

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)

**OPENING BRIEF OF THE  
CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES IN  
LOCAL RELIABILITY TRACK 1**

September 24, 2012

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## SUMMARY OF RECOMMENDATIONS

Rule 13.11 of the Commission’s Rules of Practice and Procedure requires a “summary of the briefing party’s recommendations following the table of authorities.” To this end, the Center for Energy Efficiency and Renewable Technologies (CEERT) summarizes its recommendations for inclusion in the final decision in the Local Reliability Track 1 of the Long Term Procurement Plan (LTPP) Rulemaking (R.) 12-03-014 as follows:

1. The Commission should re-confirm that its Energy Action Plan “Loading Order” applies to *all* jurisdictional utility procurement, including any undertaken to meet a long-term, forecasted “local capacity requirement” (LCR).
2. The Commission should not authorize *any* LCR procurement by any utility, including Southern California Edison Company (SCE), unless and until the Commission has issued a decision that includes orders that: (1) define terms such as “flexible” capacity or attributes and “operating characteristics” as applied to LCR resources, including distinctions, if any, in the use or meaning of these terms between meeting annual Resource Adequacy (RA) requirements versus a multi-year Long Term Procurement Plan (LTPP) LCR need, (2) identify the “eligibility” criteria and performance metrics for “non-traditional” (i.e., not gas-fired), preferred resources wishing to participate in meeting any identified LCR need; (3) confirm that, in a utility LCR procurement, each resource procured is not required to have *all* of the flexible attributes or operating characteristics potentially identified with LCR resources, but, instead, that the overall procurement portfolio, inclusive of preferred resources, can meet this need; and (4) ensure coordination and consistency on these determinations between all tracks of this LTPP Rulemaking (R.) 12-03-014, R.11-10-023 (RA), and A.11-05-023 (San Diego Gas & Electric Company (SDG&E)).
3. With respect to the LCR “need” identified and recommended by the California Independent System Operator (CAISO) for the Los Angeles (LA) Basin and Big Creek/Ventura areas, the Commission should find that the CAISO’s studies did not sufficiently consider Loading Order preferred resources, whether as mitigation measures (i.e., uncommitted energy efficiency on the demand side, transmission solutions, and quasi-transmission solutions, such

as synchronous condensers) or as non-traditional supply resources (i.e., Demand Response (DR) and storage devices).

4. The Commission should find and direct additional assessments of the economics and viability of preferred resources to reduce or meet an LCR need and of transmission solutions to mitigate the LCR need in the LA Basin and Big Creek/Ventura before authorizing SCE to conduct an LCR procurement.
5. The Commission should not grant SCE discretion, based on a “range” of LCR need, as to when, how, or how much of that need SCE will procure.
6. However, in recognition of at least some time constraints in moving forward to anticipate OTC retirements and deal with uncertainty surrounding the future of the San Onofre Nuclear Generating Station (SONGS), the Commission could adopt a finding of *some* LCR need for SCE in this proceeding, *with the caveat that no procurement will be authorized until the tasks identified in Recommendations 2. and 4., above, are first completed by this Commission.*
7. The Commission should not adopt an LCR need requirement for SCE greater than the “low estimate” identified by CAISO in its Environmentally Constrained Case of approximately 1,800 MW of replacement once-through-cooling (OTC) generation for the LA Basin.
8. The Commission should further find that any identified LCR need is for capacity in relatively rare contingency events, and the procurement of gas resources designed to produce large amounts of energy on a continuous basis would crowd out emerging preferred resources. Therefore, procurement in this LTPP cycle should be heavily weighted against combined cycle additions.
9. The Commission should find that no requirement exists today to identify a need or authorize an LCR procurement for the Big Creek/Ventura area, and any such need assessment can be deferred to the 2014 LTPP.
10. The Commission should find that no need has been demonstrated for “system flexibility” over and above any identified LCR need. In turn, the Commission should not adopt the “residual system need” of 1,200 MWs separately identified by the CAISO and should defer any further consideration of this issue to the 2014 LTPP.

11. The Commission should direct that *any* LCR study conducted by *any* party for the 2014 LTPP must fully consider all preferred resources including uncommitted energy efficiency and the then current and forecasted capabilities of demand response in any identified local area as well as on a system wide basis.
12. The Commission should not conflate purported need for “flexibility” and/or energy production that is yet to be determined in Track 2 of this proceeding with LCR need, if any, determined in this Track 1.
13. Only after the Commission has made the determinations identified in Recommendations 2. and 4. above and has directed any needed revisions to an RFO to procure such resources conforming to the Loading Order, pursuant to its current inquiry defined in the ALJ’s Ruling issued on September 14, 2012, should the Commission consider authorizing an all source LCR procurement for SCE for the LA Basin.

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LOCAL RELIABILITY TRACK 1**

The Center for Energy Efficiency and Renewable Technologies (CEERT) respectfully submits this Opening Brief in the Local Reliability Track 1 of the Commission's Long Term Procurement Plan (LTPP) Rulemaking (R.) 12-03-014. This Opening Brief is timely filed and served pursuant to the Commission's Rules of Practice and Procedure (Rule 13.11), the Administrative Law Judge's (ALJ's) Ruling setting the briefing schedule,<sup>1</sup> and the "common briefing outline" submitted by Southern California Edison Company (SCE), as revised, on August 27, 2012.

**I.  
EXECUTIVE SUMMARY**

CEERT actively participated in Local Reliability Track 1, from attendance at pre-evidentiary hearing workshops, to the preparation, service, and admission of opening, reply, and supplemental testimony of its expert, James H. Caldwell, Jr.; attendance and cross-examination of witnesses during the 9 days of evidentiary hearings in Track 1, and now the submission of this Opening Brief.<sup>2</sup> This participation reflects CEERT's longstanding advocacy aimed at promoting global warming solutions and increased reliance on clean, renewable energy sources for California. While CEERT supports the environmental objectives of the State Water Resources Control Board's (SWRCB's) policy to retire gas-fired generation using once-through-

<sup>1</sup> Reporter's Transcript (RT) at 1384 (ALJ Gamson).

<sup>2</sup> See, e.g., Exhibit (Ex.) CEERT-01, Ex. CEERT-02, and Ex. CEERT-03 (CEERT (Caldwell)).



cooling (OTC) technologies, CEERT also believes that how the expected 8-year transition for those retirements in Southern California is accomplished will be a critical test of California's commitment to reduced dependence on fossil fuels.

Thus, as CEERT witness Caldwell testified, while grid reliability must be maintained, it must be done in a manner that does not impede or compromise California's "efforts to overhaul the State's electricity infrastructure to reduce dependence on volatile fossil fuels, significantly reduce emissions of greenhouse gases and criteria pollutants in our most sensitive urban areas, and achieve other environmental goals" including "ending the destructive practice of using huge volumes of ocean water for OTC."<sup>3</sup> In those circumstances, OTC retirements could create *some* need for new generation in local capacity areas (LCAs), but "it is certainly not true that conventional gas fired resources are the only technology capable of satisfying this need" or that such a need should be determined without full consideration of demand-side preferred resources or transmission solutions that could reduce or mitigate that need.<sup>4</sup>

In fact, in the *specific context* of this long term procurement planning (LTPP) docket, it is imperative that the Commission maintain its commitment to the Energy Action Plan "Loading Order," which *requires* utility investment first in preferred resources, including energy efficiency, demand response, and renewable generation, before investment in gas-fired generation. The significance of this policy imperative is particularly acute in an urban area like the LA Basin, in which generation resources must not only comply with statewide greenhouse gas (GHG) emission reductions, but also strict air quality regulations promulgated in response to this area's classification as severe, non-attainment for criteria pollutants emitted by gas-fired generation.

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<sup>3</sup> Ex. CEERT-01, at p. II-3 (CEERT (Caldwell)).

<sup>4</sup> Ex. CEERT-01, at p. II-2 (CEERT (Caldwell))

The evidentiary record in this Track 1, applied in the context of applicable Commission policy and precedent, provides strong support for the Commission using caution in adopting in full the specific recommendations made by the California Independent System Operator (CAISO) as to (1) CAISO’s long-term forecasted local capacity reliability (LCR) need for Southern California Edison Company (SCE) in the Los Angeles (LA) Basin and Big Creek/Ventura areas, (2) its definitions of the kind or resources that can meet this need (i.e., “flexible” capacity or resources and “operating characteristics”), and (3) its conclusions that effectively limit that need being met by only thermal resources. In addition to CEERT, testimony by a diverse group of stakeholders, ranging from ratepayer advocates (Division of Ratepayer Advocates (DRA)) to environmental organizations (California Environmental Justice Alliance (CEJA) and the Natural Resources Defense Council (NRDC)), and energy businesses (EnerNOC, Inc. (a demand response provider) and Calpine Corporation (electric generator), has demonstrated that CAISO’s need assessments did not adequately factor in preferred resources or potential mitigation measures that could reduce the LCR need in the first place.

Further, in reliance on a constricted view of eligible resources, the CAISO did not fully consider the potential of preferred resources to meet this need. In fact, key terms that will define that eligibility to meet an LCR need, like “flexible” resources or attributes and “operating characteristics,” have not been, but must *first* be defined by *this Commission* in the context of a *long term* plan or forecast before any procurement can be authorized. As witness Monsen for the Independent Energy Producers Association (IEP) confirmed, without such a step being taken, the

absence of clear and transparent LCR “product” definitions will only create confusion and uncertainty in the market and undermine competition.<sup>5</sup>

For these reasons, as supported by the Track 1 evidentiary record and applicable law and policy addressed in detail in this brief, CEERT recommends that, in its Track 1 decision, the Commission should do all of the following:

1. The Commission should re-confirm that its Energy Action Plan “Loading Order” applies to *all* jurisdictional utility procurement, including any undertaken to meet a long-term, forecasted “local capacity requirement” (LCR).
2. The Commission should not authorize *any* LCR procurement by any utility, including Southern California Edison Company (SCE), unless and until the Commission has issued a decision that includes orders that: (1) define terms such as “flexible” capacity or attributes and “operating characteristics” as applied to LCR resources, including distinctions, if any, in the use or meaning of these terms between meeting annual Resource Adequacy (RA) requirements versus a multi-year Long Term Procurement Plan (LTPP) LCR need, (2) identify the “eligibility” criteria and performance metrics for “non-traditional” (i.e., not gas-fired), preferred resources wishing to participate in meeting any identified LCR need; (3) confirm that, in a utility LCR procurement, each resource procured is not required to have *all* of the flexible attributes or operating characteristics potentially identified with LCR resources, but, instead, that the overall procurement portfolio, inclusive of preferred resources, can meet this need; and (4) ensure coordination and consistency on these determinations between all tracks of this LTPP Rulemaking (R.) 12-03-014, R.11-10-023 (RA), and A.11-05-023 (San Diego Gas & Electric Company (SDG&E)).
3. With respect to the LCR “need” identified and recommended by the California Independent System Operator (CAISO) for the Los Angeles (LA) Basin and Big Creek/Ventura areas, the Commission should find that the CAISO’s studies did not sufficiently consider Loading Order preferred resources, whether as mitigation measures (i.e., uncommitted energy efficiency on the demand side, transmission solutions, and quasi-transmission solutions, such

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<sup>5</sup> Ex. IEP-1, at p. 2 (IEP (Monsen)). See also, Ex. DRA-3, at p. 14 (DRA (Spencer), noting the importance to market development and competition of having specific, Commission-established definitions to assess “system/operational needs” and provide “transparent” evaluation methods.)

as synchronous condensers) or as non-traditional supply resources (i.e., Demand Response (DR) and storage devices).

