

1 **Q. In the absence of an all source RFO at this juncture, what mechanism would you**
2 **propose?**

3 **A.** I propose a Preferred Resources LCR Mechanism (PRLM, or pronounced “*pree-lim*”). The
4 PRLM fairly and transparently captures the value of the Preferred Resources, ensures that CFR
5 are not over or under procured, addresses CFR market power, utilizes existing Commission
6 programs and CAISO modeling, and can be implemented quickly and efficiently.

7

8 **Q. At what point do you believe an all source RFO would be feasible?**

9 **A.** I recognize the appeal of developing an all source RFO framework that allows for head-to-
10 head, level playing field competition between all resources. Nevertheless, to attempt to segue to
11 this type of approach ignores the tremendous resources already, and in many cases, recently,
12 invested in existing Commission programs designed specifically for various types of Preferred
13 Resources. Furthermore, attempting to build a robust and sustainable all source RFO policy
14 which addresses the mismatch in development time scales and the load-offset profiles of each
15 source is well beyond the scope of Track 1 of this LTPP. A more appropriate forum would be
16 Track 2 of this or a subsequent LTPP. Indeed, working *within* the LTPP process to realize the
17 goal of collectively comparing all resources is a far more public and transparent approach than,
18 and thus preferable to, a conventional, utility driven RFO.

19

20 **Q. Please describe the PRLM?**

21 **A.** The purpose of the PRLM is to encourage the market to site Preferred Resources in the
22 appropriate SCE LRAs. When this occurs, additional payment is made to those Preferred
23 Resources that reflects the avoided costs that the utility would have spent on procuring CFR to
24 meet LCRs. Ratepayers and the utility should be indifferent to the payment because it would
25 have been made regardless of the existence of the PRLM – the PRLM simply provides a way to
26 redirect procurement, using market encouragement, from CFR to Preferred Resources. With
27 proper accounting in place, the PRLM will prevent acquisition of excess LCR resources by

1 tracking the incremental impact of new Preferred Resources on lowering overall demand, and
2 therefore overall LCR need.

3 The PRLM is developed using a differential analysis of two Track 1 cases modeled by the
4 CAISO. The first case is based on the 2011-2021 CAISO Transmission Plan, high net-load
5 trajectory assumptions, and forms the basis for CAISO’s procurement recommendations for
6 filling OTC LCR needs¹ (Case A) in Track 1 of this proceeding. The second case is based on the
7 “sensitivity analysis” performed by the CAISO using the mid net-load, environmentally
8 constrained case² (Case B). The CAISO recommends against using Case B for determining LCR
9 in Track 1 of this proceeding because the CAISO believes that assuming the incremental,
10 “uncommitted” amounts of Preferred Resources embedded in Case B will materialize is too
11 risky, and thus jeopardizes grid reliability.³

12 I utilize the differential between Case A and Case B because of all the scenarios modeled
13 in the CAISO 2011-2012 Transmission Plan, Case B is the most efficient in using Preferred
14 Resources to mitigate LCR generation needs, and because the differential between the two
15 provides a reasonable basis for developing funding targets for encouraging the incremental Case
16 B Preferred Resources to site in the appropriate SCE LRAs. Essentially, under the CAISO’s
17 preferred Case A scenario, the CAISO recommends filling the amount of incremental,
18 “uncommitted” Case B Preferred Resources with CFR. I, on the other hand, am proposing,
19 consistent with the Preferred Loading Order, the PRLM, which redirects this CAISO proposed
20 “chunk” of CFR procurement to Preferred Resource procurement.

21

22 **Q. By using the Case A and Case B differential as the basis for the PRLM, are you**
23 **endorsing the CAISO’s modeling?**

24 **A.** No, I am not endorsing the CAISO’s modeling. As described in my direct testimony and the
25 direct testimony of many other parties, the CAISO’s modeling is problematic in a variety of

¹ *Testimony of Robert Sparks on Behalf of the California Independent System Operator Corporation*, at p. 17 of 17, lines 4-5.

² *Supplemental Testimony of Robert Sparks on Behalf of the California Independent System Operator Corporation*, at p. 2 of 8, lines 12-24.

³ *Ibid.* at pp. 4-7 of 8, lines 1-2.

1 ways. Nevertheless, presumably due to resource constraints, no other modeling has been
2 presented and/or vetted as thoroughly as the CAISO modeling. Furthermore, I am not aware of
3 anything suggesting that the CAISO's modeling will not be utilized, at least in some fashion, in
4 deciding the disposition of Track 1 of this proceeding.

5 Thus, my use of the CAISO modeling as the building block for the PRLM is driven by
6 practicality and necessity, and should not be construed, whatsoever, as my agreement with the
7 CAISO's Track 1 procurement recommendations. I continue to support everything contained in
8 my direct testimony. The PRLM is not a retraction of that testimony, but is instead a proposal to
9 ensure that if the Commission does authorize procurement in Track 1, that the procurement
10 properly reflects the Preferred Loading Order.

