

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas)
& Electric Company (U 902 E) for a Certificate of)
Public Convenience and Necessity for the Sunrise) Application 06-08-010
Powerlink Transmission Project)
_____)

REPLY BRIEF OF UTILITY CONSUMERS' ACTION NETWORK

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* Tables of contents and authorities can be found at the end of this document.

I. Introduction.

To compensate somewhat for UCAN's 200+ paged opening brief, UCAN offers this much shorter reply brief. Rather than comport with the opening brief outline, UCAN offers observations on SDG&E's opening brief. UCAN addresses the following six categories:

1. Magic tricks - SDG&E's making material facts disappear through omission
2. Factual claims proffered without any evidentiary support
3. SDG&E assertions that, if true, would compel the Commission to reject the application;
4. Blatantly incorrect statements;
5. Silly Lawyer Tricks, aka carefully constructed misleading statements of fact; and
6. Disputed factual assertions upon which reasonable parties can disagree.

This brief also addresses assertions made in the CAISO's opening brief and offers rebuttal to dubious legal theories advanced in SDG&E's opening brief. And, because SDG&E relied on Mr. Oatman's testimony in its opening brief, UCAN is compelled to remind the Commission in some detail about how Mr. Oatman's allegedly expert, independent testimony was anything but expert or independent.

In this brief, UCAN's theme is that SDG&E's argument in this case has veered so far from the evidentiary record, it lapses into sophistry. SDG&E repeatedly violates the Commission's rule against citing facts that are outside the record and distorts those facts that are in the record. As UCAN notes here and as State Parks states in its motion to strike, the Commission should not countenance SDG&E's efforts to insert stricken facts into the record or be allowed to simply make up material facts. The other theme touched upon in this brief and in the corresponding Motion for Official Notice filed today addresses SDG&E's withholding of or refusal to acknowledge material facts. In a case that is already technically complex, these legal strategies disserve the process.

UCAN urges the Commission to adopt findings similar those it made in rejecting SDG&E's ill-considered Valley-Rainbow project: because SDG&E will continue to meet the WECC/NERC reliability criteria during the relevant planning horizon and because the STP cannot be justified on the basis of

providing economic benefits to ratepayers, SDG&E's request for a CPCN should be denied without prejudice.¹

II. Magic Tricks - Omissions of Material Facts.

Through the act of omission, SDG&E endeavors to make very material facts seem as though they've disappeared. UCAN only hopes that the Commission is fully aware that magic is illusory and that the facts haven't disappeared at all. In its opening brief, SDG&E performs six magic tricks, as detailed below.

A. SDG&E bases its arguments upon discredited reference cases and ignores the Commission-ordered reference cases.

Exhibits SD-142 and SD-144 are material indicators of the need and cost-effectiveness of STP. Yet, SDG&E does not even mention these exhibits until pages 287 and 288 respectively, and then only in passing. Mentions of these two exhibits appear on only two other pages of SDG&E's case.

SDG&E compounds its failure to cite these material exhibits by its repeated cites to the out-of-date versions of Tables 11-1 and 11-6 that are based on inconsistent baseline assumptions.² So when SDG&E states that STP is \$142 MM/year more cost effective than a GT Reference Case, it is making a knowingly false statement.³ SDG&E's own numbers as presented in Exhibit SD-142 indicates that STP's cost-effectiveness, assuming all of SDG&E's numbers are accurate, is no more than \$40 million better than a GT reference case.

Similarly, when SDG&E states "Table 11-1 shows a reliability shortfall in 2010 for DEIR alternative 2,"⁴ this statement is wrong because it relies upon the out of date version of Table 11-1 with inconsistent baseline assumptions. When using the same baseline assumptions as for all other Alternatives, Table 11-1 shows a 49 Mw surplus in 2010 for DEIR Alternative 2.⁵

And when the applicant asserts that Table 11-1 shows reliability outcomes with and without STP, this is also a false statement.⁶ Because of inconsistent baselines identified by the ALJ in hearing

¹ D. 02-12-066, p. 78

² . SDG&E OB (Opening Brief), pp. 2, 3, 286, 332 (full Table 11-6 based on the faulty Table 11-1), and page 360 (full Table 11-1 with inconsistent baseline numbers)

³ SDG&E OB, p. 7

⁴ Id., p. 186

⁵ Ex. SD-142, p. 1 "San Diego Reliability Surplus" line.

⁶ Id., p. 56,58 citing Ex. SD-36

room rulings, this number has no meaning. Yet, SDG&E intentionally chose to omit mention of the conflicting numbers in its own Ex. SD-142 at pages 1 and 3, and bases its reliability and economic cases on exhibits that have been officially rejected as not credible.

Additionally, when SDG&E asserts at page 283 of its brief that the capacity benefits of the wind generation in DEIR Alternatives 1 and 2 is uncertain, it is uncertain in only one direction. In its ALJ-directed revisions to Table 11-1, SDG&E values the wind capacity from DEIR Alternatives at zero.⁷ Thus, the only uncertainty is whether it should be higher.

As UCAN discussed in its Opening Brief, the data in Exhibits SD-142 and SD-143 together with other SDG&E data shows that when DEIR Alternative 1 is adjusted to remove the incremental CSI, the resulting alternative is economically superior to the ENR alternative. And Exhibit SD-144 directly shows that a reference case with a 7165 Btu/kwh combined cycle plant is almost economically competitive with STP using SDG&E's flawed numbers (and far superior when non-local RA, Miguel upgrades, and other SDG&E errors are considered).

B. IID's Coachella-Devers project.

In three subchapters, SDG&E's opening brief attempts to rebut the notion that LADWP's Green Path North (GPN) project would be built.⁸ Yet, no party has made GPN a particularly notable issue in Phase 2. SDG&E's excessive protest is revealing – for while it focuses its sights upon GPN, it only mentions the Coachella-Devers line twice in passing. And it is Coachella-Devers, not the GPN project, which UCAN and other parties have raised as an important development in Imperial Valley geothermal development.⁹

SDG&E fails to offer any citation in attempting to rebut UCAN's assertion about GPN. This is not an oversight – it is a factual omission designed to create an issue out of a non-issue. UCAN's actual proposals were clearly set forth in Chapter II of its Phase 1 direct testimony, and reaffirmed in its Phase 2 testimony. UCAN proposed to upgrade Miguel,¹⁰ upgrade Path 44,¹¹ increase SDG&E's N-0 import

⁷ Ex. SD-142, p. 1

⁸ Id. p. 229-236

⁹ See SDG&E's OB re GPN at p. 215, 217 (TE/VS access to renewables “would require the construction of Green Path North”), 229-233, 236 (calling GPN “the major item UCAN identifies to meet project objectives”)

¹⁰ Ex. U-3, section II.A, pp. 6-13

¹¹ Ex. U-3, section II.B, pp. 13-41

capability,¹² consider a Southern Route,¹³ count AMI and demand response savings properly,¹⁴ and improve combined cycle reliability to reduce the size of the G-1 contingency.¹⁵ UCAN has not proposed that GPN serve as an option for STP. This proposal, offered once in each phase and reiterated in each set of testimonies submitted by UCAN, could not be reasonably construed to rely to any extent upon GPN's outcome.

Even more notably, SDG&E also falsely accuses IID of not "looking beyond its control area"¹⁶ as that is exactly what IID's Coachella-Devers II project does – it is a project to link the IID control area (at Coachella) to the CAISO control area (at Devers). Coachella-Devers has the advantages of being built sooner than GPN, it already has a ROD from the BLM, it would provide 1200-1600 Mw of transfer capability to CAISO at Devers without GPN and offers 50 Mw of unused existing transfer capability to SCE and 200 Mw of planned no-cost increase in transfer capability in 2008 from re-rating the existing lines.¹⁷ Contrary to SDG&E's insinuation,¹⁸ once delivered to the CAISO grid, this energy can count for RPS purposes.

None of these facts can be surprising to SDG&E because in its Phase 1 testimony, SDG&E assumed there would be IID upgrades to the Coachella Valley-Devers transmission lines that connect IID to SCE.¹⁹ Now that IID has described and quantified its plans for Coachella-Devers transmission in Phase 2, SDG&E focuses its attention on GPN in the hopes of implying a factually unsupported contention that delays in GPN rule out IID to SCE exports.

In fact, it goes beyond implication. SDG&E expressly asserts that IID can't export to SCE because GPN is uncertain.²⁰ But SDG&E omits mention or consideration of Coachella-Devers when it makes this assertion --- instead it mentions only GPN. This, despite that fact that in Exhibit U-55, SDG&E admits that its STP analysis assumes an increase in IID export capacity to the IV substation from the current 225 Mw to 1600+ Mw. And SDG&E acknowledges in its testimony that these upgrades (as opposed to GPN) would be owned by IID, not Citizens Energy.²¹

¹²Ex. U-3, section II.C, pp. 41-48

¹³Ex. U-3, section II.D., pp. 48-50

¹⁴ Ex. U-3, section II.F, pp. 59-63

¹⁵ Ex.U-3, section II.G, pp. 63-67

¹⁶ Id, p. 234

¹⁷ Exs. ID-2 and ID-3

¹⁸ SDG&E OB, p. 215

¹⁹ Ex. SD-6, Table IV-27 on p. IV-37

²⁰ SDG&E Opening Brief, p. 235

²¹ Ex. SD-6, chapter IV, last page

C. Miguel import capacity continues to be ignored.

UCAN has repeatedly shown that SDG&E can save money by changing the RAS at Miguel to allow increased imports over SWPL.²² Moreover, as discussed in UCAN's opening brief, the CAISO wants SDG&E to increase its N-0 import capability and reduce congestion by changing the RAS at Miguel, and has included the RAS revisions in its 2008 Transmission Plan.²³ Yet, in Phase 2, SDG&E continues its refusal to model any changes at Miguel and its brief neglect any mention of added Miguel import capacity.

D. SDG&E ignores fire mitigation costs in its mitigation cost estimates.

Fire mitigation costs are not included in SDG&E's mitigation cost estimates.²⁴ The MGRA opening brief shows that the expected value of fire-related costs is \$1.5 million (levelized) per year lower for Southern Routes than for Northern routes. This means that the minimal cost advantage of ENR over the UCAN Route which UCAN identified in its opening brief (using SDG&E numbers only) would disappear when fire-related costs are taken account of.

E. Analysis of the year 2020.

In Phase 1, SDG&E prepared a 2020 analysis pursuant to the November 2006 Scoping Memo.²⁵ But in Phase 2, SDG&E attacks the appropriateness of a 2020 analysis²⁶ and its Phase 2 filings exclude any 2020 analysis. Curiously enough, the alleged culprit on this omission is apparently UCAN; SDG&E defends its reversal by citing UCAN's testimony along with that of South Bay's expert. But given that this may well be the only concession that SDG&E has made to UCAN's observations, the Commission would be justified in casting about for another reason behind this reversal.

²² Ex. U-3, section II.A. see also UCAN OB, Phase 1 and Ex. U-100

²³ UCAN OB, p. 52, 72

²⁴ SDG&E OB, p. 50

²⁵ Id. p. 16

²⁶ Id, fn. 19

It needn't look far. In its Phase 2 modeling, SDGE reveals the real reason for its about-face in its 2020 modeling. In Phase 1, SDG&E's 2020 analysis initially (in January 2007) showed dispatch benefits increasing from 2015, but when it corrected the analysis, it showed STP benefits declining from 2015 to 2020 in both constant and nominal dollars.²⁷ Such declining benefits in Phase 2 would have seriously compromised SDG&E's case, as claimed STP benefits would have been lower than those shown in Exhibits SD-142 and SD-144.

In the absence of such a Phase 2 analysis, the Commission can and should properly rely upon the still-valid Phase 1 analysis and conclude that SDG&E has overstated the economic dispatch benefits of STP by extrapolating from 2015 analysis with no 2020 analysis.

F. Southern California Edison's commercial PV proposal

Notwithstanding the introduction of Exhibits SD-115 and SD-116, the extensive cross-examination of Mr. Bialek by ALJ Weissman and the testimony of Powers Engineering, UCAN could find no mention of SCE's commercial PV proposal in SDG&E's opening brief. It persisted with reliance upon outdated cost figures dating back to 2004²⁸ and ignored the more recent, SCE-validated cost data available to it. And it fiercely (and deceptively) rebutted the PV cost figures offered by Powers Engineering.

