

Application No: R.12-03-014
Exhibit No: _____
Witness: Robert B. Anderson

**PREPARED TRACK 4 DIRECT TESTIMONY OF
SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E)**



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

August 26, 2013

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1 **PREPARED DIRECT TESTIMONY**

2 **OF ROBERT B. ANDERSON**

3 **I. PURPOSE**

4 My testimony will (1) discuss the planning studies performed jointly by San Diego Gas &
5 Electric Company (SDG&E) and Southern California Edison Company (SCE), including the
6 load and resource assumptions used, and describe the potential additional amounts of certain
7 resources that may develop such as customer-side photovoltaic (PV), combined heat and power
8 (CHP), energy storage and conventional resources; (2) summarize SDG&E's recommendations
9 for addressing the local reliability need in SDG&E's service area by 2022; (3) discuss the shift in
10 the "net peak" load period based on SDG&E's service area loads and resources to a later time of
11 day, and the need to assess the characteristics of the resources being added to the grid in order to
12 determine their effectiveness in meeting reliability needs in both the afternoon and the evening
13 hours; and (4) introduce SDG&E's proposal to request through a separate application
14 Commission approval to establish an energy park that would be made available to independent
15 generators in future Requests for Offers (RFOs) to meet local resource needs in Southern
16 California.

17 **II. SUMMARY OF STUDIES RESULTS AND RECOMMENDATIONS**

18 In its May 21, 2013 Scoping Memo, the Commission established Track 4 to consider the
19 local reliability impacts of a long-term outage at the San Onofre Nuclear Generating Station
20 (SONGS). The Commission requested that the California Independent System Operator
21 (CAISO) perform studies to assess both the interim (2018) and long-term (2022) local reliability
22 needs in the Los Angeles Basin local area and San Diego sub-area resulting from an extended
23 SONGS outage.

1 Prior to the institution of Track 4 in this proceeding, SDG&E and SCE began coordinated
2 technical studies to determine the minimum generation resources required for the San Diego and
3 Western Los Angeles Basin Local Capacity Resource (LCR) areas for the year 2022 in the
4 absence of generation at SONGS and the retirement of the coastal power plants that currently use
5 “Once Through Cooling” (OTC) technologies. Because these studies were initiated prior to the
6 creation of Track 4, certain of the assumptions SDG&E used in its transmission studies for loads
7 and resources are similar but not identical to those that the Commission requested the CAISO
8 use in its Track 4 studies. The load and resource assumptions used by SDG&E are described in
9 detail later in my testimony and the results of the transmission modeling studies are described in
10 the testimony of SDG&E witness, John Jontry.

11 The SDG&E/SCE studies have produced results that are similar to those presented by the
12 CAISO, although not identical. As discussed in Witness Jontry’s testimony, the transmission
13 studies identified a total need of 4,572 MW.¹ This result is similar that presented by the CAISO,
14 which found a need between 4,507 and 4,642 MW in total. SDG&E has also found that adding
15 major transmission capability into the load pocket can reduce the need for local generation by
16 approximately 1,000 to 1,400 MW. However, these are preliminary results and there is
17 substantial uncertainty as to how quickly transmission projects can be licensed and built.

18 As noted above, the SDG&E/SCE and CAISO studies incorporated slightly different
19 assumptions regarding future demand and availability of supply-side resources. In some cases
20 the CAISO assumptions were higher than SDG&E’s; in other cases SDG&E’s assumptions were
21 higher than those used by the CAISO. Given that forecasting demand and resource availability is
22 an imperfect science, there is little value to be gained in debating precise assumptions. As a

¹ The SDG&E studies results are set forth in Table 3 in the testimony of Witness Jontry. This value was used since it treats Pio Pico as a solution to the identified LCR need, as the CAISO did.

