BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



In The Matter of the Application of San Diego Gas and Electric Company (U 902 E) for a Certificate of Public Convenience and Necessity for the South Orange County Reliability Enhancement Project.

Application 12-05-020 (Filed May 18, 2012)

REPLY BRIEF OF THE OFFICE OF RATEPAYER ADVOCATES

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SUMMARY OF RECOMMENDATIONS

- 1) The Proposed Project should be denied.
- 2) If the Commission selects an alternative, the Trabuco Alternative, as proposed by the Office of Ratepayer Advocates ("ORA"), should be adopted.

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I. INTRODUCTION

San Diego Gas & Electric ("SDG&E") has not adequately supported the Proposed Project in its Opening Brief. In this Reply Brief, pursuant to Rule 13.11 of the Commission's Rules of Practice and Procedure, ORA responds to certain issues raised in SDG&E's Opening Brief and California Independent System Operator's ("CAISO's") Opening Brief.

II. PROJECT NEED

A. SDG&E Fails To Justify Its Expected Load Growth.

In its Opening Brief, SDG&E points to Tables 2-1 and 2-2 regarding its load forecasts for the South Orange County ("SOC") area. However, the actual peak load for the SOC area for 2015 was only 415 megawatts ("MW"). This actual value was lower than SDG&E's load forecasts of 433.5 MW and 443.3 MW for that year. The actual

¹ SDG&E Opening Brief at 26.

² RT at 205:8-19 (Vol. 2).

³ See Exhibit SDG&E 2.2, SDG&E Corrected April 7, 2015 Supplemental Prepared Testimony of Scott Bockiewicz, Don Houston, John Jontry, Karl Iliev, Hal Mortier, Henry Nembach, Cory Smith, Michael Sullivan and Willie Thomas (includes September 10, 2015 corrections with certain September 10 changes removed per ALJ Ruling of November 9, 2015) (Public Version) ("SDG&E 2.2") at 55:3-6, Table 2-1 and Table 2-2.

peak load for 2014 was 415.3 MW. 4 This actual value was lower than SDG&E's load forecast of 427.8 MW for that year. 5

Furthermore, SDG&E has failed to justify its use of a 1-in-10 forecast, versus a 1-in-5 or a 1-in-2. At hearings, the relative probabilities of such forecasts were discussed with Mr. Jontry:

- Q. How is that [1-in-10] different from an [sic] 1-in-5 or a 1-in-2?
- A. A 1-in-5 forecast could be expected to occur once every five years, one in two once every two years. They are also referred to as a 50 percent, 20 percent and 10 percent forecast. Generally speaking, the 1-in-10 will be higher than the 1-in-5 which is higher than the 1-in-2.
- Q. Which forecast is more likely to occur?
- A. By definition the 1-in-2 is more likely than the 1-in-5 which is more likely than the 1-in- $10.\frac{6}{}$

SDG&E's forecasts were further inflated due to the fact that SDG&E used non-coincident load forecasts for what it deems "load pockets," such as the SOC area. SDG&E admitted that these forecasts are "somewhat higher than the aggregate forecast" which used a coincident peak methodology. SDG&E fails to adequately justify why it used a non-coincident peak methodology given the fact that seven substations in the SOC area are interconnected to each other and are sharing transmission lines. Fundamentally, SDG&E failed to justify its methodology, which resulted in the projected load "growth" being inflated.

⁴ Exhibit Frontlines 413, Excerpt from SDGE Response to Energy Division Data Request #8.

 $[\]frac{5}{2}$ See, e.g., SDG&E 2.2 at 55:6, Table 2-2.

⁶ RT at 107:1-14 (Vol. 1).

⁷ RT at 224:17-23 (Vol. 2).

 $[\]frac{8}{2}$ RT at 224:22-23 (Vol. 2). Mr. Jontry testified that these forecasts were adjusted to 1-in-10 years. RT at 224:24-26 (Vol. 2).

B. SDG&E Overstates Outage Risks.

Citing ORA's mandate under Public Utilities Code § 309.5(a), SDG&E selectively quotes the hearing transcript to erroneously suggest that "ORA appears to have less concern about blackout risk" for South Orange County residents. However, when that mischaracterization of Mr. Mee's testimony was proposed by SDG&E at the hearings, it was rejected.