Yet, it is expected that once this case is submitted, SDG&E will modify its position. The Commission will probably wish to take official notice of a commercial PV deployment proposal that SDG&E is rumored to be preparing for release in July, after submission of the briefs in Phase 2. UCAN's understanding is that SDG&E will apply for Commission approval to fund of 35-50MW of distributed commercial PV power installations, similar to but at a much smaller scale than the proposal that SCE made to the Commission earlier this year. If history is a guide, UCAN fully expects that SDG&E's estimated PV costs supporting that application will not square with the cost assertions offered in this proceeding.

²⁷ Ex. SD-26, Table H-16 Errata, 7/25/07 version, showing both the original and corrected numbers

²⁸ See UCAN OB, p. 187, fn.812

III. Factual claims made with no reference to the record

In a number of cases, SDG&E offers facts assumed to be in the evidentiary record that simply are not. While in many of those cases, SDG&E seeks official notice of facts to be presented, in others it makes no such offer. Given the Commission's evidentiary standard requiring all facts offered in briefs be supported by an evidentiary record, the number of uncited and unsupported facts found in SDG&E's opening brief is alarming. UCAN identified at least seven such examples of a material fact offered without any evidentiary support. One blatant one is found at page 152, at which SDG&E states:

A Sargent & Lundy subcontractor has recently provided a proposal on a similar transmission line project in the coastal area for monitoring. Based on this recent proposal cost, an estimate of \$60,000 per mile was assumed, and it was assumed that three monitors could be required. To determine the monitoring costs associated with each alternative, the number of impacted acres was converted into the number of miles, which were multiplied by \$60,000 (cost per mile) and 3 (number of monitors). This does not include the cost of any Commission-contracted monitors retained to monitor SDG&E's monitors.

This is a material fact relating to costs. But there is no citation offered by applicant and UCAN was unable to find any such evidence of a "recent proposal cost" presented by SDG&E in this case.

Similarly, SDG&E asserts in its brief: "In recent years, actual peak loads in the San Diego area have substantially exceeded CEC forecasts for *future* years."²⁹ This caught UCAN's attention because it is contradicted by the record in this case. Because it was offered in its Introduction, there is a fair presumption that SDG&E would support this asserted fact by further discussion in the brief. Yet, SDG&E's brief is completely devoid of any further support for this factually inaccurate and material assertion. Other examples of unsupported factual assertions in SDG&E's opening brief include:

- Brief, p. 63 (WECC approval on 4/18/08.) This part of the Brief is cited to SDG&E prepared testimony, all of which pre-dated April 18, 2008. There is no record citation given for the alleged April 18, 2008 WECC decision.
- Brief p. 71 (731 gwh of SDG&E RPS are dependent on STP.) SDG&E references Exhibit SD-36, at pages 6.28-6.29 in support of this assertion. But the sentence about 731 gwh being "reliant upon Sunrise" is not in the cited section of Exhibit SD-36 and, to UCAN's knowledge, has no support in the evidentiary record. It is also at odds with other parties' positions.

²⁹ SDG&E Opening Brief, p. 6

- Brief, p. 147 (According to the WECC: “any southern route is at much higher risk of a common corridor outage than the northern routes.”). This statement has no citation, nor can it, because it is not true. The analysis SDG&E did for the WECC looked only at one southern route, the ESSRA, and had no conclusion about “any southern route.” The SDG&E analysis for the WECC concluded that the quantifiable risk for an N-2 outage on ESSRA or the Proposed Route was the same – between 1 in 21 years and one in 900 years. The differences were based on qualitative assessments of twelve factors. There is thus no basis for the word “much” in SDG&E’s un-cited statement in its brief.
- Brief, p. 150. (Southern route traverses an “equally important area”, thus suggesting that CNF and ABDSP are equally important). SDG&E offers a citation to Exhibit SD-36 at p. 10.18 in support of this statement, but UCAN reviewed that page and it simply doesn’t contain any information that would support the contention that the CNF and ABDSP are equally important areas.
- Brief, p. 235. (“Transfer capability west of [Devers] within the CAISO control area should also be taken into account as being constrained.”) Applicant offers no citation in support of this statement. This is notable as it conflicts with the fact that the Commission has already approved a 500 kV line west of Devers (Devers-Valley #2, in D. 07-01-040), and there is already an existing 500 kV line and four 230 kV lines west of Devers. It is also contradicted by SDG&E’s own workpapers, which show all the locations where its GridView model identified congestion, and none of them are on any of the transmission lines west of Devers.³⁰

In its final decision, the Commission must disregard each of the above facts, unless supported in SDG&E’s reply brief. Moreover, the Commission should reprimand SDG&E for presenting such facts without appropriate attribution.

³⁰ See Ex. SD-143, pp. 8-9, the GridView workpapers for the GT/CC Reference Cases with no Sunrise.

IV. Assertions that, if true, are reasons to reject STP or some STP alternative(s).

This category is somewhat unusual, in that it identifies significant contradictions within SDG&E's testimony. The following seven items are facts asserted by SDG&E that, if true, actually militate against Commission approval of STP. In most cases, the asserted facts conflict with material positions proven either by SDG&E or other intervenors. If nothing else, it highlights the complexity and the tenuous assumptions that form the basis of SDG&E's application.

A. STP hastens retirements but what about RMR and SP15 reliability?

In the last bullet at page 7 of its brief, SDG&E states that STP will hasten the retirement of older, inefficiency in-basin generation. If this were true – and it arguably is true – then by definition, it also means that SDG&E's RMR claims are overstated, because retirements will raise per-unit prices for remaining units. It would also lead the Commission to an inescapable conclusion that SP15-wide reliability is harmed by STP. The ISO's Phase 2 rebuttal testimony confirms that “the ZP26 Zonal requirement [i]s the binding constraint requiring the need for generation capacity to be dispatched in the LA Basin” and then touts not-yet-built renewable generation in the Imperial Valley as “effective at relieving either this Path 26 constraint or the South of Lugo constraint.”³¹ But if Path 15 capacity is needed to mitigate LA Basin RMR requirements, then STP-caused retirements in San Diego (which is part of SP15) must increase LA Basin RMR requirements. And if adding renewable generation in the Imperial Valley would mitigate SP15 and south-of-Lugo reliability problems, then subtracting generation in San Diego (which is closer to LA than the Imperial Valley and, unlike IID, is inside SP15) must exacerbate them.

B. A future second line through Anza-Borrego.

In a new line of argument not offered in SDG&E's testimony, SDG&E seems to tout the virtues of building a third 500 kV line between SDG&E and the Imperial Valley (after SWPL and STP) if STP

³¹ Ex. I-9, p. 18.

is built following a northern route.³² Since SDG&E denies the feasibility of building southern routes, this seems to be a warning that a second STP line through ABDSP is in the offing. Again, the tautology is straightforward. If the ENR is the only reasonable alternative available to the Commission for consideration and if one of its benefits were its capacity to be expanded, then either SDG&E is preparing for yet additional incursions into the ABSDP parkland or there is another northern route that exists but has not been offered by SDG&E. Either scenario can serve as a basis to reject the ENR.

C. No “easy connections” to IID.

IID has already submitted testimony addressing SDG&E’s contention that STP represents the best connection to the Imperial Valley.³³ But there are other impacts as well not fully addressed by IID. For example, in Phase 1, SDG&E assumed all manners of transmission expansion by IID would occur, and imputed no costs to those expansions.³⁴ All of these upgrades were assumed to occur with or without STP, except for the Bannister-San Felipe line and San Felipe substation, which were assumed to occur only if STP were built.³⁵ SDG&E used these assumptions to justify its decision to exclude these costs from its economic calculations.³⁶ After all, SDG&E opined, the costs would be the same with or without STP.

Now in Phase 2, there is a notable difference. SDG&E is trying to imply that IID may not upgrade its internal system, so that CAISO customers would have to pay for upgrades to reach from STP into the IID system.³⁷ And SDG&E then makes the further implicit claim that doing so would be cheaper from a northern route than a southern one.³⁸ But if access to IID-area resources is going to depend on additional interconnections to STP, the costs of those interconnections must be incorporated

³² SDG&E, OB, p. 68, anticipating a future third 500 kV line from Imperial County to San Diego County that would be built only if a northern route Sunrise line is built first. “.....any additional line could be co-located in an existing corridor provided a Sunrise northern route is already established”

³³ SDG&E OB, pp. 69, 149; see also p. 120

³⁴ Ex. SD-6, Appendix IV, p. IV-37, Table IV-27.

³⁵ Id., fns. 30-31.

³⁶ Since SDG&E assumed the Bannister-San Felipe 230 kV line and the San Felipe 230/500 kV substation would be built only if Sunrise was built (see previous footnote), it should have included their costs as Sunrise-related costs in Phase 1. It didn’t (see Ex. SD-6, Chapter V, where neither Bannister-San Felipe transmission nor San Felipe substation are included in the project scope for which Phase 1 costs were developed).

³⁷ SDG&E OB, pp. 69, 73, 120, 161, and 329.

³⁸ Id., claiming that the northern route would run closer to IID-area geothermal resources than the Southern route. The implicit claim, carefully never made explicit, is that short distance correlates to low cost. But since SDG&E never attributes any costs to upgrades at Imperial Valley substation or on the IID system connecting to the Imperial Valley substation for any Sunrise route (see Ex. SD-33C, Attachments 3-1, 3-2, 3-3, and 3-4), it can’t possibly save any money compared to its own estimates by interconnecting to IID at locations other than the Imperial Valley substation.

into SDG&E's economic calculations. That means **both** southern and northern routes would be more expensive than reported to date (with the additional cost greater for the southern routes according to SDG&E.)

The Commission should recognize SDG&E is claiming a benefit for a northern STP route, i.e. easy interconnection to the IID system at a location other than the Imperial Valley substation. But SDG&E doesn't address the costs to obtain this theoretical benefit. Based on data contained in Exhibit U-91, the cost would be in the neighborhood of \$171 million. With regard to the cost impacts of this new Phase 2 disclosure, SDG&E has previously concluded that interconnecting renewable transmission to a 500 kV line would cost about \$171 million for substation costs.³⁹ Interconnecting STP to the IID grid north of Imperial Valley substation would also require a new 500 kV substation, since IID has no 500 kV substations. At a cost of \$171 million, such a substation would increase the cost of STP by about 10 percent – hardly a minor omission. The DEIR would also need to be amended to reflect the additional facilities and their impacts, just as it already had to be revised to include the anticipated 500 kV substation at Jacumba.

D. Detailed cost estimates are not necessary when there are time constraints, unless they are offered by UCAN.

SDG&E says that it was acceptable for it to estimate the cost of what it claims is the only feasible southern route, their Modified Southern Route, by taking its ESSRA cost estimate and applying a mileage ratio to it.⁴⁰ Yet, applicant criticizes UCAN for using a mileage ratio approach when it offered its estimates of the cost of southern routes.⁴¹ As is shown below, this seemingly contradictory position is outcome-based.

The record shows that Modified Southern Route deviates from the ESSRA at milepost I8-40 and rejoins at Milepost BCDS-5.4.⁴² Between those two points, the ESSRA is about 11.5 miles long.⁴³ Between those same two points, the Modified Southern Route is about 21.5 miles long.⁴⁴ Thus the

³⁹ Ex. U-91, Table 1.

⁴⁰ SDG&E OB, p. 159 – “However, SDG&E’s cost estimates for the Modified Southern Route are accurate because they were based on a ratio of route length when compared to the Aspen Southern Alternative’s cost estimates”

⁴¹ Ex. SD-38, p. 7.20

⁴² DEIR, p. ES-57; SDG&E OB, p. 159

⁴³ MP I8-40 to I8-49; MP MRD-0 to MRD 2.5; see DEIR p. ES-57

⁴⁴ (from milepost BCD-0 to BCD-13.6 and from milepost BCDS-0 to BCDS-5.4, plus 2.5 miles to “stay within areas designated as Backcountry Motorized use and Backcountry” as described in SDG&E’s OB, p. 159 and shown on the DEIR Figure D.17-2 that SDG&E’s brief cites; see also DEIR, p. ES-57

Modified Southern Route is about 10 miles longer than the ESSRA.⁴⁵ According to SDG&E, those extra 10 miles cost an extra \$104 million.⁴⁶ The extra cost is \$10.4 million per extra mile.

SDG&E says this approach is appropriate for the Modified Southern Route, but not for UCAN's route. Had SDG&E used this methodology for UCAN's route, it would have had to conclude that the UCAN route is 8 miles shorter than ESSRA,⁴⁷ so by the same methodology that SDG&E used for its modified Southern Route, it should cost $\$10.4 \times 8 = \83.2 million **less** than the ESSRA. This \$83.2 million less contrasts with SDG&E's claim that UCAN's route would cost \$37 million **more**.⁴⁸ SDG&E has not offered to reconcile how a methodology that it says is good enough for its own route could be \$120 million wrong ($\$83 + \$37 = \120) when applied to the UCAN route.