4. The Commission should find and direct additional assessments of the economics and viability of preferred resources to reduce or meet an LCR need and of transmission solutions to mitigate the LCR need in the LA Basin and Big Creek/Ventura before authorizing SCE to conduct an LCR procurement.
5. The Commission should not grant SCE discretion, based on a “range” of LCR need, as to when, how, or how much of that need SCE will procure.
6. However, in recognition of at least some time constraints in moving forward to anticipate OTC retirements and deal with uncertainty surrounding the future of the San Onofre Nuclear Generating Station (SONGS), the Commission could adopt a finding of *some* LCR need for SCE in this proceeding, *with the caveat that no procurement will be authorized until the tasks identified in Recommendations 2. and 4., above, are first completed by this Commission.*
7. The Commission should not adopt an LCR need requirement for SCE greater than the “low estimate” identified by CAISO in its Environmentally Constrained Case of approximately 1,800 MW of replacement once-through-cooling (OTC) generation for the LA Basin.
8. The Commission should further find that any identified LCR need is for capacity in relatively rare contingency events, and the procurement of gas resources designed to produce large amounts of energy on a continuous basis would crowd out emerging preferred resources. Therefore, procurement in this LTPP cycle should be heavily weighted against combined cycle additions.
9. The Commission should find that no requirement exists today to identify a need or authorize an LCR procurement for the Big Creek/Ventura area, and any such need assessment can be deferred to the 2014 LTPP.
10. The Commission should find that no need has been demonstrated for “system flexibility” over and above any identified LCR need. In turn, the Commission should not adopt the “residual system need” of 1,200 MWs separately identified by the CAISO and should defer any further consideration of this issue to the 2014 LTPP.

11. The Commission should direct that *any* LCR study conducted by *any* party for the 2014 LTPP must fully consider all preferred resources including uncommitted energy efficiency and the then current and forecasted capabilities of demand response in any identified local area as well as on a system wide basis.
12. The Commission should not conflate purported need for “flexibility” and/or energy production that is yet to be determined in Track 2 of this proceeding with LCR need, if any, determined in this Track 1.
13. Only after the Commission has made the determinations identified in Recommendations 2. and 4. above and has directed any needed revisions to an RFO to procure such resources conforming to the Loading Order, pursuant to its current inquiry defined in the ALJ’s Ruling issued on September 14, 2012, should the Commission consider authorizing an all source LCR procurement for SCE for the LA Basin.

## 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.

##### 1. **Any Finding of LCR “Need” Can Only be Made in the Applicable *Commission-Based LTPP Policy and Precedent Context.***

At the outset, it is critical to place this Local Reliability Track 1 in the correct policy and legal context. That context is defined by the scope of this Ordering Instituting Rulemaking (OIR) and the precedent and policy that applies to Long Term Procurement Planning (LTPP) and procurement by Commission-jurisdictional investor-owned utilities (IOUs).

As a starting point, in the OIR here, the Commission announced that it would consider “unresolved issues” from its prior LTPP rulemaking “related to the overall long-term need for new system and local reliability resources, including adoption of system resources plans and assessment of long-term local area reliability needs.”<sup>6</sup> Of significance, however, regardless of

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<sup>6</sup> R.12-03-014, at p. 1.

the long-term need or resource plan being examined – system, local reliability, or bundled – the OIR commits to “comprehensively consider the impacts of state energy policies on the need for new resources” and to ensure that “[a]ll resource and procurement planning in this proceeding will be done in the *context* of the Energy Action Plan II (EAP II) and other state energy policies, such as AB 32 greenhouse gas, and once-through-cooling policies.”<sup>7</sup>

These commitments follow from the Commission’s most recently issued LTPP Decision (D.) 12-01-033. In that order, the Commission has concluded that the Energy Action Plan II “requires the utilities to procure resources in a specific order” with “invest[ment] first in energy efficiency and demand-side resources, followed by renewable resources, and *only then* in clean conventional electricity supply.”<sup>8</sup> Further, “[u]tility procurement *must comply* with the Commission’s established loading order,” the “loading order applies to *all* utility procurement.”<sup>9</sup> In addition, “the utility obligation to follow the loading order is *ongoing*” regardless of whether a “target” has been “hit” for a preferred resource to “satisfy other obligations of the utility.”<sup>10</sup>

In defining the scope and schedule for this rulemaking, the Scoping Memo, issued on May 17, 2012, established “three major tracks,” beginning with “Track 1 -- Local Reliability Track.”<sup>11</sup> In describing this Local Reliability Track 1, however, the Scoping Memo makes clear that, to this point in time, the CAISO has *only* performed a “Local Capacity Requirements (LCR) study” that analyzes and is “used to adopt local RA [resource adequacy] procurement requirements for the *next year*.”<sup>12</sup> Thus, the Commission has focused on “LCR for local reliability for *one forward year*” *only*.<sup>13</sup>

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<sup>7</sup> R.12-03-014, at pp. 1-2; footnotes omitted; emphasis added.

<sup>8</sup> Decision (D.) 12-01-033, at p. 17, citing Energy Action Plan 2008 Update, at 1; emphasis added.

<sup>9</sup> D.12-01-033, at p. 20; emphasis added.

<sup>10</sup> D.12-01-033, at p. 20; Finding of Fact 7, at p. 46, Ordering Paragraph 4, at p. 51; emphasis added.

<sup>11</sup> Scoping Memo, at p. 3.

<sup>12</sup> Scoping Memo, at p. 3; emphasis added.

<sup>13</sup> Scoping Memo, at p. 3; emphasis added.

In determining annual RA requirements, this year was no exception. By D.12-06-025, issued on June 21, 2012, in R.11-10-023 (RA), the Commission established the local capacity procurement obligations for 2013, based on the CAISO's annual study, noting a combined decrease in need for all local areas.<sup>14</sup> While the Commission had considered proposals by the CAISO and its Energy Division to address "*flexible* capacity needs with regard to local capacity requirements over the next several years," *no* such proposal was adopted, and the Commission instead directed that "study" of that issue was to continue in coordination "with efforts in the Long-Term Procurement Process proceeding (Rulemaking 12-03-014)."<sup>15</sup>

The CAISO's 2013 LCR Study adopted in D.12-06-025 mirrors its predecessors as to its "assumptions, processes, and criteria" and identifies and studies capacity needs "for the same ten local areas as in previous studies," two of which – Los Angeles (LA) Basin and Big Creek/Ventura – are at issue in this Local Reliability Track 1. Of note, for 2013, LCR needs in these two areas were found to have decreased due to downward trends for load (LA Basin and Big Creek/Ventura) and new transmission projects and load allocation change among substations (Big Creek/Ventura).<sup>16</sup> In fact, according to the CAISO's 2013 LCR Study, filed in the RA Rulemaking (R.11-10-023) on May 12, 2012, "LCR needs have decreased by more than 1000 MW or about 4% from 2012 to 2013" and "over the longer term," LCR "deficiencies" were only "expected" in the "San Diego area due to the 2017 OTC compliance date for the Encina power plant," among other things.<sup>17</sup> No mention is made or found in this Study of "expected" "deficiencies" near or longer term in the LA Basin.

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<sup>14</sup> D.12-06-025, at p. 2.

<sup>15</sup> D.12-06-025, at p. 2; emphasis added.

<sup>16</sup> D.12-06-025, at pp. 7-8.

<sup>17</sup> Ex. ISO-14 (CAISO 2013 Local Capacity Technical Analysis Final Report and Study Results (May 2, 2012)) (CAISO (Sparks)), at p. 3.

In the Local Reliability Track 1 of this LTPP at issue here, however, the CAISO has offered studies conducted *for the first time to forecast an LCR need through 2021* that, in turn, are to be used by the Commission to adopt a *long-term* (not annual) need for new generation resources and infrastructure specific to *certain local resource areas, not system-wide*. CEERT does understand and appreciates the CAISO intention in this regard. The need for a long-term, multi-year view of LCR need in certain local areas in Southern California has arisen due principally to the following three circumstances: (1) The reality of the success of the 33% by 2020 RPS; (2) the pendency of significant OTC retirements due to the SWRCB compliance policy; and (3) the uncertainty surrounding the future of the San Onofre Nuclear Generating Station (SONGS). Clearly, such long term forecasting will require this Commission to deal with more uncertainty and potentially require a utility to start down a procurement path for the long term that cannot be undertaken with the precision of a normal, one-year look-ahead of identifying annual RA obligations that draws from a surplus of existing RA resources.

However, for purposes of an *LTPP*, the Commission must ensure that this unique “forecasting” effort, if it is to serve as the foundation for a finding of LCR need and, more significantly, an immediate utility procurement authorization, is well-substantiated *and* has been undertaken in a manner that is consistent with, and correctly and fully accounts for, the Commission’s Loading Order and preferred resources. As CEERT witness Caldwell testified, the Commission must not act to grant procurement authority that serves to disrupt, impede, or reverse California’s “efforts to overhaul the State’s electricity infrastructure” to reduce fossil fuel dependence and greenhouse gas (GHG) emissions and criteria pollutants in sensitive urban areas.<sup>18</sup>

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<sup>18</sup> Ex. CEERT-01, at p. II-3 (Caldwell (CEERT)).



Thus, while CEERT in its opening testimony (Exhibit CEERT-01) found merit in the CAISO's determination of a certain minimum level of LCR "replacement" need to achieve OTC goals, the record in this proceeding revealed shortcomings in portions of the CAISO's studies and recommendations that cannot be ignored by the Commission, especially if procurement authorization is to result. In particular, *before* any procurement authorization can be granted, those portions of the CAISO's studies that assume higher customer loads than has been adopted as official State policy and restrict solutions to conventional gas-fired generation must be corrected. Additional assessments of mitigation or reduction of that LCR need, especially with appropriate consideration of preferred resources and Commission adoption of terms defining LCR-eligible resources, must be resolved first.

Such an approach is required to preserve the Commission's Loading Order and ensure that the resulting need or procurement is consistent with the utility's obligation to procure preferred resources before investing in conventional, gas-fired generation. In particular, while the use of a case that stresses the system during extreme events may be appropriate when dealing with a *capacity* need to respond to these rare contingency events since system reliability is at stake, it is not correct to conflate that conservative capacity need with a contrived *energy* need that simply assumes the stress case exists on a continuous basis.

On these points, CEJA witness Powers and DRA witnesses Fagan and Spencer each testified that the CAISO's studies did not properly account for preferred resources expected to be available in the forecasted period (through 2021) to reduce load or meet electricity demand in the LA Basin and Big Creek/Ventura areas.<sup>19</sup> In such circumstances, adoption of the CAISO's identified need by the Commission could risk or "will lead" to "over-procurement of unneeded

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<sup>19</sup> See, Ex. CEJA-1 at p. 4, et seq. (CEJA (Powers)); Ex. DRA-1, at p. 2, et seq. (DRA (Fagan)); Ex. DRA-3, at p. 1 (DRA (Spencer)).

fossil fuel generation” in conflict with both the EAP loading order and AB 32 goals.<sup>20</sup> As identified by DRA and CEJA, the adverse consequences of such over-procurement, especially of fossil resources, would include yielding “underutilized, stranded assets, to the detriment of [utility] customers” and “crowd[ing] out” renewables and other preferred resources from the market, at a significant cost to both the environment and ratepayers.<sup>21</sup> In fact, utility investment in unnecessary gas-fired generation in local areas, especially the LA Basin, will be a significant setback to California’s “continued transition to reliance on non-fossil resources to meet electric need now.”<sup>22</sup>

Further, as DRA witness Spencer testified the Commission has “*not* previously undertaken a comprehensive evaluation of local area long-term procurement needs,” and “this new effort” requires adapting LTPP system long-term assessments to local areas.<sup>23</sup> Even CAISO witness Sparks concluded that the “ten-year time frame” used to define LCR needs here was a “complicated task” fraught with “uncertainty on many factors,” which is not the case in “forecasting one year ahead,” as has been done in the RA proceedings.<sup>24</sup>

In these circumstances, CEERT believes it is imperative that the Commission take a measured approach in authorizing any procurement based on the current record in this proceeding (see subsection 2 below) and to do so in a manner that fully coordinates its decision here with at least *four* proceedings, including the present one, in which these issues are currently

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<sup>20</sup> Ex. CEJA-1, at p. 32 (CEJA (Powers)); Ex. DRA-3, at pp. 1-2 (DRA (Spencer)).