11

12 **Q. What do you do with the differential between Case A and Case B?**

13 **A.** As previously stated, the difference between Case A and Case B represents in MW the
14 incremental Preferred Resources included in Case B, but excluded from Case A. I then re-
15 characterize the MW differential between Case A and Case B as avoided costs. A core purpose
16 of the PRLM is to encourage the use of Preferred Resources to fill the LCR need and thereby
17 avoid unnecessary procurement of the CFR. To provide extra insurance that ratepayers are
18 getting the full benefit of the Preferred Resource procurement, I discount the avoided costs by
19 25%. I chose 25% because it is a robust discount and leaves sufficient funds to encourage
20 Preferred Resources to site in the appropriate SCE LCAs.

21 After calculating the discounted avoided cost (DAC), to determine the value over time, I
22 then calculate the net present value of the DAC using a 20 year net present value calculation.
23 Because I am recommending that the PRLM be iterated and reviewed on the 2 year LTTP
24 planning cycle, this amount is divided by four to represent the four LTTP cycles between now
25 and the year 2020. I will refer to this final amount as the Per Cycle Funding (PCF).

26 Consistent with the ratios of Preferred Resources embedded in Case B, I would then
27 allocate the PCF to the various Preferred Resources, such that each class of Preferred Resource
28 would have a separate "bucket" of PRLM funding. The funding would be utilized consistent

1 with existing Commission programs applicable to each Preferred Resource, and to new programs
2 as, or if, they are developed.

3

4 **Q. What are the advantages of the PRLM over an all-source RFO?**

5 **A.** The advantages of the PRLM over an all source RFO include but are not limited to:

- 6 1) The PRLM makes use of a sensitivity already modeled by the CAISO, thereby
7 providing a good guide for the initial cycle. At each iteration, the Commission can
8 evaluate whether incremental preferred resources are on track, how conditions on the
9 ground may have changed, and incorporate improvements to the CAISO modeling.
10 Thus, the PRLM makes good use of current CAISO analysis and provides needed
11 nimbleness to adapt to new or improved future analysis. This open-endedness allow
12 for an on-going dialog between the Commission, the CAISO and stakeholders on the
13 best ways to refine future LCR analysis. Furthermore, by requiring a much smaller
14 number of MW coming from CFR, the PRLM opens the way for more competition
15 between types and locations of CFR and mitigates market power issues.
- 16 2) The PRLM is inherently modular. By operating on two-year LTPP cycles, the PRLM
17 takes advantage of the shorter development times of Preferred Resources. By
18 adjusting the buckets for each Preferred Resource as needed during LTPP cycles, the
19 PRLM takes advantage of the granularity offered by the smaller increments of
20 Preferred Resources.
- 21 3) Management of the Preferred Resource buckets can be informed by existing
22 Commission programs, leveraging work already performed and minimizing
23 incremental resource needs.

24

25 **Q. Does the PRLM completely obviate the need for a CFR RFO?**

26 **A.** Without conceding a need for new or replacement CFR, to the extent that the Commission
27 finds the need to procure CFR, this would need to occur in an effort parallel to the PRLM.
28 Based on my previously discussed analysis of the scarcity of real estate in the SCE LRAs and the

1 related market power issues, such an effort may ultimately be best addressed through a bilateral
2 negotiation between incumbent CFR and the utility.

3

4 **Q. Is the PRLM a subsidy to Preferred Resources?**

5 A. No, the PRLM is not a subsidy. As discussed above, funds used to encourage Preferred
6 Resources to site in the appropriate LRAs are funds that would otherwise be spent on CFR.
7 Appropriate PRLM accounting, such as memo accounts or other similar mechanisms, would
8 ensure accurate tracking and would be trued up and reflected in the CAISO modeling during
9 each subsequent LTPP cycle.

10

11 **Q. Does the PRLM have a sunset date?**

12 A. Absent changed circumstances, the PRLM should end in 2020. By 2020, all OTC related
13 LCR needs should be addressed in a resource and cost efficient manner, and completely
14 consistent with the Preferred Loading Order. The iterative nature of the PRLM will have
15 enabled the Commission and the CAISO to hone in on the best ways to analyze how LCR needs
16 can be covered by the widest range of Preferred Resources (including new ones like storage) in
17 an integrated fashion. OTC retirements will have been mitigated, and PRLM-learned insights
18 will be incorporated into ongoing reliability assessments.

19

20 **Q. Can you calculate the PCF that would be utilized in the first iteration of the PRLM?**

21 A. For the LA Basin, I have calculated approximately \$370mm of PCF for the first iteration of
22 the PRLM. My calculations are found at Attachment A to my testimony. I cannot, however,
23 due to lack of transparency in the CAISO modeling and/or lack of resources, provide
24 approximate bucket allocations. For this reason as well as others, I recommend that the
25 Commission hold workshops to set the PCF, allocate the PCF to the various Preferred Resource
26 buckets, and develop any other policy that might be necessary to implement the PRLM. As the

1 owner/operator of the modeling, the CAISO would provide invaluable assistance in the
2 workshops.

