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Application No: A.14-07-009
Exhibit No.: _____
Date: July 21, 2014
Witness: Daniel S. Baerman

Application of San Diego Gas & Electric Company
(U 902 E) for Authority to Partially Fill the Local Capacity
Requirement Need Identified in D.14-03-004 and Enter
into a Purchase Power Tolling Agreement with Carlsbad
Energy Center, LLC.

Application 14-07-009
(Filed July 21, 2014)

PREPARED DIRECT TESTIMONY OF

DANIEL S. BAERMAN

ON BEHALF OF

SAN DIEGO GAS & ELECTRIC COMPANY

****PUBLIC VERSION****

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

July 21, 2014

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1 Prior to filing this Application, the Track 4 Decision required SDG&E to submit and
2 receive Energy Division approval of its procurement plan. SDG&E submitted its initial
3 conventional resources procurement plan to the Energy Division on March 21, 2014, revised
4 versions on May 1, 2014 and July 16, 2014, and received the Energy Division's approval on July
5 18, 2014. SDG&E initially submitted its preferred resources procurement plan to the Energy
6 Division on May 1, 2014 and a revised version on July 18, 2014 and is awaiting approval of this
7 plan. SDG&E has attempted to reflect the Energy Division's feedback during the procurement
8 plan review process in this Application. Among other things, SDG&E will be pursuing approval
9 of this Application at the same time as it commences an all-source Request for Offers ("RFO")
10 discussed in the Track 4 Decision.

11 SDG&E notes that the PPTA (attached as Appendix E) has not yet been executed.
12 *SDG&E intends to execute the PPTA upon the CPUC's final and non-appealable approval of*
13 *SDG&E's Application and Seller's execution of the PPTA.*

14 **II. BACKGROUND**

15 This Application is being filed in response to the Track 4 Decision calling for SDG&E to
16 procure up to 800 MW of new resources, of which up to 600 MW could include gas-fired
17 generation. The Carlsbad Energy Center will provide 600 MW of much needed new and flexible
18 capacity in SDG&E's service territory and will be located within the confines of the existing
19 Encina Power Station ("Encina") site. The existing Encina generators provide 965 MW of
20 dependable but old and relatively inefficient and less flexible capacity consisting of five (5)
21 steam turbine generators totaling 950 MW, all of which utilize OTC technology and that are

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1 under a State mandate to retire by December 31, 2017. Additionally, Encina has one (1) 15 MW
2 gas turbine generator.³

3 The Carlsbad Energy Center presents a unique opportunity for SDG&E to meet the
4 objectives delineated in the Track 4 Decision. Indeed, the Track 4 Decision recognizes that
5 procurement needs may become critical as early as 2018 and that procurement under the Track 4
6 Decision should begin as soon as possible.⁴ Given the long lead time associated with the
7 development of gas-fired generation and the impending OTC deadline that will impact Encina,
8 SDG&E has elected to submit a bilateral agreement in advance of an all-source RFO process.
9 The option to enter into bilateral agreements is expressly provided for in the Track 4 Decision
10 and is the most prudent course of action given the timing considerations involved.

11 Taking into account assumptions regarding future procurement of preferred resources and
12 the procurement authorized in the Track 4 Decision, the addition of the Carlsbad Energy Center
13 will achieve an approximately 50/50 split between preferred and conventional resources. The
14 Track 4 Decision assumes that 338 MW of future energy efficiency from existing programs will
15 meet a portion of the identified need.⁵ Add to that the 200 MW of new preferred resources that
16 the Track 4 Decision directs SDG&E to procure and the result is a total of 538 MW of preferred
17 resources. With the additional reduction of need related to the addition of rooftop solar not yet
18 developed but assumed in the Track 4 Decision's calculation of existing local resources, the
19 proposed 600 MW of gas-fired generation amounts to approximately 50% of all the new
20 resources that will be added to provide reliable electric service to all customers.

³ In its Track 4 testimony, SDG&E assumed that this gas turbine would retire along with the rest of the Encina plant at the expiration of the OTC deadline. SDG&E continues to anticipate the retirement of this unit, which has been in operation since 1968.

⁴ D.14-03-004 at 13.

⁵ D.14-03-004 at 62.

1 **III. OVERVIEW OF TESTIMONY**

2 My testimony will explain why: (1) the Carlsbad Energy Center is the best resource to
3 fill the 600 MW need identified in the Track 4 Decision, (2) the 600 MW need likely could not
4 be met by preferred resources or other procurement options, (3) SDG&E chose to negotiate
5 bilaterally for the Carlsbad Energy Center in advance of the all-source RFO, (4) the proposed
6 terms and conditions of the PPTA are reasonable and provide the best option for San Diego
7 consumers, and (5) the Carlsbad Energy Center provides benefits to all customers in SDG&E's
8 distribution service area and thus the benefits and costs should be allocated to all customers in
9 the service area.

10 Specifically, my testimony will demonstrate that the bilaterally negotiated Carlsbad
11 Energy Center PPTA is the best option for meeting a portion of SDG&E's LCR need because:
12 (1) it is the only gas-fired resource of significant size currently proposed or under development
13 that can reasonably be expected to be completed in time to meet the OTC deadline to retire
14 Encina, (2) it provides sufficient capacity and flexibility to meet reliability needs in San Diego,
15 and (3) it is priced competitively with other recently procured resources of the same type.

16 Additionally, the Carlsbad Energy Center has the support of the City of Carlsbad
17 ("City"), where it will be located. Furthermore, a substantial portion of the required transmission
18 and other needed infrastructure already exists. Failure to approve the PPTA and allow the
19 Project to be in service in time for Encina to retire at the end of 2017 would undermine the City's
20 support and the State's OTC goals and deny consumers the benefits of the Project.

21 **IV. THE CARLSBAD ENERGY CENTER IS THE BEST FIT FOR THE LOCAL**
22 **RESOURCE NEED IN SDG&E'S SERVICE TERRITORY**

23 The technology proposed for the Carlsbad Energy Center meets the "least cost best fit"
24 ("LCBF") test that SDG&E applies when evaluating procurement options. As a general

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1 principle, the Commission, through the Energy Action Plan Loading Order, requires SDG&E to
2 add preferred resources prior to considering central station conventional resources if it is feasible
3 to do so. In the case of the need identified in the Track 4 Decision, nearly half of that need will
4 be filled by preferred resources and SDG&E cannot foresee further expansion of preferred
5 resources as a “best fit” or prudent strategy for fulfilling the remaining procurement authority
6 granted to SDG&E.

7 While SDG&E is strongly committed to the goals of the Energy Action Plan and
8 procurement of preferred resources in accordance with the Loading Order, it agrees with the
9 Commission’s observation that “[i]t is necessary that a significant amount of this procurement
10 level be met through conventional gas-fired resources in order to ensure that LCR needs will be
11 met.”⁶ SDG&E shares the Commission’s view that a balanced approach is necessary, and while
12 it is necessary to “pursu[e] preferred resources to the greatest extent possible, we must always
13 ensure that grid operations are not potentially compromised by excessive reliance on intermittent
14 resources and resources with uncertain ability to meet LCR needs.”⁷

15 SDG&E’s Track 4 testimony discussed the need for resources that have the necessary
16 flexibility to meet dual resources needs in SDG&E’s service territory – resources to meet the
17 demand in the late afternoon (generally, between 4:00 PM and 5:00 PM) and a second resource
18 need between 8:00 PM and 10:00 PM when loads are relatively high but supply of renewables
19 has dropped off substantially. Fully dispatchable conventional resources are near-ideal for
20 meeting this dual-resource need in that they can ramp up and down, follow load and be started
21 multiple times within a single day. Besides this dual resource need, as more renewable
22 generation resources are added to the grid, these resources will be valuable in accommodating

⁶ D.14-03-004 at 90 (citing D.13-02-015, Finding of Fact 30).

⁷ *Id.* at 90.

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1 the variability associated with intermittent renewable generation and to provide a backstop when
2 those resources are not available.

3 With regard to this need, the Carlsbad Energy Center will be built with GE LMS100
4 technology and will provide state of the art flexibility with each unit capable of multiple starts
5 and stops per day. The units are among the most efficient cycle turbines on the market. The
6 ability of these units to quickly start and ramp up to full output and their relatively low heat rate
7 translates to reduced gas consumption. Reduced gas consumption will result in lower emissions,
8 especially of greenhouse gases (“GHG”). Flexible units such as these represent a paradigm shift
9 away from baseload type units such as combined cycle power plants that, although they are
10 efficient when operated at full load, are not as flexible and are not designed for continuous
11 operation at low output levels or a high number of starts and stops.

12 The preferred resources designated in the Loading Order include energy efficiency and
13 demand response. Currently, these preferred resources lack critical characteristics required to
14 accommodate increasing amounts of intermittent renewable generation, namely, operational
15 flexibility. For instance, many of SDG&E’s demand response programs are geared toward load
16 reductions during the mid-afternoon, which is traditionally thought of as the period of highest
17 system need. However, as discussed above, those afternoon hours will no longer correspond to
18 the period of highest system need (i.e., these programs are currently designed for a time period of
19 decreasing relevance). Incremental energy efficiency and demand response programs above
20 those already assumed to develop that reduce demand during the late afternoon between 4:00 PM
21 and 5:00 PM and during the evening loads between 8:00 PM and 10:00 PM may not be available
22 in the amounts necessary to meet needs that are projected to exist in the years after 2017.

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1 Renewable resources such as solar and wind are inherently variable and intermittent, and
2 create operating challenges that the Project capacity will address. The resource need periods
3 tend to fall in the period when solar resources are falling and wind resources tend generally to
4 ramp up. Intermittent resources such as wind and solar contribute a limited amount of
5 dependable capacity within the San Diego LCR sub-area.

6 While it is theoretically possible that other gas-fueled generation resources could fill the
7 LCR need met by the Carlsbad Energy Center, waiting for the outcome of an all-source RFO
8 would prolong the procurement process to such a degree that meeting the December 31, 2017
9 OTC retirement date would be unlikely. The Commission itself has recognized it could take
10 seven or more years to complete such procurement.⁸ The Commission has made clear that it is
11 necessary to take proactive steps to prevent a reliability crisis in which there exists insufficient
12 time to engage in additional procurement.⁹ As discussed below, an LCR need that could arise as
13 early as 2018 and the timing of the Encina shutdown to comply with the State’s OTC deadline
14 are critical drivers in the selection of the Carlsbad Energy Center to fill the resource need – one
15 that provides community benefits that are part and parcel of moving forward at this time.

16 **V. THE CARLSBAD ENERGY CENTER IS LIKELY THE ONLY GAS-FIRED**
17 **RESOURCE CAPABLE OF MEETING THE NEED AND ONLINE DATE**

18 Consistent with the approach proposed above, SDG&E submits that waiting for the
19 outcome of the all-source RFO would prolong the procurement process to such a degree that
20 meeting the December 31, 2017 OTC retirement deadline would be very unlikely. Furthermore,
21 the Carlsbad Energy Center is the only resource of sufficient size that is far enough through the

⁸ D.13-02-015 at 63 (“...we take seriously the [California Independent System Operator’s (“CAISO”)] 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.”).

⁹ See, e.g., D.09-01-008 at 18.

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1 development process to meet both the identified need and the retirement deadline. As discussed
2 above, a resource just beginning the process would likely need up to seven years from start to
3 finish before it could be online, which is many years beyond the retirement deadline for
4 Encina.¹⁰ Although the Carlsbad Energy Center will need to: (1) obtain approval of an
5 amendment to its existing California Energy Commission (“CEC”)-approved Application for
6 Certification (07-AFC-06), (2) amend its interconnection agreements, and (3) receive its air
7 permit, it is still the only sizeable resource that is far enough along in development to meet this
8 challenging deadline.

9 At this time, the only other publicly announced gas-fired resource proposed within the
10 San Diego LCR sub-area is the 100 MW Quail Brush Generation Project (“Quail Brush”) with
11 whom SDG&E signed a PPTA that was rejected by the Commission in D.13-03-029. Quail
12 Brush subsequently suspended its application for a permit from the CEC in April 2013 and
13 recently requested an additional one-year suspension, which was granted by the CEC in April
14 2014. Assuming Quail Brush bid into an RFO, however, it is of insufficient size, and the online
15 date is uncertain enough, that it cannot be viewed as a reasonable alternative to the Carlsbad
16 Energy Center and its November 1, 2017 online date.

17 The all-source RFO might generate other proposals, but it is unrealistic to assume that a
18 project of sufficient size to facilitate the retirement of Encina participating in the RFO process
19 could meet a December 31, 2017 online date. For example, a project that has not yet begun the
20 CAISO interconnection study process at the time of an RFO would already be at least two years
21 behind the Carlsbad Energy Center timeline.

¹⁰ Assuming a seven year cycle and a start date of Q2 2014, a resource starting the process would not complete it until Q2 2021.

1 In contrast, the schedule proposed for the Carlsbad Energy Center (set forth in
2 Confidential Appendix B), assuming prompt Commission action, will facilitate the retirement of
3 the existing Encina units in time to meet the State’s OTC deadline and for the new Carlsbad
4 Energy Center to be constructed and become operational before December 31, 2017.

5 **VI. THE TERMS AND CONDITIONS OF THE PPTA ARE REASONABLE AND A**
6 **GOOD VALUE FOR SAN DIEGO CONSUMERS**

7 SDG&E has negotiated terms and conditions for the Carlsbad Energy Center that are
8 reasonable and represent a good value for San Diego area consumers. [REDACTED]

9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED] As

14 mentioned above, one of the most notable strengths of the GE LMS100 technology is a quick
15 start capability and the capability to achieve full power within ten (10) minutes, [REDACTED]

16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

19 Because the units will provide local resource adequacy capacity, they are required to
20 maintain availability during all hours (with limited exceptions such as no dispatch from midnight
21 to 6:00 AM, except to the extent reasonably required for reliability-related purposes or as
22 otherwise required by the CAISO tariff). [REDACTED]

23 [REDACTED]
24 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]

5 In order to ascertain the attractiveness of the proposed Carlsbad Energy Center PPTA
6 relative to other conventional generation options, SDG&E believes that it is reasonable to
7 compare it to the Pio Pico Amended PPTA, SDG&E's most recently approved conventional
8 agreement. In sum, when the overall value of the Carlsbad Energy Center PPTA is compared to
9 the overall value of the Pio Pico Amended PPTA (that the Commission approved in D.14-02-
10 026), the Carlsbad Energy Center PPTA compares favorably. A side-by-side comparison of the
11 two PPTAs is found in Confidential Appendix C. This fact is significant because Pio Pico
12 utilizes the same technology as the Carlsbad Energy Center and is scheduled to come online
13 approximately two years prior to the Carlsbad Energy Center. It thus represents a reasonable
14 market test of the competitiveness of the pricing for Carlsbad Energy Center. The fact that
15 Carlsbad Energy Center comes online later [REDACTED]

16 [REDACTED]
17 [REDACTED]

18 The confidential version of the report of the Independent Evaluator, attached as
19 Confidential Appendix D, also addresses the reasonableness of the terms and conditions of the
20 PPTA. A full copy of the proposed PPTA is attached as Confidential Appendix E.

21 **VII. CARLSBAD ENERGY CENTER WILL ACHIEVE FULL CAPACITY**
22 **DELIVERABILITY STATUS AND MEETS THE LOCAL CAPACITY**
23 **REQUIREMENTS**

24 The need found by the Commission in its Track 4 Decision is an LCR need in the San
25 Diego sub-area. Thus, it is important that any proposed resource be fully deliverable and meet

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1 the CAISO requirements for local resource adequacy. The Carlsbad Energy Center will be
2 connected to SDG&E's existing Encina substation, which is located in the San Diego LCR area
3 and will meet the local resource adequacy requirements provided the CAISO confirms the
4 Project's Net Qualifying Capacity ("NQC") status. The permanency of the NQC status is
5 enhanced when the Project achieves full capacity deliverability status ("FCDS") pursuant to the
6 provisions of the CAISO's Generator Interconnection Process ("GIP").

7 The executed generator interconnection agreements ("GIAs") between Carlsbad Energy
8 Center, the CAISO and SDG&E for the two Carlsbad Energy Center projects - one
9 interconnecting at 230 kV and the other interconnecting at 138 kV - identify the system upgrades
10 that are needed to achieve FCDS. The GIA that specified the 230 kV upgrades needed to
11 interconnect this project contemplated building a new 230 kV switchyard. SDG&E has since
12 expanded the existing 230 kV Encina switchyard for a variety of reasons and now this
13 switchyard has the capability to interconnect the 230 kV Carlsbad Energy Center project within
14 the existing 230 kV substation without building a new 230 kV switchyard. The GIA that
15 specified the 138 kV upgrades to interconnect this project remain the same. Additionally, given
16 the electric system changes that have occurred since the execution of the original GIAs for this
17 project, CAISO has conducted reassessment studies, the results of which were reported in
18 October 2013 (the "Reassessment Study Report"). An amendment to the existing GIAs will be
19 needed based on reassessment studies; however, the Reassessment Study Report identified only
20 one additional upgrade that was not part of the original GIAs. This additional "upgrade" is
21 inclusion of a Special Protection Scheme.

22 Another way for the Project to achieve FCDS is to participate in the "Generating Unit
23 Repowering" process as described in a technical bulletin posted by the CAISO on September 12,

1 2013. Given that the existing capability of the boiler units at Encina is about 950 MW and the
2 proposed Carlsbad Energy Center has a nominal capacity of 600 MW, the Carlsbad Energy
3 Center is an ideal project to go through the Generating Unit Repowering process. This process
4 allows entities to obtain an interconnection agreement without having to participate in the
5 CAISO’s standard generation interconnection study process. To qualify under the Generating
6 Unit Repowering process, the Carlsbad Energy Center needs to demonstrate that the total
7 capability of the new generating facility will be no more than that of the existing facility and that
8 the electrical characteristics of the new generating facility are substantially the same as the
9 existing characteristics. Not having to go through the entire study process reduces the timeline
10 for interconnection by approximately two years, which would enable the Project to be online in
11 time to allow the existing Encina generating units to shut down. Between these two approaches,
12 SDG&E believes it is highly likely that the Carlsbad Energy Center will be awarded FCDS when
13 the project is built. Estimated transmission interconnection costs are set forth in Confidential
14 Appendix F.

15 **VIII. THE CARLSBAD ENERGY CENTER HAS THE SUPPORT OF THE LOCAL**
16 **CITY**

17 The City, a staunch opponent of the Project from its inception, has become a key
18 supporter of the reconstituted Carlsbad Energy Center that is the subject of the PPTA because of
19 some of the key terms and benefits that will result from the construction and operation of the
20 Project, although these are not explicitly part of the PPTA except as stated below.

21 Specifically, the January 14, 2014 Settlement Agreement between the City, Carlsbad
22 Municipal Water District, Cabrillo Power I, LLC, Seller and SDG&E (“Settlement”), attached
23 hereto as Appendix G, allows the City to acquire and redevelop the site currently occupied by
24 Encina and SDG&E’s North Coast Service Center (“Service Center”). The Settlement obligates

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1 the City to help SDG&E find a mutually agreeable new site for the Service Center and, once the
2 new Service Center is in place and other conditions are met, SDG&E will transfer to the City the
3 site of the existing Service Center, along with other SDG&E-owned property that comprises
4 Cannon Park and an additional parcel known as the Agua Hedionda North Shore Bluff Parcel.
5 The new state of the art Service Center will be paid for by NRG Energy, Inc. (“NRG”) (the
6 parent company of Seller), subject to an overall price cap of \$22.5 MM. NRG’s payments will
7 go toward the “all in” costs of the relocation of the North Coast Service Center that includes the
8 cost of construction, furniture, fixtures, equipment, IT infrastructure, architectural, engineering
9 and consulting costs. This obligation is subject to NRG issuing to its EPC a Notice To Proceed.
10 This will provide SDG&E a new and updated service center at a significantly lower cost to
11 SDG&E consumers.

12 Of even greater benefit to the City and the community at large, the Settlement provides
13 that, once the Carlsbad Energy Center is placed in service, NRG will proceed immediately to tear
14 down and dispose of the existing Encina plant and its 400-foot-tall stack, and remediate the site.
15 Prior to the Settlement, NRG had no affirmative obligation to dispense with Encina or remediate
16 the site, so the Encina plant could have remained in place for many years while the new plant
17 was in operation. Under the Settlement, the demolition and removal of the Encina plant and
18 stack and remediation of the site are all affirmative obligations on the part of NRG. If the
19 Carlsbad Energy Center goes into commercial operation but any of the existing Encina
20 generating units continue to operate, NRG must pay damages to the City until Encina is shut
21 down. This also will include the Encina gas turbine, which is part of the Cabrillo II units.

22 As noted in the Project description, the one element of the Settlement that directly
23 impacts the PPTA is a commitment from Seller that the Project will not run between the hours of

1 midnight and 6:00 AM except in the case of a system emergency or as otherwise required by the
2 CAISO tariff.

3 Securing the support of the City for the PPTA has been a major advance in providing for
4 reliable capacity in the SDG&E local area. Along with the City’s support are a large number of
5 public and consumer benefits related to the transfer of property and the construction of
6 SDG&E’s new Service Center such as the removal of the existing Encina Plant and the 400-foot-
7 tall smoke stack and redevelopment of the Encina Station site, the removal and redevelopment of
8 the SDG&E Service Center and the protection of the Agua Hedionda North Shore Bluff sites in
9 its natural and undeveloped state. All of these benefits, however, revolve around the timely
10 retirement of Encina, and the repurposing of the land, which can only happen if the Commission
11 promptly approves the PPTA to allow construction of the new plant.

12 **IX. THE COMMISSION SHOULD ALLOCATE THE COSTS OF THE CARLSBAD**
13 **ENERGY CENTER TO ALL BENEFITING CUSTOMERS**

14 Consistent with the Track 4 Decision, SDG&E requests that the costs incurred under the
15 PPTA be allocated to all benefiting customers since the resource being procured is for the
16 purpose of ensuring local reliability in the SONGS service area for the benefit of all utility
17 distribution customers in that area.

18 California Public Utilities Code (“P.U. Code”) § 365.1(c)(2)(A)-(B) requires that upon a
19 Commission determination that new generation is required to meet local or system area
20 reliability needs for the benefit of all customers in an investor owned utility’s (“IOU”) service
21 area, the net capacity costs for the new capacity must be allocated in a fair and equitable manner
22 to all benefitting customers, including Direct Access (“DA”), Community Choice Aggregation
23 (“CCA”) and bundled load customers. In other words, if new generation resources provide
24 reliability benefits to all customers, the net capacity costs of such resources must likewise be

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1 allocated to all customers. As the Commission made clear in D.11-05-005, application of the
2 CAM is mandatory where the statutory conditions are met.

3 In determining applicability of the CAM to authorized procurement, it is important to
4 recognize and distinguish between an IOU's obligations as a load-serving entity ("LSE") to
5 procure energy and capacity to serve its bundled customers versus its obligation as a regulated
6 IOU to ensure that new resources are built in order to meet long-term grid reliability needs. In
7 its role as an LSE procuring energy and capacity to serve its bundled customers, SDG&E's
8 procurement activity provides a benefit only to its bundled customers. On the other hand, in its
9 role as a regulated IOU procuring new resources to ensure grid reliability, SDG&E's
10 procurement activity provides a benefit to *all* customers in SDG&E's service area.

11 The need for new resources to replace SONGS capacity is driven by system reliability
12 concerns rather than a need for energy and capacity to serve SDG&E's bundled customers; thus,
13 it is procurement that must be subject to the CAM. SDG&E, as the LSE for its bundled
14 customers, must replace the energy and capacity that it previously received from SONGS.
15 However, SDG&E is free to procure that capacity and energy from any resource that meets its
16 needs, including existing resources. It would not be unusual for an LSE to contract with one
17 resource to meet a portion of its energy and capacity needs for one year and then contract with a
18 different resource the following year. In other words, there is no ongoing obligation to procure
19 from a particular resource after a power purchase agreement ("PPA") has expired.

20 Likewise, if a resource that previously sold its capacity and energy to a party (or group of
21 parties) ceases operation, the part(ies) that previous contracted with that resource have no direct
22 obligation to ensure that a new resource is built in its place. Thus, in its role as the LSE for its
23 bundled customers, SDG&E has no obligation to ensure that new resources are built to replace

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1 SONGS. If, however, the Commission authorizes SDG&E as a regulated utility to procure new
2 capacity in order to meet the long-term grid reliability needs as it has done in the Track 4
3 Decision, it is ordering the regulated utility to ensure that new resources are built for the benefit
4 of all customers.

5 In the latter scenario, P.U. Code § 365.1(c)(2)(A) requires the Commission to allocate the
6 net capacity costs of such new resources to all benefiting customers. The Commission has
7 consistently applied the CAM to allocate costs of new resources necessary to meet LCR need to
8 all benefitting customers. In D.13-03-029 and D.13-10-043, for example, the Commission
9 authorized SDG&E to recover the capacity costs of the Wellhead Escondido PPTA from all
10 bundled service, DA and CCA customers in SDG&E's service territory on a non-bypassable
11 basis consistent with the CAM. In D.14-02-016 and D.14-06-053, the Commission authorized
12 SDG&E to recover the capacity costs of the Amended PPTA with Pio Pico from all bundled
13 service, DA and CCA customers in SDG&E's service territory on a non-bypassable basis
14 consistent with the CAM. Similarly, in the Commission's Track 1 Decision (D.13-02-015), it
15 directed Southern California Edison ("SCE") to allocate costs incurred as the result of
16 procurement authorized in Track 1 by SCE in accordance with the CAM.

17 The objective of the Track 4 Decision is to ensure that new resources are built for
18 purposes of protecting system reliability. Plainly, *all* customers in SDG&E's service area will
19 benefit from such procurement. The Carlsbad Energy Center PPTA is a direct outgrowth of this
20 procurement directive.¹¹ Thus, in accordance with its obligation under P.U. Code §

¹¹ In the Track 4 Decision (at 120), the Commission stated: "The basic question related to CAM in this decision is whether procurement authorized in this decision should be treated any differently from procurement authorized in D.13-02-015. There is no significant difference between procurement authorized in this decision and procurement authorized in D.13-02-015. We find that the procurement authorized in this decision is for the benefit of ensuring local reliability in the SONGS

1 365.1(c)(2)(A)-(B), the Commission should authorize SDG&E to record the net capacity costs of
2 the Carlsbad Energy Center PPTA in its Local Generation Balancing Account and recover those
3 costs via a Local Generation Charge from all bundled service, DA and CCA customers in
4 SDG&E's service territory on an equal per kilowatt-hour and non-bypassable basis consistent
5 with the CAM.

6 **X. CONCLUSION**

7 SDG&E is faced with a significant challenge in meeting the need for local generation
8 resources while facilitating the retirement of a large amount of existing generation in keeping
9 with the State's OTC retirement policies and schedule. The Carlsbad Energy Center is the best
10 available alternative to balance these objectives and meet SDG&E's obligations with the best
11 available technology at a reasonable cost. SDG&E remains committed to the Loading Order
12 established by the Commission and other agencies in the Energy Action Plan, however
13 SDG&E's changing load shape, as described above, cannot reliably be met by preferred
14 resources alone. Flexible conventional resources, such as the Carlsbad Energy Center, are
15 provided for in the Track 4 Decision and absolutely necessary for system reliability.

16 In light of the totality of the evidence surrounding the reasonableness of the proposed
17 PPTA, the fact that the Carlsbad Energy Center is the only type of resource that can effectively
18 meet the need identified in the Track 4 Decision, that only the Carlsbad Energy Center can
19 reasonably be expected to provide sufficient capacity in time to meet the OTC retirement

service area, for the benefit of all utility distribution customers in that area. We conclude that such procurement meets the criteria of Section 365.1 (c)(2)(A)-(B). Therefore, SCE and SDG&E shall allocate costs incurred as a result of procurement authorized in this decision, and approved by the Commission. In most cases we expect this allocation to be consistent with D.13-02-015 and the CAM adopted in D.06-07-029, D.07-09-044, D.08-09-012 and D.11-05-005, but there may be resources where an existing alternative method of allocating resources costs may be preferred; for example, cost may be recoverable through the Energy Program Investment Charge."

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1 deadline for Encina, and the benefits that would flow from Encina's timely retirement, the
2 Commission should act expeditiously to approve the PPTA as submitted.

3 This concludes my prepared direct testimony.

4

1 **XI. WITNESS QUALIFICATIONS**

2 My name is Daniel S. Baerman. My business address is 8315 Century Park Court, San
3 Diego, California 92123. I am employed by SDG&E as Director – Origination and Portfolio
4 Design and have been in my current position since February 2014.

5 My responsibilities include procurement of generation and other long-term supply side
6 resources such as storage and demand response. My department provides analytic support for
7 review of bids received within solicitations for Resource Adequacy, ReMat, RAM, CHP, GHG
8 offset and procurement related to LTPP Track 4. Prior to my current role and responsibilities, I
9 served as Director –Electric Generation. In that role, I set policy and standards for the
10 management of SDG&E’s generation assets.

11 I joined SDG&E in 2005 and have been employed in the power generation/utility
12 industry for more than 30 years in positions of increasing responsibility. I have experience with
13 operations and maintenance, construction management, commissioning, mobilization and plant
14 outfitting both in the United States and abroad. I have managed 7 power plants and
15 commissioned 13 plants of varying technologies in my career. I am familiar with several
16 technologies including coal-fired boilers, internal combustion reciprocating engines, aero-
17 derivative gas turbines and heavy industrial gas turbines in peaking and combined-cycle
18 configurations.

19 I hold a Bachelor of Science degree in Marine Engineering from the United States
20 Merchant Marine Academy at Kings Point, New York.

21 I have previously testified before the California Public Utilities Commission.
22

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Appendix A

Confidentiality Declaration of Hillary Hebert

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

**DECLARATION OF HILLARY HEBERT
REGARDING CONFIDENTIALITY OF CERTAIN DATA**

I, Hillary Hebert, do declare as follows:

1. I am the Partnership and Programs Manager in the Origination and Portfolio Group for San Diego Gas & Electric Company (“SDG&E”). I have reviewed the Prepared Direct Testimony of Daniel S. Baerman and the attached confidential appendices thereto (“Testimony”) in support of SDG&E’s July 21, 2014 Application for Authority to Partially Fill the Local Capacity Requirement Need Identified in Decision (“D.”) 14-03-004 and Enter into a Power Purchase Tolling Agreement (“PPTA”) with Carlsbad Energy Center, LLC (“Application”). I am personally familiar with the facts and representations in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or belief.

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

^{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 California Public Utilities Commission (“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 California Public Utilities Code

where “it matches a Matrix category exactly or consists of information from which that information may be easily derived.”^{2/}

3. Pursuant to the procedure adopted in D.08-04-023, I address below each of the following five features of Ordering Paragraph 2 of D.06-06-066:

- That the material constitutes a particular type of data listed in the Matrix,
- The category or categories in the Matrix to which the data corresponds to,
- That SDG&E is complying with the limitations on confidentiality specified in the Matrix for that type of data,
- That the information is not already public, and
- That the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.^{3/}

4. SDG&E’s Protected Information:^{4/} As directed by the Commission, SDG&E demonstrates in table form below that the instant confidentiality request satisfies the requirements of D.06-06-066:^{5/}

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets Matrix Requirements
<p><i>Specific Quantitative Analysis</i></p> <p>Location:</p> <p>1. Testimony</p> <ul style="list-style-type: none"> ▪ Language highlighted in grey on pages 9-10. <p>2. Confidential Appendix C – Pricing Comparison</p>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p> <hr/> <p>Identify the Matrix category or categories to which the data corresponds</p>	<p>This data is SDG&E’s specific quantitative analysis involved in scoring and evaluating proposed projects. Some of the data also involves analysis/evaluation of proposed projects.</p> <hr/> <p>This information is protected under IOU Matrix category VIII.B.</p>

(“P.U. Code”) §§ 454.5(g) and 583, California Government Code § 6254(k) and General Order (“G.O.”) 66-C.

^{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).

^{3/} D.06-06-066, as amended by D.07-05-032, *mimeo*, p. 81, Ordering Paragraph 2. The confidential information referenced is highlighted in **GREY** / has a **grey box** around it in the Testimony and confidential appendices.

^{5/} 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”).

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets Matrix Requirements
<p>3. Confidential Appendix D – Report of the Independent Evaluator</p> <ul style="list-style-type: none"> ▪ <i>Language highlighted in grey on pages 25-26; 28-30;32 and 39</i> <p>4. Confidential Appendix F – Summary of Transmission Interconnection Costs</p>	Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data	In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that this information be kept confidential for three years.
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	SDG&E cannot summarize or aggregate the evaluation data while still providing project-specific details. SDG&E cannot provide redacted or masked versions of these data points while maintaining the format requested by the Commission.
<p>Contract Terms</p> <p>Locations:</p> <p>1. Testimony</p> <ul style="list-style-type: none"> ▪ <i>Language highlighted in grey on pages 9 - 10.</i> <p>2. Confidential Appendix B – Milestone Schedule</p> <p>3. Confidential Appendix C – Pricing Comparison</p> <p>4. Confidential Appendix D – Report of the Independent Evaluator</p> <ul style="list-style-type: none"> ▪ <i>Language highlighted in grey on pages 3 – 4; 10 - 26; 28-30;37and 39</i> <p>5. Confidential Appendix E – Carlsbad Energy Center PPTA</p>	Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix	This data includes specific contract terms.
	Identify the Matrix category or categories to which the data corresponds	This information is protected under IOU Matrix category VII.B.
	Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data	In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that this information be kept confidential for three years.
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	In order to include as much detail as possible, SDG&E has provided specific contract terms instead of summaries. SDG&E has provided summaries of certain contract terms in public portions of the testimony.

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets Matrix Requirements
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	It is not possible to provide these data points in an aggregated, redacted, summarized or masked fashion.

5. As an alternative basis for requesting confidential treatment, SDG&E submits that the Power Purchase Tolling Agreement attached to the Testimony as Confidential Appendix E is material, market sensitive, electric procurement-related information protected under 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 G.O. 66-C.^{6/}

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.

^{6/} 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.”)

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.”

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.^{7/} 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.^{8/}

10. If disclosed, the Protected Information could provide parties, with whom SDG&E is currently negotiating, insight into SDG&E’s procurement needs, which would unfairly undermine SDG&E’s negotiation position 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 its PPTA to protect non-public information. Some of the Protected

^{7/} See also Govt. Code § 6254.7(d).

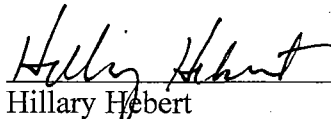
^{8/} See, D.06-06-066, *mimeo*, pp. 26-28.

Information in the PPTA and in the Testimony (including confidential appendices), relates directly to viability of the respective projects. Disclosure of this extremely sensitive information could harm the developers' ability to 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 21th day of July, 2014, at San Diego, California.



Hillary Hebert
Partnership and Programs Manager
Electric and Fuel Procurement
San Diego Gas & Electric

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Appendix B
(Redacted in its Entirety)

CECP Milestone Schedule (from PPTA)

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Appendix C
(Redacted in its Entirety)

Pricing Comparison

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Appendix D
(Redacted Version)

Report of the Independent Evaluator

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*Final Report of the Independent Evaluator
Power Purchase Tolling Agreement Between
San Diego Gas & Electric Company
And
Carlsbad Energy Center, LLC
Confidential Version*

July, 2014

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



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A. Introduction

San Diego Gas & Electric Company (“SDG&E”) shall present to the California Public Utilities Commission (“CPUC” or “Commission”) a long-term Power Purchase Tolling Agreement (“PPTA” or “Agreement”), for the purchase by SDG&E of approximately 600 MW of nominal contract generating capacity from the Carlsbad Energy Center (“Carlsbad” or “Seller”) project over a 20 year term. Under the Agreement, Carlsbad will develop, permit, design, construct, commission, test, own, operate and maintain a natural gas-fired simple cycle gas turbine generating facility using GE LMS100 technology.¹ The facility is divided into two Generating Units (Generating Units 1 and 2)² to be constructed on a portion of approximately thirty-one acres of property within the site of the existing Encina Generating Station at 4600 Carlsbad Boulevard in Carlsbad, California. It is anticipated that the units will be phased-in with the full capacity of the project reaching commercial operation by November 1, 2017.

Upon the commercial operations of the Carlsbad Energy Center project, NRG, the parent company, proposes that Encina units 1-5 will be retired in compliance with California’s Once-Through-Cooling mandate which requires the mandatory retirement of once-through-cooling (“OTC”) resources located in southern California in accordance with State Water Resources Control Board (“SWRCB”) regulations.³ In accordance with an agreement between the City of Carlsbad, NRG, and SDG&E, the City of Carlsbad

¹The GE LMS100 unit merges two proven technologies: frame industrial gas turbines and aeroderivative gas turbines. This technology has become a technology of choice for utility-scale simple cycle peaking and intermediate operations. The LMS100 unit is a flexible and efficient unit with an attractive heat rate. The unit is capable of load following quickly and has been touted as an effective compliment for integration of intermittent renewable energy projects given its flexible operating characteristics. The recently released Draft Staff Report of the California Energy Commission (“CEC”) entitled Estimated Cost of New Renewable and Fossil Generation in California (May 2014) states that many of the targeted investments in gas-fired generation in California have been to meet local reliability and operational flexibility needs. The preferred technologies for meeting these needs are gas turbines that blend high efficiency with rapid start and ramping capabilities. The result is extensive investment in combustion turbines (CTs) that are based on design for passenger jets, known as aeroderivative designs. These aeroderivative designs dominate the CTs in California despite the fact that their levelized costs are higher than their more traditional counterparts (referred to as “frame” type designs). Aeroderivative designs have rapid start-up and ramping capabilities that make them uniquely suited to conditions in California (page 8). The CEC report classifies the GE LMS100 technology as Advanced Simple Cycle design.

² [REDACTED]

³ In May, 2010, the SWRCB adopted its statewide Water Quality Control Policy of the Use of Coastal and Estuarine Water for Power Plant Cooling (Resolution No. 2010-0020), which applies to power plants located along the California coast that rely on Once-Through-Cooling (“OTC”) technology (the “OTC Policy”). The OTC Policy requires OTC facilities to meet certain requirements or retire by a specified compliance date. Cabrillo Power I LLC (“Cabrillo”), owner and operator of the Encina Power Station, submitted its OTC Implementation Plan to the SWRCB on March 30, 2011 stating that it intended to replace Encina Units 1-3 with the Carlsbad Energy Center Project or retire the Units. Cabrillo also stated it intended to operate Units 4 and 5 until the OTC compliance date of December 31, 2017 and then retire the units. In response to a follow-up letter from Thomas Howard, Executive Director of the State Water Resources Control Board issued on September 18, 2013 regarding the status of the Encina Power Station, NRG Energy responded that the Encina Power Station is scheduled to retire by December 31, 2017.

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supported the construction of the Carlsbad Energy Center project on the condition that NRG agree to retire and tear down the existing units 1-5 at the Encina plant, including the 400 foot stack.⁴ Also, under the agreement SDG&E agreed to give a portion of its land west of the freeway to the City of Carlsbad.

Based on the provisions of the PPTA, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] for a 20 year contract term.

Contract negotiations on the PPTA between Carlsbad Energy Center and SDG&E were initiated in November, 2013. Merrimack Energy was retained as the Independent Evaluator (“IE”) in January, 2014.

This report addresses Merrimack Energy’s assessment regarding contract provisions, pricing, consistency with regulatory policy and other market and competitive considerations associated with the Power Purchase Tolling Agreement between San Diego Gas and Electric Company and Carlsbad Energy Center, LLC. The issues addressed in this report are generally consistent with the CPUC Independent Evaluator Report Template requirements for a bilateral contract, but reflect the unique nature of this agreement and the overall regulatory process and requirements. The issues addressed include:

1. Describe the role of the IE throughout the contract negotiation process;
2. Describe project specific negotiations. Highlight any areas of concern including unique terms and conditions;
3. Describe the outreach activities undertaken by the utility;
4. If the contract does not directly reflect a product solicited and bid in an RFO, is the contract superior to the bids received or the products solicited in the RFO? Explain?
5. Is the contract a reasonable way of achieving the need identified in the RFO or Commission Decision?
6. Based on your analysis of the RFO bids, the bid process, and/or overall market, does the contract merit Commission approval? Explain.

B. Role of the Independent Evaluator

Regulatory Requirements For the Independent Evaluator

⁴ On January 14, 2014 the Carlsbad City Council signed off on an agreement which allows NRG to replace Encina with the Carlsbad Energy Center peaking plant. NRG also agreed to tear down the 400 foot smokestack associated with the Encina plant. Articles about the decision also cited the change to the San Diego energy landscape associated with the closure of SONGS and the need for peaking capacity in the San Diego area. Articles also cite a preference for peaking capacity as opposed to the original plan to replace Encina with a combined cycle unit.

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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), D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8) of the CPUC, D.08-11-008, D.09-06-050, and D.10-07-042.

The role of the IE in California IOU procurement processes has evolved over the past ten years. 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 is an affiliated bidder or bidders, or where the utility proposed to build a project or where a bidder proposed to sell a project or build a project or where the utility proposed to sell a project or build a project under a turnkey contract that would ultimately be owned by the utility. 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.⁵ Instead, the IE would be consulted by the IOU, along with the Procurement Review Group ("PRG") on the design, administration, and evaluation aspects of the Request for Proposals ("RFP"). The Decision identifies the technical expertise and experience of the IE with regard to industry contracts, quantitative evaluation methodologies, power market derivatives, and other aspects of power project development. From a process standpoint, the IOU could contract directly with the IE, in consultation with the PRG, but the IE would coordinate with the Energy Division.

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. This was extended to any long-term contract for new generation in D.06-07-029 (July 21, 2006). 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). The IE would also make periodic presentations regarding its findings to the utility and the utility's PRG consistent with preserving the independence of the IE by ensuring free and unfettered communications between the IE and the CPUC's Energy Division, and an open, fair, and transparent process that the PRG could confirm.

