pico PPTA, Option A with a May 1, 2017 Initial Delivery Date with no change in the Capacity rate **Sector**, and Option B with a January 1, 2018 Initial Delivery Date and a Capacity rate of . Option A also included a Resource Adequacy ("RA") contract for -year from January 2016 through April 2017, while Option B also includes an RA contract **Sector** from January 2016 through December 2017. The BRP, therefore, included the effect of an RA contract with Pio Pico compared to the cost of RA alternatives as a credit to the evaluation.

A summary of the results are provided in Exhibit 4 for the three cases.

Option	Bid Ranking Price (\$/kW-year)				
Original PPTA					
Option A					
Option B					

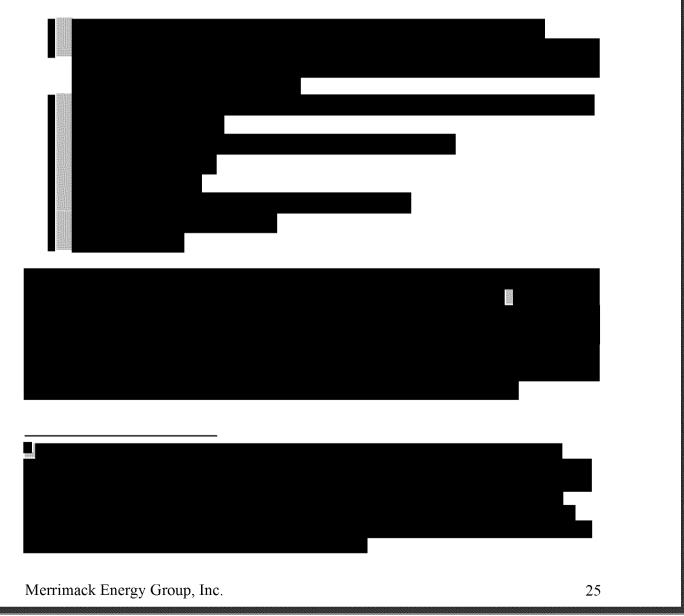
Exhibit 4: Summary of Bid Ranking Prices for Three Contract Options



During the CAM/PRG meeting a member of CAM inquired about the possibility for SDG&E to seek a June 1, 2017 Initial Delivery Date under the amended contract instead of a May 1, 2017 Initial Delivery Date since May is typically a high water month. SDG&E indicated it would bring up this issue in negotiations with Pio Pico.

A negotiation session regarding the last turn of the Sixth Amendment by the Parties dated April 23, 2013 was held between the parties on May 21, 2013. The IE monitored the session. While it was anticipated that most of the remaining issues with regard to the outstanding provisions could possibly be resolved, one issue that remained outstanding

Extensive discussions and negotiations were held in late May and early June, 2013 between the parties as well as exchanges of revisions to the Sixth Amendment and revised write-ups on key issues. The issues outstanding as of early June, 2013 included:



The parties continued extensive negotiations until final resolution was reached on June 7, 2013 with the execution of the Sixth Amendment to the Power Purchase Tolling Agreement.

G. Analysis of the Sixth Contract Amendment

Based on SDG&E's conclusion that issuing an RFO to meet the 298 MW of LCR requirements for 2018 is not a feasible solution and the proposed approach of SDG&E was to negotiate an amended contract with Pio Pico instead, the assessment of the IE will focus on the economic analysis of the resulting Sixth amendment to the PPTA and assessment of the other options considered by SDG&E. The economic analysis of the Sixth amendment to the PPTA will address the following issues:

- 1. Does the amended contract provide reasonable benefits to SDG&E's customers relative to alternatives; and
- 2. Does the amended contract provide a reasonable means of shielding undue risk to customers.