<sup>21</sup> Ex. CEJA-1, at p. 32 (CEJA (Powers)); Ex. DRA-3, at p. 3 (DRA (Spencer)). As DRA witness Spencer testified, ratepayer commitments to programs that advance Commission-approved energy efficiency and demand response targets and promote distributed generation and transmission system improvements “are justified by anticipated reductions in new conventional generation that should impact demand- and/or supply-side forecasts of load and resources,” the “forecast values” for which should be “properly accounted for when making long term procurement decisions.” (Ex. DRA-3, at p. 3 (DRA (Spencer))).

<sup>22</sup> Ex. CEERT-2, at p. 4 (CEERT (Caldwell)).

<sup>23</sup> Ex. DRA-7, at p. 2 (DRA (Spencer)); emphasis added.

<sup>24</sup> RT at 79 (CAISO (Sparks)).

being considered.<sup>25</sup> Adoption of consistent principles and precedent among these proceedings is paramount in minimizing uncertainty and confusion in the energy market and ensuring that California’s environmental and energy policies and mandates will continue to be met.

**2. While Some New Generation Resources *May* Be Needed to Replace OTC Retirements, CAISO’s Identified “Need” Is Highly Conservative, Does Not Sufficiently Account for Preferred Resources, and Should Not be Adopted In Full at This Time.**

This Local Reliability Track 1 is focused on whether and to what extent the Commission should adopt “the local capacity needs for the Los Angeles Basin and Big/Creek Ventura areas that the ISO has identified through its once through cooling (OTC) study conducted as part of the ISO’s 2011-2012 transmission planning process.”<sup>26</sup> According to CAISO witness Sparks:

“This assessment identifies the minimum amount of resources within transmission constrained areas that must be available to support the reliable operation of the transmission system assuming that the generating resources subject to California’s OTC policies retire or otherwise become unavailable. To the extent that new generation is required to maintain grid reliability in the ISO’s local capacity areas, it was assumed in the study that the new generation would come from the repowering or replacement of the existing OTC plants with acceptable cooling technology that the State Water Resources Control Board (SWRCB) approves.”<sup>27</sup>

Witness Sparks further defined a “local capacity area” as a “geographic area that does not have sufficient transmission import capability to serve the customer demand in the area without the operation of generation located within the area.”<sup>28</sup> In comparison to the annual, year-ahead “Local Capacity Technical” (LCT) Study conducted by the CAISO to provide information for resource adequacy procurement, the “LCT” Study at issue here was conducted as part of the CAISO’s 2011-2012 transmission planning process and relied on “technical evaluations using power flow and transient stability programs for various RPS scenarios (i.e., trajectory,

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<sup>25</sup> See, Section VII.B. below.

<sup>26</sup> Ex. ISO-01, at p. 2 (CAISO (Sparks)); see also, Scoping Memo, at p. 4.

<sup>27</sup> Ex. ISO-01, at p. 2 (CAISO (Sparks)).

<sup>28</sup> Id.

environmentally constrained, ISO base case, cost-constrained and time constrained) to determine long-term (2021) local capacity area requirements for areas that currently have OTC generating units.”<sup>29</sup> In its testimony, the CAISO concluded that the “Trajectory scenario” was the “most likely scenario,” since it was the one “most aligned with commercial interest” and should, in turn, “be used as the reference case for local procurement needs authorized in this proceeding.”<sup>30</sup> Further, and even more importantly, the CAISO chose a “High Load” case that assumed 10% greater net customer load for 2020 than the official State forecast as the reference *and* allowed only natural gas fired generation to meet that increased demand.<sup>31</sup>

In doing so, the CAISO “identified” a “need for approximately 2400 MW of replacement OTC generation...in the Western LA Basin, 225 MW in the Ellis sub-area (which is included in the Western LA Basin) and 430 MW of replacement OTC generation in the Moorpark sub-area.”<sup>32</sup> The CAISO, in turn, has recommended that the Commission authorize the “long term procurement of these amounts of replacement OTC generation” and require that, to meet this need, the “replacement OTC generation should have flexibility characteristics similar to the OTC generation.”<sup>33</sup>

Although this basic approach on its face may appear reasonable, it must be made clear that, in adopting these recommendations, the Commission will actually be doing three things: (1) agreeing that an express local “need,” both as to amount (2,830 MWs) *and type* (“flexible” attributes), exists for SCE, (2) that such “need,” especially as defined by CAISO, may potentially only be met by fossil resources, and (3) that such need, if authorized, would potentially require SCE to embark on a procurement that would exclude preferred resources. While LCR need may

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<sup>29</sup> Id., at p. 4.

<sup>30</sup> Id., at p. 17.

<sup>31</sup> Ex. CEERT-3, CAISO 6-4-12 Workshop Presentation, at Slide 18 (CEERT (Caldwell)).

<sup>32</sup> Ex. ISO-01, at p. 17 (CAISO (Sparks)).

<sup>33</sup> Id., at p. 17; Ex. ISO-04, at p. 7 (CAISO (Rothleder)); RT at 112-113 (CAISO (Rothleder)).

be attributable to a loss of OTC plants, the timeframe for that change (OTC retirement) is *long term* (e.g., the end of 2020 for LA Basin facilities) and *does permit* the Commission, *before procurement is ever authorized*, to approve some, but not all of this need, especially to allow key terms to be defined and preferred resources to be considered in reducing or meeting this need.

This approach is certainly warranted for the following reasons: *First*, not only do the CAISO’s OTC studies represent the *first* time CAISO has attempted to forecast an LCR need that is not just a year ahead study to identify RA requirements, extends for a period of nearly ten years out. *Second*, according to DRA witness Fagan, the “power flow modeling” tool used in the OTC studies is typically used “to test forecasted extreme circumstances” and “a particularly stressful period” on the power system, “such as the time of summer peak power consumption” and the “results in no way assess the likelihood of occurrence of any given set of events.”<sup>34</sup> *Third*, results from such modeling are “highly sensitive to the input assumptions,” which, in the case of CAISO’s “primary modeling runs,” as testified by multiple witnesses, *excluded* or assumed “zero” uncommitted energy efficiency or demand response (preferred resources highest in the Commission’s Loading Order) showing up in those local areas.<sup>35</sup>

What these facts make clear is that the CAISO’s identified LCR need is driven by relatively rare “contingencies” caused by forced outages on the transmission grid and within the generation fleet. CEERT concedes that, if these rare contingencies were to arise, they would be real and consequential and that, if an unacceptable probability of loss of electric service is to be avoided, mitigation must be planned and identified incremental resources must be in standby mode for times when these events occur. However, these standby resources will only actually be called upon to serve load at most for a few days per year. To propose, as the CAISO does, that

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<sup>34</sup> Ex. DRA-1, at p. 7 (DRA (Fagan)).

<sup>35</sup> Ex. DRA-1, at p. 17 (DRA (Fagan)); Ex. CEJA-1, at pp. 7, 10 (CEJA (Powers)). See also, RT at 969 (SCE (Minick) re input assumption sensitivity).

this “reliability LCR need” be met with new, replacement base loaded or nearly base loaded gas combined cycle plants is akin to cracking a walnut with a sledgehammer. The need is met, but there are other severe consequences associated with that “mitigation” strategy, including potential over-procurement of fossil resources and crowding out of preferred resources.<sup>36</sup>

In Supplemental Testimony, CAISO witness Sparks stated that CAISO had conducted “updated sensitivity analysis” to model “incremental uncommitted energy efficiency (EE) and additional combined heat and power (CHP,” provided by this Commission and the California Energy Commission.<sup>37</sup> However, while testifying that uncommitted energy efficiency, as an example, “can be helpful in reducing overall net demand” and that the CAISO does not care what fuel is used by an LCR resource, Mr. Sparks nevertheless insisted that the LCR resource still had to have “equivalent characteristics” to the current OTC plants and that it would not be “prudent” to rely on preferred resources to produce the energy or energy savings “where they are needed and when they are needed” to maintain “the reliability of the bulk power system.”<sup>38</sup>

CAISO defended this conservative, cautious approach to its need assessment by testifying: “Deliberately conservative forecasts must be employed in the assessment of reliability requirements for *capacity* in constrained areas since the consequences of being marginally short versus marginally long are asymmetric” and a “marginal shortage” (“the loss of firm load”) would put “public safety and the economy in jeopardy.”<sup>39</sup> Yet, despite these concerns, the CAISO did *not* propose a timeline or a date by which SCE, in whose service territory both the LA Basin and Big Creek/Ventura local areas are located, should procure the

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<sup>36</sup> See, nn. 19-21, *supra*.

<sup>37</sup> Ex. ISO-02, at p. 4 (CAISO (Sparks)).

<sup>38</sup> *Id.*, at pp. 4-8; RT at 114 (CAISO (Sparks)).

<sup>39</sup> *Id.*, at p. 4; emphasis added. See also, RT at 270-271 (CAISO (Sparks), suggesting an alarmist outcome of a Governor’s impeachment if LCR resources are under-procured). As DRA witness Spencer testified, “Mr. Sparks attempts to invoke a fear of shortages that is not well founded and he dismisses the ratepayer costs of surplus procurement.” (Ex. DRA-3, at p. 16 (DRA (Spencer))).

overall total of 2,830 MWs of local need recommended by the CAISO.<sup>40</sup> In fact, the CAISO simply testified that it had a “general understanding” that “it takes [a] significant period of time to reach a Decision, procure the generation, get it permitted, get it built” and that the “State Water Resource Board compliance dates” for “many of the OTC plants are in the 2020 time frame.”<sup>41</sup>

From CEERT’s perspective, consistent with applicable policy here, the CAISO should have been equally “conservative” by assuming that this rare capacity need could be met by Loading Order preferred resources and that there are ample alternatives to combustion to serve load in the LA Basin that exist now or certainly will materialize in the years before OTC retirement in 2020. As SCE testified, “any forecast of the future is uncertain,” and conditions, some of which “may be better defined *by year end 2012*” and others that require further assessment, will all have an impact on LCR need, especially during the time frame (through 2021) under consideration.<sup>42</sup> In fact, SCE witness Silsbee agreed with DRA that the “CAISO results are quite sensitive to the input assumptions (i.e., resource scenarios and locations) that are used in the LCR modeling analysis,” and these “input assumptions may change as new information becomes available.”<sup>43</sup> SCE witness Silsbee confirmed that “[s]ome significant assumptions that can change the LCR need include changes to the reliability planning standards, demand forecast, resource scenarios, LCR generation sites, and transmission options.”<sup>44</sup>

It is SCE’s position that this “uncertainty” and changing conditions are best addressed by the Commission giving SCE the “flexibility” as to when and how it will procure resources to meet a LCR need, including “defer[ring] procurement where appropriate” or “due to changed

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<sup>40</sup> RT at pp. 112-113 (CAISO (Sparks)).

<sup>41</sup> RT at 113 (CAISO (Sparks)).

<sup>42</sup> Ex. SCE-1, at p. 4 (SCE (Cushnie)).

<sup>43</sup> Ex. SCE-1, at p. 5 (SCE (Silsbee)).

<sup>44</sup> Id.

circumstances or if other cost-effective options become available.<sup>45</sup> CEERT does *not* agree. It is for the *Commission* to identify and authorize procurement to meet an LCR need consistent with *its LTPP procurement and State energy and environmental policies and state energy*, and not delegate such decisions to a utility’s discretion, especially to ensure that ratepayers are not paying for excessive procurement, especially from polluting gas-fired resources.