In 2007, the use of an IE was required for any competitive solicitation seeking products for a term of more than three months in D.07-12-052 (December 21, 2007). Also, the process for retaining IEs was modified substantially, with IOUs developing a pool of qualified IEs subject to feedback and any recommendations from the IOU's PRG and the

⁵ 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).

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Energy Division, an internal review process for IE candidates, and final approval of IEs by the Energy Division.

In 2008, in D.08-11-008, the CPUC changed the minimum term requirements from three months to two years, and reiterated that an IE must be utilized whenever an affiliate or utility bidder participates in the RFO, regardless of contract duration.

In D.09-06-050 issued on June 18, 2009 in Rulemaking 08-08-009, Order Instituting Rulemaking to Continue Implementation and Administration of California Renewable Portfolio Standard Program, the CPUC required that bilateral contracts should be reviewed according to the same processes and standards as contracts that come through a solicitation. This includes review by the utility's PRG and its IE, including a report filed by the IE.

In D.10-07-042 issued on July 29, 2010, the Commission reaffirmed the role of the IE and required the Energy Division to revise the IE Template to ensure that the IEs focus on their core responsibility of evaluating whether an IOU conducted a well-designed, fair, and transparent RFO for the purpose of obtaining the lowest market prices for ratepayers, taking into account many factors (e.g. project viability, transmission access, etc.).

This IE report is submitted in conformance with the above requirements and is generally consistent with the requirements outlined in the CPUC's Short Form IE Report Template.

Description of Key IE Roles

Merrimack Energy was selected by SDG&E to serve as IE in early January, 2014. Merrimack Energy participated in monitoring a number of contract negotiation calls between SDG&E and Carlsbad Energy Center LLC during the January and February timeframe. The IE reviewed turns of the contract and identified issues for follow-up discussion. The IE also had calls with SDG&E's project lead to discuss contract status and outstanding issues and participated in select PRG meetings where the project was discussed. The IE has also relied upon experiences with other recent solicitations for new conventional generation resources to support opinions and assessment of the contract provisions and associated power pricing in the contract.

C. Commission Decision 14-03-004

Unlike the traditional solicitation processes undertaken by California utilities, the contract decision undertaken by SDG&E is influenced by Commission Decision 14-03-004. As a result, this section of the report will provide an overview of the Decision as a basis for assessing the appropriateness and reasonableness of the bilateral contract negotiation process with Carlsbad Energy Center.

On March 13, 2014 the CPUC adopted D.14-03-004 (Decision Authorizing Long-Term Procurement for Local Capacity Requirements Due to Permanent Retirement of the San Onofre Nuclear Generation Station in Order Instituting Rulemaking to Integrate and

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Refine Procurement Policies and Consider Long Term Procurement Plans, in Rulemaking 12-03-014 filed on March 22, 2012). The Decision was part of the Long-Term Procurement Plan (“LTPP”) proceedings, which the CPUC holds every two years to determine whether additional generation resources are required to meet the energy needs of the investor-owned utilities. In this “Track 4” Decision in the 2012 LTPP, the CPUC authorized Southern California Edison Company (“SCE”) to procure between 500 to 700 MW and San Diego Gas & Electric Company (“SDG&E”) to procure between 500 to 800 MW by 2022 to meet local capacity needs stemming from the retired San Onofre Nuclear Station (“SONGS”). SDG&E is required to procure at least 200 MW and may procure up to the full 800 MW of authorized additional capacity, from preferred resources or energy storage. As a result, SDG&E is required to procure at least 25% -- and up to 100% -- of new local capacity from preferred resources. SCE and SDG&E are required to procure at least 50 MW and 25 MW respectively from energy storage.⁶

Through this Decision, SDG&E is authorized to solicit procurement offers through an all-source RFO but can also procure resources through bilateral negotiations, subject to Energy Division approval of its procurement process.

As described in Decision 14-03-004, the Scoping Memo for this proceeding issued on May 17, 2012 initially divided the proceeding into three tracks. Track 1 considered issues related to the overall long-term need for new local reliability resources to meet long-term local capacity requirements (LCRs) through 2022. Such long-term LCRs are expected to result from the retirement of approximately 5,900 MW from current once-through cooling generators in the Los Angeles Basin, and approximately 900 MW in the San Diego local area, to comply with State Water Quality Control Board regulations.

Track 2 considered procurement of system reliability resources for the three major electric IOUs. A ruling issued in September 2013 deferred Track 2 to a new 2014 Long-Term Procurement Plan Rulemaking due in part to the initiation of Track 4.

Track 3 considered a number of rule and policy issues related to IOU procurement practices. A final decision was issued on February 27, 2014.

A revised Scoping Memo dated March 21, 2013 in R.12-03-014 initiated Track 4 in this proceeding to consider additional resource needs related to the long-term outage (and subsequent permanent closure in June 2013) of the San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS).

The information presented in this section of the report addresses the decision for Track 4 of this proceeding. This decision is a follow-up to the Track 1 decision in this proceeding, but is more narrowly focused on local capacity requirements in what is known as the

⁶ In its Decision the CPUC identifies Total Authorization for SDG&E of 800 to 1100 MW. This includes 300 MW from the Pio Pico project from A.13-06-051, a minimum of 175 MW of Preferred Resources including energy storage, a minimum requirement of 25 MW from energy storage, and an additional 300 to 600 MW from any source.

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SONGS study area. This area consists of all of the territory of San Diego Gas & Electric and the LA Basin portion of SCE's territory.

The Decision concluded (page 23) that SCE and SDG&E have sufficient supplies to meet projected demands in the SONGS service area through at least 2018 even with the unexpected early retirement of SONGS.

The Decision also describes the assumptions and analysis conducted by CAISO in Track 4 to model the retirement of OTC plants in the SONGS study area, along with the retirement of SONGS, to produce an analysis of need for the area. A Scoping Memo for this proceeding set forth a series of assumptions for the CAISO to use in modeling long-term capacity needs in the absence of SONGS. The CAISO analysis concluded that SDG&E would have a residual need of 612 to 1,177 MW (assuming the approval of the Pio Pico contract amendment in A.13-06-016⁷) for the SONGS study area by 2022.

Based on these results, the CAISO encouraged the Commission to move forward with authorizing an interim amount of additional "no-regrets" resource procurement at this time.

As identified in the Decision, the CAISO stated that "the SCE and SDG&E study results are consistent with the CAISO's findings. All of these studies show projected residual long-term local capacity needs ranging from 2,302-2,534 MW" (page 27). The Commission concluded that it would use the CAISO's models in this decision as the basis for determining authorized procurement.

As the Decision identified with regard to the type of resources to procure, in D.13-02-015, Finding of Fact 30, the Commission stated: "It is necessary that a significant amount of this procurement level be met through conventional gas-fired resources in order to ensure LCR needs be met." "There is nothing in the record of Track 4 of this proceeding that would require a change to this Finding. While we strongly intend to continue pursuing preferred resources to the greatest extent possible, we must always ensure that grid operators are not potentially compromised by excessive reliance on intermittent resources and resources with uncertain ability to meet LCR needs" (page 90).

"In the Commission's RA proceeding (R.11-10-023), we are currently exploring the ability of various preferred resources and energy storage to meet LCR needs. The ISO is engaged in this effort as well. As this highly technical process develops, we will have a better idea of how such resources can be integrated with gas-fired resources to ensure reliability. In addition, we will learn more about the extent to which non-gas-fired resources can be used instead of gas-fired resources to meet LCR needs. Until this effort is better developed, we will take a prudent approach to reliability, while still promoting preferred resources to the greatest extent feasible. The prudent approach we take entails a gradual increase in the level of preferred resources and energy storage into the resource mix, to historically high levels" (page 90-91).

⁷ Pio Pico Amendment was approved in D.14-02-016.

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The Commission stated in its Decision (Page 95) that “SDG&E seeks to issue an all-source RFO or to contract bilaterally. SDG&E contends that moving forward on an expedited basis with a bilateral contract to address a portion of LCR need would support the policy goals of the State related to timely retirement of OTC facilities and would promote system reliability – the sooner new local resources are added to the portfolio, the lower the reliability risk. SDG&E expects that 50 to 120 MW will be procured from preferred resources and energy storage.”

As the Commission stated in the Order (page 96):

We approve SDG&E’s proposal to issue an all-source RFO or enter into bilateral contracts for the additional 500 – 800 MW authorized herein. SDG&E proposes that it procure preferred resources through specific proceedings dedicated to these resources. We agree that SDG&E should continue to follow the Commission’s requirements in other dockets; SDG&E already anticipates 407 MW will be procured in this manner. However, as with SCE, it is our intent that SDG&E should also pursue significant percentages of procurement to replace SONGS through preferred resources, energy storage and consistency with Loading Order. Therefore, SDG&E shall ensure that no less than 200 MW of procurement authorized by this decision is from preferred resources or energy storage. This amount is higher than the 120 MW of preferred resources SDG&E recommends in this proceeding. We believe the record shows that SDG&E’s recommendations are conservative. To the extent that SDG&E seeks to procure incremental preferred resources and energy storage (beyond those already expected to be procured elsewhere) through other procedural vehicles authorized by the Commission, it must delineate this process in its procurement plan”.

In its decision, the Commission ordered with regard to procurement requirements for SDG&E:

1. At least 25 MW of capacity must be procured from energy storage resources;
2. At least 175 MW of capacity must be procured from preferred resources consistent with the Loading Order of the Energy Action Plan;
3. Subject to the overall cap of 800 MW, up to 600 MW of capacity, beyond the amounts specified to be procured in (1) and (2) above, may be procured through any set of resources appropriate to meet LCR needs in the SDG&E territory, consistent to the extent feasible with the Loading Order of the Energy Action Plan (in addition to resources already required to be procured or obtained by the Commission through decisions in other relevant proceedings) (page 97 and Order page 143).

Assuming SDG&E procures 175 MW from Preferred Resources and 25 MW from Energy Storage, the additional 600 MW of resources could be procured from any resource. Presumably, SDG&E has decided to procure the maximum capacity of 600 MW in this category via a bilateral contract with the Carlsbad Energy Center project.

D. Outreach Activities

SDG&E negotiated the agreement as a bilateral contract rather than selecting the project through a solicitation process. However, the IE inquired on several occasions whether SDG&E did any assessment of the availability of other potential generators to meet all or a significant portion of the capacity provided under the contract with Carlsbad Energy Center. The IE indicated to SDG&E that he was concerned about the lack of a market test for such a large contract increment. The IE suggested that SDG&E could perhaps issue a Solicitation of Interest to assess whether there was other generating capacity options that could be available in the timeframe (i.e. prior to 2018) required for this resource. The IE was informed that SDG&E had conducted an informal review and inquiry of known market participants who may be interested in developing generating projects or offering to sell capacity to meet SDG&E's requirements beginning in 2018. The general response from these known market participants was that there were no projects under development that could meet a 2018 in-service date. SDG&E informed the IE that it asked any project developer who called or visited whether they could meet a December 2017 in-service date deadline to allow Encina to meet its OTC scheduled deadline for shut down and discovered that if any projects were available to meet the deadline they would not have had nearly enough available capacity to allow Encina to retire on December 31, 2017. While some participants indicated they could potentially meet a late 2018 or later in-service date, none were optimistic of meeting a late 2017 or early 2018 date. Also, these projects were made up of 50 MW to 100 MW projects located around Otey Mesa and the Pio Pico location, thus potentially over loading SDG&E's southern area. Based on the response from these known market participants, SDG&E concluded that the Carlsbad Energy Center project was the only reasonable alternative to meet a late 2017 or early 2018 capacity requirement as a reasonable replacement for the Encina capacity and to meet requirements in the San Diego area.

E. Description of the Carlsbad Energy Center Contract Negotiation Process

As noted, SDG&E and Carlsbad Energy Center initiated negotiations of the Agreement in November 2013. The starting point for negotiations was SDG&E's standard proforma Tolling Agreement, which incorporated upgrades associated with the Quail Brush and Pio Pico PPTA's.

Upon selection as IE in January 2014, SDG&E and Merrimack Energy held a discussion regarding the status of the project and the contract negotiation process. SDG&E informed the IE that its objective was to complete contract negotiations with NRG for the Carlsbad Energy Center project by the end of January 2014.

The first contract negotiation session between the parties attended by the IE was on January 8, 2014. [REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

NRG provided a contract turn on January 17, 2014 which addressed several of the above issues and also included [REDACTED]

[REDACTED]

No pricing was included in the contract at this time. However, the IE inquired about the level of the capacity price being discussed as part of the negotiations and was informed by SDG&E that the initial pricing being discussed included a [REDACTED]

[REDACTED]

SDG&E held a PRG meeting on January 17, 2014. At the meeting, SDG&E provided a brief update to the PRG on the status of the NRG-Carlsbad Energy Center project. The key points noted by SDG&E included:

⁸ [REDACTED]

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- SDG&E noted that it was in the early stages of negotiations with NRG on a PPTA for the Carlsbad Energy Center project;
- NRG was able to reach an agreement with the City of Carlsbad where the City will now support the project;
- NRG will refile its approved CEC application to change the technology from the 558 MW combined cycle natural gas fired power plant to a 600 MW natural gas fired peaking facility (6 GE LMS100 units).

SDG&E and NRG met again on January 21 and 22, 2014 for continued contract negotiation discussions. The topics discussed included:

[REDACTED]

SDG&E provided a contract turn on January 23, 2014. Additional issues addressed in the contract turn included:

[REDACTED]

The parties held another negotiation session on January 23, 2014. One of the primary topics discussed was [REDACTED]

[REDACTED]

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[REDACTED]

The next turn of the PPTA was provided by NRG on February 4, 2014. Contract changes were proposed in the following areas:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

A call was held on February 5, 2014 between NRG and SDG&E to discuss the PPTA. The focus of discussions moved to the operational characteristics of the project and the completion of Appendices. Also, one of the issues discussed was the deliverability status for the project. [REDACTED]

On February 9, 2014, the IE provided preliminary comments to SDG&E on the Carlsbad Energy Center contract negotiation process based on the February 4, 2014 PPTA draft. The IE concluded that the negotiation process had seemed reasonable with no major conflicts that could derail negotiations other than the traditional sticking points associated with most contract negotiation processes. [REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]
[REDACTED]
[REDACTED]

On February 21, 2014 SDG&E held its monthly PRG meeting and provided an update on the Carlsbad Energy Center project. SDG&E also included a table in the PRG presentation with a summary of the contract provisions. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] In addition, SDG&E provided updated information on the Carlsbad project to the PRG.

SDG&E noted that NRG was able to reach an agreement with the City of Carlsbad where the City will now support the Carlsbad Energy Center Project. According to the agreement, upon COD, it is anticipated that Encina units 1-5 will be retired and NRG will start the demolition of the existing Encina plant and the 400 foot tall stack, per NRG's agreement with the City of Carlsbad. NRG will refile their existing approved CEC application to change the technology from a combined cycle natural gas fired power plant to a natural gas fired peaking facility.

Subsequent to the PRG meeting, the IE and SDG&E's project lead discussed the status of negotiations and the next steps. SDG&E informed the IE that the major remaining issue to address is the [REDACTED]. Outside of that, the primary remaining work would be clean up of the PPTA and completion of the Appendices.

The next PRG meeting was held on March 21, 2014. At the meeting, SDG&E informed the PRG that SDG&E will be submitting its Gas-Fired Procurement Plan with the Energy Division by the date of the PRG meeting. Once approval of the plan is granted, SDG&E will file the Carlsbad PPTA.

SDG&E provided the IE with an Execution Version of the PPTA on March 21, 2014. The IE reviewed the PPTA and noted that the [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

A summary of the contract is provided in this section of the Report.

Power Purchase Tolling Agreement

The PPTA is a lengthy document that establishes the parameters of the agreement between SDG&E and Carlsbad Energy Center. Exhibit 1 below provides a description of several of the primary provisions of the PPTA.

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Exhibit 1: Summary of Key Provisions of PPTA Between SDG&E and Carlsbad

Provision and Reference	Description
Execution Date	[REDACTED]
Contract Capacity	633 MW; [REDACTED] [REDACTED] [REDACTED]
Product (Article 1.1)	[REDACTED]
Project (Article 1.2)	The project consists of six GE LMS100 natural gas-fired, simple cycle gas turbine generating units.
Project Location	Adjacent to the Encina Substation in Carlsbad California.
Term/Delivery Period (Article 2.8)	20 years – [REDACTED] [REDACTED] [REDACTED] [REDACTED]
Guaranteed Initial Delivery Date (Article 2.7)	November 1, 2017
Generating Units (Article 1.2.2)	The project consists of Generating Unit 1 and Generating Unit 2. [REDACTED] [REDACTED]
Pricing Provisions	
Capacity Payment (Appendix 9.2)	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
Variable O&M (“VOM”) Charge (Appendix 9.3)	[REDACTED]
Start-Up Fuel	[REDACTED] [REDACTED] [REDACTED]
Event of Default –	[REDACTED]

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Equivalent Availability Factor (Article 3.2)	[REDACTED]
Credit Requirements	[REDACTED]
Pre-Construction Period (Article 11.2.1)	[REDACTED]
Construction Period (Article 11.2.2)	[REDACTED]
Delivery Period (Article 11.2.3)	[REDACTED]
Fuel Manager	[REDACTED]
Fuel Manager (Article 14.1)	[REDACTED]
Transportation Contracts (Article 14.2)	[REDACTED]

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Contracted Marketer (Article 14.3)	[REDACTED]
Gas Delivery Charge (Article 14.6)	[REDACTED]
Conditions Precedent ("CP")	[REDACTED]
Obligations of the Parties (Article 2.3)	[REDACTED]
Seller's Obligations (Article 2.3.1)	[REDACTED]
Conditions Precedent	[REDACTED]

(Section 2.4)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

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	<ul style="list-style-type: none">• [REDACTED]• [REDACTED]
Remedies (Section 3.3)	[REDACTED]
Calculation of Termination Payment (Section 3.4)	[REDACTED]
First Priority Security Interest (Section 11.4)	[REDACTED]

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	<p>[REDACTED]</p>
Consent to Collateral Assignment (Section 12.1)	<p>[REDACTED]</p>
Seller's Covenants Negative (Section 22.4.3)	<p>[REDACTED]</p>

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	[REDACTED]
Appendices – Operational Performance Parameters	
Contract Capacity – Appendix 1.1.1	[REDACTED]
Guaranteed Heat Rate	[REDACTED]
Operating Restrictions	[REDACTED]
Guaranteed Ramp Rate	[REDACTED]

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	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
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As described above, the contract negotiation process between the Parties regarding the Carlsbad Energy Center PPTA involved extensive negotiations and discussions over a limited period of time. The parties worked very diligently and aggressively to get the contract completed. To accomplish completion of the PPTA over a short period of time reflects several tradeoffs to address risk sharing among the parties. This section of the report will therefore address some of the important risk sharing provisions of the contract.

With regard to pricing, the Carlsbad Agreement contains [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

F. Issues Assessment Associated with the Carlsbad Energy Center Project

The IE has identified several issues for review and assessment as identified in D.14-03-004 that arise in assessing the decision by SDG&E whether the procurement via a bilateral contract for a nominal capacity of 600 MW from the Carlsbad Energy Center for delivery beginning in late 2017 is in the public interest or whether there are other options that could be pursued. Potential questions and issues for consideration include:

- Is the cost of power via the bilateral contract with Carlsbad Energy Center reasonable and in the best interest of customers?
- Is it feasible to issue an RFP in time to provide the proposed capacity requirements necessary to replace all or a portion of the capacity from the Encina units beginning in the 2017 – 2018 timeframe?
- Is there evidence of competitive alternatives which would be reasonably available and viable to provide all or a portion of the level of capacity required in 2017 – 2018?
- Would it be possible and economic to contract for a lower amount of MW from Carlsbad (e.g. 400 MW from Unit 1) to meet a lower limit of capacity identified by the Commission by 2018 and put an additional 200 MW out to bid? Would Carlsbad be willing to offer a smaller project initially with the possibility of contracting the other 200 MW at a later date if the market is not able to provide the capacity at a reasonably competitive price? Is a phase-in of the units possible

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given that there are multiple units at the same site? What is the cost? Is it reasonable to expect that a solicitation process could be accomplished and resources selected, contracts negotiated and projects financed and constructed to meet a 2018 – 2022 in-service date?

1. Economic Analysis of the Carlsbad Energy Contract

This section of the report focuses on an assessment of the contract pricing and operational parameters of the Carlsbad Energy Center contract relative to benchmark options to assess the reasonableness of contract pricing. While the preference of the CPUC, the IE and other market participants is to use a competitive procurement solicitation process as a truer test of the competitive market price, such information is not available to allow for a consistent price comparison. While CPUC policy generally requires the utility to demonstrate that any contracts entered into on a bilateral basis should be competitive with the pricing for shortlisted offers from recent solicitations, this process is challenged by the lack of recent data from conventional resource solicitation processes. The most recent competitive economic data available is the pricing of the Pio Pico contract that was selected in SDG&E's 2009 RFO. While Merrimack Energy has used benchmark generation cost data for other similar resources to conduct market studies when applicable, such analysis is affected by local cost issues, labor costs, tax rates, permitting requirements, consistent technology comparisons, availability of similar information, the timeliness of available information, land use status (i.e. Greenfield or brownfield project) and size considerations. As a result, Merrimack Energy's assessment of the reasonableness of the cost of the Carlsbad Energy Center Agreement will be based on a comparison of the cost of the Pio Pico contract relative to the Carlsbad Energy Center contract as well as a comparison of the costs relative to studies completed for other ISO's on the Cost of New Entrants ("CONE Studies") as a guide for the reasonableness of costs only. Since LMS100 units are generally the preferred resources for systems where intermittent resource integration is a major consideration, the focus of this assessment will be on a comparison of these units.

For purposes of this analysis Merrimack Energy has compared the pricing of the Carlsbad Energy Center contract with the pricing in the Pio Pico contract. In addition, the IE has conducted an assessment of the estimated cost of GE LMS100 units based on benchmark studies completed by third party consulting and engineering firms and public sector organizations.⁹

Pricing of the Carlsbad Energy Center and the Pio Pico Energy Center Contracts

⁹ Merrimack Energy notes that it is difficult to compare capital costs and project pricing for even the same or similar units based on studies conducted in other parts of the country because of the different cost structures in different states and regions driven by different tax rates, labor costs, land costs, permitting requirements, regulatory requirements, and other factors that could influence cost differentials. Nevertheless, this analysis will focus on the reasonableness of the pricing of the Carlsbad Energy Center contract relative to other cost estimates for generally the same technology as a "reasonableness" standard only.

[REDACTED]

Exhibit 2: Pricing Parameters of the Carlsbad Energy Center and Pio Pico Contracts

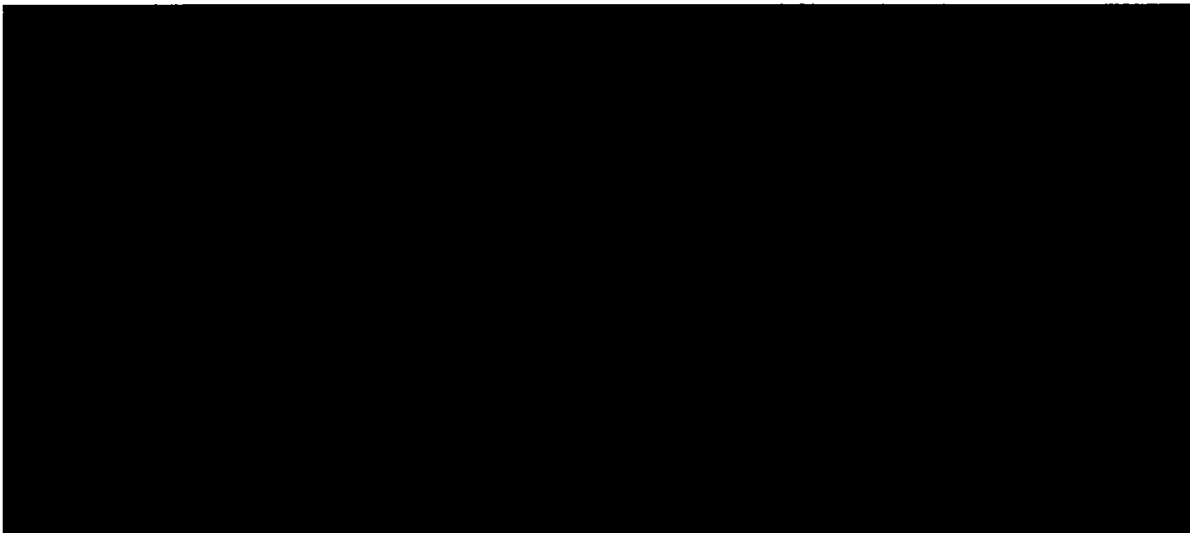
[REDACTED]



Exhibit 3

The content of Exhibit 3 is redacted with multiple horizontal black bars of varying lengths, obscuring the data and structure of the table.

Exhibit 3: Projection of Costs for the Carlsbad and Pio Pico Contracts



10

A line of text is redacted with a long black bar, with a small portion of the text visible at the end.



The IE also attempted to identify LMS100 benchmark cost information in areas of the US where the cost structure may be similar to Southern California. Two potential areas where the cost structure and market structure may be similar would be ISO New England (ISO-NE) and the New York ISO (NYISO). The IE found that cost of a new entrant in New England is expected to be based on an LMS100 unit while the NYISO is relying on the cost of a Siemens SGT6-5000 F Class simple cycle combustion turbine (F class frame unit) as the new entrant.

With regard to benchmark costs in New England, in a presentation on the results of its study on the net CONE costs for the ISO New England market (Net CONE for the ISO-NE Demand Curve 3rd Response to Stakeholders Comments and Draft Proposal – February 27, 2014), the Brattle Group provided its assessment on the cost estimates for two specific technologies to establish the Net CONE prices for ISO-NE. The Brattle Group stated that the objective of this assessment is to estimate the Net CONE that supports prices just high enough to attract sufficient new investment to meet resource adequacy objectives. The analysis considered the costs of a GE LM6000 and a GE LMS100 unit as the two new entrant options. The analysis concluded that the gross CONE cost of an LMS100 unit is \$18.40/kW-month compared to the cost of an LM 6000 of \$21.10/kW-month. The gross CONE value for the LMS100 is based on a \$2018 overnight capital cost of \$1,705/kW installed and included a Carrying Cost (i.e. Capacity Cost) of \$15.50/kW-month and a Fixed O&M charge of \$2.90/kW-month for a total of \$18.40/kW-month.¹¹ From there, the Brattle Group estimated the Net CONE (Gross CONE adjusted for energy and ancillary service margin and other cost adjustments) to be \$17.85/kW-month or \$214.20/kW-year,¹² [REDACTED]

The Brattle Group also noted that the Capital Cost for the LMS100 units based on the results of a solicitation conducted by the Connecticut utilities was \$1,449 in \$2013, but with lack of details on equipment pricing, owner's costs, inventory costs and financing costs. Also, the study includes an assessment whereby estimated capital costs would be 3-6% lower for a brownfield location relative to a greenfield location.

¹¹ The assumptions underlying the cost analysis include: (1) no network upgrade costs required; (2) estimated electric interconnection costs of \$7.1 million in \$2013; (3) Cost of debt of 7% and cost of equity of 13.8%; (4) Debt/Equity ratio of 60%/40%; (5) Composite tax rate of 40.5%; (6) WACC of 8%.

¹² The Gross CONE cost at \$18.40/kW-month results in an annual cost of \$220.80/kW-year.

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Another study prepared for the NYISO by NERA and Sargent and Lundy entitled “Proposed NYISO Installed Capacity Demand Curves For Capability Years 2014/2015, 2015/2016, and 2016/2017” (Draft Report 8/19/2013) presents high level capital cost information for LMS100 units in several zones in NYISO as a point of comparison in another high cost market. According to the study, LMS100 capital costs range from a low of \$1,332/kW (2013\$) in Zone C Syracuse to a high of \$1,858/kW (2013\$) in New York City. Total capital cost for an LMS100 unit for Zone K Long Island is estimated to be \$1,701/kW (2013\$). If these capital costs increase annually by the estimated rate of inflation of 2.5%, capital costs would range from \$1,500/kW for Zone C Syracuse to \$2,100/kW for New York City in 2018\$, compared to the ISO-NE estimated capital cost for an LMS100 project of \$1,705/kW in 2018\$.

The California Energy Commission issued a Draft Staff Report entitled Estimated Cost of New Renewable and Fossil Generation in California in May 2014. The study provided cost information on a number of generating technologies, including LMS100 units, which are classified in the Advanced Simple Cycle technology category in the report. While the report does not calculate the levelized capacity charge and fixed O&M charge as is reported for other reports, the report does include capital cost information for each technology, O&M costs and levelized costs on a \$/MWh basis based on an expected capacity factor for each technology.

The report provides a low, mid, and high cost estimate for a 200 MW Advanced CT project in 2013 dollars, with an estimated capital cost of \$632/kW installed for the low case, \$1,141/kW for the mid case and \$1,848/kW for the high case, assuming the project was developed by a third-party independent (i.e. merchant) generator. The report also includes Fixed O&M costs for Advanced CT technology option in 2013 dollars for the same three cases.

Exhibit 4 includes the Installed Capital Costs and Fixed O&M Costs for an Advanced CT technology option in 2013 dollars as reported by the CEC as well as an estimate in 2018 dollars to be consistent with other benchmark options. The 2018 costs assume a 2.5% annual average escalation rate to reflect the rate of inflation.

Exhibit 4: CEC Benchmark Cost Estimates

Case	Installed Cost (\$/kW – 2013\$)	Installed Cost (\$/kW – 2018\$)	Fixed O&M Cost (\$/kW-year – 2013\$)	Fixed O&M Cost (\$/kW-year – 2018\$)
Low Cost Case	\$632	\$715	\$8.93	\$10.10
Mid Cost Case	\$1,141	\$1,291	\$25.24	\$28.56
High Cost Case	\$1,848	\$2,090	\$69.90	\$79.08

Table 56 in the CEC report presents levelized costs in \$/MWh (in Nominal 2013\$) for each technology option broken down into fixed costs (including Capital and Financing,

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Insurance, Ad Valorem, Fixed O&M, and Taxes). The analysis also assumes a 7.5% capacity factor. [REDACTED]

The IE has also served as IE in solicitations in other regions of the country where bids for projects using the LMS100 technology have been submitted. The IE has generally found that the capacity related costs (capacity and fixed O&M costs) have been lower in other regions of the US than in California, although the CEC's low installed cost case is much lower than witnessed recently in any other market.

2. Timeframe for Issuing an RFP to Solicit Competitive Offers

Although D.14-03-004 allows SDG&E to enter into a bilateral contract for the additional 500 – 800 MW authorized in the Track 4 Decision, the IE is generally of the view that issuing an RFP or RFO to meet resource needs should be the default option and contracting bilaterally should be the fall back position if unique options exist or if it is not feasible time wise or based on some other reason to issue an RFP. As a result, this assessment focuses on the time available for conducting an RFP process for soliciting and selecting offers to meet local capacity requirements in the 2018 timeframe to compete with the Carlsbad Energy Center project to meet capacity needs due to the retirement of the Encina units.

The IE conducted a similar assessment for the analysis of the Pio Pico contract amendment report completed in June 2013 and concluded that there would not be sufficient time to issue an RFP, evaluate and select proposals, negotiate contracts, secure Commission approval and construct a gas-fired project on time to meet a late 2017 or early 2018 in-service date. Obviously, based on the passage of approximately one year since the analysis was completed, there is even a less likely chance to complete a solicitation process for up to 800 MW of generating capacity, energy efficiency or storage options in such an expedited timeframe.

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

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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).

In addition, SDG&E’s 2009 RFO, which was issued in June, 2009 took five years from issuance of the RFO to the projected initial delivery date of the Pio Pico contract, not counting the time necessary to develop the RFO.

The Preliminary Reliability Plan for LA Basin and San Diego (“Preliminary Reliability Plan – Draft August 30, 2013”) prepared by the Staff of the California Public Utilities Commission, California Energy Commission, and California Independent System Operator, Draft August 30, 2013 further elaborated on the time required to construct new generation in California.

“Recent experience has shown that it can take seven years or more for new generation (including repowering existing generation) to be permitted and built. In light of the long lead times required that may not sync up well with procurement authorization and purely independent generation development, generation development contingency options are currently under consideration. Both SCE and SDG&E are looking into beginning to license sites in their service areas that would then be made available to independent generators under a competitive solicitation process based on identified and pre-determined resource needs. (pages 5-6)

Thus, the IE would expect that a lead time of five to nine years is reasonable, with the lower level estimate likely only assuming that there are no delays in any of the key milestones associated with the process and that the project developer generally absorbs risks by expediting project milestones.¹³ At the current time, if SDG&E were to issue an RFP within the next month or so to include gas-fired generation options, there is only a 4.5 year window to complete a solicitation in time to ensure a January 1, 2018 commercial operation date. Given the long lead time to solicit proposals and the time to construct new power generation projects in California, completing a solicitation process that would lead to the construction of a significant block of new generation to replace the Encina capacity is a risky option at this point. Perhaps, some of the considerations identified in the Preliminary Reliability Plan will offer opportunities to reduce the power project development cycle timeline, but such options are likely to be reasonable for longer-term requirements, not for nearer-term requirements to meet a 2018 need.

3. Relationship Between the Decision to Retire the Encina Units and the Need for New Capacity

Another issue identified by the IE is whether there is a required correlation between the expected closure of the Encina units in 2017 and the timing of need for new generation to

¹³ 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.

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essentially replace the Encina units to maintain reliability for 2018 and beyond. In other words, is the proposed Carlsbad project a necessary “replacement” given the location of the units or are there other options that could be considered?

The Preliminary Reliability Plan for LA Basin and San Diego prepared by the Staff of the California Public Utilities Commission, California Energy Commission, and California Independent System Operator (Draft August 30, 2013) raised a number of options for near term and longer-term needs to meet reliability in the face of the closure of the San Onofre nuclear generating station in June 2013 and timeline associated with the enforcement of the closure of Once-Through Cooling units by 2018. The Reliability Plan defined the challenges associated with maintaining reliability in southern California:

“While resources are expected to be adequate in the remainder of California, the closure of San Onofre creates unprecedented challenges for maintaining reliable electric service to consumers located in the southern region of California. Additionally, the reliability risks created by the regulatory timeline for eliminating the use of once-through cooling (OTC) in the coastal areas’ aging, inefficient gas-fired power plants (5,086 MW) and load growth in southern California of about 400 MW/year are also considered in this preliminary plan. These are large numbers and involve a complex mix of regulatory challenges.

San Onofre represented approximately 16% of the local electricity generation supply, serving an average of 1.4 million homes served by SCE, SDG&E, and City of Riverside in southern California. In addition to meeting essential energy needs, it was especially important because of its location on a critical transmission path between Orange County and San Diego. As a result, its closure creates more than a shortage of electricity. It also creates a shortage of voltage support.

Complicating the challenge of replacing resources that came from San Onofre is the nature of voltage support, which can only be supplied by conventional generation, combined heat and power, or specialized equipment such as synchronous condensers that operate like large electric motors.”

The Preliminary Reliability Plan identified several options to meet reliability needs in the nearer term including authorizing additional conventional resources to replace Encina.¹⁴

A CPUC Long Term, Procurement Proceeding (LTPP) decision is expected in early 2014 to address reliability needs in the LA Basin and San Diego. This

¹⁴ The Preliminary Reliability Plan identified three action items: (1) Consider the procurement/development of about 3,250 MW of preferred resources – local energy efficiency, demand response, renewable generation, combined heat and power, and storage – for a target of about 50% of need; (2) Consider the procurement/development of transmission, including infrastructure that provides voltage support or enhances resource sharing between Orange County and San Diego, and the procurement/development of about 3,000 MW of conventional generation to meet the remaining needs in the region, including load growth; and (3) Establish backstop permits so that once-through cooling requirements can be quickly deferred and/or generation resources can be quickly deployed in the event needed resources in (1) or (2) are not fully developed on a schedule to meet reliability needs.

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decision should provide procurement authorization beginning in 2016 to address the need resulting from the Encina facility's 2017 OTC compliance deadline. **There may be a variety of options considered to meet the needs caused by the retirement of Encina (950 MW).**¹⁵ One option frequently discussed is the development of a new power plant referred to as Carlsbad Energy Center. This would replace units 1-3 and the remaining Encina units (Units 4 and 5 with a combined capacity of 630 MW) would be retired in accordance with the OTC compliance schedule. In May of last year (i.e. 2012), the Carlsbad Energy Center received the CEC approval of the project's Application for Certification (AFC).¹⁶ At this time, there are no power purchase agreements (PPA) pending for the proposed repowering project for Carlsbad Energy Center.

With regard to other options besides Carlsbad, the Track 4 Decision concluded with regard to transmission:

"There is not enough information available at this time to make a specific finding that any transmission project will be able to reduce the LCR need in the SONGS service territory by 2022. Partially, this is because the ISO's 2013/2014 LTPP is not yet final. Beyond this, there are various approval and permit processes – as well as public input – before construction can begin. The construction process can take several years, and is subject to significant delay. We find that there is a reasonable possibility that at least one of the transmission solutions examined by SCE and SDG&E will be operational by 2022. The least complex of these projects is the Mesa-Loop-In project, which is therefore the most likely to meet this timeframe (page 52)."

The Track 4 Decision also discussed the transmission option with regard to the determination of SDG&E's authorization to procure resources:

"We authorize SDG&E to procure between 500 and 800 MW. The greater maximum amount for SDG&E reflects several factors. First, SDG&E's recommendations include assumptions for transmission lines which we do not accept as reasonably likely (unlike the Mesa Loop-in for SCE). Second, even with its transmission assumptions, SDG&E's studies show a need for at least 1,028 MW in its territory by 2022. After assuming the Pio Pico plant, SDG&E shows a need for at least 728 MW in its territory. Third, as discussed below, we will require SDG&E to procure more preferred resources than the 120 MW it contends are achievable (on top of 408 MW of preferred resources SDG&E expects to

¹⁵While the Preliminary Reliability Plan addressed the Carlsbad Energy Center option, no other specific options were identified. However, presumably other generation options, such as procurement of preferred resources and transmission options could be considered. The purpose of this assessment is to assess whether such options are reasonable and possible in the timeframe allotted to meet the 2018 near-term need date.

¹⁶The CEC approved the original project application for construction of a gas-fired combined cycle facility for the Carlsbad Energy Center. However, the configuration of the project has changed to a peaking unit relying on six LMS100 units. As a result, the Carlsbad Energy Center will be required to reapply for CEC approval.

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procure through other proceedings). In light of all these factors, it is appropriate and prudent to allow SDG&E to procure up to 800 MW at this time to avoid under-procurement (page 85).”

As background, the strategy for the Encina Units has been defined in information submitted to the State Water Resources Control Board. The Encina Power Station is owned and operated by Cabrillo Power I LLC (“Cabrillo”).¹⁷ 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 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.¹⁸ 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, 2017.¹⁹

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.

4. Relationship Between Carlsbad and Preferred Resources

¹⁷ 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.

¹⁸ 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.

¹⁹ 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.

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Both the Track 4 procurement plans and the Preliminary Reliability Plan discuss the range of resource amounts between gas-fired and preferred resources. Specifically, the Track 4 Plan states that SDG&E is required to procure at least 200 MW and may procure up to the full 800 MW of authorized additional capacity from preferred resources or energy storage. While SDG&E proposes to contract for over 600 MW from the Carlsbad project, other options may be possible to assess what range of capacity is most beneficial to consumers.

The IE has raised some concerns about the Carlsbad decision since the decision has not been guided by any market test or evaluation results prior to negotiating the Carlsbad contract. The IE originally raised a concept with SDG&E to issue a Solicitation of Interest as a market test. However, based on its LTTP/Track 4 Procurement Plan for Preferred Resources filing, SDG&E now plans to issue a Preferred Resources RFO in the third quarter for up to 200 MW to be delivered by 2021. The plan states that SDG&E will submit a short list for approval by first quarter 2015.

One option posed by the IE was for SDG&E to contract for 400 MW from the Carlsbad facility with an option to take the next 200 MW if the results of the Preferred Resources RFO are not compelling or economic. Alternatively, perhaps Carlsbad could phase in the individual units (as it anticipates already) but over a longer period to allow sufficient time to assess the market.

In response to the IE's inquiry of SDG&E, the Company responded that all the capacity of the Carlsbad project is needed by January, 2018 because of the closure of the Encina project. The Encina project is located in a "sweet spot" on the system for reliability purposes and another unit at that site is the ideal solution. The need for new generation to replace Encina was the primary concern for SDG&E, and the company appeared reluctant to risk higher prices or any potential for less capacity to meet needs. [REDACTED]

[REDACTED]

G. Project Viability Assessment

From a project viability perspective the Carlsbad 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. Furthermore, the development efforts to date place Carlsbad in a favorable competitive situation relative to projects just getting started in the development process. These are identified and described below.

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- The project has received the approval of the City of Carlsbad. In accordance with an agreement between the City of Carlsbad, NRG, and SDG&E, the City of Carlsbad supported the construction of the Carlsbad Energy Center on the condition that NRG agree to retire and tear down the existing units 1-5 at the Encina plant, including the 400 foot stack.²⁰ Also, under the agreement SDG&E agreed to give a portion of its land west of the freeway to the City of Carlsbad. The City of Carlsbad also recognized the need to construct generation in the area with the shutdown of SONGS and preferred the construction of a peaking unit that did not operate frequently;
- Current projects on the site have existing CAISO queue positions and Large Generator Interconnection Agreements (“LGIA”) which may allow it to benefit from a shorter timeframe for its request to amend its LGIAs;
- The California Energy Commission (“CEC”) originally approved the Project’s Application for Certification on May 31, 2012 to construct a 558 MW natural gas-fired combined cycle facility. Carlsbad Energy Center will seek to amend its existing permit from the CEC to construct the facility to address the proposed change in technology from a combined cycle unit to a peaking unit using LMS100 technology. Carlsbad Energy Center stated that it expects to refile and expects the process to take 12-16 months;

The CEC Decision authorizing the initial structure of the Carlsbad Energy Center also identifies several benefits associated with the project:

- The project will utilize the Encina Power Station infrastructure to reduce environmental impacts and costs. The infrastructure at the Encina Power Station will support the Carlsbad Energy Center project with only minor new connections including to the existing high pressure natural gas, industrial/sanitary sewer, potable water, and the existing SDG&E 138kV and 230kV switchyards at the Encina Power Station;
- Accomplishes “brownfield” redevelopment of an existing power plant for a net increase in electrical generation capacity to support electrical system and local resource supply requirements in the San Diego area. The CPUC has a stated preference for brownfield power projects.

