

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate
and Refine Procurement Policies and
Consider Long-Term Procurement Plans.

Rulemaking 12-03-014
(Filed March 22, 2012)

Track 1 Reply Brief
of the
California Cogeneration Council

R. Thomas Beach
Crossborder Energy
2560 Ninth Street, Suite 213A
Berkeley, CA 94710
Telephone: 510-549-6922
E-mail: tomb@crossborderenergy.com

On behalf of
CALIFORNIA COGENERATION COUNCIL

October 12, 2012

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

Order Instituting Rulemaking to Integrate
and Refine Procurement Policies and
Consider Long-Term Procurement Plans.

Rulemaking 12-03-014
(Filed March 22, 2012)

**TRACK 1 REPLY BRIEF
OF THE CALIFORNIA COGENERATION COUNCIL**

The California Cogeneration Council (CCC) respectfully presents the following reply brief on the Track 1 issues in this long-term procurement planning (LTPP) proceeding. The CCC has reviewed the opening briefs submitted in this proceeding, and hereby responds to the briefs of certain parties on a limited number of issues. In particular, the CCC responds to the opening briefs of several parties on issue associated with how preferred resources should be considered, procured, and paid to meet the local capacity reliability (LCR) needs identified in this case. These were the issues in Sections II.A, II.B, IV.A, IV.D, and V.A of the common briefing outline developed for this proceeding.

**II.
DETERMINATION OF LOCAL CAPACITY REQUIREMENTS (LCR) NEED IN
CALIFORNIA INDEPENDENT SYSTEM OPERATOR (CAISO) STUDIES**

A. CAISO’s LCR and Once-Through Cooling (OTC) Generation Studies

The California Independent System Operator (CAISO) attempts to characterize the record as one in which many intervening parties “only focused on pushing the local area deficiency lower and ignored in their recommendations the ISO’s more optimistic assumptions; for example, the LCR/OTC study assumed that SONGS was in operation.”¹ The CCC challenges this characterization, and submits that this case is not primarily about whether there is a need to replace retiring units using once-through cooling (OTC) – there clearly is such a need – but

¹ CAISO Opening Brief, at 15.

instead this case is about the types of resources that should be procured to meet that need, and how that procurement should be accomplished at the least possible cost to ratepayers. The key to meeting LCR needs at the least cost to ratepayers is to seek what Commissioner Florio described as a “twofer”² – resources that both can meet LCR needs and are being procured for other policy reasons. As set forth in the Opening Brief of the CCC and many other parties, the state already is making substantial efforts to procure “preferred” energy efficiency (EE), demand response (DR), distributed generation (DG), and combined heat and power (CHP) resources. Thus, the support of the CCC and other parties for modeling cases in which a significant portion of the LCR need is met through preferred resources does not represent an overly “optimistic”, extreme, or unbalanced approach to the LCR analysis – it simply represents the most cost-effective approach to meeting LCR needs because it would rely on resources that the state already intends to develop.

Further, the CAISO’s assumption that SONGS will operate does not make its preferred modeling cases somehow fair and balanced. First, as TURN observes, if the closure of SONGS necessitates a major transmission upgrade into the L.A. Basin, that could reduce LCR needs, not increase them.³ Moreover, this case is not about how to replace the loss of SONGS, as the assigned commissioner and administrative law judge recognized in limiting the SONGS-related testimony in this case.⁴ This case is about the LCR needs that result from retiring OTC units. The CCC believes that the Commission and other parties recognize the importance of SONGS units to meeting the LCR needs in both the L.A. Basin and San Diego, and that any sustained or permanent shut-down of the SONGS units will trigger further modeling of the impacts of such a shut-down on the transmission and LCR needs in southern California. Indeed, such studies appear to be already under way.⁵ As a result, the CAISO is not being “optimistic” in assuming that SONGS continues to operate.

² Tr. 657-658 (SCE, Cushnie).

³ TURN Opening Brief, at 11-12.

⁴ Tr. 53; also “Assigned Commissioner and Administrative Law Judge’s Ruling Partially Granting Motion to Strike Testimony,” dated July 17, 2012, in this docket.

