

1 conducted through the CAISO, brokers, or exchanges. The Commission did not define “short-term” in  
 2 the context of this rule. SCE construes “short-term” in this context to refer to transactions of up to three  
 3 calendar months or one quarter in duration with delivery start dates up to one quarter forward, which is  
 4 the definition provided by the Commission in the context of bilateral transactions.<sup>74</sup> SCE is authorized  
 5 to transact with its affiliates in this AB 57 Bundled PP subject to the Commission’s restrictions as  
 6 summarized in this section.

### 7 **3. Procurement Limits and Ratable Rates**

#### 8 a) Forward Procurement Authority and Contract Duration

9 SCE has authority to enter into electrical capacity, electrical energy, and natural gas transactions  
 10 up to ten (10) calendar years forward. SCE shall not exceed a five (5) year contract duration limit for  
 11 any single electrical capacity or electrical energy transaction. Specifically, SCE can enter into contract  
 12 terms of five years or less provided the contracts expire within ten (10) calendar years of execution (*e.g.*,  
 13 a contract executed in 2012 must expire on or before December 31, 2022).

#### 14 b) Electrical Capacity Ratable Rates and Position Limits

15 Procurement position limits and maximum rates of transaction (referred to as “ratable rates”)  
 16 apply to electrical capacity transactions for delivery months that occur two or more calendar years  
 17 beyond the transaction year (*e.g.*, for transactions occurring in 2012, limits shall apply to contract  
 18 deliveries in 2014 and beyond). SCE has no limits on its ability to meet its RA capacity requirements  
 19 for the current calendar year and prompt calendar year (*i.e.*, the calendar delivery year immediately  
 20 following the current year).

21 Delivery years two through ten shall have maximum annual position limits equal to the  
 22 difference between (1) SCE’s forecast electrical capacity requirement to meet its RA requirement (*i.e.*,  
 23 peak annual hour load using a 1-in-2 year load forecast multiplied by 117%), and (2) the forecast Net  
 24 Qualifying Capacity (NQC) of SCE’s committed resources and planned for preferred resources.<sup>75</sup>  
 25 SCE’s procurement of electrical capacity as measured by the NQC of the resource, exclusive of  
 26 preferred resources, cannot exceed the applicable annual position limit in years two through ten.

<sup>74</sup> See D.04-12-048, OP 15.

<sup>75</sup> For purposes of calculating SCE’s annual electrical capacity limits and compliance with such limits, preferred resources are EE programs, DR programs, Renewable Sources, and Distributed Generation.

1 Ratable rates shall also apply to SCE's procurement of electrical capacity. The maximum rate of  
2 transaction shall equal the annual position limit divided by the time difference between the applicable  
3 delivery year and transaction year. For example, the ratable rate for contract deliveries in Year 4 would  
4 be one-third of the annual position limit for Year 4 (*i.e.*, Year 4 annual position limit divided by the  
5 annual time difference between Year 4 and Year 1). These ratable rates accumulate year-to-year,  
6 producing cumulative ratable rate limits for each delivery year equal to those defined in Table J-1 of  
7 Appendix J. Furthermore, the ratable rate methodology allows for procurement of two times the ratable  
8 rate for delivery Year 2 through Year 5 (*e.g.*, for transactions occurring in 2012, delivery years 2014-  
9 2017 are eligible for two times the ratable rate) when certain market conditions are present, subject to  
10 the corresponding delivery year's annual position limit. The operative ratable rate limit for delivery  
11 Year 2 through Year 5 shall be set as follows:

- 12 1. Two times the ratable rate if the prompt 12-month forward on-peak implied market  
13 heat rate<sup>76</sup> is less than the two standard deviation historical high value contained in  
14 Table J-2 of Appendix J; and
- 15 2. One times the ratable rate if the 12-month forward implied on-peak market heat rate  
16 is greater than or equal to the two standard deviation historical high value contained  
17 in Table J-2 of Appendix J.

18 The ratable rate limit for delivery Year 6 through Year 10 is one times the ratable rate.

19 c) Electrical Energy Ratable Rates and Position Limits

20 Position limits and ratable rates apply to electrical energy transactions with delivery months  
21 beyond the prompt month. No position limits apply to current month and prompt month transactions in  
22 order to allow SCE to meet its forecast requirements. Monthly electrical energy purchase position limits  
23 are the gross net short position (*i.e.*, the sum of all hourly net-short positions) for each month's on-peak  
24 and off-peak period based on economic dispatch of SCE's existing portfolio assuming a 2-standard  
25 deviation historical low implied market heat rate. Monthly electrical energy sales position limits are the  
26 gross net long position (*i.e.*, the sum of all net-long positions) for each month's on-peak and off-peak  
27 period based on economic dispatch of SCE's existing and planned-for portfolio assuming a 2-standard

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<sup>76</sup> Calculated by dividing the SP-15 on-peak power price by the Topock gas price as provided by published indices and/or brokers' quotes.

