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)

REPLY BRIEF OF THE INDEPENDENT ENERGY PRODUCERS ASSOCIATION ON TRACK 4 ISSUES

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The Independent Energy Producers Association (IEP) submits this reply brief on Track 4 issues. In responding to arguments presented in parties' opening briefs, IEP generally follows the structure suggested by the list of issues in Administrative Law Judge David Gamson's instructions for Track 4 briefs circulated on November 4, 2013.

The arguments presented the parties' opening brief require IEP to reiterate the grounds for IEP's primary recommendations:

- The Commission should authorize an interim, "no regrets" procurement of at least 706 MW for Southern California Edison Company (SCE) as part of its existing Track 1 solicitation and at least 820 MW for San Diego Gas & Electric Company (SDG&E).
- The Commission should authorize a supplemental procurement, as appropriate, after considering the results of the Transmission Planning Process of the California Independent System Operator (CAISO), the results of SCE's Track 1 solicitation, and the Commission's decision in

Application (A.) 13-06-015, SDG&E's request to enter into a power purchase agreement with the 300 MW Pio Pico project.

- All-source solicitations open to all technologies that can reliably provide the services needed to maintain local grid reliability should be the primary vehicles for procurement of resources authorized in Track 4.
- The Commission should maintain its commitment to ensuring grid reliability and should not be swayed by parties who advocate manipulation of planning assumptions to ensure that the modeling arrives at predetermined outcomes.

I. THE COMMISSION SHOULD AUTHORIZE AN IMMEDIATE INTERIM PROCUREMENT OF ADDITIONAL LOCAL RELIABILITY RESOURCES

An interim, no regrets procurement for both SCE and SDG&E is needed to maintain grid reliability in the local reliability areas that constitute the San Onofre Nuclear Generating Station (SONGS) study area over the 2012-2022 planning horizon.

A. The Importance of Maintaining Reliability

The Legislature has described reliable electric service as "of utmost importance to the safety, health, and welfare of the state's citizenry and economy"[1] and "of paramount importance to the safety, health, and comfort of the people of California."[2] The Legislature created the CAISO to ensure "the reliability of electric service"[3] and "the reliable operation of the transmission grid."[4] The Legislature requires the Commission to ensure that "the facilities

[1] California Public Utilities Code § 330(g). Unless indicated otherwise, all statutory references in this brief are to the Public Utilities Code.
[2] § 334.
[3] § 345.5(b).
[4] § 345; see § 398.2(b).

needed to maintain the reliability of the electric supply remain available and operational" when it considers out-of-service facilities, sales of utility assets, or mergers involving public utilities.[5]

In Track 4, some parties have advocated that the Commission should take a new approach to procurement that would intentionally increase the risk of blackouts (or, more euphemistically, "load shedding"). On the other hand, the three entities—other than the Commission[6]—with the greatest responsibility for maintaining the reliability of electric service in the SONGS study area agree that the Commission should immediately authorize a modest, no regrets interim procurement to help ensure that reliable electric service can continue to be provided to consumers. For the reasons presented in IEP's briefs, supported by the evidence in this proceeding, the Commission should continue to take prudent actions to maintain the reliability of the electric grid.

1. The CAISO: Interim Procurement Is an Urgent First Step

The CAISO, faced with the challenges created by the sudden loss of SONGS Units 2 and 3 and looming retirements of generating facilities in response to the once-through cooling (OTC) requirements imposed by the State Water Resources Control Board, describes an interim, no regrets procurement as an "urgent first step" toward long-term reliability.[7] The CAISO's Track 4 study revealed a "substantial local resource need" beginning in 2018[8] and a residual resource need in 2022 ranging from 1222 MW to 1922 MW in the Los Angeles (LA) Basin and from 612 MW to 1177 MW for San Diego.[9]

The CAISO urges the Commission to take the reasonable step of authorizing an interim procurement in the amounts requested by SCE (500 MW) and SDG&E (500-550 MW).

[5] § 362(a).
[6] The Commission has recently reiterated the importance of reliability in Rulemaking 13-11-006, which was instituted to develop a framework for integrate safety and reliability improvements into the general rate case plan.
[7] CAISO Opening Brief, pp. 2-3.
[8] CAISO Opening Brief, p. 9.
[9] CAISO Opening Brief, pp. 10-12.

The CAISO considers these amounts to be a no regrets authorization, *i.e.,* the minimum needed to preserve reliability and the minimum that the Commission should authorize regardless of the outcome of future developments like the release of information about transmission projects approved in the TPP.