⁵ Exh. ISO-1, at 15; Tr. 92.

B. Consideration Of Preferred Resources, Including Uncommitted Energy Efficiency, Demand Response, Combined Heat and Power, and Distributed Generation, In Determining Future LCR Needs

The parties to this case generally agree that state policies which favor the use of certain resources, such as California’s “loading order,” should be considered in meeting the need for LCR resources in certain portions of Southern California Edison’s (SCE) service territory. However, the conditions which certain parties would place on the consideration of preferred resources effectively would preclude their procurement to meet the identified LCR need. For example, the CAISO states that “both ISO witnesses Millar and Rothleder made it clear that the ISO is technology neutral and that should DR, EE, CHP or storage resources successfully meet the operational characteristics required by the ISO, they should be able to compete in an RFO or other procurement process.”⁶ The “operational characteristics” cited by the CAISO include flexibility characteristics such as dispatchability, quick response times, fast starts, and the ability to provide ancillary services – attributes that preferred resources obviously do not possess, except perhaps to a limited extent.⁷ The CAISO makes clear that DR resources are unlikely to provide the requisite flexibility,⁸ and EE, DG, and CHP resources clearly provide even fewer of these characteristics than DR. The CAISO noted candidly that “for study purposes the ISO was not aware of a viable alternative to conventional generation that meets these operational needs.”⁹ Thus, the CAISO’s assertion that it is “technology neutral” rings hollow, when it is only conventional gas-fired generation that has the characteristics that the CAISO seeks to procure. Specifically, with respect to CHP, the CAISO asserts that

CHP sales to the grid can be treated as supply side resources and, to the extent that they can perform as necessary, can compete with generators to meet local capacity requirements. Accordingly, the ISO strongly disagrees with CCC witness Beach’s assertions that the ISO is “not encouraging” CHP. The CEC forecast includes a reasonable amount of behind the meter CHP, and the ISO anticipates that additional CHP will compete in the procurement process. In Section IV below, the ISO has described the ideal characteristics needed for successful participation in the procurement process.¹⁰

⁶ CAISO Opening Brief, at 40.

⁷ *Ibid.*, at 28-29 and 48-49. As discussed by CCC’s witness Mr. Beach, CHP units can be sized and configured to supply limited flexibility, for example, by oversizing the topping cycle gas turbine or by diverting steam to a steam turbine in combined-cycle operations. *See* Exh. CCC-8.

⁸ *Ibid.*, at 49.

⁹ *Ibid.*

¹⁰ *Ibid.*, at 28 (emphasis supplied).

Thus, although the CAISO makes a great pretense of resource neutrality and of “encouraging” preferred resources to compete to supply LCR needs, the careful caveats that the CAISO places on that competition – in particular, in the phrases highlighted above – make clear that the CAISO does not conceive this to be a competition in which preferred resources can actually compete. The CAISO’s “ideal characteristics needed for successful participation” are circumscribed to be those that only conventional gas-fired generation can provide. In sum, preferred resources will not be developed to meet LCR needs if such resources are forced to compete in all-source RFOs that require them to provide operating characteristics that they plainly cannot supply. SCE’s witness Mr. Cushnie admitted as much under questioning from Commissioner Florio, which is cited in the CAISO’s opening brief.¹¹

The CAISO’s own modeling of a scenario with higher amounts of EE, DG, and CHP – the “Sensitivity Study” discussed in the CAISO’s June 19 supplemental testimony (Exh. CAISO-2) – shows that more robust development of preferred resources can reduce the LCR need in the Los Angeles Basin to be met with conventional gas-fired generation to 1.0 gigawatts (GW). The CCC agrees with TURN’s perspective that, today, new conventional generation sited to meet SCE’s LCR needs are just as “uncommitted” as the EE and CHP resources which the CAISO wants to ignore.¹² There may be significant opposition to siting large-scale replacement generation at the coastal sites of present OTC units – the only likely sites for new gas-fired generation. SCE has discussed the significant uncertainties in obtaining air emission offsets,¹³ and SCE and TURN both express concern that the present owners of OTC units may have market power if conventional gas-fired generation is the only option to meet LCR needs.¹⁴ Given these uncertainties, the Commission should find that there is significant value in pursuing the robust development of preferred resources to meet a significant portion of the LCR need, as a hedge against the uncertainties associated with siting new large-scale conventional generation and as a means to mitigate the possible market power of the owners of existing OTC units. From this perspective, there also is no need to apply arbitrary 50% reductions to the availability of

¹¹ Tr. 664, line 7-665, line 14. CAISO Opening Brief, at 45.

