



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

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

R.12-03-014
(Filed March 22, 2012)

**OPENING BRIEF
OF THE NATURAL RESOURCES DEFENSE COUNCIL
ON TRACK 4 ISSUES**

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SUMMARY OF RECOMMENDATIONS

NRDC's recommendations are summarized as follows:

- We recommend that the CPUC not authorize additional resources for Southern California Edison (SCE) or San Diego Gas & Electric (SDG&E) at this point because the record does not support a finding of any additional need.
- We recommend that the Commission extend Track 4 into 2014 in order to incorporate the effects of the updated California Energy Commission (CEC) Final Demand Forecast for years 2014-2024 as well as the draft results of the Independent System Operator's (ISO) 2013/2014 Transmission Plan.
- If the Commission makes an interim or final decision now, contrary to NRDC's recommendation, any authorizations should be reduced at least by reasonable amounts of preferred resources, updated for the CEC Revised Demand Forecast for years 2014-2024, and should be procured in the form of a "living pilot" for preferred resources.
- We recommend that the Commission adopt the proposed Findings of Fact and Conclusions of Law in Attachment A.

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I. INTRODUCTION

The Natural Resources Defense Council (NRDC) respectfully submits this Opening Brief on Track 4 of this Long Term Procurement Plans (LTPP) proceeding. This Opening Brief is filed and served pursuant to Rule 13.11 of the Commission’s Rules of Practice and Procedure, the *Revised Scoping Ruling and Memo of the Assigned Commissioner and Administrative Law Judge* of May 21, 2013 (the “Revised Scoping Memo”), and the Administrative Law Judge’s schedule set forth during the Evidentiary Hearing of Friday, November 1, 2013.¹ NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy requires.

**II. EVIDENCE IN RECORD DOES NOT SUPPORT AUTHORIZATION OF
ADDITIONAL RESOURCES IN SCE’S AND SDG&E’S LOCAL CAPACITY
AREAS**

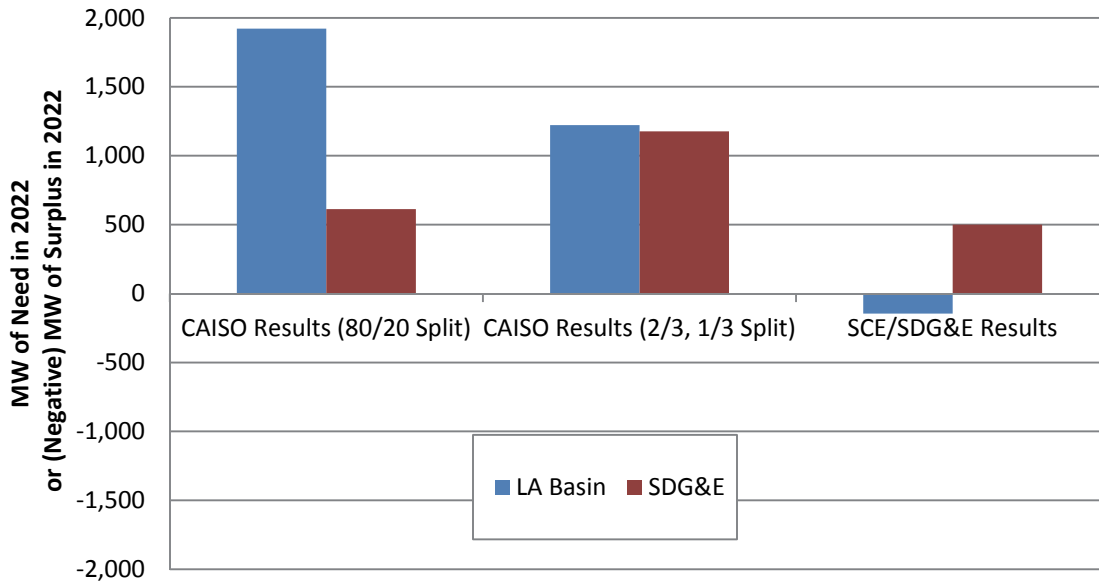
**A. CAISO’s and Utilities’ Local Capacity Requirement (LCR) Study Results
Overestimate Actual Needs**

The Commission should not adopt CAISO’s and the utilities’ (SCE’s and SDG&E’s) recommendations for additional local capacity needs in the SONGS region (SCE’s LA Basin local area and the SDG&E local area) because those recommendations exclude significant amounts of energy efficiency and demand response, and do not account for the updated

¹ Evidentiary Hearing Transcript of November 1, 2013, p. 2304.

California Energy Commission demand forecasts for those local areas. CAISO's,² SCE's,³ and SDG&E's⁴ model results suggested authorization of significant additional resources in the SONGS region, as shown in Figure 1. (While SCE is requesting 500 MW of additional need in this proceeding⁵, their model results show a 145 MW surplus of local supply.⁶)

Figure 1: CAISO and Utilities' Original Model Results



However, the Commission should reduce the results of CAISO's and the utilities' LCR studies in order to account for all reasonably expected to occur cost-effective energy efficiency and demand response. After making these adjustments, the LCR need estimates are reduced

² CAISO's model results from: Exhibit CAISO-1 at 26 (Table 13 – Residual Resource Needs in 2022 Without SONGS).

³ SCE's model results from: Exhibit SCE-1 at 10 (Figure II-2), and Exhibit SCE-1 at 11 (“This results in a remaining need of 1055 MW of combined need for Tracks 1 and 4, which is below the maximum amount of GFG (1200 MW) authorized to be procured through Track 1 procurement.”).

