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 ENERNOC, INC., IN LOCAL RELIABILITY TRACK 1

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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." In summary, and consistent with Section I. Executive Summary, EnerNOC, Inc., recommends and request that a final decision in the Local Reliability Track 1 of the Long Term Procurement Plan (LTPP) Rulemaking (R.) 12-03-014 find, conclude, and order as follows:

- The Commission should find that the record in this proceeding demonstrates that the studies and sensitivities used by the California Independent System Operator (CAISO) to identify a local capacity requirement (LCR) need of approximately 2,400 MWs for the Los Angeles (LA) Basin area through 2021 neither included or recognized the contribution of preferred resources (e.g., uncommitted energy efficiency and demand response) available today or in the near term, in the case of demand response, nor the anticipated growth and capabilities of preferred resources, including demand response, to meet an LCR need over the long-term forecasted period.
- Given these shortcomings in those studies, the Commission should find that the LCR need identified by the CAISO and supported by the investor-owned utilities (IOUs) for the LA Basin local capacity area (LCA) is inconsistent with State policy and cannot be adopted at this time.
- Instead, but in recognition of some time constraints with respect to Once Through Cooling (OTC) retirements, the Commission should find an LCR need for the LA Basin exists, as the basis of a procurement authorization for SCE, as the net of 2,400 MW reduced by a MW quantity reflective of expected growth of preferred resources within the LCA, as an interim procurement target for the LA Basin.
- The Commission should find that reconsideration of any adopted LCR need for the LA Basin will take place in the 2014 LTPP and be based on further CAISO studies that will include projected growth of preferred resources and their effectiveness in reducing the LCR need.

- The Commission should find that no thermal procurement by SCE to meet an identified LCR need should commence or take place unless and until the Commission has issued a decision that specifically determines the amount of new capacity that must be flexible or any other eligibility criteria required for resources to meet an identified LCR need and finds that such criteria fairly reflects the participation possible by preferred resources in meeting this need, including on a portfolio basis.
- The Commission should find that such LCR eligibility criteria definition(s) apply to LCR procurement by any and all of the IOUs.
- The Commission should find that, given the shorter lead time to develop and provide preferred demand response resources, an all-source request for offer (RFO), which includes demand resources, issued today for an LCR need that may not materialize until 2018-2020 is not advisable. Instead, the Commission, the CAISO , the IOUs and all parties should continue to develop DR products and services, and all preferred resources, to fill the net short position in the interim.

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OPENING BRIEF OF ENERNOC, INC., IN LOCAL RELIABILITY TRACK 1

EnerNOC, Inc. (EnerNOC) 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,[1] and the "common briefing outline" submitted by Southern California Edison Company (SCE), as revised, on August 27, 2012.

I. EXECUTIVE SUMMARY

EnerNOC's active participation and testimony in the Local Reliability Track 1 evidentiary hearings has had a two-fold purpose: (1) to elevate consideration of the "preferred resources" in the Commission's "Loading Order" applicable to *all* utility procurement, especially the capability of preferred demand response (DR) resources to meet the flexibility or operational characteristics of a local capacity requirement (LCR) need, and (2) to demonstrate that this capability exists today across various markets in North America and the world and is expected in Southern California in 2013 pursuant to this *Commission's* orders. Thus, by Decision (D.) 11-10-003, DR resources will be required to be dispatchable within a local capacity area (LCA) in order to claim local resource adequacy (RA) credit,[2] and, in one utility

[1] Reporter's Transcript (RT) at 1384 (ALJ Gamson).
[2] D.11-10-003, at p. 2.

service territory, upon Commission approval of pending DR contracts, DR will be dispatched within 30 minutes of notification, a criterion described by the CAISO for purposes of relieving a contingency event.[3]

Clearly, current and expected Commission action, along with the record in this Track 1, demonstrate that fast response DR resources are currently, or soon will be, provided in markets and to investor-owned utilities (IOUs), including the provision of ancillary services and frequency support. Demand-side resources, aside from being at the top of the preferred resources in the Commission's Energy Action Plan Loading Order, are also essential to furthering the State's greenhouse gas (GHG) reduction targets and are expected to grow further as a result of the Commission's initiatives for deploying smart technologies. Taken together, demand resources can only increase, potentially substantially, over the 10-year planning horizon (through 2021) at issue in this Track 1.

For these reasons, and based on the record in this proceeding, as addressed in detail in this brief, EnerNOC recommends that a Commission decision in this Local Reliability Track 1 make all of the following findings, conclusions, and orders:

- The Commission should find that the record in this proceeding demonstrates that the studies and sensitivities used by the California Independent System Operator (CAISO) to identify a local capacity requirement (LCR) need of approximately 2,400 MWs for the Los Angeles (LA) Basin area through 2021 neither included or recognized the contribution of preferred resources (e.g., uncommitted energy efficiency and demand response) available today or in the near term, in the case of demand response, nor the anticipated growth and capabilities of preferred resources, including demand response, to meet an LCR need over the long-term forecasted period.
- Given these shortcomings in those studies, the Commission should find that the LCR need identified by the CAISO and supported by the investor-owned utilities (IOUs) for the LA

[3] Ex. ISO-06, at pp. 13-14 of 19 (CAISO (Millar)).

Basin local capacity area (LCA) is inconsistent with State policy and cannot be adopted at this time.

- Instead, but in recognition of some time constraints with respect to Once Through Cooling (OTC) retirements, the Commission should find an LCR need for the LA Basin exists, as the basis of a procurement authorization for SCE, as the net of 2,400 MW reduced by a MW quantity reflective of expected growth of preferred resources within the LCA, as an interim procurement target for the LA Basin.
- The Commission should find that reconsideration of any adopted LCR need for the LA Basin will take place in the 2014 LTPP and be based on further CAISO studies that will include projected growth of preferred resources and their effectiveness in reducing the LCR need.
- The Commission should find that no thermal procurement by SCE to meet an identified LCR need should commence or take place unless and until the Commission has issued a decision that specifically determines the amount of new capacity that must be flexible, or any other eligibility criteria required for resources to meet an identified LCR need and finds that such criteria fairly reflects the participation possible by preferred resources in meeting this need, including on a portfolio basis.
- The Commission should find that such LCR eligibility criteria definition(s) apply to LCR procurement by any and all of the IOUs.
- The Commission should find that, given the shorter lead time to develop and provide preferred demand response resources, an all-source request for offer (RFO), which includes demand resources, issued today for an LCR need that may not materialize until 2018-2020 is not advisable. Instead, the Commission, the CAISO , the IOUs and all parties should continue to develop DR products and services, and all preferred resources, to fill the net short position in the interim.

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.

In its testimony, EnerNOC's central focus in this proceeding has not been on the merits of the model used by CAISO to identify a long-term LCR for SCE in the LA Basin or Big Creek/Ventura areas. Rather, EnerNOC's concerns have focused on the CAISO's *assumptions* used in that model to assess need and CAISO's conclusions, based on its own internal definitions of "flexible" attributes or "operating characteristics," as to the resources that can meet that need.