¹² TURN Opening Brief, at 9.

¹³ Exh. SCE-1 at 13-14.

¹⁴ See Exh. TURN-1, at 20-21; TURN Opening Brief, at 2, 13, and 18; Exh. SCE-1, at 14; SCE Opening Brief, at 17-19.

preferred resources which TURN suggests, given that there is no evidence that such a discount is warranted by facts on the ground.¹⁵ One would assume that there is a relatively uniform distribution of small-scale preferred resources throughout SCE's service territory; as a result, to adopt TURN's 50% discount would be in effect to assume, without support, that these resources are much less likely to be found in the affected LCR areas than in other portions of SCE's service territory.

IV. **PROCUREMENT OF LCR RESOURCES AND INCORPORATION OF THE** **PREFERRED LOADING ORDER IN LCR PROCUREMENT**

A. Incorporation Of The Preferred Loading Order In LCR Procurement

The CCC joins with many parties in recommending that the Commission find that preferred resources can meet at least that portion of SCE's LCR need which preferred resources serve in the Sensitivity Study presented in Exh. CAISO-2. The CCC agrees completely with TURN that "[t]he LTPP offers an important opportunity to acknowledge the importance of preferred resources in meeting future system needs."¹⁶ SCE recognizes that it will be procuring preferred resources such as CHP in order to meet CPUC-approved targets, and that it will use RFOs to do so in the most cost-effective way.¹⁷

D. Appropriate Method(s) of Procurement

The CCC has recommended that the Commission should modify existing procurement mechanisms for preferred resources for use in procuring such resources to meet LCR needs. The CCC's opening brief discusses at length why the use of an all-source RFO to procure preferred resources is not the best means to meet local area needs, and the CCC will not repeat those arguments here. In short, there is no need to "re-invent the wheel" when the Commission has devoted great effort in recent years to designing a variety of procurement processes that are tailored to the procurement of preferred resources.

¹⁵ TURN Opening Brief, at 10.

¹⁶ TURN Opening Brief, at 6.

¹⁷ SCE Opening Brief, at 12.

In contrast, SCE has proposed that it conduct “studies to assess the cost effectiveness of preferred resources” that could meet the LCR need, and then include such studies in any application for approval of a contract to meet LCR needs.¹⁸ The CCC expects that such studies would be used to justify why preferred resources are too expensive to meet LCR needs, or why they fail to provide the needed operational characteristics. The CCC strongly opposes this aspect of SCE’s proposal, and anticipates that the Commission will have little appetite for repeated litigation of SCE’s cost-effectiveness studies of preferred resources, particularly as such studies may duplicate other ongoing Commission activities in this area. If the Commission found that a preferred resource was not cost-effective at meeting LCR needs, what would such a finding mean for other Commission cost-effectiveness evaluations of similar resources? Would parties with interests in particular preferred resources have to defend their view of the cost-effectiveness of the resource in repeated SCE applications for approval of contracts to meet LCR needs?

The CCC submits that it would be much better to use repeated market tests, rather than repeated litigation, as the means to assess whether it is cost-effective to procure preferred resources to meet LCR needs. SCE can perform such tests through regular RFOs to procure preferred resources in the affected LCR areas. The CCC has recommended that SCE should select preferred resources to meet LCR needs if the additional cost for such resources, compared to the cost of preferred resources in RFOs which are not directed toward meeting LCR needs, does not exceed the cost to meet the equivalent LCR need with conventional resources. TURN’s opening brief also supports the use of such a premium:

To the extent that the selection of preferred resources for LCR needs would count towards preferred resource targets adopted in other proceedings, the Commission should direct SCE to determine acceptable premiums that would justify selection in an RFO. For example, if the selection of a photovoltaic resource would reduce SCE’s otherwise applicable RAM, FIT or RPS obligations, any premiums associated with those avoided obligations would not be incurred. It may therefore be appropriate to develop proxy premiums that could be applied to preferred resource bids for purposes of assessing their cost-effectiveness as compared with conventional resources. This approach would preserve the overall goal of cost-minimization and ensures that total portfolio costs are taken into account in meeting LCR needs.¹⁹

¹⁸ *Ibid.*, at 11.