1 practical matter, there are a number of different paths that may be taken to arrive at the same
2 approximate need determination and SDG&E believes it is most productive to move forward
3 with the understanding that LCR need falls within a specified range. This is particularly true at
4 this point, given the existence of additional uncertainty related to the impact of potential
5 transmission system modifications being studied by the CAISO. Thus, rather than attempting to
6 define a precise LCR need number, the Commission should approve a range of potential need in
7 order to account for the heightened level of uncertainty in the current environment. The potential
8 need range proposed by SDG&E is discussed below.

9 In his prepared direct testimony, CAISO witness Sparks recommends that the
10 Commission take no action at this time to authorize LCR procurement, and that it instead wait
11 until the results of the CAISO 2013/2014 transmission planning study have been formally
12 adopted – a process that will could take a year or more. SDG&E concurs in the need for
13 additional studies to fully determine the ability of transmission upgrades to reduce LCR need. It
14 is an active participant in this effort at the CAISO, and urges the Commission to support the
15 CAISO’s work to identify future transmission project(s) that can reduce the local capacity need
16 and then support timely development of such project(s) if the project(s) require separate
17 Commission approval. Although SDG&E supports the CAISO’s efforts, it submits that a
18 complete halt to LCR procurement authorization is highly imprudent given the magnitude of the
19 need in a combined OTC shutdown and SONGS-out environment. Instead, the Commission
20 should take a compromise approach of authorizing SDG&E to move ahead with some long lead-
21 time procurement while leaving a portion of the need open for refinement as additional studies
22 are undertaken.

1 Accordingly, SDG&E respectfully requests that the Commission reject the CAISO's
2 proposal to delay Track 4, and that it expeditiously authorize SDG&E to undertake additional
3 procurement. Specifically, based on SDG&E's and the CAISO's transmission modeling results
4 to date, SDG&E recommends the Commission authorize it to move forward with procurement of
5 the following mix of resources:

- 6 • *Energy Efficiency*: aggressively pursue cost-effective energy efficiency (EE) in the
7 context of the EE proceeding that will lower both afternoon and evening peak loads.
8 SDG&E believes that the most prudent and efficient way to procure this resource is
9 through the Commission's dedicated EE proceeding, and that the cost-effectiveness
10 of EE programs should be compared against the cost of new resources being added in
11 the San Diego local area. Third parties that wish to propose EE programs should do
12 so in this proceeding so all EE programs can be compared against each other.
- 13 • *Demand Response*: aggressively pursue cost-effective demand response (DR)
14 programs in the context of the DR proceeding that can meet local reliability needs by
15 working with the CAISO to develop programs with operational characteristics that
16 address local reliability needs. SDG&E believes the most prudent and efficient way
17 to procure this resource is through the Commission's dedicated DR proceeding, and
18 that the cost effectiveness of DR programs should be compared against the cost of
19 new resources being added in the San Diego local area. Third parties that wish to
20 propose DR programs should do so in the context of the dedicated DR proceeding so
21 that all DR programs can be compared against each other and in order to determine
22 any interactions between proposals.

- 1 • *Supply-Side Request for Offers:* SDG&E should be authorized to issue an RFO to
2 request between 500-550 MW of supply-side resources.² Renewable resources,
3 energy storage and conventional resources should all be eligible to bid into the RFO.
4 Opportunities to upgrade and increase capacity at existing resources should also be
5 considered.

6 SDG&E also notes, as discussed in more detail below, that it is exploring the feasibility
7 of developing of an energy park that would be made available to independent generators in
8 future RFOs to meet local resource needs. The goal of the energy park would be to reduce the
9 lead-time required to build new generation facilities. The concept involves developing a fully
10 licensed park in which individual “lots” would be made available to independent developers as
11 the Commission determines future local resource needs in Southern California. By having
12 licensed sites available, development of new resources required to meet LCR need and/or system
13 Resource Adequacy (RA) needs could occur within a much shorter period than the current
14 processes allow. To the extent it elects to pursue this energy park proposal, SDG&E will file a
15 separate application with the Commission seeking approval to move forward with such a plan.