As addressed in the sections that follow, for the specific purpose of *this Commission's* jurisdictional long term procurement planning (LTPP) process and the potential procurement authorization at issue here, the CAISO's recommendations require further examination or amendment to ensure consistency with the Commission's and this State's energy and environmental policies applicable to this LTPP proceeding. In summary, it is EnerNOC's position that (1) the CAISO's LCR assumptions did not adequately consider preferred resources (i.e., uncommitted energy efficiency and demand response) in the Commission's adopted Loading Order and, by doing so, have overstated SCE's LCR need in the Los Angeles (LA) Basin,[4] and (2) the CAISO has sought to limit reliance on those preferred resources to reduce or meet that need, without consideration of the current or expected potential for these resources to meet any "flexible" attributes or "operating characteristics," as those terms may be (but have not yet been) defined by the Commission, especially in the long-term timeframe at issue here. While EnerNOC does not address the issue of the CAISO's modeling, as distinct from its resources

[4] Because many parties, including SCE, have concluded that there is "no immediate need to consider procurement of resources in the Big Creek/Ventura area" and that need assessment can be deferred until the 2014 LTPP, EnerNOC has focused on CAISO's identified LCR need for the LA Basin area. See, Ex. SCE-1, at pp. 10-11 (SCE (Minick)).

assumptions in this Opening Brief, it does reserve the right to respond to other parties on this issue in its Reply Brief.

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

Preferred resources must be considered in determining, and meeting, future LCR needs. In order to maintain the validity and intent of the Commission's adopted Energy Action Plan (EAP) Loading Order, the IOUs must procure "all cost-effective energy efficiency (EE) and DR resources first, then renewable resources and distributed generation before clean, fossil-fuel resources."[5] The Commission has specifically required adherence to the Loading Order for *LTPP and all* utility procurement, and the Commission must not allow either the IOUs or the CAISO to undermine that Loading Order in either identifying a resource need or procuring resources to meet that need within a local capacity area (LCA).

This policy principle was recently reinforced by the Commission in D.12-01-033 in the previous LTPP Docket (R.10-05-006), as follows:

> "It appears necessary to reiterate here the centrality of the loading order, and to direct the utilities to procure **all** of their generation resources in the sequence set out in the loading order. While hitting a target for energy efficiency or demand response may satisfy other obligations of the utility, that does not constitute a ceiling on those resources for purposes of procurement."[6]

Yet, as the CAISO's and IOU's testimony in the Track 1 hearings reflect, the Loading Order was clearly *not* "central" in the determination of LCR need by the CAISO, especially as to the resource assumptions on which it was based. In this regard, the CAISO conducted a once-through cooling (OTC) study as part of the 2011-2012 Transmission Plan and determined a local capacity need for the Los Angeles Basin (LA Basin) and the Big Creek/Ventura local capacity

[5] Exhibit (Ex.) EnerNOC-1, at p. II-3 (EnerNOC (Tierney-Lloyd)).
[6] D.12-01-033, at p. 21; emphasis added. See also, Ex. EnerNOC-3, at p. III-2 (EnerNOC (Tierney-Lloyd).

areas (LCAs).[7] The CAISO conducted power flow and "transient stability programs for various RPS scenarios to determine long-term (2021) local capacity area requirements for areas that currently have OTC generating units."[8] The CAISO determined the need to be between 2,370 MW and 3,741[9] MW for the LA Basin and 430 MW for the Big Creek/Ventura LCA, depending upon the effectiveness of the resource.[10] It was the ultimate recommendation of CAISO witness Sparks that the Commission should direct the "long term procurement" of "approximately 2,400 MW of replacement OTC generation…in the Western LA Basin, if the generation is selected from the most effective sites for mitigating the Western LA Basin transmission constraint" and had "flexibility characteristics similar to the OTC generation."[11]

In making these determinations and recommendations, CAISO witness Sparks confirmed, however, that the CAISO had assumed *no* demand response for purposes of determining or meeting the LCR need.[12] Yet, Mr. Sparks conceded that DR "could be used to reduce the replacement OTC needs if the demand response is in electrically equivalent locations and if they materialize and are determined to be feasible for mitigation."[13]

Based upon the OTC study, CAISO witness Rothleder determined a residual system need of 1,051 MW, which would require the addition of 1,200 MW of generation resources.[14] In that case, the CAISO models *did* assume roughly 5,000 MW of system DR resources.[15] Therefore, while the CAISO is not recommending that the Commission act upon Mr. Rothleder's

[7] Ex. ISO-1 at p. 2 of 17 (CAISO (Sparks)).
[8] Id., at p. 4 of 17.
[9] RT at 603 (SCE (Cushnie)).
[10] Ex. ISO-1, at p. 6 of 17 (CAISO (Sparks).
[11] Id., at p. 17 of 17.
[12] Id., at p. 15 of 17.
[13] Id.
[14] Ex. ISO-4, at p. 4 of 9 (CAISO (Rothleder)).
[15] RT at 303 (CAISO (Rothleder)).

recommendations for system need at this time,[16] the CAISO testimony indicates that it is willing to consider DR for purposes of meeting a system need, just not a local need. This is the CAISO's position even though CAISO witness Millar agreed that the majority of DR resources are probably located within an LCA.[17]

It is apparent that, notwithstanding its understanding of the potential of preferred resources such as dispatchable DR, in particular, to meet LCR need, the CAISO nevertheless excluded DR resources in both its assessments of LCR need and its recommendations on resources that could meet that need. This approach appears rooted in the CAISO's assumption that DR resources have not historically been used for local reliability purposes, and, therefore, will not provide local-dispatchability in the long-term period examined in its studies.[18] Again, CAISO also maintains a belief that DR resources are not a suitable "replacement" for retiring OTC generation because these resources cannot meet *all* of the flexible capacity or operating characteristics,[19] as internally defined by CAISO staff..

