

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Mark Minick

Title: Manager of Resource Planning

Dated: 07/03/2012

Question 01:

Has SCE performed its own LCR analysis of the LA Basin or the Western LA Basin in this proceeding? If so, please provide all documents including workpapers that show SCE's analysis.

Response to Question 01:

No.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Mark Minick
Title: Manager of Resource Planning
Dated: 07/03/2012

Question 02.a:

In its June 25, 2012 Testimony, SCE states that it “does not agree with all assumptions used by the CAISO.” SCE June 25, 2012 Testimony of M. Minick at p. 5. SCE also states that “[s]ome significant assumptions that can change the LCR need include changes to the reliability planning standards, demand forecast, resource scenarios, LCR generation sites, and transmission options.” *Id.* at p. 5.

a. Please identify what specific assumptions used by the CAISO SCE does not agree with and what SCE’s preferred assumption would be.

Response to Question 02.a:

SCE has internal load forecasts and renewable resource generation assumptions that are not exactly the same as those used by the CAISO in their LCR analysis. In this respect our analysis would be different than the CAISO analysis if we had done an LCR study. We did not do such a study. So, the purpose of the testimony statement is to simply note that a slightly different amount of LCR might be required using different assumptions, and SCE would prefer having flexibility in the procurement targets. So, if future studies with different assumptions change the LCR requirements, we can adjust the procurement accordingly.

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2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Mark Minick
Title: Manager of Resource Planning
Dated: 07/03/2012

Question 02.b:

In its June 25, 2012 Testimony, SCE states that it “does not agree with all assumptions used by the CAISO.” SCE June 25, 2012 Testimony of M. Minick at p. 5. SCE also states that “[s]ome significant assumptions that can change the LCR need include changes to the reliability planning standards, demand forecast, resource scenarios, LCR generation sites, and transmission options.” *Id.* at p. 5.

b. Please fill out the Load and Resource Tables that are attached hereto with SCE’s preferred assumptions.

Response to Question 02.b:

These load and resource tables appear to be designed to determine the Resource Adequacy (RA) or planning reserve margin requirements of the SCE system and are not capable of determining the LCR need, which is the subject of this proceeding. If such data were available it would need to be broken down further into segments at each electrical substation in order for the CAISO to do modelling required to determine LCR need for both the "LA Basin" and "Western LA Basin". SCE cannot produce such data in time for this proceeding and in some cases it may be essentially impossible to create such data without making many arbitrary assumptions, and these assumptions would need to be agreed to by the CAISO in order for the CAISO to do another LCR analysis.

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DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Mark Minick

Title: Manager of Resource Planning

Dated: 07/03/2012

Question 02.c:

In its June 25, 2012 Testimony, SCE states that it “does not agree with all assumptions used by the CAISO.” SCE June 25, 2012 Testimony of M. Minick at p. 5. SCE also states that “[s]ome significant assumptions that can change the LCR need include changes to the reliability planning standards, demand forecast, resource scenarios, LCR generation sites, and transmission options.” *Id.* at p. 5.

c. For all assumptions used in filling out the Load and Resource Tables, please provide all supporting evidence and documentation that SCE relies on for this assumption.

Response to Question 02.c:

Please refer to the answer for question 2b.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Aaron Fishman
Title: Sr. Project Manager
Dated: 07/03/2012

Question 03.a:

SCE states in its testimony that “CAISO’s assumptions in the LCR analysis recognized neither the potential for increased distributed generation (DG) nor increased localized generation.” SCE June 25, 2012 Testimony of M. Minick at p. 7.

a. Please state SCE’s preferred current forecast for the potential for increased distributed generation in the LA Basin and Western LA Basin.

Response to Question 03.a:

SCE does not have an alternative or preferred DG forecast for the LA Basin.

Mr. Minick’s testimony intends to make the general point that the LCR need would be equal to or less than that projected by the CAISO if more distributed generation (among other things) develops in appropriate locations within the LA Basin. However SCE has no information at this point in time that provides confidence that more DG will turn up in the right locations to alleviate the LCR need. There are, however, various programs being proposed within the state that may encourage the development of additional distributed generation.