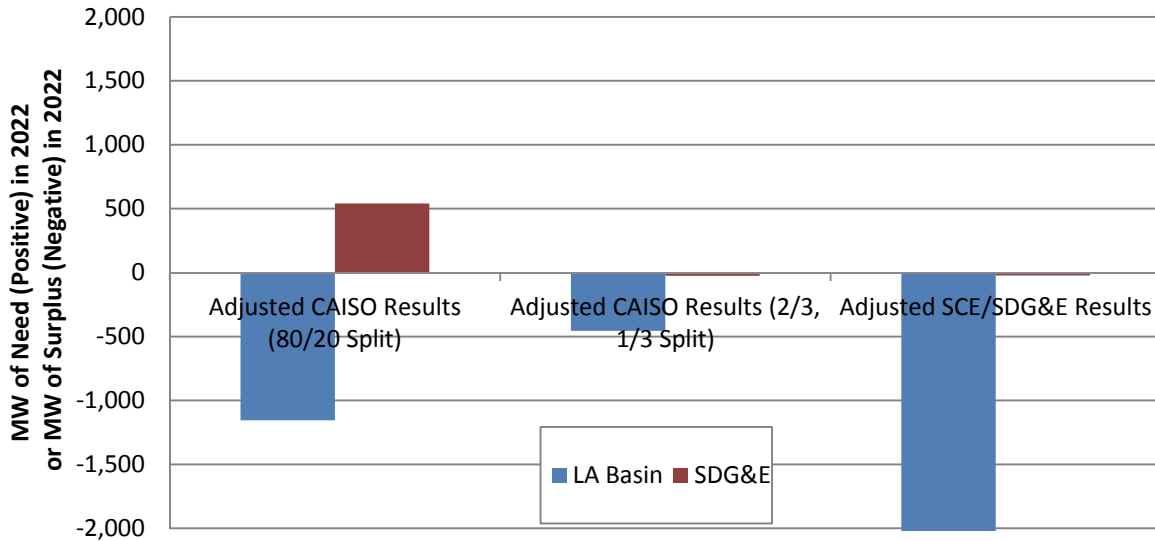
⁴ SDG&E model results from: Exhibit SDG&E-1 at 5 (“Supply-Side Request for Offers: SDG&E should be authorized to issue an RFO to request between 500-550 MW of supply-side resources.”).

⁵ “In this Track 4, SCE recommends that the Commission authorize procurement of an additional 500 MW to bridge the gap between the CAISO need assessment and SCE's estimate of the LCR need.” Exhibit SCE-1 at 3.

⁶ “Over the last year, transmission upgrades and the addition of reactive elements (e.g., synchronous condensers and shunt capacitors) have mitigated some of the reliability concerns created by the unexpected outage at SONGS. SCE's studies show that reliability in this area can be managed without LCR generation above the amounts authorized in Track 1.” Exhibit SCE-1 at 49. Before accounting for the authorizations of gas-fired generation in Track 1, which was 1,200 MW, SCE's model results showed a need of 1,055 MW in the LA Basin. Because the CPUC has already authorized 1,200 MW in the LA Basin, that yields a surplus of 145 MW. *Supra* note 3.

significantly. Furthermore, incorporating the CEC’s Revised Demand Forecast for 2014-2024 shows that LCR estimates are primarily surpluses instead of additional needs in the SONGS region, as shown here in Figure 2 and explained more thoroughly in Sections III and IV.

Figure 2: CAISO’s and Utilities’ Model Results Adjusted for Reasonable Amounts of Preferred Resources and Updated CEC Demand Forecast



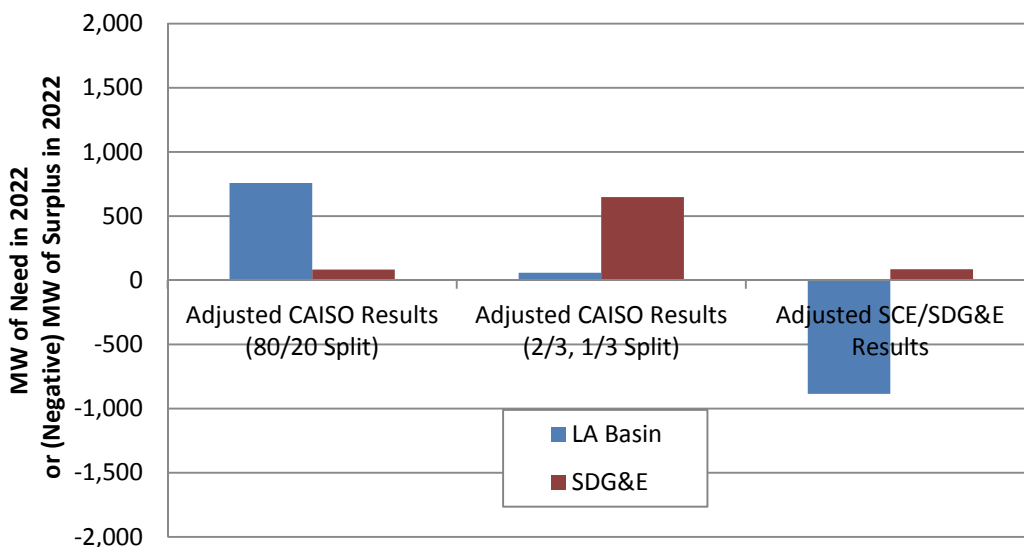
Therefore, it would be premature and imprudent for this Commission to adopt a final need determination, or authorize any gas-fired generation, based on model results that omit significant amounts of reasonably expected to occur energy efficiency and demand response, and are based on an outdated forecast.⁷ We recommend that the Commission not authorize procurement based on CAISO’s or the utilities’ LCR studies at this time.

⁷ The forecast used in CAISO’s and the utilities’ model results, which are based on the ALJ Revised Scoping Memo assumptions, are outdated because the CEC’s Revised Demand Forecast released in October 2013 (as well as the CEC’s Preliminary Demand Forecast released in May 2013) shows lower actual demand in the LA Basin and San Diego area. NRDC, *Opening Comments On ALJ Gamson’s Questions From The September 4, 2013 Prehearing Conference*, p. 5 (September 30, 2013).