This major discrepancy casts doubt on SDG&E's claim that the shortest route of the three routes (the UCAN route) will cost more than the route that is 8 miles longer (ESSRA), and almost as much as the route that is 18 miles longer (Modified Southern). And if the Commission were to find that the shortest route is actually cheaper (which is what it would be, using SDG&E's Modified Southern Route methodology for cost estimation), then this is yet another reason to reject the SDG&E-proposed modified Southern Route. And it is the reason why SDG&E uses this methodology for its Modified Southern Route proposal but objects to UCAN using the same methodology for UCAN's route.

E. What is good for Biomass should be good enough for Stirling.

"This Alternative concentrates a large quantity of its supply with a single supplier, thus exposing this Alternative to significant developer risk."⁴⁹ The Commission might be excused for concluding that this quote in SDG&E's brief refers to the Stirling Solar Thermal plant. It doesn't; but it should.

SDG&E actually offers it as a criticism of the DEIR's reliance upon a single developer for "nearly 20 percent" of the renewables in DEIR Alternative 2. To add insult to injury, SDG&E accuses this particular biomass developer as having had viability problems in the past.⁵⁰

⁴⁵ 21.5 miles versus 11.5 miles for the parts that are different

⁴⁶ (\$1670 million for the Modified Southern Route, per p. 160 of the OB, versus \$1566 million for the ESSRA, per p. 143 of the SDG&E OB

⁴⁷ See Figure ES-17 on p. ES-57 of the DEIR. See also UCAN OB, p. 91

⁴⁸ \$1603 million versus \$1566 million; SDG&E OB, pp. 143, 164

⁴⁹ SDG&E OB, p. 195

⁵⁰ Id. Mr. McClenahan adds this developer has defaulted on a previous contract with SDG&E. Yet, he insists that he isn't talking about Stirling whose ability to meet its contractual obligations are in serious doubt and have been all but abandoned by SCE. See UCAN OB, pp. 183-184

Even though SDG&E isn't referring specifically to the Stirling project, its criticisms parallel any concerns the Commission might have in relying upon one questionably viable developer to provide almost 100% of the energy to meet post-STP local reliability needs⁵¹ and to be 40 percent of the expected 2500 Mw of future Imperial Valley renewables contained in SDG&E's GridView modeling. The irony of SDG&E's critique of the DEIR's biomass estimates has to be served over time because it is just far too rich to be consumed in one sitting.

F. IID facts don't square with SDG&E's world view.

In a number of places in this reply brief and UCAN's opening brief, we point out how SDG&E's interpretation of facts clashes with those of IID. In this section, we add how SDG&E's "world view" of the IID plans clashes with straight-forward logic. For example, SDG&E states that "exports out of the IID system may also be affected by congestion on the 230/500 kV transformers at the Imperial Valley substation ... the Imperial Valley 230 kV bus ... is already congested."⁵² UCAN does not dispute the truth of this statement. The problem is that SDG&E overlooks the full implications of the statement. SDG&E assumes that STP is needed to relieve this congestion. But SDG&E ignores a very important fact; if power can't get from IID to the CAISO's 500 kV bus at Imperial Valley substation, then building STP west from that bus will be worthless as a means of delivering geothermal generation from IID.

In fending off alternative proposals, SDG&E also raises the defense that transmission planning should not assume transmission or generation projects that are not yet built. Yet, its claims of renewable benefits from STP hinges on both the unfunded and unlicensed construction of 1600 Mw of new geothermal generation inside the IID service area and the construction of new IID transmission to relieve congestion on the south side of the IID system that have not yet been built, let alone funded.⁵³ One final set of IID inconsistencies: SDG&E talks about IID only having incremental transmission capacity of 50 Mw to the north with existing lines⁵⁴ but ignores the fact that the **total** capacity of IID to export to the south is currently only 225 Mw.⁵⁵

⁵¹ Ex. D-78, re GIV-SD local reliability area

⁵² SDG&E OB, p. 235

⁵³ Ex. SD-6, table IV-27.

⁵⁴ SDG&E OB, p. 235

⁵⁵ Ex. U-55

G. Expandability dooms STP.

SDG&E draws a line in the sand when it states: “It hardly makes sense from a CAISO ratepayers’ perspective to select southern routes if potential future expansion of those routes is infeasible...”⁵⁶ If this argument were true then it is difficult to logically justify any STP route. The record indicates that, in SDG&E’s mind, any routes through Indian Reservations are infeasible. The DEIR maintains that that expansion of the northern routes would go through Indian Reservations.⁵⁷ The resulting tautology is straightforward. According to SDG&E, the expansion of the northern routes would not be feasible if they went through Indian lands that the DEIR claims is unavoidable. Thus, the Commission could readily find “it would hardly make sense” to select either a southern *or* a northern route because of infeasibility.

V. Blatantly incorrect statements.

In addition to the omitted material facts and unsupported factual assertions, SDG&E offers statements of fact that are clearly incorrect. UCAN’s sampling of 19 of these incorrect material statements are discussed below.

A. Reliability deficit in 2010.

Throughout its brief, applicant maintains its long-discredited assertion that it faces a reliability deficit in 2010.⁵⁸ SDG&E itself acknowledges that this fact is not true given its proposed STP start date of 2011. As the evidentiary record makes quite clear, the only deficit faced prior to 2016 is attributable solely to SDG&E’s assumption that South Bay ceases operations.⁵⁹ As noted in UCAN’s opening brief, either AMI, the Ener Noc contract or dispatchable demand response covers the forecast deficit in 2010.⁶⁰

⁵⁶ SDG&E OB, p. 67

⁵⁷ See, e.g., DEIR, p. B.3, Figure B-1. SDG&E disagrees with this assessment but has not provided a specific route of its own to counter the DEIR assessment.

⁵⁸ SDG&E OB, pp. xxiv, 1-2, 6, 9 (“imminent reliability requirements”), 55 (90-691 Mw)

⁵⁹ Ex. SD-142, p. 1

⁶⁰ UCAN OB, p. 24. Ex. U-100 also details how post 2008 energy efficiency, the Borrego Springs CT or the Miramar CT are also available to address any potential deficit in 2010.

And, as noted in the Motion of Official Notice filed concurrently with this brief, UCAN discovered that SDG&E contradicted its own sworn testimony in a submission just this week to the California Energy Commission. This CEC document reveals that SDG&E's claimed reliability deficit of 2010 simply doesn't exist. If accepted into the record, SDG&E's own numbers would indicate that it doesn't need any new resources in 2010 through 2012 to meet its reliability needs beyond the baseline resources in Ex. SD-142, p. 3 and the demand response efforts that it currently has authorized and underway.

B. STP net benefits are over \$140 MM/yr.

Applicant also persists in its hoary story that STP offers net benefits in excess of \$140 million per year.⁶¹ This, too, has been contradicted by SDG&E's own documents. Exhibit SD-142 shows ENR \$119 MM/yr better than DEIR Alt. 1, not \$140+ million, after adjusting for consistent baselines. And when the proper reference cases are incorporated, the net benefits literally disappear, as set forth in Exhibits SD-142 (p. 14) and SD-144 (pp. 1, 2).

C. CNF routes are infeasible if they require Plan Amendments, and thus routes through BCNM zones are infeasible.

SDG&E asserts that plans through BCNM zones are infeasible under the current CNF General Plan, and thus require a Plan Amendment to become feasible.⁶² But "infeasible without a Plan Amendment" and "infeasible" are not the same. Otherwise one could just as well say the Proposed Project and the ENR are infeasible because they will require ABDSP Plan Amendments (as per the State Parks Opening Brief), and also infeasible because they will require amendments to the BLM's California Desert Conservation Area Plan.⁶³ The DEIR is clear that the I-8 route and the BCD route (parts of each of which are used by the UCAN route) would require a CNF plan amendment.⁶⁴ But

⁶¹ SDG&E OB, pp. xxv, 278

⁶² SDG&E OB, pp. xxvi, 164

⁶³ DEIR, p. D.17-6

⁶⁴ DEIR, p. D.17-15

equally clear is the fact that the CNF has a process for making amendments to its plan.⁶⁵ Thus the routes that go through CNF BCNM zones are not per se infeasible, as SDG&E's illogic would suggest.

D. All alternatives to STP rely on infeasible projects.

One of the foundational arguments in SDG&E's opening brief is the contention that all of the alternatives to STP are infeasible because the projects contained in the alternatives are infeasible. Thus, the logic goes, STP is not only the best option available to the Commission but it is the only option.⁶⁶ As the record shows and as is explained in UCAN's opening brief, this is false for AMI – approved already, and in early construction. It is false for EnerNoc – contract signed. It is false for other dispatchable demand response – approved in LTPP decision. It is false for Barre-Ellis expansion – no opposition in record, and it is not hypothetical. It, too, is false for Coachella-Devers II 1200-1600 Mw export line, which has a BLM ROD. It is false for existing Path 42 uprating of 200 Mw, which has proponents, an expected 2008 completion date, and no identified opposition (per Exhibit ID-2). And it is also false for South Bay's operational life extension – it is already built, has a lease valid for as long as the CAISO says it's needed and is already relied upon by SDG&E itself as part of its with-Sunrise cases. And, as will be explained further below, it is false for many of the other alternatives.

E. The myth of GHG reductions and IV renewable increases.

In a number of pages through the SDG&E brief, SDG&E asserts that STP offers lower greenhouse gases (GHG) and greater renewable development of Imperial Valley.⁶⁷ Both assertions are factually unsupportable, as will be explained below.

1. Decreased GHG via STP.

SDG&E's assertion is undermined by the fact that no legitimate GHG benefits analysis can be done except on a WECC-wide basis (as SDG&E does later on p. 83 of its brief), because anything else is only a partial analysis. But it is this partial analysis that Mr. Held offers on behalf of applicant.

⁶⁵ DEIR, pp. D.17-9 and D.17-10

⁶⁶ SDG&E OB, pp. xxvi, 3, 11 (with the exception of the unwieldy Modified Southern Route)

⁶⁷ SDG&E OB, pp. 77-82, 182-183, 338-339

Second, any claims that there will be GHG benefits from Imperial Valley generation are only legitimate if there will be more renewable generation in the Imperial Valley with STP than without it. SDG&E's GridView modeling shows not to be the case as per Exhibit U-86. Moreover, if claims of more renewable generation built in the Imperial Valley with STP than without it are going to be accepted by the Commission, then the cost of that generation also has to be counted. There is nothing in the record that quantifies that cost. In Phase 1, SDG&E refused to count the cost of renewable generators as a cost attributable to STP, arguing that STP would not cause any increase in the Mw of renewable generation.⁶⁸

Now, in Phase 2, SDG&E is attempting to argue that GHG emissions are lower with STP because STP will cause an increase in the Mw of renewable generation. This is logically inconsistent; either SDG&E's economic analysis is invalid or its GHG analysis is invalid. But its Marie Antoinette-like desire to feast on cake in the absence of bread is not sufficient to overcome the deficiencies in the evidentiary record.

If STP causes incremental renewable generation that wouldn't otherwise exist (as SDG&E asserts in its brief at p. 82), then the capital cost of that generation is a cost that can be avoided by not building STP. To accept this proposition, the Commission would have to take SDG&E's economic analysis and add the cost of all that incremental renewable generation to the STP alternatives but not to the non-STP alternatives.⁶⁹

2. SDG&E's assertions is contradicted by its own testimony and that of the CAISO.

If the Commission digs below the surface, it will find this statement by SDG&E very revealing: “[a]nalysis of the Sunrise Powerlink is predicated on the assumption that so long as IID upgrades their internal transmission network, renewable resources will be added in the Imperial Valley – in the amounts contemplated by the Imperial Valley Study Group – whether or not STP is built.”⁷⁰ Thus, SDG&E's economic analysis directly contradicts SDG&E's GHG testimony regarding the Imperial Valley.

⁶⁸ Ex. U-55, pp. 1-2, response to UCAN DR4-24b.

⁶⁹ Note that SDG&E did exactly that for DEIR Alternatives 1 and 2, which it assumes will have more renewables than STP. RT at 4723:12-18, (Strack) admitting DEIR alternatives 1 and 2 have more renewables than the with-Sunrise alternatives. See also Ex. SD-142, pp. 4-7, providing year-by-year specifics. The cost of those extra renewables is then assessed against those alternatives. See Ex. SD-143, pp. 56-67 (DEIR Alternative 1 costs) and 68-79 (DEIR Alternative 2 costs).