However, these definitions or characteristics contained in Mr. Rothleder's testimony have not been adopted by the CAISO or this Commission, for either short-term RA procurement or long-term LTPP procurement, nor have they been addressed in the context of preferred resources.[20] Further, testimony here has also indicated that it may not be necessary for a resource to have all of these characteristics to be effective in reducing an LCR need and that a

[16] Ex ISO-4, at p. 7 of 9 (CAISO (Rothleder)).
[17] RT at 431 (CAISO (Millar)).
[18] Ex. ISO-6, at pp. 13-15 of 19 (CAISO (Millar)); RT at 350 (CAISO (Millar)).
[19] RT at 434-435, 440 (CAISO (Millar)).
[20] RT at 441 (CAISO (Millar)). The Commission is also currently conducting a further examination of this broader issue of eligibility of preferred resources to meet an LCR need. (See, ALJ's Ruling of September 14, 2012 (September 14 ALJ's Ruling).)

portfolio of resources could provide the characteristics enumerated by the CAISO.[21] In fact, it may not even be the case that conventional generation has all of these characteristics.[22]

Perhaps more discouraging, especially given the significant commitments that have been made by DR customers in California, CAISO witness Millar testified that he did not think that customers would either be interested in or capable of providing such DR services.[23] It is notable, however, that Mr. Millar's experience with DR programs date from more than a decade ago, in the 1995-1996 timeframe.[24]

Needless to say, DR programs and capabilities have changed dramatically since the period of time when Mr. Millar had direct experience with them. In Alberta, Canada, today, as opposed to the mid-1990's of Mr. Millar's historical experience with DR programs,[25] DR resources are providing frequency support, a service that went "live" in 2012.[26] Further, Mr. Millar confirmed that he had little basis for making statements about the willingness or capability of customers in California to provide DR services since he did not have any direct, consumer-level experience in California in his current role at the CAISO.[27]

EnerNOC, which has a long history of providing DR resources and participating in DR programs *specific to this Commission's jurisdictional utilities*, strongly disagrees, and finds no basis, for the CAISO's assessments and assumptions regarding DR either currently or, especially, for the long-term period covered by the CAISO's LCR "need" recommendations. Put simply, the CAISO's DR assumptions, both as to assessing and meeting LCR need, are unfounded and wrong.

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[21] RT at 604-605, 607-610 (SCE (Cushnie)); RT at 296-298 (CAISO (Rothleder)).
[22] Ex. IEP-1, at pp. 5-6 (IEP (Monsen)).
[23] RT at 351-352, 436 (CAISO (Millar)).
[24] RT at 436 (CAISO (Millar)).
[25] RT at 407 (CAISO (Millar)).
[26] Ex. EnerNOC-2, at p. II-3 (EnerNOC (Hoffman)).
[27] Ex ISO-6, at p. 1 of 19 (CAISO (Millar)); RT at 408 (CAISO (Millar)).

In fact, California is lagging behind several other markets that use DR resources to provide some of the very LCR attributes identified by the CAISO. The existence of these products nationally is a clear indication that similar DR resources could be provided in California as well.[28] Thus, from an industry perspective, a capability exists today for providing fast-response, locally-dispatchable DR resources, and those resources should be developed so as to avert the need for more thermal generation.

In addition, local dispatchability in California will be a requirement in order for DR resources to count for local resource adequacy (RA) purposes beginning in *2013*.[29] While this rule change was adopted in 2011 and was acknowledged by CAISO witness Millar,[30] the CAISO nevertheless continues to advance an LCR need forecast through 2021 that assumes **zero (*0*)** DR for purposes of meeting that need, even while conceding that the majority of the DR resources are probably located within LCAs.[31] Further, CAISO has designed its wholesale DR products to be locally deliverable, on an even more granular basis than the LCA.[32] Despite these facts, CAISO maintains the unsupportable position that DR resources cannot offset any of the LCR need over the next ten (10) years.

As further evidence of the gulf between CAISO's views of DR and the reality, EnerNOC believes that it is both appropriate and required for the Commission to take official notice of two applications filed by Pacific Gas and Electric Company (PG&E) (A.12-09-004) and SCE (A.12-09-007) after the close of hearings in this Track 1.[33] These applications seek approval of contracts that are the result of these utilities' most recent solicitations (Request for Offers

[28] Ex. EnerNOC-2, at p. II-3 (EnerNOC (Hoffman)).
[29] D.11-10-003, at p. 2.
[30] RT at 433 (CAISO (Millar)).
[31] RT at 431 (CAISO (Millar)).
[32] RT at 440 (CAISO (Millar)).
[33] Such "official notice" is clearly permitted by Rule 13.9 of the Commission's Rules of Practice and Procedure.

(RFOs)) for DR resources for 2013 and 2014. Most significantly, these RFOs have resulted in DR resources that are *dispatchable on a local basis*. In fact, in SCE's service territory, DR resources can be dispatched on a basis comparable to CAISO's own market design for its Proxy Demand Resource (PDR).[34] In PG&E's service territory, DR can be dispatched on an LCA basis within 30 minutes notice.[35] Clearly, local deliverability will be included as an attribute of DR resources in California in the near term as will response within a shorter notification period.

Unfortunately, CAISO's efforts to diminish or discredit DR's value or capability in reducing or meeting an LCR need did not end with erroneous conclusions about its lack of local dispatchability or responsiveness. Instead, faced with those facts (that DR can and will be locally dispatchable in 2013 and respond within 30 minutes), the CAISO witnesses elected to "pile on" the barriers to consideration of DR to meet an LCR need by claiming that DR could not offset a need for thermal capacity unless it could meet *ALL* of the flexible attributes *and* operating characteristics the CAISO witnesses claim are required to replace OTC generation. The result, as noted previously, is that the CAISO assumed zero (0) MW of DR capacity toward meeting the local capacity need through 2021.

Is the bar for DR resources to be considered to meet an LCR need higher than other generating capacity? Because the need for, and the characteristics of, flexible capacity resources have not yet been determined, it is premature for CAISO to determine whether or not DR resources can meet those requirements. On its face, there seems to be a bias against consideration of DR resource capabilities that are available today or will be available in the future. This position is completely at odds with the recognition of DR as a "preferred resource" on the Commission's Loading Order. Local dispatch requirements that resulted from D.11-10-

[34] A.12-09-007 (SCE DR Contracts), Testimony, at p. 10.
[35] A.12-09-004 (PG&E DR Contracts), Testimony, at p. III-1.

003 had not existed for DR resources previously. But, the lack of a requirement in California for local deliverability does not belie a lack of capability for DR resources any more than existing generation could be faulted for failing to meet a yet-to-be adopted definition of flexibility criteria.[36]

Given the detail provided by EnerNOC witness Hoffman regarding the DR products now available in other markets, the Commission simply cannot discount or ignore the likelihood that DR resource capabilities will be expanding in the near term and can and will become even more "flexible" and "time responsive" to meet Commission LCR directives or utility RFOs.[37] In fact, recognition of the current and expected potential of DR to meet resource needs, including LCR needs, is part of the Commission's effective enforcement of the Loading Order in utility procurement. The bar for priority resource participation should not be so high *or different* that it precludes consideration of all options (especially preferred resources) other than thermal resources.