B. The Commission Should Include Preferred Resources that Are Reasonably Expected To Occur in Determining LCR Needs

We recommend that the CPUC adjust downward both CAISO’s and the utilities’ recommended LCR needs because they do not include all reasonably expected to occur energy efficiency savings and demand response. Accounting for these resources, as required by the State’s loading order, shows that actual LCR needs in the SONGS area will be 1,693 MW lower than was presented in CAISO’s model results and 1,300 MW lower than the utilities’ model results. Each of these adjustments will be addressed in the subsections below: i) energy efficiency, ii) demand response, and iii) the updated demand forecast. These adjustments reduce the original model results significantly and even yield a significant surplus in one case (Figure 3).

Figure 3: CAISO and Utilities’ Model Results Adjusted Only For Reasonable Amounts of Preferred Resources⁸



⁸ Model results adjusted based on reductions described *infra* Sections II.B.1 through II.B.3.

1. Energy Efficiency

All of the original model results presented by CAISO and the utilities should be adjusted downward in order to account for the amount of energy efficiency savings that are reasonably expected to occur but were omitted from their modeling. We will address first the energy efficiency assumptions that CAISO⁹ and SCE¹⁰ used, which are those contained in the ALJ Revised Scoping Memo. We will address SDG&E's energy efficiency assumptions at the end of this subsection because SDG&E used slightly different assumptions.

The energy efficiency estimates that CAISO and SCE relied on: (i) were based on an incomplete assessment of energy efficiency potential; (ii) omitted incremental "naturally-occurring" savings that are by definition reasonably expected to occur; and (iii) incorrectly used a low estimate of efficiency in SDG&E's local area instead of the mid estimate. Including these additional energy efficiency savings increases the energy efficiency assumptions used in the ISO's and SCE's modeling by 885 MW in the SONGS study area, with 543 MW in the LA Basin and 342 MW in the San Diego local area.¹¹ The components of these savings are detailed in Table 1, and discussed in more detail below.

⁹ Exhibit ISO-1 at 5: "Per the CPUC's Revised Scoping Ruling, the low level of savings for incremental EE was modeled for the studies."

¹⁰ Exhibit SCE-1 at 14: "SCE's CEC load forecast data is consistent with the Track 4 Scoping Memo, Attachment A, and thus, is consistent with the assumption used by the CAISO." (SCE, Silsbee)

See also, Hearing Transcript at 2120: "Q: you testified that SCE relied upon the revised scoping ruling which identified the assumptions that CAISO should use for Track 4 studies, quote, 'to the extent practical.' And I wondered if you could please define what you meant by 'to the extent practical.'"

A: "Sure. We started work on understanding implications of San Onofre not being in service in 2022 well before the scoping ruling came out. So many of the assumptions had here already been in place. What we attempted to do is conform where we could to assumptions that we expected CAISO to use in its studies to minimize any discrepancy. It would be assumption driven. And so we used the CEC load forecast, the same uncommitted energy efficiency forecast."

¹¹ Exhibit NRDC-1 at 4-5 (Table 1).

Table 1: Additional Energy Efficiency Local Area Impacts in MW in 2022 Relative to CAISO’s and SCE’s Model Results¹²

	(A) Updated Potential Study and CEC Analysis	(B) Including Incremental Naturally-Occurring Savings	(C) Using SDG&E’s Mid Case Estimate Instead of Low Case	(D) Total (A + B + C)
LA Basin	90	453	-	543
San Diego	67	123	152	342
SONGS Study Area	157	576	152	885

First, the Commission should adjust the CAISO and SCE need assessments downward by 157 MW for additional energy efficiency savings because the record demonstrates that the amount relied upon in the ALJ Revised Scoping Memo was based on an incomplete estimate of actual energy efficiency savings: “[The amount of savings in the Revised Scoping Memo] excluded many energy efficiency codes and standards that will produce savings from 2015 and beyond.”¹³ In fact, the document on which the Revised Scoping Memo’s assumptions are based was explicit in stating that it did not focus on efficiency savings after 2014.¹⁴ As NRDC’s witness testified, the Revised Scoping Memo’s assumptions were based on the CPUC’s 2012 potential study, which omitted all savings from the CEC’s building efficiency standards to take effect in 2017 and 2020. Additionally, the 2012 potential study omitted savings from all future federal appliance standards, many of which have already been finalized, such as the 2012 residential dishwasher efficiency standards (which took effect in 2013), 2012 residential clothes washer efficiency standard, 2013 microwave efficiency standard, and 2013 commercial air

¹² *Id.*

¹³ Exhibit NRDC-1 at 6-7. See also: “And the issue was that in the interim years, the Public Utilities Commission was supposed to develop a potential study over the next 10 years to study the cost-effective efficiency potential but didn’t fully complete its work and so only had a partial draft study to submit to the Energy Commission, which then analyzed the amounts to figure out how much was incremental. So at the time the 2012 IEPR was published, it did not have the full potential study to analyze.” Exhibit NRDC-1 at

¹⁴ *Id.* at fn X: “We understand that there are also ongoing or planned state and federal standard development effects that will lead to future standards adoption. Based on general CEC and DOE rulemaking procedures, those new standards will most likely take effect after 2014, and therefore, won’t affect the goal-setting for the 2013-2014 bridge period. In the second phase of this study, we will estimate the potential impact and energy savings from future C&S activities.”

conditioner and heat pump efficiency standard.”¹⁵ It would be unreasonable for the Commission to assume that these efficiency standards, some already in effect, will produce zero energy savings in the SONGS area.