1 deviation historical high implied market heat rate. Tables J-3, J-3a, J-4, and J-4a in Appendix J contain  
2 SCE's on-peak purchase, off-peak purchase, on-peak sales and off-peak sales position limits for  
3 electrical energy, respectively. These limits, filed as monthly quantities, set the maximum allowable net  
4 forward position for the on-peak and off-peak purchase and sales transactions for the duration of the AB  
5 57 Bundled PP.

6 Annual rolling-year (*i.e.*, rolling 12-month) ratable procurement limits shall apply to SCE's  
7 purchase and sale of electrical energy products. The annual ratable rate shall equal 100% of the sum of  
8 the monthly position limits for Year 1 (*i.e.*, Months 1 to 12), 50% for Year 2 (*i.e.*, Months 13 to 24),  
9 33% for Year 3 (*i.e.*, Months 25 to 36) and so on as Table J-5 in Appendix J shows. The ratable rate  
10 methodology will allow for electrical energy purchases of two times the ratable rate for delivery Year 2  
11 through Year 5 when certain market conditions are present as set forth below, subject to the individual  
12 monthly position limits. The operative transaction limit for purchases in delivery Year 2 through Year 5  
13 are set as follows:

- 14 1. Two times the ratable rate if the prompt 12-month forward on-peak power price<sup>27</sup> is  
15 less than the two standard deviation high value contained in Table J-6 of Appendix J;  
16 and
- 17 2. One times the ratable rate if the 12-month forward on-peak power price is greater  
18 than or equal to the two standard deviation high value contained in Table J-6 of  
19 Appendix J.

20 The ratable rate limit for delivery Year 6 through Year 10 is one times the ratable rate for  
21 purchases. A one-times ratable rate applies for all sales transactions.

22 Energy-only products transacted during the term of the AB 57 Bundled PP shall count against  
23 the energy purchase and sales monthly position limits and ratable rate limits. Energy-only products  
24 include energy-only tolling contracts, heat rate options, and fixed-price non-renewable energy  
25 transactions. The quantities counted against the limit will be the forecasted expected energy output of  
26 the contract or resource at the time of evaluation. RA-tolling contracts and firm energy imports that can  
27 be used to meet RA requirements shall not count against electrical energy position or ratable rate limits

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<sup>27</sup> Market quotes for SP-15 on-peak forwards.

1 as these products may be required to meet SCE's RA requirement. Additionally, products that do not  
2 financially hedge costs or otherwise alter SCE's procurement cost TEVaR (e.g., Index-priced electrical  
3 energy deals) shall not count against electrical energy position or ratable rate limits.

4 d) Natural Gas Ratable Rates and Limits

5 (1) Overview

6 SCE's gas exposure is one of the largest in the United States. It is comprised of two sub-  
7 portfolios: the Non-QF and the QF portfolios.

8 The Non-QF portfolio is made up of the gas requirements related to SCE's utility-owned  
9 generation and gas-fired power plants under tolling agreements with SCE. The gas requirements vary  
10 based on economic dispatch. Therefore, the type of plants that are contracted for will affect the gas  
11 requirements. In general, gas needs are the highest in 3<sup>rd</sup> quarter of each year, as many of the power  
12 plants under contract are economic to dispatch frequently during that time period.

13 SCE must manage both the price risk of natural gas procurement (Financial Gas Procurement)  
14 and the physical purchase of natural gas (Physical Gas Procurement) for the SCE Non-QF portfolio.  
15 The financial gas and physical gas requirements do not match exactly. There are tolling contracts where  
16 SCE does not provide physical gas required for the power plant's operation, but does provide financial  
17 payments based on contracted heat rate to pay for the gas procured by the plant operator. The power  
18 plants currently under tolling agreement include plants on the SoCal Gas, PG&E, and Kern River Gas  
19 Pipeline systems. This requires that SCE manage the physical gas requirements for its portfolio  
20 pursuant to the balancing rules and physical gas constraints of each of those systems.