Q. Okay. Is it fair to say that ORA concluded that it is not worth protecting the residents of South Orange County from a potential outage of Talega substation?

MR. MOLDAVSKY: Objection. Misstates testimony.

ALJ FARRAR: Response, Mr. Raushenbush.

MR. RAUSHENBUSH: It doesn't, and it's directly on point.

ALJ FARRAR: I'm afraid you're going to have to rephrase it. I do believe it mischaracterizes his testimony.

MR. RAUSHENBUSH: Q. Do you believe that what ORA has proposed actually protects the residents of South Orange County from a catastrophic loss of Talega substation?

A. Yes. 10

ORA does not ignore the possibility of outages. The Proposed Project is simply not a good means to mitigate the reliability concerns in the SOC area. Ultimately, the Proposed Project does not improve power supply reliability for the SOC area.

As explained in Opening Brief, the Proposed Project does not provide two truly electrically independent power sources to the SOC area. ORA has also explained that the Proposed Project does not provide two geographically separate power sources to the SOC area. ORA has also explained that

⁹ SDG&E Opening Brief at 5.

¹⁰ RT at 1390:5-21 (Vol. 9).

¹¹ ORA Opening Brief at 32.

¹² ORA Opening Brief at 35.

Regarding these issues, SDG&E's Opening Brief discounts the concerns raised by Intervenors as unlikely or catastrophic. Yet, SDG&E does not adequately explain why its identified outages are more likely than ORA's identified fire and seismic risks. SDG&E should not be arbitrarily highlighting low probability events, while discounting actual risks to system reliability.

Further, SDG&E's assurance that "[e]ven in the unlikely event that smoke or firefighting forces <u>all</u> of SDG&E's 230 kV [kilovolt] lines out of service, such an outage is temporary and relatively short (hours)" is cold comfort in light of SDG&E's witness Mr. Iliev's failure to guarantee service restoration within 24 hours under a seismic scenario.

Q. Thank you.

Aren't the SONGS-Talega SONGS-Capistrano and Escondido, Talega, Capistrano all within a half mile radius of the Talega Substation under the proposed project?

- A. They are close by, yes.
- Q. So if an earthquake in that area where to knock out all of those lines, that would result in an outage of the entire South Orange County area, right?
- A. If an earthquake where to knock out those lines, yes.

. . .

- Q. Under the proposed project could you guarantee restoration of service between 24 hours?
- A. No. ... 15

Ultimately, SDG&E concedes that "'for an earthquake to damage all three transmission lines ..., it would most likely damage Talega Substation as well. If this

¹³ SDG&E Opening Brief at 17-18.

¹⁴ SDG&E Opening Brief at 17.

 $[\]frac{15}{8}$ RT at 920:4-16, 921:5-8 (Vol. 7). Mr. Iliev subsequently asserted that a "transmission line would be restored faster than a transformer outage." RT at 921:8-13 (Vol. 7).

were to happen, the substation, not the transmission lines around it, would be the long term outage." This assertion by SDG&E demonstrates that the Proposed Project does not offer a true second source of power for the SOC area.

C. CAISO and SDG&E Fail To Refute the Fact That the SOC Area Is a Local Area Network.

Both SDG&E and CAISO ignore Mr. Jontry's admission at hearings that the SOC Area is a local area network. Instead, tenuous grounds are put forth in an attempt to misclassify the SOC Area as a bulk electric system ("BES"). CAISO acknowledges that a local area network definition "appears to include systems like the South Orange County 138 kV system." CAISO then points to three elements that it believes distinguishes the SOC Area from the definition: (1) 69 kV facilities from San Luis Rey to Talega; (2) a 100 MVAR STATCOM at Talega; and (3) a 40 MVAR shunt capacitor at Capistrano.

The 69 kV facilities from San Luis Rey to Talega do not qualify the entire SOC area as BES. The minimal impact of these facilities was discussed at hearings with Mr. Jontry.

- Q. So there's South Orange County load that's not served by the 230/138 kV Talega transformers?
- A. Yeah. I think as I mentioned earlier, there's a 69 kV connection from Talega south to San Luis Rey Substation.
 And I that (sic) believe that does serve a small amount of load in South Orange County.
- Q. But -- sorry.
- A. But 99 percent if not more of the load in South Orange County is served by the 138 kV transformers at Talega.