2. SCE: Take Prompt Action to Authorize Procurement of 500 MW

SCE performed its own power flow studies to assess the local capacity need in the SONGS study area. SCE's study used the reliability standards of the North American Electric Reliability Corporation (NERC), rather than the more stringent CAISO reliability standards. Despite the use of different reliability standards in the analyses, SCE's and the CAISO's studies reached similar results. The CAISO found an overall need for additional generation in the LA Basin of 3722 MW in 2022, while SCE found an overall need of 2802 MW. Both studies concluded that there is an immediate need to procure about 500 MW of additional resources.[10] SCE concluded:

> The closure of the OTC facilities, including SONGS, creates serious reliability issues for the electric grid in the LA Basin and in SDG&E's service area. SCE urges the Commission to start taking action now to address these reliability concerns through procurement of new LCR [Local Capacity Requirement] resources.[11]

SCE agrees with the CAISO that the Commission should authorize SCE to procure 500 MW "now as a matter of urgency."[12]

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[10] SCE Opening Brief, p. 5.
[11] SCE Opening Brief, p. 2.
[12] SCE Opening Brief, p. 6.

3. SDG&E: Move Forward Now to Authorize Procurement of 500 to 550 MW

SDG&E and SCE performed technical studies of the local capacity needs of San Diego and the Western LA Basin even before Track 4 was initiated. The results of those studies fell within the range identified in the CAISO's studies.[13]

The need the studies identified for the San Diego subarea in 2022 was between 620 MW and 1470 MW, after accounting for 408 MW of preferred resources that SDG&E intends to aggressively pursue. SDG&E also proposes to reserve 70-120 MW for procurement of demand response or energy storage. SDG&E seeks authorization to procure the remaining 500-550 MW, which could include long lead time resources, in an interim solicitation.[14]

Because of the long lead times required to permit and construct some types of resources, SDG&E ask the Commission to authorize an interim procurement of 500-550 MW "as soon as is feasible."[15]

4. Other Parties Agree that an Interim, No Regrets Procurement Is a Prudent Step Required to Maintain Reliability

Other parties also conclude that the Commission should help ensure reliable electric service by authorizing an interim procurement in at least the amounts SCE and SDG&E request.

The Utility Reform Network (TURN), for example, recommends an interim procurement in the amounts requested by SCE and SDG&E "because the evidence in the record shows that substantial new investments in resources will quite likely be necessary within the next

[13] SDG&E Opening Brief, p. 6.
[14] SDG&E Opening Brief, pp. 7-9.
[15] SDG&E Opening Brief, p. 5.

decade to maintain reliable electric service in the two [local reliability areas] and that procurement of such resources should thus begin as soon as reasonably possible."[16]

NRG Energy, Inc. (NRG) concludes that it is prudent for the Commission to authorize an interim procurement of at least 500 MW for SCE and 820 MW for SDG&E.[17] This procurement should occur "sooner rather than later" because of the impending retirement of units subject to OTC requirements.[18] NRG also notes that authorizing procurement now will allow SCE and SDG&E to take advantage of opportunities to repower existing coastal generation facilities and to make use of their existing infrastructure and effective location in load centers.[19]

Based on SCE's need calculation, AES Southland LLC (AES) recommends that the Commission should authorize SCE to procure an additional 1440 MW of generation in the LA Basin as part of its ongoing Track 1 solicitation.[20] Like NRG, AES notes that quick action by the Commission will make it possible for SCE to take advantage of existing coastal sites of plants subject to OTC regulations, which may be the most cost-effective way to meet reliability needs in the LA Basin.[21]

The California Energy Storage Alliance (CESA) agrees that additional resources are needed to replace the capacity of SONGS and the retiring OTC units, and accordingly CESA urges the Commission "to immediately authorize additional procurement by SCE and SDG&E to ensure that local reliability needs in the Los Angeles Basin and SDG&E local areas are met despite the retirement of SONGS."[22]

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[16] TURN Opening Brief, p. 2.
[17] NRG Opening Brief, p. 20.
[18] NRG Opening Brief, p. 2.
[19] NRG Opening Brief, pp. 2-3.
[20] AES Opening Brief, p. 5.
[21] AES Opening Brief, p. 17.
[22] CESA Opening Brief, p. 6.

B. Postponing Needed Procurement Undermines Reliability

Several parties assert that the Commission can postpone procurement of resources needed for local reliability in the SONGS study area without significant consequences[23] or that new technologies will somehow emerge that will meet or eliminate the need for additional reliability resources. These assertions are based on false premises, wishful thinking, or both, and the Commission should not base its decision on such a shaky foundation. Postponing the procurement of needed resources increases the risk that insufficient local reliability resources will be available when and where they are needed in the future to avoid blackouts.

The arguments in favor of delaying procurement to meet local reliability needs take several forms, as discussed in the following sections.