As a result, the project is more mature than other possible competitors with several key critical path items in place or fairly far along in the project schedule. In addition, the project now enjoys local and City support and facilitates the retirement of the Encina

²⁰ On January 14, 2014 the Carlsbad City Council signed off on an agreement which allows NRG to replace Encina with the Carlsbad Energy Center peaking plant. NRG also agreed to tear down the 400 foot smokestack associated with the Encina plant. Articles about the decision also cited the change to the San Diego energy landscape associated with the closure of SONGS and the need for peaking capacity in the area. Articles also cite a preference for peaking capacity as opposed to the original plan to replace Encina with a combined cycle unit.

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Power Station. Overall, there appears to be a number of positive factors from a project viability standpoint that benefit the project.

H. Conclusions

The IE has reached the following conclusions regarding the PPTA between SDG&E and Carlsbad Energy Center:

1. The option selected by SDG&E to pursue bilateral negotiation of a PPTA with Carlsbad Energy Center is a reasonable decision given the Track 4 Decision and the mandate to retire OTC units in Southern California. The decision represents the most secure decision that would result in development of generating capacity in the San Diego area;

2. While the pricing provisions of the PPTA appear to be [REDACTED]
[REDACTED]
[REDACTED] competitive pricing information is limited. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

3. While implementation of a robust competitive solicitation process is the best means to assess the availability of generation options and competitive market prices, it is not likely that a solicitation process could be undertaken in sufficient time to meet the projected requirements by 2018. SDG&E's initiative to issue an RFO for Preferred Resources in the third quarter of 2014 may provide some guidance regarding the availability of resources and the competitive prices from these options. Such information may be available before a final Commission decision is rendered on the Carlsbad Energy Center PPTA;

4. SDG&E acted in an appropriate, fair and unbiased fashion in its negotiations with Carlsbad Energy Center. The parties negotiated aggressively but fairly. 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 that generally balances risk and adequately protects the interests of customers;

I. Recommendations

For the reasons stated in this report, the IE concludes that the decision of SDG&E to reach a contractual agreement for the output from the Carlsbad facility is a reasonable decision. The IE has some uncertainty regarding the size for the project. While it would appear that 400 – 600 MW will be a reasonable outcome for Carlsbad, the conduct of an

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RFO for Preferred Resources may provide competitive pricing and project location information to assess project value at the full capacity selected. The IE also recognizes that should other projects prove economic and feasible for an early 2018 in-service date, any reduction in project size will likely result in higher contract prices for the power that would need to be factored into any decision on the contract amount. Ideally, the timing for the Preferred Resources RFO will provide guidance for the appropriate amount of power from Carlsbad and from Preferred Resources.

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Appendix E
(Redacted in its Entirety)

Carlsbad Energy Center PPTA

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Appendix F
(Redacted in its Entirety)

Summary of Transmission Interconnection Costs

Appendix G

Settlement Agreement

**Between City of Carlsbad, the Carlsbad Municipal Water District,
Cabrillo Power I, LLC, Seller and SDG&E**

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SETTLEMENT AGREEMENT

DATED AS OF JANUARY 14, 2014

BETWEEN AND AMONG

THE CITY OF CARLSBAD,

CARLSBAD MUNICIPAL WATER DISTRICT,

CABRILLO POWER I LLC,

CARLSBAD ENERGY CENTER LLC

AND

SAN DIEGO GAS & ELECTRIC COMPANY

LIST OF EXHIBITS

Exhibit A	Legal Description of the Encina Site
Exhibit B	Map of the Encina Site
Exhibit C	Area Map of the Encina Site
Exhibit D	Form of NRG Support Letter
Exhibit E	Form of City Support Letter
Exhibit F	Form of Assumption of Obligations Agreement
Exhibit G	Form of Amendment
Exhibit H	Form of Memorandum of Agreement
Exhibit I	Form of Fossil Fuel Deed Restriction
Exhibit J	Legal Description of North Coast Services Center Site
Exhibit K	Map of North Coast Services Center Site
Exhibit L	Legal Description of Parcel 11
Exhibit M	Map of Parcel 11
Exhibit N	Legal Description of Cannon Park
Exhibit O	Map of Cannon Park
Exhibit P	Legal Description of Agua Hedionda North Shore Bluff Parcel
Exhibit Q	Map of Agua Hedionda North Shore Bluff Parcel
Exhibit R	Form of Guaranty
Exhibit S	Map of Encina Redevelopment Site
Exhibit T	Map of CECP Site

SETTLEMENT AGREEMENT

THIS SETTLEMENT AGREEMENT (this "Agreement") is entered into as of January 14, 2014, by and among the City of Carlsbad, a charter city, located in San Diego County (the "City"), and Carlsbad Municipal Water District ("CMWD"), Cabrillo Power I LLC and Carlsbad Energy Center LLC (collectively, "NRG"), and San Diego Gas & Electric Company ("SDG&E"). The City, NRG and SDG&E are sometimes referred to in this Agreement collectively as the "Parties" and individually as a "Party", except that SDG&E is a Party solely for purposes of Article 5 and Article 12. Unless otherwise defined in this Agreement, initially capitalized terms used in this Agreement shall have the meaning given them in Article 1 below.

The Parties are entering into this Agreement to resolve long-standing disputes between the City and NRG regarding the Carlsbad Energy Center Project ("CECP" or the "Project"), and to provide for the redevelopment of the site of the Encina Power Station. This Agreement, if and when it becomes effective according to its terms, provides for, among other things: (i) the retirement, decommissioning, demolition and removal of the Encina Power Station, (ii) the remediation and redevelopment of the Encina Redevelopment Site (as defined below), (iii) the permitting, construction and development of the CECP, (iv) the relocation and construction of the New Service Center (as defined below), and (v) other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.

RECITALS

THIS AGREEMENT is made with reference to the following facts and circumstances:

A. **WHEREAS**, NRG owns real property located in the City, in the County of San Diego, California, bounded generally by Cannon Road to the south, Interstate 5 to the east, the Agua Hedionda Lagoon to the north, and Carlsbad Boulevard to the west (the "Encina Site"). A legal description of the Encina Site is attached to this Agreement as Exhibit A, and a map of the Encina Site is attached as Exhibit B, provided that in the event of any inconsistency between the map and the legal description, the legal description shall control. Also attached, as Exhibit C, is a map of the area in which the Encina Site is located;

B. **WHEREAS**, at the Encina Site, NRG operates facilities known as Units 1-5 (individually a "Unit" and collectively the "Units," the "Encina Power Station" or the "Station") for the purpose of generating and selling electric power. The Encina Power Station is currently subject to a Resource Adequacy Agreement ("RA Agreement") and a Participating Generator Agreement ("Participating Generator Agreement") with the California Independent System Operator ("ISO");

C. **WHEREAS**, NRG filed an application for the construction and development of the CECP with the California Energy Commission (the "Commission") on or about September 2007 (Docket No. 07-AFC-06) (the "Application");

D. **WHEREAS**, the City conditionally opposed this Application;

E. **WHEREAS**, from 2007 through 2012 the Commission processed this Application and, in May of 2012, issued its Order (Order No. 12-0531-06) and Decision approving the construction and development of the Project subject to the conditions stated therein;

F. **WHEREAS**, the San Onofre Nuclear Generation Station (“SONGS”) ceased operation January 2012 and in June 2013 Southern California Edison determined that they would not recommence power generation at SONGS;

G. **WHEREAS**, the early closure of SONGS has caused an increased and accelerated need for power generation facilities in Southern California, and the ISO has determined that additional generating capacity is currently needed in the San Diego region;

H. **WHEREAS**, NRG and SDG&E have represented to the City that they are interested in entering into a tolling or power purchase agreement (“Proposed PPA”) for the Project but only if (i) SDG&E and NRG are able to come to mutually acceptable terms on the Proposed PPA and (ii) NRG amends its permits for the Project to allow a change in proposed technology (“Amendment”), and NRG has represented that it would amend its permits only if the City would be supportive of such an Amendment;

I. **WHEREAS**, the Amendment would request approval of a redesigned electrical generating facility that would have a smaller environmental footprint, lower profile, and lower stack heights, and would facilitate the retirement and removal of the Encina Power Station;

J. **WHEREAS**, on December 3, 2013, the City adopted a resolution that provides:

“That the City Council does hereby direct staff to negotiate with SDG&E and NRG in an attempt to reach a mutually beneficial agreement acceptable to all three parties, supporting a change in the proposed CECP technology conditioned upon the decommissioning, demolition, and remediation of the current Encina Power Station site, as well as other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.”;

K. **WHEREAS**, the City, NRG and SDG&E contemplate that SDG&E will relocate its North Coast Service Center provided that the cost of the proposed relocation and construction of the New Service Center be done in a manner which is cost-neutral to SDG&E and its ratepayers; and

L. **WHEREAS**, the Parties now wish to fully and finally resolve disputes involving the CECP and the Encina Power Station, by providing for, among other things: (i) the retirement, decommissioning, demolition, and removal of the Encina Power Station, (ii) the remediation and redevelopment of the Encina Redevelopment Site (as defined below), (iii) the provisions of the Amendment and the construction and development of the CECP, (iv) the relocation and construction of the New Service Center, and (v) other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.

AGREEMENT

ACCORDINGLY, to settle long-standing disputes and in consideration of the mutual covenants and agreements in this Agreement and for other good and valuable consideration, the receipt and adequacy of which are acknowledged, the Parties agree to the following terms and conditions:

ARTICLE 1

DEFINITIONS

1.1 Definitions

- (a) “Affiliate” means, with respect to a Person, any Person that directly or indirectly Controls, is Controlled by or is under Common Control with that Person.
- (b) “Agreement” shall have the meaning set forth in the opening paragraph of this Agreement.
- (c) “Amendment” shall have the meaning set forth in Recital H and set forth in Exhibit G.
- (d) “Application” shall have the meaning set forth in Recital C.
- (e) “Assumption of Obligations” shall mean the agreement in recordable form attached as Exhibit F.
- (f) “Attorneys’ Fees and Costs” means any and all reasonable attorneys’ fees, costs, expenses and disbursements, including, but not limited to, expert witness fees and costs, travel time and associated costs, transcript preparation fees and costs, document copying, exhibit preparation, courier, postage, facsimile, long-distance and communications expenses, court costs and the costs and fees associated with any other legal, administrative or alternative dispute resolution proceeding, fees and costs associated with execution upon any judgment or order, and costs on appeal.
- (g) “CEQA” means the California Environmental Quality Act.
- (h) “CECP” shall have the meaning set forth in the second opening paragraph of this Agreement.
- (i) “CECP Site” shall mean the approximately 30 acre site on which the newly constructed CECP will be situated and which is identified in the map attached as Exhibit T.
- (j) “City” shall have the meaning set forth in the opening paragraph of this Agreement.
- (k) “City Support Letter” shall have the meaning set forth in Section 3.4(b)(i).

(l) “CMWD” shall have the meaning set forth in the opening paragraph of this Agreement.

(m) “Commission” shall have the meaning set forth Recital C.

(n) “Control” means the power to direct the affairs or management of another Person, whether by contract, operation of law or otherwise. “Controlled by” and “Controlling” have correlative meanings. “Common Control” means that two Persons are both Controlled by the same other Person.

(o) “DOE” mean the United States Department of Energy.

(p) “Effective Date” shall have the meaning set forth in Section 2.3(b).

(q) “Electric Reliability Removal Conditions” means, for one or more Units of the Station, that:

(i) NRG has not received an order or determination from a federal, state or local governmental agency or authority, including, but not limited to, the ISO, with jurisdiction requiring NRG to continue operating a Unit or Units at the Station or finding that a Unit or Units are necessary for reliability, thereby preventing the shutdown of one or more Units; and

(ii) NRG has obtained any necessary approvals for the Shutdown, including from the ISO, the California State Water Resources Control Board, and the San Diego County Air Pollution Control District.

(r) “Encina Power Station” shall have the meaning set forth in Recital B.

(s) “Encina Redevelopment Site” shall mean the area comprising the Encina Site, excluding, however, the CECF Site. The Encina Redevelopment Site will be subject to future redevelopment and a map of the area is identified on Exhibit S.

(t) “Encina Site” shall mean the entire approximately 95 acre site currently occupied by the Encina Power Station, exclusive of the SDG&E switchyard, and which is identified on Exhibits A, B, and C.

(u) “EPC Contract Notice to Proceed” shall have the meaning set forth in Section 5.4(b).

(v) “Event of Default” shall have the meaning set forth in Article 7.

(w) “Excluded Transfer” shall mean:

(i) any Transfer to an Affiliate of NRG, provided that NRG Energy, Inc. continues to guarantee performance of NRG’s obligations under the Guaranty;

(ii) any Transfer of an easement or license over a portion of the Site, that would not allow the Transferee to use that portion of the Site to generate electricity with equipment or machinery that is powered by the combustion of fossil fuels and which would not otherwise interfere with NRG's ability to perform its obligations under this Agreement;

(iii) After demolition and removal of above-ground structures in satisfaction of Section 6.1, any Transfer of an interest, in addition to an easement or license, over a portion of the Site, provided that such Transfer would not allow the Transferee to use that portion of the Site to generate electricity with equipment or machinery that is powered by the combustion of fossil fuels and which would not otherwise interfere with NRG's ability to perform its obligations under this Agreement; and

(iv) any condemnation or exercise of eminent domain authority, whether whole or partial, by a governmental authority or other entity with statutory authority under state law to exercise eminent domain authority.

(x) "Existing Deed of Trust" means any deed of trust securing the Existing Secured Loan and encumbering the site.

(y) "Existing Secured Loan" means the term loan and revolving credit facility under the credit agreement, dated as of July 1, 2011 as amended or modified from time to time, among NRG Energy, Inc., as borrower, the several banks and other financial institutions or entities from time to time parties to the credit agreement, Morgan Stanley Senior Funding, Inc. as syndication agents, and CitiCorp North America, as administrative agent and collateral agent, which loan is secured by the Existing Deed of Trust.

(z) "Existing Secured Loan Parties" means the several banks and other financial institutions or entities that are from time to time parties to the existing secured loan, Morgan Stanley Senior Funding, Inc., as syndication agents, and Morgan Stanley Senior Funding, Inc., as administrative agent and collateral agent, and any of their successors and assigns, including any person receiving an interest in the site or the member interests of NRG from any of the foregoing as a result of their exercise of any of their rights or remedies under the Existing Secured Loan.

(aa) "Feasibility Studies" shall have the meaning set forth in Section 5.3(a).

(bb) "FERC" means the Federal Energy Regulatory Commission or any successor.

(cc) "Final Shutdown Date" means the earlier of (a) midnight of December 31, 2017 or (b) the commercial operation date of CECP (as such term is defined under the facility's PPA).

(dd) "Fossil Fuel Restriction" shall have the meaning set forth in Section 3.5.

(ee) "Guaranty" shall have the meaning set forth in Section 2.5.

(ff) "Indemnified Parties" means the City (including, but not limited to, all of its respective boards, commissions, departments, agencies and other subdivisions), all Agents of the City, and their respective heirs, legal representatives, successors and assigns, and each of them.

- (gg) “Indemnify” means indemnify, protect, defend and hold harmless.
- (hh) “Independent Guaranty Amount” shall have the meaning set forth in Section 2.5(a).
- (ii) “IODs” shall have the meaning set forth in Section 2.4(b).
- (jj) “ISO” shall have the meaning set forth in Recital B.
- (kk) “ISO Tariff” shall mean the tariff of the ISO, as it may be amended, supplemented, or replaced (in whole or in part) from time to time.

(ll) “Laws” shall mean all present and future applicable laws, ordinances, rules, regulations, permits, authorizations, orders and requirements, whether or not in the contemplation of the Parties, that may affect or be applicable to the Encina Site or any part of the Encina Site (including, without limitation, any subsurface area), or the use of the Encina Site and the buildings and improvements on or affixed to the Encina Site, including, without limitation, all consents or approvals required to be obtained from, and all rules and regulations of, and all building and zoning laws of, all federal, state, county and municipal governments, and their departments, bureaus, agencies or commissions, authorities, board of officers, or any other body or bodies exercising similar functions, having or acquiring jurisdiction of the Encina Site, and similarly the term “Law” shall be construed to mean the same as the above in the singular as well as the plural.

(mm) “Loss” or “Losses” when used with reference to any indemnity means any and all claims, demands, losses, liabilities, damages (including foreseeable and unforeseeable consequential damages to the extent arising from third party claims), liens, obligations, interest, injuries, penalties, fines, lawsuits and other proceedings, judgments and awards and costs and expenses (including, without limitation, reasonable Attorneys’ Fees and Costs, and consultants’ fees and costs) of whatever kind or nature, known or unknown, contingent or otherwise.

(nn) “Memorandum of Agreement” shall have the meaning set forth in Section 2.2(a) of this Agreement.

(oo) “New Service Center” shall refer to the new service center to be constructed in connection with the North Coast Service Center as set forth in Section 5.1(b).

(pp) “New Service Center Location” shall have the meaning as set forth in Section 5.2(a).

(qq) “North Coast Service Center” shall refer to the existing facility that is owned by SDG&E and that is located at the current North Coast Service Center Site.

(rr) “North Coast Service Center Site” shall refer to the current location of the North Coast Service Center located at the corner of Cannon Road and Carlsbad Boulevard. A legal description of the current property is attached hereto as Exhibit J, a map of the current property is attached hereto as Exhibit K.

(ss) “North Coast Service Center Redevelopment Site” shall mean the area comprised of the North Coast Service Center Site, Cannon Park, and the Agua Hedionda North Shore Bluff Parcel.

(tt) “NRG” shall have the meaning set forth in the opening paragraph of Agreement.

(uu) “NRG Support Letter” shall have the meaning set forth in Section 3.4(a)(ii).

(vv) “NSC Cost Cap” shall have the meaning set forth in Section 5.4(a).

(ww) “NSC Costs” shall have the meaning set forth in Section 5.4(a).

(xx) “Official Records” means the official records of the City and of the County of San Diego, California.

(yy) “Party” or “Parties” shall have the meanings set forth in the opening paragraph of this Agreement.

(zz) “Person” means any individual, partnership, corporation (including, but not limited to, any business trust), limited liability company, joint stock company, trust, unincorporated association, joint venture or any other entity or association, the United States, or other federal, state or local governmental entity.

(aaa) “Petition to Amend” shall have the meaning set forth in Section 6.1.

(bbb) “Project” shall have the meaning set forth in the opening paragraph of this Agreement.

(ccc) “Proposed PPA” shall have the meaning set forth in Recital H.

(ddd) “Prudent Utility Practices” means the practices, methods, standards and acts engaged in or approved by a significant portion of the applicable segment of the electric power generation industry pertaining to facilities of the type, similar size and location to Encina Power Station that, in light of the facts that are known, or reasonably should have been known, at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with Laws, permits, codes, standards, equipment manufacturer’s recommendations, reliability, safety, environmental protection, economy, and expedition. Prudent Utility Practices are not limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods, standards and acts generally acceptable or approved by a significant portion of the applicable segment of the electric power generation industry in the United States.

(eee) “RA Agreement” shall have the meaning set forth in Recital B.

(fff) “Relocation Guaranty Amount” shall have the meaning set forth in Section 2.5(c).

(ggg) “SDG&E” shall have the meaning set forth in the opening paragraph of this Agreement.

(hhh) “Shut Down” or “Shutdown” means the permanent and irrevocable cessation of electricity generation operations at the Encina Power Station in accordance with all applicable laws and regulations, such that the Encina Power Station may no longer be used to generate electricity or reactive power on any basis (including, but not limited to, any reliability-must-run or other intermittent or emergency basis) or emit any hazardous materials in conjunction with the operation of any electrical generation facilities comprising the Encina Power Station. For purposes of this Agreement, “Shutdown” does not include any significant hazardous materials remediation activities on the Site.

(iii) “Shut Down Guaranty Amount” shall have the meaning set forth in Section 2.5(b).

(jjj) “Shutdown Obligation” means the obligation of NRG to Shut Down the Encina Power Station set forth in Section 3.1(a)(ii).

(kkk) “SONGS” shall have the meaning set forth in Recital F.

(lll) “Station” shall have the meaning set forth in Recital B.

(mmm) “Term” shall have the meaning set forth in Section 2.1.

(nnn) “Termination Notice” shall have the meaning set forth in Section 5.6(a).

(ooo) “Transfer” means sell, convey, assign, transfer, alienate or otherwise dispose of (directly or indirectly, by one or more transactions, and by operation of law or otherwise) (i) all or any material part of the ownership interest or rights in any portion of the Encina Site and/or this Agreement, or (ii) all or a Controlling portion of the member interests in NRG.

Notwithstanding the generality of the foregoing, however, “Transfer” shall exclude (i) an Excluded Transfer and (ii) any encumbrance executed in connection with a financing undertaken by NRG for CECP.

(ppp) “Transferee” means a Person to whom a Transfer is made.

(qqq) “Unit” or “Units” shall have the meaning set forth in Recital B.

ARTICLE 2

GENERAL TERMS

2.1 Term of Agreement

The term of this Agreement (the “Term”) shall commence on the Effective Date (as defined in Section 2.3(b)) and shall remain in effect until the Parties have fulfilled all of their obligations under this Agreement, unless terminated earlier in writing in accordance with the terms and conditions of this Agreement.

2.2 Covenants Running with the Land

(a) **Recordation of Memorandum of Agreement.** The City and NRG agree to execute, acknowledge, and cause a memorandum of this Agreement substantially in the form attached to this Agreement as Exhibit H (the “Memorandum of Agreement”) to be recorded in the Official Records as soon as possible following the Effective Date in accordance with California Civil Code Section 1468.

(b) **Binding on Successors.** Upon recordation of the Memorandum of Agreement as provided in Section 2.2(a) above, this Agreement shall constitute covenants running with the Encina Site binding on all successors and assigns of NRG; provided, however, this Agreement, including the covenants on the part of NRG, shall not be binding on the Existing Secured Loan Parties or any of their successors or assigns.

(c) **Termination of Agreement.** Upon any termination of this Agreement, the City shall, at NRG’s written request, execute a notice of termination of the Agreement to be recorded in the Official Records, and this obligation of the City shall survive any such termination of this Agreement.

2.3 Agreement Approvals and Effective Date

(a) **NRG Approval.** NRG has obtained all required approvals for it to enter into this Agreement.

(b) **City Approval.** Once NRG has signed and delivered this Agreement to the City, the City shall timely submit this Agreement to the City Council for approval. Notwithstanding anything in this Agreement to the contrary, NRG understands and agrees that no officer or employee of the City has authority to bind the City to this Agreement unless and until the City Council shall have duly adopted a resolution in its sole and absolute discretion approving this Agreement. Therefore, any obligations of the Parties under this Agreement are contingent upon such approval, and this Agreement shall not be effective unless and until such approvals are obtained in accordance with the City’s applicable ordinances and codes. If a City Council resolution approving this Agreement becomes effective, then the effective date of this Agreement (the “Effective Date”) shall be the same date that such resolution becomes effective. Notwithstanding the foregoing, if a resolution approving this Agreement does not become effective by January 31, 2014, then this Agreement shall terminate and shall be of no force and effect unless the City acting through the City Attorney, and NRG, in their respective sole discretion, agree in writing to extend such date and such a resolution is duly enacted and becomes effective on or before such extended date.

(c) **SDG&E Approval.** SDG&E may be required to obtain certain regulatory approvals in connection with its obligations under Article 5 of this Agreement, including from the California Public Utilities Commission. To the extent such approvals are required, SDG&E will use reasonable efforts to obtain all such required approvals as soon as commercially practicable. The Parties agree that SDG&E’s obligations under this Agreement are contingent on such approvals, if any.

2.4 Improvements

(a) **Easements.** The City will provide a project description to NRG regarding easements for the Agua Hedionda Lift Station and the Vista-Carlsbad Interceptor Sewer Pipeline that coordinates with the Poseidon easement. NRG shall submit an application to the Commission within 60 days after receipt of project description and NRG will execute easements within 10 days of Commission approval.

(b) **PDP Land Transfers.** Within 90 days of the Effective Date, NRG agrees to grant Irrevocable Offers of Dedications (“IODs”) for the Hubbs Site Parcel, Bluff Area Parcel, South Power Plant Parcel, and Fishing Beach Parcel, as described in Planning Commission Resolution 6632, subject to reasonable restrictions and reservations necessary to ensure public safety and the continuity of power plant operations.

2.5 Guaranty

(a) **Independent Guaranty.** NRG agrees to deliver to the City a Guaranty from NRG Energy, Inc. in the form of Exhibit R and in the amount of five million dollars (\$5,000,000) (the “Independent Guaranty Amount”) within ten (10) business days from the Effective Date. The City shall release this amount once all obligations under this Agreement have been satisfied to the City’s satisfaction; provided, however, that if the Commission does not issue a final decision approving the Amendment and NRG notifies the City in writing that it is ending further development of the CECP, and provided further that NRG does not have any outstanding liabilities or obligations to the City under this Agreement, the City’s consent to such request to reduce this amount will not be unreasonably withheld.

(b) **Shut Down Obligation.** Within ten (10) business days after the Final Shut Down Date, NRG will increase the amount of the Guaranty by twenty million dollars (\$20,000,000) (the “Shut Down Guaranty Amount”), bringing the total amount of the Guaranty to twenty five million dollars (\$25,000,000). Upon NRG’s request, the City shall release the Shut Down Guaranty Amount following NRG’s satisfaction of all obligations under Section 6.1. Following NRG’s commencement of demolition and removal of above ground structures, and provided that NRG does not have any outstanding liabilities or obligations to the City under this Agreement at such time, NRG may request, and the City will reasonably consider, a proportionate reduction in the Shut Down Guaranty Amount upon the completion of certain key milestones, with such milestones and reductions to be established by NRG and the City at such time.

(c) **Relocation of North Coast Service Center.** Within ten (10) business days after the EPC Contract Notice to Proceed is issued, NRG will increase the amount of the Guaranty by an additional amount of twenty two million five hundred thousand (\$22,500,000) (the “Relocation Guaranty Amount”) for a total Guaranty amount of forty seven million and five hundred thousand dollars (\$47,500,000). If the credit rating for Carlsbad Energy Center is equal to or exceeds NRG Energy, Inc.’s credit rating as of the Effective Date, with the consent of the City, which shall not be unreasonably withheld, NRG may elect to substitute a Guaranty from Carlsbad Energy Center LLC for the Relocation Guaranty Amount. Upon NRG’s request, the City shall release the Relocation Guaranty Amount following NRG’s satisfaction of all obligations under Article 5. At NRG’s request, the City will reduce the Relocation Guaranty

Amount in proportion to NRG's payments made in accordance with Article 5; provided, that if NRG makes the ten million dollar (\$10,000,000) payment under Section 5.6(b) following issuance of the Termination Notice, the City shall release the entire Relocation Guaranty Amount.

ARTICLE 3

POWER STATION SHUTDOWN PROCESS

3.1 Agreement to Permanently Shut Down the Encina Power Station

(a) Shutdown Obligation.

(i) Within thirty (30) days of the Effective Date, NRG shall initiate measures to Shut Down Units 1-5 of the Encina Power Station. Such measures shall include, but not be limited to, amending the compliance plan for the Encina Power Station in connection with the State Water Resource Control Board's regulation addressing the use of once-through cooling by coastal power plants.

(ii) Subject to the Electric Reliability Removal Conditions and provided that (x) the California Public Utilities Commission has issued a final decision approving a power purchase agreement for CECP and (y) the Commission has issued a final decision approving the Amendment, NRG agrees to Shut Down the Encina Power Station no later than the Final Shutdown Date (the "Shutdown Obligation"). Notwithstanding the foregoing, if NRG issues a final notice to proceed with construction of CECP without having received California Public Utilities Commission approval, such condition shall be deemed satisfied.

(iii) Subject to the provisions of Section 3.3, NRG will diligently apply for and exercise its best efforts to obtain any regulatory approvals and permits needed to Shut Down Units 1-5 and to ensure that the Electric Reliability Removal Conditions are satisfied as soon as reasonably possible. NRG will not, directly or indirectly, request that any regulatory agency with jurisdiction over the Shut Down of the Encina Power Station deny or delay the approvals needed for the Shut Down. Further, NRG will take no action which is cause for the regulatory agency to deny or delay any approvals or other matters needed to satisfy the Electric Reliability Removal Conditions.

(iv) The Electric Reliability Removal Conditions are solely for the benefit of NRG. If some, but not all, of the Electric Reliability Removal Conditions are not satisfied for reasons other than an Event of Default by NRG or NRG's failure to timely obtain a needed approval for the Shut Down, then NRG, in its sole and absolute discretion, may upon not less than ten (10) days' written notice to the City describing in reasonable detail the unsatisfied condition(s) either: (x) suspend performance of its obligation to Shut Down the applicable Unit or the Encina Power Station only until such condition is satisfied, or (y) waive the satisfaction of such conditions as NRG may set forth in its sole and absolute discretion in a written notice to the City.

(v) Notwithstanding anything in this Agreement to the contrary, if the United States Department of Energy ("DOE"), ISO or other entity having jurisdiction over NRG

or the Encina Power Station orders or decrees it necessary for any Unit or Units to continue to operate past the Final Shutdown Date, then NRG shall be permitted to operate the applicable Unit or Units in accordance with such order or decree. Nothing in this subsection (v) shall relieve either Party from its support obligations under Section 3.4 or prevent either Party from challenging the effectiveness or legality of such order, provided, however, each Party shall provide the other Party copies of any such order and any legal challenges to such order. In the event NRG receives an order under this Section 3.1(a)(v), NRG and City shall comply with Section 3.4 until such time as the Unit or Units is/are released from such order.

(vi) Notwithstanding any provision in this Agreement to the contrary, in the event that CECP becomes commercially operable and the Encina Power Station continues to operate, NRG will pay the City (on a monthly basis), a liquidated damages payment equal to \$1/kW-mo. multiplied by the greater of (a) the generating capacity of the Unit or Units (in MW) remaining online past the Final Shutdown Date or (b) 300 MW. If the Shutdown occurs during a portion of a calendar month, then the monthly payment shall be pro-rated based on the number of days during which the Unit or Units were operational and the number of days in that calendar month. Such liquidated damages shall continue until the Shutdown of the Encina Power Station.

(b) **Accelerated Shutdown.** Nothing in this Agreement shall prohibit NRG from an accelerated Shutdown of a Unit or Units, whereby the Shutdown would occur in advance of the Final Shutdown Date.

(c) **Post-Shutdown Activities.** Within ninety (90) days of the Shutdown of the Encina Power Station, NRG (i) shall ensure that the Encina Power Station facilities and improvements are in a secure, inoperable condition and do not pose a physical or environmental safety hazard to members of the public or visitors of the Encina Site, consistent with Prudent Utility Practices and all applicable regulatory requirements and approvals; (ii) shall seek to terminate applicable permits and registrations that are no longer needed after the Shutdown of the Encina Power Station, (iii) shall request termination of the ISO Participating Generator Agreement and FERC market-based rate tariff as applicable to the Encina Power Station, and (iv) shall take appropriate actions in support of those requests, consistent with all applicable legal requirements.

3.2 Notices Regarding Electric Reliability Removal Conditions

NRG shall promptly provide the City with copies of any and all notices, correspondence or other documents to or from the ISO, FERC or other agency relating to the Electric Reliability Removal Conditions; provided, however, that failure to provide copies of such notices shall not constitute an event of default under Section 7.1.

3.3 Limitation on Future Contracts; No Actions to Prolong Need for Encina Power Station

With the exception of any contractual arrangements required to be entered into in connection with Electric Reliability Removal Conditions, NRG represents, warrants and

covenants that its obligation to Shut Down the Encina Power Station under this Agreement shall not be limited by any existing contracts it has or may in the future have to operate any or all of the Units on the Encina Site. NRG further agrees not to take any actions that may prolong the need for the Encina Power Station to continue operating for electric reliability or any other purposes inconsistent with the terms and conditions of this Agreement; the City nonetheless acknowledges that NRG has the right, in its sole and absolute discretion so long as consistent with the terms and conditions of this Agreement, to continue to operate, maintain, repair, replace and improve the Encina Power Station, in accordance with all applicable laws, regulations, and permits, until the Final Shutdown Date; provided, however, that NRG may be required to operate, maintain and repair the Encina Power Station beyond the Final Shutdown Date if the Electric Reliability Removal Conditions have not been met.

3.4 Mutual Support for Shutdown Efforts and NRG's Regulatory Compliance Pending Shutdown

(a) NRG's Support for Shutdown Efforts.

(i) No later than fifteen (15) business days after approval of the Amendment by the Commission, NRG shall submit to the ISO a written notice of intent to retire the Encina Power Station as of Final Shutdown Date.

(ii) Within five (5) business days of the City's request, NRG shall deliver a letter (the "NRG Support Letter"), in the form attached as Exhibit D, to other governmental agencies or third parties.

(b) City's Support of NRG's Regulatory Compliance Pending Shutdown. As long as there is not an Event of Default by NRG under this Agreement, for period beginning with the Effective Date and ending on the Final Shutdown Date, the City agrees to support any and all regulatory approvals required for the continued operation of any of the Units before Shutdown, such support to consist of:

(i) within five (5) business days of NRG's request the City shall submit a letter from the City Attorney ("City Support Letter"), to the relevant governmental agency, in the form attached to this Agreement as Exhibit E, and

(ii) upon reasonable prior notice provided by NRG, the City shall participate in a reasonable number of meetings with the relevant governmental agencies, provided that the City's participation under this subsection 3.4(b)(ii) shall consist of verbally affirming City's support for the renewal or issuance of the relevant regulatory approval for the Encina Power Station, as stated in the City Support Letter.

In the event of a dispute between the Parties regarding the City's compliance with its obligations under subsections 3.4(b)(i)-(ii), and before NRG delivers any Notice of Default under Article 7 for noncompliance with these obligations, both Parties shall, upon request of either Party, meet and confer in good faith to attempt to resolve such dispute over a period of ten (10) business days. Further, NRG shall not deliver a Notice of Default under Article 7 for City's alleged non-compliance with its obligations under Sections 3.4(b)(i)-(ii) before the expiration of the ten (10) business day period following delivery to the City of written notice of such dispute.

Any other actions by the City in support of NRG's regulatory compliance pending Shutdown in addition to the actions specified under this Section 3.4(b) shall be at the sole discretion of the City. If the City decides to rescind its support on or after the Final Shutdown Date, then the City may, in its sole discretion, take such action as it deems appropriate to oppose or condition the continued operation of the Encina Power Station or any portion of the Encina Power Station, including, but not limited to, opposing the extension or renewal of any operating permits and/or the imposition by governmental regulatory authorities of air and water quality mitigation measures or other operating requirements or limitations.

3.5 Fossil Fuel Deed Restriction

NRG agrees to limit fossil fuel generation on the Encina Site to the generating capacity proposed in the current project description (e.g., six LMS100s) to be proposed in the Petition to Amend and any black start equipment potentially required by the ISO. NRG agrees that no future modifications to the CECP shall be undertaken that exceed the environmental envelope, profile or footprint of CECP as presented in the Amendment. Within ten (10) business days after the Shut Down, NRG shall record a restrictive covenant for the benefit of the City in the Official Records, in the form attached to this Agreement as Exhibit I, which provides that no portion of the Encina Site, with the exception of the CECP Site, may be used to generate electricity with equipment or machinery that is powered by the combustion of fossil fuels (except the following used on the Encina Site: ancillary equipment or machinery; back-up generators; or distributed energy sources approved by the City in a redevelopment plan), all as more particularly set forth in such exhibit (the "Fossil Fuel Restriction"). Except with respect to the Existing Secured Loan Parties as provided in Section 2.2 of this Agreement, the Fossil Fuel Restriction shall constitute covenants running with the land, binding on successors and assigns of NRG. In the event that an Existing Secured Loan Party, or its successor or assignee, takes ownership or possession of the Site and fails to assume NRG's obligations and rights under this Agreement under Section 2.2 of this Agreement, and the Agreement terminates after the Fossil Fuel Restriction has been recorded, then following any such termination the City shall, at the written request of NRG or the Existing Secured Loan Party (or its successor or assignee), execute and cause a quitclaim deed to be recorded in the Official Records evidencing the termination of the Fossil Fuel Restriction; this obligation of the City shall survive any such termination of this Agreement. Notwithstanding the foregoing, and also as provided in Section 2.2 of this Agreement, the Parties understand and agree that, in the event of a refinancing of the Existing Secured Loan that provides for full repayment, NRG shall ensure – supported by written evidence reasonably satisfactory to the City – that this Agreement, including the Fossil Fuel Restriction, has priority over the deed of trust securing the refinanced loan and, accordingly, that the Fossil Fuel Restriction shall thereafter be binding on all successors and assigns of NRG without exception.

ARTICLE 4

AMENDMENTS TO THE CECP PERMITS

4.1 City Support of CECP Permits Amendment Applications

(a) Provided that NRG is not in default under any obligations to the City under the Agreement and in substantial compliance with the provisions of the Amendment agreed to by the

City, the City agrees not to oppose permits or authorities accommodating the continued operation of the Encina Power Station through the Final Shutdown Date.

(b) The City shall support the Amendment; provided that the City has a reasonable and meaningful opportunity to review and comment on the Amendment prior to filing with the Commission to confirm that the Amendment is consistent with Exhibit G and the Amendment is filed with the Commission consistent with the provisions of Exhibit G. The City will issue the City Support letter, a form of which is set forth in Exhibit E, in connection with the Amendment and to government agencies as requested by NRG. Upon reasonable prior notice provided by NRG, the City shall also participate in a reasonable number of meetings with the relevant governmental agencies, provided that the City's participation under this subsection shall consist of verbally affirming City's support for the Amendment.

(c) As per the request of the City, NRG will incorporate a provision in the Petition to Amend to be filed with the Commission in connection with the Amendment and in any power purchase agreement for CECP that CECP will not operate between the hours of midnight and 6 am, except to the extent reasonably required for reliability-related purposes or as otherwise required by the ISO Tariff. A decision by the Commission declining to apply this limitation to the CECP shall not absolve the City of its support obligation set forth in Section 4.1(b).

4.2 Services for CECP

(a) NRG agrees to work with the Carlsbad Fire Department in good faith to address those fire safety concerns that were previously raised in connection with the Application in the Amendment and any other reasonable fire safety concerns during the Amendment process.

(b) NRG agrees to reimburse the City for costs incurred in accordance with actual services performed by the City as contemplated by currently adopted fee and permit schedules, including applicable and appropriate impact fees, which are not expected to exceed \$1 MM.

(c) The City, CMWD and NRG will work together to establish related services to CECP, including recycled water supply, potable water supply, sanitary sewer service and fire response.

(d) The City will work with NRG to accommodate gas line service to CECP on the east side of the railroad tracks.

ARTICLE 5

SDG&E PROVISIONS

5.1 Relocation of the North Coast Service Center

(a) SDG&E has advised the City that with the early retirement of SONGS and future closures of plants that use once-through cooling technology, the SDG&E area will be deficient of electricity generating capacity by 2018. SDG&E has requested that the City support the Amendment for the development of CECP as set forth in this Agreement

(b) In addition and subject to regulatory approvals and other conditions and agreements specified here, SDG&E has agreed to the relocation of SDG&E's North Coast Service Center, currently located at the corner of Cannon Road and Carlsbad Boulevard ("North Coast Service Center Site"), with the North Coast Service Center Site and certain other properties to be transferred to the City upon completion and occupancy of the newly relocated North Coast Service Center ("New Service Center").

(c) The New Service Center is to be built at NRG's sole cost, subject to the NSC Cost Cap (defined below), and to SDG&E's specifications and conditions. NRG will build the New Service Center, or will cause it to be built, in accordance with such specifications; provided, however, that the City, in its sole discretion, may elect to build the New Service Center, or to cause it to be built. The Parties acknowledge and agree that the cost of the relocation and the construction of the New Service Center, and the structure of the transaction, will be at no cost to the City or to SDG&E, and in a manner that is cost-neutral to SDG&E and its ratepayers.

(d) If the City and SDG&E do not proceed with the proposed relocation of the New Service Center, then NRG shall make the payment to the City in accordance with Section 5.6(b) below.

5.2 Identification of Property for the New Service Center Location

(a) The City and SDG&E will work together to identify a mutually acceptable alternative location for the New Service Center to be located ("New Service Center Location"). Currently SDG&E and the City may review: (i) the land currently owned by SDG&E north of Cannon Road known as Parcel 11 (a legal description of Parcel 11 is attached hereto as Exhibit L, a map of Parcel 11 is attached hereto as Exhibit M) or (ii) another site mutually acceptable to both the City and SDG&E, as determined by each in its respective and sole discretion, provided that such site shall be made available at no cost to SDG&E. The City shall cooperate on community outreach and education on the New Service Center Location.

(b) In the event that SDG&E and the City cannot agree on a mutually acceptable New Service Center Location by March 1, 2016, then either the City or SDG&E may provide the Termination Notice as set forth in Section 5.6 below.

5.3 Feasibility Studies and Ongoing Coordination Regarding SDG&E Specifications and Conditions for the New Service Center

(a) Within sixty (60) days after the Effective Date, SDG&E will meet with the City to identify and cause the environmental, land use, traffic and nodal analysis studies associated with studying the feasibility of the New Service Center ("Feasibility Studies") to be prepared. SDG&E shall pay for the Feasibility Studies subject to reimbursement for such studies as provided for below.