Second, the Commission should reduce CAISO’s and SCE’s LCR need estimates by 576 MW to account for the amount of “naturally-occurring” energy efficiency that the record shows should have been included as input assumptions in CAISO’s and SCE’s studies. As NRDC’s witness testified, “These ‘naturally occurring’ energy efficiency savings are expected to occur by definition (regardless of any program or policy), and the savings are not included in the CEC’s demand forecast nor in the amount of incremental savings attributed to programs, codes, and standards.”¹⁶ Using the CEC’s estimate for this amount of incremental naturally-occurring savings in SCE and SDG&E’s service territories, using their ‘low’ savings scenario in 2022, and adjusting downward to account for locational uncertainty yields a 576 MW reduction from CAISO’s and SCE’s need estimates.¹⁷

Third, the Commission should reduce CAISO’s need estimates by 152 MW in the San Diego local area because the evidence in this proceeding demonstrates that the Revised Scoping Memo mistakenly assumed that SDG&E’s local area was different from its service territory area. As NRDC’s witness testified, “The amount included in the local area should simply be the amount reasonably expected to occur in SDG&E’s service territory, since they are the same geographical area.”¹⁸ There is no ambiguity about the total amount of efficiency at the service territory level, as the Revised Scoping Memo clearly stated: “across the SCE and SDG&E areas we expect the mid-level of savings to occur.”¹⁹ The Commission should fix this error by including the additional 152 MW.

¹⁵ *Id.* at 7.

¹⁶ Exhibit NRDC-1 at 10.

¹⁷ *Id.*

¹⁸ *Id.* at 11-12.

¹⁹ *Id.* at 12.

Adjustments to SDG&E's Model Results

SDG&E's energy efficiency input assumptions are slightly different than CAISO's and SCE's because they did not exactly rely on the amounts used in the ALJ's Revised Scoping Memo. In fact, SDG&E made one of the three adjustments we recommended above to its efficiency assumptions (using the "mid" estimate of efficiency savings instead of "low" due to its local area being the same geographical area as its service territory).²⁰ Therefore, only two of the adjustments discussed above (those for updated potential study results and for omitted natural-occurring savings), should be applied to SDG&E's model results. We recommend reducing SDG&E's need estimate by 211 MW in order to account for these corrections.

This Commission Should Make These Conservative Adjustments To Account for Energy Efficiency Savings That Are Reasonably Likely To Occur

NRDC's recommendations to adjust CAISO's and utilities' need estimates by the amounts of additional energy efficiency savings discussed above are not only reasonable, but actually conservative themselves. The recommended energy efficiency savings are conservative because they were reduced to account for locational uncertainty, and were reduced according to the CEC's busbar allocation methodology. As shown in the record, these adjustments, pursuant to the CEC's busbar allocation methodology, and described in the Revised Scoping Memo, result in adjustments to local capacity needs that are *lower* than a 1-to-1 ratio when compared to the total amount of demand reduced at the input assumption level.²¹ I.e., there are more efficiency savings occurring in the SONGS local areas than the amount that NRDC is recommending to adjust CAISO's and the utilities' need assessments. Furthermore, NRDC's estimates exclude

²⁰ Exhibit NRDC-1 at 13.

²¹ Hearing Transcript at 2192 (NRDC, Martinez): "In fact, NRDC reduced its estimate of total efficiency that should be reduced from the local needs assessment based on a couple factors. We basically copied the methodology that was in the ALJ scoping memo, reducing it first for an assessment of the amount that would occur in a local area using low estimates. And secondly, according to a busbar allocation methodology that the Energy Commission had used in reducing the amount of energy efficiency. And so we basically copied those ratios, which were less than a one to one megawatt ratio for our ultimate recommendations for reduction in local capacity needs."

savings from future federal appliance standards, assume that utility programs never improve over time, and only include a subset of savings from emerging technologies.²² Consequently, the Commission can securely rely on these conservative adjustments to CAISO's and utilities' need assessments.

2. Demand Response

All of the original model results presented by CAISO and the utilities should be adjusted downward in order to account for the amount of demand response that is reasonably expected to occur. In particular, CAISO only used a portion of the demand response input assumptions that the ALJ Revised Scoping Memo directed it to use in its studies. The Revised Scoping Memo specifically indicated that: "'Second Contingency' consists of assumptions representing residual resources that could be used to meet subsequent post-contingency needs. 'Second Contingency' resources are not modeled but, would be accounted for as potential resources to address any residual need identified by a second contingency condition in the studies."²³ However, in modeling how CAISO would mitigate a second contingency (the "N-1-1" contingency), CAISO used zero demand response from this "second contingency" bucket.²⁴ Including this amount of demand response resources increases the DR assumptions used in the ISO's modeling by 808 MW in the SONGS study area, with 621 MW in the LA Basin and 187 MW in the San Diego local area.

²² NRDC, *Reply Comments Of The Natural Resources Defense Council (NRDC) On ALJ Gamson's Policy-Related Questions Presented At The September 4, 2013 Prehearing Conference*, p. 7 (September 30, 2013).

²³ Revised Scoping Memo at 2.

²⁴ Hearing Transcript at 1451 (ISO, Sparks): "Q So did you subtract 997 megawatts of demand resources from the residual need after the second contingency?"

A No, we did not."

Hearing Transcript at 1454 (ISO, Sparks): "A: . . . [W]e did include the first contingency DR, but not the second contingency."

**Table 2: Additional Demand Response in MW in 2022
Relative to CAISO’s Model Results**

	(A) Total Demand Response Available to Meet "Second Contingency" ²⁵	(B) Total Demand Response Used in CAISO's model results ²⁶	(C) Difference between CAISO and Revised Scoping Memo Assumptions for DR (= A - B)
LA Basin	794	173	621
San Diego	203	16	187
SONGS Study Area	997	189	808

SCE’s modeling results also used only a portion of the amount of demand response that was required by the Revised Scoping Ruling,²⁷ approximately 4541.5 MW;²⁸ whereas SDG&E’s modeling included zero demand response.²⁹ Therefore, the need estimates from the utilities’ model results should also be reduced, as set forth in Table 3.

²⁵ Revised Scoping Memo at 7.

²⁶ *Id.* (SONGS Study Area First Contingency Amounts); *See also* Exhibit ISO-1 at 26 (Table 13) (showing 198 MW of DR in 2022 in SONGS study area).

²⁷ Hearing Transcript at 2121 (SCE, Silsbee): “Q: Were your study assumptions consistent with the revised scoping ruling with regard to demand response including the 189 megawatts that were to be assumed for the first contingency in 2018 and 2022?”