1. Revising Assumptions to Arrive at Predetermined Conclusions

a. Revising Assumptions at this Late Date Creates a Procedural Dilemma

The current process for statewide electricity planning involves the coordination of key decisions by three entities. The California Energy Commission (CEC) prepares its Integrated Energy Policy Report (IEPR), which among other things forecasts the need for electricity in coming years. The CAISO conducts its Transmission Planning Process (TPP) to identify transmission projects and upgrades that are needed in future years (and that can greatly affect the need for local reliability resources). The Commission reviews the information provided by the IEPR and the TPP in its long-term procurement plan (LTPP) proceeding and authorizes investor-owned utilities to procure resources accordingly.

Ideally, the results of the IEPR and the TPP are available for the determination of the need for system and local resources in the LTPP. In addition, this process works best when

[23] *E.g.*, CEERT Opening Brief, pp. 19-20, 35-36.

the three entities work from a common set of assumptions, so that results are comparable. Because this process is sequential, the Commission must by necessity adopt a procurement plan based on a consistent set of assumptions, even as new studies are underway that might revise or alter those assumptions.

In this proceeding, the Commission continued "the process of developing assumptions and scenarios first, and then conducting the analysis in this LTPP proceeding."[24] In Decision (D.) 12-12-010, the Commission adopted the assumptions and scenarios to be used in Track 2 analyses and formally asked the CAISO to use these scenarios and assumptions in its modeling of operational flexibility, which was to be submitted as part of Track 2.[25]

The Revised Scoping Ruling and Memo of the Assigned Commissioner and Administrative Law Judge, issued on May 21, 2013 (Revised Scoping Memo) added a Track 4 to this proceeding and specified the assumptions to be used to study the local reliability needs of the SONGS study area. Accordingly, the assumptions presented in the Revised Scoping Memo formed the foundation for Track 4, and the studies performed by the CAISO, SCE, and SDG&E were based on the assumptions specified in the Revised Scoping Memo.

At the prehearing conference on September 4, 2013, the Administrative Law Judge posed a series of questions for parties to answer either in written comments or in testimony. One of the questions asked whether updates to any assumptions should be considered. Depending on the Commission's response to the proposed changes presented in response to this question, this question may have created a procedural dilemma. At this point, the Revised Scoping Memo has not been superseded by other ruling or Commission decision. The parties are still under the direction of the Revised Scoping Memo to use the assumptions

[24] D.12-12-010, p. 2.
[25] D.12-12-010, pp. 1, 9, 12-13.

specified there, and the evidentiary record has been constructed based on those assumptions. If the assumptions are changed in the Proposed Decision or in the Commission's Track 4 decision, the parties will have no opportunity to reflect the revised assumptions in the modeling that forms the basis for the determination of need in Track 4. Altering the study results to reflect only certain changes, without any opportunity to perform studies or modeling to reveal the full implications of those changes, risks producing inconsistent and unsupportable results.

For that reason, IEP respectfully urges the Commission to base the Track 4 decision on the results of the studies that used the assumptions and scenarios of the Revised Scoping Memo, as instructed.

b. Piecemeal Revision of Assumptions Leads to Inconsistent, Unsupportable Results

In response to the questions posed by the Administrative Law Judge at the September 4, 2013 prehearing conference, several parties propose to alter selected assumptions specified in the Revised Scoping Memo. Even though the Revised Scoping Memo had set forth "the assumptions to be used for considering the impacts of interim and long-term local reliability needs in the Los Angeles Basin local area and San Diego sub-area resulting from an extended SONGS outage,"[26] these parties argue that the need for additional resources to assure local reliability shown in the studies of the CAISO, SCE, and SDG&E could somehow be avoided if only some of the assumptions of the study could be altered.

In addition to the procedural dilemma discussed above, the problem with making piecemeal revisions to the assumptions of the Revised Scoping Memo is that the outcome of any modeling effort or study can be manipulated by changing certain selected assumptions. The fallacy of these parties' recommendations is the belief that tampering with the assumptions and

[26] Revised Scoping Memo, p. 6.

changing the results of the modeling somehow negates or eliminates the real-world need for additional resources to ensure reliability. The goal of Track 4, and the intent of the Revised Scoping Memo, is to arrive at the best possible forecast of the need for additional resources over the 10-year planning horizon using a reasonable and *internally consistent* set of assumptions. Tinkering with the study assumptions to arrive at predetermined outcomes is more advocacy than analysis, and risks obscuring the real need for resources required to maintain reliable electric service to consumers.