(b) As soon as reasonably possible, but by no later than March 31st, 2015, SDG&E will provide all required specifications and conditions for the New Service Center to NRG and the City. In connection with this SDG&E will provide a budget and cost statement representing its budget for the NSC Costs (defined below), including, to the extent available, (i) any available budget or cost estimates for the construction of the New Service Center; and (ii) a statement or

budget of all other costs for the relocation (including the Feasibility Studies) of the North Coast Service Center. Such budget will not exceed the NSC Cost Cap as provided in Section 5.4 and will be prepared such that the New Service Center can be reasonably and prudently constructed for an amount that will not exceed the NSC Cost Cap.

5.4 New Service Center Relocation and Construction Cost Cap: NRG Funding and Conditions

(a) NRG agrees to fund up to \$22.5 million (\$22,500,000) (the “NSC Cost Cap”) toward the “all-in” cost of the relocation of the North Coast Service Center according to SDG&E’s specifications and conditions, including the cost of construction, furniture, fixtures, equipment, IT infrastructure, architectural, engineering and consulting costs, all relocation costs, reasonable contingencies and the reimbursements for the Feasibility Studies under Section 5.3(a) (collectively, the “NSC Costs”).

(b) NRG’s obligation to fund the NSC Costs is conditioned upon NRG’s issuance of a final notice to proceed under its engineering, procurement and construction contract for CECP (the “EPC Contract Notice to Proceed”).

(c) Upon NRG’s issuance of the EPC Contract Notice to Proceed, NRG, SDG&E and the City shall meet within thirty (30) days of such final notice to review the projected NSC Costs in relation to the NSC Cost Cap and construction of the New Service Center.

(i) If the projected NSC Costs are less than or equal to the NSC Cost Cap, and a Termination Notice has not been issued under Section 5.6, NRG will build the New Service Center, or will cause it to be built, in accordance with SDG&E’s specifications and conditions; provided, however, that the City, in its sole discretion, may elect to build the New Service Center, or to cause it to be built. Subject to the NSC Cost Cap and the conditions and provisions stated herein, NRG agrees to fund the NSC Costs. Subject to the NSC Cost Cap, SDG&E will be reimbursed by NRG for costs associated with the Feasibility Studies and such reimbursement shall be made as agreed by NRG and SDG&E; provided, however, that any amounts reimbursed for Feasibility Studies will reduce the NSC Cost Cap on a dollar-for-dollar basis.

(ii) If the projected NSC Costs exceed the NSC Cost Cap, SDG&E, NRG and the City shall meet in good faith to consider potential modifications to this Article 5, including, without reservation, changes to the New Service Center specifications and conditions, the NSC Cost Cap, or agreements to fund the costs in excess of the NSC Cost Cap; provided, however, that any subsequent modifications will be strictly subject to execution of future binding definitive agreements and obtaining any required regulatory approvals.

5.5 Conditions to SDG&E’s Obligation to Relocate the North Coast Service Center

SDG&E's Relocation of the North Coast Service Center is subject to the following conditions:

- (a) Identification of the New Service Center Location in accordance with Section 5.2.
- (b) SDG&E obtaining any required regulatory approvals with the understanding that SDG&E will diligently and in good faith seek all regulatory approvals needed for the relocation of the North Coast Service Center as contemplated in this Agreement.
- (c) A Private Letter Ruling, if necessary, satisfactory to SDG&E, issued by the Internal Revenue Service confirming the tax treatment of the transactions outlined herein.
- (d) Construction of the New Service Center and turnover of the completed and operational New Service Center to SDG&E.

5.6 Termination of Proposed Relocation of the North Coast Service Center; NRG Payment

(a) Either the City or SDG&E may issue a notice terminating the obligations and agreement to relocate the North Coast Service Center (the "Termination Notice") under the following circumstances:

- (i) if the City and SDG&E cannot agree upon a mutually acceptable New Service Center Location;
- (ii) if construction of the New Service Center does not commence before the third (3rd) anniversary of the commercial operation date for CECP;
- (iii) if the projected cost of relocation of the North Coast Service Center cannot be accomplished within the NSC Cost Cap, and SDG&E, NRG and the City are unable to agree upon subsequent modifications pursuant to Section 5.4(c)(ii); or
- (iv) if SDG&E and the City jointly elect not to proceed with the relocation of the North Coast Service Center.

(b) Within 30 days of receipt of the Termination Notice, NRG shall pay the City of Carlsbad the sum of \$10 million (\$10,000,000); provided, however, that NRG will owe this amount only if CECP achieves commercial operation, in which case NRG shall make the payment within 30 days of commercial operation or the Termination Notice, whichever is later. Thus, if the New Service Center does not proceed and NRG does not fund the costs of the New Service Center, NRG shall be responsible for the payment as provided in this Section 5.6(b).

(c) Notwithstanding any other provision in this Agreement, the City's issuance of a Termination Notice will not affect NRG's remaining obligations under this Agreement, except to the extent expressly set forth in this Article 5.

5.7 Transfer of SDG&E Property upon the Relocation of the North Coast Service Center

Upon the completion and occupancy of the New Service Center, SDG&E shall transfer (i) the existing North Coast Services Center Site and buildings, (ii) Cannon Park (a legal description of Cannon Park is attached hereto as Exhibit N, a map of Cannon Park is attached hereto as Exhibit O), and (iii) the Agua Hedionda North Shore Bluff Parcel (APN 206-070-16) (a legal description of the Agua Hedionda North Shore Bluff Parcel is attached hereto as Exhibit P, a map of the Agua Hedionda North Shore Bluff Parcel is attached hereto as Exhibit Q), to the City in fee simple, free and clear of all financial liabilities and financial liens, simultaneously with SDG&E receiving title to the New Service Center. SDG&E will be responsible for remediating preexisting environmental conditions to applicable industrial standards pursuant to applicable law. The City and SDG&E will determine if such remediation shall be conducted before or after the transfer of title. If the site is to be remediated prior to the transfer, SDG&E shall commence the remediation within sixty (60) days after occupancy of the New Service Center, shall proceed in a diligent and timely manner to remediate the site and shall then transfer the properties under this Section 5.7 upon completion of the remediation. If the remediation is to occur following the transfer, the City will provide at least one-hundred twenty (120) days notice that SDG&E is to commence remediation of the site and the remediation shall proceed in a diligent and timely manner to completion.

5.8 Long-Term Plan for Substation Improvements and Expansions

The Parties acknowledge that SDG&E has recently undertaken certain improvements and upgrades of the Encina Power Station substation. The City has asked SDG&E to consider relocating the Encina Power Station substation away from the Encina Site. SDG&E has agreed that as part of a long-term plan, and contingent upon execution and regulatory approval of the Proposed PPA, and subject to any other required regulatory approvals, it will work in good faith with the City to identify and ultimately permit a site, such that any future material improvements or expansions to the transmission system, beyond those needed for the CECP, be made at the alternate site in lieu of the existing Encina Power Station. SDG&E will update the City at least annually on the status of the long-term plan as it relates to the identification and permitting of such a site. The City acknowledges and agrees that the substation design at the alternate site and any associated transmission design will be based on SDG&E design standards and specifications. The alternate site will be subject to a feasibility review by SDG&E to ensure a constructible site. Any design enhancements requested by the City that are not part of SDG&E's customary design standard and specifications will be paid for by the City unless SDG&E and City otherwise agree.

ARTICLE 6

REDEVELOPMENT PROCESS

6.1 Demolition and Removal of Above-Ground Structures

(a) Provided that (i) the California Public Utilities Commission has issued a final decision approving a power purchase agreement for CECP and (ii) the Commission has issued a final decision approving the Amendment, NRG agrees to fund at its sole cost the physical demolition and removal of the above-ground structures of the Encina Power Station in accordance with Laws and the milestones set forth below. Notwithstanding the foregoing, if NRG issues a final notice to proceed with construction of CECP without having received

California Public Utilities Commission approval, such condition shall be deemed satisfied. Details regarding the demolition and removal of the Encina Power Station will be incorporated into the petition to amend (“Petition to Amend”) the Commission-issued license for CECP in which NRG seeks authority to construct CECP as reflected in Exhibit G, and following the issuance of a decision by the Commission approving such Petition to Amend, NRG will obtain all additional permits, if any, consistent with the schedule outlined below.

(b) Provided that (i) the California Public Utilities Commission has issued a final decision approving a power purchase agreement for CECP and (ii) the Commission has issued a final decision approving the Amendment, NRG shall commence physical demolition and removal of the above-ground structures of the Encina Power Station within one (1) year after Shut Down. NRG will also use good faith efforts to identify opportunities to begin and implement decommissioning prior to such date, including the removal of unused tanks. Notwithstanding the foregoing, if NRG issues a final notice to proceed with construction of CECP without having received California Public Utilities Commission approval, such condition shall be deemed satisfied.

(c) Provided that (i) the California Public Utilities Commission has issued a final decision approving a power purchase agreement for CECP and (ii) the Commission has issued a final decision approving the Amendment, NRG agrees to complete physical demolition and removal of the above-ground structures of the Encina Power Station within two (2) years of the commencement of demolition activities. Notwithstanding the foregoing, if NRG issues a final notice to proceed with construction of CECP without having received California Public Utilities Commission approval, such condition shall be deemed satisfied.

6.2 Redevelopment and Remediation

(a) The City and NRG acknowledge that they have a mutual interest in the productive reuse of the Encina Redevelopment Site. The City staff and NRG will work in good faith to address the redevelopment of the Encina Redevelopment Site in the pending General Plan update.

(b) If the City takes fee title to the North Coast Service Center Site, as contemplated by Article 5 of this Agreement, the City and NRG work in good faith to consider a joint development strategy for the Encina Redevelopment Site and the North Coast Service Center Redevelopment Site, comprising basic principles to be identified in a subsequent binding agreement.

(c) NRG shall present an initial proposed strategy for redevelopment of the Encina Redevelopment Site to City of Carlsbad staff within one-hundred eighty (180) days of the Effective Date of this Agreement.

(d) With the exception of any remediation required under a Commission decision approving the Amendment or applicable law, remediation of the Encina Redevelopment Site shall be undertaken in conjunction with redevelopment of the Encina Redevelopment Site.

(e) The City and NRG shall work in good faith to determine a mutually acceptable and appropriate alignment for the Coastal Rail Trail; provided, however, that failure to reach

agreement on the alignment for the Coastal Rail Trail shall not impact performance of the obligations established in this Agreement.

ARTICLE 7

EVENTS OF DEFAULT

7.1 Defaults by NRG

Each of the following shall constitute an “Event of Default” by NRG under this Agreement:

(a) NRG fails to perform any of its obligations set forth in this Agreement, which failure is not a separate Event of Default, and which continues without cure for a period of thirty (30) days following the date the City provides written notice specifying the nature of such failure; provided, however, if a longer period of time than thirty (30) days is reasonably necessary to effect such cure, then no Event of Default shall exist as long as NRG commences such cure within such thirty (30) day period and then proceeds diligently in the prosecution of such cure to completion.

(b) NRG fails to perform its obligation to permanently Shut Down the Encina Power Station by the Final Shutdown Date (except solely as expressly provided in Section 3.1(a)).

(c) NRG fails to (i) timely perform its obligations under Section 6.1, or (ii) fails to make payment under Section 5.6(b), provided such failure to pay is not cured within five business days.

(d) Any representation made by NRG to the City contained in this Agreement proves to be false or misleading in any material respect at the time that such representation was made.

(e) NRG files a petition for relief, or an order for relief is entered against NRG in any case under applicable bankruptcy or insolvency law that is now or later in effect, whether for liquidation or reorganization, and this Agreement has been rejected or deemed rejected by the debtor in such case.

(f) NRG attempts to Transfer this Agreement, any portion of the Encina Site, or both, to a Transferee without the prior written consent of the City.

(g) A Transferee, not including an Existing Secured Loan Party, fails to execute an Assumption of Obligations and does not comply with the Shutdown Obligation.

7.2 Defaults by the City

The following shall constitute an Event of Default by the City under this Agreement:

(a) The City fails to perform any of its obligations set forth in this Agreement, which failure continues without cure for a period of thirty (30) days following the date NRG provides written notice specifying the nature of such failure; provided, however, if a longer period of time

than thirty (30) days is reasonably necessary to effect such cure, then no Event of Default shall exist as long as the City commences such cure within such thirty (30) day period and then proceeds diligently in the prosecution of such cure to completion.

(b) Any representation made by the City to NRG contained in this Agreement proves to be false or misleading in any material respect at the time that such representation was made.

ARTICLE 8

REMEDIES

8.1 Remedies of the City

(a) **Specific Performance.**

(i) If an Event of Default by NRG occurs, then the City shall have the right to bring an action for specific performance or other equitable relief, or any other remedy authorized by applicable law.

(ii) In the event that a Transferee, with the exception of an Existing Secured Loan Party, fails to execute an Assumption of Obligations and does not comply with the Shutdown Obligation, the City shall have the right of specific performance against the Transferee to require it to comply with the Shutdown Obligation.

(b) **Suspension of Performance.** Notwithstanding anything to the contrary in this Agreement, if at any time an Event of Default by NRG occurs before the Shutdown, then the City shall, in addition to its other remedies under this Section 8.1, have the right to suspend performance of its obligations under this Agreement until such Event of Default is cured by NRG.

(c) **NRG's Consent to Specific Performance and Waiver of Rights.**

(i) In any action by the City for specific performance or injunctive relief under Article 3, Article 4, and Section 6.1 and Section 6.2 of this Agreement, NRG hereby consents to the City's right to seek specific performance of the Agreement. Further, NRG agrees that the City is fully entitled to seek a preliminary or permanent injunction to prevent further breach of the Agreement; to compel performance in aid of a decree of specific performance; or where the further breach may render specific performance meaningless or otherwise impair the City's ability to obtain performance of the Agreement. In connection with such requests for specific performance or injunctive relief, NRG acknowledges and agrees that:

a. Specific performance may be compelled to compel performance of the following provisions of this Agreement: Article 3, Article 4, and Article 6;

b. Monetary damages are not an adequate remedy at law for the breach of these provisions. Further and notwithstanding the liquidated damages provided for under Section 3.1(a)(vi) and the fact that this liquidated damage provision is

an effort to quantify an appropriate liquidated damage provision, NRG acknowledges that the City is not adequately compensated by the liquidated damages set forth therein in the event that NRG fails to Shut Down in conformance with Section 3(a). Accordingly and notwithstanding the imposition and actual payment of any such liquidated damages, these damages do not constitute an adequate remedy at law such as to deny entry of a decree of specific performance of the Agreement or either a preliminary or permanent injunction;

c. The Agreement is fair and reasonable to NRG and the failure to specifically enforce the Agreement would effectively deny the City the rights bargained for under this Agreement;

d. NRG's breach of the Agreement, as well as the continued or threatened breach of the Agreement, will cause great and irreparable injury to the City that can only be remedied by specific performance of the Agreement and issuance of a preliminary and/or permanent injunction;

e. Specific performance and issuance of a preliminary and/or permanent injunction cannot be denied based on the argument that there is a need for continuous supervision by the court or lack of mutuality or any other equitable defense or objection;

f. In connection with the request for a preliminary and/or permanent injunction which constitutes a mandatory injunction compelling NRG's performance under the Agreement, NRG acknowledges that this extraordinary form of relief is appropriate and proper under the unique circumstances of this Agreement and that a mandatory injunction should issue if the City demonstrates that it will incur irreparable injury if performance is not compelled. NRG further agrees that in the event of a mandatory injunction compelling performance that such injunction shall not be stayed by any appeal of the injunctive order;

g. NRG waives any other equitable defense to the entry of the injunction;

h. NRG waives any requirement that the city post a bond or any other security in connection with such injunctive relief; and

i. The remedies here shall be in addition to any and all other legal or equitable remedies that maybe available to the City under this agreement.

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8.2 Remedies of NRG

(a) Specific Performance. If an Event of Default by the City occurs, then NRG shall have the right to bring an action for specific performance or other equitable relief, or any other remedy authorized by applicable law, subject to the limitation set forth in Section 8.3.

(b) Suspension of Performance. Notwithstanding anything to the contrary in this Agreement, if at any time an Event of Default by the City occurs before the Shutdown, then NRG shall, in addition to its other remedies under this Section 8.2, have the right to suspend performance of its obligations under this Agreement until such Event of Default is cured by the City.

(c) Consent to Specific Performance and Waiver of Rights by the City. In any action by NRG for specific performance or injunctive relief under this Agreement, City hereby consents to NRG's right to seek specific performance of the Agreement. Further, City agrees that NRG is fully entitled to seek a preliminary or permanent injunction to prevent further breach of the Agreement; to compel performance in aid of a decree of specific performance; or where the further breach may render specific performance meaningless or otherwise impair NRG's ability to obtain performance of the Agreement. In connection with such requests for specific performance or injunctive relief, City acknowledges and agrees that:

(i) Specific performance may be compelled to compel performance of the provisions of this Agreement;

(ii) Monetary damages are not an adequate remedy at law for the breach of these provisions;

(iii) The Agreement is fair and reasonable to City and the failure to specifically enforce the Agreement would effectively deny NRG the rights bargained for under this Agreement;

(iv) City's breach of the Agreement, as well as the continued or threatened breach of the Agreement, will cause great and irreparable injury to NRG that can only be remedied by specific performance of the Agreement and issuance of a preliminary and/or permanent injunction;

(v) Specific performance and issuance of a preliminary and/or permanent injunction cannot be denied based on the argument that there is a need for continuous supervision by the court or lack of mutuality or any other equitable defense or objection;

(vi) In connection with the request for a preliminary and/or permanent injunction which constitutes a mandatory injunction compelling City's performance under the Agreement, City acknowledges that this extraordinary form of relief is appropriate and proper under the unique circumstances of this Agreement and that a mandatory injunction should issue if NRG demonstrates that it will incur irreparable injury if performance is not compelled. City further agrees that in the event of a mandatory injunction compelling performance that such injunction shall not be stayed by any appeal of the injunctive order;

(vii) City waives any other equitable defense to the entry of the injunction;

(viii) City waives any requirement that NRG post a bond or any other security in connection with such injunctive relief; and

(ix) The remedies here shall be in addition to any and all other legal or equitable remedies that maybe available to NRG under this agreement.

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8.3 Limitations of Liability

(a) **Direct Monetary Damages: No Consequential or Incidental Damages.** The City and NRG agree that they may be held liable for any monetary or liquidated damages arising directly out of a breach of the obligations of this Agreement or any Event of Default. Notwithstanding this, neither the City nor NRG shall be liable for, and the City and NRG each waive any claim for, any incidental or consequential damages, arising out of any Event of Default on the part of NRG or the City.

(b) **No Individual Liability.** NRG agrees that no member, commissioner, official, advisor, agent or employee of the City will be personally liable to NRG, or any successor in interest, due to an Event of Default by the City. The City agrees that no directors, officers, shareholders, members, employees, advisers or agents of NRG or of its Affiliates will be personally liable to the City, due to an Event of Default by NRG.

8.4 LIQUIDATED DAMAGES

(a) IN THE EVENT THAT CECP BECOMES COMMERCIALY OPERABLE AND THE ENCINA POWER STATION CONTINUES TO OPERATE, NRG HAS AGREED TO MAKE THE LIQUIDATED DAMAGE PAYMENT AS PROVIDED BY SECTION 3.1(A) (VI).

(b) NRG AND THE CITY HAVE AGREED TO THE DAMAGE PROVISION SET FORTH IN SECTION 3.1(A) (VI). NRG AND THE CITY ACKNOWLEDGE AND AGREE THAT THIS PROVISION APPLIES SOLELY TO CONTINUED OPERATION OF THE ENCINA POWER PLANT AS SET FORTH IN SECTION 3.1(A) (VI) AND FURTHER ACKNOWLEDGE THAT THIS PROVISION IS REASONABLE AT THE TIME OF THE AGREEMENT AS THAT TERM IS USED IN CALIFORNIA CIVIL CODE SECTION 1671. TO THE EXTENT NECESSARY TO SUPPORT THE STATEMENT THAT THIS PROVISION IS REASONABLE AT THE TIME OF THE AGREEMENT: (I) NRG ACKNOWLEDGES, AGREES AND UNDERSTANDS THAT THE CITY WOULD INCUR DAMAGES IN THE EVENT THAT ENCINA POWER STATION CONTINUED TO OPERATE AFTER THE DATE THAT CECP BECAME COMMERCIALY OPERABLE BUT THAT THOSE DAMAGES AND COMPENSATION TO THE CITY WILL BE EXTREMELY DIFFICULT AND IMPRACTICAL TO ASCERTAIN IN PART DUE TO THE FACT THAT THE CONTINUED OPERATION HAS AN IMPACT ON THE CITY AND ITS RESIDENTS AND THE QUANTIFICATION OF THOSE POTENTIAL DAMAGES CANNOT BE DONE AT THIS TIME; (II) NRG ADMITS THAT THIS IS A REASONABLE PROVISION GIVEN THE DIFFICULTY OF QUANTIFYING THESE DAMAGES AND THE

AMOUNT OF REASONABLE COMPENSATION TO THE CITY IN THE EVENT THAT THE ENCINA POWER PLANT CONTINUES IN OPERATION.

(c) THE LIQUIDATED DAMAGES SO IMPOSED ARE NOT INTENDED AS A FORFEITURE OR PENALTY WITHIN THE MEANING OF CALIFORNIA CIVIL CODE SECTIONS 3275 OR 3369, BUT ARE INTENDED TO CONSTITUTE LIQUIDATED DAMAGES TO THE CITY AS PROVIDED BY CALIFORNIA CIVIL CODE SECTIONS 1671(b). NRG AGREES, ACKNOWLEDGES AND REPRESENTS THAT THE LIQUIDATED DAMAGES SET FORTH HEREIN ARE REASONABLE AT THE TIME OF THIS AGREEMENT AND ARE NOT A PENALTY OR FORFEITURE AND NRG IS ESTOPPED FROM ARGUING THAT THE LIQUIDATED DAMAGE PROVISION IS UNENFORCEABLE OR CONSTITUTES A PENALTY.

(d) NOTWITHSTANDING THE IMPOSITION AND PAYMENT OF SUCH LIQUIDATED DAMAGES, NRG ACKNOWLEDGES AND AGREES THAT THE CITY MAINTAINS ITS RIGHTS TO SEEK SPECIFIC PERFORMANCE OF THE AGREEMENT AS PROVIDED FOR IN SECTION 8.1(C), ACKNOWLEDGES THAT THE LIQUIDATED DAMAGES DO NOT CONSTITUTE AN ADEQUATE REMEDY AT LAW AND AGREES THAT SUCH LIQUIDATED DAMAGES DO NOT IMPAIR OR PREVENT THE CITY FROM SEEKING SPECIFIC PERFORMANCE OF ARTICLE 3 (OR ANY OTHER PROVISION OF THIS AGREEMENT) OR INJUNCTIVE RELIEF IN CONNECTION WITH THE ENFORCEMENT OF THIS AGREEMENT.

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ARTICLE 9

INDEMNITY

9.1 Indemnification of the City

Subject to the terms, conditions and limitations set forth below and to the extent permitted by law, NRG agrees to and shall Indemnify the Indemnified Parties from and against any and all Losses (including, without limitation, any judgments, settlements, consent decrees, stipulated judgments or other partial or complete terminations of any actions or proceedings that require any of the Indemnified Parties to take any action) imposed upon, incurred by or asserted against any of the Indemnified Parties in connection with the occurrence or existence of any of the following arising as a result of this Agreement: (i) any accident, injury to or death of any Person or loss or damage to property occurring on the Encina Site; (ii) any accident, injury to or death of any person or loss or damage to property occurring near or around the Encina Site and that shall be directly or indirectly caused by the negligent act or omission or willful misconduct of NRG or its agents, tenants or invitees; (iii) any development, construction, operation, use, occupation, management, marketing, leasing, condition, financing or refinancing, sale or Transfer of the Encina Site; (iv) non-compliance with applicable Laws, including, but not limited to, Laws relating to hazardous materials, disabled access (including, without limitation, the

American with Disabilities Act) and unreinforced masonry buildings; (v) any third-party contracts entered into by or on behalf of NRG with respect to the Encina Site; (vi) any civil rights actions or other legal actions or suits initiated by any occupant or invitee of the Encina Site; and (vii) any claim that NRG and the City are joint venturers. Notwithstanding the foregoing, NRG shall not be required to Indemnify the Indemnified Parties against Losses if such Losses are caused by the negligence or willful misconduct of the City or the Agency or their respective directors, officers, employees, agents, successors and assigns, including the negligence or willful misconduct of the Indemnified Parties (or failing to act) or in the City's regulatory capacity in the exercise of its police powers.

9.2 Terms and Conditions

The foregoing indemnity is subject to the following terms and conditions.

(a) Immediate Obligation to Defend. NRG specifically acknowledges that it has an immediate and independent obligation to defend the Indemnified Parties from any claim that is actually or potentially within the scope of the indemnity provisions of Section 9.1, even if such claim is or may be groundless, fraudulent or false. Such obligation arises at the time such claim is tendered to NRG by an Indemnified Party and continues at all times after such tender.

(b) Notice. The Indemnified Parties agree to give notice to NRG with respect to any suit or claim initiated against the Indemnified Parties. Such notice shall be given at the address for notices of NRG set forth in this Agreement, and in no event later than the earlier of (i) ten (10) days after valid service of process as to any suit or (ii) fifteen (15) days after receiving written notification of the filing of such suit or the assertion of such claim, which the City has reason to believe is likely to give rise to a claim for indemnity under this Article. If notice is not given to NRG in a timely manner as provided in this Article, then, except as provided below, NRG's liability shall terminate as to the matter for which such notice is not given, provided that failure to notify NRG shall not affect the rights of the Indemnified Parties or the obligations of NRG under this Article unless NRG is materially prejudiced by such failure, and then only to the extent of such prejudice.

(c) Defense. NRG shall, at its option but subject to the reasonable consent and approval of the Indemnified Parties, be entitled to control the defense, compromise or settlement of any such matter through counsel of NRG's own choice; provided, however, in all cases the Indemnified Parties shall be entitled to participate in such defense, compromise, or settlement at their respective expense. If NRG shall fail, however, in the Indemnified Party's reasonable judgment, within a reasonable time following notice from the Indemnified Parties alleging such failure, to take reasonable and appropriate action to defend, compromise or settle such suit or claim, the Indemnified Parties shall have the right promptly to hire counsel at NRG's sole expense to carry out such defense, compromise or settlement, which expense shall be immediately due and payable to the Indemnified Parties upon receipt by NRG of a properly detailed invoice; provided that NRG must consent in writing to any proposed compromise or settlement, which consent shall not be unreasonably withheld.

(d) Insurance. The indemnity contained in Section 9.1 shall not be limited by any insurance carried by NRG.

(e) **Survival.** The indemnity contained in this Section shall survive any termination of this Agreement as to matters or Losses that arise during the term of this Agreement.

(f) **No Limitation on Other Obligations.** The agreement to Indemnify set forth above is in addition to, and in no way shall be construed to limit or replace, any other obligations or liabilities that NRG may have to the City under any other permits, approvals or agreements with the City, at common law or otherwise.

(g) **Limitation.** NRG has no duty under Section 9.1 regarding any claim against any Indemnified Parties directly related to the existence, interpretation and/or enforcement of this Agreement.

ARTICLE 10

SETTLEMENT

10.1 Negotiated Settlement

The discussions that have produced this Agreement have been conducted with the explicit understanding that they are privileged under California Evidence Code section 1152 and Federal Rule of Evidence 408, and that such discussions shall be without prejudice to the position of any party and may not be used in any manner in any proceeding or otherwise, except as may be necessary to enforce this Agreement or as otherwise required by law.

ARTICLE 11

RESERVED

11.1 Reserved

ARTICLE 12

GENERAL

12.1 Notices

Except as otherwise expressly provided in this Agreement, all notices, demands, approvals, consents and other formal communications between the Parties required or permitted under this Agreement shall be in writing and shall be deemed given and effective upon the date of receipt (i) if given by personal delivery on a business day (or the next business day if delivered personally on a day that is not a business day), (ii) if sent for next-business-day delivery (with all expenses prepaid) by a reliable overnight delivery service, with receipt of delivery, or (iii) if mailed by United States registered or certified mail, first class postage prepaid, to the Party at their respective addresses for notice designated below. For convenience of the Parties, copies of notices may also be given by facsimile to the facsimile number set forth below or such other number as may be provided from time to time by notice given in the manner required under this Agreement; however, neither Party may give official or binding notice by

facsimile. The effective time of a notice shall not be affected by the receipt, before receipt of the original, of a facsimile copy of the notice.

- (a) In the case of a notice or communication to the City:

Celia A. Brewer, Esq.
City Attorney for City of Carlsbad
General Counsel for Carlsbad Municipal Water District
1200 Carlsbad Village Drive
Carlsbad, CA 92008
Celia.Brewer@carlsbadca.gov

Stephen C. Hall, Esq.
Troutman Sanders LLP
805 SW Broadway, Suite 1560
Portland, OR 97205
stephen.hall@troutmansanders.com

Fletcher W. Paddison, Esq.
Troutman Sanders LLP
11682 El Camino Real
Suite 400
San Diego, CA 92130-2092
fletcher.paddison@troutmansanders.com

- (b) And in the case of a notice or communication sent to NRG or NRG:

Sean Beatty
West Region General Counsel
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
sean.beatty@nrgenergy.com

- (c) And in the case of a notice or communication sent to SDG&E:

Diana Day
Assistant General Counsel
SDG&E
101 Ash Street,
HQ11
San Diego, CA 92101
dday@semprautilities.com

Every notice given to a Party to this Agreement, under the terms of this Agreement, must state (or must be accompanied by a cover letter that states) substantially the following:

- (i) the Section of this Agreement under which the notice is given and the action or response required, if any;
- (ii) if applicable, the period of time within which the recipient of the notice must respond;
- (iii) if approval is being requested, shall be clearly marked “Request for Approval under the Settlement Agreement”;
- (iv) if a notice of a disapproval or an objection that is subject to a reasonableness standard, shall specify with particularity the reasons for the disapproval or objection; and
- (v) if applicable, that the failure to object to the notice within the stated time period will be deemed to be the equivalent of the recipient’s approval of or consent to the request for approval that is the subject matter of the notice.

If a request for approval states a period of time for approval that is less than the time period provided for in this Agreement for such approval, the time period stated in this Agreement shall be the controlling time period.

In no event shall a recipient’s approval of or consent to the subject matter of a notice be deemed to have been given by its failure to object to such notice if such notice (or the accompanying cover letter) does not comply with the requirements of this Section.

Any mailing address or facsimile number may be changed at any time by giving written notice of such change in the manner provided above at least ten (10) days before the effective date of the change.

12.2 Relationship of Parties: No Joint Venture or Partnership

The subject of this Agreement is an agreement for the Shutdown of the Encina Power Station and for a private development, with neither Party acting as the agent of the other Party in any respect. None of the provisions in this Agreement is intended to or shall be construed or deemed to render the City or SDG&E a partner in NRG’s business, or joint venturer or member in any development or joint enterprise with NRG, including, but not limited to, the development or reuse of the Encina Site. NRG shall Indemnify the City against any Losses relating to any claim of any such joint venture as provided in Section 9.1. Nothing in this Agreement is intended to or shall be construed to create any principal-agent relationship between SDG&E, NRG and the City. Nothing in this Agreement is intended or shall be construed as to create any obligation between SDG&E and NRG to enter into the Proposed PPA.

12.3 Conflict of Interest

No member, official or employee of the City may have any personal interest, direct or indirect, in this Agreement, nor shall any such member, official or employee participate in any decision relating to this Agreement that affects her or his personal interest or the interests of any corporation, partnership or association in which she or he is interested directly or indirectly.

12.4 Time of Performance

(a) **Expiration.** All performance dates (including cure dates) expire at 5:00 p.m., Carlsbad, California time, on the performance or cure date, unless otherwise provided in this Agreement.

(b) **Weekends and Holidays.** A performance date that falls on a Saturday, Sunday or City holiday (or official City furlough day) is deemed extended to the next City working day.

(c) **Days for Performance.** All periods for performance specified in this Agreement in terms of days shall be calendar days, and not business days, unless otherwise expressly provided in this Agreement.

(d) **Time of the Essence.** Time is of the essence for each and every provision of this Agreement.

12.5 Interpretation of Agreement

(a) **Words of Inclusion.** The use of the terms “including,” “such as” or words of similar import when following any general term, statement or matter shall not be construed to limit such term, statement or matter to the specific items or matters set forth, whether or not language of non-limitation is used with reference to such items or matters. Rather, such terms shall be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such statement, term or matter.

(b) **No Presumption Against Drafter.** This Agreement has been negotiated at arm’s length and between Persons sophisticated and knowledgeable in the matters dealt with in this Agreement. In addition, experienced and knowledgeable legal counsel has represented each Party. Accordingly, this Agreement shall be interpreted to achieve the intents and purposes of the Parties, without any presumption against the Party responsible for drafting any part of this Agreement.

(c) **Costs and Expenses.** The Party on which any obligation is imposed in this Agreement shall be solely responsible for paying all costs and expenses incurred in the performance of such obligation, unless the provision imposing such obligation specifically provides to the contrary.

(d) **Agreement References.** A reference to any provision, term or matter “in this Agreement,” “herein” or “hereof,” or words of similar import shall be deemed to refer to any and all provisions of this Agreement reasonably related in the context of such reference, unless such reference refers solely to a specific numbered or lettered Article, Section or paragraph of this Agreement or any specific subdivision of this Agreement.

(e) **Approvals and Consents.** Unless this Agreement otherwise expressly provides, all approvals, consents or determinations to be made by or on behalf of the City under this Agreement shall be made by the City Attorney, or his or her designee. Unless otherwise provided in this Agreement, whenever approval, consent or satisfaction is required of a Party under this Agreement, it shall not be unreasonably withheld or delayed. Except with respect to matters that

a Party is expressly entitled to determine in its sole and absolute discretion, the reasons for disapproval shall be stated in reasonable detail in writing. Approval by NRG or the City to or of any act or request by the other shall not be deemed to waive or render unnecessary approval to or of any similar or subsequent acts or requests.

(f) Recitals. The Recitals in this Agreement are included for convenience of reference only and are not intended to create or imply covenants under this Agreement. In the event of any conflict or inconsistency between the Recitals and the terms and conditions of this Agreement, the terms and conditions of this Agreement shall control.

(g) Captions. The captions preceding the articles and Sections of this Agreement have been inserted for convenience of reference only. Such captions shall not define or limit the scope or intent of any provision of this Agreement.

(h) Exhibits. Whenever an "Exhibit" is referenced, it means an attachment to this Agreement unless otherwise specifically identified. All such Exhibits are incorporated in this Agreement by reference.

12.6 Successors and Assigns

This Agreement is binding upon and will inure to the benefit of the successors and assigns of the City and NRG, except as expressly provided in this Agreement.

12.7 No Third Party Beneficiaries

This Agreement is made and entered into for the sole protection and benefit of the Parties and their successors and assigns, except as expressly provided in this Agreement.

12.8 Counterparts

This Agreement may be executed in counterparts and by facsimile or e-mailed signatures, each of which is deemed to be an original, and all such counterparts shall constitute one and the same instrument.

12.9 Entire Agreement

This Agreement, including the attached Exhibits, constitutes the entire agreement between the Parties with respect to the subject matter of this Agreement and supersedes all negotiations or previous conditions mentioned in or incidental to this Agreement (including, but not limited to, any term sheets relating to any of the subject matters of this Agreement). No parol evidence of any prior draft of this Agreement or any other agreement shall be permitted to contradict or vary the terms of this Agreement.

12.10 Governing Law

The laws of the State of California shall govern the interpretation and enforcement of this Agreement. As part of the consideration for the City's entering into this Agreement, all Parties agree that all actions or proceedings arising directly or indirectly under this Agreement may, at the sole option of the City, be litigated in courts located within the State of California, in the City of Carlsbad, County of San Diego, and the Parties expressly consent to the jurisdiction of any such local, state or federal court, and consents that any service of process in such action or proceeding may be made by personal service upon the Parties wherever the Parties may then be located, or by certified or registered mail directed to the Parties at the address set forth in this Agreement for the delivery of notices.

12.11 Extensions by the City

Upon the request of NRG or SDG&E, the City Attorney or his or her designee may, by written instrument and in the City Attorney's sole and absolute discretion, extend the time for NRG's or SDG&E's performance of any term, covenant or condition of this Agreement or permit the curing of any default upon such terms and conditions as he or she determines appropriate, including but not limited to, the time within which NRG or SDG&E shall agree to such terms or conditions, provided, however, any such extension for more than thirty (30) days or the permissive curing of any particular material default will be subject to approval of the City Council by resolution and in no event will operate to release any of NRG's or SDG&E's obligations nor constitute a waiver of the City's rights regarding any other term, covenant or condition of this Agreement or any other default in, or breach by NRG or SDG&E of, this Agreement or otherwise affect compliance with the other dates for performance under this Agreement.

12.12 Further Assurances

The Parties agree to execute and acknowledge such other and further documents as may be necessary or reasonably required to effectuate the terms of this Agreement. The City Attorney is authorized to execute on behalf of the City any closing or similar documents and any contracts, agreements, memoranda or similar documents with State, regional or local entities or other Persons that are necessary or proper to achieve the purposes and objectives of this Agreement and do not materially increase the obligations of the City under this Agreement, if the City Attorney determines that the document is necessary or proper, consistent with the purposes of this Agreement and in the City's best interests. The City Attorney's signature of any such document shall conclusively evidence such a determination by him or her.

12.13 Severability

If any provision of this Agreement, or its application to any Person or circumstance, is held invalid by any court, the invalidity or inapplicability of such provision shall not affect any other provision of this Agreement or the application of such provision to any other Person or circumstance, and the remaining portions of this Agreement shall continue in full force and effect, unless enforcement of this Agreement as so modified by and in response to such invalidation would be grossly inequitable under all of the circumstances, or would frustrate the fundamental purposes of this Agreement.

12.14 Amendments; Corrections of Technical Errors

Neither this Agreement nor any of its terms may be terminated, amended or modified except by a written instrument executed by the Parties. Any material amendment of this Agreement shall be subject to approval of the City Council by resolution. If by reason of inadvertence, and contrary to the intention of the Parties, errors are made in this Agreement in the legal description or the reference to or within any Exhibit with respect to a legal description, in the boundaries of any parcel in any map or drawing that is an Exhibit, or in the typing of this Agreement or any of its Exhibits, the Parties by mutual agreement may correct such error by written memorandum executed by them without the necessity of amendment of this Agreement. The City Attorney may execute any such written memorandum on behalf of the City.

12.15 Representations, Warranties and Covenants

(a) **NRG Representation, Warranties and Covenants.** NRG represents, warrants, and covenants to the City that as of the Effective Date, each of the following statements is accurate and complete:

(i) **Valid Existence; Good Standing.** NRG represents that both Cabrillo Power I LLC and Carlsbad Energy Center LLC are Delaware limited liability companies duly organized, validly existing and in good standing under the laws of the State of California. NRG represents that each entity has all requisite power and authority to own its property and conduct its business as presently conducted.

(ii) **Authority.** NRG represents that each of Cabrillo Power I LLC and Carlsbad Energy Center LLC has all requisite power and authority to execute and deliver this Agreement and to carry out and perform all of its duties and obligations under this Agreement. Without limiting the foregoing, NRG has obtained any and all required approvals. NRG will provide as a condition of the City's obligations under this Agreement (x) written resolutions from Cabrillo Power I LLC and Carlsbad Energy Center LLC authorizing the execution of and performance their obligations under this Agreement and (y) a written resolution from NRG Energy, Inc., in its role as Guarantor, authorizing NRG Energy, Inc. to guarantee the prompt and complete performance of NRG's obligations under this Agreement.

(iii) **No Limitation on Ability to Perform.** Neither limited liability company agreements, nor any other agreement or Law prohibits or materially limits or otherwise affects the right or power of NRG to enter into and perform all of the terms and covenants of this Agreement. Neither NRG nor any of its members are party to or bound by any contract, agreement, indenture, trust agreement, note, obligation or other instrument that prohibits or materially limits or otherwise affects the same. Except as expressly stated in this Agreement, no consent, authorization or approval of, or other action by, and no notice to or filing with, any governmental authority, regulatory body or any other Person is required for the due execution, delivery and performance by NRG of this Agreement or any of the terms and covenants contained in this Agreement (or if required, any such consent, authorization or approval has been obtained, any such action has occurred, and any such notice has been given). There are no pending or threatened

suits or proceedings or undischarged judgments affecting NRG before any court, governmental agency, or arbitrator that, if determined adversely to NRG, might materially adversely affect the enforceability of this Agreement or the ability of NRG to perform its obligations under this Agreement.

(iv) **Valid Execution.** The execution and delivery of this Agreement (and the agreements contemplated in this Agreement) by NRG have been duly and validly authorized by all necessary action on the part of NRG. Upon its execution and delivery by all Parties and City Council approval under Section 2.3(b), this Agreement will be a legal, valid, binding and enforceable obligation of NRG.

(v) **Business Licenses.** To NRG's knowledge, NRG has obtained all licenses required to conduct business in City and it is not in default of any fees or taxes due to the City.

(vi) **Financial Matters.** (1) NRG is not in default under, and has not received notice asserting that it is in default under, any agreement for borrowed money, (2) NRG has not filed a petition for relief under any chapter of the U.S. Bankruptcy Code and has no present intention to petition for relief under any chapter of the U.S. Bankruptcy Code, (3) to NRG's knowledge, no involuntary petition naming NRG as debtor has been filed under any chapter of the U.S. Bankruptcy Code, and (4) NRG has the financial wherewithal to perform all of its financial and other obligations under this Agreement.

For purposes of the foregoing representations and warranties, whenever a statement is qualified by reference to NRG's knowledge or lack of knowledge, such reference is intended to refer to, and be limited to, matters within the actual knowledge of, or which should be discovered upon a reasonably diligent inquiry by, those officers of NRG who are most knowledgeable with NRG's business dealings with the Encina Site.