16 **III. SDG&E/SCE JOINT STUDIES: SDG&E NEED ANALYSIS INPUTS**

17 ***A. Description of Load and Generation Assumptions***

18 As discussed above, SDG&E began its local reliability studies prior to the Commission’s
19 issuance of its May 21 Scoping Memo. Accordingly, the assumptions used by SDG&E in its
20 transmission studies for loads and resources are similar but not identical to those the Commission
21 requested the CAISO use in its studies.

² SDG&E’s request assumes Commission approval of A.13-06-015, SDG&E’s Pio Pico Power Purchase Agreement (PPA), and construction of the Pio Pico facility. If the Pio Pico application is not approved and the facility is not constructed, SDG&E would increase the proposed amount of capacity to be procured through the RFO by 300 megawatts.

1 In addition, it is important to note that the modeling assumptions used by SDG&E to
2 perform its studies were based on information known *at the time* – *i.e.*, the assumptions were
3 included in order to begin the modeling work with the understanding that as time progresses,
4 additional amounts of certain resources may be found to be cost-effective and be used to meet
5 the identified need. The following load and supply assumptions were used by SDG&E in its
6 studies.

- 7 • *Load*: SDG&E used the load forecast for the entire service area from the 2012
8 Integrated Energy Policy Report (IEPR) completed by the California Energy
9 Commission (CEC). This matches the load in the 2012 LTPP planning assumptions.
10 For transmission studies, the 90/10 load forecast is used.

- 11 ○ *Uncommitted EE*: SDG&E reduced the load by the mid-case forecast for
12 uncommitted EE amounts adopted in the 2012 LTPP planning assumptions.
13 The amount of uncommitted EE in the mid-case forecast is based on expected
14 (1-in-2) weather conditions. The impact of this energy efficiency during peak
15 load hours was increased to account for estimated impacts during a hot 1-in-
16 10 weather condition. This is the weather condition used in the CAISO's
17 assessment of LCR.

- 18 ○ *Roof Top Solar (Behind the Meter)*: The CEC load forecast assumed 286 MW
19 of rooftop solar will be installed resulting in a reduction in peak demand of
20 186 MW. SDG&E's base case assumed an additional 65 MW of installed
21 solar capacity, reducing the peak load by additional 30 MW to account for

1 greater amounts of rooftop solar than were included in the original forecast.³

2 Thus, the case assumed a total of 351 MW, as compared with the
3 approximately 184 MW installed today.

4 ○ *Demand Response*: SDG&E did not include any demand response as a load
5 reduction in the initial studies since it was not clear what demand response
6 programs would meet CAISO local capacity requirements and where it would
7 be located. However, demand response is a potential solution to meet the
8 identified need and is discussed below.

9 ○ *CHP (Behind the Meter)*: Although SDG&E has not seen any noteworthy
10 development of new CHP in its service area, load was reduced by 20 MW of
11 additional CHP. SDG&E is currently conducting an RFO to implement the
12 CHP settlement, which may or may not result in some new in-service area
13 CHP.

14 Table 1 below summarizes the major load assumptions used by SDG&E to develop the
15 total system load that was modeled.

16 **Table 1**

Input	Source	2022 Value (MW)
Load	CEC 90/10 forecast	6056
Uncommitted Energy Efficiency	CEC Mid Case (grossed up)	(338)
Incremental Roof Top PV	SDG&E Estimate	(30)
Demand Response	SDG&E Estimate	(0)
Incremental CHP	SDG&E Estimate	(20)
Load (including losses) ⁴		5668

³ The CEC used 65% as the peak load to installed capacity factor in its forecast. SDG&E used the same peak load factor of 46% of nameplate as the Commission included in the Track 4 assumptions.

⁴ The total load includes losses of 185 MW. The transmission models use the load net of losses, which would be 5,483 MW, and then calculates losses which will vary depending on the generation and transmission additions and simulated system conditions.

1 • *Supply-Side Assumptions:* SDG&E generally used the adopted planning assumptions
2 for supply resources located in the San Diego area load pocket with several revisions.