A: Sure. . . . Our analysis assumed about 620 megawatts of demand response in the smaller Western LA Basin area. I adjudged those to be reasonably consistent. In the preferred resources scenario that we ran, we assumed that the 620 would be available to us. We discounted it by fifty percent as applicable to meeting LCR needs because these programs were originally developed and are currently used to meet system needs, not local needs. In addition, we augmented the existing demand response by an additional 283 megawatts of demand response targeted into I believe the Johanna, Santiago, Ellis, and the LA area. Again, we assumed a fifty-percent use of those resources for LCR needs.”

²⁸ $451 = 50\% * 620 \text{ MW} + 50\% * 238 \text{ MW}$. *Id.*

²⁹ Exhibit SDG&E-1 at 7: “Demand Response: SDG&E did not include any demand response as a load reduction in the initial studies”

**Table 3: Additional Demand Response in MW in 2022
Relative to Utilities' Model Results**

	(A) Total Demand Response Available to Meet "Second Contingency" ³⁰	(B) Total Demand Response Used in Utilities' model results	(C) Difference between Revised Scoping Memo Assumptions for DR and Utilities' Models (= A - B)
LA Basin	794	451.5	342.5
San Diego	203	0	203
SONGS Study Area	997	451.5	545.5

The Commission Should Make These Adjustments To Account for Demand Response Resources That Are Reasonably Likely To Occur

These proposed amounts of additional demand response are reasonable because the Revised Scoping Memo stated that these demand response amounts were consistent with IOU Annual Load Impacts Reports and consistent with amounts used in Track 1 of this proceeding.³¹ Therefore, it is reasonable for the Commission to adjust the ISO and utilities' need estimates so that they are consistent with at least the assumptions in the Revised Scoping Memo.

Additionally, SDG&E testified that energy storage may be used to satisfy demand response projections and actually facilitate the growth of DR programs.³² While energy storage could be counted as a stand-alone resource, we merely note that here, in the context of demand response, energy storage provides another reason why the amounts of demand response in the Revised Scoping Memo are reasonable: given the 745 MW of energy storage targets for SCE and SDG&E,³³ the inclusion of an additional 545.5 MW of demand response is even more likely to

³⁰ Revised Scoping Memo at 7.

³¹ "The study results shall provide a broad assessment of local area needs that inform the programs of "Second Contingency" resources such that they can adapt to meet the residual need." Revised Scoping Memo at 2. "This amount of DR, 173 MW, is roughly consistent with the amount of DR identified in the Track 1 Decision, 200 MW. To be consistent with the 2012 Load Impact Report, the remaining amount of LA Basin DR forecasted in the report shall be accounted for as a "Second Contingency" resource, i.e. a resource that is available to prepare for subsequent contingencies." Revised Scoping Memo at 5.

³² Hearing Transcript at 1854 (SDG&E, Anderson): "The customer-based energy storage, customers may install it, do things. It may be the technology that they use to facilitate their enrollment in a DR program. Okay. So we might see energy storage facilitate the growth in DR, . . ."

³³ Exhibit SC-1 at 14-15.

occur. Therefore, the Commission should account for the original amount of demand response in the Revised Scoping Memo by adjusting the ISO's and utilities' need assessments downward by 808 MW and 545.5 MW, respectively.

C. The Commission Should Account for the CEC's Revised Demand Forecast 2014-2024

We recommend that the CPUC adjust downward both CAISO's and the utilities' recommended LCR need because they do not account for the CEC's updated Revised Demand Forecast for 2014-2024.³⁴ The CEC updates its demand forecast roughly every two years. The CEC demand forecast that was used as an input assumption in the CAISO and utility model results was the CEC's 2012-2022 demand forecast, which was developed during the 2011 IEPR and finally adopted by the CEC in June 2012. However, the CEC released an updated demand forecast for years 2014-2024 in March of 2013, the "Preliminary Demand Forecast." Then in September 2013, the CEC released a refinement of that forecast: the CEC's "Revised Demand Forecast" for 2014-2024. In this updated Revised Demand Forecast, the CEC finds that demand in the SONGS area will be 1,321 MW lower in 2022 than what was used in the Revised Scoping Memo's assumptions:³⁵ 1,213 MW lower in the LA Basin and 108 MW lower in San Diego.

The Commission can rely upon both the updated CEC Revised Demand Forecast 2014-2024 as well as NRDC's recommended accounting of preferred resources because there is no overlap between the CEC Revised Demand Forecast 2014-2024 and the CEC Estimates of Additional Achievable Energy Savings 2014-2024³⁶ (which NRDC uses for its recommendations). The CEC Estimates of Additional Achievable Energy Savings 2014-2024 are the same vintage as the CEC Revised Demand Forecast 2014-2024, so there is no overlap between the two. The Energy Commission develops an estimate of additional achievable energy

³⁴ Exhibit NRDC-2 at 4, fn 6.

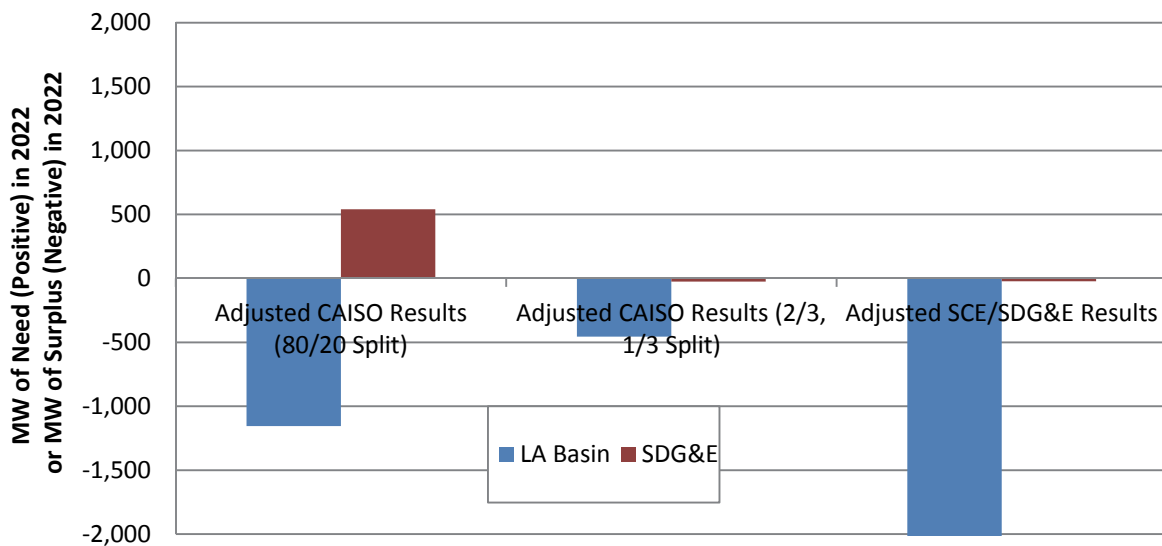
³⁵ Exhibit SC-1 at 1.