¹⁹ TURN Opening Brief, at 16.

The payment of such a premium would be a reasonable outcome given that ratepayers would be receiving Commissioner Florio’s desired “twofer” – both obtaining preferred resources and meeting LCR needs with a single resource.

Interestingly, the CAISO supports a similar concept in its opening brief. In discussing a Calpine position that a transmission alternative would be less expensive than LCR generation, the CAISO argues that the cost of the transmission alternative should not be compared to the full cost of a combined-cycle plant meeting LCR needs, but to “the difference in the cost of procuring generation inside the Moorpark sub-area versus the cost of procuring generation outside the sub-area.”²⁰ This incremental analysis is no different than choosing a preferred resource to meet LCR needs so long as the cost premium for such a resource, above the costs of similar resources elsewhere in SCE’s service territory, does not exceed the cost to serve the comparable LCR requirement with conventional generation. The Commission should adopt such a test as the means for SCE to determine whether preferred resource bids in the RFOs held to procure LCR resources are cost-effective compared to new conventional resources.

V.
INCORPORATION OF FLEXIBLE CAPACITY ATTRIBUTES IN LCR
PROCUREMENT

A. If A Need Is Determined, Should Flexible Capacity Attributes Be Incorporated Into Procurement?

There is little debate that, to the extent that LCR needs are met through procurement of conventional gas-fired generation, the fossil generation so procured should have the flexibility characteristics that the CAISO seeks. However, the Commission also should acknowledge that meeting a substantial portion of the LCR need with preferred resources is another way to make more flexible resources available to the grid.

After reviewing the record in this case, the Commission should find that there is no basis to conclude that all resources acquired to meet LCR needs must have the full set of flexibility

²⁰ CAISO Opening Brief, at 37 (emphasis added).

characteristics that the CAISO desires. In fact, it is likely that using preferred resources to meet a substantial portion of the LCR need also will make more flexible resources available to the grid, as the output of the preferred resources unloads nearby marginal gas-fired generation, which then becomes available to provide needed flexibility. Exactly such an impact was observed in the 2010 LTPP studies of the flexibility needed for renewables integration.²¹ In the 2010 LTPP, the cases with lower demands on the grid showed zero need for new flexible resources, as the flexibility requirements were met with existing, unloaded marginal plants. As demand increased, existing marginal generation was needed to serve load, and new resources had to be procured to meet flexibility requirements. The CAISO's Mr. Rothleder acknowledged these results in both his testimony and on the stand.²² In addition, this is clearly an area in which there is going to be further study in later tracks of this LTPP and in future LTPP cases.²³ Accordingly, the CCC believes that the Commission should not conclude that only conventional generation built to meet LCR needs will be able to supply the flexibility needed to integrate renewables, or, as the CAISO's opening brief suggests,²⁴ that conventional generation offers an additional benefit – needed flexibility – that will not be obtained if preferred resources are used to meet LCR needs.

²¹ Exh. CAISO-4, at 2.

²² Exh. CAISO-4, at 2, and Tr. 329, line 26-330, line 26.

²³ *Ibid.*, at 7-8.

²⁴ CAISO Opening Brief, at 50-51.

VIII.
CONCLUSION

The CCC appreciates the Commission's consideration of the positions discussed in this reply brief, and looks forward to further participation in this case.

Respectfully submitted,

/ s /
R. Thomas Beach
Crossborder Energy
2560 Ninth Street, Suite 213A
Berkeley, CA 94710
Telephone: 510-549-6922
E-mail: tomb@crossborderenergy.com

On behalf of
CALIFORNIA COGENERATION COUNCIL

October 12, 2012