(b) **City Representations, Warranties, and Covenants.** The City represents, warrants, and covenants to NRG that as of the Effective Date, each of the following statements is accurate and complete:

(i) **Authority.** The City has all requisite power and authority to execute and deliver this Agreement and to carry out and perform all of its duties and obligations under this Agreement.

(ii) **Valid Execution.** The execution and delivery of this Agreement (and the agreements contemplated in this Agreement) by the City have been duly and validly authorized by all necessary action on the part of the City. Upon its execution and delivery by all Parties and City Council approval under Section 2.3(b), this Agreement will be a legal, valid, binding and enforceable obligation of the City. The City has provided (or upon written request will provide) to NRG a written resolution of the City authorizing the execution of and performance by the City of its obligations under this Agreement.

(iii) **Defaults.** The execution, delivery and performance of this Agreement do not and will not violate or result in a violation of, contravene or conflict with, or

constitute a default under (A) any agreement, document or instrument to which the City is a party or (B) any applicable law, statute, ordinance or regulation.

For purposes of the foregoing representations and warranties, whenever a statement is qualified by reference to the City's knowledge or lack of knowledge, such reference is intended to refer to, and be limited to, matters within the actual knowledge of, or which should be discovered upon a reasonably diligent inquiry by employees of the City Attorney who are most knowledgeable with this Agreement.

12.16 Cooperation and Non-Interference

In connection with this Agreement, the Parties shall reasonably cooperate with one another to achieve the objectives and purposes of this Agreement. In so doing, the Parties shall each refrain from doing anything that would render its performance under this Agreement impossible and each shall do everything that this Agreement contemplates that the Party shall do to accomplish the objectives and purposes of this Agreement. In all situations arising out of this Agreement, the Parties shall each attempt to avoid and minimize the damages resulting from the conduct of the other and shall take all reasonably necessary measures to achieve the provisions of this Agreement.

12.17 Attorneys' Fees and Costs

NRG shall pay to City on demand any and all Attorneys' Fees and Costs incurred or paid by City in enforcing NRG's obligations under this Agreement. City shall pay to NRG on demand any and all Attorneys' Fees and Costs incurred or paid by NRG in enforcing City's obligations under this Agreement.

12.18 Transfer

NRG acknowledges and agrees that during the term of the Agreement any Transfer of the Agreement, any portion of the Encina Site, or both, requires the prior written consent of the City, which will not be unreasonably withheld, conditioned, or delayed, provided that the Transferee (i) has the financial capability of performing NRG's obligations under this Agreement, as reasonably determined by the City in its sole discretion; provided, however, that a Transferee with a credit rating equal to or higher than NRG Energy, Inc. from a nationally-recognized credit rating agency shall be deemed to meet this condition, and (ii) enters into an Assumption of Obligations Agreement set forth in Exhibit F.

12.19 Survival

Notwithstanding anything to the contrary in this Agreement, the following provisions shall survive the expiration of the Term or any other termination of this Agreement: (i) any obligation that arises and was not satisfied before termination shall survive any termination of this Agreement except to the extent otherwise provided in this Agreement; (ii) the releases and indemnities set forth in Article 9 and Article 10 of this Agreement shall continue as set forth in those articles, and (iii) any provision expressly stated in this Agreement to survive in whole or in part following a termination of this Agreement.

12.20 Exhibits

The attached Exhibits A-T are made a part of this Agreement.

IN WITNESS WHEREOF, the City of Carlsbad, Carlsbad Municipal Water District, Cabrillo Power I LLC, Carlsbad Energy Center LLC, and San Diego Gas & Electric Company have caused this Agreement to be executed on the date first written above.

CABRILLO POWER I LLC

By: John Chilton
Title: PRESIDENT

CARLSBAD ENERGY CENTER LLC

By: John Chilton
Title: PRESIDENT

**CITY OF CARLSBAD
AND
CARLSBAD MUNICIPAL WATER
DISTRICT**

By: Mark Parkland
Title: Mayor Pro Tem

*Solely with respect to Article 5 and
Article 12*

SAN DIEGO GAS & ELECTRIC

By: _____
Title: _____

IN WITNESS WHEREOF, the City of Carlsbad, Carlsbad Municipal Water District, Cabrillo Power I LLC, Carlsbad Energy Center LLC, and San Diego Gas & Electric Company have caused this Agreement to be executed on the date first written above.

CABRILLO POWER I LLC

By: _____

Title: _____

CARLSBAD ENERGY CENTER LLC

By: _____

Title: _____

**CITY OF CARLSBAD
AND
CARLSBAD MUNICIPAL WATER
DISTRICT**

By: _____

Title: _____

*Solely with respect to Article 5 and
Article 12*

SAN DIEGO GAS & ELECTRIC

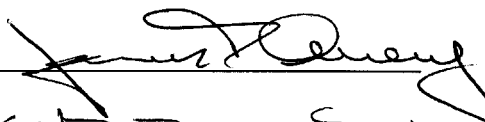
By:  _____
Title: SVP Power Supply

EXHIBIT A

Legal Description of the Encina Site

[INSERTED ON THE FOLLOWING PAGE]

LEGAL DESCRIPTION

(Exceptions Not Noted)

The land referred to herein is situated in the State of California, County of San Diego, City of Carlsbad, and described as follows:

That portion of Lot "H" of Rancho Agua Hedionda, in the City of Carlsbad, County of San Diego, State of California, according to Partition Map thereof No. 823, filed in the Office of the County Recorder of San Diego County, November 16, 1896; being Parcel No. 4 of that certain Certificate of Compliance recorded October 30, 2001 as file no. 2001-0789068 of Official Records, and more particularly described as:

Commencing at the intersection of the easterly line of the 100.00 foot wide right-of-way of the Atchison Topeka and Santa Fe Railroad with the northerly line of Canon Road (60.00 feet wide); thence long said easterly line north 22°30'13" west, 1564.78 feet to the TRUE POINT OF BEGINNING; thence continuing along said easterly line north 22°30'13" west, 1990.35 feet to the beginning of a non-tangent curve concave to the northwest having a radius of 1005.37 feet, a radial to said beginning bears south 85°54'14" east; thence northeasterly 36.76 feet along said curve through a central angle of 02°05'42"; thence non-tangent to said curve north 22°30'13" west, 302.87 feet; thence leaving said easterly line north 61°25'37" east, 14.19 feet; thence north 30°30'37" east, 34.90 feet; thence south 40°47'43" east, 63.50 feet; thence south 69°10'23" east, 38.00 feet; thence north 79°19'37" east, 285.00 feet; thence north 88°07'37" east, 333.14 feet; thence north 81°53'37" east, 13.68 feet to the westerly right-of-way lline of California State Highway XI-SD-2B (I-5); thence along said right-of-way line south 17°57'05" east, 204.93 feet; thence south 12°34'11" east, 424.72 feet; thence south 22°07'51" east, 239.68 feet; thence south 22°30'37" east, 1210.91 feet; thence leaving said right-of-way line south 67°37'25" west, 492.66 feet; thence south 62°25'13" west, 126.26 feet to the TRUE POINT OF BEGINNING,

Together with that portion of said Lot H described as follows:

Commencing at the northeasterly corner of Record of Survey No. 14621, in the City of Carlsbad, County of San Diego, State of California, recorded in the Office of the County Recorder of Sand Diego County, August 14, 1994 as file no. 1994-500086, said corner being on the westerly line of the right-of-way of the Atchison Topeka and Santa Fe Railroad; thence along said westerly line and easterly line of Record of Survey 14621 south 28°40'19" east, 656.70 feet to the most southerly corner of said Record of Survey No. 14621; thence continuing south 28°40'19" east, 275.00 feet to the TRUE POINT OF BEGINNING; thence leaving said westerly line south 56°25'30" west, 61.30 feet; thence south 04°59'18" west, 27.61 feet; thence south 39°37'42" east, 61.38 feet; thence south 77°21'22" east, 49.55 feet; thence south 26°45'53" east, 232.92 feet; thence south 17°52'19" east, 115.92 feet; thence south 02°16'37" east, 55.06 feet; thence south 24°00'58" west, 44.47 feet; thence south 40°45'14" west, 126.60 feet; thence south 29°41'50" west, 83.42 feet; thence south 27°27'35" west, 90.04 feet; thence south 35°18'30" west, 212.59 feet; thence south 19°22'01" east, 108.34 feet; thence south 30°56'56" east, 304.06 feet; thence south 14°30'21" west, 175.27 feet; thence south 00°09'57" east, 123.11 feet; thence south 26°53'37" east, 119.99 feet; thence south 34°46'51" west, 23.60 feet; thence north 61°27'21" west, 142.77 feet; thence north 22°47'32" west, 47.01 feet; thence south 67°12'28" west, 16.03 feet; thence south 22°47'32" east, 22.23 feet; thence south 58°37'31" west, 97.99 feet; thence south 41°35'28" west, 110.44 feet; thence north 74°44'52" west, 164.81 feet; thence north 05°57'51" west, 202.95 feet; thence north 30°14'20" west, 64.23 feet; thence north 64°31'22" west, 293.59 feet to the easterly line of the 100.00 foot wide Carlsbad Boulevard; thence along said easterly line of Carlsbad

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Boulevard south 24°07'36" east, 913.18 feet to the beginning of a curve concave southwesterly having a radius of 4050.00 feet; thence southeasterly 348.89 feet along said curve through a central angle of 04°56'09"; thence south 19°11'27" east, 15.63 feet to the beginning of a curve concave northeasterly having a radius of 5216.55 feet; thence southeasterly 900.29 feet along said curve through a central angle of 09°53'18"; thence leaving said easterly line of Carlsbad Boulevard north 60°43'42" east, 103.71 feet; thence north 71°53'50" east, 49.05 feet; thence north 88°29'46" east, 149.63 feet; thence north 77°06'32" east, 80.00 feet; thence north 68°28'15" east, 121.97 feet; thence north 63°21'54" east, 220.51 feet; thence north 67°56'35" east, 167.57 feet; thence north 76°27'03" east, 60.33 feet; thence south 77°37'36" east, 172.85 feet; thence south 60°55'41" east, 66.30 feet; thence south 45°30'57" east, 47.42 feet; thence south 82°40'44" east, 84.31 feet; thence south 44°29'52" east, 52.55 feet to said westerly right-of-way line of said Atchison Topeka and Santa Fe Railroad; thence along said westerly line north 22°30'13" west, 2664.53 feet; thence north 28°40'19" west, 835.14 feet to the TRUE POINT OF BEGINNING.

The above described parcel of land contains 95.08 acres more or less.

Assessor's Parcel Numbers: 210-010-43, and 210-010-43 (with other property).

(End of Legal Description)

EXHIBIT B

Map of the Encina Site



EXHIBIT C

Area Map of the Encina Site



EXHIBIT D

Form of NRG Support Letter

Re: Cabrillo Power I LLC's Support of the Shutdown of the Encina Power Station

Dear _____:

In response to longstanding concerns and disputes related to the operation of the Encina Power Station, Cabrillo Power I LLC (NRG) and the City of Carlsbad (City) have entered into a Settlement Agreement dated as of January 14, 2014, to permanently shut down the Encina Power Station on the earlier of the commercial operation of the Carlsbad Energy Center or December 31, 2017, provided that the Encina Power Station is no longer needed for electric reliability as set forth in the Settlement Agreement.

NRG fully supports the shutdown of the Encina Power Station as soon as it is not needed for reliability. More particularly, NRG does not intend to operate the Encina Power Station after commercial operation of the Carlsbad Energy Center or December 31, 2017, whichever is earlier, and accordingly is committed to working with the California Independent System Operator and the City to achieve the permanent shutdown of the Encina Power Station by the earlier of those milestones.

Very truly yours,
CABRILLO POWER I LLC

[signed by authorized officer or officers]

EXHIBIT E

Form of City Support Letter

Re: City's Support of the Approvals Needed for Licensing and Operation of the Carlsbad Energy Center and Interim Operation of the Encina Power Station

Dear _____:

Consistent with the terms of the Settlement Agreement dated as of January 14, 2014, among multiple parties, including Carlsbad Energy Center LLC, Cabrillo Power I LLC and the City of Carlsbad (City), I write this letter to indicate the support of the City for the issuance of the permit or license for the operation of the Carlsbad Energy Center.

City further supports renewal of any permits or licenses necessary for the interim operation of the Encina Power Station. Under the Settlement Agreement, Cabrillo Power I LLC has agreed to shut down the Encina Power Station on the earlier of commercial operation of the Carlsbad Energy Center or December 31, 2017, provided it is released from reliability requirements by the California Independent System Operator (ISO). Accordingly, the City supports the renewal of the permits for the Encina Power Station until the earlier of commercial operation of the Carlsbad Energy Center or December 31, 2017.

A representative of the City is authorized to meet in person with your agency to communicate the support referenced in this letter.

Very truly yours,

City Attorney
City of Carlsbad

EXHIBIT F

Form of Assumption of Obligations Agreement

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:



(Space above this line for Recorder's use only)

ASSUMPTION OF OBLIGATIONS AGREEMENT

This Assumption of Obligations (this "Assumption") dated as of _____, 2014, is by **Cabrillo Power I LLC** and **Carlsbad Energy Center LLC** (collectively the "Assignor"), _____, a _____ (the "Assignee"), and the **City of Carlsbad**, a charter city located in San Diego County (the "City").

Factual Background

A. The Assignor owns real property located in the City, in the County of San Diego, California, bounded generally by Cannon Road to the south, Interstate 5 to the east, the Agua Hedionda Lagoon to the north, and Carlsbad Boulevard to the west (the "Site").

B. The Assignor and the City entered into that certain Settlement Agreement dated for reference purposes as of January 14, 2014 (the "Agreement"). Capitalized terms not defined in this Assumption have the meanings given them in the Agreement.

C. The Assignor wishes to convey to the Assignee its entire right, title and interest in and to that portion of the Site, as more particularly described in Exhibit A attached to the Agreement (the "Transferred Property") and its rights under the Agreement to the extent pertaining to the Transferred Property. In connection therewith, Assignee has agreed to assume [certain/all] of Assignor's unfulfilled and/or continuing obligations under the Agreement, all as set forth in this Assignment.

Agreement

Therefore, the City, the Assignor and the Assignee agree as follows:

(1) Reaffirmation of Obligations. The Assignor reaffirms all of its obligations under the Agreement (to the extent such obligations remain unfulfilled as of the date this instrument is executed), and the Assignor acknowledges that to its knowledge, [except for _____] the City is presently not in default of any of its obligations under the Agreement. The City reaffirms all of its obligations under the Agreement (to the extent such obligations remain unfulfilled as of the date this instrument is executed), and the City acknowledges that to its knowledge, [except for _____] the Assignor is presently not in default of any of its obligations under the Agreement.

(2) Effective Date. Effective as of _____ (the “Effective Date”) Assignor assigns to Assignee all of its right, title and interest in and to the Agreement [to the extent pertaining to the Transferred Property].

(3) Assumption. The Assignee assumes and agrees to faithfully perform for the benefit of the City all obligations of the Assignor under, and to be bound by all of the provisions of, the Agreement that remain unfulfilled as of the Effective Date; provided, however, the Assignee shall not assume the following obligations:_____. Upon this Assumption becoming effective, the Assignor shall have no further obligations to the City, and the City shall have no further obligations to the Assignor, with respect to the obligations of the Assignor under the Agreement assumed by and the rights of the Owner under the Agreement assigned to the Assignee.

(4) Representations and Warranties of Assignor. The Assignor represents and warrants to the City as follows:

(A) No Event of Default on the part of Assignor, or to Assignor’s knowledge, no event or condition that, with notice or lapse of time or both, would constitute an Event of Default on the part of Assignor, exists under the Agreement.

(B) The execution, delivery, and performance by the Assignor of this Assignment (x) will not contravene any legal requirements applicable to the Assignor or the Transferred Property, and (y) will not conflict with, breach or contravene any other agreement binding upon the Assignor or the Transferred Property.

(5) Representations and Warranties of Assignee: The Assignee represents and warrants to the Agency and the City as follows:

(A) The Assignee has reviewed the Agreement and is familiar with its terms and provisions.

(B) The Assignee makes for itself all representations, agreements and warranties of the Assignor set forth in Section 12.15(a) of the Agreement, effective as of the date hereof [to the extent applicable to the Transferred Property], subject to the following modifications: _____.

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(C) The Assignee has obtained all consents in connection with its assumption of the obligations provided in this Assumption and for its acquisition of the Transferred Property that may be required by any agreement to which it is a party. Other than the consents so obtained, no consent to the acquisition of the Transferred Property is required under any agreement to which Assignee is a party.

(D) The execution, delivery, and performance by the Assignee of this Assumption and any other documents required under this Assumption (x) will not contravene any legal requirements applicable to the Assignee, and (y) will not conflict with, breach or contravene any other agreement binding upon the Assignee.

(E) To the knowledge of Assignee, there are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending against the Assignee, or threatened against or affecting the Assignee, in which there is a reasonable possibility of an adverse determination and that are reasonably likely individually or in the aggregate, if adversely determined, have a material adverse effect on the ability of the Assignee to perform such obligations under the Agreement as are being assumed by the Assignee.

(6) Address for Notices. All notices to the Assignee shall be sent to the following addresses:

Attention: _____
Facsimile: _____
Telephone: _____

(7) No Prejudice. This Agreement shall not prejudice any rights or remedies of the City under the Agreement.

(8) Integration. This Assumption contains the entire agreement of the parties with respect to the matters contemplated in this Assumption and supersedes all prior negotiations.

(9) Modification. This Assumption may be amended or modified only in a writing signed by the parties.

(10) Counterparts. This Assumption may be executed in any number of counterparts which together shall be deemed the same instrument.

(11) Unenforceability. If any provision of this Assumption shall be determined by a court of competent jurisdiction to be invalid, illegal or unenforceable, then that portion shall be deemed severed and the remaining parts shall remain in full force as though the invalid, illegal, or unenforceable portion had not been a part of this Assumption.

(12) Governing Law. The parties agree that this Assumption shall be construed and interpreted in accordance with the laws of the State of California.

PUBLIC (REDACTED) VERSION

IN WITNESS WHEREOF, the Assignor, the Assignee and the City have caused this Agreement to be duly executed.

ASSIGNOR: CABRILLO POWER I LLC AND
CARLSBAD ENERGY CENTER LLC

By: _____

CITY: CITY OF CARLSBAD

By: _____

ASSIGNEE:

By: _____

EXHIBIT G

Form of Amendment

Carlsbad Energy Center Project Amendment

In accordance with Section 4.1(b) of the Agreement, this Exhibit G sets forth certain provisions of NRG's proposed Petition to Amend (defined below) and Amendment (defined below), which provisions are a material part of the City's consideration for entering into the Agreement; provided, however, that the Commission's failure to adopt the midnight to 6:00 a.m. operating limitation shall not absolve the City of its support obligation set forth in the Agreement. Unless otherwise defined in this Exhibit G, initially capitalized terms used in this Exhibit G shall have the meaning given them in Article I of the Agreement. In the event of any conflict or inconsistency between Exhibit G and the terms and conditions of the Agreement, the terms and conditions of the Agreement shall prevail.

Carlsbad Energy Center LLC ("NRG") intends to modify the Carlsbad Energy Center Project ("CECP") to replace the currently licensed combined-cycle configuration with a peaker configuration. To accomplish this modification, NRG will submit a Petition to Amend ("PTA") to the California Energy Commission ("Commission") requesting that the Commission amend its May 2012 Final Decision in Docket 07-AFC-06 in which it granted the Application for Certification of the CECP (the "Final Decision" and such Commission amendment, the "Amendment"). The CECP PTA will demonstrate the extraordinary circumstances that have arisen, including those associated with the premature closure of the San Onofre Nuclear Generating Station, and that necessitate changes to the Final Decision. The PTA will also include certain NRG obligations from the Agreement relating to the Final Shutdown, decommissioning, demolition, and removal of the Encina Power Station, which are set forth below.

The Project Description for the CECP PTA will address the following:

1. Site Preparation and Tank Farm Demolition. NRG will demolish the following existing facilities to enable construction of the amended CECP as well as creation of associated laydown areas:
 - a. Aboveground Fuel Oil Storage Tanks 4-7 located east of the railroad tracks and west of Interstate 5. The footprint of the amended CECP will occupy the current location of Tanks 4-7.
 - b. Aboveground Fuel Oil Storage Tanks 1 and 2 located west of the railroad tracks. The footprint of those tanks will be used for construction laydown.
 - c. Site grading including removal of internal berms within the tank farm basin and preparation of ingress/egress routes.

2. Construction of Supporting Facilities.
 - a. Industrial water supply interconnection from City supplied reclaim water source at Cannon Road, if available (preferred) or from Ocean Water Purification System (small desalination plant if needed).

- b. Ocean Water Purification System (if needed).
 - c. Natural gas line interconnection from Cannon Road (preferred, if feasible; interconnect with existing infrastructure, if not) and gas metering and compression systems.
 - d. Fire Prevention Systems and hydrants east of the railroad tracks; commission/test associated back up diesel power pump to support Fire Prevention Systems.
 - e. Water and Aqueous Ammonia Storage Tanks.
 - f. Administration Building/Control Room.
 - g. Operations and Maintenance Building.
 - h. Stormwater management systems.
 - i. Industrial waste discharge interconnections.
3. Construction of no more than six General Electric LMS100s.
- a. Construction of no more than six General Electric LMS100s and supporting equipment (transformers, air cooled condensers, lubricating systems, selective catalytic reduction (“SCR”) for emissions control, etc).
 - b. Construction of the LMS100s will be below grade to minimize the visual profile of the units, stacks, and associated equipment.
 - c. Construction of black start, diesel powered generation equipment (anticipated to be 1-2 MWs) to be located on east side of railroad tracks (if needed by the ISO).
 - d. Interconnect into the 138 and 230 kV switchyards located on west side of the railroad tracks and appurtenant to SDG&E utilities and structures supporting the transmission of electricity to and from the switchyards.
 - e. Interconnect with constructed reclaimed or CECP desalination water supplies and natural gas supply, including associated gas metering and gas compression equipment.
 - f. Conduct commissioning of units, including installation and testing of SCR and continuous emissions monitoring systems (“CEMS”) for the respective units.
 - g. Conduct commissioning of black start unit (if needed by the ISO).
4. Environmental Characteristics. Environmental characteristics will include the following:
- a. Reduced criteria air pollutants compared to the permitted CECP.
 - b. Reduced greenhouse gas emissions compared to the permitted CECP.
 - c. Elimination of the use of ocean water for plant use (unless the City is not able to provide reclaimed water).
 - d. Reduced noise levels compared to the permitted CECP.
 - e. No operation between midnight and 6:00 am, except to the extent reasonably required for reliability-related purposes or as otherwise required by the ISO Tariff.
 - f. Lower plant profile and visibility.

- g. Removal of all aboveground oil storage tanks (see 1 a and b).
 - h. Demolition and removal of the Encina Power Station in a time certain unless required by the ISO or other agency for system reliability (see 5 below).
 - i. Revised vegetation and screening plan developed in cooperation with the City
 - j. Resolution of City fire safety concerns.
 - k. Development of the Coastal Rail Trail in a manner agreed to with the City.
5. Final Shutdown Date, Shut Down, decommissioning, demolition and removal. The PTA and the Amendment will incorporate the following requirements from the Agreement relating to the Final Shutdown Date, Shut Down, decommissioning, demolition and removal of the Encina Power Station, all of which requirements are expressly subject to the terms and conditions of the Agreement:
- a. NRG will permanently Shut Down the Encina Power Station on the earlier of the commercial operation date of CECP or December 31, 2017 (i.e., the Final Shutdown Date).
 - b. Within ninety (90) days of the Shutdown of the Encina Power Station, NRG shall ensure that the Encina Power Station facilities and improvements are in a secure, inoperable condition and do not pose a physical or environmental safety hazard to members of the public or visitors of the Encina Site, consistent with Prudent Utility Practices and all applicable regulatory requirements and approvals.
 - c. NRG shall commence physical demolition and removal of the above-ground structures of the Encina Power Station within one (1) year after Shut Down.
 - d. NRG and its contractor(s) will use commercially reasonable efforts to sequence the work to complete demolition and removal in the most timely and efficient manner, taking into consideration any hourly fieldwork restrictions/constraints at the site. The demolition scope of work will include the following:
 - i. Demolition to existing grade of Encina Power Station power block building and stack, including removal of steam boilers and associated equipment and removal of the combustion turbine (e.g., the black start unit). Removal of buildings, structures, equipment, and remaining storage tanks at the Encina Power Station (i.e., administrative building, operations/maintenance/warehouse buildings, industrial wastewater management system, intake/discharge structures not otherwise assumed by Poseidon).
 - ii. The overall project objective is to decontaminate and demolish the Site in a safe, cost-effective and environmentally safe manner, and in compliance with all applicable laws.
 - iii. NRG's contractor will prepare an updated hazardous materials survey. NRG's contractor shall properly handle, manage or remove and dispose of

- all hazardous materials and wastes in accordance with all local, state and federal regulations.
- iv. NRG and its contractors will develop, implement and maintain a storm water pollution prevention and sediment and soil erosion control plan in accordance with all local, state and federal regulations.
 - v. Site restoration activities after demolition: grading/backfilling to match existing surrounding grade. Surrounding grade may include existing concrete/asphalt surfaces. Clean, suitable fill material reused from the site or from offsite will be utilized to support back filling operation.
 - vi. Site grading and drainage will match the current site contours. Existing stormwater management systems would be utilized west of the railroad tracks. Erosion controls shall be installed and maintained during demolition site activities.
- e. NRG agrees to complete physical demolition and removal of the above-ground structures of the Encina Power Station within two (2) years of the commencement of demolition activities.
 - f. NRG agrees to limit fossil fuel generation on the Encina Site to the generating capacity proposed in the current project description (e.g., six LMS100s) proposed in the Amendment and any black start equipment potentially required by the ISO.
 - g. NRG agrees that no future modifications to the CECP shall be undertaken that exceed the environmental envelope, profile or footprint of CECP as presented in the PTA and Amendment.

Anticipated Amendment Approval Schedule

Subject to processing and approval by applicable regulatory agencies (e.g., CEC, California Public Utilities Commission, San Diego County Air Pollution Control District, U.S. Environmental Protection Agency, San Diego Regional Water Quality Control Board), the following is the anticipated permitting/approval schedule for the Amendment:

1. March 2014 - File CECP PTA with the Commission.
2. March 2014 – File Air Permit Applications with San Diego County Air Pollution Control District (“SDAPCD”).
3. June 2014 – Commission Site Informational Work Shop and Initial Data Requests.
4. October 2014 – SDAPCD Preliminary Determination of Compliance.
5. December 2014 – Commission Preliminary Staff Assessment and Workshop.
6. April 2015 – Commission Final Staff Assessment Report.
7. June 2015 – Commission Evidentiary Hearings
8. August 2015 – Commission Presiding Member’s Proposed Decision on CECP PTA.
9. September 2015 – Commission Decision on CECP PTA.

EXHIBIT H

Form of Memorandum of Agreement

RECORDING REQUESTED BY AND)
WHEN RECORDED MAIL TO:)
)
City Clerk)
CITY OF CARLSBAD)
1200 Carlsbad Village Drive)
Carlsbad, California 92008-1989)

Space above this line for Recorder's use

Assessor's Parcel Number [CLICK HERE](#)

Project Number and Name [CLICK HERE](#)

NOTICE OF RESTRICTION ON SALE OR CONVEYANCE OF REAL PROPERTY

The real property located in the City of Carlsbad, County of San Diego, State of California which is described on Exhibit "A" attached hereto (the "Property").

Pursuant to Government Code Section 27281.5(a), Notice is hereby given that the owner of the Property as set forth below is hereby restricted from conveying, transferring or granting the Property to any other party, except as provided under the Settlement Agreement (described below) and this restriction is imposed by the City of Carlsbad on the Property.

This Notice shall be recorded in the County Recorder's Office for the County of San Diego which recordation is permitted pursuant to the provisions of Government Code Section 27281.5(a). Upon recordation, this Notice provides constructive notice of the restriction on the conveyance or transfer of the Property.

This Notice is provided pursuant to that certain Settlement Agreement, Dated as of January 14, 2014, Between and Among the City of Carlsbad, Carlsbad Municipal Water District, Cabrillo Power I LLC, Carlsbad Energy Center LLC and San Diego Gas & Electric Company, approved by the City of Carlsbad pursuant to City Of Carlsbad Resolution No. 2014-010, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CARLSBAD, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN AND AMONG THE CITY OF CARLSBAD (CITY)

PUBLIC (REDACTED) VERSION

AND THE CARLSBAD MUNICIPAL WATER DISTRICT (CMWD), NRG ENERGY, INC. (NRG), AND SAN DIEGO GAS & ELECTRIC (SDG&E), ADDRESSING CITY AND CMWD SUPPORT FOR A CHANGE IN THE PROPOSED TECHNOLOGY OF THE APPROVED CARLSBAD ENERGY CENTER PROJECT (CECP) PLANT AND THE SUBMITTAL OF A PETITION TO AMEND (PTA) APPLICATION TO THE CALIFORNIA ENERGY COMMISSION (CEC) FOR APPROVAL OF THIS TECHNOLOGY CHANGE, CONDITIONED UPON THE DECOMMISSIONING, DEMOLITION, REMOVAL AND REMEDIATION OF THE CURRENT ENCINA POWER STATION (EPS) SITE, AS WELL AS OTHER CHANGES IN CECP PLANT DESIGN, ENERGY INFRASTRUCTURE AND PROPERTY CONSIDERATIONS BENEFICIAL TO THE RESIDENTS OF CARLSBAD, approved by the City of Carlsbad on January 14, 2014. A copy is on file at the City of Carlsbad Planning Division.

OWNER:

Owner's Name

Signature

Print name and title

Signature

Print name and title

Date

APPROVED AS TO FORM:

CITY OF CARLSBAD

DON NEU,
City Planner

Date

CELIA A. BREWER, City Attorney
City Attorney

By: _____
Assistant City Attorney

Date

PUBLIC (REDACTED) VERSION

(Proper notarial acknowledgment of execution by Contractor must be attached.)

(Chairman, president or vice-president and secretary, assistant secretary, CFO or assistant treasurer must sign for corporations. Otherwise, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering the officer(s) signing to bind the corporation.)

(If signed by an individual partner, the partnership must attach a statement of partnership authorizing the partner to execute this instrument).

EXHIBIT I

Form of Fossil Fuel Deed Restriction

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:

(Space above this line for Recorder's use only)

DECLARATION OF ENVIRONMENTAL RESTRICTION REGARDING USE

This Declaration Of Environmental Restriction Regarding Use (this "Declaration") is made as of _____, _____, by **NRG Cabrillo Power I LLC** and **Carlsbad Energy Center LLC** (collectively "NRG"), in favor of the **City of Carlsbad**, a charter city, located in San Diego County (the "City"). NRG and the City are sometimes collectively referred to below as the "Parties."

Recitals

THIS DECLARATION is made with reference to the following facts and circumstances:

- A. NRG owns real property located in the City, in the County of San Diego, California, bounded generally by Cannon Road to the south, Interstate 5 to the east, the Agua Hedionda Lagoon to the north, and Carlsbad Boulevard to the west (the "Site"). A legal description of the Site is attached to this Declaration as Exhibit A. If there is any conflict or inconsistency between the general description of the Site and the attached legal description, the attached legal description shall control.
- B. At the Site, NRG previously operated facilities known as Units 1-5 (individually a "Unit" and collectively the "Units," the "Encina Power Station") for the purpose of generating and selling electric power.
- C. On or about January 14, 2014, NRG and the City entered into a Settlement Agreement (the "Settlement Agreement"), under which the Parties agreed to resolve certain outstanding disputes. All capitalized terms in this Declaration not defined in this Declaration shall have the meaning given to them in the Settlement Agreement.

- D. Before the date of this Declaration, NRG permanently shut down the operation of the Encina Power Station in accordance with requirements and procedures described in the Settlement Agreement. The final shutdown date of the Encina Power Station was _____, 20__.
- E. In accordance with NRG's obligations under into the Settlement Agreement, NRG now wishes to record this Declaration describing certain permanent restrictions on the use of the Site following the shutdown of the Plant. The Parties intend that this Declaration have priority over any mortgage, deed of trust or similar instrument now or later encumbering any or all of the Site.

Agreement

ACCORDINGLY, NRG, on behalf of itself and its successors and assigns, its and their licensees and invitees, and all persons claiming by and through them, covenants to and agrees with the City, for the benefit of the City and the City's Property, as follows:

1. **Restriction Regarding Use of Fossil Fuels.** From and after the date this Declaration is recorded in the Official Records of San Diego County, California, and except solely for the limited purposes provided in section 2 below, the Site shall not be used for the generation of electricity by any plant, facility, machinery or other equipment that is powered by the combustion of Fossil Fuels. "**Fossil Fuels**" means petroleum or any petroleum product, coal or any coal-based product, natural gas, or other hydrocarbon-based fuel. The Parties intend that this restriction run with the Site in perpetuity. The purpose of this restriction is to protect human health and safety and the environment.
2. **Exceptions.** The restriction set forth in section 1 above shall not apply to: (i) the operation of the Carlsbad Energy Center Project ("CECP") in the configuration described in Exhibit G to the Settlement Agreement which is located on the Site; provided that changes to the configuration of the CECP that do not exceed the environmental envelope, profile or footprint of CECP as reflected in Exhibit G are permitted; (ii) ancillary equipment or machinery; (iii) back-up generators; (iv) distributed energy sources approved by the City in a redevelopment plan; or (v) any Existing Secured Loan Party, as set forth in Section 2.2 of the Settlement Agreement.
3. **Enforcement.** The City may, in its sole discretion, rely on this Declaration to enforce any of its covenants or restrictions. The City, but not the general public, shall have all rights and remedies available at law or in equity to enforce the covenants and restrictions set forth in this Declaration. All rights and remedies available to the City under this Declaration or at law or in equity shall be cumulative and not alternative, and invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other available right or remedy. In the event of any breach of the covenants or restrictions by NRG under this Declaration, the City shall be entitled to recover all attorneys' fees and costs in connection with City's enforcement activities and actions.

PUBLIC (REDACTED) VERSION

4. Notice and Cure Rights. Before taking enforcement actions under section 3 above, the City shall provide written notice to NRG of any actual or alleged violation of the covenants or restrictions set forth in this Declaration. Such notices shall be given to NRG at the address last furnished by NRG in writing to the City. NRG shall have a period of ten (10) days after receipt of such notice to cure such violation; provided, however, if the violation is not capable of cure within such ten (10) day period, NRG shall have such additional time as shall be reasonably required to complete a cure so long as NRG promptly undertakes action to commence the cure within the ten (10) day period and then diligently prosecutes the same to completion. The time in which NRG may cure is referred to in this Declaration as the “Cure Period,” and the City shall not exercise any legal or equitable remedies during the Cure Period so long as NRG is diligently pursuing such cure. Notwithstanding anything to the contrary in this section, in no event shall the Cure Period exceed six (6) months.
5. Covenants Running with the Land; Binding on Successors. This Declaration, including the covenants set forth above, constitute covenants running with the land in perpetuity and shall bind and burden NRG and any successor owner or occupier.
6. Constructive Notice and Acceptance. Every person or entity who now or later owns or acquires any right, title or interest in or to all or any portion of the Site is, and shall be, conclusively deemed to have consented to and agreed to every covenant, condition, restriction contained in this Declaration, whether or not any reference to this Declaration is contained in the instrument by which such person or entity acquired such interest.
7. Injunctive Relief. Notwithstanding anything to the contrary contained in this Declaration, and without limiting section 3 above, the City may seek and obtain injunctive relief in any court of competent jurisdiction to restrain NRG from any conduct in breach of this Declaration that causes or threatens to cause immediate and irreparable harm to the extent such equitable relief is otherwise available.
8. No Waiver. No waiver by the City (including, without limitation, any of its boards, commissions, officers, employees or agents) of any violation under this Declaration shall be effective or binding unless and to the extent expressly made in writing by the City, and no such waiver may be implied from any failure by the City to take action with respect to such violation. No express written waiver of any violation shall constitute a waiver of any subsequent violation in the performance of the same or any other provision of this Declaration.
9. Severability. Should any provision or portion of this Declaration be declared invalid or in conflict with any law, the validity of all remaining provisions shall remain unaffected and in full force and effect.
10. Governing Law; Venue. The laws of the State of California shall govern the interpretation and enforcement of this Declaration. As part of the consideration for the City’s entering into Settlement Agreement and this Declaration, NRG agrees that all actions or proceedings arising directly or indirectly under this Declaration may, at the sole option of the City, be litigated in courts located within the State of California, in the County of San Diego, and

NRG expressly consents to the jurisdiction of any such local, state or federal court, and consents that any service of process in such action or proceeding may be made by personal service upon NRG wherever NRG may then be located, or by certified or registered mail directed to NRG at the address set forth in this Declaration for the delivery of notices.

11. Notices. Except as otherwise expressly provided in this Declaration, all notices, demands, approvals, consents and other formal communications between the Parties required or permitted under this Declaration shall be in writing and shall be deemed given and effective upon the date of receipt (i) if given by personal delivery on a business day (or the next business day if delivered personally on a day that is not a business day), (ii) if sent for next-business-day delivery (with all expenses prepaid) by a reliable overnight delivery service, with receipt of delivery, or (iii) if mailed by United States registered or certified mail, first class postage prepaid, to the Party at their respective addresses for notice designated below. For convenience of the Parties, copies of notices may also be given by facsimile to the facsimile number set forth below or such other number as may be provided from time to time by notice given in the manner required under this Declaration; however, neither Party may give official or binding notice by facsimile. The effective time of a notice shall not be affected by the receipt, before receipt of the original, of a telefacsimile copy of the notice.

- (a) In the case of a notice or communication by NRG to the City:

Celia A. Brewer, Esq.
City Attorney for City of Carlsbad
General Counsel for Carlsbad Municipal Water District
1200 Carlsbad Village Drive
Carlsbad, CA 92008
Celia.Brewer@carlsbadca.gov

- (b) And in the case of a notice or communication sent by the City to NRG:

Sean Beatty
West Region General Counsel
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
sean.beatty@nrgenergy.com

Every notice given to a Party to this Declaration, under the terms of this Declaration, must state (or must be accompanied by a cover letter that states) substantially the following: the section of this Declaration under which the notice is given and the action or response required, if any; and if applicable, the period of time within which the recipient of the notice must respond.

In no event shall a recipient's approval of or consent to the subject matter of a notice be deemed to have been given by its failure to object to such notice if such notice (or the accompanying cover letter) does not comply with the requirements of this Section.

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Any mailing address or number may be changed at any time by giving written notice of such change in the manner provided above at least ten (10) days before the effective date of the change.

IN WITNESS WHEREOF, NRG has duly executed this Declaration as of the date first written above.

NRG ENERGY, INC. ON BEHALF OF ITSELF
AND ITS SUBSIDIARIES, INCLUDING
CABRILLO POWER I LLC

By: _____

Name: _____

Title: _____

**EXHIBIT A
TO
DECLARATION OF ENVIRONMENTAL RESTRICTION REGARDING
USE**

Legal Description of the Site

[INSERTED ON THE FOLLOWING PAGE]

LEGAL DESCRIPTION

(Exceptions Not Noted)

The land referred to herein is situated in the State of California, County of San Diego, City of Carlsbad, and described as follows:

That portion of Lot "H" of Rancho Agua Hedionda, in the City of Carlsbad, County of San Diego, State of California, according to Partition Map thereof No. 823, filed in the Office of the County Recorder of San Diego County, November 16, 1896; being Parcel No. 4 of that certain Certificate of Compliance recorded October 30, 2001 as file no. 2001-0789068 of Official Records, and more particularly described as:

Commencing at the intersection of the easterly line of the 100.00 foot wide right-of-way of the Atchison Topeka and Santa Fe Railroad with the northerly line of Canon Road (60.00 feet wide); thence long said easterly line north 22°30'13" west, 1564.78 feet to the TRUE POINT OF BEGINNING; thence continuing along said easterly line north 22°30'13" west, 1990.35 feet to the beginning of a non-tangent curve concave to the northwest having a radius of 1005.37 feet, a radial to said beginning bears south 85°54'14" east; thence northeasterly 36.76 feet along said curve through a central angle of 02°05'42"; thence non-tangent to said curve north 22°30'13" west, 302.87 feet; thence leaving said easterly line north 61°25'37" east, 14.19 feet; thence north 30°30'37" east, 34.90 feet; thence south 40°47'43" east, 63.50 feet; thence south 69°10'23" east, 38.00 feet; thence north 79°19'37" east, 285.00 feet; thence north 88°07'37" east, 333.14 feet; thence north 81°53'37" east, 13.68 feet to the westerly right-of-way lline of California State Highway XI-SD-2B (I-5); thence along said right-of-way line south 17°57'05" east, 204.93 feet; thence south 12°34'11" east, 424.72 feet; thence south 22°07'51" east, 239.68 feet; thence south 22°30'37" east, 1210.91 feet; thence leaving said right-of-way line south 67°37'25" west, 492.66 feet; thence south 62°25'13" west, 126.26 feet to the TRUE POINT OF BEGINNING,

Together with that portion of said Lot H described as follows:

Commencing at the northeasterly corner of Record of Survey No. 14621, in the City of Carlsbad, County of San Diego, State of California, recorded in the Office of the County Recorder of Sand Diego County, August 14, 1994 as file no. 1994-500086, said corner being on the westerly line of the right-of-way of the Atchison Topeka and Santa Fe Railroad; thence along said westerly line and easterly line of Record of Survey 14621 south 28°40'19" east, 656.70 feet to the most southerly corner of said Record of Survey No. 14621; thence continuing south 28°40'19" east, 275.00 feet to the TRUE POINT OF BEGINNING; thence leaving said westerly line south 56°25'30" west, 61.30 feet; thence south 04°59'18" west, 27.61 feet; thence south 39°37'42" east, 61.38 feet; thence south 77°21'22" east, 49.55 feet; thence south 26°45'53" east, 232.92 feet; thence south 17°52'19" east, 115.92 feet; thence south 02°16'37" east, 55.06 feet; thence south 24°00'58" west, 44.47 feet; thence south 40°45'14" west, 126.60 feet; thence south 29°41'50" west, 83.42 feet; thence south 27°27'35" west, 90.04 feet; thence south 35°18'30" west, 212.59 feet; thence south 19°22'01" east, 108.34 feet; thence south 30°56'56" east, 304.06 feet; thence south 14°30'21" west, 175.27 feet; thence south 00°09'57" east, 123.11 feet; thence south 26°53'37" east, 119.99 feet; thence south 34°46'51" west, 23.60 feet; thence north 61°27'21" west, 142.77 feet; thence north 22°47'32" west, 47.01 feet; thence south 67°12'28" west, 16.03 feet; thence south 22°47'32" east, 22.23 feet; thence south 58°37'31" west, 97.99 feet; thence south 41°35'28" west, 110.44 feet; thence north 74°44'52" west, 164.81 feet; thence north 05°57'51" west, 202.95 feet; thence north 30°14'20" west, 64.23 feet; thence north 64°31'22" west, 293.59 feet to the easterly line of the 100.00 foot wide Carlsbad Boulevard; thence along said easterly line of Carlsbad

PUBLIC (REDACTED) VERSION

Boulevard south 24°07'36" east, 913.18 feet to the beginning of a curve concave southwesterly having a radius of 4050.00 feet; thence southeasterly 348.89 feet along said curve through a central angle of 04°56'09"; thence south 19°11'27" east, 15.63 feet to the beginning of a curve concave northeasterly having a radius of 5216.55 feet; thence southeasterly 900.29 feet along said curve through a central angle of 09°53'18"; thence leaving said easterly line of Carlsbad Boulevard north 60°43'42" east, 103.71 feet; thence north 71°53'50" east, 49.05 feet; thence north 88°29'46" east, 149.63 feet; thence north 77°06'32" east, 80.00 feet; thence north 68°28'15" east, 121.97 feet; thence north 63°21'54" east, 220.51 feet; thence north 67°56'35" east, 167.57 feet; thence north 76°27'03" east, 60.33 feet; thence south 77°37'36" east, 172.85 feet; thence south 60°55'41" east, 66.30 feet; thence south 45°30'57" east, 47.42 feet; thence south 82°40'44" east, 84.31 feet; thence south 44°29'52" east, 52.55 feet to said westerly right-of-way line of said Atchison Topeka and Santa Fe Railroad; thence along said westerly line north 22°30'13" west, 2664.53 feet; thence north 28°40'19" west, 835.14 feet to the TRUE POINT OF BEGINNING.