³⁶ Exhibit NRDC-1 at 8, fn 11.

efficiency (AAEE) precisely for this point: to ensure that there is no overlap between the CEC AAEE savings and CEC baseline forecast (the CEC Revised Demand Forecast 2014-2024).³⁷

Therefore, NRDC recommends adjusting CAISO’s and the utilities’ model results downward to reflect the CEC’s most recent forecast that demand is expected to be lower in the LA Basin and San Diego than was previously projected. Incorporating the CEC’s updated forecast, in addition to the preferred resource estimates discussed above, yields surpluses in nearly every case (Figure 2, replicated here).

Figure 2 (Replicated): CAISO’s and Utilities’ Model Results Adjusted for Reasonable Amounts of Preferred Resources and Updated CEC Demand Forecast



³⁷ “... Energy Commission staff needed to estimate the portion of savings from the 2013 Potential Study not accounted for in the baseline forecast. These nonoverlapping savings are referred to as additional achievable energy efficiency (AAEE) impacts.” *Id.*

Table 4: CAISO’s and Utilities’ Model Results Adjusted For Reasonable Amounts of Preferred Resources and Updated CEC Demand Forecast

Modeler	Resource Split	Local Area	CAISO findings of Need	NRDC EE adjustment	DR adjustment (Revised Scoping Memo)	Updated CEC forecast	Final Adjusted Need
ISO	2/3	LA Basin (SCE)	1,222	543	621	1,213	-1,155
	1/3	SDG&E	1,177	342	187	108	540
		SONGS Area (Total)	2,399	885	808	1,321	-615
	80% 20%	LA Basin (SCE) SDG&E	1,922 612	543 342	621 187	1,213 108	-455 -25
		SONGS Area (Total)	2,534	885	808	1,321	-480
SCE		LA Basin (SCE)	-145	543	342.5	1,213	-2,244
SDG&E		San Diego	500	211	203	108	-22
		SONGS Area (Total)	355	754	546	1,321	-2,266

Adjusting the CAISO’s and utilities’ model results to account for reasonably expected to occur preferred resources and the CEC’s Revised Demand Forecast, the record does not support an immediate decision authorizing any additional local resources. Therefore, we recommend that the Commission extend this Track 4 of the proceeding into a second phase, in order to incorporate material and updated information in Q1 2014, as we discuss below, before making any procurement decisions.

III. EXTENSION OF TRACK 4 THROUGH Q2 2014 IN ORDER TO INCORPORATE THE UPDATED CEC FINAL DEMAND FORECAST 2014-2024 AS WELL AS THE DRAFT RESULTS OF THE 2013/2014 ISO TRANSMISSION PLAN

We strongly recommend that the Commission defer making a final need determination at this time and instead include a Phase 2 within Track 4 to incorporate the California Energy Commission’s Final Demand Forecast for 2014-2024 (which will include a final amount of additional achievable energy efficiency) and CAISO’s 2013/2014 Transmission Plan. These two updates are planned to be released in time to be incorporated into a Phase 2 of this Track 4 and

would likely significantly reduce the ISO and utilities' modeled need in the SONGS Study Area. For ISO in particular, these updates could reduce the modeled need by 2,409 MW or more, after accounting for the CEC's finding of reduced load growth in its revised demand forecast and from inclusion of the mesa loop-in transmission line discussed in further detail below.³⁸

However, the total amount of reductions has not been finalized yet. Thus, an extension of two quarters time in order to include such critical information is not only justified, but failure to do so would likely result in unnecessary procurement for consumers. Therefore, we recommend creating a Phase 2 of this Track, introducing these two updated pieces of information into the record by January of 2014, and concluding with a Track 4 Final Decision in Q2 2014.

A. Incorporation of CEC Final Demand Forecast 2014-2024

The CEC Demand Forecast for years 2012-2022 was used in the Revised Scoping Ruling, but the CEC has since found that electric demand in the LA Basin and in San Diego will be significantly lower than originally forecast. This updated forecast, the Revised Demand Forecast for years 2014-2024, released in September 2013, shows that demand in the LA Basin will be 1,213 MW lower in 2022 compared to the 2012 forecast that was used in the Revised Scoping Memo.³⁹ Given this significant impact, it is critical that the Commission include these changes in a Final Decision, which requires a short extension of Track 4 of this proceeding. Furthermore, in its opening testimony, ISO recommended that the Commission wait until the CEC Final Demand Forecast 2014-2024 could be incorporated into the CPUC's Final Decision in this

³⁸ Exhibit SC-1 at 1; Sierra Club, *Opening Comments on ALJ Gamson's Questions from the September 4, 2013 Prehearing Conference*, p.2, (September 30, 2013) ("consideration of new California Energy Commission demand forecast . . . shows a reduction in demand of 1213 MW.") See also Exhibit SCE-1 at X: "Mesa Loop-In further reduces need for LCR resources in the LA Basin by 1,196 MW."