Customer Economic Impacts/Benefits

In terms of customer impacts and benefits, it is important to note that the Pio Pico contract was one of three contracts executed as a result of SDG&E's 2009 RFO, along with the Escondido Energy Center project (45 MW) and the Quail Brush Power project (100 MW). These three PPTAs resulted from an evaluation and selection of offers that were received for new long-term local capacity resources bid into SDG&E's Request for Offers ("RFO") for Demand Response (DR) and Supply Resources issued on June 9, 2009. The three projects were bid into the 2009 RFO and were short listed and selected through a competitive solicitation process with oversight from an IE. The IE confirmed that SDG&E's evaluation demonstrated that the three projects for which SDG&E executed contracts had lower bid-ranking costs than the other offers received. It can therefore be concluded that the pricing of the three projects, including the Pio Pico project, provided competitive benefits relative to other offers submitted and projects available in the market at that time.¹⁹ As a result of the implementation of a competitive solicitation process, the best projects from a customer benefit standpoint were selected.

The next issue is whether the amended contract with Pio Pico meets the CPUC requirements and provides reasonable value to customers. As noted, although the CPUC Decision authorized SDG&E to procure up to 298 MW of total generation capacity to come on-line beginning in 2018, the amended agreement includes an Initial Delivery

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¹⁹ As the IE understands, SDG&E has not executed any other PPTAs for similar resources (i.e. long-term local capacity) subsequent to the execution of the three PPTAs. Therefore, the only reasonable resources for comparison with the Pio Pico project are the Quail Brush Power project and the Escondido Energy Center project, all of which were competitive in the 2009 RFO and were selected for contract negotiation and execution through the RFO.

Date of June 1, 2017.²⁰ The capacity rate would remain **and the second second**

The IE has also undertaken an analysis to assess the economics of the options considered. The IE's analysis compares the present value of the cost stream for Capacity and Fixed O&M costs associated with three cases²¹:

- 1. The original contract based on a 20 year contract term beginning on May 27, 2014²²;
- 2. The Sixth Amendment to the PPTA assuming a June 1, 2017 Initial Delivery Date and a 25 year contract term;
- 3. The proposal of Pio Pico for Sixth Amendment pricing assuming a higher Capacity rate to accommodate a January 1, 2018 Initial Delivery Date and a 25 year contract term.

Exhibit 5 provides the results of the analysis. As is illustrated by the analysis results, the present value of the cost stream for the Sixth Amendment (i.e. June 1, 2017 Initial Delivery Date) to the PPTA executed by the parties has the lowest present value cost of the three options. On a present value basis the cost stream for capacity and Fixed O&M under the original contract has the highest cost due primarily to the early in-service date of the project. The option to delay the in-service date has value for customers, as reflected in the Sixth Amendment case, particularly given that the capacity rate has not changed and the indexing formula for fixed O&M cost is the same in all cases. However, the higher capacity price requested by the Seller for a later in-service date (i.e. January 1, 2018) offsets to some degree the discounting benefits associated with a later in service date.

For purposes of ensuring consistency with regard to contract years, the analysis assumes the contract year actually begins on June 1, 2014 instead of May 27, 2014.

²⁰ The Pio Pico project would actually come on-line on September 1, 2015 and operate as a merchant plant for nearly two years, until June 1, 2017. The September 1, 2015 in-service date was actually requested by SDG&E to allow SDG&E to meet the CPUC and CAISO requirements for securing RA capacity for the following year.

Case Option	Present Value of Fixed Cost Stream Over the Contract Terms
Case 1: Original Contract	
Case 2: Sixth Contract Amendment	
Case 3: January 1, 2018 In Service Date	

Exhibit 5: Present Value of Fixed Cost Streams for Contract Option Cases

SDG&E's Revised Analysis

Based on the IE's question about the calculation of beginning and end effects in its initial analysis (see Footnote 16), SDG&E conducted an assessment of the beginning and end effects associated with the amended PPTA with Pio Pico. Since the Initial Delivery Date would be deferred until June 1, 2017, SDG&E's customers would not incur the higher capacity and fixed O&M charges associated with the PPTA

The analysis conducted by SDG&E shows a revised Bid Ranking Price for the Original PPTA filed of _______ compared to _______ for the amended PPTA. The lower Bid Ranking Price for the amended PPTA is attributed to the impacts of the beginning and end effect "credits" associated with the delayed Initial Delivery date in the amended PPTA.²³These results are consistent with the direction of the results of the analysis prepared by the IE.