The above described parcel of land contains 95.08 acres more or less.

Assessor's Parcel Numbers: 210-010-43, and 210-010-43 (with other property).

(End of Legal Description)

EXHIBIT J

Legal Description of North Coast Services Center Site

[INSERTED ON NEXT PAGE]

LEGAL DESCRIPTION
EXHIBIT J

That certain parcel of land situated in the City of Carlsbad, County of San Diego, State of California, being more particularly described as follows:

Parcel 5 as described in the Certificate of Compliance recorded on October 30, 2001 as Document No. 2001-0789069 of Official Records of said San Diego County also as shown as Parcel 5 on Record of Survey No. 17350 filed in the Office of the County Recorder of said San Diego County on April 12, 2002 as File No. 2002-0308512.

Containing 16.37 acres more or less.

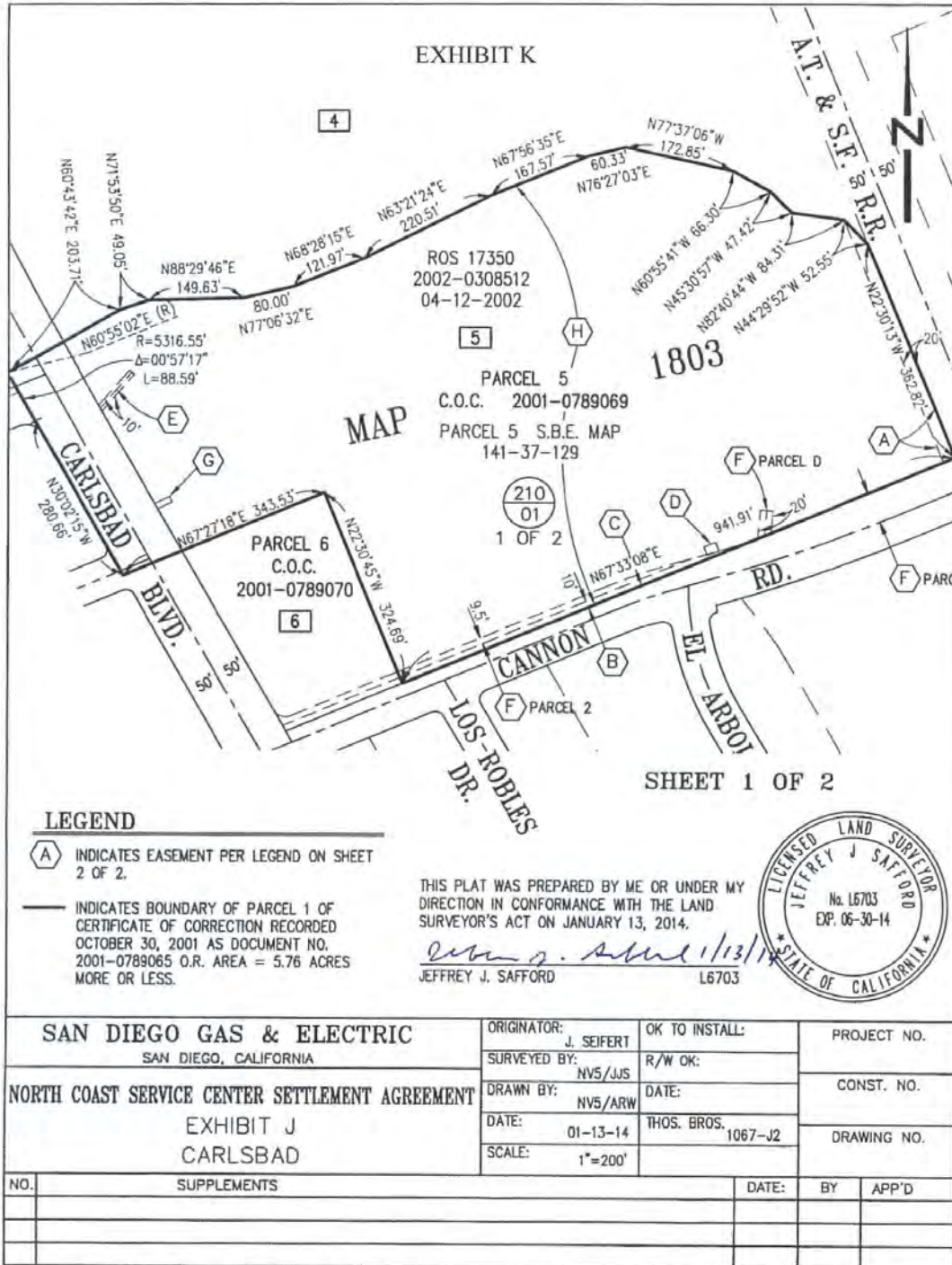
Prepared By:

Jeffrey J. Safford 1/13/14
Jeffrey J. Safford, L6703 Date



EXHIBIT K

Map of North Coast Services Center Site



NV5: G:\weirich\NV5 Job Storage Pre-Number\North Coast Service Center Settlement Agreement\NCSCSA EXHIBIT.dwg POINTS FILE: N/A

EXHIBIT K

EASEMENT LEGEND

- (A)** EASEMENT FOR ROAD PURPOSES GRANTED TO W.D. CANNON RECORDED ON JANUARY 21, 1953 IN BOOK 4722, PAGE 361, O.R.

ALSO, AN EASEMENT AND RIGHT OF WAY FOR WATER PIPELINE PURPOSES.

ALSO, AN EASEMENT AND RIGHT OF WAY FOR ROAD AND FOR WATER PIPELINE PURPOSES OVER THE EASTERLY 20 FEET OF THE SOUTHERLY 576.45 FEET OF THE PARCEL OF LAND CONVEYED TO SAN DIEGO GAS AND ELECTRIC COMPANY BY DEED RECORDED IN BOOK 2974, PAGE 493, O.R.

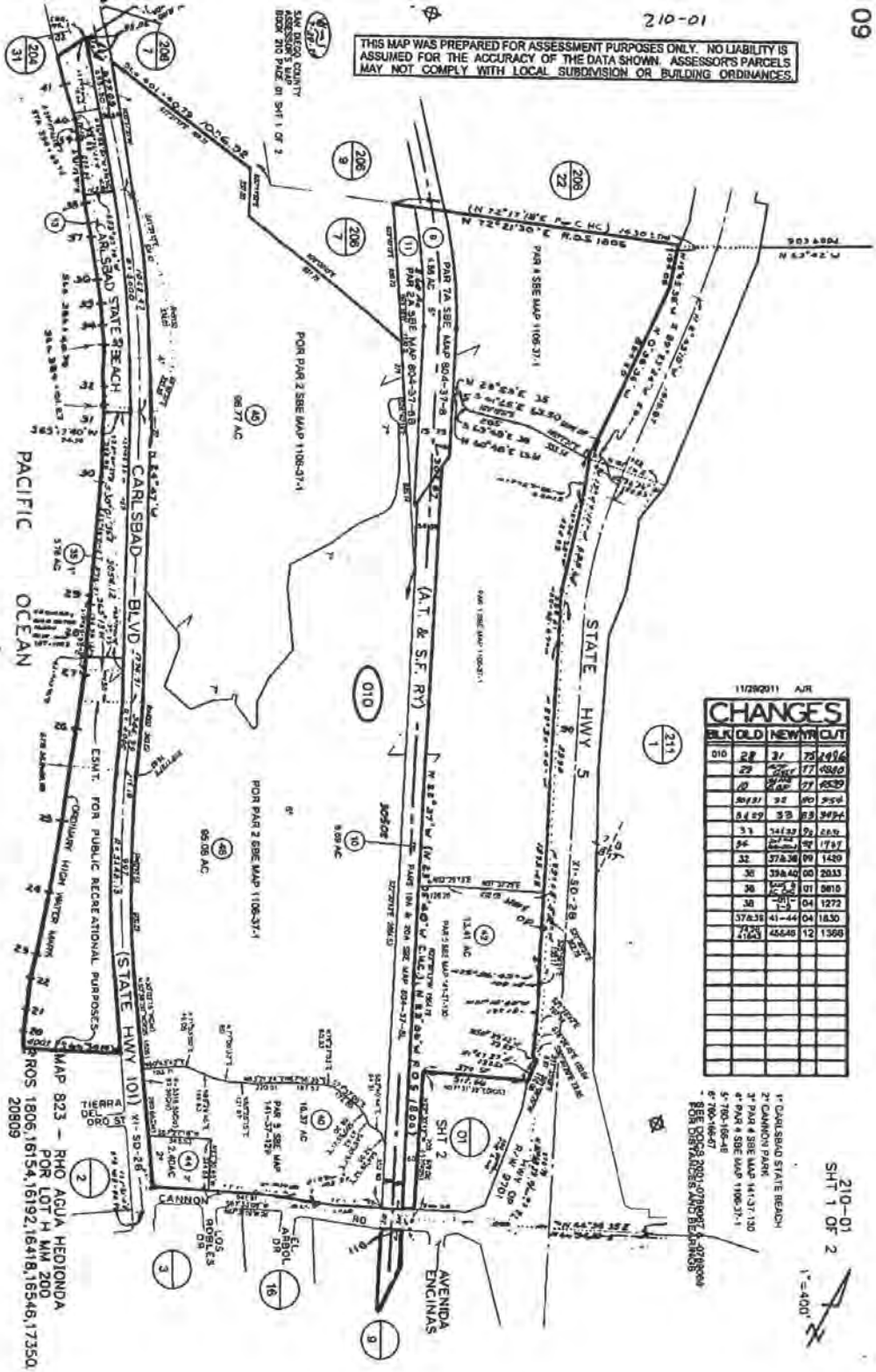
ALSO, THE RIGHT, TITLE AND INTEREST OF GRANTOR IN ANY PIPE IN THE GROUND WITHIN SAID WATER PIPELINE RIGHTS OF WAY GRANTED HEREIN, GRANTEE, HOWEVER, TO REMOVE THE SAME OR SUCH PORTION THEREOF AS MAY CEASE TO BE USED WITHIN TWELVE MONTHS FROM DATE OF CESSATION OF USE, OTHERWISE TITLE TO SUCH PIPE TO REVERT TO THE GRANTOR, ITS SUCCESSORS OR ASSIGNS.
- (B)** EASEMENT FOR A PUBLIC STREET GRANTED TO THE CITY OF CARLSBAD RECORDED ON APRIL 7, 1964 AS FILE NO. 62682, O.R.
- (C)** EASEMENT FOR A PUBLIC STREET GRANTED TO THE CITY OF CARLSBAD RECORDED ON JUNE 24, 1964 AS FILE NO. 111718, O.R.
- (D)** EASEMENT FOR A SEWER PUMPING STATION GRANTED TO THE CITY OF CARLSBAD RECORDED ON APRIL 14, 1965 AS FILE NO. 66049, O.R.
- (E)** EASEMENT FOR A SEWER PIPELINE GRANTED TO THE CITY OF CARLSBAD RECORDED ON APRIL 14, 1965 AS FILE NO. 66050, O.R.
- (F)** EASEMENT FOR ROAD AND PUBLIC UTILITY GRANTED TO THE CITY OF CARLSBAD RECORDED ON NOVEMBER 13, 1972 AS FILE NO. 303347, O.R.
- (G)** EASEMENT FOR WATER PIPELINES, METERS, AND METER VAULT GRANTED TO THE CITY OF CARLSBAD RECORDED ON FEBRUARY 27, 1974 AS FILE NO. 74-049416, O.R.
- (H)** INDICATES COVENANTS AND CONDITIONS CONTAINED IN AN AGREEMENT BY AND BETWEEN SAN DIEGO GAS AND ELECTRIC COMPANY AND CABRILLO POWER I LLC, A DELAWARE LIMITED LIABILITY COMPANY DATED MAY 20 1999 AND RECORDED MAY 21, 1999 AS FILE NO. 1999-0347270, O.R. REGARDING STAGING, MAINTENANCE AND OPERATION FACILITIES RELATED TO LICENSEE'S ELECTRICAL TRANSMISSION AND DISTRIBUTION SERVICES.

SHEET 2 OF 2

SAN DIEGO GAS & ELECTRIC SAN DIEGO, CALIFORNIA NORTH COAST SERVICE CENTER SETTLEMENT AGREEMENT EXHIBIT J CARLSBAD		ORIGINATOR: J. SEIFERT	OK TO INSTALL:	PROJECT NO.
		SURVEYED BY: NV5/JJS	R/W OK:	CONST. NO.
		DRAWN BY: NV5/ARW	DATE:	
		DATE: 01-13-14	THOS. BROS. 1067-J2	DRAWING NO.
SCALE: 1"=200'				
NO.	SUPPLEMENTS	DATE:	BY	APP'D

NV5: G:\Weirich\NV5 Job Storage Pre-Number\North Coast Service Center Settlement Agreement\NCSCSA EXHIBIT.dwg

POINTS FILE: N/A



THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

11/29/2011 AM

CHANGES					
BLK	OLD	NEW	TR	CLUT	
010	28	37	75	4916	
	29	38	77	4960	
	30	39	77	4939	
	30A	31	36	954	
	30B	32	36	954	
	30C	33	39	3494	
	31	34	39	213	
	32	35	39	1489	
	33	36	39	1489	
	34	37	39	1489	
	35	38	39	1489	
	36	39	39	2033	
	37	40	39	5810	
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	39	42	44	1830	
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	94	97	44		
	95	98	44		
	96	99	44		
	97	100	44		

Parcel 5

DOC # 2001-0789069

OCT 30, 2001 4:59 PM

RECORDING
REQUESTED BY
STEWART TITLE OF CALIFORNIA
AND WHEN
RECORDED MAIL TO:

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 20.00

025097

City Clerk
CITY OF CARLSBAD
1200 Carlsbad Village Dr.
Carlsbad, CA 92008



SPACE ABOVE THIS LINE FOR RECORDER'S USE

ASSESSOR'S PARCEL NO. 210-010-39-00 (portion)
PROJECT NO. & NAME: ADJ 00-10, Parcel 5
Enclra Adjustment
Case No. CE 01-40

**CERTIFICATE OF COMPLIANCE
FOR ADJUSTMENT PLAT**
(Section 86499.35 of the Government Code)

The City Engineer has determined that the real property described below, has been divided or has resulted from a division or combining of lots in compliance with the Subdivision Map Act and with the provisions of the Carlsbad Municipal Code pursuant thereto.

OWNER(S): Cabrillo Power I LLC, a Delaware Limited Liability Company

DESCRIPTION: (See Exhibit "A" attached. Exhibit "B" is attached for clarity only.)

NOTE: The description in Exhibit "A" attached has been provided by the owner of the property and neither the City of Carlsbad nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall have no force and effect if the above owners or any subsequent transferee or assignee acquires any contiguous property other than a lot or lots shown on a recorded subdivision map, parcel map or record of survey map filed pursuant to and prior to repeal (Stats. 1955, Ch. 1593) of Section 11575 of the Business and Professions Code;

This Certificate of Compliance shall in no way affect the requirements of any other County, State or Federal agency that regulates development of real property.

DATE: 10/29/01

BY: [Signature]
Deputy City Engineer
RCE 33061 EXP. 8/30/02
33698

EXHIBIT "A"
LEGAL DESCRIPTION
ADJ 00-10 - ENCINA

025098

PARCEL 5

That portion of Rancho Agua Hedionda, in the City of Carlsbad, County of San Diego, State of California, according to Partition Map thereof No. 823, filed in the Office of the County Recorder of said County, November 16, 1896, described as follows:

Commencing at the Northeasterly corner of Record of Survey No. 14621, in the City of Carlsbad, County of San Diego, State of California, recorded in the Office of the County Recorder of San Diego County, August 14, 1994 as File No. 1994-500086, said corner being on the Westerly line of the Right-of-Way of the Atchison Topeka and Santa Fe Railroad; thence along said Westerly line and Easterly line of said Record of Survey 14621 South 28°40'19" East, 656.70 feet to the most Southerly corner of said Record of Survey No. 14621; thence continuing South 28°40'19" East, 1110.14 feet; thence South 22°30'13" East, 2664.53 feet TO THE TRUE POINT OF BEGINNING; thence continuing South 22°30'13" East, 362.82 feet to the Southeast corner of Parcel 1 described in Document No. 78-430841, recorded October 10, 1978, Official Records; thence leaving said Westerly line of Railroad and along the Southerly line of said Parcel 1, North 67°33'08" West, 941.91 feet; thence leaving said Southerly line North 22°30'45" West, 324.69 feet; thence South 67°27'18" West, 343.53 feet to the Westerly line of the 100 foot wide Carlsbad Boulevard; thence along said Westerly line of Carlsbad Boulevard North 30°02'15" West, 280.66 Feet to the beginning of a curve concave Easterly having a radius of 5316.55 feet; thence Northerly 88.59 feet along said curve through a central angle of 00°57'17"; thence leaving said Westerly line North 60°43'42" East, 203.71 feet; thence North 71°53'50" East, 49.05 feet; thence North 88°29'46" East, 149.63 feet; thence North 77°06'32" East, 80.00 feet; thence North 68°28'15" East, 121.97 feet; thence North 63°21'24" East, 220.51 feet; thence North 67°56'35" East, 167.57 feet; thence North 76°27'03" East, 60.33 feet; thence South 77°37'06" East, 172.85 feet; thence South 60°55'41" East, 66.30 feet; thence South 45°30'57" East, 47.42 feet; thence South 82°40'44" East, 84.31 feet; thence South 44°29'52" East, 52.55 feet to the TRUE POINT OF BEGINNING.

The hereinabove described parcel of land contains 16.37 acres more or less.

Prepared By:

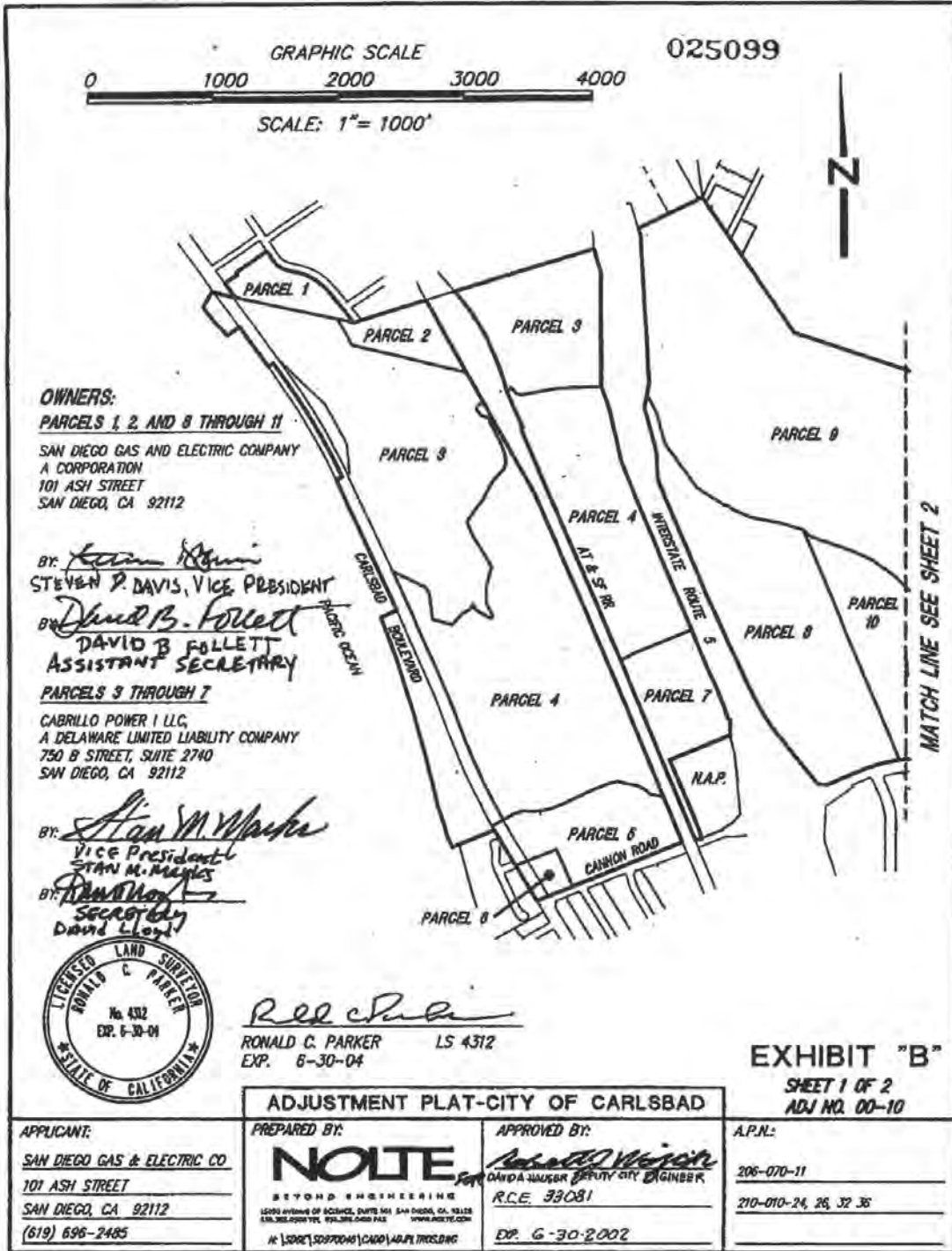
Nolte Associates, Inc.

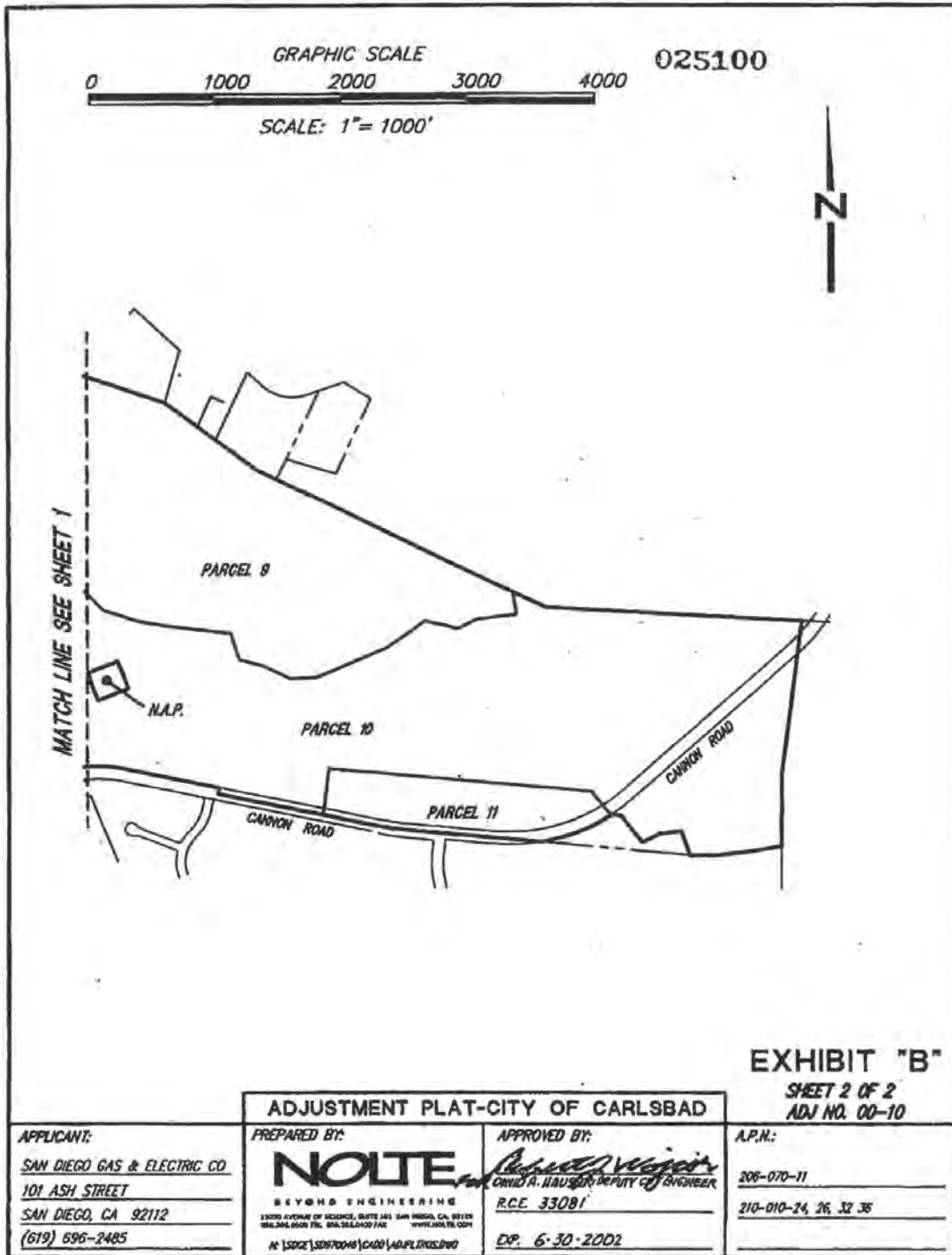
Ronald C. Parker 10-22-01

Ronald C. Parker Date
Director of Survey



n:\ud1947\legal description parcel 5.doc





025101

State of California }
County of San Diego }

On October 29, 2001 before me, Kelly Murphy
(Date) (Name, Title of Officer)

personally appeared Robert J. Wojcik
(Name[s] of Signer[s])

_____, personally known to me
- OR - (or proved to me on the basis of satisfactory evidence) to be the person(s) whose

name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they
executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted,
executed the instrument.

WITNESS my hand and official seal



Kelly Murphy
Signature of Notary

(This area for official
notary seal)

Title or Type of Document	<u>Certificate of Compliance for Adjustment Plat ADJ 00-10, Parcel 5</u>		
Date of Document	<u>10/29/01</u>	No. of Pages	<u>4</u>
Signer(s) other than named above	_____		

EXHIBIT L

Legal Description of Parcel 11

[INSERTED ON NEXT PAGE]

LEGAL DESCRIPTION

EXHIBIT L

That certain parcel of land situated in the City of Carlsbad, County of San Diego, State of California, being more particularly described as follows:

Parcel 11 as described in the Certificate of Compliance recorded on October 30, 2001 as Document No. 2001-0789075 of Official Records of said San Diego County also as shown as Parcel 11 on Record of Survey No. 17350 filed in the Office of the County Recorder of said San Diego County on April 12, 2002 as File No. 2002-0308512.

Containing 20.55 acres more or less.

Prepared By:

Jeffrey J. Safford 1/14/14
Jeffrey J. Safford, L6703 Date

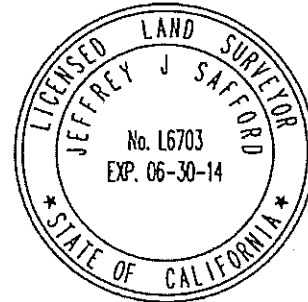


EXHIBIT M

211
01

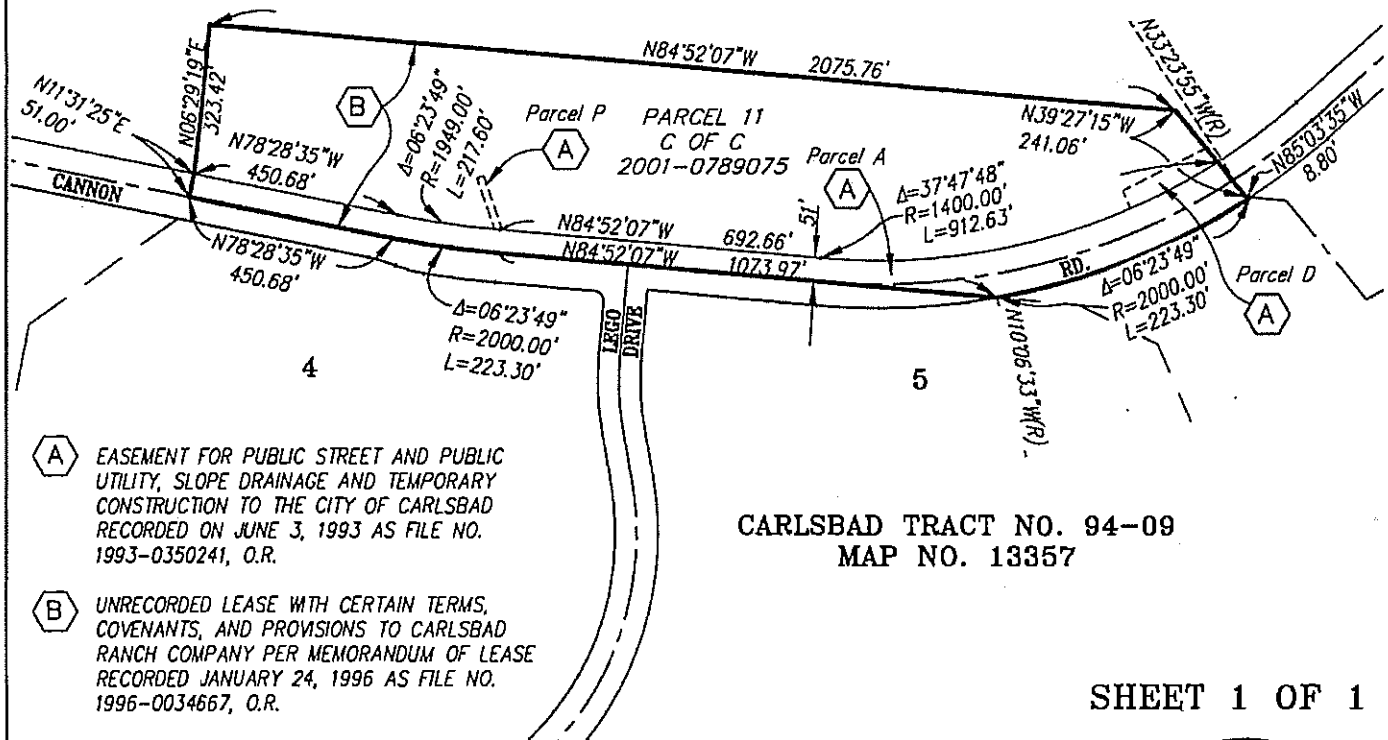
PARCEL 10
C OF C
2001-0789074

ROS 17350
2002-0308512
04-12-2002



POR. PAR. 7
S.B.E. MAP
141-37-73J

POR. LOT H,
RANCHO AGUA HEDIONDA,
MM 209



- (A) EASEMENT FOR PUBLIC STREET AND PUBLIC UTILITY, SLOPE DRAINAGE AND TEMPORARY CONSTRUCTION TO THE CITY OF CARLSBAD RECORDED ON JUNE 3, 1993 AS FILE NO. 1993-0350241, O.R.
- (B) UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, AND PROVISIONS TO CARLSBAD RANCH COMPANY PER MEMORANDUM OF LEASE RECORDED JANUARY 24, 1996 AS FILE NO. 1996-0034667, O.R.

CARLSBAD TRACT NO. 94-09
MAP NO. 13357

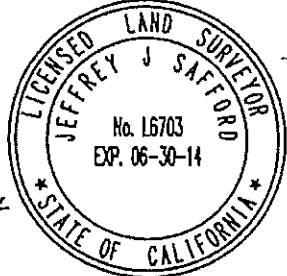
SHEET 1 OF 1

LEGEND

- (A) INDICATES EASEMENT AS NOTED HEREON.
- INDICATES BOUNDARY OF PARCEL 11 OF CERTIFICATE OF CORRECTION RECORDED OCTOBER 30, 2001 AS DOCUMENT NO. 2001-0789075 O.R. AREA = 20.55 ACRES (NET), MORE OR LESS.

THIS PLAT WAS PREPARED BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE LAND SURVEYOR'S ACT ON JANUARY 14, 2014.

Jeffrey J. Safford 1/14/14
JEFFREY J. SAFFORD L6703



SAN DIEGO GAS & ELECTRIC SAN DIEGO, CALIFORNIA		ORIGINATOR:	J. SEIFERT	OK TO INSTALL:		PROJECT NO.
		SURVEYED BY:	NV5/JJS	R/W OK:		CONST. NO.
NORTH COAST SERVICE CENTER SETTLEMENT AGREEMENT EXHIBIT M CARLSBAD		DRAWN BY:	NV5/ARW	DATE:		DRAWING NO.
		DATE:	01-13-14	THOS. BROS.	1067-J2	
		SCALE:	1"=400'			
NO.	SUPPLEMENTS			DATE:	BY	APP'D

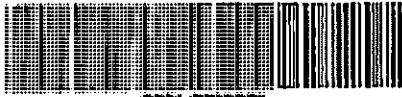
DOC # 2001-0789075

OCT 30, 2001 4:59 PM

RECORDING
REQUESTED BY
STEWART TITLE OF CALIFORNIA
AND WHEN
RECORDED MAIL TO:

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 20.00

025128



City Clerk
CITY OF CARLSBAD
1200 Carlsbad Village Dr.
Carlsbad, CA 92008

PRO
31
16M

SPACE ABOVE THIS LINE FOR RECORDER'S USE

ASSESSOR'S PARCEL NO. 211-010-28-00
PROJECT NO. & NAME: ADJ 00-10, Parcel 11
Encina Adjustment
Case No. CE 01-46

**CERTIFICATE OF COMPLIANCE
FOR ADJUSTMENT PLAT**
(Section 66499.35 of the Government Code)

The City Engineer has determined that the real property described below, has been divided or has resulted from a division or combining of lots in compliance with the Subdivision Map Act and with the provisions of the Carlsbad Municipal Code pursuant thereto.

OWNER(S): San Diego Gas & Electric Company, a Corporation

DESCRIPTION: (See Exhibit "A" attached. Exhibit "B" is attached for clarity only.)

NOTE: The description in Exhibit "A" attached has been provided by the owner of the property and neither the City of Carlsbad nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall have no force and effect if the above owners or any subsequent transferee or assignee acquires any contiguous property other than a lot or lots shown on a recorded subdivision map, parcel map or record of survey map filed pursuant to and prior to repeal (Stats. 1955, Ch. 1593) of Section 11575 of the Business and Professions Code;

This Certificate of Compliance shall in no way affect the requirements of any other County, State or Federal agency that regulates development of real property.

DATE: 10/29/01

BY: Robert J. Wajed
Deputy City Engineer
RCE 33084-EXP. 8/30/02
7369B

EXHIBIT "A"
LEGAL DESCRIPTION
ADJ 00-10 - ENCINA

025129

PARCEL 11

Parcel B of Certificate of Compliance recorded November 22, 1995 as File No. 1995-0532901 of Official Records, in the City of Carlsbad, County of San Diego, State of California.

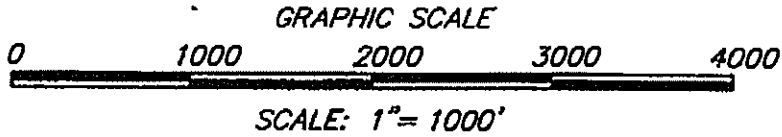
The hereinabove described parcel of land contains 20.55 acres more or less.

Prepared By:

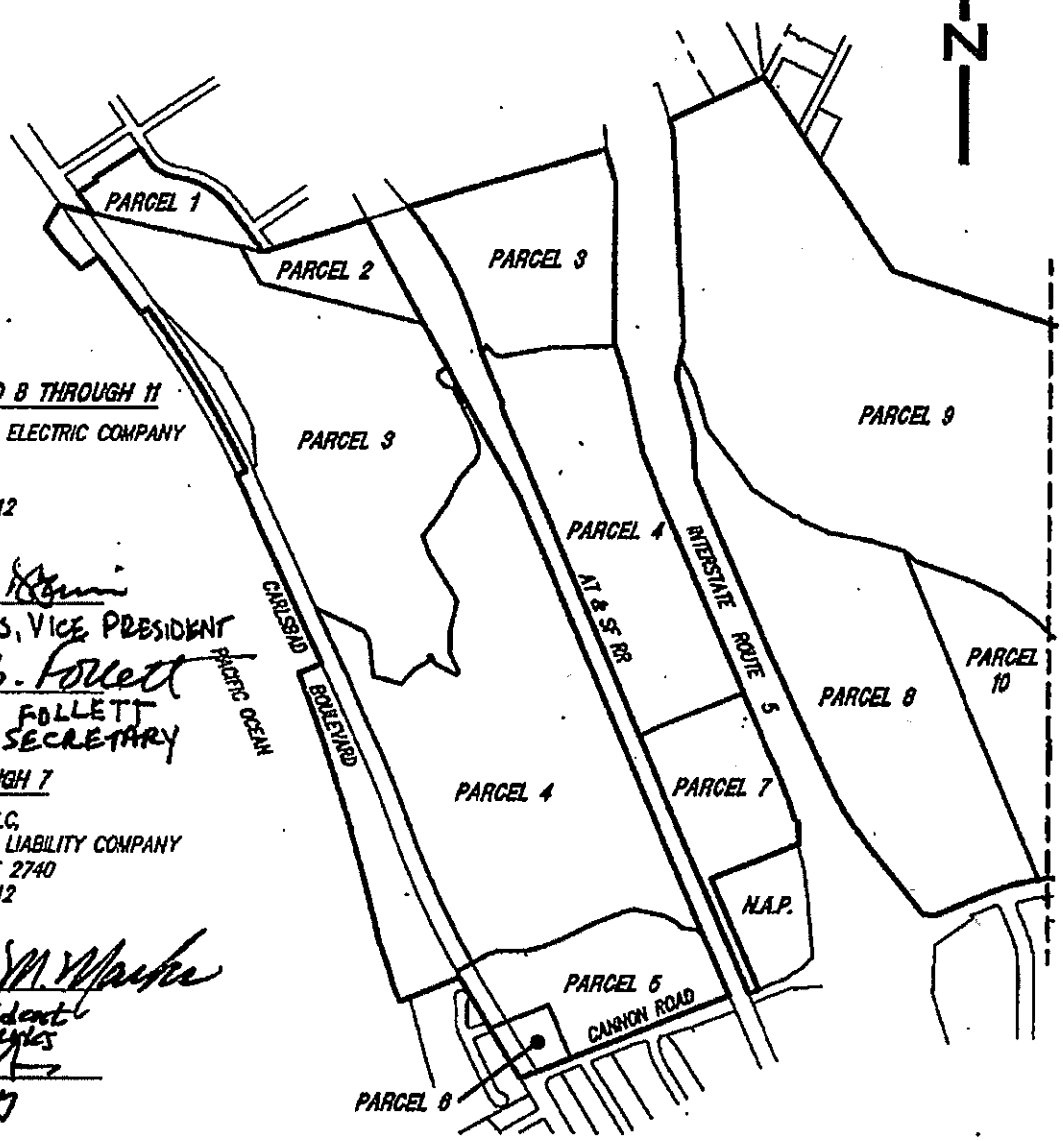
Nolte Associates, Inc.