⁷⁰ Ex. U-55, p. 1. SDG&E response to UCAN DR4-24b. The quoted sentence is then followed by a listing of five reasons why it is indeed correct to assume that renewables will be exportable from IID with or without Sunrise. See also Exs. ID-2 and ID-3 for further confirmation that renewables will be exportable from IID with or without Sunrise.

SDG&E's assertion that there will be more GHG emissions without STP also undercuts the CAISO's claim that the RPS impacts of STP will save ratepayers money. If the extra renewables in the Imperial Valley due to STP occur as the CAISO and SDG&E GHG witnesses assert, and they are not offset elsewhere (as the CAISO assumes but SDG&E's GHG witnesses do not), then the economic benefits that Mr. Orans calculates on behalf of CAISO will simply not exist. The Commission can ultimately accept the CAISO assertion that RPS dollar benefit from STP, but there are no GHG benefit because renewables get built somewhere with or without STP if it also accepts SDG&E's GHG witnesses argument that RPS GHG benefit from STP-facilitated renewables with no offsetting renewable development elsewhere.

It is also conflicting is the testimony submitted by UCAN and SDG&E witness Strack that there is neither an economic nor a GHG benefit from RPS due to STP, because the same amount of renewables, in the same places, gets built with or without STP. But the Commission cannot accept both the CAISO and SDG&E's GHG witnesses' versions because their positions are mutually contradictory.

SDG&E's attempted quantification of emissions due to 2206 gwh of generation from the South Bay project in 2015 is meaningless, because it ignores the GHG impacts of reducing generation somewhere else by the same 2206 gwh.⁷¹ SDG&E's assertion overlooks the fact that for purposes of this proceeding, adding generation does not change load. If a South Bay combined cycle plant is built and generates 2206 gwh in 2015, that is 2206 gwh that won't be generated somewhere else. If the "somewhere else" is a less efficient gas-fired generator (e.g., Encina 1-5), then the South Bay combined cycle will have reduced net emissions. Similarly, if the "somewhere else" is a coal plant in New Mexico, then South Bay combined cycle will have reduced GHG emissions even more. Absent analysis of where the generation would have been without South Bay, simply calculated GHG emissions from South Bay in isolation is meaningless.

Separately, the 2206 gwh figure for 2015 appears in a discussion of DEIR Alternative 1. But in SDG&E's most recent modeling of that alternative, SDG&E's own model shows generation at South Bay in 2015 as 1425 gwh, less than two-thirds as much.⁷² The Commission should understand that SDG&E is distancing itself from its own Phase 2 numbers for the actual DEIR Alternative 1 and is, instead, relying upon the CAISO's Phase 1 numbers. For reasons fully expressed in UCAN's Phase 1 briefs, reliance upon the CAISO's numbers in lieu of SDG&E's updated Phase 2 numbers is ill-advised.

⁷¹ SDG&E OB, p. 89

⁷² Ex. U-111, "SDGE_SouthBay_CC" line.

3. SDG&E mischaracterizes DRA testimony.

The SDG&E brief says that an “increase in renewable generation will reduce WECC-wide CO2 emissions.”⁷³ It spends two pages arguing that DRA witness Suurkask’s testimony confirms this assertion. As DRA will no doubt explain in its reply brief, DRA’s witness did not suggest that STP would in any way reduce WECC-wide CO2 emissions. First, as the SDG&E brief concedes,⁷⁴ the highest level of WECC-wide renewable generation in the DEIR is in DEIR alternatives 1 and 2 without STP, not in the with-STP alternatives. So that means that GHG emissions would be lower in DEIR alternatives 1 and 2 than with STP.

Second, the SDG&E brief ignores other effects of STP on WECC-wide CO2 emissions besides its role in transmitting renewable energy. STP, as SDG&E’s witness Strack admitted, would lead to an increase in coal generation, which would of course have associated GHG emissions.⁷⁵ The total increase in coal generation quantified in Exhibit U-86 is 224 gwh per year more in 2015 with STP than with DEIR Alternative 1, solely from coal plants in which California utilities have ownership or contractual rights.⁷⁶ Since GridView dispatch isn’t affected by ownership, the same factors that make coal generation bigger with STP at the coal plants listed in Exhibit U-86 would also make it larger at other coal plants.

The SDG&E brief goes on at some length regarding GHG emissions calculations by the CAISO and errors contained therein.⁷⁷ In its opening brief, UCAN has already addressed the issue of CAISO calculations of GHG emissions and how the WECC-wide GHG benefits of STP as calculated by the CAISO are dubious at best in Exhibit U-101 and it will not repeat those arguments here.

F. Greater reliability risks on Southern routes

Also scattered throughout SDG&E’s brief is the assertion that the Southern routes pose additional reliability risks.⁷⁸ This factually inaccurate assertion is fully rebutted by UCAN in its

⁷³ SDG&E OB, p. 83

⁷⁴ SDG&E OB, p. 84, citing Suurkask

⁷⁵ See RT at 4740 (Strack) and Ex. U-86, pp. 8-9.

⁷⁶ Ex. U-86, pp. 8 (194 gwh increase in coal generation in Arizona at plants with California ownership or contract rights) and 9 (30 gwh increase in coal generation in southern Utah and New Mexico at plants with California ownership or contract rights)

⁷⁷ SDG&E OB, pp. 86-88

⁷⁸ SDG&E OB, pp. 58-64, 321-322.

Exhibit U-101 as well as the testimony by Mr. Zaininger on behalf of DRA⁷⁹ and doesn't warrant repeating in this reply brief. However, UCAN notes that at page 61 of SDG&E's brief, SDG&E's attorneys summarize Ms. Sagi's discussion about category C rules for adjacent circuits on separate towers without attribution. At page 62 they talk about STP and SWPL being adjacent for 36 miles. These citations are notable because they don't actually reference the Sagi testimony or any testimony at all, to support the contention. There is a unavoidable insinuation that risks are created by 36 miles of adjacent circuits. But such an implication is unfounded (and factually unsupported) given that the parts of STP and SWPL that would be on adjacent towers have no fire risk and there are no other risks quantified by Sagi as significant.⁸⁰

At the same page 62, SDG&E's counsel again offer an unattributed assertion that a benefit of the Northern Routes is that a load-dropping RAS would not be required. The following page states that the Proposed Route will not "require" such a "draconian scheme".⁸¹ This statement conflicts with testimony by Ms. Sagi during cross-examination in which she admitted that SDG&E could and might possibly implement such as RAS.⁸²

Then at page 64, SDG&E's counsel do it again. They state: "southern routes parallel SWPL with varying degrees of separation (4-8 miles) for an addition 29 miles before heading north" (p. 64.) This statement is false with regard to both the BCD and UCAN routes.....although both are southern routes. Within 10 miles after its separation from the SWPL right of way, both the UCAN and BCD routes are more than 8 miles away from SWPL, and remain so thereafter.⁸³ The ENR takes about 9 miles after it turns away from SWPL until it is more than 8 miles away.⁸⁴ So there is less than one mile difference between the ENR and the UCAN route in how fast they diverge from SWPL once they start diverging.

G. Campo Indians have outrightly rejected any transmission through their land.

⁷⁹ Ex. D-104

⁸⁰ See Ex. U-101. See also SDG&E OB p. 64, talking about risks in the 29 mile section where the "southern routes" and SWPL are 4-8 miles apart. There is no such 29 mile section for the UCAN route, as per DEIR, p. ES-57.

⁸¹ See also, SDG&E OB, p. 322

⁸² RT at 4812 (Sagi)

⁸³ DEIR, p. ES-57.

⁸⁴ DEIR, p. ES-41.

In its efforts to convince the Commission that the Campo Indians are an insurmountable obstacle to a southern route, SDG&E has provided what it portrays as an actual letter of rejection from the Campo Tribe. It is this letter upon which SDG&E bases its claims.⁸⁵

The relevant portion of the letter says only that a preliminary review of the DEIR shows that “it is clear that there is no direct benefit to the Campo Reservation and, in fact, may actually have adverse financial impacts to our tourism based businesses near the freeway.” The letter clearly states that this conclusion is preliminary. It states that it has not found a “benefit” from the line inuring to the Reservation. And it raises financial impact concerns. In sum, it clearly expresses that money is an important issue in the tribe’s thinking.

But in UCAN’s cross-examination of Ms. Trexel, SDG&E admitted to having made no effort to determine what financial offer it could make to the Campo Kumeyaay Nation to offset the financial costs of STP.⁸⁶ In fact it has never asked the Campo Kumeyaay Nation what they would want in compensation to produce a net positive financial impact and has not even assessed what kind of offer might be cost-effective to present to the Campo tribe.⁸⁷ Thus the Commission has not been presented with a factual basis for concluding that the Campo letter represents a “rejection in perpetuity” that cannot be overcome.

H. “Actual peak loads in the San Diego area have substantially exceeded CEC forecasts for future years.”

As mentioned above, SDG&E offers an introductory tease that actual peak loads have exceeded CED forecasts for future years.⁸⁸ This statement is not supported by any reference to the record and understandably so – it is false. SDG&E’s actual peak demand in 2007 was 4602 Mw, but Exhibit SD-5, p. II-17, Table II-2 shows the forecasted peak demand as 4741 Mw in 2007, while Exhibit SD-5, Table II-3 (Appendix II, 4th page) shows “CEC’s Forecast Peak Demand” as 4749 Mw in 2007. Additionally, Exhibit U-37 shows the CEC forecast of 2007 SDG&E load as 4902 Mw, and the CAISO’s Phase 1 Brief shows CEC-forecasted 2008 peak load of 4999 Mw.⁸⁹

⁸⁵ Ex. SD-34, Attachment 10-1. See also SDG&E OB, pp. 3,5,9, 141

⁸⁶ RT at 4285 (Trexel), see also RT at 4286-4287

⁸⁷ Id.

⁸⁸ SDG&E OB, p. 6

⁸⁹ CAISO, Phase 1 OB, p. 21, Table V-1, line 1)

In Phase 2, Table 11-1 shows forecasted 2010 SDG&E load, per the CEC, as 4841 Mw under 1-in-2 weather conditions in 2010, and growing 76 Mw per year,⁹⁰ which corresponds to 4613 Mw in 2007. In short, SDG&E's statement is actually backwards; actual peak loads have failed to exceed CEC loads even for the same year, let alone for future years.

1. In-basin generation would “commit SDG&E to a fossil generation future.”

At page seven of its brief, SDG&E offers yet another unsupported assertion – that “reliance on in-area generation alternatives to meet San Diego’s reliability needs.....would commit SDG&E to a fossil generation future.” SDG&E’s failure to cite to any authority in the record is a clue to the falseness of this assertion.

First, it is contradicted by Exhibit U-111, which shows that the incremental in-basin fossil generation added in DEIR Alternative 1 but not in DEIR Alternative 6 (15 Mw Borrego CT, 49.5 Mw Wellhead GT2, 49 Mw Miramar GT2, 35.7 Mw of DG, and the 620 Mw South Bay CC)⁹¹ generate a total of 1616 gwh in 2015, while the incremental renewables in the same scenario (354 Mw of Crestwood wind 1-3, 63 Mw of Fallbrook biomass, 27 Mw of Miramar biomass, and 169 Mw of SDGE solar PV)⁹² generate 1788 gwh. So, by SDG&E’s own numbers, more than 50% of the generation from DEIR alternative 1 resources is renewable.

The statement is also contradicted by Exhibit U-112 which demonstrates that the incremental in-basin fossil generation added in the super peaker GT-CC Reference Case (138 Mw of Pala 3-5 CTs and 540 Mw of Carlsbad EC 1-2 super peakers)⁹³ generates only 258 gwh, out of a total SDG&E-area load in 2015 of over 23,500 gwh.⁹⁴ So the fossil fuel additions that SDG&E calls a “fossil generation future” represent only 1% of SDG&E’s load – hardly a commitment and barely worth raising. The truth is that the GT/CC Reference Case uses new fossil generation almost entirely to meet reliability needs, and not to meet energy needs.