For these reasons, CEERT certainly agrees with ALJ Gamson’s exploration with CAISO witness Sparks of the possible “leeway” available to the Commission to authorize only “some percentage” of the CAISO’s recommended need “at the end of this year,” while “wait[ing] a year, two years, five years, ... to require the rest of it in order to see if some of those other [preferred] resources come about.”<sup>46</sup> In keeping with this approach, CEERT recommends that the Commission not adopt an LCR need requirement now for SCE greater than the “low estimate” identified by CAISO in its Environmental Case of approximately 1,800 MW of replacement OTC generation for the LA Basin.<sup>47</sup> Further any procurement of that need should not be authorized unless and until the Commission has first defined the “flexible” attributes or “operational” characteristics that will determine resource eligibility to meet that LCR need, including consideration of the capabilities of preferred resources now and through the next LTPP cycle to meet this need individually or on a portfolio basis.

### **3. No Basis Exists for the Commission to Adopt any Amount of “Residual System Need” in this Local Reliability Track 1.**

In his Opening Testimony, CAISO witness Rothleder went beyond the issue of the 2,830 MWs of LCR need identified by Mr. Sparks to claim that, in conducting a separate “production simulation run,” in which the CAISO’s OTC studies were “incorporated into the renewable

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<sup>45</sup> Ex. SCE-1, at p. 2 (SCE (Cushnie))

<sup>46</sup> RT at 272-273 (ALJ Gamson).

<sup>47</sup> Ex. ISO-01, at p. 11 of 17 (CAISO (Sparks)).



integration studies,” the “simulation results show a 1,051 MW residual system shortage of upward load following resource.”<sup>48</sup> Mr. Rothleder recommends that, “[t]o cover the shortage, about 1,200 MW generic resources will be needed because a resource with minimum load can contribute toward load following for the portion of the resources operating range between the resource minimum and maximum operating level.”<sup>49</sup>

CEERT strongly disputes this claimed *additional* system need and asks that the Commission not adopt this need or authorize its procurement by any utility, including SCE, in this Local Reliability Track 1. Specifically, as CEERT witness Caldwell testified:

“Mr. Rothleder has not provided sufficient support for his claim that 1200 MW of additional ‘flexible’ system resource need exists over and above the specific local capacity needs identified by Mr. Sparks. The purpose of this additional flexible system capacity is purported to be to effectively integrate the plausible range of renewable resources required to meet the legislative mandate of 33% RPS by 2020. However, Mr. Rothleder’s own testimony contradicts this assertion. None of the four scenarios Mr. Rothleder explored that meet the State resource goals of all cost effective energy conservation and 33% RPS by 2020 show ANY additional system need for ‘flexible system resources.’ In fact, this ‘additional system need’ comes from a scenario that looks at a very high load growth case coupled with sub optimal energy efficiency and demand response performance.”<sup>50</sup>

None of the CAISO scenarios examined that meet the State goals of 33% RPS and all cost-effective energy efficiency showed any need for new fossil resources in addition to local reliability needs.<sup>51</sup> In fact, additional need was shown only in an “All Gas” case that freezes renewable penetration at 2009 levels and meets remaining 2020 load with natural gas, or, a “High Load” case, which assumes “failure of new energy efficiency programs and thus 10% higher energy loads statewide in 2020, again met with natural gas.”<sup>52</sup>

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<sup>48</sup> Ex. ISO-04, at pp. 3-4 (CAISO (Rothleder)).

<sup>49</sup> Id., at pp. 4-5.

<sup>50</sup> Ex. CEERT-01, at pp. II-2 – II-3 (CEERT (Caldwell)); emphasis original.

<sup>51</sup> Ex. CEERT-01, at p. II-4 (CEERT (Caldwell)).

<sup>52</sup> Ex. CEERT-01, at pp. II-4 – II-5 (CEERT (Caldwell)).

During hearings, CAISO witness Rothleder did clarify that he was “not asking for that [1200 MW residual system] need to be authorized at this point” and that, in fact, “additional time” and “studies” were required “to explore and validate that number” and the “alternatives” or “options” to meet that particular, more “flexible” system need.<sup>53</sup> Instead, Mr. Rothleder observed that it might “potentially” be authorized in Track 2 as a system need, but he was not certain how that “authorization” would be assigned by the Commission to the utilities.<sup>54</sup> Mr. Rothleder also confirmed that this “need” only arose in the “High Load” scenario, which would not be RPS compliant without adding 1,497 MWs of additional renewable capacity.<sup>55</sup>

In these circumstances, CEERT urges the Commission to address this issue in the manner recommended by its witness Caldwell, as follows:

“The additional 1200 MW of proposed need for ‘flexible’ system resources outlined in Mr. Rothleder’s testimony should be deferred pending the outcome of additional probabilistic renewable resource integration studies outlined in Mr. Rothleder’s testimony on page 4. It is expected that these studies will not be complete until Spring of 2013, and therefore not in time for next year’s procurement cycle.”<sup>56</sup>

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

As reviewed in Section A above, an extensive record was created in the Track 1 evidentiary hearings by the testimony of multiple parties, including DRA, CEJA, The Utility Reform Network (TURN), and even Southern California Edison Company (SCE), that CAISO’s “ten-year forward procurement recommendations for local areas may overestimate procurement needs.”<sup>57</sup> Among the factors contributing to this outcome was the CAISO’s use of assumptions,

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<sup>53</sup> RT at 284, 289-290 (CAISO (Rothleder)).

<sup>54</sup> Id.

<sup>55</sup> RT at 286 (CAISO (Rothleder)).

<sup>56</sup> Ex. CEERT-01, at p. II-2 (CEERT (Caldwell)).

<sup>57</sup> Ex. DRA-7, at p. 1 (DRA (Spencer)).

to which its model is highly sensitive, that either underrepresented or did not include the contribution that preferred resources can make, especially in reducing local area need.

To begin with, SCE witness Cushnie confirmed that, in terms of “meeting the LCR need, there are demand side resources that *reduce* the LCR need” and that should be considered in combination with any supply side resources in meeting that need.<sup>58</sup> Further, according to SCE witness Minick, the use of the California Energy Commission’s (CEC’s) low load forecast, instead of the median forecast used by CAISO as its base case, could “substantially diminish the resource need amount by hundred of megawatts.”<sup>59</sup>

Mr. Minick also confirmed that inclusion of “higher levels of uncommitted energy efficiency (EE) and demand response (DR) programs” and “localizes generation development in the future” than assumed by the CAISO could lead to a “significantly lower” range of LCR requirements than identified by the CAISO.<sup>60</sup> In this regard, Mr. Minick testified that “the CAISO’s assumptions in the LCR analysis recognized neither the potential for increased distributed generation (DG) nor increased localized generation.”<sup>61</sup> In addition, the CAISO used “existing generation sites ... to determine the new LCR need,” where, if “preferred geographical locations or areas” were chosen or assumed, “the total amount of required new LCR generation may decrease.”<sup>62</sup>

This perspective was also offered by DRA Witness Fagan, CEJA witness May, and Natural Resources Defense Council (NRDC) witness Martinez.<sup>63</sup> In fact, both Mr. Martinez and Ms. May concluded that the CAISO had either not included, or used “unreasonably low”

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<sup>58</sup> RT at 604-605 (SCE (Cushnie)).

<sup>59</sup> Ex. SCE-1, at p. 6 (SCE (Minick)).

<sup>60</sup> *Id.*, at p. 7.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*, at p. 8.

<sup>63</sup> Ex. NRDC-01, at pp. 1-9 (NRDC (Martinez)); Ex. CEJA-3, at pp. 2-3, 7-15 (CEJA (May));

estimates of, energy efficiency, demand response, and other preferred resources in assessing this need and, in fact, the “generation need identified by CAISO is wiped out when taking into account these resources.”<sup>64</sup> EnerNOC witness Tierney-Lloyd similarly testified that the CAISO analysis did not adequately incorporate demand response resources or consider their current and near term capabilities to be dispatchable or offer fast response or “other services ...like economic demand response, ancillary services, voltage or under-frequency support or the future expanded potential for DR resources for system or local support purposes as the result of technological advancements including smart grid enablement.”<sup>65</sup>

In fact, DRA witness Fagan concluded that the CAISO’s “*overestimate*” of “the range of deficiency of resources needed to meet 2021 local capacity requirements in the LA Basin and the BC/Ventura local areas resulted from CAISO “either excluding or minimizing the effect that preferred demand side resources, including uncommitted energy efficiency and demand response, can have on projected peak load in these areas for 2021.”<sup>66</sup> When these resources were considered in one scenario conducted by CAISO for the LA Basin, a dramatic reduction in LCR need resulted or even a “resource surplus.”<sup>67</sup> For these reasons, consistent with the Loading Order applicable here, CEERT again, specifically recommends a sequenced approach that resolves key definitions and mitigation *before* procurement to meet any LCR need is authorized and, for now, limits that identified need to no more than 1,800 MWs.

### **C. Appropriate Assumptions Concerning Retirement of OTC Generation.**

CEERT witness Caldwell testified that “capacity” required to meet local area needs “should be solicited within the next procurement cycle with an in-service date prior to the

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<sup>64</sup> Ex. CEJA-3, at p. 3 (CEJA (May)); Ex. NRDC-1, at p. 7 (NRDC (Martinez)).

<sup>65</sup> Ex. EnerNOC-1, at p. II-2 (EnerNOC (Tierney-Lloyd)); see also, Ex. EnerNOC-2, Ch. II (EnerNOC (Hoffman)).

<sup>66</sup> Ex. DRA-1, at pp. 1-3 (DRA (Fagan)); emphasis added.

<sup>67</sup> Id.

retirement/repowering of existing gas fired resources” consistent with the latest SWRCB OTC compliance schedule.<sup>68</sup> However, as Mr. Caldwell also confirmed, such retirements will occur at the earliest in 2017, and, for the majority of LA Basin OTC plants, not until 2020.<sup>69</sup> In fact, CAISO witness Sparks confirmed that, while it takes time to “procure the generation” and “get it built,” many of the OTC plants subject to the SWRCB compliance dates “are in the 2020 time frame.”<sup>70</sup>

The record in this Local Reliability Track 1 has been that “alternatives” to procurement, especially transmission solutions or upgrades, not only reduce, but can potentially eliminate, LCR need, a circumstance about which many parties have already agreed should defer or negate an LCR need in the Big Creek/Ventura area.<sup>71</sup> The same “alternatives” are even more significant for the LA Basin, especially where emissions reductions, to meet both AB 32 GHG emission reductions and local air quality standards, place a premium on reducing LCR need or meeting it with preferred resources to gas-fired generation. For the majority of OTC plants located in the LA Basin, compliance with the SWRCB policy is not required before December 31, 2020, and the SWRCB further retains the authority to amend “compliance dates...based on, among other factors, the need to maintain reliability of the electric system as determined by the energy agencies,” including this Commission and the CAISO.<sup>72</sup>

While CEERT strongly supports “the need to fulfill the environmental objectives of the SWRCB’s OTC policy in a timely manner,”<sup>73</sup> there is certainly time to make, and publicly vet, the “assessments” or studies identified by SCE and steps recommended by CEERT to determine

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<sup>68</sup> Ex. CEERT-01, at p. II-1 (CEERT (Caldwell)).

<sup>69</sup> Ex. CEERT-01, at pp. II-1-II-2 (CEERT (Caldwell)); Ex. CEERT-02, at p. 2 (CEERT (Caldwell)).

<sup>70</sup> RT at 113 (CAISO (Sparks)).

<sup>71</sup> Ex. SCE-1, at pp. 10-11 (SCE (Minick)); Ex. DRA-6, at p. 15 (DRA (Fagan)); Ex. Calpine-2, at pp. 1-2 (Calpine (Calvert)).

<sup>72</sup> Ex. CEERT-03, SWRCB Resolution No. 2011-0033, at pp. 000441, 000454 (CEERT (Caldwell)). See also, RT at 1216-1217 (SDG&E (Anderson)).