2. The Energy Storage Decision

Sierra Club asserts that the decision in Track 4 should take into account procurement of 745 MW of energy storage in SDG&E's and SCE's territories by 2020, which Sierra Club contends is required by D.13-10-040, the energy storage decision. The California Environmental Justice Alliance (CEJA) makes a similar argument for including 612 MW of storage.[27] However, Sierra Club and CEJA gloss over several basic flaws in their arguments.

- D.13-10-040 established storage procurement targets "to encourage the development and deployment of new energy storage technologies."[28] Because the target storage technologies are new, the Commission allowed for deferral of up to 80% of storage goals in recognition of the fact that storage proposals might not be "economically or operationally viable."[29] Thus, at this point the contribution of storage resources toward meeting local reliability needs in the near future, while promising, is uncertain.
- D.13-10-040 requires the utilities to make procurement decisions about energy storage resources by 2020, but the actual storage installations do

[27] CEJA Opening Brief, pp. 34-39.
[28] D.13-10-040, pp. 22-23.
[29] D.13-10-040, p. 42.

not need to be complete until the end of 2024—two years after the planning horizon considered in Track 4.

- Not all energy storage technologies can meet the requirements of local Resource Adequacy (RA) capacity.
- D.13-10-040 does not require SCE or SDG&E to procure storage resources within the SONGS study area or even within their own service areas. Storage located in Northern California can meet the goals of D.13-10-040 but contribute nothing toward the local reliability requirements for the SONGS study area. Even within the SONGS study area, the effectiveness of energy storage in meeting local reliability needs is highly dependent on the location of the storage facility. Even if SCE and SDG&E are successful in procuring 745 MW of energy storage in their service areas, there is no assurance that the procured storage will just happen to be sited at the most effective locations.

Energy storage includes a range of technologies that promise to provide cost-effective capacity and load-following services to help maintain local grid reliability. The Commission has directed the utilities to conduct a series of solicitations beginning in 2014 and continuing through 2020 to procure 1325 MW of storage, to be fully installed by the end of 2024. These targeted storage procurements over time will provide an appropriate means to ascertain the locational benefits of storage. Furthermore, all-source solicitations to meet local reliability needs will provide additional market opportunities to test the locational benefits of storage. In the absence of empirical evidence of the commercial viability of storage resources to meet the operational needs in the local area, however, the Commission should not assume that

storage resources are presently capable of replacing SONGS at the scope recommended by some parties.

3. Demand Response

Several parties, including Sierra Club, CEJA, and the Natural Resources Defense Council (NRDC), continue to contend that the CAISO's studies failed to account for 997 MW of demand response (DR) that the Revised Scoping Memo included as a "Second Contingency" assumption.[30]

The CAISO has patiently explained how its modeling followed the instructions of the Revised Scoping Memo. According to the definitions of the Revised Scoping Memo, "fast" DR resources can respond to dispatch instructions in 30 minutes or less,[31] and the CAISO modeled the 189 MW of First Contingency DR accordingly, as the Revised Scoping Memo instructed.[32] Consistent with the instructions of the Revised Scoping Memo, the 997 MW of Second Contingency DR was not available to *avoid* the second contingency, but would be available to *respond to* the second contingency. The CAISO's modeling followed the Revised Scoping Memo's instructions, which reasonably reflected the operating and performance characteristics of Second Contingency DR resources.

Sierra Club and CEJA argue that the modeling should have reduced demand by the 977 MW of Second Contingency DR (NRDC calculates that the CAISO should have modeled 808 MW of additional DR). That approach, however, would impute a performance to the Second Contingency DR resources (*i.e.,* an ability to respond in 30 minutes or less) that they could not achieve and would expose the grid to shortfalls at the exact time when it is in the greatest need of reliable resources.

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[30] Sierra Club Opening Brief, pp. 8-11; CEJA Opening Brief, pp. 41-43; NRDC Opening Brief, pp. 9-11.
[31] Revised Scoping Memo, Attachment A, p. 5, fn.11.
[32] Revised Scoping Memo, Attachment A, pp. 5, 6.

4. Customer-side Photovoltaic Installations

Sierra Club and CEJA similarly fault the CAISO for modeling customer-side photovoltaic installations in the way the Revised Scoping Memo specified.[33] These parties argue that the CAISO failed to recognize a total of 616 MW of these resources with a Net Qualifying Capacity of 278 MW.

Again, the CAISO followed the instructions of the Revised Scoping Memo: "The location where customer-side PV will be built is difficult to predict, therefore the capacity amounts described here will be modeled as 'Second Contingency' resources."[34] That is what the CAISO did.[35]

5. Low-level Versus Mid-level Incremental Energy Efficiency for SDG&E

NRDC asserts that the Revised Scoping Memo "mistakenly assumed that SDG&E's local area was different from its service territory area."[36] On that basis, NRDC recommends a reduction of demand in SDG&E's local area by 152 MW.