But, as the TV pitchman would exhort the viewer, wait. There’s more. SDG&E’s assertion drops yet another level into its falseness purgatory when one considers the CT Reference Case. In this

⁹⁰ SDG&E OB, p. 360, 2nd line

⁹¹ See Ex. SD-142, p. 7 showing 121 Mw of incremental CTs, 35 Mw of incremental non-renewable DG, and 620 Mw of incremental CC in DEIR Alternative 1

⁹² See Ex. SD-142, p. 7 re incremental wind, biomass, and PV

⁹³ See Ex. SD-142, p. 3, showing 140 Mw of CTs and 540 Mw of Carlsbad added in the GT/CC Reference Case

⁹⁴ Ex. SD-143, p. 7

case – constructed by SDG&E – new CTs at Pala is only about 6 gwh per year each.⁹⁵ With 7 new CTs in the CT Reference Case,⁹⁶ that would be about 42 gwh per year out of 23,500 gwh total load – or under 0.2 percent. A CT Reference Case is intentionally designed to be as close as possible to a *do nothing at all* (beyond the baseline) case as possible while still meeting reliability requirements. This one barely adds to additional fossil fuel reliance. Had SDG&E’s attorneys sought to reference the evidentiary record, and not their PR machine, they would have found that their case to “commit SDG&E to a fossil generation future” is no case at all.

J. Can’t meet RPS goals without STP in 2010.

Another theme that permeates the SDG&E brief is that RPS goals cannot be met without STP.⁹⁷ To some extent, UCAN addresses this issue in its opening brief, so those arguments won’t be repeated. Moreover, the question is somewhat irrelevant, since even if the CPUC approves this CPCN, STP will not be operational until 2011.

However, SDG&E’s opening brief does overlook some fairly major and material facts that became available after the evidentiary hearings. For example, the Commission may wish to take official notice of SDG&E’s advice letter 1975-E and 1975-E-A (submitted in March and April 2008), showing 136 gwh of additional IV renewable generation in 2010, without STP. And a recently approved advice letter (AL 1946-E) demonstrates increased generation from in-basin expansion of the Bull Moose project, with its expected on line date of 12/31/08. check prior sentence – is it expansion of?

It is also notable that SDG&E totally ignores Exhibit U-91 which demonstrates that ability of SDG&E to import RPS resources from north of San Diego. SDG&E’s 2010 RPS requirement is approximately 3484 gwh.⁹⁸ SDG&E admits that it already has 612 gwh of that under contract from local sources within its service area, and 724 gwh under contract from SCE-area resources.⁹⁹ According to recent press announcement in early June, SDG&E has just signed a contract for another 210 Mw, producing 635 gwh.^{100 101} Thus SDG&E has non-Imperial Valley resources of 1971 gwh under

95 Ex. U-112

96 as per Exhibit SD-142, p. 3

97 SDGE OB, pp. 6,8,10,22,68,71, 73 et. al.

98 Ex. SD-5, p. III-9.

99 Ex. U-86, p. 12.

¹⁰⁰ SDG&E Advice Letter 1997-E at <http://www.sdge.com/tm2/pdf/1997-E.pdf>. It confirms that the wind project is 210 Mw (p. 1), 635 gwh per year (p. 1), and already under construction (p. 15), with all long-lead time already ordered (p. 2) and the

contract,¹⁰² and needs only another 1513 gwh to meet its 2010 RPS requirements.¹⁰³ Even if 100 percent of that 1513 gwh came from the Imperial Valley, it would require less than 10 percent of the transfer capability of the existing SWPL line.¹⁰⁴

Put another way, SDG&E's current normal import capability over existing lines is 2850 Mw and its emergency import capability is 2500 Mw.¹⁰⁵ Using the lower of these two numbers, SDG&E energy import capability is at least 21,900 gwh per year over existing transmission facilities.¹⁰⁶ SDG&E's RPS requirement in 2010 from non-local sources is about 2872 gwh per year.¹⁰⁷ So SDG&E can meet its 2010 RPS obligation using less than 14 percent of its existing import capability.¹⁰⁸ In 2015, even if SDG&E's RPS obligation increased from 20 percent to 26.5 percent, it would still be only 5033 gwh,¹⁰⁹ of which no more than 4498 gwh would need to be imported.¹¹⁰ Thus SDG&E can meet a 26.5 percent RPS obligation in 2015 using less than 21 percent of its existing import capability.¹¹¹ If the Commission adopts UCAN's proposals to upgrade the existing system to allow normal imports of 3200 Mw and emergency imports of 2850 Mw,¹¹² meeting RPS obligations using the existing system would be even easier.

SDG&E's RPS statements are also rendered false because SDG&E admits that SWPL could physically deliver well over 10,000 gwh per year of renewables (Ex. U-86), more than triple the 3500 gwh per year RPS requirement SDG&E describes on p. 71 of its opening brief. And it is irrelevant because no alternative requires 100 percent of SDG&E's RPS obligation to flow over SWPL.

full 210 Mw expected on line before 2010 (p. 2). Page 16, item VI.F UCAN requests the Commission to take official notice of this post-hearing disclosure by SDG&E.

¹⁰¹Note that based on the CAISO's testimony in this case, the capacity factor for Montana wind projects would be 35 percent (Ex. I-2 shows 3000 Mw of wind in Montana (Table 4.3), and shows that 3000 Mw with a 35% capacity factor (Table 4.4), so the CAISO's expectation is that Montana wind will have a 35% capacity factor). At a 35 percent capacity factor, 210 Mw would produce $210 \text{ Mw} \times 8760 \text{ hrs/year} \times 1 \text{ gwh}/1000 \text{ Mwh} \times 35\% = 644 \text{ gwh per year}$.

¹⁰² $612 + 724 + 635 = 1971$.

¹⁰³ $3484 - 1971 = 1513$.

¹⁰⁴ SWPL import capability of 16,200 to 16,600 gwh per year, per Ex. U-86, p. 13. Ten percent of that is 1620-1660 gwh per year. 1513 gwh is less than 1620-1660 gwh.

¹⁰⁵ Ex. U-3, first sentence of section II.C., p. 41.

¹⁰⁶ $2500 \text{ Mw} \times 8760 \text{ hrs/year} \times 1 \text{ gwh}/1000 \text{ Mwh} = 21900 \text{ gwh per year}$.

¹⁰⁷ $3484 \text{ gwh RPS obligation (Ex. SD-5, p. III-9) minus } 612 \text{ gwh under contract from local sources (Ex. U-86, p. 12). } 3484 - 612 = 2872$.

¹⁰⁸ $2874 \text{ gwh obligation divided by } 21,900 \text{ gwh capability. } 2874/21900 = .131 = 13.1 \text{ percent}$.

¹⁰⁹ Ex. U-86, p. 12.

¹¹⁰ Id., showing a 5033 gwh obligation and 535 gwh (in 2015) of in-basin resources already under contract. $5033 - 535 = 4498$.

¹¹¹ $4498 \text{ gwh obligation divided by } 21,900 \text{ gwh capability. } 4498/21900 = .2053 = 20.5 \text{ percent}$.

¹¹² Ex. U-3, sections II.B (upgrade Path 44 to allow emergency imports of 2850 Mw) and II.C (increase N-0 import capability to 3200 Mw).

K. SDG&E's "robust" penetration of rooftop solar is anything but robust.

Another one of the recurring false themes in the SDG&E brief is the very limited promise of rooftop PV.¹¹³ While no party has suggested the rooftop PV is any kind of panacea, a number of parties recognize the role that rooftop PV can play --- with the exception of SDG&E who has presented such conservative estimates as to even make Rush Limbaugh blush. In the outdated Table 11-1 attached to SDG&E's brief, SDG&E would have the Commission assume 13 Mw of CSI by 2010 and 33 Mw by 2016 with STP, or barely 3 Mw per year. That's less than it actually achieved in 2007¹¹⁴ and far less than the CSI targets or SDG&E's own Phase 1 assumptions. And it conflicts with the CSI assumptions in Exhibit SD-142 pp. 1 and 3, provided in response to a direct order from the ALJ. The Commission will find that the CSI levels assumed by SDG&E in its opening brief to occur if STP is built (13 Mw by 2010 and 33 Mw by 2016) are just straight line extrapolations of 2004-06 actuals.¹¹⁵ As such, they should be dismissed by the Commission as unrepresentative of what should be truly achievable. Greater weight should be placed on the data that will be coming from SCE's commercial PV deployment as well as the expected commercial PV application rumored to be submitted by SDG&E later this summer.

L. Construction increases in Phase 2 are not attributable to inflation

At page 48 of its brief, SDG&E states that a large part of the [construction] cost increases [from Phase 1 to Phase 2] is merely due to the escalation to account for inflation. Need quotes around prior sentence? As described in Exhibit U-101 and UCAN's opening brief, this statement is patently false. The real increases are due to scope changes with regard to miles of roads and road construction costs, and enormous increases in estimated support costs, as admitted by Mr. Eck.

¹¹³ SDG&E OB, pp. 9, 360

¹¹⁴ SDG&E OB, p. 191 where SDG&E concedes over 8Mw of PV installed in 2007.

¹¹⁵ Ex. U-101, p. 40 and fn. 161

M. SDG&E reliability deficiency grows over time

Yet, another recurring theme – that of a growing reliability deficiency -- is unsupported by the record.¹¹⁶ SDG&E’s own Table 11-1 contradicts this oft-repeated. The last line on page 360 shows that SDG&E has a smaller reliability deficient in 2011 than 2010. Moreover, as UCAN’s Motion for Official Notice reveals, SDG&E appears to have knowingly misled the Commission about this alleged 2010 deficiency. Both of these documents, along with UCAN’s showing, cast most all of SDG&E’s representations about its specific reliability needs in disrepute.

N. 731 gwh of 2010 energy is reliant upon STP.

In its opening brief, SDG&E states unequivocally: “731 gwh of 2010 energy comes via Imperial Valley substation and is “thus reliant” on STP.”¹¹⁷ This assertion contradicts SDG&E’s advice letter 1975-E (of which UCAN requests official notice), in which SDG&E says that it expects the 49.4 Mw MMR project called Mt. Signal (p.6) (formerly Bethel; see AL 1975-E, p. 1) to produce 304 gwh per year of energy (p. 2) with a commercial operating deadline of 12/31/09 (p. 1), a delay potential of no more than one year (p. 17), and no transmission conditions (p. 18). The point of delivery to SDG&E is the Imperial Valley substation.¹¹⁸ Thus the MMR Mt. Signal project will precede STP, is not dependent on it, and will deliver over 300 gwh. SDG&E’s brief is factually incorrect when it says that 731 gwh of 2010 generation connected or scheduled to Imperial Valley substation is “reliant upon Sunrise”.

O. No more than 1% of “the more than 7000 Mw of renewable generation that is currently in the CAISO queue could be developed and simultaneously dispatched” because of the 1150 Mw pre-dispatch.

SDG&E claims that no more than 1% of “the more than 7000 Mw of renewable generation that is currently in the CAISO queue could be developed and simultaneously dispatched” because of the

¹¹⁶ SDG&E OB, pp. 55, 58, 280

¹¹⁷ SDG&E OB, p. 71

¹¹⁸ Advice Letter 1975-E, p. 90 of 108 in redacted pdf version at SDG&E website.

1150 Mw pre-dispatch limiter announced by the CAISO in Phase 2.¹¹⁹ SDD&E premises this contention on the unproven assertion that the existing 1070 Mw connected to the CAISO grid at Imperial Valley has some kind of dispatch priority. This is indicated by footnote 93 which states that the two gas-fired plants get priority on determining deliverability, which is not the same thing as determining actual dispatch or curtailment. This footnote is not only unsupported by the record, but it is wrong. SDG&E's witness admitted in cross-examination that dispatch priority is based on economics, and it expects renewable generation to gain dispatch priority over existing fossil generation.¹²⁰ UCAN said the same in Exhibit U-101. So did SDG&E's GridView model in Exhibit U-86. In fact, GridView modeling included the CAISO limiter, and still showed that the 900 Mw solar thermal project modeled as connected to Imperial Valley was unaffected by the limiter in scenarios without STP. So the effect of the limiter, if any, would not occur until after at least 900 Mw of new generation is direct connected to Imperial Valley substation. 900 is much more than 1% of 7000.

P. UCAN did not ignore the economic consequences of congestion on SWPL without STP.

Contrary to SDG&E's suggestion at page 73, UCAN relied upon SDG&E's economic modeling with GridView, which takes congestion into account. UCAN acknowledged that using SWPL without STP for imports from IID would increase congestion costs,¹²¹ but showed those increases were minimal compared to the cost of STP. Higher congestion costs without STP do not mean STP should be built.

Q. It will not take 42-56 months from receipt of CEC permit to completion of construction for a combined cycle project.

SDG&E's uncited, unsupported assertion that it will take 42-56 months from receipt of CEC permit to completion of construction for a combined cycle project should be disregarded.¹²² Exhibit D-106 proves that SDG&E's speculation is incorrect. This exhibit is the CEC's most project status report.