¹⁶ SDG&E Opening Brief at 17-18 (quoting SDG&E 3.2 at 32:1-12).

 $[\]frac{17}{8}$ RT at 72:18-28 – 73:1 (Vol. 1).

¹⁸ CAISO Opening Brief at 6.

¹⁹ CAISO Opening Brief at 6-7.

- Q. So you're testifying that there is power flowing on the 69 kV line from San Luis Rey into Talega?
- A. It could, but very small amount. The line south of San Luis Rey I think off the top of my head is only rated for 24 MVA, so it's a very week (sic) connection.
- Q. It could isn't the same as it does. So I guess does it or can it? Which? Does it?
- A. It could. It depends on what the system conditions are on any one particular day.

..

- Q. Okay. That's what I'm trying to understand. The Pendleton load is not part of South Orange County, is it? What you call -- SDG&E calls and what CAISO considers SDG&E's South Orange County system?
- A. Right. I think there's a small amount of load at Cristianitos Substation, which is in Orange County. But I believe it's just a few megawatts. 20

The minimal amount of power that may be flowing on this lower voltage (69 kV) sub-transmission line does not qualify the rest of the SOC area as BES. Under such an approach, all local area networks with any minimal connection at lower voltages would be treated as BES. This would eliminate the distinction between a local area network and BES.

The two voltage support devices interconnected to the 138 kV system also fail to qualify the entire the SOC area as BES.²¹ CAISO posits that "[p]ursuant to NERC's Inclusion I5 to the BES definition, both of these devices are BES elements because they support voltages and transfer capability on the 138 and 230 kV systems." SDG&E and CAISO are incorrect on this point.

²⁰ RT at 132:1-25, 133:10-18 (Vol. 1).

²¹ See SDG&E Opening Brief at 6-7.

²² CAISO Opening Brief at 7.

ORA understands that the purpose of this 40 MVAR shunt capacitor would be to maintain the voltage level at the Capistrano 138 kV bus. Thus, it should be beyond dispute that the purpose of this device it to provide voltage support locally at the Capistrano substation. Arguing that the shunt capacitor, which is located 7.5 miles away from the Talega Substation, is providing voltage support to the 230 kV transmission lines is implausible.

Similarly, the 100 MVAR STATCOM, another voltage support device that is interconnected to the Talega Substation's 138 kV bus, should not be deemed as providing voltage support for the 230 kV side of Talega Substation. Voltage support on the 230 kV side would be installed on the 230 kV side. It is unreasonable to qualify the 230 kV/138 kV transformers, the 138 kV buses, the 138 kV transmission lines, and the voltage support devices that are interconnected to the 138 kV transmission system for providing power to local South Orange County load, as part of the BES.

Even assuming that the voltage support elements qualify as part of the BES under Inclusion I5, this does not establish the *entire SOC area* as BES. In any event, no party has persuasively excluded the effect of footnote b or its successor footnote 12 of NERC TPL-001-4 on this Application. ²³

D. SDG&E's Argument Against Reconfiguring the Talega Substation Is Unpersuasive.

SDG&E justifies the Proposed Project by attacking the value of reconfiguring the Talega substation to resolve SDG&E's asserted concerns. While SDG&E concedes that reconfiguring Talega Substation would reduce some risks, it overstates the other risks that it views as unresolved by such a reconfiguration. SDG&E does not acknowledge that such risks are supported by SDG&E's inflated non-coincident peak

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²³ See Exhibit ORA 211, Standard TPL-001-4.

²⁴ SDG&E Opening Brief at 29-30.

load forecasts. Further, by not recognizing the SOC area as a local area network, SDG&E exaggerates the import of its perceived violations.

SDG&E's view that the Talega substation has insufficient space for reconfiguration is not persuasively supported. Indeed, it has been subject to other installations within the past five years. SDG&E does not explain why it elected to use valuable space for other installations, given its belief that Talega's critical reconfiguration also required space.

III. Selection Of Alternative / If the Commission Selects a Project, Which Alternative Should It Select?

No party effectively refutes ORA's position that in the event that the Commission authorizes a project, it should select the Trabuco Alternative, as proposed by ORA ("Trabuco Alternative").