SCE expects that as future generation procurement occurs to meet local reliability needs, new information on DG projects and programs may give justification to reducing the LCR procurement need. Hence, SCE has requested the CPUC grant it flexibility to procure up to the amount proposed by the CAISO (but not necessarily the total amount proposed by CAISO) so that it can reduce procurement if the new information provides confidence that the need for new generation in the LA Basin is less than what the CAISO is currently projecting.

Southern California Edison
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DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Aaron Fishman
Title: Sr. Project Manager
Dated: 07/03/2012

Question 03.b:

SCE states in its testimony that “CAISO’s assumptions in the LCR analysis recognized neither the potential for increased distributed generation (DG) nor increased localized generation.” SCE June 25, 2012 Testimony of M. Minick at p. 7.

b. Please state SCE’s preferred current forecast for the potential for increased localized generation in the LA Basin and Western LA Basin.

Response to Question 03.b:

See response to a) above

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DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Aaron Fishman
Title: Sr. Project Manager
Dated: 07/03/2012

Question 03.c:

SCE states in its testimony that “CAISO’s assumptions in the LCR analysis recognized neither the potential for increased distributed generation (DG) nor increased localized generation.” SCE June 25, 2012 Testimony of M. Minick at p. 7.

c. Please provide all supporting evidence and documentation that SCE relies on for this assumption.

Response to Question 03.c:

The "increased distributed generation (DG) nor increased localized generation" that Mr. M. Minick refers to is not an assumption but a general statement of fact. If more distributed/localized generation occurs in the local area, then the LCR need could potentially be reduced. However, there are no firm programs that the CAISO could look to at this time as a basis for assuming more distributed/localized generation.

Southern California Edison
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DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question 04.a:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

a. Please provide an explanation of what transmission mitigations including adding transmission facilities as stated above, could be used to reduce LCR need.

Response to Question 04.a:

In general, any upgrades (new transmission lines, reconducting of an existing line, and new transformers, etc) added within the Local Capacity Area that provide an alternate route for power flow may reduce LCR need.

Southern California Edison
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DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by:

Title:

Dated: 07/03/2012

Question 04.b:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

b. Pursuant to Request No. 5(a) please provide any transmission projects identified in CAISO's 2011/2012 Transmission Plan in Tables 7.1-1 through 7.2-1 that SCE believes should be added to mitigate LCR need in the LA Basin.

Response to Question 04.b:

SCE believes that the data request contains a typographical error. SCE believes that the question should read "Pursuant to Request No. 4(a)" instead of "Pursuant to Request No. 5(a)". Based on this assumption, all transmission projects identified in the 2011/2012 Transmission Plan in Table 7.1-1 through 7.2-2 and approved the CAISO Board should be added.

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2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question 04.c:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

c. If SCE believes that additional projects should be added that were not included in Tables 7.1-1 through 7.2-1, please list those transmission projects included their expected in-service date.

Response to Question 04.c:

Only approved projects should be considered in LCR studies. SCE only has one project that was approved by CAISO after the 2011-2021 studies, as discussed in response to 4(a) and 4(b).

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DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question 04.d:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

d. Has SCE proposed any transmission projects for the LA Basin or Western LA Basin? If so, please provide a list of any proposed transmission project.

- i. In the list provided pursuant to Request No. 4(d) above, please identify any projects that were evaluated to mitigate contingencies by way of reconducturing.
- ii. In the list provided pursuant to Request No. 4(d) above, please identify any special protection system projects that have been evaluated.

Response to Question 04.d:

d. Has SCE proposed any transmission projects for the LA Basin or Western LA Basin? If so, please provide a list of any proposed transmission project.

Response: No.

i. In the list provided pursuant to Request No. 4(d) above, please identify any projects that were evaluated to mitigate contingencies by way of reconducturing.

Response: Refer to Response 4.d

ii. In the list provided pursuant to Request No. 4(d) above, please identify any special protection

system projects that have been evaluated.

Response: No special protection system project have been been evaluated.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question 04.e:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

e. For each project listed pursuant to Request No. 5(b-d) above, please define:

- i. the project's expected impact on LCR need;
- ii. the project's reactive support;
- iii. the project's voltage support; and
- iv. the project's estimated cost.