Ronald C. Parker *10/22/01*
Ronald C. Parker Date
Director of Survey





025130



OWNERS:

PARCELS 1, 2, AND 8 THROUGH 11

SAN DIEGO GAS AND ELECTRIC COMPANY
A CORPORATION
101 ASH STREET
SAN DIEGO, CA 92112

BY: *Steven P. Davis*
STEVEN P. DAVIS, VICE PRESIDENT

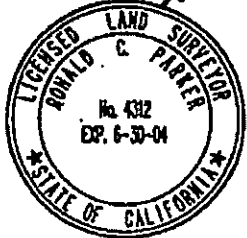
BY: *David B. Follett*
DAVID B. FOLLETT
ASSISTANT SECRETARY

PARCELS 3 THROUGH 7

CABRILLO POWER I LLC,
A DELAWARE LIMITED LIABILITY COMPANY
750 B STREET, SUITE 2740
SAN DIEGO, CA 92112

BY: *Stan M. Markes*
VICE PRESIDENT
STAN M. MARKES

BY: *David L. Lyon*
SECRETARY
DAVID LYON

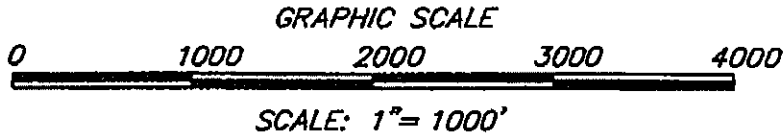


Ronald C. Parker
RONALD C. PARKER LS 4312
EXP. 6-30-04

EXHIBIT "B"

SHEET 1 OF 2
ADJ NO. 00-10

ADJUSTMENT PLAT-CITY OF CARLSBAD			
APPLICANT: SAN DIEGO GAS & ELECTRIC CO 101 ASH STREET SAN DIEGO, CA 92112 (619) 696-2485	PREPARED BY: NOLTE BEYOND ENGINEERING 15070 AVENUE OF SCIENCE, SUITE 101 SAN DIEGO, CA 92128 619.362.0300 TEL. 619.322.0400 FAX WWW.NOLTE.COM # [SDGE] [52870046] [CAD] [AD.PETROS.DWG]	APPROVED BY: <i>David A. Hauser</i> DAVID A. HAUSER DEPUTY CITY ENGINEER R.C.E. 33081 EXP. 6-30-2002	A.P.N.: 205-070-11 210-010-24, 26, 32, 36



025131

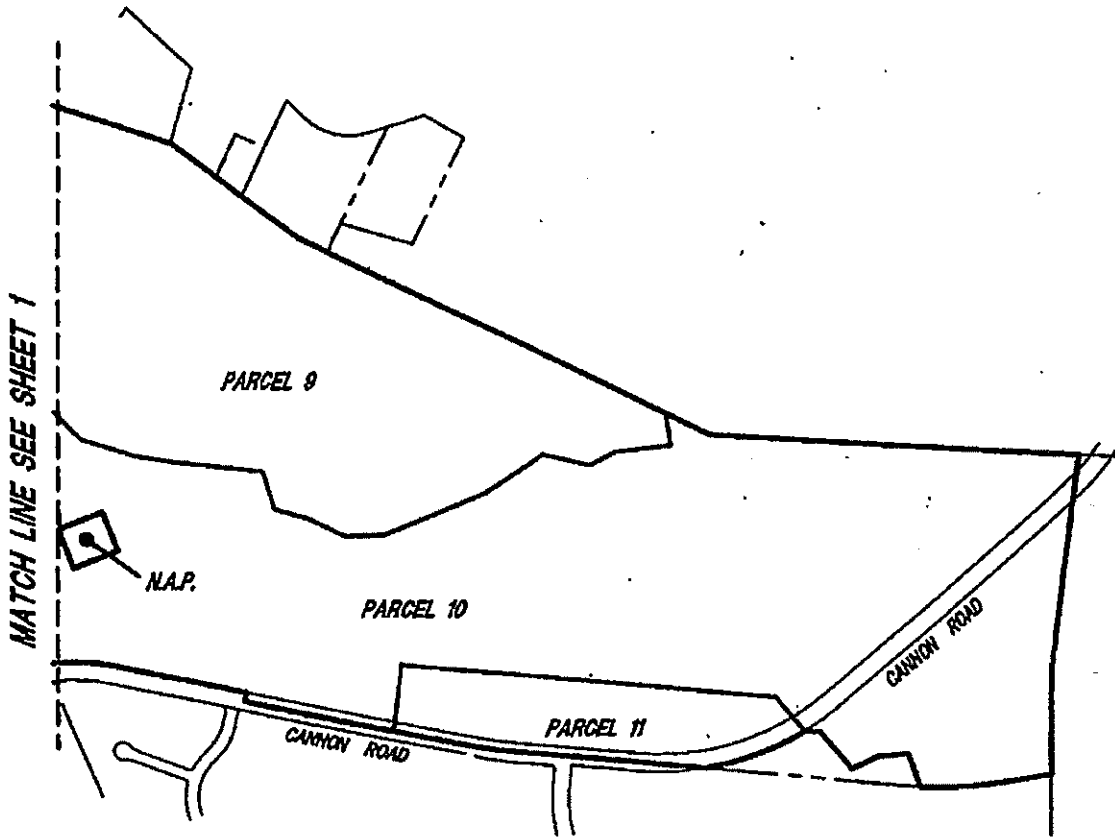


EXHIBIT "B"

SHEET 2 OF 2
ADJ NO. 00-10

ADJUSTMENT PLAT-CITY OF CARLSBAD			
APPLICANT: SAN DIEGO GAS & ELECTRIC CO. 101 ASH STREET SAN DIEGO, CA 92112 (619) 696-2485	PREPARED BY: NOLTE BEYOND ENGINEERING 13020 AVENUE OF SCIENCE, SUITE 101 SAN DIEGO, CA 92126 619.391.0000 TEL. 619.391.4400 FAX WWW.NOLTE.COM # [SDGE] 50970046 [CADD] ADAP.TROS.DWG	APPROVED BY: DAVID A. HAUSER, DEPUTY CITY ENGINEER R.C.E. 33081 EXP. 6-30-2002	A.P.N.: 206-070-11 210-010-24, 26, 32 36

State of California }
County of San Diego }

025132

On October 29, 2001 before me, Kelly Murphy,
(Date) (Name, Title of Officer)

personally appeared Robert J. Wojcik
(Name[s] of Signer[s])

_____, personally known to me
- OR - (or proved to me on the basis of satisfactory evidence) to be the person(s) whose
name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they
executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted,
executed the instrument.

WITNESS my hand and official seal



Kelly Murphy
Signature of Notary

(This area for official
notary seal)

Title or Type of Document	<u>Certificate of Compliance for Adjustment Plat ADJ 00-10, Parcel 11</u>		
Date of Document	<u>10/29/01</u>	No. of Pages	<u>4</u>
Signer(s) other than named above	_____		

EXHIBIT N

Legal Description of Cannon Park

[INSERTED ON NEXT PAGE]

LEGAL DESCRIPTION

EXHIBIT N

That certain parcel of land situated in the City of Carlsbad, County of San Diego, State of California, being more particularly described as follows:

Parcel 6 as described in the Certificate of Compliance recorded on October 30, 2001 as Document No. 2001-0789070 of Official Records of said San Diego County also as shown as Parcel 6 on Record of Survey No. 17350 filed in the Office of the County Recorder of said San Diego County on April 12, 2002 as File No. 2002-0308512.

Containing 2.40 acres more or less.

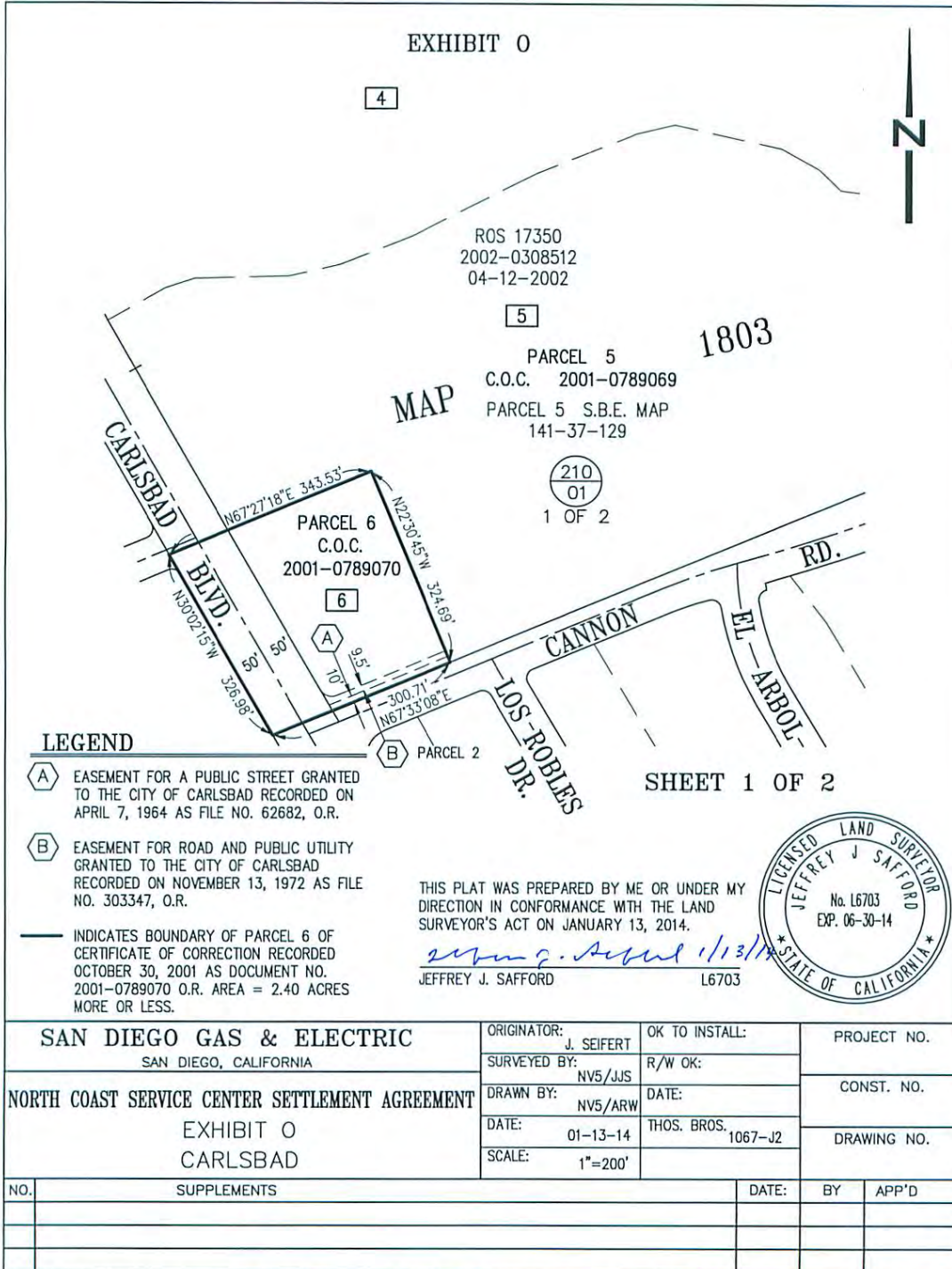
Prepared By:

Jeffrey J. Safford 1/13/14
Jeffrey J. Safford, L6703 Date

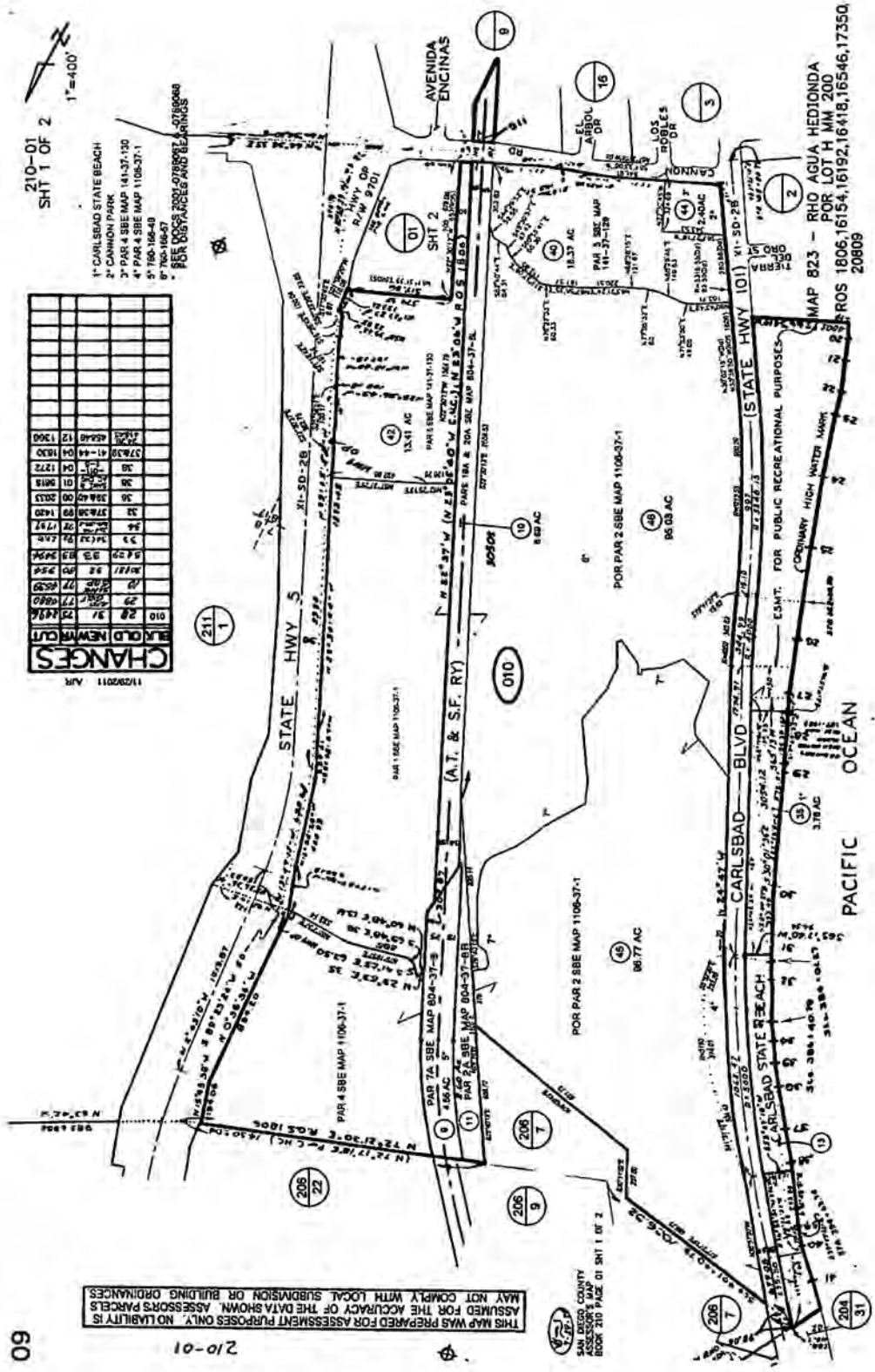


EXHIBIT O

Map of Cannon Park



NV5: G:\Weirich\NV5 Job Storage Pre-Number\North Coast Service Center Settlement Agreement\NCSCSA EXHIBIT.dwg POINTS FILE: N/A



09

210-01

Parcel 6

DOC # 2001-0789070

OCT 30, 2001 4:59 PM

RECORDING REQUESTED BY STEWART TITLE OF CALIFORNIA AND WHEN RECORDED MAIL TO:

025102

OFFICIAL RECORDS SAN DIEGO COUNTY RECORDER'S OFFICE GREGORY J. SMITH, COUNTY RECORDER FEES: 20.00

FD 5/1601

City Clerk CITY OF CARLSBAD 1200 Carlsbad Village Dr. Carlsbad, CA 92008



SPACE ABOVE THIS LINE FOR RECORDER'S USE

ASSESSOR'S PARCEL NO. 210-010-24-00 PROJECT NO. & NAME: ADJ 00-10, Parcel 6 Encina Adjustment Case No. CE 01-41

CERTIFICATE OF COMPLIANCE FOR ADJUSTMENT PLAT (Section 66499.35 of the Government Code)

The City Engineer has determined that the real property described below, has been divided or has resulted from a division or combining of lots in compliance with the Subdivision Map Act and with the provisions of the Carlsbad Municipal Code pursuant thereto.

- OWNER(S): Cabrillo Power I LLC, a Delaware Limited Liability Company
DESCRIPTION: (See Exhibit "A" attached. Exhibit "B" is attached for clarity only.)
NOTE: The description in Exhibit "A" attached has been provided by the owner of the property and neither the City of Carlsbad nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall have no force and effect if the above owners or any subsequent transferee or assignee acquires any contiguous property other than a lot or lots shown on a recorded subdivision map, parcel map or record of survey map filed pursuant to and prior to repeal (Stats. 1955, Ch. 1593) of Section 11575 of the Business and Professions Code;

This Certificate of Compliance shall in no way affect the requirements of any other County, State or Federal agency that regulates development of real property.

DATE: 10/29/01

BY: [Signature] Deputy City Engineer RCE 33661 EXP. 3/30/02 33698

025103

EXHIBIT "A"
LEGAL DESCRIPTION
ADJ 00-10 - ENCINA

PARCEL 6

That portion of Rancho Agua Hedionda, in the City of Carlsbad, County of San Diego, State of California, according to Partition Map thereof No. 823, filed in the Office of the County Recorder of said County, November 16, 1896, described as follows:

Commencing at the Northeasterly corner of Record of Survey No. 14621, in the City of Carlsbad, County of San Diego, State of California, recorded in the Office of the County Recorder of San Diego County, August 14, 1994 as File No. 1994-500086, said corner being on the Westerly line of the Right-of-Way of the Atchison Topeka and Santa Fe Railroad; thence along said Westerly line and Easterly line of said Record of Survey 14621 South 28°40'19" East, 656.70 feet to the most Southerly corner of said Record of Survey No. 14621; thence continuing South 28°40'19" East, 1110.14 feet; thence South 22°30'13" East, 2664.53 feet; thence continuing South 22°30'13" East, 362.82 feet to the Southeast corner of Parcel 1 described in Document No. 78-430841, recorded October 10, 1978, Official Records; thence leaving said Westerly line of Railroad and along the Southerly line of said Parcel 1, North 67°33'08" West, 941.91 feet TO THE TRUE POINT OF BEGINNING; thence leaving said Southerly line North 22°30'45" West, 324.69 feet; thence South 67°27'18" West, 343.53 feet to the Westerly line of the 100 foot wide Carlsbad Boulevard; thence along said Westerly line South 30°02'15" East, 326.98 feet to a line that bears South 67°33'08" West from the TRUE POINT OF BEGINNING; thence North 67°33'08" East, 300.71 feet to the TRUE POINT OF BEGINNING.

The hereinabove describe parcel of land contain 2.40 acres more or less.

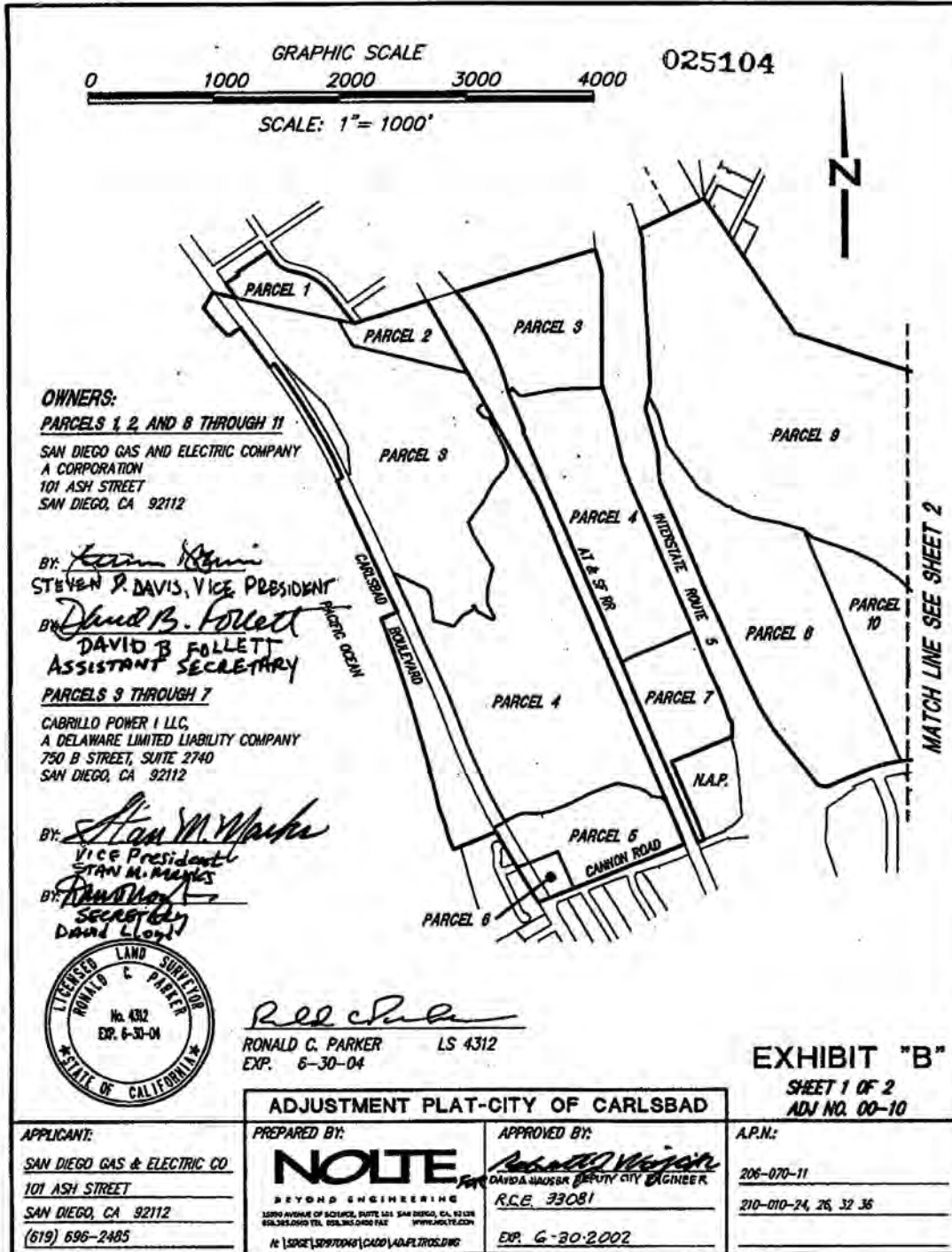
Prepared By:

Nolte Associates, Inc.

Ronald C. Parker 10/22/01
Ronald C. Parker Date
Director of Survey



n:\sd1947\legal description parcel 6.doc



OWNERS:

PARCELS 1, 2, AND 8 THROUGH 11

SAN DIEGO GAS AND ELECTRIC COMPANY
A CORPORATION
101 ASH STREET
SAN DIEGO, CA 92112

BY: *Steven P. Davis*
STEVEN P. DAVIS, VICE PRESIDENT

BY: *David B. Follett*
DAVID B. FOLLETT
ASSISTANT SECRETARY

PARCELS 3 THROUGH 7

CABRILLO POWER I LLC,
A DELAWARE LIMITED LIABILITY COMPANY
750 B STREET, SUITE 2740
SAN DIEGO, CA 92112

BY: *Stan M. Marks*
VICE PRESIDENT
STAN M. MARKS

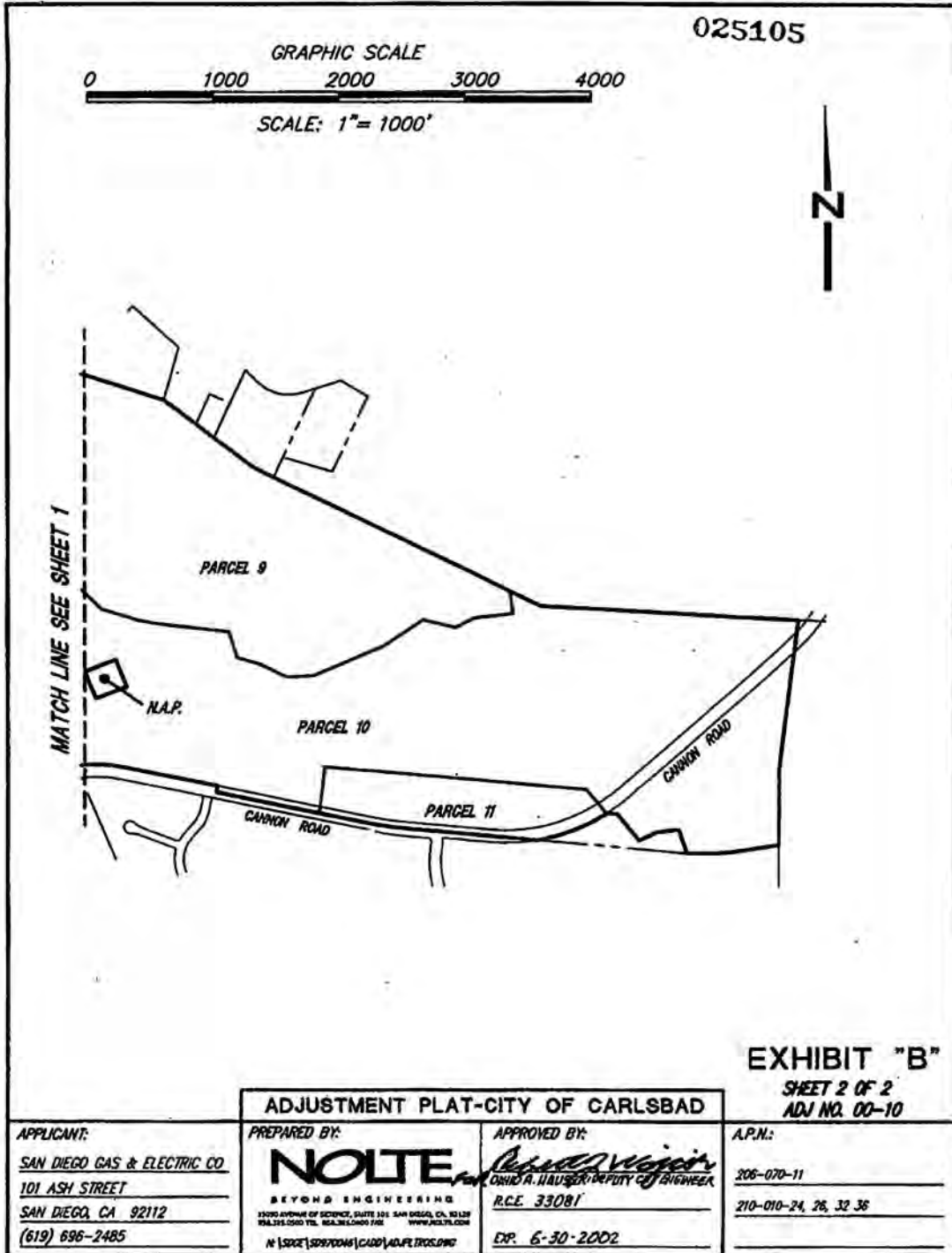
BY: *David Lloyd*
SECRETARY
DAVID LLOYD



Ronald C. Parker
RONALD C. PARKER LS 4312
EXP. 6-30-04

EXHIBIT "B"
SHEET 1 OF 2
ADJ NO. 00-10

ADJUSTMENT PLAT-CITY OF CARLSBAD			
APPLICANT: SAN DIEGO GAS & ELECTRIC CO 101 ASH STREET SAN DIEGO, CA 92112 (619) 696-2485	PREPARED BY: NOLTE BEYOND ENGINEERING <small>10890 AVENUE OF SCIENCE, SUITE 1411 SAN DIEGO, CA 92186 619.365.0090 TEL 619.363.0400 FAX WWW.NOLTE.COM</small> N:\SPR\SPR7040\CA00\ADJ.PLOTS.DWG	APPROVED BY: <i>David A. Jauson</i> DAVID A. JAUSON DEPUTY CITY ENGINEER R.C.E. 33081 EXP. 6-30-2002	A.P.N.: 206-070-11 210-010-24, 26, 32, 36



State of California }
County of San Diego }

025106

On October 29, 2001 before me, Kelly Murphy
(Date) (Name, Title of Officer)

personally appeared Robert J. Wojcik
(Name[s] of Signer[s])

_____, personally known to me
- OR - (or proved to me on the basis of satisfactory evidence) to be the person(s) whose
name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they
executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted,
executed the instrument.

WITNESS my hand and official seal



Kelly Murphy
Signature of Notary

(This area for official
notary seal)

Title or Type of Document <u>Certificate of Compliance for Adjustment Plat ADJ 00-10, Parcel 6</u>	
Date of Document <u>10/29/01</u>	No. of Pages <u>4</u>
Signer(s) other than named above _____	

EXHIBIT P

Legal Description of Agua Hedionda North Shore Bluff Parcel

[INSERTED ON NEXT PAGE]

LEGAL DESCRIPTION

EXHIBIT P

That certain parcel of land situated in the City of Carlsbad, County of San Diego, State of California, being more particularly described as follows:

Parcel 1 as described in the Certificate of Compliance recorded on October 30, 2001 as Document No. 2001-0789065 of Official Records of said San Diego County also as shown as Parcel 1 on Record of Survey No. 17350 filed in the Office of the County Recorder of said San Diego County on April 12, 2002 as File No. 2002-0308512.

Containing 5.76 acres more or less.

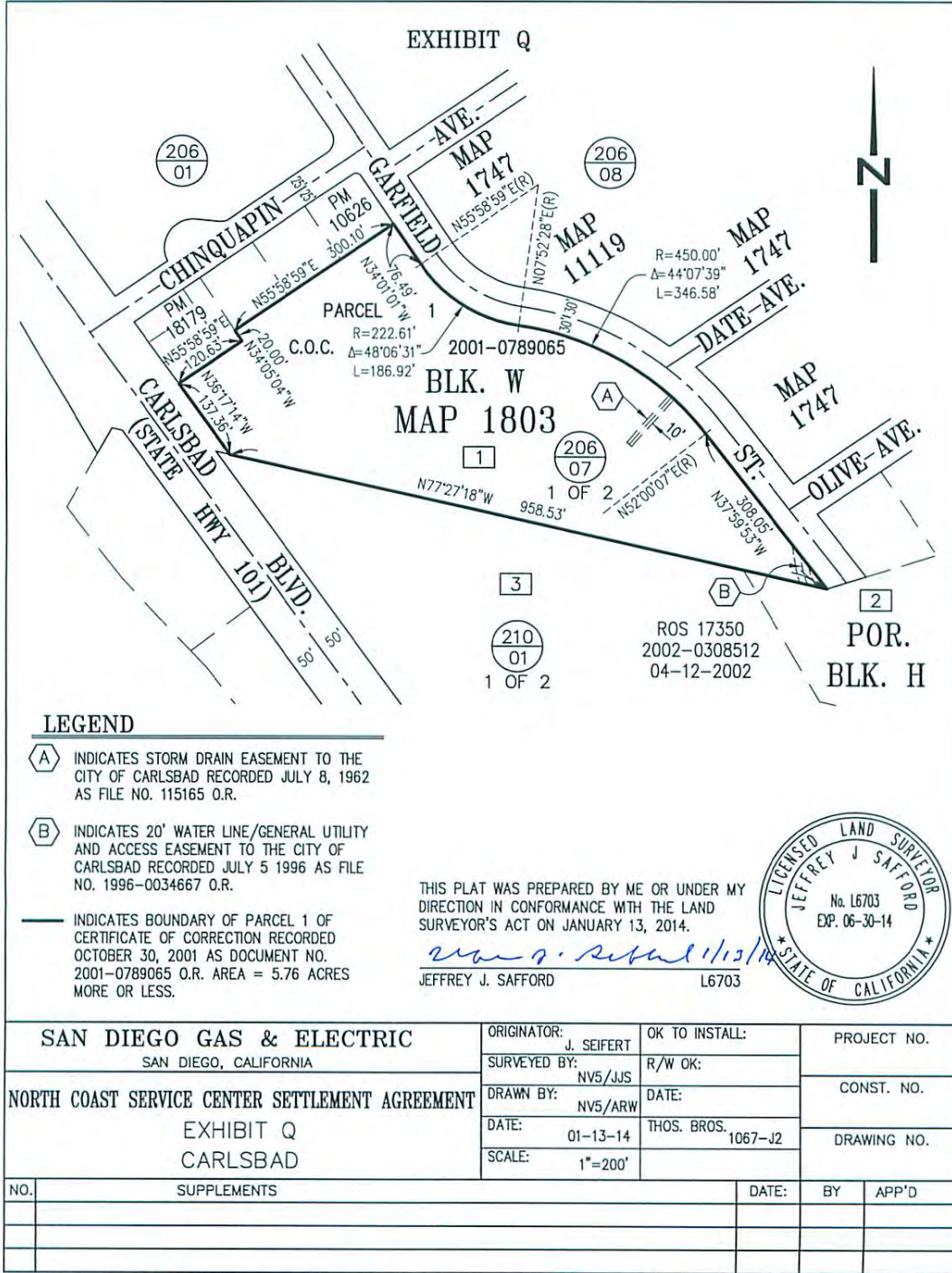
Prepared By:

Jeffrey J. Safford 11/13/14
Jeffrey J. Safford, L6703 Date

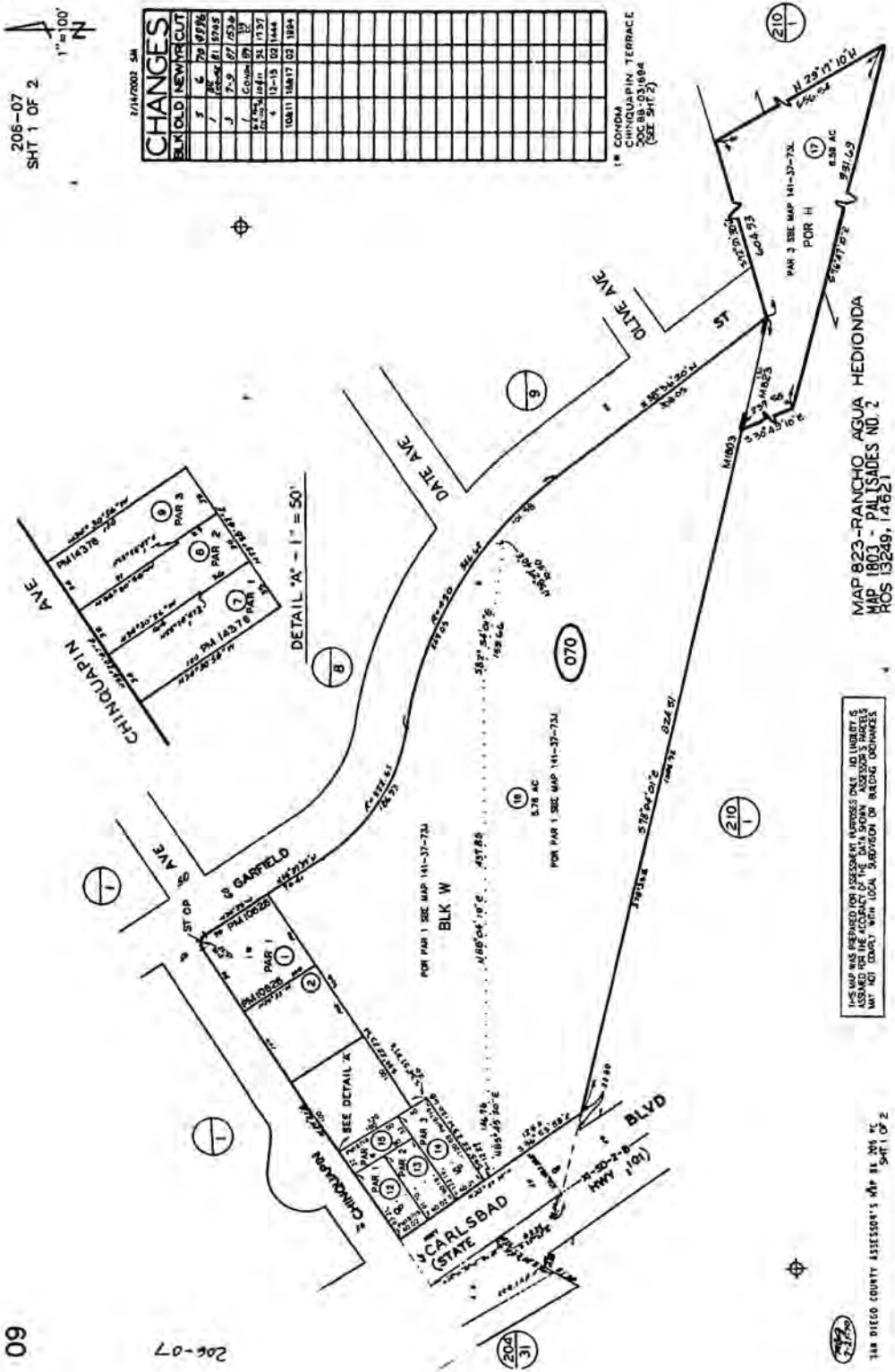


EXHIBIT Q

Map of Agua Hedionda North Shore Bluff Parcel



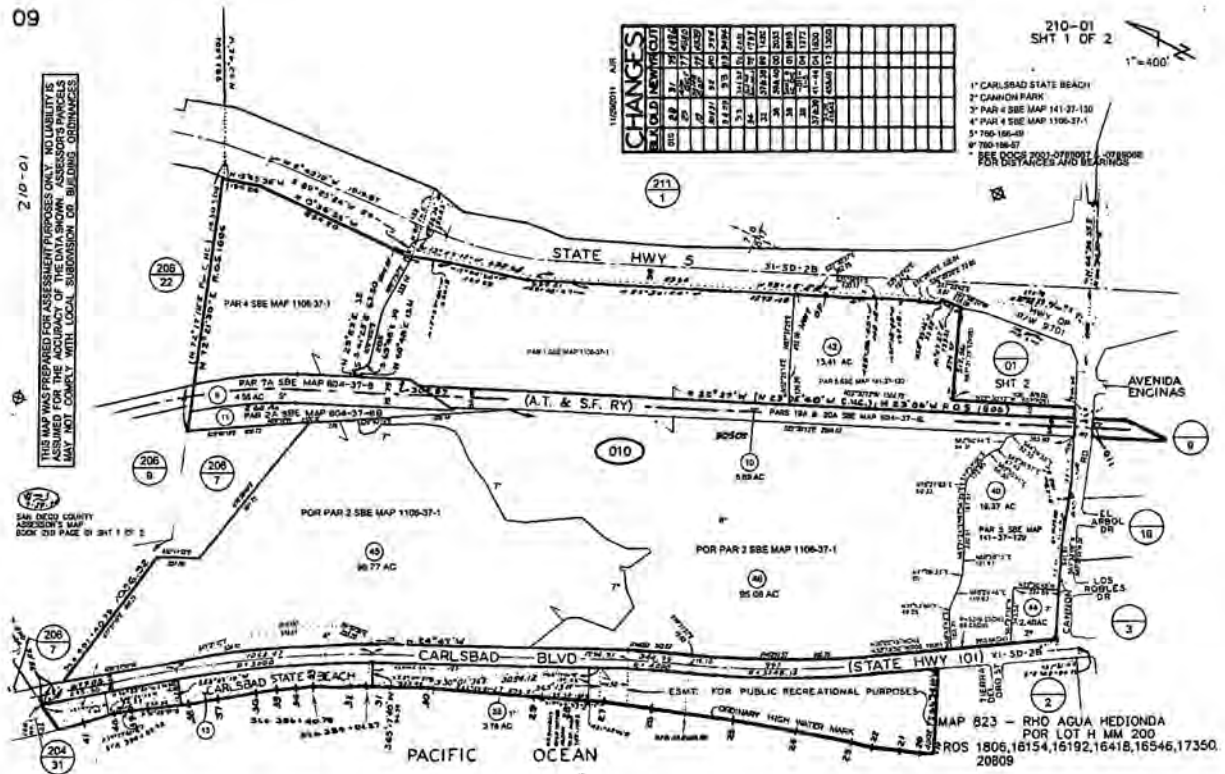
NV5: G:\Weirich\NV5 Job Storage Pre-Number\North Coast Service Center Settlement Agreement\NCSCSA EXHIBIT.dwg POINTS FILE: N/A



09

206-07

09



206-01
SHT 1 OF 2

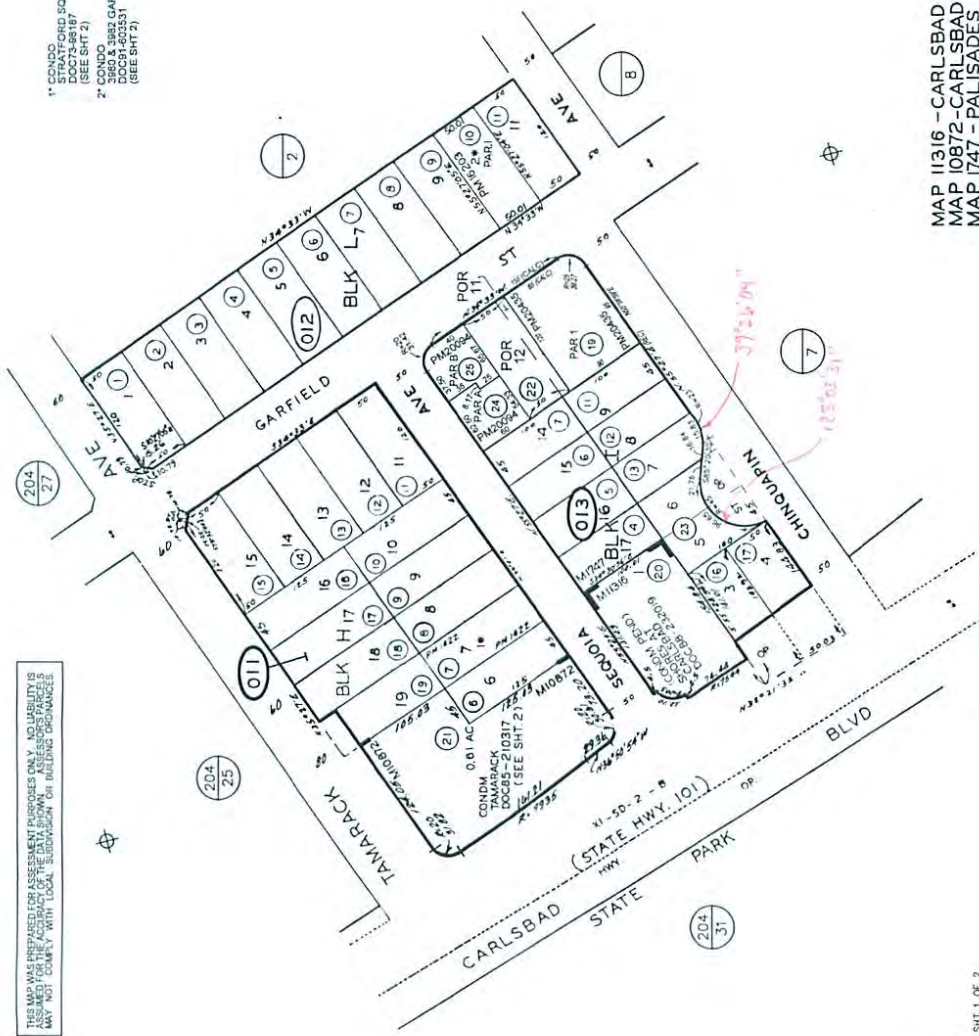
1" = 100'

N

- 1' CONDO. 3000 SQUARE (SEE SHT 2)
- 2' CONDO. 3000 SQUARE GARFIELD ST (SEE SHT 2)

THIS MAP WAS PREPARED FOR THE CITY OF CARLSBAD AND IS ASSUMED TO BE ACCURATE TO THE BEST OF THE MAPPER'S KNOWLEDGE. THE MAPPER MAKES NO WARRANTY AS TO THE ACCURACY OF THE DATA SHOWN. UNLESS OTHERWISE SPECIFIED, THE MAPPER ASSUMES NO LIABILITY FOR DAMAGES OR INJURIES. THE USER MAY NOT COMPLY WITH LOCAL, SUBDIVISION OR BUILDING ORDINANCES.