¹¹⁹ Id, pp. 71-72

¹²⁰ See RT 4738-40, where SDG&E's witness admits that the 1150 Mw limiter affects fossil generation in Mexico but not renewable generation in IID (geothermal) or at the Imperial Valley substation (solar thermal) . In particular, at RT4738:11-14, SDG&E's witness admits that renewable generation displaces fossil generation in the presence of the 1150 Mw limiter. The reverse does not occur.

¹²¹ Exhibits U-3, U-100

¹²² SDG&E OB, p. 175 - sum of the last two bullet points for equipment lead time and time to construct

That report lists the AFC permit date and the commercial operation date for all 20 combined cycle projects that have entered commercial operation in California since 2001. The longest durations was 58 months for the Mountainview 3-4 project.¹²³ Two others were between the 42 and 56 months claimed interval (Metcalf, line 27, and Pastoria, line 26). The other 17 were all less than 42 months, with intervals ranging from 19-40 months.¹²⁴ Among the 85% of all combined cycle projects that took less than SDG&E's minimum duration of 42 months was SDG&E's own Palomar project, with an elapsed duration from permitting to operation of 32 months.¹²⁵ So SDG&E has effectively taken the two outlier projects and made those the norm.

The Commission can't help but note that if it really took 36 months from AFC filing to construction start, as SDG&E also claims in its brief, then the Stirling project could not be expected to start construction until 2012 at the soonest.¹²⁶

R. CAISO's position on Path 44 upgrade: as per SDG&E.

SDG&E opts to characterize the CAISO stakeholder process as having considered and rejected UCAN's Path 44 upgrade."¹²⁷ Leaving aside the controversial notion that the CAISO's process was a stakeholder process and UCAN's documented exclusion from that process,¹²⁸ the SDG&E assertion is problematic in many other ways

The brief specifically cites to p. 46 of App. I-1 of Ex. SD-5 in footnote 152 to support its contention. That cited page contains such a litany of proven errors that citing it for anything is highly misleading. Just to name a few: It has been conclusively proven that SCE has not "indicated that nothing more can be done to increase the capacity on Barre-Ellis line."¹²⁹ It has been proven that Barre-

¹²³ Ex. D-106, line 31a

¹²⁴ Ex. D-106, lines 2, 3, 13, 15, 18, 20, 1ab, 22, 23, 24, 25, 29, 30, 32, 33, 34, and 38

¹²⁵ Ex. D-106, line 34

¹²⁶ Stirling does not need a "standard turbine-gen set" but it will need "generation step-up transformers.

¹²⁷ SDG&E OB, p. 220. Note, even the CAISO admitted that there was no stakeholder process. RT at 1846-1847 (Perez):

22 Q In that discussion, I think you said that
23 there was a stakeholder process to develop assumptions
24 for the ISO testimony; is that correct?

25 A There was a stakeholder process to develop
26 assumptions for the ISO testimony in this hearing?

27 Q Hm-hmm.

28 A If I -- if I said that, I misspoke. I

1 don't -- I don't recall such a stakeholder process.

¹²⁸ RT at 2700-2701 (Marcus, Phase 1) see also Ex. U-3

¹²⁹ Ex. U-3, Ex. U-100, UCAN Phase 1 OB

Ellis does not have a 1613 MVA emergency rating.¹³⁰ Increasing the line rating would *not* require conversion to 500 kV.¹³¹ And upgrading Path 44 would not require transferring ownership of a North of SONGS line from SCE to SDG&E.

SDG&E's willingness to rely on the discredited Shirmohammadi report from July 2006 while ignoring the CAISO's own inclusion of Barre-Ellis upgrades in various studies and documents from 2001 to 2008¹³² would be highly misleading if it weren't so blatantly wrong.

But this raises yet another issue – the basis for the CAISO's support of STP. As discussed in Section VII. C. below, the CAISO is legally obligated to approve the economic assessment of a project in order to gain the rebuttable presumption status. The CAISO board relied upon a Shirmohammadi-penned finding about the Path 44 upgrade that has been proven to be so thoroughly unbelievable as to be rendered meaningless.¹³³

S. "No party ... offered any evidence at all related to EMF."

The final overtly wrong statement made by SDG&E is found at page 342 where it states "No party ... offered any evidence at all related to EMF." If only SDG&E had read Exhibit U-101¹³⁴ (UCAN's Phase 2 rebuttal testimony), it would have known not to have made this statement. But it didn't and it did.

VI. Silly lawyer tricks.

Another category of misstatement that permeates SDG&E's opening brief is the technically true yet misleading statement, which we offer as "silly lawyer tricks." By using one word out of context or adding an easily-overlooked qualifier, SDG&E's attorneys attempt to make statements that are not factually inaccurate but are designed to convey a fact that is contrary to the record. SDG&E's use of carefully constructed claims are not unlike the despot general who, accused of giving the orders to a firing squad that dutifully executes an innocent political prisoner, claims in his defense that when we shouted "fire" he was merely trying to draw attention to a brush fire nearby. While this sophism might be termed silly, it is also troubling. Rarely, if ever, has UCAN found it necessary to call the

¹³⁰ 1613 MVA is not the maximum size for 230 KV line ratings as per Ex. U-3

¹³¹ Ex. U-3, see also UCAN Phase 1 OB

¹³² See Ex. U-3 citing various older CAISO studies; Ex. U-100 citing the CAISO's 2008 Transmission Plan

¹³³ RT at 1806 (Perez)

¹³⁴ Ex. U-101, p. 25

Commission's attention to counsels' deliberate distortion and abuse of the evidentiary record. Yet, the tenor and duplicity found in their counsels' arguments in SDG&E's opening brief was undeniable. UCAN offers the following selection of 16 misleading and, in some cases, disrespectful lawyer tricks found throughout SDG&E's opening brief.

A. 1150 Mw limiter now exists and keeps renewables from being used.

As discussed above, the impacts of this CAISO-imposed limiter are very questionable and controversial. But besides the controversy about whether the gas-fired generators in Baja are subject to this limiter, SDG&E makes some very curious arguments about this limiter. It states at page eight:

"An 1150 MW dispatch limit currently exists on the SWPL between the Miguel Substation and the Imperial Valley Substation, potentially preventing thousands of MWs of proposed new renewable generation from ever being developed."

The key misleading work is "potentially." As SDG&E conceded, it is not an issue for IID-connected generation.¹³⁵ So any renewable generator who connects somewhere east or north of Imperial Valley substation is not affected.

It is also not an issue for the first 1150 Mw of direct-connected renewables. As explained above, SDG&E's own Gridview modeling and its data responses to UCAN confirm that there's no impact of the limiter upon Stirling's 900 Mw.¹³⁶ SDG&E own data responses to UCAN in Exhibit U-86 support the fact that there is no limiter impact on 900 Mw of Stirling solar thermal power.

So based upon the arguments contained in SDG&E's briefs and the evidentiary record, it is not at all clear which thousands of MWs of proposed new renewable generation are being prevented from development.

B. Total NPV of benefits as a new metric instead of levelized annual costs.

At page 10 (and footnote 12) SDG&E asserts that:

"The Proposed Project compared to Aspen's In-Area All-Source Generation Alternative, In-Area Renewable Generation Alternative, and TE/VS Interconnect Alternative provides an additional total net present value benefit respectively of \$142 million, \$265 million, and \$248 million to CAISO customers."

¹³⁵ RT at 4739:26-4740:4 (Strack). He states that generation which is not directly connected to Imperial Valley substation (such as IID generation) cannot be affected by the 1150 Mw limiter; RT2727:17-2718:12 - 1150 Mw limiter does not apply to IID or to geothermal generation.

¹³⁶ See Ex. U-101 for reasons and Ex. U-86 for the SDG&E concession

Given that this is a false statement that is not attributed to any evidentiary source, the Commission should properly ignore it. But what is interesting is that had SDG&E used the term “levelized annual costs” rather than net present value, the statement might arguably be defensible. But instead SDG&E’s counsel attempts to fashion a new metric using the term *net present value* rather than the *levelized annual costs* terminology that it has maintained throughout the two phases of this case. A simple mistake? Perhaps, but unlikely. Had the attorneys been referring to levelized annual costs, the numbers would have been different: \$142 should be \$120, \$265 should be \$301, and \$265 should be \$218.¹³⁷ Thus, the Commission has to conclude that the attorneys were attempting to change a metric in mid-stream.

C. Northern routes allowing expansion to SCE contradict claim that routes across Indian lands are infeasible.

A number of times throughout its brief¹³⁸ SDG&E selectively quotes from Mr. Woldemarian’s testimony on expandability.¹³⁹ But the quotes are misleading, as they consistently omit a sentence that identifies an actual route for an expansion to SCE. That sentence, the last one on p. 6.24 of Exhibit SD-35, references the route to SCE shown in the DEIR.¹⁴⁰ It shows a route that crosses 6 miles of an Indian Reservation (from mileposts 14.5 to 20.5). So according to SDG&E’s definition of infeasible, this route is indubitably infeasible. So it is that SDG&E’s attorneys deploy this legal trick of failing to acknowledge, let alone, cite this particular sentence in the opening brief.

D. Motivations behind ENR has less to do with lower impacts than with legal strategy.

SDG&E’s attorneys also claim that ENR has lower impacts than the initial proposed route.¹⁴¹ This statement can only be made with any integrity when the *purpose* of the route change is not considered. But, as effectively pointed out in the CBD brief, SDG&E’s intent behind this route change was not reduce environmental impacts but to improve licensability.

¹³⁷ Ex. SD-142, p. 14, Table 11-6).

¹³⁸ SDG&E OB pp. xxv, xxvi, 66-68, 340

¹³⁹ Ex. SD-35, p. pp. 6.24-6.26

¹⁴⁰ Figure B-12b. (DEIR, p. B-30)

¹⁴¹ SDG&E OB, pp. xxvii (last bullet), 336

SDG&E’s claims that ENR can move outside of the 100’ corridor are also misleading.¹⁴² More than anything else, the proposed amendment to the ENR is really a means to compel ABDSP to grant approval of a route in the current corridor by using consequent environmental damages from that route to persuade ABDSP to accept a “lesser evil” route outside the corridor that is not licensable on its own merits. When the Commission peels back the layers of SDG&E’s legal onion, it will find that the detrimental impacts upon Angelina Springs are the reason impacts are higher for ENR.¹⁴³

E. Definition of “Imperial Valley” is expanded to include Mexico and eastern San Diego County.

The already broad definition of “Imperial Valley” that was described by Ms. Brown in Phase 1 appears to have been expanded by SDG&E’s counsel to include Mexico and eastern San Diego County near SWPL.¹⁴⁴ The location of the generation projects (none of which have permits or are under construction) contained in Table 6-3 are described as the *Imperial Valley region* and *Imperial Valley vicinity*. Yet, Table 6-3 includes generation located in Mexico and Eastern San Diego – not just Imperial Valley.

Oddly enough, STP isn’t routed in eastern San Diego County near SWPL, unless a southern route is chosen. As UCAN’s Phase 1 brief pointed out, SDG&E explicitly rejected UCAN’s request that it consider Mexican routes on the ground that there was no basis for it.¹⁴⁵ However, now SDG&E’s attorney appear to want to claim Mexican generation as a basis for building STP by expanding the scope of Imperial Valley to include any generation project built in Mexico or eastern San Diego.

F. Challenges to SDG&E’s cost estimates.

SDG&E’s attorneys declare a number of times that no party “credibly challenged the methodology” used for SDG&E’s cost estimates.¹⁴⁶ Note the words “credibly challenged” and “methodology.” As the record shows, several parties (UCAN, DRA, RPCC, TNHC) challenged

¹⁴² Id.

¹⁴³ Id., p. 108 cites avoiding them as a virtue; thus not avoiding them must be a negative impact; cf. p. 122; p. 336 concedes that ENR has worse cultural impacts than a non-ENR route

¹⁴⁴ SDG&E OB, pp. 4, 8, 69 (“Imperial Valley vicinity”), 70 (“Imperial Valley region”),

¹⁴⁵ Ex. SD-6, p. VI-9

¹⁴⁶ SDG&E OB, pp. 45, 143

SDG&E's cost numbers. In Phase 2, UCAN devoted much of Exhibit U-101 and a majority of its opening brief to raising questions about SDG&E's costs. But UCAN didn't use the word "methodology" when it challenged the accuracy and basis of those costs, so the SDG&E attorneys seized upon that to make its hollow declaration.