While EnerNOC has particular concerns with the CAISO's assumptions regarding DR, it is also disturbed that the IOUs seemed to follow suit by supporting the CAISO's failure to include DR resources for determining and meeting the local capacity need. In this regard, the testimony of SCE, PG&E, and San Diego Gas and Electric Company (SDG&E) all supports, generally, the CAISO's LCR need assessment, including the exclusion of DR resources for purposes of meeting the local need, despite contradictory statements regarding DR potential to reduce that need.[38] Thus, SCE witness Cushnie testified that, even for the lower range of the

[36] See, Ex. IEP-1, at p. 2 (IEP (Monsen).
[37] See, Ex. EnerNOC-2 (EnerNOC (Hoffman)).
[38] Ex. SCE-1, at p. 4 (SCE (Minick)); Ex SDG&E-1, at p. 5 (SDG&E (Anderson)); Ex. PG&E-1, at p. 19 (PG&E (Frazier-Hampton)).

resource need, 2,370 MW, demand-side resource would reduce the LCR need[39] and supply-side DR resources could meet the need.[40] Yet, SCE witness Cabbell confirmed that no non-generation alternatives were considered by SCE other than transmission.[41]

Similarly, PG&E witness Frazer-Hampton, while supporting the Loading Order, expressed uncertainty and disbelief that EE and DR resources could be counted upon to meet the LCR.[42] This opinion was offered, however, against the backdrop of Ms. Frazer-Hampton's admissions that she had a relatively limited understanding of "how the DR Programs are" and had not studied the likelihood of DR being realized in a LCA in either SCE's or PG&E's service territory.[43]

More significantly, however, was the testimony of SCE witnesses Minick and Silsbee, which clearly support *reliance and inclusion, not exclusion,* of DR resources in assessing and meeting an LCR need. Specifically, SCE witness Minick agreed that DR would generally lower the LCR requirement, noting also "[l]et's be honest," "[w]e're going to have more energy efficiency…more demand response…and less fossil generation."[44] Mr. Minick even testified that SCE used the total DR megawatts, as reflected in Exhibit (Ex.) EnerNOC X SCE-Revised, for purposes of SCE's planning.[45] The CAISO did not.[46]

The fact that SCE recognizes the potential for DR to reduce and meet the LCR need was further underscored by the testimony of SCE witness Silsbee. Mr. Silsbee indicated that SCE currently counts DR resources against its local capacity requirement and that he saw "no reason

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[39] RT at 605 (SCE(Cushnie)).
[40] Id.
[41] RT at 806-807 (SCE (Cabbell)).
[42] RT at 883 (PG&E Frazer-Hampton)).
[43] RT at 885-889 (PG&E (Frazer-Hampton)).
[44] RT at 969, 986 (SCE (Minick)).
[45] Ex. EnerNOC-X-SCE-1-Revised (Cross-Exhibit (Minick)); RT at 975-976 (SCE (Minick)).
[46] RT at 975-976 (SCE (Minick)).

why DR resources "can't be counted" for local RA purposes.[47] Mr. Silsbee also admitted that energy efficiency could reduce the LCR at the local level and acknowledged that additional amounts of DR would be enabled by smart metering.[48] Lastly, Mr. Silsbee identified DR resources from the Base Interruptible Program and the Summer Discount Program (air-conditioning cycling) in Exhibit CEJA-X-SCE-3 that were within the Western LA Basin, a sub-area within the LA Basin LCA, and could be effective or partially effective in reducing the LCR.[49]

Notably, Mr. Silsbee did not include other dispatchable DR resources in his analysis, such as DR aggregator programs identified in Ex. EnerNOC-X-SCE-1-Revised. As stated earlier, upon approval by the Commission of the recent applications for approval of DR contracts submitted by PG&E and SCE (A.12-09-004; A.12-09-007), the utilities will have available additional capacity that is locally-dispatchable beginning in 2013 and potentially effective in reducing the LCR.

Given this record, and especially the expected changes in DR to deliver locally dispatchable resources beginning in a matter of months, it is completely inappropriate for the Commission to approve any LCR need assessment that wholly excludes DR resources in identifying that need. Such an approach, on its face, is inconsistent with the Commission's LTPP procurement policies and fails to take into consideration the likely growth in size and capability of the DR resources resulting from technology and the need to meet the changing operational characteristics of California's electricity system over the forecast period.

In fact, this failure to consider preferred resources would wrongly commit the State to the continued use of thermal resources as the sole or primary option for integrating renewable

[47] RT at 1044-1045 (SCE (Silsbee)).
[48] RT at 1067-1068 (SCE (Silsbee)).
[49] Ex. CEJA-X-SCE-3 (Cross Exhibit (Silsbee)); RT at 1080-1083 (SCE (Silsbee)).

resources. As EnerNOC witness Tierney-Lloyd testified, renewable integration studies by the National Renewable Energy Laboratory (NREL) and the Western Governors' Association (WGA) identify flexible generation capacity as one of the tools for integrating renewable resources, but *not* the only or even the primary tool.[50] These studies, contrary to the positions of CAISO and the utilities, identify DR as a resource for integrating renewable resources. Based on this record, EnerNOC renews its recommendations as to next steps to correctly consider DR resources in reducing and meeting LCR needs contained in both the Summary of Recommendations and Executive Summary (Section I) of this brief.

C. Appropriate Assumptions Concerning Retirement of OTC Generation.

EnerNOC's focus in this proceeding has been on the CAISO's assumptions regarding preferred resources in determining an LCR need, as opposed to its assumptions on OTC generation retirement. EnerNOC does note, however, that the targeted date for OTC retirement in the LA Basin (the end of 2020) does permit time to ensure that preferred resources, especially with respect to their anticipated growth and increased capabilities, are considered and solicited in meeting any identified LCR need for the LA Basin. EnerNOC otherwise reserves the right to respond to other parties on this issue in its Reply Brief.

D. Transmission and Other Means of Mitigation.

Similarly, EnerNOC's testimony did not directly address transmission mitigation of LCR need. However, EnerNOC does believe that corrected assumptions to *include* preferred resources, such as DR, by CAISO in its LCR studies would certainly have the effect of reducing LCR need, for the reasons and based on the record reviewed in this brief. With respect to other

[50] Ex. EnerNOC-1, at pp. III-1 to III-3 (EnerNOC (Tierney-Lloyd); see also, Ex. EnerNOC-4 (EnerNOC (Tierney-Lloyd)).

mitigation, EnerNOC reserves the right to respond to other parties on this issue in its Reply Brief.

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

A. LA Basin

For the reasons addressed above, EnerNOC takes clear exception to CAISO's assumption of *0* DR in assessing or meeting the LCR need for either the LA Basin or Big Creek/Ventura areas. To the extent that these assumptions are corrected to include DR, especially over the long-term forecast period at issue in the CAISO's studies, it would clearly reduce the LCR need. For the LA Basin, in particular, such demand reduction resources, like dispatchable DR, are a further benefit to addressing the complications and time required to site a gas-fired generation in an "urban center" that "limits access to sites for LCR generation" and imposes strict air pollution and emission restrictions.[51]

As stated in Section II.B. above, to the extent that any procurement authorization is given to SCE in this Track 1 based on the *current* CAISO studies, the Commission should only authorize a portion of the CAISO's identified LA Basin LCR need until the CAISO analyzes the growth of preferred resources and the resulting affect on the LCR need in the 2014 LTPP. EnerNOC reserves the right to address the specific LA Basin issue further in response to other parties in its Reply Brief.