³⁹ *Id.*

proceeding.⁴⁰ It would be unreasonably hasty for this Commission to adopt a procurement decision in January 2014 using outdated information when the CEC plans to adopt the Final Demand Forecast for the LA Basin on January 15, 2014.⁴¹ Given that the CEC Final Demand Forecast will significantly affect the amount of need presented in CAISO's and the utilities' models, we urge the Commission to consider these changes before it authorizes any additional resources.

B. Incorporation of CAISO'S 2013/2014 Transmission Plan

Similarly, CAISO's 2013/2014 Transmission Plan will substantially affect need determinations as it includes modelling of additional reactive support and transmission projects in addition to an evaluation of the appropriate mix of preferred resources to replace conventional generation.⁴² Numerous parties, including CAISO, have testified that this information is material and significant.⁴³ For instance, inclusion of the Mesa Loop-In project alone would reduce the need for LCR resources in the LA Basin by 1,196 MW.⁴⁴ Furthermore, SCE has expressly stated its intention to pursue appropriate approvals for the project, asking that the Commission not order it to make firm commitments to gas-fired generation to supplant the Mesa Loop-In project.⁴⁵ Yet, the Mesa Loop-In project is only one project meriting consideration; CAISO has identified several additional non-generation alternatives, such as converting existing SONGS electric generators to synchronous condensers and maintaining Huntington Beach Unit 3 and 4

⁴⁰ Exhibit ISO-1 at 30, "The ISO also wants to consider incorporating the 2013 IEPR demand forecast which is anticipated to be completed and adopted by the CEC Commission by the end of this year."

⁴¹ Hearing Transcript at 2194 (NRDC, Martinez): "A managed version of the CEC's Demand Forecast (which should include the AAEE forecast) is planned to finally be adopted in December 2014, so it will be available to be introduced into evidence . . ." NRDC, *Opening Comments On ALJ Gamson's Questions From The September 4, 2013 Prehearing Conference*, p. 5, (September 30, 2013).

⁴² Exhibit ISO-1 at 30; Exhibit SC-1 at 13, 16.

⁴³ Exhibit ISO-1 at 31; Exhibit ORA-4 at 7; SCE-1 at 8; Exhibit SC-1 at 16.

⁴⁴ Exhibit SCE-1 at 8.

⁴⁵ Exhibit SCE-1 at 8; Exhibit SCE-2 at 4.

synchronous condensers, among others.⁴⁶ This was confirmed in hearings by SCE’s witness Cushnie, who stated that CAISO’s transmission process is “looking at other projects as well that might alleviate the need for additional generation.”⁴⁷ Therefore, we recommend introducing the draft results of CAISO’s 2013/2014 Transmission Plan in January 2014.

IV. IN THE ALTERNATIVE, IF THE COMMISSION DOES MAKE AN INTERIM OR FINAL DECISION, ANY AUTHORIZATIONS SHOULD BE REDUCED AT LEAST BY REASONABLE AMOUNTS OF PREFERRED RESOURCES, UPDATED FOR THE CEC REVISED DEMAND FORECAST 2014-2024, AND SHOULD BE PROCURED IN THE FORM OF A LIVING PILOT FOR SDG&E.

A. Incorporation of the Loading Order in LCR Procurement

In order to comply with the State’s loading order, the Commission must include a reasonable estimate of energy efficiency and demand response before authorizing any additional need. There is ample legal and policy guidance requiring the Commission to include a reasonable estimate of energy efficiency savings in calculating the amount of any new procurement. The State’s “loading order” established in the Energy Action Plan (EAP) II identifies energy efficiency as the state’s top priority resource, and state law codifies this policy and requires that any procurement need must be met first with efficiency.⁴⁸ The EAP II also identifies demand response as a top priority resource.⁴⁹ This Commission, the Energy Commission, and the Legislature could not be clearer in stating that need assessments must first rely on cost-effective energy efficiency as the top priority procurement resource. Therefore, we recommend that the Commission make the adjustments recommended in Section II yielding the results shown in Figure 2, replicated here, and presented in table format in Table 5 below:

⁴⁶ Exhibit SC-1 at 13.

⁴⁷ Transcript Hearing, Vol. 13, October 31, 2013, p. 1964.

⁴⁸ Exhibit NRDC-2 at 3. “The electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.” Cal. Public Util. Code § 454.5(b)(9)(C).

⁴⁹ *Id.*

Figure 2 (Replicated): CAISO’s and Utilities’ Model Results Adjusted for Reasonable Amounts of Preferred Resources and Updated CEC Demand Forecast

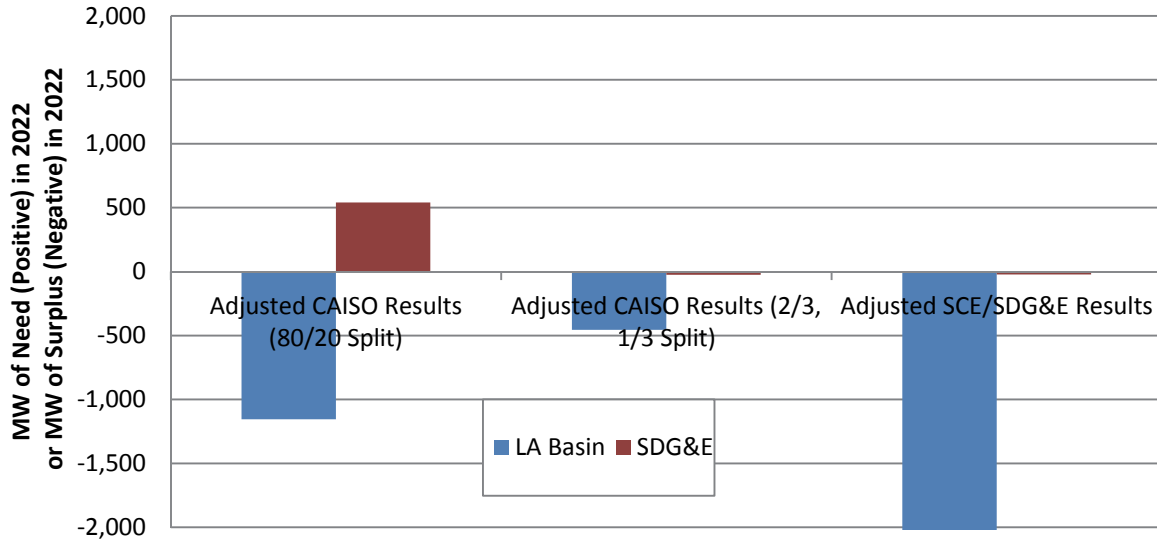


Table 5: CAISO’s and Utilities’ Need Assessments Adjusted for Reasonable Amounts of Preferred Resources and Updated CEC Demand Forecast (in MW in 2022)