G. ALL of the alternatives meet reliability requirements.

At page 58, SDG&E claims that "all of the Sunrise routing alternatives will continue to allow SDG&E and other LSE.....to reliably serve their customers." This assertion falls under the category of "true, but so what?" Technically, this is a true statement notwithstanding the endeavors of SDG&E witnesses Sagi and Oatman to imply otherwise for southern routes. The implicit suggestion is that the SDG&E alternatives meet this requirement but the others don't. However, it is an irrelevant assertion because SDG&E concedes that all of the *non-Sunrise alternatives* also meet all reliability requirements in all years.¹⁴⁷ Indeed, the identification of resources sufficient to meet reliability requirements is how the Reference Case alternatives were created in the first place.

H. Northern routes are no more "geographically removed from the Miguel substation" than the southern routes.

Another implied message is contained in the brief's statement that northern routes are "geographically removed from the Miguel substation."¹⁴⁸ Again, a true statement but. . . What SDG&E's brief doesn't acknowledge is that the southern routes are also geographically removed from Miguel. The record shows that all routes in the DEIR, and the UCAN route as well, go to Sycamore Canyon and not Miguel. The closest any southern route comes to Miguel is about 16 miles away, at MP I8-79 under Alpine Blvd.¹⁴⁹ Northern routes are about 17 miles away from Miguel at MP134.¹⁵⁰

¹⁴⁷ See Ex. SD-142, pp. 1 and 3.

¹⁴⁸ SDG&E OB, p. 63

¹⁴⁹ DEIR, p. ES-57

¹⁵⁰ DEIR, p. ES-5

I. A southern substation's proximity to Escondido and other northern substations.

Another “true but irrelevant” statement is found at page 66, which states: “A southern substation site would also have a longer route to get to Escondido and other northern substations.” This statement is overtly misleading because it ignores southern substations. Most of SDG&E’s load is in the south, not the north¹⁵¹, and a southern substation would have a shorter route to get to southern substations at Penasquitos, Mission, Los Coches, and Sycamore Canyon.¹⁵² For the Sycamore Canyon substation, which SDG&E references by name,¹⁵³ it is about 19 miles closer to the proposed southern substation in the ESSRA and UCAN Route alternatives than it is to SDG&E’s proposed “Central East” substation.¹⁵⁴

It is also misleading because other than Escondido, there are no other northern substations to which future expansions have been identified. The DEIR identifies Escondido, Sycamore Canyon, Penasquitos, Mission, and Los Coches as possible termini for future 230 kV expansion lines. Only Escondido is in the northern part of SDG&E’s service area. Besides Escondido, the others are all closer to a southern substation than to the Central East substation. See the previous subsection.

Finally, it is false because it ignores feasibility. The only shorter way to get to Escondido from a northern route is to go through two Indian reservations.¹⁵⁵ Otherwise one has to go via Sycamore Canyon.¹⁵⁶ Likewise, the expansion route from the Central East substation to the Los Coches substation goes through an Indian reservation.¹⁵⁷ By SDG&E’s own definitions, these routes would be infeasible.

J. Impacts on gas-fired generation in Mexico.

UCAN agrees with SDG&E that building STP increases gas-fired generation in Mexico because those generators wouldn’t have to share capacity on SWPL.¹⁵⁸ But the reason gas-fired generation in

¹⁵¹ Ex. U-101, rebuttal of Oatman

¹⁵² See DEIR maps at pp. B-29 (showing those substations as destinations for future 230 kV lines) and ES-57. See also Exh. U-100.

¹⁵³ SDG&E OB, p. 67

¹⁵⁴ See DEIR, pp. B-29 (45 miles from Central East to Sycamore Canyon via “CEP” route), ES-57 (3 miles along SVO route from MP MRD34 to MP I8-740, 19 miles along the I-8 route from MP I8-74 to MP I8-92.7, 4 miles along proposed route from MP131 to MP135; 3 + 19 + 4 = 26 miles.) See also Ex. U-100.

¹⁵⁵ DEIR, p. B-29, “CEE” route, mileposts 19-25 and 29-32

¹⁵⁶ DEIR, p. B-29, “CEP” route, which is closer to the southern substation than to the northern “Central East” substation

¹⁵⁷ DEIR, p. B-29, “CEL” route.

¹⁵⁸ At SDG&E OB, p. 73, SDG&E states: “Absent the Sunrise Powerlink, the desired uses of the SWPL will exceed its capability and

Mexico is lower without STP is precisely what SDG&E witness Held and McCleanehan refuse to admit: that renewable generation from IID can displace fossil-fired generation from Mexico on the SWPL line. Without STP, there is likely to be congestion on SWPL. But SDG&E's modeling shows that what gets squeezed off is the Mexican fossil generation, not the IID-area geothermal or solar.¹⁵⁹ SDG&E suggests that STP is needed to protect stranding gas fired generation. But the evidentiary record shows that while Mexican fossil generation is lower without STP, IID renewable generation is not. And SDG&E continues to discourage even more efficient gas-fired generation in the San Diego basin (e.g. South Bay repower, Enpex) to preserve unfettered transmission access for the Baja generators.

K. Impacts on Bighorn Sheep only for seven miles.

The environmental intervenors will likely raise this disingenuous statement by SDG&E, but it was so obvious as to even elicit a response by other intervenors. SDG&E tries to minimize STP impacts on bighorn sheep by saying that STP “primarily follows SR 78” which, as a paved road, is already a barrier to sheep.¹⁶⁰ By using the word “primarily” the sentence is technically true, since the STP route in ABDSP parallels SR 78 for about 15 out of 22 miles inside the Park. But it is misleading in that it ignores the *other 7 miles* through Grapevine Canyon as if they didn't exist. This is *the* seven miles of Bighorn Sheep habitat. The assertion by SDG&E begs the next question: would SDG&E agree not to build transmission lines on those seven miles on the grounds that it was “primarily” getting to build most, but not all, of STP?

L. Delays on the southern route vs. the northern route.

UCAN addresses this issue in its opening brief. But when SDG&E's attorneys write: “Any southern route will significantly delay the expected in-service date for Sunrise ... approximately one year” they are waving a red flag.¹⁶¹ The key word here is “significantly.” Calling a one year delay from 2011 to 2012 “significant” is highly misleading. It is misleading because SDG&E expects lower loads in 2011 than 2010. It is misleading because whatever resource mix is used to meet reliability needs in

result in the stranding of relatively efficient gas-fired generation located in Mexico”

¹⁵⁹ See Ex. U-86

¹⁶⁰ SDG&E OB, p. 100, see also pp. xxv, 9 where it argues, conversely, that the northern route can be built more quickly.

¹⁶¹ Id., pp. 147, 160

2010 (prior to an on-line date of 2011) will be more than enough to meet reliability needs in 2011 (prior to an on-line date of 2012). It is misleading because after all the delays due to SDG&E's own errors and intransigence in this proceeding, it takes a high degree of chutzpah to assert that a one year delay in construction is significant.¹⁶² It is misleading because, as described in UCAN's opening brief, it is predicated upon the self-serving assertion that it need not get approval from ABSDP for the ENR.¹⁶³ SDG&E's counsel may suffer from a shortage of technical proficiency, but they clearly don't suffer from a shortage of nerve.

M. Minor Adjustments vs. Substantial Crossings.

According to SDG&E, the UCAN southern route would cross "substantial portions" of BCNM land in the Cleveland National Forest which "could not be avoided with simple re-routes."¹⁶⁴ Actually, this is a factually inaccurate statement. The BCD route crosses 5 segments of BCNM land,¹⁶⁵ totaling 4.1 miles.¹⁶⁶ One of those five segments is about a mile long and would also be crossed by SDG&E's Modified Southern Route if not for the several mile long deviation proposed by SDG&E to bypass 1.7 miles of the BCD alternative.¹⁶⁷ SDG&E's characterizes this deviation as a "minor adjustment".¹⁶⁸ Yet, UCAN's route amounts to a "substantial" crossing. The real fact here is that there are really only about 3 miles of BCNM land that constitute what SDG&E calls "substantial portions" of BCNM land in the Cleveland National Forest which "could not be avoided with simple re-routes." Alas, SDG&E's attorneys do not offer adjectives to describe and compare the three "substantial" miles in the CNF, with the 20+ miles crossing of the ABDSP

¹⁶² UCAN refers to the delay from 12/05 to 8/06 due to lack of a PEA in the original application; delay from 8/06 to 1/07 in making its affirmative economic case because of errors in its modeling; delay from June to July 2007 due to further modeling errors; delays in fall 2007 in DEIR completion due to SDG&E's failure to fully describe its project scope; delay from April to May 2008 due to the absence of any Reference Case analysis in its Phase 2 filing.

¹⁶³ UCAN OB, p. 109, fn. 373, 167, 203

¹⁶⁴ SDG&E OB, pp. 164, 168

¹⁶⁵ DEIR at Fig. D.17-2, as cited by the SDG&E OB

¹⁶⁶ Ex. U-100, p. 38 and fn. 202

¹⁶⁷ SDG&E, OB, p. 157 and DEIR at Fig. D.17-2

¹⁶⁸ Id, p. 158

N. Direct access to renewables” as a project goal.

The phrase: “Direct access to renewables” as a project goal constitutes a newly introduced concept offered by SDG&E counsel.¹⁶⁹ Specifically, the word “direct” here is the new addition to SDG&E’s lexicon. Direct access¹⁷⁰ is neither an appropriate goal, nor one that STP itself would achieve. With the exception of the proposed Stirling project that would be directly connected to the Imperial Valley substation, STP would not provide “direct” access to any renewables. For example, all of the 1600 Mw of geothermal generation SDG&E expects to get built in the IID service area in 2008-15 would have to be delivered to the CAISO at the Imperial Valley substation before any of it could flow over STP. SDG&E admits that it currently has only 225 Mw of interconnection capacity to IID at STP.¹⁷¹ It’s just assuming IID will build lots more transmission.¹⁷² Thus, if *direct* access really is a project goal, then STP fails miserably. More likely, it is not a project goal as much as some legally inspired rhetoric. We note that SDG&E does properly define the STP project goals without claiming “direct access” to renewables as a goal.¹⁷³ Presumably, the lawyers missed that one.

O. Distortions of the Energy Park proposal

In Phase 1 of this proceeding, UCAN offered the concept of an “energy park” or “site banking” that could be developed by SDG&E as one element of an alternative to a singular transmission line project.¹⁷⁴ In Phase 1, SDG&E dismissed the notion as naïve and rejected consideration of it. In Phase 2, Powers Engineering raised the concept again, as part of a multi-dimensional package of alternative strategies for Commission consideration. However, in Phase 2, the “attorneys-gone-wild” fervor struck and the concept became wildly distorted. SDG&E’s brief states: “Because Mr. Powers is proposing 920 MW of PV, *id.* at 7, the “renewable energy park” proposal apparently envisions up to 92 “parks” (if each “park” was 10 MW) to 920 “parks” (if each “park” was 1 MW).”¹⁷⁵

¹⁶⁹ SDG&E OB, pp. xxiv, 9,214, 352

¹⁷⁰ Not to be confused with “direct access” for retail electricity purchasing, that other controversial matter before the CPUC currently.

¹⁷¹ Ex. U-55

¹⁷² Ex. SD-6, Table IV-27; note that in Phase 1 SDG&E was assuming upgrades to the Coachella-Devers lines

¹⁷³ SDG&E OB, p. 6, first sentence in section I.A., listing the three “vital objectives” of the project without ever using the word “direct.”

¹⁷⁴ Ex. U-1, see UCAN Phase 1 opening brief, p. 314-316

¹⁷⁵ SDG&E OB, p. 240

This Phase 2 distortion of the renewable energy park alternative offered by UCAN and Powers Engineering is illustrative of SDG&E counsels' disregard for fact. There's nothing in the record that suggests 920 MW being generated in energy parks. Powers' proposal was quite straightforward; it was to substitute the 290 MW solar trough plant in Borrego Springs described in the DEIR with 290 MW at or near rural SDG&E substations.¹⁷⁶

Then, to compound the distortion, SDG&E attacks Powers for failing to identify any "renewable energy parks" under development in San Diego County.¹⁷⁷ It makes this statement even though SDG&E knew full well in Phase 1 that the UCAN energy park proposal was conceptual.¹⁷⁸ Second, Powers testimony made no representation that the energy park was anything other than conceptual, albeit feasible given SDG&E's renewable energy RFO.

Perhaps counsels' true colors are on unadorned display in its reference to Jigar Shah, the founder, former CEO and current Chief Strategy Officer of Sun Edison as a "PV salesman".¹⁷⁹ This disrespect accorded to Mr. Shah and to the testimony of Powers Engineering is symptomatic of the disrespect paid by SDG&E counsel to the evidentiary record in this phase of the proceeding.