B. Big Creek/Ventura Area

EnerNOC's position regarding the Big Creek/Ventura area need is the same as indicated above for the LA Basin. However, for this area, EnerNOC believes it is important to note that

[51] Ex. SCE-1, at p. 14 (SCE (Silsbee)).

SCE, along with other parties, have testified that there is "no immediate need to consider procurement of resources in the Big Creek/Ventura area" at this time.[52] Given shortcomings in the CAISO's resource assumptions used to determine LCR need, deferring review of this area to the 2014 LTPP, especially to correct such deficiencies, has particular merit. Again, however, EnerNOC reserves the right to respond further on this issue in its Reply Brief.

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

A. Incorporation of the Preferred Load Order in LCR Procurement.

As indicated in Section II.B., EnerNOC objects to the CAISO's LCR need assessment for its failure to include or adequately consider DR resources in that need assessment, either in terms of meeting or reducing that need. Again, unless and until the CAISO studies are refined to properly reflect contributions from preferred resources to meet LCR need, EnerNOC recommends that the Commission not approve the full LCR need proposed by the CAISO and supported by the IOUs. Rather, EnerNOC supports the position of a phased procurement approach as explored by Administrative Law Judge (ALJ) Gamson in his examination of CAISO witness Sparks.[53] In other words, the Commission should not approve the entire range of LCR need, between 2,400 and 3,400 MW at this time and should instead require the CAISO to incorporate a reasonable forecast of growth of preferred resources and analyze the affect of that growth on LCR need in the 2014 LTPP.

Even once the Commission determines a reasonable amount of capacity that can be procured for the LA Basin LCR, pending further analysis of preferred resources in the 2014 LTPP, additional steps are required to be taken by the Commission *before* SCE can be authorized

[52] Ex. SCE-1, at p. 10 (SCE (Minick)).
[53] RT at 272-273 (ALJ Gamson).

to procure such resources. As described in further detail in Section V.A. below, no LCR procurement should be authorized unless and until the Commission itself has adopted definitions for the characteristics or attributes required of resources to meet an LCR need that includes consideration of preferred resources and has required that eligibility criteria to be part of any LCR RFO. Similar to the CAISO's need assessment, EnerNOC does not believe that either the CAISO or the IOUs have properly acknowledged or considered how preferred resources, in particular DR, can and will be available to *meet* that need in the forecast period at issue here (through 2021).

On the issue of procurement or procurement "eligibility" to meet any identified LCR need, the Commission has fully committed to requiring each jurisdictional IOU to following the Loading Order for *all* procurement, no exceptions.[54] In these circumstances, the Commission must not authorize any LCR procurement that has the effect of favoring fossil-fueled, thermal resources simply because the CAISO has not adequately accounted for the potential for preferred resources to meet an LCR need now or over the next 10 years.

In this regard, when asked about the scenario where more preferred resources develop than are considered in its LCA needs assessment, the CAISO nevertheless clung to its insistence that additional thermal resources can and should be built as "back-up insurance."[55] The Commission, however, has an obligation to ensure that ratepayers are not subjected to increased costs or rates resulting from the over-procurement of resources in excess of the level required for the utilities to provide safe, reliable service. While the CAISO may place reliability or, more specifically, excess reliability, above all other considerations in identifying an LCR need, the Commission must place reliability in context with other policy objectives, including the cost of

[54] See, e.g., D.12-01-033, at p. 21.
[55] RT at 401 (CAISO (Millar)).

providing the reliability and the cost of displacing clean energy resources by having a utility over-invest in fossil generation.

EnerNOC does not dispute that the CAISO should study and assess the need for new thermal generation in SCE's LA Basin LCA, *to the extent* that such a need assessment has fully and properly accounted for demand response and other preferred resources reducing that need, as discussed above.[56] However, EnerNOC does contest a needs assessment that assumes 0 DR and any LCR procurement authorization that exclusively seeks or relies upon thermal resources and ignores the preferred resources in the Loading Order. Preferred resources must be considered first. Further, as EnerNOC witness Tierney-Lloyd testified:

> "[T]he filter for evaluating preferred resources must not only be what is feasible and reliable by today's standards; but, what is likely to be available during the planning window. Otherwise, the Commission will dismiss or discount the developments that are likely to occur over this period of time."[57]

Many factors will change the manner in which DR resources are provided in the next 10 years. These include integration with CAISO wholesale markets, faster access to data through smart grid technologies, faster response or automated demand response services, to name a few.[58]

SCE has specifically recognized this expanded role and capability of DR. Thus, SCE witness Silsbee agreed that increased reliance on demand response would result from the growing use of smart-grid enabling technologies.[59] In fact, SCE identified an opportunity to nearly double its existing DR portfolio by 2017 as a result of such technologies in its Smart Grid Deployment Plan by adding an additional 1,500 MWs of DR potential, some of which, EnerNOC

[56] Ex. EnerNOC-3, at p. III-2 (EnerNOC (Tierney-Lloyd)).
[57] Id., at p. III-8.
[58] Id., at p. III-9; Ex. EnerNOC-1, at pp. II-6 - II-9 (EnerNOC (Tierney-Lloyd)).
[59] RT at 1068 (SCE(Silsbee))

assumes, would be in the LA Basin LCA and have some capability of reducing the LCR need.[60] Unfortunately, again, none of that potential "growth" in DR capability was recognized by either the CAISO in its need assessment for the LA Basin or SCE in its support of that assessment, other than for SCE to ask for discretion or "flexibility" in how it would "undertake" procurement to meet that need.[61]

DR must be given a seat at the table for purposes of *both* reducing *and meeting* the LCR need, either as a demand-side or supply-side resource. The Commission must incorporate the evolving nature of DR services into evaluating the LCR need and determining the appropriate amount of thermal resources that should be procured. Without taking the future potential of DR into consideration, the Commission's policies with regard to the Loading Order and its smart grid policies will be undermined and will likely produce a fraction of the value that was intended because of an inability to avoid new capacity costs. Such a direction would eliminate the need for, or reduce the value of, future DR services and, potentially, render them cost ineffective.[62]

Therefore, the Commission must support its own policies in deed, as well as in word, and modify the LCA need assessment to include growth in preferred resources. This commitment requires the Commission to adjust the CAISO's LA Basin LCR need assessment to include preferred resources to either meet or reduce the LCR need or to adopt procurement authority for only a portion of the need identified by the CAISO until the CAISO can re-evaluate local capacity contributions from preferred resources in the 2014 LTPP. The Commission must then adopt flexible capacity eligibility criteria to meet LCR needs *before* any LCR procurement authorization, for either SCE or SDG&E is granted. Lastly, the Commission must ensure that such flexible capacity eligibility criteria is well-defined and has been developed in consideration

[60] Ex. EnerNOC-1, at p. II-8 (EnerNOC (Tierney-Lloyd)).
[61] Ex. SCE-1, at p. 2 (SCE (Cushnie)).
[62] Ex. EnerNOC-3, at p. III-2 (EnerNOC (Tierney-Lloyd)).

of the current and expected capabilities of preferred resources, in particular, DR resources to meet that need either individually or on a portfolio basis with other resources.