3 The changes in resources used in the studies are outlined below:

- 4 ○ New Generation: SDG&E included in the case the dependable capacity
5 associated with the application SDG&E had before the Commission at the
6 time the planning work started. This included the Wellhead Escondido
7 repower at 45 MW, and the Pio Pico Plant at 300 MW.⁵ The Quail Brush
8 plant at 100 MW was used as a possible plant to meet identified needs.
- 9 ○ New Renewable Generation: SDG&E included 20 MW of dependable
10 capacity at time of the afternoon peak from new local solar based on installed
11 capacity of 50 MW in the load pocket. This was developed based on
12 assessment of the existing contracts and renewable energy programs.
- 13 ○ OTC Retirements: SDG&E assumed all 964 MW of dependable capacity at
14 the Encina power plant would be retired, including the 14 MW combustion
15 turbine at the site that does not use OTC.
- 16 ○ Non-OTC Retirements: SDG&E retired the existing 35 MW Wellhead
17 Escondido plant, since it is being replaced in total as indicated above, as well
18 as 188 MW of older combustion turbines known as the Cabrillo II units.

19

⁵ The Commission approved the Wellhead Escondido plant in D.13-03-029. SDG&E has since re-filed for approval of the Pio Pico plant in A.13-06-015.

- CHP Retirements: SDG&E assumes that 88 MW of local CHP units will be retired. These resources are made up of three units that are located on military bases in San Diego. The Navy has indicated that it does not plan to renew these contracts when they expire in 2019.⁶

Table 2 summarizes the supply-side assumptions regarding resource additions and retirements.

TABLE 2

Input	Source	2022 Value (MW)
New Generation	Included Pio Pico, and Wellhead Escondido	345
New Renewable Generation	SDG&E Estimate	20
OTC Retirements	Encina (includes GT)	(964)
Non-OTC Retirements	Cabrillo II and existing Wellhead Escondido	(223)
CHP Retirements	Retired units with expiring contracts	(88)
Net Change in Local Resources		(910)

B. Identified Need and Preferred Resources

It is important to note that SDG&E’s case includes a base assumption of 408 MW of load reduction and an increase in supply from incremental preferred resources (from current levels).

It is critical in considering preferred resources as a solution to defined LCR need (*i.e.*, the need for resources that exists *after* load and load reducing resources are taken into account), that the contribution of preferred resources to meeting LCR need not be double-counted. In other words, if it assumed that a particular preferred resource will have higher increment of availability, and this higher increment of availability is included as a base assumption to reduce load and to establish the resulting LCR need, the same increment of resource availability cannot be proposed

⁶ The relevant facilities are the North Island, Naval Station and MCRD facilities.

1 as a solution to meeting that LCR need; *i.e.*, each dependable megawatt can only be counted
2 once. For example, consider a base assumption that 20 MW of CHP generation will be added
3 and that the load presented to the transmission grid will, as a result, be reduced by 20 MW.
4 Now, if there is an LCR need of 400 MW after taking into account forecast load and forecast
5 reductions to load (including the 20 MW of CHP) that same 20 MW of CHP cannot be proposed
6 as a resource to meet the 400 MW LCR need.⁷

7 Likewise, the Commission needs to recognize that the assumptions about preferred
8 resources that would develop between now and 2022 that are input into the model to reduce the
9 calculated LCR need should be viewed the same way as preferred resources targeted to meet the
10 calculated LCR need. As an example, if a model run was done with no incremental preferred
11 resources, it might show a need for new resources of 500 MW. After the run it might be
12 determined that the Commission wants to plan for incremental EE to meet 250 MW of this
13 identified need, leaving 250 of remaining need. Likewise a model run could be done reducing
14 loads by assumption that 250 MW of incremental EE will develop over time. In this case the
15 model runs show a remaining need of 250 MW.⁸ In reality, both cases have the same need and
16 both cases look to uncommitted EE to solve the same portion of the need.