NRDC is wrong. The Revised Scoping Memo used the low level or incremental energy efficiency savings for the Track 4 assumption, rather than the mid-level of savings, because "[f]uture energy efficiency programs are generally not crafted to specific locations."[37] Even within the local reliability areas, the effectiveness of energy efficiency resources in reducing local reliability needs is highly dependent on the location where they are installed.

Contrary to NRDC's assertion, the Revised Scoping Memo recognizes that SDG&E's service area and local reliability area are identical. This is clearly shown in the table

[33] Sierra Club Opening Brief, pp. 8-11.
[34] Revised Scoping Memo, Attachment A, p. 10.
[35] CAISO Opening Brief, pp. 14-15.
[36] NRDC Opening Brief, p. 7.
[37] Revised Scoping memo, Attachment A, p. 4.

designating the assumptions for the low level of incremental energy efficiency savings.[38] The figures for the "IOU Area" and "Study Area" for SDG&E are identical (and, by contrast, the table shows lower values for SCE's study area (*i.e.,* the LA Basin) than for the SCE area), and those were the assumptions the CAISO correctly used in its modeling.

6. Selective Updating of Energy Efficiency and Demand Assumptions

NRDC and CEJA also urge the Commission to increase the amount of uncommitted energy efficiency included in the demand forecast by 157 MW to reflect information being considered in connection with the development of the 2013 Integrated Energy Policy Report at the CEC.[39] Similarly, CEJA recommends using the demand forecast developed by the CEC staff in September 2013.[40]

In addition to the arguments against these updates presented in IEP's Opening Brief (pp. 21-24) (*i.e.,* changing only selected assumptions distorts the results, the potential to delay this proceeding, uncertainty about uncommitted resources, uncertainty about location and effectiveness), IEP notes that the Administrative Law Judge in the new energy efficiency rulemaking, R.13-11-005, has requested comments on the results of the study that is the basis for NRDC's and CEJA's proposed updates.[41] If the Commission is receiving comments on the CEC's staff draft, presumably it has not already decided to endorse the numbers in the draft. The Commission should not be pressured to adopt selective updates that are still under consideration by the Commission.

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[38] Revised Scoping Memo, Attachment A, p. 4.
[39] NRDC Opening Brief, pp. 6-7; CEJA Opening Brief, pp. 22-26.
[40] CEJA Opening Brief, pp. 17-22.
[41] Administrative Law Judge's Ruling Regarding Post-2014 Energy Efficiency Goals, issued on Nov. 26, 2013 in R.13-11-005.

7. Proposals to Delay Procurement to Allow Specific Technologies to Mature

Several parties' arguments boil down to assertions that the Commission should postpone procurement so that a specific technology or set of technologies can mature, emerge, or become cost-effective. These arguments take several forms:

- **Delay is required by the loading order.** Some parties claim that the Commission should rely solely on "preferred resources" to meet any identified need.[42] If preferred resources are not capable of responding as required to maintain local reliability, then (according to these parties) the Commission should delay procurement of conventional resources (ignoring that the loading order includes "clean and efficient fossil-fired generation") and order the utilities to frame their procurement efforts in a way that selects the preferred resources needed for reliability. In other words, these parties assert that the Commission should force the utilities to find preferred resources that can provide the capacity needed for local reliability; the utilities will accordingly find the needed preferred resources, apparently without regard to cost or feasibility.

  However, neither the relevant statutes nor the Energy Action Plan requires exclusive reliance on preferred resources. Public Utilities Code section 454.5(b)(9)(C) requires a utility to prepare a procurement plan that proposes to fill unmet need with "available energy efficiency and demand reduction resources that are *cost effective, reliable, and feasible.*" (Emphasis added.) Similarly, Energy Action Plan II, which elaborated on

[42] *E.g.*, Sierra Club Opening Brief, pp. 26-27; CEJA Opening Brief, p. vii (alternate recommendation); EDF Opening Brief, pp. 5, 7.

the loading order outlined in the initial Energy Action Plan, refers to procurement of "cost-effective" preferred resources.[43] The best way to determine which preferred resources are cost effective is to allow preferred resources to compete on a fair basis with other types of resources in an all-source solicitation for local capacity, as IEP and others have proposed.