Amended PPTA Assessment

As noted, the negotiation process between the Parties regarding the Sixth Amendment to the PPTA involved extensive discussions and negotiations. Also, negotiations leading up to execution of the Sixth Amendment to the Power Purchase Tolling Agreement between the Parties reflect several tradeoffs to address risk sharing between the Parties to reflect revisions to the contract. This section of the report will address the risk sharing options and trade-offs executed in the Sixth Amendment.

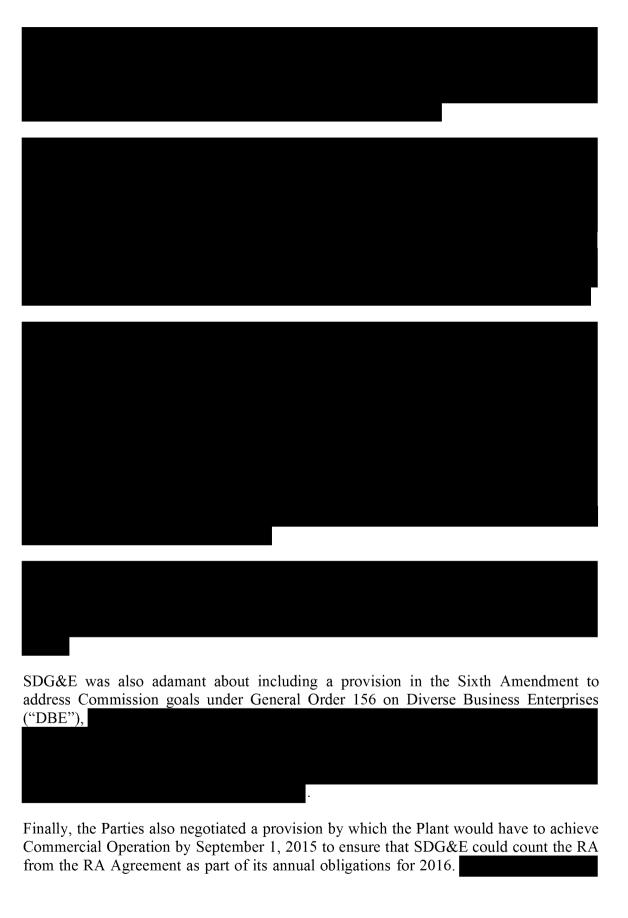
For example, with regard to pricing, Pio Pico agreed to maintain the Capacity for the twenty-five year term of the contract while also agreeing to extend the Initial Delivery Date in the PPTA from May 27, 2014 in the original PPTA to June 1, 2017 under the Sixth amendment. Pio Pico also agreed to achieve commercial operations on or before September 1, 2015, and would operate on a merchant basis for

²³ The Beginning and End Effects credit increases from the Original PPTA (as corrected to reflect an error in the Fixed O&M rate) compared to a credit for the Amended PPTA.

nearly two years.²⁴ On the other hand, SDG&E and Pio Pico agreed to extend the contract term from 20 to 25 years. The parties have also been discussing a separate RA Agreement for 2016 and 2017, which would provide Pio Pico some revenues during the period in which the project would operate as a merchant plant and would be totally exposed to the market.