17 The base assumptions regarding preferred resources that reduced the identified need
18 consisted of the following:

- 19 · *Energy Efficiency*: Achieve 338 MW of EE peak reductions on a hot summer peak
20 load basis (“dependable” peak reduction);

⁷ Figures cited are illustrative.

⁸ Figures cited are illustrative.

- 1 • *Rooftop Solar*: Add 167 MW of incremental roof top solar on a installed capacity
2 basis (over the level achieved by July 2013) in order to achieve an estimated
3 dependable load reduction of 96 MW;
- 4 • *CHP*: Add 20 MW of additional dependable CHP generating capacity ;
- 5 • *Local Renewable Generation*: In a manner consistent with SDG&E’s Commission-
6 approved RPS Plan, add 50 of installed MW of local renewables to achieve an
7 estimated dependable peak reduction of 20 MW.
- 8 • *Demand Response*: As discussed above, SDG&E’s need calculation excluded
9 demand response programs as a base assumption, but identified DR as potential
10 solution.

11 **IV. PROPOSED SOLUTION: RFO FOR PORTION OF IDENTIFIED LCR NEED**

12 The Commission has made clear that it does not support “just in time” procurement, and
13 that planning for and procuring new resources must occur well in advance of the need for the
14 resources. In the Commission’s decision in Track 1 of this proceeding, it acknowledged that
15 construction of new resources involves a seven to nine year lead time.⁹ The Commission
16 emphasized in D.09-01-008 the need to take proactive steps to prevent development of a
17 reliability crisis in which there exists insufficient time to engage in additional procurement.¹⁰

18 To address the Commission’s clear directive to avoid “just in time” resource additions,
19 need authorizations must be made far enough in advance to allow sufficient time to carry out the
20 Commission’s procurement protocols. As discussed above, based on both SDG&E’s and the
21 CAISO need finding, a total of between 620 and 1,470 MW of dependable capacity could be

⁹ D13-02-015, *mimeo*, p. 63.

¹⁰ D.09-01-008, *mimeo*, p. 18.

1 needed in the San Diego area.¹¹ SDG&E has identified that a major transmission addition could
2 potentially reduce that need for dependable capacity by between 1,000 and 1,400 MW in 2022
3 (assuming the transmission facilities could be licensed and built by that time). Thus, given the
4 range of need, the uncertainty in the planning assumptions and the ability of future developments
5 in demand response and other technologies, SDG&E recommends that it be authorized to issue
6 an RFO to procure between 500 and 550 MW of local capacity. SDG&E has reduced the
7 proposed capacity amount of the RFO to below the 620 MW need identified in order to account
8 for possible growth in demand response with the characteristics needed to address local grid
9 reliability needs.¹²

10 SDG&E proposes that the RFO be open to all supply-side technologies including
11 renewable resources, energy storage and conventional generation. Since SDG&E has an RFO for
12 CHP currently in process, SDG&E proposes that all CHP resources participate in the CHP RFO
13 and that the amount of capacity to be procured in the proposed supply-side RFO be reduced by
14 an amount equal to the local CHP selected in the CHP RFO that exceeds the 20 MW assumption
15 used to determine the LCR need.¹³

16 **V. COST ALLOCATION**

17 Under the cost allocation mechanism (CAM) that exists pursuant to § 365.1(c), each
18 investor-owned utility (IOU) must procure the new generation resources necessary to serve its
19 distribution service territory, with the cost and benefits of the capacity associated with these new
20 resources being shared by all “benefitting parties” located in that IOU’s service territory. As the

¹¹ Both these values assume that SDG&E’s Pio Pico application is approved and the plant is constructed. This reduces the need by 300 MW.

¹² Currently, SDG&E only has 20 MW of DR that can respond to dispatch instructions within 30 minutes or less, including notification time to customers.

¹³ SDG&E issued its current CHP RFO on August 7, 2013. Bids are due on September 23. SDG&E anticipates submittal of PPAs for Commission approval in the summer of 2014.