<sup>73</sup> Ex. CEERT-01, at p. II-2 (CEERT (Caldwell)).

the extent to which alternative resources, both transmission and preferred resources, can reduce and/or meet any LCR need resulting from the OTC retirements before procurement is authorized, *as long as that process starts now*. Although CAISO witness Sparks testified that the time period prior to OTC plant retirements in 2020 should be used to “nail down what we expect to see” in terms of replacement generation,<sup>74</sup> CEERT believes that this time would be even more valuably spent in ensuring that all steps have been taken, through alternative, mitigation solutions, to *reduce* that need in the first place. In fact, CAISO witness Sparks agreed that “there are in fact transmission solutions that can reduce local capacity needs” and that the CAISO is “today actively engaged with Southern California Edison to develop such solutions.”<sup>75</sup>

In this regard, CEERT witness Caldwell testified that any “urgency” associated with vesting SCE with discretionary procurement authority now is further offset by the fact that “there is nothing to stop existing facility owners who feel that they have a competitive edge from starting the long lead engineering and permitting process in anticipating of potentially receiving a long term LCR contract in the future.”<sup>76</sup> In fact, “[p]rocurement and construction of already permitted resources can be accomplished in three to four years.”<sup>77</sup>

In addition, in terms of the assumptions that should be made concerning retirements of OTC plants, CEERT witness Caldwell testified that “‘repowering’ to achieve compliance [with the SWRCB policy] should be considered a new ‘replacement’ resource eligible to bid in a procurement solicitation for local reliability and/or RA requirements,” but “no presumption of an existing entitlement to either RA payments or transmission capacity to ensure deliverability

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<sup>74</sup> RT at 113-114 (CAISO (Sparks)).

<sup>75</sup> RT at 116 (CAISO (Sparks)).

<sup>76</sup> Ex. CEERT-02, at pp. 2-3 (CEERT (Caldwell)).

<sup>77</sup> *Id.*, at p. 3.

should be granted to these replacement resources.”<sup>78</sup> Further, if the Commission were to rely on the CAISO’s OTC studies and adopt its LCR “need” for SCE, the Commission should also make clear that SCE is authorized to procure *replacement*, not additional, capacity for retiring plants that now provide RA and flexibility attributes to the grid, and that such “need” is based on Mr. Sparks’ LCR assessment only and not the “residual system need” identified by Mr. Rothleder, as discussed above.<sup>79</sup>

In fact, it is CEERT’s position, as reiterated throughout this brief, that the Commission should immediately embark on a public process that both defines the attributes or characteristics needed to meet this need, including consideration of the attributes of “non-traditional” alternatives that will permit them to compete in any LCR solicitation. An ALJ’s Ruling issued in this proceeding on September 14, 2012 (September 14 ALJ’s Ruling), following a Workshop held on September 7, suggests that the Commission intends to continue to explore, among other things, “changes [that] should be made” to utility procurement rules and upfront definitions of needed “attributes” or “characteristics” to meet an indentified need by all resources, including Loading Order preferred resources.<sup>80</sup> While CEERT supports this effort, CEERT continues to urge coordination and uniformity on all decisions made on these same issues, including any needed distinctions, between this rulemaking, R.11-10-023 (RA), and A.11-05-023 (SDG&E), as addressed in Section IV.B. below.

#### **D. Transmission and Other Means of Mitigation.**

As the CAISO testimony makes clear, the issue of whether and to what extent an LCR *generation resource* need exists in the LA Basin or Big Creek/Ventura local capacity areas fundamentally arises from constraints within California’s electric transmission system. Thus, as

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<sup>78</sup> Ex. CEERT-01, at p. III-2 (CEERT (Caldwell)).

<sup>79</sup> Ex. CEERT-01, at pp. III-2 – III-3 (CEERT (Caldwell)).

<sup>80</sup> R.12-03-014 (LTPP) ALJ’s Ruling of September 14, 2012, at pp. 1-4

defined by CAISO, a “local capacity area is a geographic area that does not have sufficient transmission import capability to serve the customer demand in the area without the operation of generation located within that area.”<sup>81</sup> From the CAISO’s perspective, “[t]here must be sufficient generation in that area available for ISO operators to serve load in the area under stressed system conditions such as during high demand periods; during outages of up to two transmission lines use to import power into the area; during outages of up to two local generating units; and during outages of one generating unit and one transmission line.”<sup>82</sup> In fact, the LCR needs that have been identified by CAISO in this Local Reliability Track 1 were identified “through its once through cooling (OTC) study conducted as part of the ISO’s 2011-2012 transmission planning process.”<sup>83</sup>

Before any LCR “need” can be confirmed by this Commission, however, further assessments must be made as to whether or not there are *transmission solutions* or *demand reductions* (from increased reliance on demand-side preferred resources) that can reasonably be expected in that time period that will mitigate or reduce any need for new or repowered fossil-fired generation resources to be procured by SCE to replace retiring OTC plants, as the CAISO has concluded.<sup>84</sup> These potential changes, both in transmission facilities and demand, were identified by SCE in testifying that the “range of LCR future need can vary” and its “results” altered “significantly” based on changes to “the reliability planning standards, demand forecast, resource scenarios, LCR generation sites, and transmission options.”<sup>85</sup> In terms of the impact on LCR need created by generation siting, SCE witness Minick testified that the CAISO used “existing generation sites ... to determine the new LCR need,” where, if “preferred geographical

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<sup>81</sup> Ex. ISO-01, at p. 3 (CAISO (Sparks)).

<sup>82</sup> *Id.*, at p. 4.

<sup>83</sup> *Id.*, at p. 2; emphasis added.

<sup>84</sup> *Id.*

<sup>85</sup> Ex. SCE-1, at p. 5 (SCE (Minick)).



locations or areas” were chosen or assumed, “the total amount of required new LCR generation may decrease.”<sup>86</sup>

With respect to transmission mitigation of LCR need, DRA witness Fagan concluded that the CAISO’s results, in fact, demonstrate “the critically important role that transmission reinforcement (and by extension, consideration of new transmission) can play in reducing local area needs,” including “those that many not be planned or approved at this time.”<sup>87</sup> Given that this proceeding is focused on *long term planning*, Mr. Fagan testified that it is the “correct venue to examine how improved balancing area coordination within the LA basin could lead to lower LCR needs for the total requirements of the LA Basin, including both CAISO and Los Angeles Department of Water and Power (LADWP) control areas.”<sup>88</sup> In fact, based on her analysis, CEJA witness May concluded that “[t]ransmission fixes and procedures could completely eliminate deficits in meeting local capacity requirements in combination with added resources such as EE, DR, DG, and storage.”<sup>89</sup>

Similarly, SCE witness Cabbell agreed that the CAISO’s identified range of new LCR need “may be reduced by additional transmission facilities.”<sup>90</sup> In this regard, Ms. Cabbell confirmed that the “CAISO analysis could be affected by any new transmission mitigation” not accounted for in its transmission configuration used in that analysis and “[i]f additional transmission facilities are identified through transmission technical studies, the CAISO’s analysis would need to be re-run.”<sup>91</sup>

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<sup>86</sup> Ex. SCE-1, at p. 8 (SCE (Minick)).

<sup>87</sup> Ex. DRA-1, at p. 4 (DRA (Fagan)).

<sup>88</sup> *Id.*, at p. 5.

<sup>89</sup> Ex. CEJA-3, at p. 35 (CEJA (May)).

<sup>90</sup> Ex. SCE-1, at p. 8 (SCE (Cabbell)).

<sup>91</sup> *Id.*

In addition, it appears that consideration of “transmission solutions,” in particular, is an ongoing process between the CAISO and SCE.<sup>92</sup> While SCE witness Cabbell did testify that CAISO modeled “transmission projects that have been approved by the ISO through the ten years” at issue here, “they didn’t really propose any other projects,” except for one.<sup>93</sup> SCE witness Cabbell agreed that there could be transmission solutions that would emerge in this same time period that would mitigate the LCR need that was found by the CAISO, noting that “every year we study the reliability of the grid, and there could be some projects that could develop in these areas that the ISO identified some concern.”<sup>94</sup>

While CEERT agrees with these impacts, and separately addressed the issue of transmission solutions in its testimony, it does not agree with the purpose for which SCE offered this testimony. Namely, SCE offered these potential impacts on the CAISO’s need assessment as a basis for supporting “the need for flexibility” or discretion to be granted SCE in “the procurement of new generation to meet forecast LCR need.”<sup>95</sup> According to SCE witness Cushnie, such “flexibility” would allow SCE, as an example, to determine, based on internal, technical studies, “the economics and viability of those preferred resources” or of using “demand reduction programs.”<sup>96</sup> Mr. Cushnie concluded that, “to the extent we think that those can meet in a cost-effective and viable way the LCR needs that have been identified, we would show that to the Commission and ask the Commission to allow us to procure less than what we’ve requested here.”<sup>97</sup> Mr. Cushnie did not believe that these technical studies should be conducted “with numerous entities,” but would be developed internally, inform SCE as to the resources to

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<sup>92</sup> RT at 116-117 (CAISO (Sparks)).

<sup>93</sup> RT at 785-786 (SCE (Cabbell)).

<sup>94</sup> RT at 786 (SCE (Cabbell)).

<sup>95</sup> Ex. SCE-1, at p. 5 (SCE (Minnick)); see also, RT at 786 (SCE (Cabbell)).

<sup>96</sup> RT at 606-607, 609 (SCE (Cushnie)).

<sup>97</sup> RT at 609-610 (SCE (Cushnie)).

be procured, and provide “its study assumptions” in an application to the Commission supporting that procurement.<sup>98</sup>

This approach is *not* one supported by CEERT, especially to the extent that SCE is given “discretion to ignore the Loading Order” or make elections based on internal studies that are not disclosed or publicly vetted *prior* to decisions being made by SCE as to what or if generation resources are required in the first place to meet that need.<sup>99</sup> As CEERT witness Caldwell testified, “it is certainly not true that conventional gas fired resources are the only technology capable of satisfying” an LCR need and that such a need can, instead, be met or reduced by “transmission upgrades; quasi-transmission devices that function as voltage support such as synchronous condensers; distributed resources, whether renewable or gas-fired; dispatchable demand response programs; or storage devices that meet the local and electrical characteristics” of this LCR need.<sup>100</sup> The Commission, as well as all stakeholders, should have confidence that all needed assessments have been made to avoid unnecessary long-term investment in new or repowered fossil-fuel generation in the LA Basin, especially as a matter of conjecture.

Thus, CEERT witness Caldwell recommended that the Commission *not* grant “utility discretion to ignore the Loading Order and conduct a ‘risk free’ (free for the IOUs – certainly, not so for ratepayers), open-ended procurement of conventional LCR resources with only a Commission rubberstamp contract approval at the end.”<sup>101</sup> With respect to transmission mitigation, CEERT witness Caldwell recommended that SCE and CAISO submit in this proceeding “existing transmission studies and/or conduct new studies, as outlined by [SCE witness] Ms. Cabbell [footnote citation to SCE Ex.-1, at pp. 8-9], to establish the quantity of

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<sup>98</sup> RT at 606-607; 609-611 (SCE (Cushnie)).

<sup>99</sup> Ex. CEERT-02, at p. 2 (CEERT (Caldwell)).

<sup>100</sup> Ex. CEERT-01, at pp. II-2 (CEERT (Caldwell)).

<sup>101</sup> Ex. CEERT-02, at p. 3 (CEERT (Caldwell)).