With regard to the fixed O&M payment, the original of	contract
The Amendment	
The capacity pricing	
un containty will therefore not be an igging in this concernant	Such cost
uncertainty will therefore not be an issue in this agreement. While Fixed O&M costs will be	
while Fixed Oaki costs will be	
Another area where risk allocation was carefully considere	ed by the parties was
24	
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In conclusion, the Parties made a number of concessions during the negotiation process for the Sixth Amendment that resulted in successful execution of the Sixth Amendment. The IE is of the opinion that the provisions of the Sixth Amendment represent a reasonable balance of risk for both Parties. Although SDG&E made concessions in the negotiation process

SDG&E was also successful in securing concessions from the Seller that served to balance risk

All in all, the Sixth Amendment should serve to shield undue to risk to SDG&E's customers.

H. Project Viability Assessment

From a project viability perspective the Pio Pico Energy Center project has several positive characteristics relative to its status in the project development process that substantially increases the likelihood that the project can be developed, constructed and completed to ensure it is able to meet the estimated need date of 2018. These are identified and described below.

- □ The California Energy Commission ("CEC") approved the Project's Application for Certification on September 12, 2012, approximately 19 months after the Application for Certification was filed;
- □ The project has executed a firm EPC Agreement with for construction of the project;
- □ The project has an equipment supply agreement with GE for the LMS 100 turbines;
- □ The project has a signed Interconnection Agreement with all required studies completed;

1 6			

As a result, the project is a fairly mature project in the development process with several key critical path items in place or fairly far along in the project schedule. Given the status of development of the Pio Pico project, it is expected that if SDG&E decided to issue a new RFO for 2018 resources, the project would have a significant competitive advantage from a project viability standpoint.

I. Conclusions

The IE has reached the following conclusions regarding the Sixth Amendment to the Pio Pico Agreement and the options available to SDG&E:

- 1. The option selected by SDG&E to negotiate an Amendment to the original Pio Pico contract with the objective of starting the contract in the 2018 timeframe rather than soliciting offers through a new RFO is a reasonable decision and should be in the best interests of customers;
- 2. While implementation of a robust competitive solicitation process is the best means to assess the availability of generation options and competitive market prices, since power generation project capital costs have been increasing and there appears to be a limited number of viable competitors available in the market at this time, contract pricing for generation resource options could actually be higher. Furthermore, it is uncertain whether a competitive solicitation process could be completed in time to secure generation resources to meet a 2018 need date;
- 3. SDG&E acted in an appropriate, fair and unbiased fashion in its negotiations with Pio Pico. The parties negotiated aggressively but fairly. The Sixth Amendment to the PPTA reflects the cooperative nature of the negotiations and the efforts of both parties to resolve differences in a fair and equitable manner resulting in a Contract Amendment that effectively balances risk and adequately protects the interests of customers;
- 4. Although the option selected by SDG&E to delay the Initial Delivery Date under the Pio Pico contract for approximately three years to June 1, 2017 does not strictly conform to the CPUC's requirements listed in its Decision, the earlier Initial Delviery Date provides a lower cost option than a Contract Amendment with Pio Pico for an Initial Delivery Date of January 1, 2018. The analysis conducted by both SDG&E and the IE illustrate that although the Initial Delivery Date agreed to in the Sixth Amendment does not strictly conform to the Commission's Decision, the earlier Initial Delivery Date of June 1, 2017 results in an economic benefit to customers since Pio Pico agreed to maintain the current capacity rate for a January 1, 2018 Initial Delivery Date.

J.Recommendation

For the reasons stated in this report, the IE concludes that the decision of SDG&E to pursue an amended contract with Pio Pico Energy Center was a reasonable decision. Furthermore, SDG&E acted in a fair and appropriate manner in the negotiation process and aggressively pursued a contract amendment process designed to appropriately balance risk between the parties and provide a reasonable cost outcome for customers. As

a result, the IE believes that the Sixth Contract Amendment with Pio Pico Energy Center is reasonable, is in the best interests of customers, and warrants Commission approval.

APPENDIX E

Amended PPTA (Redacted in its Entirety)