1 Commission made clear in D.11-05-005, application of the CAM is mandatory where the
2 statutory conditions are met.¹⁴ Specifically, if the Commission makes a determination that the
3 generation resources in question “are needed to meet system or local area reliability needs for the
4 benefit of all customers in the electrical corporation’s distribution service territory,” the costs of
5 procuring such resources *must* be allocated through the CAM.¹⁵

6 If the Commission orders SDG&E to pursue new local capacity in order to meet
7 identified LCR need for the benefit of all customers, it must also address cost allocation issues.
8 Since the needs identified in this proceeding are resources needed for the reliability of all
9 customers in the SDG&E load pocket, the costs of adding these resources must be shared with all
10 benefiting customers. Accordingly, SDG&E requests that the Commission approve recovery of
11 the net capacity costs of any new local resources procured through the above-proposed RFO
12 through the Commission-approved CAM.

13 Such treatment would be consistent with the CAM process established by the
14 Commission pursuant to Public Utilities Code § 365.1(c), as well as past Commission decisions
15 addressing local capacity needs. For example, in D.13-03-029 the Commission authorized
16 SDG&E to recover the capacity costs of the Wellhead Escondido PPTA from all bundled
17 service, Direct Access (DA) and Community Choice Aggregation (CCA) customers in SDG&E’s
18 service territory on a non-bypassable basis consistent with the CAM.¹⁶

¹⁴ D.11-05-005, *mimeo*, p. 6.

¹⁵ *Id.* at pp. 6-7.

¹⁶ *See also* D.13-03-014, *mimeo*, Ordering Paragraph 15.

1 **VI. CHANGING “NET LOAD” SHAPE GREATLY IMPACTS THE RESOURCE**
2 **SELECTION AND THE ABILITY OF RESOURCES TO MEET LOCAL AND**
3 **SYSTEM RESOURCE ADEQUACY NEEDS**

4 An issue of major importance in local resource selection is the San Diego area load shape
5 that must be met on a daily basis and the times of day that various resources are available.¹⁷
6 Historically, the vast majority of resources that counted towards both local and system need
7 were either loaded at relatively constant levels, or could be dispatched as needed to meet load
8 regardless of time of day. Going forward, as the State increases its reliance on preferred
9 resources whose output varies substantially by time of day, there will be less generation
10 operating at relatively constant levels and greater need for generation which can be operated
11 during the evening hours when preferred resources are either off-line or producing power at low
12 levels. Examples include solar resources, which ramp up sharply in the morning and ramp down
13 equally sharply in the late afternoon, and demand response, which may only be available in
14 specific hours.

15 Today, the San Diego area peak load, net of behind the meter supply, is expected to occur
16 between 4:00 and 5:00 PM during summer afternoons. The San Diego area then experiences a
17 second, although lower, peak on summer evenings between 8:00 and 10:00 PM. The evening
18 peak has historically been about 90% of the afternoon peak, or about 400 MW lower than the
19 afternoon peak. As more solar is added to the system, both behind the meter roof top

¹⁷ Although load shapes will also vary seasonally, summertime loads are expected to drive resource needs; accordingly my testimony focuses on daily summer load shapes.

1 applications and to meet Renewable Portfolio Standards (RPS) program requirements, the grid is
2 experiencing a shift where the need for new resources is being driven by evening loads. Indeed,
3 this trend is so pronounced that SDG&E proposed to modify its time-of-delivery (TOD) factors
4 in its recently-filed draft 2013 RPS Plan.¹⁸

5 This shifting net need is not just a San Diego phenomenon; it is a CAISO-wide issue.
6 The CAISO grid-wide “net peak” load (net peak being loads minus expected renewable resource
7 output) will be moving into the evening hours, between 7:00 PM to 10:00 PM, within the next
8 couple of years.¹⁹ The San Diego area exhibits these same characteristics. The SDG&E/SCE
9 joint studies assumed the existence of 351 MW of rooftop solar in the SDG&E service area. In
10 addition, SDG&E’s current RPS portfolio includes over 1,400 MW of solar resources.
11 Assuming a total of 1,750 MW of solar in the portfolio, and assuming solar resources contribute
12 about 40% at time of current peak load, there will be a 700 MW decrease in energy output
13 between the afternoon and evening at a time when loads drop by only 400 to 500 MW. Although
14 the wind resources in the portfolio are expected to increase in output from the morning to the
15 evening, deliveries will not increase enough to move the “net peak” load from the evening hours.
16 Thus the San Diego area will begin to exhibit an evening “net peak.” that will drive the need for
17 incremental dependable capacity resources.²⁰