B. Other Commission Policies and Consideration Affecting LCR Procurement.

As mentioned above, not only are the Commission's policies relative to the preferred Loading Order at stake in terms of how the LCR need is calculated and met, so are the Commission's policies to advance smart grid technologies. At least a portion of the benefits of implementing smart technologies is to improve the efficiency of consumer consumption in the form of DR and EE, resulting in reducing the need for procurement of energy and capacity.[63] If capacity additions will be made irrespective of smart grid investments and the resulting increases in DR and EE, then the benefit of the smart grid investments will be eroded.

Smart grid investments and technology advancements will also enable the types of fast-responding DR resource capabilities that have been enumerated in the testimony of EnerNOC witness Hoffman and described by CAISO's witnesses as desirable attributes.[64] As Mr. Hoffman testified, the ability for DR resources to provide synchronous reserves (spinning reserves) already occurs in markets, like Pennsylvania-New Jersey-Maryland Interconnection (PJM), and DR resources are being used for load following purposes in Bonneville Power Administration's (BPA's) service territory, on a pilot basis, for purposes of managing renewable intermittency.[65] DR resources were found to be cost-effective for renewable resource integration for the hours where contingency reserves shortages occur as opposed to building a new combined-cycle plant, with the ability to be available for all hours in a year.[66]

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[63] Ex. EnerNOC-1, at p. II-8 (EnerNOC (Tierney-Lloyd)).
[64] See, Ex. EnerNOC-2 (EnerNOC (Hoffman)).
[65] Ex. EnerNOC-2, at pp. II-4, II-8, II-9 (EnerNOC (Hoffman)). PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of a 13-state area of the mid-Atlantic area plus the District of Columbia. PJM dispatches about 180,400 megawatts (MW) of generating capacity over 61, 200 miles of transmission lines.
[66] Ex. EnerNOC-4, at p. 22 (EnerNOC (Tierney-Lloyd)).

The testimony of EnerNOC witness Tierney-Lloyd also demonstrated that the goals for achieving GHG emissions reductions could be compromised if new thermal generation plant additions occur without respect to the affect on LCR need reduction resulting from expanded DR and EE capabilities through 2021.[67] Achievement of GHG emissions reductions in the electricity sector depends upon both achievement of the RPS and achievement of aggressive, demand-side management goals. However, those reductions could be offset, to an undetermined extent, by new emissions from thermal facilities. In fact, CAISO witness Rothleder testified that emissions limitations were "not taken into account."[68] EnerNOC has also addressed the need to coordinate decisions in this regard among various proceedings, including R.11-10-023 (RA), in Section VII.B. below.

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

Because the CAISO's studies failed to properly include or reflect the availability of preferred resources to reduce LCR need through 2021, as discussed above, the Commission should not direct SCE to issue an RFO for the entire CAISO-identified LCR need of 2,370 MW of "effective" capacity resources in the LA Basin. If no study revisions are required in response, the Commission should only approve a portion of the LCR need for the LA Basin until the next LTPP cycle (2014) in which the study assumptions can and should be corrected to include growth assumptions for preferred resources. With respect to *procurement* to meet that reduced need, such procurement should only be authorized or commenced *after the Commission* has adopted eligibility criteria for, and identified the amount of, flexible capacity resources to meet that need. In developing that eligibility criteria, the Commission should make every effort to

[67] Id., at pp. II-4 - II-6.
[68] Ex. ISO-4, at pp. 6-7 of 9 (CAISO (Rothleder)).

encourage development of preferred resources to meet, or exceed, the targeted MW quantity, keeping in mind that some DR resources will go toward both reducing and meeting that need.

Given the acknowledged uncertainties regarding the CAISO LCR studies, SCE's response has been to ask for "flexibility" in conducting its LCR procurement. However, SCE's testimony has provided very little detail in terms of how they would evaluate preferred resources relative to thermal resources, especially in light of their apparent dismissive consideration of DR resources for meeting the LCR need. For example, SCE witness Silsbee testified that he was not sure how preferred resources would be considered.[69] The Commission should not transfer oversight of its preferred Loading Order implementation to an ill-defined, internal process over which no third party would have visibility, or a discretionary exercise by SCE, the results of which will not be known until SCE submits an application for approval of resources it has already selected. [70] Instead, the Commission, again, should first define and adopt the eligibility criteria that will apply to resources bidding to meet this need before any RFO or bilateral contracting is authorized for SCE.

D. Appropriate Method(s) of Procurement.

An RFO is the most appropriate method for procurement for thermal generation resources, to ensure that the most competitive result is obtained. However, *if* the Commission adopts the CAISO's recommendation that resources eligible for such procurement must have specific "flexible attributes" or "operating characteristics," it is incumbent that *the Commission* define these attributes *first*. Although the definition of those characteristics has been discussed in the context of R.11-10-023, the Resource Adequacy Docket, *no decision* defining those attributes has been issued by the Commission. It is unclear, at this point, the amount of capacity resources

[69] RT at 1077 (SCE (Silsbee)).
[70] RT at 610-611 (SCE (Cushnie)).

within an LCA that would need to possess flexible capacity attributes or operating characteristics, and it is also unclear if those attributes or characteristics are the same in the context of a RA requirement as they are for a long-term resource procurement.

The Commission may wish to determine the flexible operating characteristics it would like demand resources, or other resources, to provide, taking into account that DR resources are not generation resources. The Commission must also determine if all resources need to have these flexible operating characteristics, and if not, what amount or what proportion of the total resource base should demonstrate these characteristics. It will also be important to identify whether the flexible operating characteristics allow the CAISO to respond to contingency events. While it was apparent from the testimony of Mr. Millar that he expected DR to be able to respond to contingency events, it is not clear to EnerNOC that all resources must also demonstrate that ability.[71] If not, however, EnerNOC remains concerned that the bar is being raised higher for preferred resource participation in an LCR procurement process than for conventional generation resources.

EnerNOC also does not agree with CAISO witness Millar that the RFO parameters can be determined within the RFO process as the RFO is being conducted.[72] That proposal means the parameters of the RFO are a moving target and difficult for any meaningful bidder to assess. Bid parameters or eligibility criteria need to be known in advance of the RFO to give all potential bidders the same opportunity to provide responses, with all bidders having the same information as to the types of products being sought. Only once those parameters are defined can RFOs be issued for meeting an LCR need. It, therefore, remains EnerNOC's strong recommendation that this Commission first define those parameters or criteria *before* authorizing

[71] RT at 358 (CAISO (Millar)); RT at 604-605, 607-610 (SCE (Cushnie)); RT at 296, 298 (CAISO (Rothleder)).
[72] RT at 355 (CAISO (Millar)).

any LCR procurement and ensure that that criteria considers the growing capabilities of DR, including access to enabling technologies, along with appropriate incentives to encourage customer participation.