Moreover, many of the preferred resource technologies have separate procurement programs that allow resources to compete to provide the products and services sought by policymakers or utilities on a least-cost basis. For example, eligible renewable resources can compete in solicitations under the Renewables Portfolio Standard program. Cogeneration resources can compete in the solicitations specified in the Combined Heat and Power/Qualifying Facility settlement, and storage resources can compete in the procurements required by D.13-10-040. Other preferred resources have programmatic funding commitments (*e.g.*, energy efficiency) outside of the LTPP procurement process. The preferred resource targets and the associated procurement mechanisms are not replaced by the LTPP procurements. Rather, the LTPP procurements of local reliability resources resulting from Track 4 and similar proceedings (if structured as all-source solicitations, as IEP recommends) provide an additional mechanism for these preferred resources to prove their commercial viability. Thus, delay in the Track 4 procurement is not warranted, and conducting a Track 4 procurement now to fill an identified

[43] Energy Action Plan II (Oct. 2005), p. 2.

local reliability need will not hinder the development and commercialization of preferred resources.

- **Delay is required to allow time for market transformation to occur.** The advocates of certain technologies believe that commercial success for their chosen technology is just around the corner, and the Commission should postpone Track 4 procurement to give these technologies a chance to blossom. Proceeding to procure needed local reliability capacity at this time would fill some of the need that (according to these parties) their favored technology could fill if only it is allowed more time to mature.

  Any unnecessary delay of needed procurement increases the risk of outages or of emergency procurement at costs well above the costs of resources acquired under normal circumstances. The Commission should not delay the procurement of needed local reliability resources in the hope that a particular technology will quickly achieve commercial acceptance. Preferred resources procured through special mechanisms or technology-specific solicitations can contribute to local reliability needs to the extent of their Net Qualifying Capacity, and when emerging technologies are able to compete successfully against other types of resources, they can participate in all-source solicitations for local reliability capacity.

- **Delay is required to allow time for preferred resources to become cost-effective.** The Center for Energy Efficiency and Renewable Technologies (CEERT) argued that the preferred technologies it favors are unable to compete successfully with gas-fired generation and that

preferred resources need more time to become cost-competitive with more conventional resources.[44] For IEP's members, who own and operate most of the renewable energy capacity in the state, storage presents an interesting commercial opportunity. However, because preferred resources have other resource-specific procurement opportunities or programs, IEP believes that to meet local reliability needs, preferred resources can and should compete on a fair basis with other types of resources. For that reason, IEP consistently recommends that the Track 4 procurement, including the interim procurement that the Commission should immediately authorize, should primarily occur through all-source solicitations that are expressly designed to recognize and value the benefits of preferred resources.[45]

8. Conclusion

California has set some ambitious goals that will substantially "de-carbonize" electric generation by 2050. The California Air Resources Board's AB 32 Scoping Plan includes a dramatic expansion of certain low-carbon technologies. Many of the new and emerging low-carbon generation technologies are not yet commercially proven. The Commission, however, must balance the long-term goal of decarbonizing the electric sector by 2050 with the challenges of maintaining the reliability of the electric grid in the near- and mid-term. When considering the need for additional resources to ensure local reliability, the Commission should appropriately apply a strict standard of viability. By definition, the resources needed for local reliability have to be available when and where they are needed. Resources with uncertain availability,

[44] CEERT Opening Brief, p. 42, fn. 174.
[45] See IEP Opening Brief, pp. 34-37.

undependable operation dates, or unproven technologies are not appropriate technologies for local reliability, regardless of whether they are preferred or not.

In short, the procurement the Commission authorizes for local reliability should provide strong, reasonable assurances that the resources selected through the solicitation will be available when and where they are needed.

II. THE AMOUNT OF INTERIM AND SUPPLEMENTAL PROCUREMENT

A. Interim Procurement

Among the parties that recognize the need for the Commission to authorize an interim procurement, the consensus is that amounts requested by the utilities—500 MW for SCE as part of its ongoing Track 1 solicitation and 500-550 MW for SDG&E—are prudent, minimum, no-regrets amounts that are needed to maintain the reliability of the grid.

Even these minimal amounts of interim procurement carry some increased risk to reliability. IEP noted that the CAISO recommended procurement of 1922 MW, and SCE's lower request assumed that the Mesa Loop-In transmission project will be approved and that SCE will aggressively pursue preferred resources. After accounting for SCE's Track 1 procurement and assuming that the Mesa Loop-In will be approved and completed, IEP recommended an interim procurement for SCE of between 706 MW (if SCE procures 1800 MW in its Track 1 solicitation) and 1106 MW (if SCE procures 1200 MW in its Track 1 solicitation).

For similar reasons related to the status of SDG&E's proposed Devers-North County AC transmission line, IEP recommended an interim procurement of 820 MW for SDG&E.[46]

[46] IEP Opening Brief, pp. 31-33.

Thus, if the Commission limits an interim procurement to 1000-1050 MW, it should review the status of various key assumptions to determine the need for a potential supplemental procurement.