CHANGES	BLK	OLD	NEW	CUT
	009	9110	18179	67 59724
	011	7	6404	213 14
	011	19	7415	175 49779
	011	21	752	21 84 2065
	011	21	CONV	80 004
	012	10	5248	82 56222
	013	17-3	20	28 147
	013	30	CONV	50 663
	012	1	3105	92 4686
	011	15	5206	192 4789
	012	10	CONV	82 408
	012	21	2122	22 2652
	013	14	151	23 89 1044
	013	13	1323	31 00 4631
	013	21	24825	07 1371
	013	18	1815	26 4622



MAP 11316 - CARLSBAD TCT 84-18 (CONDM)
 MAP 10872 - CARLSBAD TCT 81-44 (CONDM)
 MAP 1747 - PALISADES

09

206-01

SAN DIEGO COUNTY
 ASSASSOR'S MAP
 BOOK 206 PAGE 01 SHT 1 OF 2

206-09

09

206-09
 SAN BECO COUNTY
 COUNTY CLERK
 BOOK 206 PAGE 09 SH 1 OF 2

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE CORRECTNESS OF THE DATA SHOWN. INTERESTED PARTIES ARE ADVISED THAT THIS MAP IS NOT A GUARANTEE OF THE DATA SHOWN. INTERESTED PARTIES ARE ADVISED THAT THIS MAP IS NOT A GUARANTEE OF THE DATA SHOWN.



MAP 13255-CITY OF CARLSBAD TCT 84-02
 MAP 13256-CARLSBAD TCT 84-13 (CONDOM)
 MAP 1609-FALLSADES NO.2
 MAP 1747-FALLSADES
 PBI PG153-RHO AGUA HEDIONDA
 ROS 12989, 13486

206-09
 SH 1 OF 2



06/20/2013 ACR

CHANGES	
BLK/OLD	NEW/CUT
091 16	975.277 44315
092 6	73 577 116
092 13	CONDM 881 657
092 1	14115 790 1151
092 14215	14417 92 1735
091 7	27 655 97 2024
091 13	19-25 91 63
092 17	18419 02 1232
092 388	20 14 1200

* OPEN SPACE

Parcel 1

DOC # 2001-0789065

OCT 30, 2001 4:59 PM

RECORDING
REQUESTED BY
STEWART TITLE OF CALIFORNIA
AND WHEN
RECORDED MAIL TO:

025074

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 20.00

Flp
SP
10/29

City Clerk
CITY OF CARLSBAD
1200 Carlsbad Village Dr.
Carlsbad, CA 92008



2001-0789065

SPACE ABOVE THIS LINE FOR RECORDER'S USE

ASSESSOR'S PARCEL NO. 206-070-10-00 and
206-070-11-00 (portion)

PROJECT NO. & NAME: ADJ 00-10, Parcel 1

Encina Adjustment

Case No. CE 01-36

**CERTIFICATE OF COMPLIANCE
FOR ADJUSTMENT PLAT**
(Section 66499.35 of the Government Code)

The City Engineer has determined that the real property described below, has been divided or has resulted from a division or combining of lots in compliance with the Subdivision Map Act and with the provisions of the Carlsbad Municipal Code pursuant thereto.

OWNER(S): San Diego Gas & Electric Company, a Corporation

DESCRIPTION: (See Exhibit "A" attached. Exhibit "B" is attached for clarity only.)

NOTE: The description in Exhibit "A" attached has been provided by the owner of the property and neither the City of Carlsbad nor any of its officers or employees assume responsibility for the accuracy of said description.

This Certificate of Compliance shall have no force and effect if the above owners or any subsequent transferee or assignee acquires any contiguous property other than a lot or lots shown on a recorded subdivision map, parcel map or record of survey map filed pursuant to and prior to repeal (Stats. 1955, Ch. 1593) of Section 11575 of the Business and Professions Code;

This Certificate of Compliance shall in no way affect the requirements of any other County, State or Federal agency that regulates development of real property.

DATE: 10/29/01

BY: Robert A. Wojcik
Deputy City Engineer
RCE 3298 EXP. 8/30/02
33698

025075

EXHIBIT "A"
LEGAL DESCRIPTION
ADJ 00-10 - ENCINA

PARCEL 1

All of Block "W" of Palisades Unit No. 2, according to Map thereof No. 1803, filed in the office of the County Recorder of said San Diego County, August 25, 1924; EXCEPTING therefrom, the Northeasterly 300 feet of the Northwesterly 100 feet thereof; ALSO EXCEPTING the Northwesterly 120 feet of said Block "W" lying Southwesterly of the Southwesterly line of said Northeasterly 300 feet, and the Southeasterly prolongation of said Southwesterly line.

The hereinabove described parcel of land contains 5.76 acres more or less.

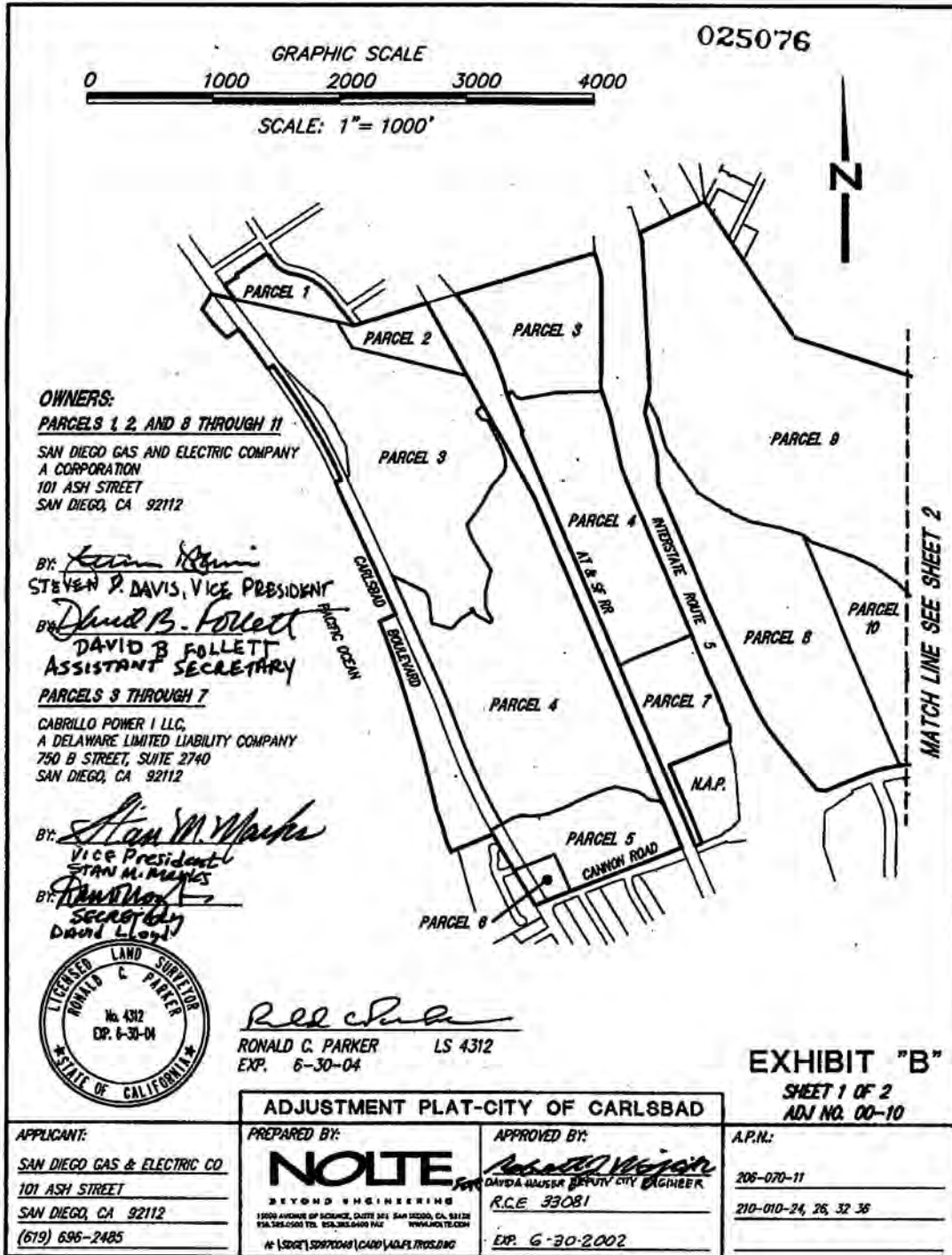
Prepared By:

Nolte Associates, Inc.

Ronald C. Parker 10-22-01
Ronald C. Parker Date
Director of Survey



n:\sd1947\legal description parcel 1.doc



OWNERS:
PARCELS 1, 2, AND 8 THROUGH 11
 SAN DIEGO GAS AND ELECTRIC COMPANY
 A CORPORATION
 101 ASH STREET
 SAN DIEGO, CA 92112

BY: *Steven P. Davis*
 STEVEN P. DAVIS, VICE PRESIDENT

BY: *David B. Follett*
 DAVID B. FOLLETT
 ASSISTANT SECRETARY

PARCELS 3 THROUGH 7
 CABRILLO POWER I LLC,
 A DELAWARE LIMITED LIABILITY COMPANY
 750 B STREET, SUITE 2740
 SAN DIEGO, CA 92112

BY: *Stan M. Marks*
 VICE PRESIDENT
 STAN M. MARKS

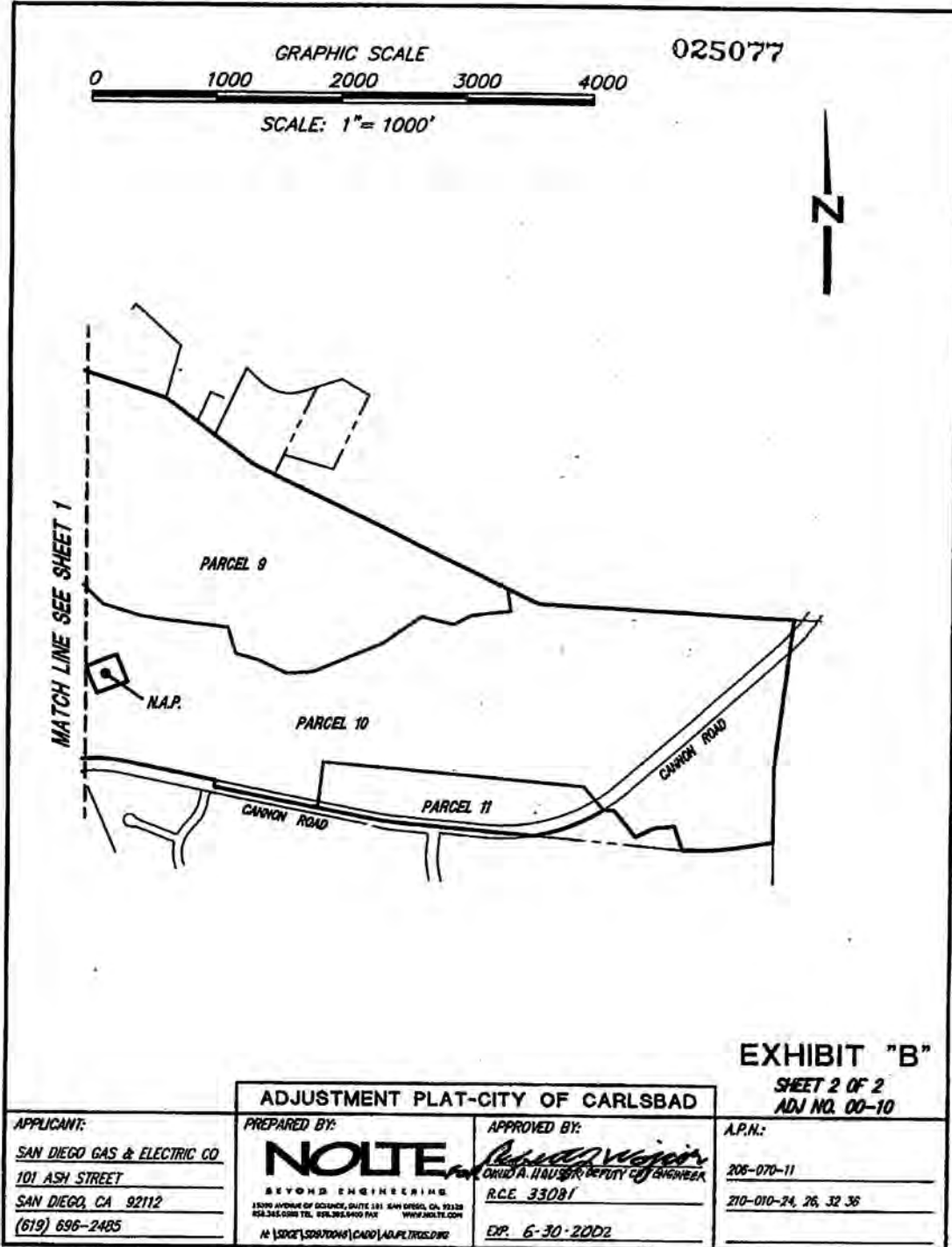
BY: *David Lloyd*
 SECRETARY
 DAVID LLOYD



Ronald C. Parker
 RONALD C. PARKER LS 4312
 EXP. 6-30-04

EXHIBIT "B"
 SHEET 1 OF 2
 ADJ. NO. 00-10

ADJUSTMENT PLAT-CITY OF CARLSBAD			
APPLICANT: SAN DIEGO GAS & ELECTRIC CO 101 ASH STREET SAN DIEGO, CA 92112 (619) 696-2485	PREPARED BY: NOLTE BEYOND ENGINEERING 1900 AVENUE OF SCIENCE, SUITE 341 SAN DIEGO, CA 92128 P.O. BOX 1000 TEL. 619-383-6400 FAX WWW.NOLTE.COM # [SDGE] 528970048 CARLSBAD, CALIF. TRUS. ENG	APPROVED BY: <i>Roberta Wagner</i> ROBERTA WAGNER DEPUTY CITY ENGINEER R.C.E. 33081 EXP. 6-30-2002	A.P.N.: 208-070-11 210-010-24, 26, 32, 38



025078

State of California }
County of San Diego }

On October 29, 2001 before me, Kelly Murphy
(Date) (Name, Title of Officer)

personally appeared Robert J. Wojcik
(Name[s] of Signer[s])

_____, personally known to me
- OR - (or proved to me on the basis of satisfactory evidence) to be the person(s) whose
name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they
executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted,
executed the instrument.

WITNESS my hand and official seal



Kelly Murphy
Signature of Notary

(This area for official
notary seal)

Title or Type of Document <u>Certificate of Compliance for Adjustment Plat ADJ 00-10, Parcel 1</u>	
Date of Document <u>10/29/01</u>	No. of Pages <u>4</u>
Signer(s) other than named above _____	

EXHIBIT R
FORM OF GUARANTY

Independent Guaranty Amount

This Guaranty is executed and delivered as of this _____ day of _____, 2014 by NRG Energy, Inc., a Delaware corporation (“Guarantor”), in favor of the City of Carlsbad, a charter city, located in San Diego County (“City”), in connection with the performance by Cabrillo Power I LLC, a limited liability company, and Carlsbad Energy Center LLC, a limited liability company (collectively (“Owner”) of a Settlement Agreement dated January 14, 2014 between Owner and City (the “Settlement”).

- RECITALS -

A. WHEREAS, the Owner operates facilities known as Units 1-5 (individually a “Unit” and collectively the “Units,” the “Encina Power Station” or the “Station”) for the purpose of generating and selling electric power;

B. WHEREAS, the Owner intends to build and operate new facilities known as the Carlsbad Energy Center Project (“CECP”) for the purpose of generating and selling electric power, and the City has historically opposed such project;

C. WHEREAS, the Parties have entered the Settlement to fully and finally resolve disputes involving the CECP and the retirement and removal of the Encina Power Station, by providing for, among other things: (i) the retirement, decommissioning, and removal of the Encina Power Station, (ii) the remediation and redevelopment of the Encina Power Station site, (iii) the provisions of the Amendment and the construction and development of the CECP, (iv) the relocation and construction of the new North Coast Service Center, and (v) other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.

D. WHEREAS, Owner is controlled by Guarantor. Guarantor expects to derive material benefits from the performance of the Settlement by Owner and City. To induce City to enter into the Settlement and undertake the obligations as set out in the Settlement, Guarantor has agreed to guarantee the obligations of Owner as provided in this Guaranty.

NOW, THEREFORE, in consideration of the foregoing, Guarantor agrees as follows:

- AGREEMENT -

1. Guaranty. Subject to the provisions of this Guaranty, Guarantor hereby absolutely, irrevocably, unconditionally, and fully guarantees to City the due, prompt, and complete observance, performance, and discharge of each and every obligation, including without limitation obligations that are financial or that require specific performance, of Owner under the Settlement, whether incurred before or after the date of delivery of this Guaranty (the “Obligations”). This is a guaranty of payment, not of collection, and as such, City shall not be required to institute, pursue, or exhaust any remedies against Owner before instituting suit, obtaining judgment, and executing thereon against Guarantor under this Guaranty.

2. Rights of City. Guarantor hereby grants to City, in City’s discretion and without the need to notify or obtain any consent from Guarantor, and without termination, impairment, or any other effect upon Guarantor’s duties hereunder, the power and authority from time to time:

(a) to renew, compromise, extend, accelerate, or otherwise change, substitute, supersede, or terminate the terms of performance of any of the Obligations, in each case in accordance with the Settlement;

(b) to grant any indulgences, forbearances, and waivers, on one or more occasions, for any length of time, with respect to Owner's performance of any of the Obligations; and

(c) to accept collateral, further guaranties, and/or other security for the Obligations, and, if so accepted, then to impair, exhaust, exchange, enforce, waive, or release any such security.

3. Performance. If any of the Obligations are not performed according to the tenor thereof, and any applicable notice and cure period provided by the Settlement has expired ("Default"), Guarantor shall immediately upon receipt of written demand by City (a) perform or cause Owner to perform the Obligation in Default, and (b) pay, reimburse, and indemnify City against any liabilities, damages, and related costs (including attorneys' fees) incurred by City as a result thereof up to but not to exceed a maximum cumulative amount of five million dollars (\$5,000,000), all in such manner and at such times as City may reasonably direct.

4. Satisfaction. Satisfaction by Guarantor of any duty hereunder incident to a particular Default or the occurrence of any other Default shall not discharge Guarantor except with respect to the Default satisfied, it being the intent of Guarantor that this Guaranty be continuing until twenty (20) years after the execution date of this Guaranty or such time as all of the Obligations have irrevocably been discharged in full, whichever is sooner, at which time this Guaranty shall automatically terminate. If at any time the performance of any Obligation by Owner or Guarantor is rescinded or voided under the federal Bankruptcy Code or otherwise, then Guarantor's duties hereunder shall continue and be deemed to have been automatically reinstated, restored, and continued with respect to that Obligation, as though the performance of that Obligation had never occurred, regardless of whether this Guaranty otherwise had terminated or would have been terminated following or as a result of that performance.

5. Notice of Acceptance. Guarantor waives and acknowledges notice of acceptance of this Guaranty by City.

6. Waivers by Guarantor. Guarantor hereby waives and agrees not to assert or take advantage of:

(a) all set-offs, counterclaims, and, subject to Section 3 above, all presentments, demands for performance, notices of non-performance, protests, and notices of every kind that may be required by Applicable Laws;

(b) any right to require City to proceed against Owner or any other person, or to require City first to exhaust any remedies against Owner or any other person, before proceeding against Guarantor hereunder;

(c) any defense based upon an election of remedies by City;

- (d) any duty of City to protect or not impair any security for the Obligations;
- (e) the benefit of any laws limiting the liability of a surety;

(f) any duty of City to disclose to Guarantor any facts concerning Owner, the Settlement, or any other circumstances, that would or allegedly would increase the risk to Guarantor under this Guaranty, whether now known or hereafter learned by City, it being understood that Guarantor is capable of and assumes the responsibility for being and remaining informed as to all such facts and circumstances; and

(g) until all Obligations in Default have been fully paid and/or performed, any rights of subrogation, contribution, reimbursement, indemnification, or other rights of payment or recovery for any payment or performance by it hereunder. For the avoidance of doubt, if any amount is paid to Guarantor in violation of this provision, such amount shall be held by Guarantor for the benefit of, and promptly paid to, City.

7. Cumulative Remedies. The rights and remedies of City hereunder shall be cumulative and not alternative to any other rights, powers, and remedies that City may have at law, in equity, or under the Settlement. The obligations of Guarantor hereunder are independent of those of Owner and shall survive unaffected by the bankruptcy of Owner. City need not join Owner in any action against Guarantor to preserve its rights set forth herein.

8. Representations and Warranties. Guarantor represents and warrants to City as follows:

(a) Guarantor is a corporation, duly organized, validly existing, and in good standing under the laws of the state of its incorporation. Owner is a direct or indirect wholly-owned subsidiary of Guarantor. Guarantor has all necessary corporate power and authority to execute and deliver this Guaranty and to perform its obligations hereunder.

(b) The execution, delivery and performance of this Guaranty has been duly and validly authorized by all corporate proceedings of Guarantor and is not in violation of any law, judgment of court or government agency. This Guaranty has been duly and validly executed and delivered by Guarantor and constitutes a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms.

9. Collection Costs. Guarantor hereby agrees to pay to City, upon demand, all reasonable attorneys' fees and other expenses which City may expend or incur in enforcing the Obligations against Owner and/or enforcing this Guaranty against Guarantor, whether or not suit is filed, including, without limitation, all attorneys' fees, and other expenses incurred by City in connection with any insolvency, bankruptcy, reorganization, arrangement, or other similar proceedings involving Owner that in any way affect the exercise by City of its rights and remedies hereunder.

10. Severability. Should any one or more provisions of this Guaranty be determined to be illegal or unenforceable, all other provisions nevertheless shall be effective.

11. Waiver or Amendment. No provision of this Guaranty or right of City hereunder can be waived, nor can Guarantor be released from Guarantor's duties hereunder, except by a

writing duly executed by City. This Guaranty may not be modified, amended, revised, revoked, terminated, changed, or varied in any way whatsoever except by the express terms of a writing duly executed by City.

12. Successors and Assigns. This Guaranty shall inure to the benefit of and bind the successors and assigns of City and Guarantor.

13. Governing Law. This Guaranty shall be governed by and construed in accordance with the laws of the State of California without regard to the principles of conflicts of law thereof.

14. Notices. All notices, requests, claims, demands, and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in the manner contemplated by the Settlement, addressed as follows:

- (a) if to City as provided in the Settlement
- (b) if to Guarantor:

Sean Beatty
West Region General Counsel
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
sean.beatty@nrgenergy.com

or to such other address(es) as the person to whom notice is given may have previously furnished to the others in writing in the manner set forth above.

IN WITNESS WHEREOF, Guarantor has caused this Guaranty to be duly executed and delivered to City as of the day written above.

NRG Energy, Inc.

By: _____

Name: _____

Title: _____

PUBLIC (REDACTED) VERSION

STATE OF

By: _____

Name:

Title:

)

) ss.

COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 20__, by _____, as _____ of _____.

Witness my hand and official seal.

My commission expires: _____.

Notary Public: _____

(S E A L)

(space above reserved for recording information)

Shut Down Guaranty Amount

This Guaranty is executed and delivered as of this _____ day of _____, 20__ by NRG Energy, Inc., a Delaware corporation (“Guarantor”), in favor of the City of Carlsbad, a charter city, located in San Diego County (“City”), in connection with the performance by Cabrillo Power I LLC, a limited liability company, and Carlsbad Energy Center LLC, a limited liability company (collectively (“Owner”) of a Settlement Agreement dated January 14, 2014 between Owner and City (the “Settlement”).

- RECITALS -

A. WHEREAS, the Owner operates facilities known as Units 1-5 (individually a “Unit” and collectively the “Units,” the “Encina Power Station” or the “Station”) for the purpose of generating and selling electric power;

B. WHEREAS, the Owner intends to build and operate new facilities known as the Carlsbad Energy Center Project (“CECP”) for the purpose of generating and selling electric power and the City has historically opposed such project;

C. WHEREAS, the Parties have entered the Settlement to fully and finally resolve disputes involving the CECP and the retirement and removal of the Encina Power Station, by providing for, among other things: (i) the retirement, decommissioning, and removal of the Encina Power Station, (ii) the remediation and redevelopment of the Encina Power Station site, (iii) the provisions of the Amendment and the construction and development of the CECP, (iv) the relocation and construction of the new North Coast Service Center, and (v) other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.

D. WHEREAS, Owner is controlled by Guarantor. Guarantor expects to derive material benefits from the performance of the Settlement by Owner and City. To induce City to enter into the Settlement and undertake the obligations as set out in the Settlement, Guarantor has agreed to guarantee the obligations of Owner as provided in this Guaranty.

NOW, THEREFORE, in consideration of the foregoing, Guarantor agrees as follows:

- AGREEMENT -

1. Guaranty. Subject to the provisions of this Guaranty, Guarantor hereby absolutely, irrevocably, unconditionally, and fully guarantees to City the due, prompt, and complete observance, performance, and discharge of each and every obligation under Section 6.1 of the Settlement, including without limitation obligations that are financial or that require specific performance, of Owner, whether incurred before or after the date of delivery of this Guaranty (the “Obligations”). This is a guaranty of payment, not of collection, and as such, City shall not be required to institute, pursue, or exhaust any remedies against Owner before instituting suit, obtaining judgment, and executing thereon against Guarantor under this Guaranty.

2. Rights of City. Guarantor hereby grants to City, in City’s discretion and without the need to notify or obtain any consent from Guarantor, and without termination, impairment, or any other effect upon Guarantor’s duties hereunder, the power and authority from time to time:

(a) to renew, compromise, extend, accelerate, or otherwise change, substitute, supersede, or terminate the terms of performance of any of the Obligations, in each case in accordance with the Settlement;

(b) to grant any indulgences, forbearances, and waivers, on one or more occasions, for any length of time, with respect to Owner's performance of any of the Obligations; and

(c) to accept collateral, further guaranties, and/or other security for the Obligations, and, if so accepted, then to impair, exhaust, exchange, enforce, waive, or release any such security.

3. Performance. If any of the Obligations are not performed according to the tenor thereof, and any applicable notice and cure period provided by the Settlement has expired ("Default"), Guarantor shall immediately upon receipt of written demand by City (a) perform or cause Owner to perform the Obligation in Default, and (b) pay, reimburse, and indemnify City against any liabilities, damages, and related costs (including attorneys' fees) incurred by City as a result thereof up to but not to exceed a maximum cumulative amount of twenty million dollars (\$20,000,000), which is in addition to the Independent Guaranty Amount, all in such manner and at such times as City may reasonably direct.

4. Satisfaction. Satisfaction by Guarantor of any duty hereunder incident to a particular Default or the occurrence of any other Default shall not discharge Guarantor except with respect to the Default satisfied, it being the intent of Guarantor that this Guaranty be continuing until such time as all of the Obligations have irrevocably been discharged in full, at which time this Guaranty shall automatically terminate. If at any time the performance of any Obligation by Owner or Guarantor is rescinded or voided under the federal Bankruptcy Code or otherwise, then Guarantor's duties hereunder shall continue and be deemed to have been automatically reinstated, restored, and continued with respect to that Obligation, as though the performance of that Obligation had never occurred, regardless of whether this Guaranty otherwise had terminated or would have been terminated following or as a result of that performance.

5. Notice of Acceptance. Guarantor waives and acknowledges notice of acceptance of this Guaranty by City.

6. Waivers by Guarantor. Guarantor hereby waives and agrees not to assert or take advantage of:

(a) all set-offs, counterclaims, and, subject to Section 3 above, all presentments, demands for performance, notices of non-performance, protests, and notices of every kind that may be required by Applicable Laws;

(b) any right to require City to proceed against Owner or any other person, or to require City first to exhaust any remedies against Owner or any other person, before proceeding against Guarantor hereunder;

(c) any defense based upon an election of remedies by City;

- (d) any duty of City to protect or not impair any security for the Obligations;
- (e) the benefit of any laws limiting the liability of a surety;

(f) any duty of City to disclose to Guarantor any facts concerning Owner, the Settlement, or any other circumstances, that would or allegedly would increase the risk to Guarantor under this Guaranty, whether now known or hereafter learned by City, it being understood that Guarantor is capable of and assumes the responsibility for being and remaining informed as to all such facts and circumstances; and

(g) until all Obligations in Default have been fully paid and/or performed, any rights of subrogation, contribution, reimbursement, indemnification, or other rights of payment or recovery for any payment or performance by it hereunder. For the avoidance of doubt, if any amount is paid to Guarantor in violation of this provision, such amount shall be held by Guarantor for the benefit of, and promptly paid to, City.

7. Cumulative Remedies. The rights and remedies of City hereunder shall be cumulative and not alternative to any other rights, powers, and remedies that City may have at law, in equity, or under the Settlement. The obligations of Guarantor hereunder are independent of those of Owner and shall survive unaffected by the bankruptcy of Owner. City need not join Owner in any action against Guarantor to preserve its rights set forth herein.

8. Representations and Warranties. Guarantor represents and warrants to City as follows:

(a) Guarantor is a corporation, duly organized, validly existing, and in good standing under the laws of the state of its incorporation. Owner is a direct or indirect wholly-owned subsidiary of Guarantor. Guarantor has all necessary corporate power and authority to execute and deliver this Guaranty and to perform its obligations hereunder.

(b) The execution, delivery and performance of this Guaranty has been duly and validly authorized by all corporate proceedings of Guarantor and is not in violation of any law, judgment of court or government agency. This Guaranty has been duly and validly executed and delivered by Guarantor and constitutes a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms.

9. Collection Costs. Guarantor hereby agrees to pay to City, upon demand, all reasonable attorneys' fees and other expenses which City may expend or incur in enforcing the Obligations against Owner and/or enforcing this Guaranty against Guarantor, whether or not suit is filed, including, without limitation, all attorneys' fees, and other expenses incurred by City in connection with any insolvency, bankruptcy, reorganization, arrangement, or other similar proceedings involving Owner that in any way affect the exercise by City of its rights and remedies hereunder.

10. Severability. Should any one or more provisions of this Guaranty be determined to be illegal or unenforceable, all other provisions nevertheless shall be effective.

11. Waiver or Amendment. No provision of this Guaranty or right of City hereunder can be waived, nor can Guarantor be released from Guarantor's duties hereunder, except by a

writing duly executed by City. This Guaranty may not be modified, amended, revised, revoked, terminated, changed, or varied in any way whatsoever except by the express terms of a writing duly executed by City.

12. Successors and Assigns. This Guaranty shall inure to the benefit of and bind the successors and assigns of City and Guarantor.

13. Governing Law. This Guaranty shall be governed by and construed in accordance with the laws of the State of California without regard to the principles of conflicts of law thereof.

14. Notices. All notices, requests, claims, demands, and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in the manner contemplated by the Settlement, addressed as follows:

- (a) if to City as provided in the Settlement
- (b) if to Guarantor:

Sean Beatty
West Region General Counsel
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
sean.beatty@nrgenergy.com

or to such other address(es) as the person to whom notice is given may have previously furnished to the others in writing in the manner set forth above.

IN WITNESS WHEREOF, Guarantor has caused this Guaranty to be duly executed and delivered to City as of the day written above.

NRG Energy, Inc.

By: _____

Name: _____

Title: _____

PUBLIC (REDACTED) VERSION

STATE OF

By: _____

Name:

Title:

)

) ss.

COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 20__, by _____, as _____ of _____.

Witness my hand and official seal.

My commission expires: _____.

Notary Public: _____

(S E A L)

(space above reserved for recording information)

Relocation Guaranty Amount

This Guaranty is executed and delivered as of this _____ day of _____, 20____ by NRG Energy, Inc., a Delaware corporation (“Guarantor”), in favor of the City of Carlsbad, a charter city, located in San Diego County (“City”), in connection with the performance by Cabrillo Power I LLC, a limited liability company, and Carlsbad Energy Center LLC, a limited liability company (collectively (“Owner”) of a Settlement Agreement dated January 14, 2014 between Owner and City (the “Settlement”).

- RECITALS -

- A. WHEREAS, the Owner operates facilities known as Units 1-5 (individually a “Unit” and collectively the “Units,” the “Encina Power Station” or the “Station”) for the purpose of generating and selling electric power;
- B. WHEREAS, the Owner intends to build and operate new facilities known as the Carlsbad Energy Center Project (“CECP”) for the purpose of generating and selling electric power and the City has historically opposed such project;
- C. WHEREAS, the Parties have entered the Settlement to fully and finally resolve disputes involving the CECP and the retirement and removal of the Encina Power Station, by providing for, among other things: (i) the retirement, decommissioning, and removal of the Encina Power Station, (ii) the remediation and redevelopment of the Encina Power Station site, (iii) the provisions of the Amendment and the construction and development of the CECP, (iv) the relocation and construction of the new North Coast Service Center, and (v) other changes in energy infrastructure and property considerations beneficial to the residents of Carlsbad.
- D. WHEREAS, Owner is controlled by Guarantor. Guarantor expects to derive material benefits from the performance of the Settlement by Owner and City. To induce City to enter into the Settlement and undertake the obligations as set out in the Settlement, Guarantor has agreed to guarantee the obligations of Owner as provided in this Guaranty.

NOW, THEREFORE, in consideration of the foregoing, Guarantor agrees as follows:

- AGREEMENT -

1. Guaranty. Subject to the provisions of this Guaranty, Guarantor hereby absolutely, irrevocably, unconditionally, and fully guarantees to City the due, prompt, and complete observance, performance, and discharge of each and every obligation under Article 5 of the Settlement, including without limitation obligations that are financial or that require specific performance, of Owner, whether incurred before or after the date of delivery of this Guaranty (the “Obligations”). This is a guaranty of payment, not of collection, and as such, City shall not be required to institute, pursue, or exhaust any remedies against Owner before instituting suit, obtaining judgment, and executing thereon against Guarantor under this Guaranty.
2. Rights of City. Guarantor hereby grants to City, in City’s discretion and without the need to notify or obtain any consent from Guarantor, and without termination, impairment, or any other effect upon Guarantor’s duties hereunder, the power and authority from time to time:

(a) to renew, compromise, extend, accelerate, or otherwise change, substitute, supersede, or terminate the terms of performance of any of the Obligations, in each case in accordance with the Settlement;

(b) to grant any indulgences, forbearances, and waivers, on one or more occasions, for any length of time, with respect to Owner's performance of any of the Obligations; and

(c) to accept collateral, further guaranties, and/or other security for the Obligations, and, if so accepted, then to impair, exhaust, exchange, enforce, waive, or release any such security.

3. Performance. If any of the Obligations are not performed according to the tenor thereof, and any applicable notice and cure period provided by the Settlement has expired ("Default"), Guarantor shall immediately upon receipt of written demand by City (a) perform or cause Owner to perform the Obligation in Default, and (b) pay, reimburse, and indemnify City against any liabilities, damages, and related costs (including attorneys' fees) incurred by City as a result thereof up to but not to exceed a maximum cumulative amount of twenty-two million five hundred thousand dollars (\$22,500,000), all in such manner and at such times as City may reasonably direct; provided that such maximum cumulative amount shall be reduced in proportion to Owner's payments made in accordance with Article 5.

4. Satisfaction. Satisfaction by Guarantor of any duty hereunder incident to a particular Default or the occurrence of any other Default shall not discharge Guarantor except with respect to the Default satisfied, it being the intent of Guarantor that this Guaranty be continuing until such time as all of the Obligations have irrevocably been discharged in full, at which time this Guaranty shall automatically terminate. If at any time the performance of any Obligation by Owner or Guarantor is rescinded or voided under the federal Bankruptcy Code or otherwise, then Guarantor's duties hereunder shall continue and be deemed to have been automatically reinstated, restored, and continued with respect to that Obligation, as though the performance of that Obligation had never occurred, regardless of whether this Guaranty otherwise had terminated or would have been terminated following or as a result of that performance.

5. Notice of Acceptance. Guarantor waives and acknowledges notice of acceptance of this Guaranty by City.

6. Waivers by Guarantor. Guarantor hereby waives and agrees not to assert or take advantage of:

(a) all set-offs, counterclaims, and, subject to Section 3 above, all presentments, demands for performance, notices of non-performance, protests, and notices of every kind that may be required by Applicable Laws;

(b) any right to require City to proceed against Owner or any other person, or to require City first to exhaust any remedies against Owner or any other person, before proceeding against Guarantor hereunder;

- (c) any defense based upon an election of remedies by City;
- (d) any duty of City to protect or not impair any security for the Obligations;
- (e) the benefit of any laws limiting the liability of a surety;
- (f) any duty of City to disclose to Guarantor any facts concerning Owner, the Settlement, or any other circumstances, that would or allegedly would increase the risk to Guarantor under this Guaranty, whether now known or hereafter learned by City, it being understood that Guarantor is capable of and assumes the responsibility for being and remaining informed as to all such facts and circumstances; and
- (g) until all Obligations in Default have been fully paid and/or performed, any rights of subrogation, contribution, reimbursement, indemnification, or other rights of payment or recovery for any payment or performance by it hereunder. For the avoidance of doubt, if any amount is paid to Guarantor in violation of this provision, such amount shall be held by Guarantor for the benefit of, and promptly paid to, City.

7. Cumulative Remedies. The rights and remedies of City hereunder shall be cumulative and not alternative to any other rights, powers, and remedies that City may have at law, in equity, or under the Settlement. The obligations of Guarantor hereunder are independent of those of Owner and shall survive unaffected by the bankruptcy of Owner. City need not join Owner in any action against Guarantor to preserve its rights set forth herein.

8. Representations and Warranties. Guarantor represents and warrants to City as follows:

(a) Guarantor is a corporation, duly organized, validly existing, and in good standing under the laws of the state of its incorporation. Owner is a direct or indirect wholly-owned subsidiary of Guarantor. Guarantor has all necessary corporate power and authority to execute and deliver this Guaranty and to perform its obligations hereunder.

(b) The execution, delivery and performance of this Guaranty has been duly and validly authorized by all corporate proceedings of Guarantor and is not in violation of any law, judgment of court or government agency. This Guaranty has been duly and validly executed and delivered by Guarantor and constitutes a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms.

9. Collection Costs. Guarantor hereby agrees to pay to City, upon demand, all reasonable attorneys' fees and other expenses which City may expend or incur in enforcing the Obligations against Owner and/or enforcing this Guaranty against Guarantor, whether or not suit is filed, including, without limitation, all attorneys' fees, and other expenses incurred by City in connection with any insolvency, bankruptcy, reorganization, arrangement, or other similar proceedings involving Owner that in any way affect the exercise by City of its rights and remedies hereunder.

10. Severability. Should any one or more provisions of this Guaranty be determined to be illegal or unenforceable, all other provisions nevertheless shall be effective.

11. Waiver or Amendment. No provision of this Guaranty or right of City hereunder can be waived, nor can Guarantor be released from Guarantor's duties hereunder, except by a writing duly executed by City. This Guaranty may not be modified, amended, revised, revoked, terminated, changed, or varied in any way whatsoever except by the express terms of a writing duly executed by City.

12. Successors and Assigns. This Guaranty shall inure to the benefit of and bind the successors and assigns of City and Guarantor.

13. Governing Law. This Guaranty shall be governed by and construed in accordance with the laws of the State of California without regard to the principles of conflicts of law thereof.

14. Notices. All notices, requests, claims, demands, and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in the manner contemplated by the Settlement, addressed as follows:

- (a) if to City as provided in the Settlement
- (b) if to Guarantor:

Sean Beatty
West Region General Counsel
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
sean.beatty@nrgenergy.com

or to such other address(es) as the person to whom notice is given may have previously furnished to the others in writing in the manner set forth above.

IN WITNESS WHEREOF, Guarantor has caused this Guaranty to be duly executed and delivered to City as of the day written above.

NRG Energy, Inc.

By: _____

Name: _____

Title: _____

PUBLIC (REDACTED) VERSION

STATE OF

By: _____

Name:

Title:

)

) ss.

COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 20__, by _____, as _____ of _____.

Witness my hand and official seal.

My commission expires: _____.

Notary Public: _____

(S E A L)

(space above reserved for recording information)

EXHIBIT S

Map of Encina Redevelopment Site



EXHIBIT T
Map of CECP Site