21 The SCE QF Portfolio represents the financial gas exposure related to SCE's QF contracts.  
22 Many of SCE's QF contracts have terms that index the energy price to the price of gas or a Heat Rate  
23 (HR) payment mechanism. SCE converts this price risk into the equivalent units in natural gas price  
24 exposure. Since SCE does not purchase the physical gas for QFs, SCE must use financial gas  
25 instruments to manage price risk for this portfolio. This portfolio is at present almost entirely "must  
26 take."

27 In addition to gas purchases, gas sales may become necessary or desirable due to changing  
28 forecasts of system or market conditions. For example, a reduction in forecast load might result in  
29 certain gas, which was purchased to fuel a generator projected to be dispatched to serve a portion of that  
30 forecast load, becoming surplus. This change would result in a long position in gas and SCE could sell  
31 the surplus gas. As another example, SCE might have purchased gas to fuel a generator that was

1 (3) Natural Gas Storage and Pipeline Limits

2 In addition to managing the physical purchase of gas and managing its financial price risk, SCE  
3 may require pipeline capacity and natural gas storage (either firm or interruptible). Securing natural gas  
4 storage allows SCE to inject gas into storage and then withdraw at a later time to meet reliability and  
5 operational needs. SCE can use firm natural gas storage injection and withdrawal rights to mitigate  
6 imbalance penalties for operational reasons on pipeline and Local Distribution Company (LDC)  
7 systems. Firm natural gas storage rights also provide system reliability, since firm injection and  
8 withdrawal are the last non-core services that the LDC will interrupt during a system gas curtailment.  
9 Appendix J provides a description of how storage injection, withdrawal and inventory limits are  
10 calculated. Table J-9 provides the actual limits.

11 Similarly, SCE should have the capability to fuel any SCE contract resource up to the full  
12 capacity of that resource from whatever location gas can most economically be supplied. Consistent  
13 with D.03-12-062, SCE is authorized to obtain gas pipeline capacity to the extent necessary to support  
14 delivery of gas from gas receipt points to the generator burner-tip. SCE may contract for gas pipeline  
15 capacity to meet each generator's peak annual requirement.<sup>80</sup> If SCE acquires gas transportation  
16 capacity that is temporarily not required to transport gas for SCE's portfolios, SCE will attempt to  
17 market the surplus to the extent allowed by the tariff of the gas transportation provider.

18 e) SO<sub>2</sub> Allowance Sales Position Limits and Ratable Rates

19 SCE is not including a limit structure for SO<sub>2</sub> transactions due to the low value of its SO<sub>2</sub> Title  
20 IV allowance portfolio.<sup>81</sup>

21 f) Transaction Compliance Accounting and Limit Updates

22 Transactions will be deemed to be compliant with SCE's authorized position limits and ratable  
23 rate limits if, at time of purchase or sale, the transaction does not cause SCE to exceed its applicable  
24 position limit and ratable rate limit. A transition from a two-time ratable rate to one-time ratable rate  
25 will not cause any transaction activity that occurred prior to the transition date to be non-compliant with  
26 SCE's ratable rate limits, provided the subject transactions complied with the then applicable ratable rate  
27 limit when executed.

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<sup>80</sup> D.03-12-062, pp.28-29.

<sup>81</sup> Total portfolio value is estimated to be approximately \$3.5 million as of March 17, 2011.

1 SCE shall file an annual (or more frequent, if necessary) update to its position limits and ratable  
2 rate limits in the form of a Tier 1 advice letter during years in which SCE does not file an updated  
3 conformed bundled procurement plan.<sup>82</sup> This will provide SCE with the opportunity to adjust its  
4 position limits and ratable rate limits to reflect changes in SCE's portfolio and updated forecast  
5 assumptions. SCE shall submit the advice filing by October 31<sup>st</sup> with an effective date of January 1<sup>st</sup> of  
6 the year following the submittal, unless suspended or otherwise instructed by the Commission. SCE  
7 shall calculate the updated position limits and ratable rate limits using SCE's Commission-authorized  
8 limits methodology.

9 **4. Congestion Revenue Rights (CRR) Transactions**

10 SCE may transact CRRs in the CAISO's long-term CRR (LTCRR) process, CAISO's annual and  
11 monthly CRR allocation and auction processes, and through bilateral means as Appendix G provides.

12 **5. Convergence Bidding (CB) Transactions**

13 SCE may transact convergence bids in the CAISO's IFM as provided in Appendix H.

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<sup>82</sup> The updated limits calculations shall be consistent with the methodology employed in Appendix J.