B. Supplemental Procurement

The 1000-1050 MW recommended for a no-regrets interim procurement are not sufficient to ensure reliability in the SONGS study area. The need for additional local capacity resources should be reviewed again after some additional information becomes available:

- **The CAISO releases the results of the 2013-2014 TPP.** As mentioned above, both the 500 MW SCE requests and the 706-1106 MW IEP recommends for an interim procurement assume that the Mesa Loop-In project will move forward. If the Mesa Loop-In does not pass the TPP screening, then a supplemental procurement will be needed and should be authorized to avoid reliability problems. Similarly, IEP's recommendation for SDG&E's interim procurement assumes that the CAISO will approve the Devers-North County AC transmission line. If the Devers-North County AC transmission line or an electrically comparable transmission project is not approved in the TPP, the Commission should authorize SDG&E to conduct a supplemental procurement for 650 MW of additional resources to maintain grid reliability.
- **The results of SCE's Track 1 solicitation become available.** Final results may not be available for some time, but even preliminary results should reveal whether SCE was able to attract bids from at least 150 MW of preferred resources and 50 MW of energy storage resources.

Additional procurement would be necessary to the extent that SCE fails to procure 1800 MW of additional resources in the West LA Basin.

- **The Commission issues its decision in A.13-06-015.** If the Commission does not authorize SDG&E to enter into a power purchase agreement with the Pio Pico project, SDG&E should be authorized to procure 300 MW of additional local reliability capacity as part of a supplemental procurement.

This additional information should be available early in 2014, and the Commission's decision authorizing supplemental procurement should be issued no later than mid-2014, so that a supplemental solicitation can occur before the end of 2014. Delaying the decision on supplemental procurement limits the ability of potentially low-cost resources with long lead times to compete in the supplemental solicitation.

III. PROCUREMENT FOR LOCAL RELIABILITY SHOULD FOCUS ON VIABLE RESOURCES

In a procurement of resources needed for local reliability, viability is particularly important. If a resource is selected through the solicitation but fails to begin operation when scheduled, the reliability of the grid could be threatened.

The link between viability and reliability is another reason the Commission should be realistic about the types of resources that can provide the functions needed to maintain local reliability. Stretch goals and policy preferences are important to set the direction of California's energy future, and the Commission can allow procurement of somewhat riskier technologies to contribute to system resource adequacy. By contrast, local reliability, by its nature, is more dependent on resources showing up as scheduled and performing as needed, and the consequences of a resource's failure to show up and perform are potentially severe, *i.e.*, blackouts.

IV. ALL-SOURCE SOLICITATIONS SHOULD BE THE PRIMARY VEHICLES FOR PROCUREMENT OF CAPACITY FOR LOCAL RELIABILITY

The focus of procurement of capacity needed for local reliability should be the resource's viability and ability to provide the products and services needed to maintain reliability. For that reason, IEP and others recommend that procurement of local capacity resources should occur primarily through an all-source solicitation, where all resources that can meet the specified requirements can compete on a fair basis.

Some parties assert that an all-source solicitation discriminates against preferred resources.[47] This assertion, however, overlooks the fact that preferred resources that do not emit greenhouse gases (GHGs) have a built-in economic advantage over conventional gas-fired units in that they do not require the acquisition of GHG emission allowances. In addition, the criteria the utilities establish for the solicitation can assign value to resources sited in certain locations that are the most effective locations for enhancing reliability, which can benefit preferred resources that are not dependent on extensive infrastructure.

While the criteria the utilities establish for their solicitations could conceivably be designed to exclude all resources except preferred resources, restricting procurement to only certain technologies limits the supply of resources (which, all else being equal, will increase the cost to ratepayers) and makes it more difficult for the utilities to implement a least-cost/best-fit approach to procurement. By contrast, an all-source solicitation for local reliability resources that focuses on obtaining the specific resource characteristics and quantities needed to preserve reliability can allow all technologies to compete on a fair basis to provide the desired functions. Development of a solicitation process that fairly values and compares the wide array of supply and demand technologies, including preferred resources, and equitably weighs their respective

[47] *E.g.*, Sierra Club Opening Brief, pp. 26-27.

strengths and weaknesses should be a primary goal of the Commission's procurement proceedings.

V. OTHER CONSIDERATIONS: THE GOAL OF RESOURCE PLANNING SHOULD BE TO AVOID BLACKOUTS, NOT TO RELY ON OUTAGES

A. The CAISO's Use of the N-1-1 Contingency

Some parties criticized the CAISO for using the N-1-1 contingency rather than a less stringent N-1 contingency or for excluding load shedding as mitigation for the N-1-1 contingency.