Response to Question 04.e:

e. For each project listed pursuant to Request No. 5(b-d) above, please define:

- i. the project's expected impact on LCR need;

Response: SCE does not have this information. The LCR study needs to be rerun to determine the effect on LCR need.

- ii. the project's reactive support;

Response: Not applicable, the project does not include reactive support.

iii. the project's voltage support; and

Response: Not applicable, the project does not include voltage support.

iv. the project's estimated cost.

Response: As shown in Table 7.2-1 the estimated cost is approximately \$5-15M.

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DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Mark Minick

Title: Manager of Resource Planning

Dated: 07/03/2012

Question 05:

Please provide a list of any additional resources that CAISO did not consider that SCE expects to mitigate the LCR need for both the Moorehead Park area in 2021. Please include the expected MW of the project and when the project could be expected to come on-line.

Response to Question 05:

SCE does not know of any sited, licensed, or contracted new generation in the Moorpark area at this time. However, slower load growth, including some of the currently uncommitted future EE and DR, transmission line equipment modifications, additional distributed generation, and other factors may lessen the need for the amount LCR generation proposed by the CAISO. Similarly, higher load growth and more stringent reliability criteria may increase this amount.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Mark Minick

Title: Manager of Resource Planning

Dated: 07/03/2012

Question 06:

Please provide a list of any additional resources that CAISO did not consider that SCE expects to mitigate the LCR need for the LA Basin area in 2021. Please include the expected MW of the project and when the project could be expected to come on-line.

Response to Question 06:

SCE does not know of any sited, licensed, or contracted new generation in this area at this time. However, slower load growth, including some of the currently uncommitted EE and DR, transmission line equipment modifications, additional distributed generation, and other factors may lessen the need for the amount LCR generation proposed by the CAISO. Similarly, higher load growth and more stringent reliability criteria may increase this amount. Due to these factors SCE is proposing that we have flexibility in the procurement of future LCR needs.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Mark Minick

Title: Manager of Resource Planning

Dated: 07/03/2012

Question 07:

Please provide a list of any additional resources that CAISO did not consider that SCE expects to mitigate the LCR need for the Western LA Basin area in 2021. Please include the expected MW of the project and when the project could be expected to come on-line.

Response to Question 07:

See answer to question 6.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question 08:

Please provide the 10-year outage history for the following lines:

- a. Serrano-Villa PK #1;
- b. Serrano-Lewis PK #2

Response to Question 08:

- a. Serrano-Villa PK #1;

Response: There were no forced outages on the Serrano-Villa Park # 1 for the last 10 years. Scheduled outages are not readily available.

- b. Serrano-Lewis PK #2

Response: SCE believes that the data request contains a typographical error. SCE believes that the question should be Serrano-Lewis #2, no PK. There were no forced outages on the Serrano-Lewis # 2 for the last 10 years. Scheduled outages are not readily available.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Phillip Leung

Title: Power System Planner

Dated: 07/03/2012

Question 09:

Has SCE analyzed CAISO's power flow modeling in this proceeding? Has SCE done its own power flow modeling for this proceeding? If so, please provide the inputs that SCE used for its power flow modeling.

Response to Question 09:

Response: SCE was involved in the initial stages and developed the initial power flow Base Case that the CAISO used for its power flow modeling in this proceeding. This is the extent of the work done by SCE for CAISO's LCR Studies. SCE did not conduct its own power flow studies for this proceeding.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA

Prepared by: Carol Schmid-Frazer

Title: Senior Attorney

Dated: 07/03/2012

Question 10:

Please provide a copy of all other data requests that have been submitted to SCE by other parties in this proceeding, as well as a copy of all SCE's responses to those data requests

Response to Question 10:

Attached below is a copy of all data requests that SCE has received to date and all data request responses sent out to date.

Southern California Edison
2012 LTPP R.12-03-014

DATA REQUEST SET CEJA-SCE-001

To: CEJA
Prepared by: Phillip Leung
Title: Power System Planner
Dated: 07/03/2012

Question Q.04 Amendment:

In CAISO's 2011/2012 Transmission Plan, CAISO includes several tables featuring lists of transmission projects. *See* 2011/2012 Transmission Plan at pp. 419-428 (Table 7.1-1 (status of previously approved projects costing less than \$50M); Table 7.1-2 (showing status of previously approved projects costing \$50M or more); Table 7.2-1 (new reliability projects found to be needed)).