A. SDG&E Overstates Loop Flow Concerns With the Trabuco Alternative.

As indicated in its discussion about loop flow in ORA's Opening Brief, ORA understands that there could be loop flow concerns under The Trabuco Alternative. 26 Beyond that discussion, ORA notes that such concerns can be mitigated by installing Special Protection Systems ("SPSs").

SDG&E's argument against use of SPSs relies on CAISO planning standards.²⁷ However, its assertion that "[t]here are too many Category C contingencies in South Orange County where the Applicable Ratings would not allow time for manual adjustment of the system for SDG&E to utilize SPSs in compliance with CAISO

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²⁵ RT at 893:3-17 (Vol. 7).

²⁶ See ORA Opening Brief at 38-40.

²⁷ SDG&E Opening Brief at 21.

planning standards"²⁸ does not adequately explain why use of multiple SPSs would not adequately address loop flow concerns.

In any event, SDG&E's complaints ignore the loop flow concerns associated with the Proposed Project itself. $\frac{29}{}$

B. SDG&E Overstates Its Concern Regarding Path 43.

SDG&E's Opening Brief asserts risks associated with Path 43.³⁰ SDG&E, once again, fails to acknowledge the significance of the retirement of SONGS. The retirement of SONGS greatly reduces the power flow on Path 43.³¹ SDG&E is thus inflating this issue without consideration of the current status of Path 43. SDG&E also does not fully appreciate the beneficial impact of SPSs on this issue.

C. SDG&E's Arguments Regarding Interconnection Delay Are Unpersuasive.

SDG&E's Opening Brief also discusses SDG&E's interest in not interconnecting with SCE's transmission system. SDG&E should not threaten delay in order to force the Proposed Project onto ratepayers. SDG&E had notice of the Trabuco Alternative since ORA testified about this approach on May 26, 2015. If ordered by the Commission to expeditiously implement the Trabuco Alternative, SDG&E could not reasonably argue for any further delay.

²⁸ SDG&E Opening Brief at 21.

²⁹ See, e.g., RT at 1244:3 – 1246:4 (Vol. 8).

 $^{30 \}over 30$ SDG&E Opening Brief at 46-47.

^{31 31} See, e.g., ORA Opening Brief at 40.

^{32 32} SDG&E Opening Brief at 47-48.

³³ See ORA 200, CORRECTED PREPARED TESTIMONY OF CHARLES MEE ON SOUTH ORANGE COUNTY RELIABILITY ENHANCEMENT PROJECT (SOCREP), at 12:18 – 18:1.

D. SDG&E Fails To Demonstrate That the Trabuco Substation Reconfiguration Is Infeasible.

SDG&E's Opening Brief declares that its "substation engineering experts have determined" that the Trabuco substation configuration contemplated by the Trabuco Alternative is infeasible. However, at hearings, Mr. Mee pointed to SDG&E's Trabuco block diagram in opposition:

MR. RAUSHENBUSH: Q. Please point to the piece of SDG&E testimony that led you to conclude that it would fit on the AT&T parking lot.

- A. I believe that's SDG&E's Exhibit 4-C, Attachment 55.
- Q. What's on that page?
- A. I don't have that with me. Based on my memory, that's the layout of the Trabuco substation.

. . .

MR. RAUSHENBUSH: Q So Mr. Mee, do you have in front of you Exhibit SDG&E-3.2 and Attachment 39, the Trabuco block diagram?

ALJ FARRAR: Actually, he does not. He has Exhibit 4-C, and he's looking at Attachment 55, which is the same picture. 35

ORA does not advocate for SDG&E's approach for the Trabuco substation under Alternative J. However, in its Trabuco block diagram, SDG&E proposes to use 1.95 acres of land to hold the 230 kV transmission switchyard, with two 230 kV transmission lines feeding the switchyard, and three transformers converting voltage from 230 kV to 138 kV. Beyond the 1.95 acres, the AT&T parking lot is 2.67 acres. It is thus reasonable to conclude that if 1.95 acres can hold a 230 kV transmission switchyard, 2.67 acres could also hold such a switchyard. Furthermore, it should be feasible for the 2.67 acres

³⁴ SDG&E Opening Brief at 49.