E. Timing of Procurement.

Building in adequate lead time is of greatest importance as it relates to fossil generation, due to the time necessary to permit and build these facilities.[73] As stated, earlier, the Commission should not, however, give the utilities carte blanche to procure up to the LCR need identified by CAISO. Since the CAISO did not include uncommitted EE, CHP, storage or DR, the Commission should first determine how incorporation of these preferred resources would affect the overall need so as not to result in the development of thermal resources in excess of need. EnerNOC recommends adjusting the LCR need by projections for growth of preferred resources within the LCA, or, in the alternative, to authorize only a portion of the need identified by the CAISO and to require the CAISO to modify its study assumptions to include preferred resources for the next LTPP cycle (2014).

In this regard, it is important to note that demand resources do not require the same amount of "lead time" that conventional, gas-fired generation resources require. They can be brought on line much more quickly, so long as the product specifications are known and the incentives are appropriate. In fact, a shorter leading timeframe for development of generation resources in the Big Creek/Ventura area was a basis for SCE asking that any LCR need in that area be deferred.[74] As such, the Commission, the CAISO, the IOUs, and the parties should, in the interim, work to develop DR resources that are responsive to the LCR need.

[73] RT at 113-114 (CAISO (Sparks)).
[74] Ex. SCE-1, at pp. 10-11 (SCE (Minick)).

In addition, since DR services are evolving as a result of changes in the market, changes in technology, and changes in product specification, it makes sense to issue RFOs for DR resources as the exact program and product definitions become crystallized. Given, again, the shorter time frame for "development," EnerNOC recommends issuing a separate RFO for DR resources to meet or reduce a portion of the LCR need so as to reduce the need by 2018-2021. It does not make sense to issue an RFO for DR services today, as part of an all-source RFO, if those services will not realistically be needed for another 5 or more years. The issuance of a long lead-time RFO is only necessary for resources that require that lead time to come on line, like thermal resources. However, it does make sense to develop DR resources in the interim so as to realize a reduction in the LCR need by 2018-2021.

V.
INCORPORATION OF FLEXIBLE CAPACITY ATTRIBUTES IN LCR PROCUREMENT

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

The previous sections of this brief reflect the shortcomings in the CAISO's assessment of LCR need in the LA Basin area and its recommendations on how that need should be met. Again, it is CAISO's recommendation that, among other things, any "replacement OTC generation" to meet an identified LCR need "should have flexibility characteristics similar to the OTC generation."[75] Imposing this requirement on resources being bid or procured to meet an LCR need, however, is *not* appropriate unless and until *this Commission* has defined and adopted the criteria that will be used by jurisdictional utilities in soliciting such resources. That step simply has not been taken by this Commission in any formal decision.

[75] Ex. ISO-1, at p. 17 of 17 (CAISO (Sparks)).

Further, the Commission cannot assume that every MW identified as needed in the LCA must possess those attributes. In this regard, SCE witness Minick testified:

> "In reality, an LCR resource doesn't need to have flexibility. They could be a baseload resource at a certain location and meet LCR requirements. But, it would be very nice from an operational perspective to have flexibility."[76]

Thus, flexibility may not be a condition precedent for every resource that meets the LCR need.

While defining these terms upfront in advance of an LCR RFO will be critical, the Commission should not adopt the rather vague and sweeping definition of flexibility or operating characteristics used by CAISO witness Rothleder for that purpose.[77] In this regard, Mr. Rothleder testified that flexible resources should "provide dispatch flexibility between minimum and maximum operating level[s]…can be used to respond to quick changes in load and variations of generation from renewable resources…can provide ancillary services…have inertia or governor control to respond to changes in frequency and a faster start, to respond more quickly when needed."[78] Additionally, according to Mr. Rothleder, LCR resources would also need to meet other attributes of flexible conventional generation including "voltage support, flexibility, frequency response, sustained energy supply, reliable responsiveness, no significant use limitations and the ability to provide energy regulation, operating reserves and load following."[79]

However, later, Mr. Rothleder clarified that "voltage support" is an operational characteristic, not a flexible characteristic and that, in fact, "you can put together packages of resources that meet the combination of needs," as opposed to requiring each flexible resource to meet every flexibility requirement.[80] SCE witness Cushnie agreed and testified that "certain

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[76] RT at 972, 973 (SCE (Minick)).
[77] Ex ISO-4, at pp. 8 and 9 of 9 (CAISO (Millar)).
[78] Id.
[79] Ex. ISO-4, at p. 9 (CAISO (Rothleder)).
[80] RT at 296, 298 (CAISO (Rothleder)).

resources that don't have all of those flexibility attributes can be partially effective in meeting an LCR need."[81]

Despite these concessions, CAISO witness Millar nevertheless continued to insist that a DR resource would need to provide ***ALL*** of the "attributes" and operating characteristics identified by Mr. Rothleder to be of value in meeting the local need.[82] Mr. Millar did agree, however, that it was "theoretically possible" that non-DR generation resources could be "freed up" by calling upon DR resources to meet a contingency event.[83] In that instance, DR is providing a benefit by reducing the amount of incremental capacity with flexible attributes that may be needed.

The testimony of the CAISO and utility witnesses underscore the extreme importance of *this Commission* deciding and bringing clarity, with reference to this record, the record in R.11-10-023, and even the pending comments in response to the September 14 ALJ's Ruling, as to the meaning of these terms and their applicability in any LCR RFO. It is critical that flexible capacity attributes be defined, explicitly, before the procurement process commences.

In this regard, EnerNOC witness Hoffman provided examples of DR resources that provide several of the operational characteristics that would conform to the description of flexibility provided by Mr. Rothleder.[84] For example, DR can respond quickly to changes in load and variations in generation. Many of the services described by Mr. Hoffman respond within 10 minutes or less, including the provision of ancillary services.[85] Notably, the provision

[81] RT at 608 (CAISO (Cushnie)).
[82] RT at 434, 440 (CAISO (Millar)).
[83] RT at 425 (CAISO (Millar)).
[84] See, Ex. EnerNOC-2 (EnerNOC (Hoffman)).
[85] Ex. EnerNOC-2, at pp. II-1, II-2, II-4, II-5, and II-6 (EnerNOC (Hoffman)).

of ancillary services is also an option for DR resources to provide in CAISO's markets, as a non-spinning reserve.[86] This service also requires a 10-minute response.

Mr. Hoffman also testified that some of the DR services respond nearly instantaneously. For example, DR is providing frequency response in Alberta, Canada, and the Electric Reliability Council of Texas (ERCOT) and New Zealand and sub-10-minute load following response pilots in the Bonneville Power Administration's (BPA's) service territory.[87] Admittedly, DR does have certain use limitations, but it also has the capability to contribute to meeting several of the described attributes of a flexible resource and, as even the CAISO and SCE witnesses admitted, could certainly be effective toward meeting the overall LCR need.