In SCE's June 26, 2012 Testimony, SCE asserts that CAISO did not consider certain transmission mitigation that could reduce LCR need. Specifically, SCE states that "the CAISO has not investigated adding transmission facilities beyond the 2021 transmission configuration used in its analysis of need for LCR resources in the LA Basin." SCE June 25, 2012 Testimony of D. Cabbell at pp. 8-9.

- a. Please provide an explanation of what transmission mitigations including adding transmission facilities as stated above, could be used to reduce LCR need.
- b. Pursuant to Request No. 5(a) please provide any transmission projects identified in CAISO's 2011/2012 Transmission Plan in Tables 7.1-1 through 7.2-1 that SCE believes should be added to mitigate LCR need in the LA Basin.
- c. If SCE believes that additional projects should be added that were not included in Tables 7.1-1 through 7.2-1, please list those transmission projects included their expected in-service date.
- d. Has SCE proposed any transmission projects for the LA Basin or Western LA Basin? If so, please provide a list of any proposed transmission project.
 - i. In the list provided pursuant to Request No. 4(d) above, please identify any projects that were evaluated to mitigate contingencies by way of reconducturing.
 - ii. In the list provided pursuant to Request No. 4(d) above, please identify any special protection system projects that have been evaluated.
- e. For each project listed pursuant to Request No. 5(b-d) above, please define:
 - i. the project's expected impact on LCR need;
 - ii. the project's reactive support;

- iii. the project's voltage support; and
- iv. the project's estimated cost.

Response to Question Q.04 Amendment:

a. Please provide an explanation of what transmission mitigations including adding transmission facilities as stated above, could be used to reduce LCR need.

Response: In general, any upgrades (new transmission lines, reconductoring of an existing line, and new transformers, etc) added within the Local Capacity Area. However, the Local Capacity Area Technical Studies would need to be redone.

b. Pursuant to Request No. 5(a) please provide any transmission projects identified in CAISO's 2011/2012 Transmission Plan in Tables 7.1-1 through 7.2-1 that SCE believes should be added to mitigate LCR need in the LA Basin.

Response: SCE believes that the data request contains a typographical error. SCE believes that the question should read "Pursuant to Request No. 4(a)" instead of "Pursuant to Request No. 5(a)". Based on this assumption, all transmission projects identified in the 2011/2012 Transmission Plan in Table 7.1-1 through 7.2-2 and approved by the CAISO Board should be included.

c. If SCE believes that additional projects should be added that were not included in Tables 7.1-1 through 7.2-1, please list those transmission projects included their expected in-service date.

Response: There are no additional projects that should be added that were not included in Tables 7.1-1 through 7.2-1.

d. Has SCE proposed any transmission projects for the LA Basin or Western LA Basin? If so, please provide a list of any proposed transmission project.

i. In the list provided pursuant to Request No. 4(d) above, please identify any projects that were evaluated to mitigate contingencies by way of reconductoring.

Response: Yes, SCE proposed the Del Amo-Ellis Loop In project which came on-line on 6/1/2012.

ii. In the list provided pursuant to Request No. 4(d) above, please identify any special protection system projects that have been evaluated.

Response: No special protection system projects have been evaluated with the project mentioned in question 4.d (i).

e. For each project listed pursuant to Request No. 5(b-d) above, please define:

Response: SCE believes that the data request contains a typographical error. SCE believes that the question should read "Pursuant to Request No. 4(b-d)" instead of "Pursuant to Request No. 5(b-d)".

i. the project's expected impact on LCR need;

Response: The Del Amo-Ellis Loop In project was included in the CAISO Study before its on-line date.

ii. the project's reactive support;

Response: Not applicable, the project did not include reactive support.

iii. the project's voltage support; and

Response: Not applicable, the project did not include voltage support.

iv. the project's estimated cost.

Response: As shown in Table 7.2-1 the estimated cost is approximately \$5-15M.