LCR need that can be cost effectively met through transmission and controlled load shedding solutions.”<sup>102</sup> According to Mr. Caldwell, “these studies must emphasize the efficient production and transport of reactive power for voltage support on the urban grid, not only to relieve some of the identified constraints, but also to minimize real power losses on the transmission and distribution (T&D) system.”<sup>103</sup> Further, “[t]ransmission upgrades along these lines can be thought of as ‘supply side EE,’ with all the beneficial characteristics of EE on the customer side of the meter, plus the added benefit of being per se qualified to meet identified LCR need.”<sup>104</sup>

Similar conclusions were reached by DRA witness Fagan, Calpine Corporation (Calpine) witness Calvert, and even SCE, specifically with reference to the Big Creek/Ventura area. In this regard, all three found that there was no immediate need to procure new LCR generation in that area and ongoing review was necessary.<sup>105</sup> In fact, Calpine witness Calvert testified to specific “transmission solutions” or “upgrades that may reduce or eliminate the need for new OTC replacement generation in the Big Creek/Ventura area.”<sup>106</sup> Further, deferring such authorization would “provide the Commission, the CAISO, and SCE with sufficient time to further evaluate the effectiveness of these upgrades (either individually or some combination thereof) and/or develop additional alternatives.”<sup>107</sup> From CEERT’s perspective, the same should be true for the LA Basin, especially where emissions restrictions, to meet both AB 32 GHG emission reductions and local air quality standards, place a premium on reducing LCR need or meeting it with

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<sup>102</sup> Id.

<sup>103</sup> Ex. CEERT-02, at pp. 3-4 (CEERT (Caldwell)).

<sup>104</sup> Id.

<sup>105</sup> Ex. DRA-1, at p. 27 (DRA (Fagan)); Ex. SCE-1, at pp. 10-11 (Minick); Ex. Calpine-2, at pp. 1-2 (Calpine (Calvert)).

<sup>106</sup> Ex. Calpine -2, at p. 2 (Calpine (Calvert)).

<sup>107</sup> Id.

alternative resources to gas-fired generation and the SWRCB compliance dates for OTC retirements are years away.

### **III. DETERMINATION OF LCR NEED SPECIFIC TO LA BASIN AND BIG CREEK/VENTURA AREA**

#### **A. LA Basin**

CEERT has identified its overarching concerns with the total LCR need identified by CAISO above and renews its request here that any LCR procurement in the LA Basin take place only after the assessments and definitions identified in Recommendations 2 and 4 of the Section 1. Executive Summary of this brief are accomplished first. There is no room for “discretion” or a broad, unspecified procurement authorization to meet any LCR need, especially if it has the potential to compromise State energy and environmental policies. Notwithstanding some of the “challenges” that have been identified for permitting new fossil generation in the LA Basin,<sup>108</sup> sufficient time exists for the Commission to promptly undertake the additional analysis and rule development that will avoid an LCR “need” resulting in over-procurement of fossil resources or crowding out of preferred resources. For the reasons identified in Section II above, without such additional analysis, any LCR need identified for the LA Basin at this time should not exceed 1,800 MWs.

#### **B. Big Creek/Ventura Area**

In their testimony, many parties, including SCE, reached the same conclusion regarding CAISO’s LCR need identified for the Big Creek/Ventura area – either that need will be met by expected transmission solutions or it can be deferred indefinitely. According to SCE witness Minick, not only is the size of the LCR need in the Big Creek/Ventura area “not as large as in the

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<sup>108</sup> See, e.g., Ex. SCE-1, at pp. 12-15 (SCE (Silsbee)).

LA Basin,” but it is also “not as challenging.”<sup>109</sup> Further, the owners of the major existing OTC facilities in the area have announced plans to either mitigate or elect to replace some of that generation.<sup>110</sup> In these circumstances, “SCE sees no immediate need to consider procurement of resources in the Big Creek/Ventura area.”<sup>111</sup> This same conclusion was reached by DRA witness Fagan, Calpine witness Calvert, and CEJA witness May, agreeing that no LCR procurement is required to be considered until the 2014 LTPP.<sup>112</sup> In these circumstances, no basis exists in this record to authorize any procurement now of LCR resources in the Big Creek/Ventura area.

#### **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.**

As stated previously, *all* utility resource procurement must comply with the Energy Action Plan II “Loading Order” and other state energy policies like AB 32.<sup>113</sup> Compliance is mandatory, not discretionary, and applies on an “ongoing” basis.<sup>114</sup> *No exception* to this policy mandate exists or has been adopted by this Commission for determining a “local capacity reliability” need and any related, directed procurement. There is also no basis to create such an exception based on the record in this proceeding, especially where the “forecasted” need is one for potentially several thousand MWs over a *long-term* period, not just the year-ahead. As NRDC witness Martinez and EnerNOC witness Tierney-Lloyd testified, “ample legal and policy guidance” requires the Commission to follow the Loading Order for *all* procurement, including

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<sup>109</sup> Ex. SCE-1, at p. 10 (SCE (Minick)).

<sup>110</sup> *Id.*, at pp. 10-11.

<sup>111</sup> *Id.*, at p. 10.

<sup>112</sup> Ex. DRA-6, at p. 15 (DRA (Fagan)); Ex. Calpine-2, at pp. 1-2 (Calpine (Calvert)); Ex. CEJA 6, at p. 1 (CEJA (May)).

<sup>113</sup> R.12-03-014, at pp. 1-2; footnotes omitted; emphasis added; D.12-01-033, at p. 20.

<sup>114</sup> D.12-01-033, at p. 20; Finding of Fact 7, at p. 46, Ordering Paragraph 4, at p. 51; emphasis added.

any needed for local reliability purposes, and especially with regard to a “top priority” procurement resources, like energy efficiency and demand response.<sup>115</sup>

Given that the CAISO has assumed that “the new generation” required to meet this need “would come from the repowering or replacement of the existing OTC plants with acceptable cooling technology,”<sup>116</sup> procurement authorization based on such an assumption would lead to long-term investment by SCE to the likely exclusion of any preferred resources to meet need over the next ten years. Such an outcome is not supported by the evidentiary record here and is clearly at odds with the Loading Order, unless and until the Commission can find absolutely that *no preferred resource* can meet the LCR need.

On that point, CAISO witness Sparks testified that resources procured to meet the identified LCR need did not have to be gas-fired generation and that, “[t]o the extent that the generation has equivalent characteristics of that type of generation, I don’t think the ISO cares what its fuel is.”<sup>117</sup> While suggesting the CAISO is indifferent to fuel source, nevertheless, testimony by CEJA witness May, for example, demonstrated that the CAISO, in its long-term LCR need and procurement recommendations here, did not fully account for the contribution, both to reduce need and provide supply, that preferred resources (i.e., energy efficiency, demand response, distributed generation) can make to meeting SCE’s LCR need, especially over the *decade* at issue here.<sup>118</sup>

The real “debate” that has arisen is whether the “attributes” or “characteristics” that have been suggested as required for LCR resources, but have not been defined by this Commission or

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<sup>115</sup> Ex. NRDC-1, at p. 2 (NRDC (Martinez)); Ex. EnerNOC-1, at pp. II-3 – II-4 (EnerNOC (Tierney-Lloyd)) (testifying that CAISO’s analysis did not appear to have considered DR “as a primary resource for meeting local reliability needs” or, in turn, “duly considered the specifications of the loading order.” (*Id.*, at p. II-4).

<sup>116</sup> Ex. ISO-01, at p. (CAISO (Sparks))

<sup>117</sup> RT at 114 (CAISO (Sparks)).

<sup>118</sup> Ex. CEJA-3, at pp. 2-43 (CEJA (May)).

the CAISO, can or do in fact limit the types of resources that can meet an LCR need. Specifically, CAISO witnesses, in particular, Mr. Rothleder, stressed that only a resource that had certain “flexible” attributes and “operational” characteristics could meet the LCR need arising in the LA Basin or Big Creek/Ventura due to the retirement of OTC generation. The record regarding these recommendations by the CAISO is addressed further in Section V. below.

However, testimony in this proceeding supports a finding that, *especially during the long term forecast period at issue here (through 2021)*, preferred resources, such as demand response, *will* be able to meet local reliability needs. To this end, CEERT again urges the Commission to first confirm and define the “attributes” required to meet any LCR need identified here *and* identify the extent to which preferred resources can meet this need *before* any procurement (RFOs or bilateral contracts) are authorized. The Commission appears to be on this course (see, e.g., September 14 ALJ’s Ruling) and certainly can complete these tasks to permit timely procurement that would permit generation resources, if any are needed, to replace OTC facilities scheduled to be retired in the LA Basin at the end of 2020.

#### **B. Other Commission Policies and Consideration Affecting LCR Procurement.**

In addition to the preeminence of the Loading Order applicable to LCR (and all jurisdictional-utility procurement, other state policies must be taken into account, especially those that impact the propriety or permitting of new or even replacement fossil-fueled generation. From the state perspective, the Global Warming Solutions Action of 2006 (AB 32) established a state-wide commitment to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020.<sup>119</sup> At the local level, especially in the LA Basin, any new fossil fuel generation would be subject to air pollution control regulations promulgated by the South Coast Air Quality Management District (SCAQMD), including required offsets for new sources that do not meet

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<sup>119</sup> Stats. 2006, Ch. 488, adding Health and Safety Code §§38500, et al.



federal clean air standards.<sup>120</sup> In fact, SCE witness Silsbee confirmed that SCAQMD emissions regulations are among the factors that “can limit options for developing new generation in the LA Basin.”<sup>121</sup>

These state and local laws that impact gas-fired generation, in particular, were recognized by SWRCB in adopting its “Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling,” dated July 19, 2011 (“SWRCB OTC Policy”).<sup>122</sup> In this regards, the SWRCB specifically sought to account for the fact that “the Los Angeles region presents a more complex and challenging set of issues,” in terms of air quality regulation, among other things, in establishing a *target* compliance date for OTC retirement for facilities in the LA Basin of December 31, 2020.<sup>123</sup> While the SWRCB forecasted an “expected” “seven years” from Commission procurement authorization in this LTPP to an “operational” date for “replacement infrastructure,” its OTC Compliance Policy also left room to reconsider or even suspend its final compliance schedules to permit the continued operation of an existing OTC power plant if required to maintain reliability of the electric system.<sup>124</sup> As SCE witness Minick testified, the “OTC compliance schedule is one of the many resource planning assumptions that will constantly be changing,” impacting both the timing and the amount of LCR capacity.<sup>125</sup>

Clearly, this policy reflects the SWRCB’s recognition that its policy is *not* intended to displace or alter *existing* State energy (reliability) and environmental policies or requirements applicable to OTC plants, but rather to provide goals consistent with those requirements. As noted above, CEERT believes that generators themselves can do much to advance the SWRCB’s

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<sup>120</sup> Ex. SCE-1, at p. 13 (SCE (Silsbee)).

<sup>121</sup> *Id.*

<sup>122</sup> Ex. CEERT-03, SWRCB OTC Policy (CEERT (Caldwell)).

<sup>123</sup> *Id.*, at pp. 000441-000443.

<sup>124</sup> *Id.*, at pp. 000445-000446.

<sup>125</sup> Ex. SCE-1, at p. 10 (SCE (Minick)).

“expected” operational date of replacement generation from seven to as little as 3 years. Thus, while OTC retirement is a sound policy, it should not be accomplished, nor did the SWRCB intend to accomplish it, in a manner that would shortchange important state and local environmental regulations or serve to encourage over-procurement of fossil resources or crowd out alternative, preferred resources.

**C. If a Need is Determined, How the Commission Should Direct LCR Need to be Met.**

The September 14 ALJ’s Ruling in this proceeding suggests that the Commission intends to continue to explore, among other things, “changes [that] should be made” to utility procurement rules and upfront definitions of needed “attributes” or “characteristics” to meet an identified need by all resources, including Loading Order preferred resources.<sup>126</sup> Again, while CEERT supports this effort, the evidentiary record here is sufficient to either require a process to identify or alter those rules specifically in consideration of preferred resources *before any* LCR procurement, whether by RFO or bilateral negotiations, is authorized.