The CAISO's use of N-1-1 was appropriate. The CAISO recognizes that blackouts of the urban coastal areas of San Diego County should be avoided except as a last resort to avoid broader voltage collapse.

The parties who hope to eliminate or shape the Track 4 procurement argue that the chances of outage actually being triggered as a result of an N-1-1 contingency are so slight that the Commission should take its chances and risk a blackout to lower the need for additional local reliability resources. Some of these parties assert that the probability of an N-1-1 contingency occurring is "less than a minute in a ten-year period"[48] or one chance in five million.[49]

But blackouts do happen, and the Commission should not be persuaded to gamble with grid reliability. The consequences of a blackout are so severe that even a low probability of a blackout resulting from an N-1-1 event should be avoided. The proponents of tolerating blackouts seem to think that the only consequences of a blackout are minor inconveniences, like

[48] CEJA Opening Brief, pp. 15-16.
[49] Exh. RB-1a, p. 6, fn.8 (Firooz).

having to serve unchilled chardonnay for dinner,[50] or that blackouts are acceptable as long as they only affect other people.[51]

As IEP noted, the total direct and indirect costs of blackouts are enormous. Contrary to the suggestion that blackouts to preserve reliability can be managed to avoid cutting off essential services, the current safety net provisions in San Diego drop 500 MW in a quarter-second and another 500 MW if needed to avoid a systemwide voltage collapse. The result of load shedding will be expensive and disruptive, as hospitals, schools, businesses, and industries shut down, traffic signals go dark, and freezers start thawing. Using the estimated cost of blackouts developed by a consultant to the Commission of $40,000/MWh, the financial cost of the 2011 San Diego blackout was around a quarter of a billion dollars.

The advocates of load shedding do more than merely downplay the cost of blackouts; they also attempt to overstate the cost of the resources that could help avoid blackouts. This part of the argument is based on the misconception that the resources needed to avoid outages would only run a couple of hours a year; thus (these advocates' argument goes), the cost of the resource needed to avoid blackouts would be extraordinarily high on a per MWh basis. In fact, however, once the resources are installed and in operation, they are available to provide capacity, ancillary services, and other services and to supply energy to the grid whenever they are dispatched. If a gas-fired peaker were selected to provide local reliability, for example, it would not just run a couple of hours a year. Rather, it would be bid into the CAISO's markets and would likely displace other gas-fired units with higher heat rates, longer start-up times, or higher costs.

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[50] *E.g.*, "[I]n high demand conditions what you're cutting is air conditioning load. If people have to be somewhat uncomfortable for four hours, that's unfortunate, but it does not necessarily impose any economic hit on the economy or their businesses." (RT 1949 (Powers).)

[51] See City of Redondo Beach Opening Brief, p. 7.

The parties arguing in favor of load shedding seem to believe that the mere presence of conventional capacity would undermine environmental goals. This belief, however, overlooks that as preferred resources enter the resource base over time, gas-fired resources may not run as much to provide energy but will continue to provide valuable capacity. In these conditions, the state effectively has procured cost-effective backstop capacity that will continue to be available as needed to protect against shortages and blackouts. If energy from these plants is not needed, they will not operate, and the environmental impacts of the presence of these resources will be negligible.

The Commission should not be swayed by attempts to minimize the cost of blackouts or to downplay the risk that blackouts will occur. The Commission should recognize the enormous financial and social cost of blackouts and should authorize procurement of the resources that the evidence in this case indicates are needed to preserve local reliability.

VI. CONCLUSION

The discussions of the details of powerflow modeling and the glowing descriptions of the potential for emerging generation technologies should not obscure the principal basic facts borne out by the evidence in this proceeding:

- The studies performed by the CAISO, SCE, and SDG&E show that the Commission should immediately authorize a modest, no regrets interim procurement of local reliability capacity of at least 706 MW for SCE and 820 MW for SDG&E.
- After additional information becomes available in early 2014 about the results of the CAISO's 2013-2014 TPP, the success of SCE's Track 1 solicitation in attracting cost-effective bids from viable preferred

resources, and the Commission's decision in A.13-06-015, the Commission should consider authorizing a supplemental procurement of local reliability resources to account for the failure of certain key assumptions to materialize.

- The primary vehicle for procuring local reliability resources should be an all-source solicitation in which all viable resources with the ability to provide the products and services needed to maintain reliability can compete.

The Independent Energy Producers Association respectfully urges the Commission to act consistently with these facts and to authorize an interim procurement and, as appropriate, a supplemental procurement of resources needed to maintain local reliability in the SONGS study area.

Respectfully submitted this 16th day of December, 2013 at San Francisco, California

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