	Adjusted CAISO Results (80/20 Split)	Adjusted CAISO Results (2/3, 1/3 Split)	Adjusted SCE/SDG&E Results
LA Basin	-1,135	-435	-2,099
SDG&E	540	-25	-22

After accounting for reasonable amounts of preferred resources and the updated CEC demand forecast, it is clear that the record does not support authorization of new resources. Every case for the LA Basin shows surpluses instead of needs. The majority of cases for San Diego show surpluses instead of needs. Therefore, any interim or immediate final decision should authorize zero additional resources in the LA Basin and San Diego.

B. If the CPUC Finds a Need for SDG&E, Contrary to NRDC’s Recommendation, Then the Commission Should Direct SDG&E To Meet that Need Through Procurement of Preferred Resources Only

If the Commission finds a need for San Diego, contrary to NRDC’s recommendation, we urge the CPUC to authorize procurement of only preferred resources at this time. From Table 4, the only case in which there is a need for San Diego is the adjusted CAISO model results using the 80/20 split for resource allocation, yielding a 540 MW need. The other adjusted CAISO

model result, using a 2/3 v. 1/3 allocation split, yields a 25 MW surplus, and the adjusted SDG&E model yields a 22 MW surplus. If the Commission were to authorize the average of the three, 165 MW, we recommend that the entire authorization be made for preferred resources. The Loading Order requires that the Commission fill all unmet need first through preferred resources, and SDG&E does not yet have a Preferred Resources Pilot. SDG&E testified that they would be able to create such a pilot were the Commission to direct them.⁵⁰

Furthermore, limiting the authorization to only cost effective preferred-resources is a “no regrets” strategy. First, cost-effective preferred resources save customers money, so if subsequent information demonstrates that these interim authorizations were excessively high, procurement of these resources instead of gas-fired generation would result in relative savings for customers. Second, preferred resources are more modular than gas-fired generation, so can be tailored better to specific procurement targets, as well as more easily reduced if subsequent information reveals that such authorizations were excessively high. Last, the location of preferred resources can evolve more easily over time, whereas “steel in the ground” gas-fired generation is committed to one location regardless of future changes to where the most effective location for resources may be in the local area. As the grid and population centers evolve, preferred resource can better adapt to new grid needs than can gas-fired generation. Therefore, if the Commission were to issue any authorizations for additional resources, we urge the Commission to procure the entirety through the creation of a SDG&E Preferred Resources Pilot.

⁵⁰ Hearing Transcript at 1815-1816 (SDG&E, Anderson): “(Florio) Q: Are you aware that Edison has proposed in this proceeding, and to be followed by a fuller application, a living pilot to achieve aggressive implementation of preferred resources in a portion of its service territory?”

A: I am generally familiar with it.

...

Q: If the Commission asked SDG&E to do something similar, could you do it?

A: I'm sure if the Commission asked, we will find a way to do it.”

V. CONCLUSION

NRDC respectfully requests that the Commission adopt the recommendations contained in this opening brief.

Respectfully submitted,

/S/

Sierra Martinez
Legal Director, California Energy Project
Natural Resources Defense Council

November 25, 2013

ATTACHMENT A: Proposed Findings of Fact and Conclusions of Law

We recommend that the Commission adopt the following:

Proposed Findings of Fact

1. The record does not provide an adequate and persuasive basis upon which to authorize additional resources at this time.
2. The record shows that model results from ISO, SCE, and SDG&E overestimate actual LCR needs in the LA Basin and San Diego local areas.
3. It is reasonable to reduce ISO's estimate of LCR procurement by a conservative 885 MW due to additional energy efficiency impacts in the SONGS study area.
4. It is reasonable to reduce SCE's estimate of LCR procurement by a conservative 543 MW due to additional energy efficiency impacts in the LA Basin local area.
5. It is reasonable to reduce SDG&E's estimate of LCR procurement by a conservative 211 MW due to additional energy efficiency impacts in the San Diego local area.
6. It is reasonable to reduce ISO's, SCE's, and SDG&E's estimate of LCR procurement by 1,321 MW in the SONGS study area due to reduced demand as shown in the CEC's Revised Demand Forecast for 2014-2024.
7. After adjusting ISO's, SCE's, and SDG&E's model results for the best available estimates, the record shows surpluses of local area resources in the vast majority of cases studied.
8. We also find that need determinations for utility LCR procurement should be consistent with ISO's 2013/2014 Transmission Plan and the CEC's Final Demand Forecast for 2014-2024, which will likely further reduce procurement needs in the SONGS region.

Proposed Conclusions of Law

1. Consistent with § 454.5(b)(9)(C), which states that utilities must first meet their "unmet resource needs through all available energy efficiency and demand reduction resources that are cost-effective, reliable and feasible," and the Commission's Loading Order established in the Energy Action Plan, this Commission must rely upon all reasonably expected to occur preferred resources before authorizing any new resources.
2. We find that the pending finalization of the CEC's Final Demand Forecast for 2014-2024 and the availability of draft results from CAISO's 2013/2014 Transmission Plan warrants extending, for two quarters, the Commission's final need determination.
3. Additionally, in order to protect customers from unnecessary procurement, it is reasonable to extend this Track 4 of the proceeding into the second quarter of 2014.
4. At this time, it is premature to authorize any additional resources.