Thus, whether by a decision in Track 1 or *after* further analysis, the Commission’s first order of business must be a decision that defines the “attributes” or operating “characteristics” required to meet any identified LCR need and either defines or adopts a process for determining how preferred resources can meet that need before procurement of or from fossil-fueled generation is authorized. In this regard, CEERT witness Caldwell recommended that the Commission *not* grant “utility discretion to ignore the Loading Order and conduct a ‘risk free’ (free for the IOUs – certainly, not so for ratepayers), open-ended procurement of conventional LCR resources with only a Commission rubberstamp contract approval at the end.”<sup>127</sup>

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<sup>126</sup> R.12-03-014 (LTPP) ALJ’s Ruling of September 14, 2012, at pp. 1-4

<sup>127</sup> Ex. CEERT-02, at p. 3 (CEERT (Caldwell)).

Instead, the Commission should require, *before any directed LCR procurement is authorized*, (1) that a stakeholder process, jointly held in both this LTPP rulemaking and R.11-10-012 (RA), be initiated (to include the utilities, CAISO, prospective bidders, and other interested parties) “to establish metrics and protocols for dispatchability and performance of aggregated EE, DG and DR preferred resources in an LCR solicitation” and (2) that SCE be required to “conduct a Request for Qualification (RFQ) to establish the likely quantity and price range of these qualified preferred resources that may be available in the appropriate locations to satisfy the identified LCR need.”<sup>128</sup> Along with the additional transmission studies recommended by Mr. Caldwell, it is “[o]nly by taking these steps [that there will] be sufficient data available to conduct a directed procurement of the identified LCR need.”<sup>129</sup>

#### **D. Appropriate Method(s) of Procurement.**

CEERT does favor a competitive model for procurement (i.e., “Requests for Offers”), especially to meet a targeted need. However, it is clear that the “products” being sought must be adequately defined to ensure a fair and competitive outcome that, in particular, does not disadvantage resource types, especially those high on the Commission’s Loading Order. CEERT again renews its recommendation for a sequence of actions to be timely taken by the Commission to ensure such an outcome.

#### **E. Timing of Procurement.**

The record in this LTPP Track 1 does *not* support the Commission granting *immediate* procurement authorization to SCE to meet any LCR need, especially not the discretionary authorization requested by SCE. Instead, there are several steps that will not unduly delay any

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<sup>128</sup> Ex. CEERT-02, at p. 3 (CEERT (Caldwell)).

<sup>129</sup> *Id.*, at p. 4.

*needed generation* LCR procurement, but must be accomplished first to preserve State energy and environmental policies and provide clarity as to the precise products to be procured.

Thus, *first*, the Commission must specifically define any and all required “flexible” attributes or “operational characteristics” required for resources to meet an LCR need, with distinctions, if any, as to how these terms are used or applied in an RA versus LTPP context. *Second*, the Commission should find that there is no present LCR need for the Big Creek/Ventura area based on the testimony of SCE, DRA, and CEJA, among others. *Third*, before any procurement is authorized for the LA Basin, any rules or economic assessments required to ensure that the Commission’s Loading Order has been and will be fairly considered in reducing and meeting this procurement and that all transmission solutions have been considered that could reduce or negate the LCR need must be completed. *Fourth*, the Commission can then authorize an LCR procurement for SCE, tailored to the outcome of this data. Under no circumstances, given the impact on ratepayers and state policy, should the Commission approve SCE’s request to be given “discretion” as to when and how to procure these resources.

## V. INCORPORATION OF FLEXIBLE CAPACITY ATTRIBUTES IN LCR PROCUREMENT

### **A. If a Need is Determined, Should Flexible Capacity Attributes be Incorporated into Procurement.**

Defining “flexible capacity attributes” or operational characteristics for LCR resources is precedent-setting and needs to be decided in the correct legal and policy context. For LTPP procurement, the Commission, not another state agency or the CAISO, must decide this issue

before authorizing any utility LCR procurement and must not leave it to be resolved as a matter of internal communications between the CAISO and the investor-owned utilities (IOUs).<sup>130</sup>

CEERT understands and appreciates CAISO's jurisdiction to ensure that reliability standards promulgated by the North American Electric Reliability Council (NERC) and the Western Electric Coordinating Council (WECC) and enforced by the Federal Energy Regulatory Commission (FERC) are indeed interpreted appropriately and met in practice. However, IOU procurement to meet this reliability need, especially in a cost-effective manner for ratepayers, is Commission jurisdictional, and decisions reached by this Commission impacting such procurement must be coordinated and consistent to avoid uncertainty and confusion.

How has this issue emerged in this proceeding? To begin with, a review of the Rulemaking for R.12-03-014, the Scoping Memos in both R.12-03-014 and R.11-10-023 (RA), the Assigned Commissioner's Ruling (ACR) on Standardized Planning Assumptions (6-27 ACR), and, finally, D.12-06-025 in R.11-10-023 (RA) makes clear that the Commission understands that it is this *Commission's* obligation to *consider and define* "flexibility" or "flexible" resources, especially in terms of procurement of resources by jurisdictional utilities whether to meet LTPP resource needs or RA requirements.<sup>131</sup>

Thus, while the issue of the "need for flexible resources" has been specifically raised for scenarios and planning assumptions applicable to Track 2 (System Needs), the Standardized Planning Assumptions adopted in the 6-27 ACR confirm: "Flexibility does *not* have a standard definition, but a *definition will be established* either in this proceeding [R.12-03-014] or in the

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<sup>130</sup> RT at 1212 (SDG&E (Anderson)).

<sup>131</sup> R.12-03-014 (LTPP) Rulemaking, at pp. 8-9; R.12-03-014 (LTPP) Scoping Memo, at pp. 3, 5-6, 12; R.11-10-023 (RA) Scoping Memo, at p. 4; D.12-06-025, at p. 1; 6-27 ACR, Attachment ("Planning Assumptions for Use in 2012 LTPP"), at pp. 6-8, 16.

Resource Adequacy proceedings (the current proceeding is R.11-10-023).”<sup>132</sup> However, as DRA witness Spencer testified, it is also not clear that this term should be defined the same for an annual RA versus long-term LTPP need.<sup>133</sup>

In fact, it was clear, even from the Scoping Memo in this LTPP, that the Assigned Commissioner and Assigned ALJ believed that “specific guidance” by the Commission on “flexible contracting for local reliability” and “flexible capacity attributes” would be decided in R.11-10-023 and that decision would be issued in June 2012, before party testimony and the evidentiary hearings in this Local Reliability Track 1 had been served or taken place. It should be noted that, as an example, the testimony of SDG&E witness Anderson was premised on the erroneous assumption that, following on a broad stakeholder process, which included the CAISO, the Commission would have issued a decision by June 2012 in R.11-10-023 “defining flexible contracting quantities and *metrics*.”<sup>134</sup> Witness Anderson also testified that the “Commission should not adopt specific flexibility requirements until the technical basis and associated procurement requirements for flexible capacity attributes have been finalized in R.11-10-023” and should further “discourage parties from seeking to re-litigate in the context of this proceeding issues that are resolved in the context of R.11-10-023.”<sup>135</sup>

However, in that anticipated June 2012 decision (D.12-06-025) in R.11-10-023, no such decision was reached. As a first point, in that order, the Commission stated:

“In consultation with the ISO and with other stakeholders, we recognize that there may be a need for more specificity in procurement for RA purposes. We can accomplish this through defining ‘flexibility,’ so that LSEs can procure resources to meet RA needs in ways which more precisely meet changing reliability needs.”<sup>136</sup>

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<sup>132</sup> 6-27 ACR, Attachment (“Planning Assumptions for Use in 2012 LTPP”), at p. 16, n. 21; emphasis added.

<sup>133</sup> Ex. DRA -3, at pp.12-13 (DRA (Spencer)).

<sup>134</sup> Ex. SDG&E-1, at p. 2 (SDG&E (Anderson)); emphasis added.

<sup>135</sup> *Id.*, at p. 3.

<sup>136</sup> D.12-06-025, at p. 11.

This statement is also significant because it supports the crucial fact that, for purposes of jurisdictional utility “procurement,” the Commission has the duty and responsibility to provide instructions, if needed, to more “precisely” define utility procurement.

But, in D.12-06-025, the Commission found that it could not resolve or adopt any “flexible capacity proposal” made in R.11-10-023 for the 2013 Resource Adequacy year because such proposals were not “sufficiently detailed and ready for implementation at this time.”<sup>137</sup> Instead, the Commission committed to study such proposals further and “coordinate our efforts” with those in this LTPP rulemaking (R.12-03-014).<sup>138</sup> While there has been a further Workshop in R.11-10-023 on this issue (held on August 13, 2012), no further action has been taken by the Commission in R.11-10-023 to define “flexibility” or adopt any “flexible capacity” proposal.

Yet, as noted previously, the CAISO in its testimony in this Track 1 is not only recommending that the Commission identify and adopt its recommended LCR need for SCE in this proceeding, but also to authorize procurement of “replacement OTC generation” by *all* “load serving entities” or IOUs with “flexibility characteristics” as defined by the CAISO to be “similar to the OTC generation.”<sup>139</sup> As part of this recommendation, CAISO witness Rothleder provided his detailed definition of “‘flexible’ resources,” including elements of dispatchability, responsiveness, and minimum operating levels, among other things.<sup>140</sup> However, according to witness Rothleder, “to meet ISO’s operational needs in the local capacity areas,” any alternatives to “flexible conventional generation” would also have to include “attributes of such resources, including voltage support, flexibility, frequency response, sustained energy supply, reliable

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<sup>137</sup> D.12-06-025, at p. 2. See also, D.12-06-025, Findings of Fact 3 and 4; Conclusion of Law 5, at pp. 36, 38.

<sup>138</sup> *Id.*

<sup>139</sup> Ex. ISO-1, at pp. 16-17 (CAISO (Sparks)); Ex. ISO-4, at p. 7 (CAISO (Rothleder)). RT at 281-282 (CAISO (Rothleder)).

<sup>140</sup> Ex. ISO-4, at p. 8 (CAISO (Rothleder)).

responsiveness, no significant use limitations, and the ability to provide energy regulation, operating reserves, and load following.”<sup>141</sup> Thus, from CAISO’s perspective, eligible resources meeting an LCR need would have to have required “flexibility characteristics,” *as well as* “operational characteristics,” like voltage support, noting that “some” of the requirements related to “system flexibility,” while others were “more relevant to the local needs themselves.”<sup>142</sup>

While the CAISO witness Millar did concede that the CAISO was “open to stakeholder participation” in developing such criteria,<sup>143</sup> it was also clear that the CAISO does not believe that such action should forestall the Commission ordering SCE to move forward to procure LCR resources.<sup>144</sup> Thus, according to CAISO witness Rothleder, while “it’s important to explore” what resources, including “alternatives” to gas-fired generation, might meet the LCR need, “it should not be done at...the expense of the timing of ... when actions need to start being taken to meet the ... local needs” and, for the local need, “you don’t really want to wait to find out if there’s alternatives.”<sup>145</sup> In fact, CAISO witness Rothleder testified that it “would be great” if the Commission were to adopt his recommended definition and requirements for “flexible resources” in this Track 1, even though his proposed definition for “flexibility” or even operational characteristics for LCR resources had *not* been adopted by either this Commission *or* the CAISO.<sup>146</sup>

Where resource commitments are going to be made by a jurisdictional utility on behalf of, and paid for by, its ratepayers, it is imperative that the “metrics” and “characteristics” of the procurement being authorized are decided by this Commission *first*. CEERT strongly disagrees

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<sup>141</sup> Ex. ISO-4, at p. 9 (CAISO (Rothleder)).

<sup>142</sup> RT at 287 -288(CAISO (Rothleder)).

<sup>143</sup> RT at 439-440 (CAISO Millar).

<sup>144</sup> RT at 289 (CAISO (Rothleder)).