18 This shift in the time period that will drive need for incremental resources has major
19 resource planning implications. It impacts the assessment of effectiveness of all resources that
20 could be procured to meet the identified resource need. Recognition of the shift in peak load

¹⁸ Filed in R.11-05-005.

¹⁹ See slide presentation of David Vidaver, Presented on August 19, 2013, at CEC workshop. See p. 8 showing net loads for 2012 -2017. Underlying renewable portfolio are ISO renewable capacity projections presented in a CPUC workshop by Karl Meeusen (March 20, 2013, slide 26) www.energy.ca.gov/http://www.energy.ca.gov/2013_energypolicy/documents/index.html#08192013.

²⁰ The winter peak is already in the evenings but is forecasted to remain lower than the summer evening peak.

1 periods must also drive policy considerations. For example, as the Commission considers
2 expansion of EE and DR programs, it must consider the effectiveness of programs that reduce
3 loads in both the afternoon *and* evenings. EE program peak reductions are currently calculated
4 based on expected peak reductions only during the afternoon hours of 2:00 – 5:00 PM. Likewise
5 DR programs have generally focused on afternoon hours and their impact at that time. In future
6 proceedings the Commission should look at programs that reduce load during *both* afternoon and
7 evening hours. Likewise, procurement of supply-side resource must take into account the
8 resource’s ability to meet evening load demands as well as afternoons.

9 **VII. CONTINGENCY LICENSING**

10 Forecasting future LCR need involves inherent uncertainty. The resource planning
11 process involves many variables – *e.g.*, basic load growth assumptions, achievement of EE and
12 DR reductions, the timeline for permitting, licensing and building new generation and
13 transmission facilities, and the cost and quantities of preferred resources that develop over time –
14 each of which may differ significantly from expectations.

15 As discussed above, the long lead time involved in constructing new generation resources
16 – *i.e.*, can be seven years or more – is a major factor in the ability to meet local need.

17 Accordingly, SDG&E is currently exploring the feasibility of developing of an energy park that
18 would be made available to independent generators in future RFOs to meet local resource need.

19 The goal of the energy park would be to reduce the time between a finding of generation need
20 and the in-service date of generating plants necessary to meet that need. The concept involves

1 development of a fully-licensed park that would have the necessary transmission and natural gas
2 infrastructure as well as access to water in order to support generation development. The “lots”
3 would be made available to independent developers to use in bids as the Commission determines
4 future local resource needs in Southern California.

5 Availability of licensed sites would mean that development of new generating resources
6 required to meet LCR need could occur within a much shorter period than the current processes
7 allow. In addition, projects could be bid with more certainty since licensing risk and
8 interconnection costs would already be known. To the extent it elects to pursue this energy park
9 proposal, SDG&E will file a separate application with the Commission seeking approval to move
10 forward with such a plan.

11 This concludes my prepared testimony.

1 **VII. WITNESS QUALIFICATIONS OF ROBERT ANDERSON**

2 My name is Robert B. Anderson. My business address is 8330 Century Park Court, San
3 Diego, California, 92123.

4 I am employed by San Diego Gas & Electric Company (SDG&E) as Director - Resource
5 Planning. My responsibilities mainly include electric resource planning. I have been employed
6 by SDG&E since 1980, and have held a variety of positions in resource planning, corporate
7 planning, power plant management, and gas planning and operations.

8 I have a BS in Mechanical Engineering and an MBA - Finance. I am a registered
9 professional engineer in Mechanical Engineering in California.

10 I have previously testified before this Commission.