Clearly, the Commission must require that any determination of LCR need must incorporate growth in preferred resources over the planning period. Priority resources should not be considered or procured as an afterthought. It is EnerNOC's position that DR can meet a portion of the flexibility needs identified by the CAISO. As stated in the testimony of EnerNOC witness Andrew Hoffman, demand response resources are not only capable of providing a flexible resource over the planning period at issue here (through 2021), but, in fact, are already delivering services that would meet some aspects of the CAISO's flexible capacity definition in many markets in the United States and abroad.[88] Again, while the DR resources noted above *that are already in operation* would be responsive to some of the operating characteristics that the CAISO has associated with flexible capacity requirements, demand response products and technologies are evolving. This evolution has been accelerated by progressive policies in markets like PJM and will continue to accelerate as products are developed and technology is available for accessing and communicating data.

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[86] Id., at p. II-2.
[87] Id., at pp. II-3, II-6 – II-9.
[88] See, Ex. EnerNOC-2 (EnerNOC (Hoffman)).

The potential to provide similar services exists in California, if certain barriers are removed, such as relaxing the Western Electric Coordinating Council's (WECC's) current limitation for DR providing synchronized (spinning) reserve services and resolving metering and data communication issues with CAISO. Once the regulatory barriers are removed, development of high value, more flexible DR resources could be realized in California. It is unreasonable to assume, as CAISO's witness Millar did, that the products could not be delivered similarly in California.[89] Mr. Hoffman noted customer verticals that are participating in the BPA pilot and are ideal candidates to deliver flexible demand-side resources "also represent significant sources of load in California."[90] In these circumstances, excluding DR resource contributions toward reducing *and* meeting the LCR need, today and in the future, will only result in procurement of thermal resources in excess of what is necessary to maintain local reliability.

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

EnerNOC's proposed approach to determining eligibility in a LCR procurement is addressed above. As to other "rules" that might apply, EnerNOC reserves the right to respond to the Opening Briefs of other parties on that issue in its Reply Brief.

VI.
COST ALLOCATION MECHANISM (CAM)

Issues related to the proposed allocation of costs of needed LCR resources were addressed by several parties. EnerNOC reserves the right to respond to the Opening Briefs of other parties on these issues in its Reply Brief.

[89] RT at 351-352 (CAISO (Millar)).
[90] Ex. EnerNOC-2, at p. II-9 (EnerNOC (Hoffman)).

VII.
OTHER ISSUES

A. SCE Capital Structure Proposal.

Similarly, EnerNOC does not have an initial position on SCE's capital structure proposal. However, EnerNOC again reserves the right to respond to the Opening Briefs of other parties on 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.

It is important for the Commission to recognize that the record in this proceeding will provide some, but not all, of the answers and direction it needs in terms of defining and meeting an LCR need. While CAISO's testimony recommended that LCR resources be "flexible" and capable of responding to contingency events, it does not provide the kind of guidance and definitions required to determine how much or what kind of flexible capacity resources are required. The Commission cannot assume that all resource additions have to include flexible characteristics, as stated by SCE's witness Minick. But, what exactly is meant by flexibility is not yet defined. That definition, and the potential establishment of a flexible resource adequacy requirement, may be addressed by the end of the year in the Resource Adequacy Docket (R.11-10-023), but it is not clear that such terms, applicable to an annual RA requirement, will or should have the same meaning as a long-term LCR procurement.

It is, therefore, imperative that the Commission undertake to decide these key definitional issues for both RA and LTPP purposes in a single decision that applies uniformly to all of the utilities. Further, no LCR solicitation by any utility, either SCE or SDG&E, should be authorized unless and until this guidance and definitions are provided by the Commission and the Commission ensures that such RFOs will include the appropriate eligibility criteria. Anything

less will only inject uncertainty in the market, diminish competition, and even limit the role that could and should be played by preferred resources in meeting any LCR need. EnerNOC further strongly recommends coordination between the affected proceedings (R.12-03-014, R.11-10-023, and A.11-05-023) in the Commission reaching this important decision.

C. SCE Statewide Cost Allocation Proposal.

EnerNOC reserves the right to respond to the Opening Briefs of other parties on this issue in its Reply Brief.

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

Clearly, all stakeholders should encourage and support CAISO compliance with federal reliability requirements. The question, however, is how best to ensure that CAISO has access to adequate reserve levels, consistent with federal reliability requirements.

It is EnerNOC's position that the best means of meeting these requirements is through market mechanisms. Are the signals being sent for the products that are needed in the location and at the time they are needed? If not, as is being proposed in the RA Docket (R.11-10-023), is there a requirement for load-serving entities (LSEs) to secure a certain amount of resources, including reserves, to meet their requirement? If not, then the CAISO has a role to perform by providing a backstop procurement service to ensure it has met the federal reliability requirements.

Starting with the CAISO providing a backstop procurement is not optimal since the CAISO is not subject to this Commission's regulatory authority, and it does not have the same policy and legal mandates as the Commission, including ensuring that utility electric service is provided at just and reasonable rates, implementing the preferred Loading Order, and achieving the State's GHG and RPS laws. Instead, the CAISO's central mandate is maintenance of system

reliability. In fulfilling that responsibility, it is not clear that the reserve margin that CAISO would seek to not only meet, but exceed, federal requirements is optimal or appropriate, especially in terms of potential excess costs being imposed on California ratepayers or on resource mix. Thus, if these reserves are purchased on a spot market basis, is the CAISO paying a premium for those reserves? These concerns should bear on the Commission at least encouraging the CAISO to minimize its utilization of backstop procurement.

E. Energy Storage

EnerNOC reserves the right to respond to the Opening Briefs of other parties on this issue in its Reply Brief.

VIII.
CONCLUSION

Given the extensive record developed in this Local Reliability Track 1 over 9 days of evidentiary hearing, with the participation of a wide group of affected stakeholders, there can be no doubt that the issues of establishing a long-term LCR need and identifying the resources that can meet that need are critically important and, in this case, will be precedent-setting. It is imperative that the Commission resolve these issues by weighing this factual record and resolving these issues in a manner that is consistent with applicable policy and law, especially adherence to the Loading Order, and that results in orders that are coordinated among other affected proceedings, especially to reach clear and transparent guidance on the resources and timing of procurement to meet this need.

EnerNOC has actively participated in this proceeding to provide the unique and expert perspective of witnesses directly involved in the growing Demand Response industry today. The facts regarding the growth and near-term capabilities of DR, a preferred resource in the Loading Order, must be accounted for in the Commission's assessment of any LCR need or related LCR

procurement authorization for SCE. The record here makes clear that DR is today capable of reducing *and* meeting LCR need and that capability will certainly expand during the long lead time before any OTC retirement takes place in the LA Basin. For these reasons, EnerNOC again urges the Commission to adopt its recommendations summarized in the Summary of Recommendations and Section I. Executive Summary of this brief in its final decision in this Track 1.

Respectfully submitted,

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