3

4 **Q. Can you calculate the PCF that would be utilized in the first iteration of the PRLM for**
5 **the Moorpark sub-area of the Big Creek/Ventura LRA?**

6 A. Unfortunately, Case B covers only the LA Basin LCA, leaving me without data on the
7 Moorpark –Big Creek/Ventura LRA and thus without an ability to calculate the related PCF.
8 However, while all of the RPS sensitivities in the CAISO 2011-12 Transmission Plan describe
9 430MW of LCR need under high net-load conditions, it is quite possible that under mid net-load
10 (or low net-load) conditions this need no longer exists. Moreover, SCE recommends that the
11 “Commission Should Defer Authorizing LCR Generation in the Ventura/Big Creek Area Until
12 the 2014 LTPP Cycle.”⁴ We endorse this recommendation, and further recommend that the
13 Commission request an analysis from the CAISO responsive to stakeholder input, and perhaps
14 similar in style to Case B for the 2014 LTPP planning cycle, for all applicable LRAs, for use in
15 calculating the PCF of the PRLM.

16

17 **Q. How would the PRLM address issues of flexibility brought up by the CAISO in its**
18 **testimony?**

19 A. I continue to affirm that it is premature to address flexibility needs in Track 1 of this
20 proceeding. I will point out that if Preferred Resources are deployed according to the PRLM,
21 transmission capacity will become more available in constrained pockets and thus flexibility
22 needs can be met on a system-wide basis, further eliminating market power distortions that might
23 arise from contracting for such flexibility in a specific set of locations.

24

25 **Q. Have you discussed the PRLM proposal with other parties to the LTPP?**

⁴ *Testimony of Southern California Edison Company on Local Capacity Requirements* at p.10, lines 12-13.

1 A. Yes, I have. In fact, on behalf of the California Cogeneration Council, I understand that Tom
2 Beach will be co-sponsoring the PRLM proposal. I also understand that the Sierra Club and the
3 Solar Energy Industries Association are generally supportive of the concept.

4 **Q. Does this conclude your testimony?**

5 A. Yes, it does.

ATTACHMENT A

TRACK 1

PREPARED REPLY TESTIMONY OF ERIC GIMON ON BEHALF OF THE VOTE SOLAR INITIATIVE

Calculation of the PCF for the first iteration of the PRLM

- (1) In his original direct testimony Robert Sparks recommends procuring about 2,400MW from a Case A 1,870-2,884MW-estimated range of OTC replacement need for Western LA (225MW of which covers its Ellis sub-area). In his supplemental direct testimony, Mr. Sparks identifies an OTC replacement need in the Case B scenario 1,042 MW (+ SONGS) at the most “effective” sites, with no further need in the Ellis or Moorpark sub-areas. This leads to avoided procurement of 2400MW – 1042M \approx 1,400MW of conventional generation at the most “effective” sites. The use of an assumed 1,400 MW of avoided generation, and the CAISO’s recommended split between combined cycle gas turbines (CCGTs) and combustion turbines (CTs), results in avoiding the construction of one 500MW CCGT and nine 100MW CTs.¹
- (2) The CAISO 2011 *Annual Report on Market Issues and Performance* calculates that the cost of a new 500 MW CCGT, less the revenues that can be recovered in the market, is \$126.6 per kW-year.² The corresponding above-market cost for a new 100 MW CT unit is \$153.5 per kW-year.³ Thus, the annual savings from the reduced local area requirements in Case B are approximately \$200 Million

¹ In *Testimony of Mark Rothleder on Behalf of the California Independent System Operator Corporation*, at p 3 of 9 lines 27-28, Mark Rothleder indicated that CAISO modeled 2,800 MW of new generation with two 500 MW CCGTs and eighteen CTs. I used exactly half of these to model 1,400 MW of avoided costs.

² Taken from the CAISO 2011 *Annual Report on Market Issues & Performance* (April 2012), at pp.45-46, Tables 1.7 and 1.8, and Figure 1.20. I use the CAISO’s calculated five-year average for the market revenues for this unit. The excerpt is found at Attachment B.

³ *Ibid.*, at pp. 47-48, Tables 1.9 and 1.10, and Figure 1.21. Again, this assumes the CAISO’s calculated five-year average for the market revenues for this unit.

Per Year (an average of \$143.9 per kW-year), or a 20-year net present value of \$2.0 billion (\$1,413 per kW) at an 8% discount rate. I then multiply the \$2.0 billion by 75% to reflect the discount (\$1.5mm), and then divide by 4 to represent the LTPP cycles between now and the year 2020 (\$370mm).