³⁵ RT at 1142:9-18, 23-28 (Vol. 9).

to hold a smaller 230 kV switchyard, which would have two 230 kV transmission lines feeding the switchyard and only two transformer positions, as contemplated by the Trabuco Alternative.

SDG&E's legal arguments regarding infeasibility are equally unpersuasive. SDG&E repeatedly cites to Exhibit 6, an "RWQCB [Regional Water Quality Control Board] Order." SDG&E's Opening Brief fails to explain why the RWQCB Order would be violated. Absent any meaningful analysis, this conclusory proposition should not be given any weight.

SDG&E does cite *Sequoyah Hills Homeowners Assn. v. City of Oakland* in support of its conclusion about RWQCB Order.³⁷ A review of the pin cite given in that case indicates two possible legal assertions that SDG&E may have been relying on.

First, *Sequoyah* indicates that: "[i]n fact, it [CEQA] permits public agencies to approve projects for which significant environmental impacts have been identified upon a finding that 'economic, social, or other considerations' render such alternatives infeasible." ORA agrees that the Proposed Project has significant environmental impacts. However, the Trabuco Alternative has not been shown to be infeasible. Thus, the analogy being drawn is inapposite.

Second, *Sequoyah* explained that a certain alternative: "would be *legally* infeasible in that it would be prohibited by *Government Code section 65589.5*, *subdivision (j)*." The apparent analogy that could be drawn is that the RWQCB Order somehow establishes legal infeasibility. However, as stated above, what is missing is a meaningful

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³⁶ See, e.g., SDG&E Opening Brief at 50.

³⁷ SDG&E Opening Brief at 50, fn. 209 (citing *Sequoyah Hills Homowners Assn. v. City of Oakland*, 23 Cal.App.4th 704, 715 (1993)).

 $[\]frac{38}{2}$ Sequoyah at 715.

 $[\]frac{39}{2}$ Sequoyah at 715.

analysis as to why that would be true. SDG&E's citation to the RWQCB Order and *Sequoyah* does not support a finding of infeasibility.

SDG&E also makes an oblique reference to a "potential legal infeasibility for one utility to condemn property of another utility." This "potential" issue should not be given any weight, as SDG&E's Opening Brief did not explain its reasoning. Such potential concerns do not establish infeasibility, as exemplified by ORA's cross examination of Mr. Thomas on the transmission portion of the Trabuco Alternative.

- Q. You use the language "potentially" and "infeasible." It is not your testimony -- strike that.
 - You are not definitively stating one way or the other that ORA's alternative, Trabuco Alternative, is infeasible, are you?
- A. The term "potentially" and "infeasible" in this context as I stated in my testimony was in regard to the transmission portion of the alternative proposed. And that we have not definitively determined that that portion of that alternative is feasible, because we don't know yet if we can acquire the land rights to build via that line in an overhead position. And we have not had a chance yet to meet with the railroad owner, as well as the Southern California Edison Transmission Engineering Department, to see that that is feasible.
- Q. Okay. Just to close the loop on that question, you haven't determined that that aspect of the alternative is infeasible either, correct?
- A. That is correct. 41

E. SDG&E's View That the Trabuco Alternative Would Cost More Than the Proposed Project Is Unpersuasive.

SDG&E argues that the Trabuco Alternative would cost more than the Proposed Project. 42 Putting aside the contingency that ORA already described in its Opening

⁴⁰ SDG&E Opening Brief at 50.

⁴¹ RT at 648:13 - 649:8 (Vol. 5).

Brief⁴³, SDG&E's proposition does not comport with common sense. It will cost more to construct seven and a half miles of 230 kV double-circuit transmission lines than a half mile. There is no way around that cost issue of the Proposed Project. Self-serving arguments that seek to inflate the costs of the Trabuco Alternative should not be given any weight.

IV. CONCLUSION

The cost of the Proposed Project is not commensurate with the potential reliability benefits it would provide. If the Commission chooses an alternative, it should select the Trabuco Alternative.

Respectfully Submitted,

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⁴² See, e.g., SDG&E Opening Brief at 50.

⁴³ See ORA Opening Brief at 29-31.