<sup>145</sup> RT at 289-290 (CAISO (Rothleder)).

<sup>146</sup> RT at 306-307 (CAISO (Rothleder)); RT at 440-441 (CAISO (Millar)).



with the testimony of SDG&E witness Anderson, especially given the Commissions decisions and rulings in both the LTPP and RA proceedings, that it is the CAISO alone that will “define flexibility” for LCR procurement or that the resources sought through an LCR-directed request for offers (RFOs) would be defined through communications between the CAISO and the IOU only.<sup>147</sup>

Defining this procurement at the outset by the Commission is not only required to fairly notice developers or other providers of what resources can meet this need, but also to ensure that the procurement in fact meets the Commission’s and state’s energy and environmental policies. As Independent Energy Producers Association (IEP) witness Monsen testified, “truly competitive solicitations” must ensure “that the products sought by policy-makers and the grid operator are clearly and transparently defined so that competitive markets can plan for and response to specific resource needs in a timely cost-effective manner.”<sup>148</sup> In addition to the absence of an adopted definition of “flexibility” or “flexible attributes,” according to Mr. Monsen, “the CAISO has not yet determined how much flexible capacity is needed (let alone the timing and location of that need), nor has it determined how future resource additions or changes to the existing generation fleet will change the need for either local or system flexibility.”<sup>149</sup> DRA witness Fagan even testified that “CAISO’s LCR need, and their resulting resource deficiency is predicated on analyses for a single point in time, tied to the peak summer need on an extreme weather day,” and, “[a]t this time, there are no analyses which indicate any new resource need for these local areas because of flexibility needs.”<sup>150</sup>

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<sup>147</sup> RT at 1211-1213 (SDG&E (Anderson)).

<sup>148</sup> Ex. IEP-1, at p. 2 (IEP (Monsen)).

<sup>149</sup> *Id.*, at p. 7.

<sup>150</sup> Ex. DRA-1, at p. 5 (DRA (Fagan)).

In addition, while the CAISO testimony suggests that only one type of resource (“conventional” generation) can replace retiring OTC plants, this is not necessarily an the opinion of the IOUs. As SCE witness Cushnie testified, SCE viewed the CAISO recommendations “as sort of the comprehensive set of flexibility requirements” for LCR generation resources. In fact, SCE, which is “technology neutral in terms of the resources that we acquire,” also has concluded that “certain resources that don’t have all of those flexibility attributes,” as defined by the CAISO, “can be partially effective in meeting an LCR need” and will examine the economics and viability of such options in determining the “least-cost” solution to meet this need.<sup>151</sup>

Where SCE and CEERT part company is to how and when the criteria or metrics should be determined, especially to include preferred resources, in meeting the LCR need. To this end, as CEERT does not support the Commission giving SCE broad discretion or “flexibility” in doing so, but, again, asks that the Commission *not* authorize any LCR procurement for any utility without first adopting the “flexibility” or other operational criteria that will apply to this procurement. There is certainly time to take such steps, if started now.

**B. Additional Rules, Not Already Covered by Resource Adequacy (RA) Rules, to Govern LCR Procurement.**

Based on the record reviewed above, CEERT does not believe that *any* “rules” have yet been adopted by this Commission that can and should define the attributes or characteristics of the resources that can meet SCE’s or any other IOU’s LCR need, to the extent that one exists. As noted above, it is the Commission, not the CAISO, that must adopt any “flexibility” or “operational” criteria or characteristics that govern any authorized LCR procurement.

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<sup>151</sup> RT at 604-605, 607-610 (SCE (Cushnie)). See also, Ex. IEP-1, at pp. 5-7 (IEP (Monsen), regarding the varying “flexibility” provided by repowered units versus the units they are replacing).

It is CEERT’s position, therefore, that, as a first order of business, the Commission, with the input and concurrence of the CAISO, must define the attributes (i.e., flexibility, operational, locational) or metrics required of resources to meet an LCR need. There is no reason that this step cannot and should not be taken before *any* LCR procurement is authorized.

To ensure full consideration of alternative resources to conventional, gas-fired generation to meet that need, especially those preferred resources that are high on the Commission’s Loading Order and advance this state’s energy and environmental policies, CEERT witness Caldwell has testified and recommended as follows:

“First, [the IOUs should] confer with the CAISO and prospective bidders to establish metrics and protocols for dispatchability and performance of aggregated EE, DG and DR preferred resources in an LCR solicitation. This exercise should draw on the wealth of experience from other Balancing Authorities around the globe, as outlined in the Opening Testimony of EnerNOC, Inc. There is no question that these resources must be in the right location, have the appropriate electrical characteristics, be visible to and dispatchable by the CAISO in real time, and be accountable for performance to established standards. Many forms of EE, DG, and DR can meet this high standard for LCR need, some cannot. To the extent that a stakeholder workshop will help to advance or support the development of such a mechanism, CEERT would support and participate in that effort.

“Second, conduct a Request for Qualification (RFQ) to establish the likely quantity and price range of these qualified preferred resources that may be available in the appropriate locations to satisfy the identified LCR need.”<sup>152</sup>

SCE witness Cushnie appeared to commit SCE to conduct “separate studies that assess...the “economics and viability of ...preferred resources” to meet its LCR need. However, those studies would be conducted internally and only shared with the Commission and parties after-the-fact when SCE filed its application for *approval* of its procurement of resources selected in a completed RFO.<sup>153</sup>

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<sup>152</sup> Ex. CEERT-02, at p. 3 (CEERT (Caldwell); footnotes omitted).

<sup>153</sup> RT at 609-610 (SCE (Cushnie)).

Given, especially, that the Commission has *not* yet, but has committed to, defining “flexibility,” at least one key element of defining the resources that can meet the LCR need, CEERT believes that it is imperative for that *Commission decision, based on a public stakeholder process*, to take place first. Certainly, any “studies” conducted by SCE as to the economics and viability of preferred resources to meet that need can be part of that public process, along with consideration of the CAISO’s preferred list of flexibility and operational characteristics. But such input should *inform* a Commission decision that will define an RFO before it is issued, not limit the procurement options that can be approved by the Commission based on RFO criteria that was never vetted or authorized by the Commission.

## **VI. COST ALLOCATION MECHANISM (CAM)**

CEERT does not address the issues in this topic area at this time. However, CEERT does reserve the right to respond to Opening Briefs in this issue in its Reply Brief.

## **VII. OTHER ISSUES**

### **A. SCE Capital Structure Proposal.**

CEERT does not address this issue at this time. However, CEERT does reserve the right to respond to Opening Briefs in this issue in its Reply Brief.

### **B. Coordination of Overlapping Issues Between R.12-03-014 (LTPP), R.11-10-023 (RA), And A.11-05-023.**

In his testimony, DRA witness Spencer echoed a key concern that CEERT shares regarding how this Commission has elected to deal with a complex and significant issue – long-term LCR need – in a myriad of proceedings, without a clear path or explanation as to how decisions taking place in these varied proceedings will in fact be coordinated. Even within this proceeding, the Commission has continued to hold Workshops and issue rulings, including the

September 14 ALJ’s Ruling and an even more recently issued Assigned Commissioner’s Ruling (ACR) on “standardized planning scenarios,” which confuse the lines between the LTPP tracks (Tracks 1 through 3) and the boundaries of, or the “record” on, which this Track 1 decision will be based. The potential for conflicting results and precedent on critical LCR issues and definitions has also been created by the fact that the issue of SCE’s versus SDG&E’s LCR needs and procurement, stemming from the same CAISO studies as here, are pending in two separate proceedings – R.12-03-014 (SCE) and A.11-05-023 (SDG&E).

These circumstances, the resulting regulatory and procedural risks, and the issues affected have been summarized by DRA witness Spencer as follows:

“[K]ey issues that will be determined in other proceedings do not allow for adequate stakeholder input and a comprehensive process in the proposed timeframe of this proceeding. The overlapping issues include a decision on the definition of flexible capacity in R.11-10-023 and the long-term local capacity requirements (LCR) for San Diego Gas & Electric Company (SDG&E) in Application (A.)11-05-023. Without proper coordination, the Commission risks adopting inconsistent planning methodologies and/or assumptions in this proceeding and between this proceeding and other related proceedings. These overlapping issues include threshold questions of how to account for and apply the CAISO’s transmission and renewable integration studies in long term resource procurement decisions. Other key issues include identifying updates to the standardized planning assumptions that should be adopted for demand, preferred resources, and retirements of once-through cooling (OTC) generation.”<sup>154</sup>

Further, witness Spencer testified that “[d]eciding SCE’s LCR separately from SDG&E’s request for authorization to build three power plants in A.11-05-023, may lead to conflicting outcomes and increase the complexity of long-term planning because of interdependencies between the LA Basin and San Diego local capacity requirements,” and, even within this proceeding, “the LCR process is not timed to incorporate new planning assumptions and consider the scenarios created from the assumptions,” actions expected in Track 2.<sup>155</sup> Mr.

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<sup>154</sup> Ex. DRA-3, at pp. 1-2 (DRA (Spencer)).

<sup>155</sup> Id., at pp. 3, 6-7.

Spencer further noted that key terminology, such as “flexible capacity attributes” had not been defined by the Commission yet either in the RA rulemaking (R.11-10-023) or this LTPP proceeding, and it is not clear whether a definition potentially adopted by year’s end in R.11-10-023 (RA) “accurately translates between the a year-ahead RA program and the ten-year ahead approach of the LTPP.”<sup>156</sup>

Given these circumstances, Mr. Spencer recommended that (1) “the Commission **defer** a decision on SCE’s LCR long term procurement, so that it may take into account the final, adopted planning standards that relate to demand-side and supply-side distributed generation assumptions, including a ‘high DG’ scenario,’ or, alternatively, ‘provide an opportunity to revise the LCR need determinations ... after the 2012 planning assumptions and scenarios are finalized in a later track,” and (2), “before the Commission determines any specific future needs for flexibility,” it should “adopt specific definitions that can be used to assess the system/operational needs.”<sup>157</sup> According to Mr. Spencer, only then can “the Commission establish transparent methods for evaluating and comparing the flexibility characteristics of specific generators” that “are critical to enable market participants to develop, and IOUs to evaluate, the competitiveness of bids for new flexible resources.”<sup>158</sup>

Many of these sentiments have been echoed by CEERT in this brief in the preceding sections and reflected in its recommendations in Section I. Executive Summary. While CEERT does understand that timeliness is important in addressing the impacts of OTC retirements on local reliability, such a circumstance is not an excuse for cogent, meaningful, and consistent decision-making based on a coordinated, full, and fair public record. For CEERT, any decision reached by the Commission in this Track 1 must first commit to an orderly, transparent

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<sup>156</sup> Id., at p. 13.

<sup>157</sup> Id., at pp. 13-14; emphasis original.

<sup>158</sup> Id., at p. 14.

resolution of issues that impact *any determination* of LCR need or LCR procurement authorization for either SCE or SDG&E.

**C. SCE Statewide Cost Allocation Proposal.**

CEERT reserves the right to respond to Opening Briefs on this issue in its Reply Brief.

**D. CAISO Backstop Procurement Authority to Avoid Violating Federal Reliability Requirements.**

CEERT reserves the right to respond to Opening Briefs on this issue in its Reply Brief.

**E. Energy Storage**

CEERT reserves the right to respond to Opening Briefs on this issue in its Reply Brief.

**VIII.  
CONCLUSION**

The Commission is faced with a critical decision in this Track 1 that has the potential to shape energy infrastructure and procurement decisions through the end of the decade. Based on the record in this proceeding, CEERT urges the Commission to adopt CEERT's recommendations in Section I. Executive Summary of this brief to ensure a transition to OTC retirements that will continue this State's progress to reducing Global Warming and improving air quality through increased reliance on the Loading Order's preferred resources.

Respectfully submitted,

September 24, 2012

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