P. Limited updates to Phase 2

In what might qualify as the most audacious of the silly lawyer tricks offered by SDG&E counsel, the opening brief states that SDG&E's Phase 2 analysis includes the same assumptions as in Phase 1 except for "limited updates."¹⁸⁰ As detailed in Exhibit U-101 and in UCAN's opening brief, SDG&E's changes to its Phase 2 case are anything but "limited." Rather than re-argue the points raised in UCAN's opening brief, we simply bestow the award for perhaps the silliest of the lawyer tricks contained in the SDG&E opening brief.

¹⁷⁶ Ex Powers-1, p. 6.

¹⁷⁷ SDG&E OB, p. 241

¹⁷⁸ RT at 3916 (Powers), SDG&E counsel confirms the conceptual nature of the concept with Powers.

¹⁷⁹ SDG&E OB, p. 244. This, despite SDG&E counsel's reference to Mr. Shah in the hearings by his proper title. See RT at 3430. SDG&E also had access to Sun Edison's own web page which clearly laid out Mr. Shah's role and qualifications. <http://www.sunedison.com/aboutus-management.php>

¹⁸⁰ SDG&E OB, p. 279 – "SDG&E used the same assumptions included in its Phase 1 analysis except for limited updates of information relating to Southern California/Northern Baja California Mexico load forecasts and San Diego area resource additions."

VII. Disputed factual assertions.

A. STP impact upon import capability.

SDG&E offers the oft-repeated refrain that STP increases import capability by 1000 Mw.¹⁸¹ Yet, Exhibit U-91 suggests this seeming truism is not true at all, since even 1 Mw of increased generation with STP triggers the need for new transformer at Sycamore. Alternatively, if SDG&E claims Exhibit U-91 doesn't include STP, then Exhibit U-91 shows STP is not needed when new generation added in the Imperial Valley. Either way, STP's impact upon import capacity is not as clear as SDG&E would have hoped because of the data contained in Exhibit U-91.

B. All southern routes don't require an SPS.

SDG&E claims that the alternative southern routes require an SPS with up to 1000 Mw of load dropping.¹⁸² To support this contention, SDG&E relies solely upon a WECC review which was based solely on a route similar to the ESSRA.¹⁸³ SDG&E asserts that the same analysis would apply to all southern routes.¹⁸⁴ But the UCAN route is intentionally routed away from SWPL in anticipation of this very argument.¹⁸⁵ So SDG&E cannot claim that the WECC has found the UCAN route needs an SPS (it hasn't) or that the WECC would require an SPS for the UCAN route.

C. The real story behind the length and cost of access roads

SDG&E asserts that the proposed project requires 83 miles of new roads, while ESSRA would require 150 miles of new roads.¹⁸⁶ This is a highly-disputed matter. First, this assertion clashes with

¹⁸¹ Id. p. 8

¹⁸² Id, p. 63

¹⁸³ Id., p. 59, fn. 80.

¹⁸⁴ Id.

¹⁸⁵ Ex. U-100, section IV.A.1, p. 32. See also Ex. U-101, section VI.B., p. 31, pointing out that the "High Risk" items that SDG&E alleges raise reliability risks for the southern routes relate to portions of the ESSRA west of the UCAN route, and are "**not** high risk in the portion of the southern route[s] adjacent to SWPL."

¹⁸⁶ SDG&E OB, p. 146 -- "Aspen Southern Alternative has approximately 67 more miles of new access roads than the Proposed Project and that Mr. Woodruff failed to consider the difficulty of terrain associated with constructing 150 miles of new access roads in the south"

the DEIR. The DEIR, says the Proposed Project will require 102.2 miles of new roads.¹⁸⁷ Since roads and structure pads are now the single largest cost component for STP, this difference is significant.¹⁸⁸ The DEIR does not appear to have a number for miles of new roads for ESSRA, but SDG&E has admitted its 150-mile estimate is an upper bound, based on assuming no structures built without road access.

Second, the DEIR numbers suggest that SDG&E's mileage estimates are suspect. Given the large cost associated with roads and pads and the absence of any detail regarding them in SDG&E's testimony, a detailed review of SDG&E's mileage estimates would have been warranted. Lack of time prevented a comprehensive review by UCAN.¹⁸⁹ But the Commission may not need one.

Just a quick review of a single DEIR page shows that SDG&E may have substantially overstated new road requirements. DEIR Figure Ap.11C-63 shows the first four miles of the BCD route, which is also part of the UCAN route and SDG&E's Modified Southern Route. For all of those four miles, the DEIR shows that the proposed BCD route closely parallels McCain Valley Road. However, between poles S2128 and S2124, for a distance of about a mile, the DEIR shows a new access road that parallels both the BCD route and McCain Valley Road. For the next mile or so, between poles S2124 and S2120, there are **two** new access roads, each again paralleling both the BCD route and McCain Valley Road. Elsewhere access is by short radial roads from McCain Valley Road to the BCD route (poles S2132, S2130, S2129, S2128, S2127 and S2126). So in the course of the first 2 miles, the map appears to show 3 miles more of access road that would really be needed. UCAN urges the Commission to scrutinize the SDG&E numbers very closely, as there is compelling evidence that their numbers are not accurate and cannot be relied upon for cost-estimate purposes.

D. Comparability of CNF and ABDSP.

SDG&E claims that CNF and ABDSP are "equally important" areas and boasts that no party has shown otherwise.¹⁹⁰ While UCAN doesn't hold itself out to be expert on environmental land-use matters, it is exceedingly difficult to ignore the fact that National Forest's management is based on

¹⁸⁷ DEIR, p. B-51, Table B-3.

¹⁸⁸ Ex. U-101, p. 24 and fn. 90

¹⁸⁹ See SDG&E's OB at p. 159 and UCAN's discussion below of SDG&E's willingness to cut corners with regard to cost estimates and blame lack of time.

¹⁹⁰ SDG&E OB, pp. 150, 337

“multiple use.” State Parks are based on preservation. By equating them, SDG&E seems to have lost sight of the fact that there is a reason why the CNF has a freeway run through it and ABDSP does not.

E. Borrego area solar proponents exist.

SDG&E attacks the DEIR regarding the lack of developers for solar projects near Borrego Springs.¹⁹¹ However, Exhibit U-98 (last two lines) shows two solar projects in the CAISO queue for delivery to the CAISO grid at Borrego Springs, totaling over 100 Mw. Because they are smaller projects, they propose to make use of the existing 69 kV transmission line to Borrego Springs, and not a new 230 kV line. The DEIR estimate of up to 290 MW of nameplate potential is justifiable based upon an unrebutted and authoritative exhibit.

F. How to calculate lifecycle costs of alternatives.

At page 181, SDG&E calculates the incremental cost of an alternative by multiplying its annual cost times the number of years. This is the same approach used by UCAN in its opening brief,¹⁹² suggesting that SDG&E is not troubled by any deviations between this methodology and a more precise methodology that would take into account the front-loaded nature of utility cost recovery.¹⁹³

G. SDG&E vs. Sempra – who should the Commission believe?

Sempra generation has filed an application with DOE for a Presidential Permit to import up to 1250 Mw of wind generation from Mexico and deliver it to the CAISO via the SWPL line.¹⁹⁴ Sempra plans to deliver generation prior to the operating date of STP. But SDG&E claims the CAISO’s 1150 Mw limiter will prevent this from happening.¹⁹⁵ So is Sempra misleading DOE? Is the CAISO

¹⁹¹ SDG&E OB, p. 186

¹⁹² UCAN OB, p. 4 and fn. 1.

¹⁹³ See Ex. SD-143, pp. 17-87, for 71 pages of examples of the computations required by a more precise approach to convert front-loaded costs with actual utility ratemaking into equivalent levelized annual costs.

¹⁹⁴ UCAN OB, p. 41, 70

¹⁹⁵ SDG&E OB, p. 328

misleading Sempra? Or is SDG&E misleading the CPUC? None of the parties have shed any light on what appears to be an unreconciled factual conflict.

VII. Rebuttal of CAISO brief.

A. *The newly-introduced 1150 Mw limiter is a non-issue.*

At p. 6 of its Phase 2 OB, the CAISO discloses that it plans to impose an 1150 Mw pre-dispatch limit on generation directly connected to the CAISO grid at IV substation or to SWPL west of IV substation. The CAISO then suggests that the limiter will reduce renewable generation and reliability in the absence of STP. Any such implication is false. As discussed below, this limiter, if needed and implemented, will not affect renewable resource generation for years to come and will not prevent reliable service to SDG&E customers. Thus it is a non-issue with regard to STP licensing. It *is* an issue for the two Baja generating plants, TdM and Intergen. But neither entity has offered submissions in this proceeding.

1. The need for the dispatch limiter is based entirely on non-public documents.

The dispatch limiter was newly introduced in Phase 2 – apparently the problem identified by the CAISO did not warrant mention in Phase 1 despite the fact that it was properly a Phase 1 issue.¹⁹⁶ The CAISO has admitted that the purpose of the limiter is to avoid having to use the already existing RAS that protects the CFE electrical grid from potential adverse consequences after an outage of the SWPL line,¹⁹⁷ such as the 70+ hour long outage that occurred during the October 2007 fires.¹⁹⁸ The CAISO claims there will be a “dramatic increase in risk to the electrical system operated by CFE as generation is

¹⁹⁶ Based upon the evidence in Phase 1, the Commission can reasonably find that despite all of the CAISO’s analyses of reliability impacts from adding new renewable generation in the absence of STP, it never found any need for prior restraints on generation.

¹⁹⁷ See RT at 5322:23-5323:18 (Sparks), describing the sequence of events which would have to occur before the existing RAS that cross-trips a transmission line between the CAISO and CFE would be activated; see RT 532421-5325:15 (Sparks) for the ISO’s admission that the purpose of the 1150 Mw limiter is to avoid use of the cross-trip RAS.

¹⁹⁸ Ex. SD-35, Attachments 5-2 and 5-3. Normal outages of the SWPL line are far shorter in duration. Total annual outages average under 14 hours per year. See Ex. U-4, section II.E.1, p. 50, fn. 186.

added to the IV substation above 1150 Mw¹⁹⁹ but there is no analysis in the record to that effect, and apparently no analysis outside the record, either.²⁰⁰

Importantly, the CAISO has not claimed that increasing generation will cause SWPL outages to increase in frequency even though it is the effect of SWPL outages that the limiter is supposed to protect against. Nor is there any record that the existing RAS won't work if interconnected generation at IV substation exceeds 1150 Mw. CFE's willingness to let the CAISO penalize itself for CFE's benefit is understandable, but it is not support for the CAISO's position.

2. The dispatch limiter will not come into operation for years.

Currently there are 1070 Mw of generation connected to the CAISO at IV substation and zero Mw connected to the SWPL line west of IV substation.²⁰¹ The zero figure cannot change unless and until a new 500 kV substation (e.g., Jacumba) is built between IV and Miguel substations, because without a substation there is no way to deliver power on to SWPL between IV and Miguel substations. No CPCN has been filed with the CPUC for such a substation.²⁰² The 1070 Mw figure will not change unless and until new generation is interconnected to the CAISO at IV substation. The first planned new interconnection to the CAISO at IV substation is 300 Mw from the Stirling project.²⁰³ This is the only Imperial Valley project with an interconnection agreement with the CAISO,²⁰⁴ but it has not yet filed for an AFC with the CEC,²⁰⁵ let alone received an AFC or begun any construction. Thus it will be a number

¹⁹⁹ CAISO OB, p. 6

²⁰⁰ At RT5322:13-18 (Sparks), the ISO witness asserts that the risks to CFE will increase "dramatically," but he later admits that the ISO has done no analysis whatsoever of the expected change in frequency of the required use of the existing cross-trip RAS. See RT at 5325:8-25 (Sparks). Thus there does not appear to be any analytical basis for the claimed dramatic increase in risk.

²⁰¹ CAISO OB, p. 7.

²⁰² Ex. U-98, pp. 7-12, lists projects in the CAISO queue with their planned interconnection locations. There are 8 projects listed as planning to interconnect along the SWPL line between Imperial Valley and Miguel substations (projects 106A, 112, 159A, 183, 209, 215, 286, and 303). Ex. U-98 shows that none of these projects has an interconnection agreement with the CAISO. No CPCN has been filed with the CPUC for transmission facilities to interconnect any of these projects. No generators associated with any of these projects are included in any of SDG&E's modeling. See Ex. SD-6, Appendix IV, pp. IV-5 through IV-8 listed all new generation included in SDG&E's modeling. Until the Commissioner's Order extending the DEIR schedule and expanding its scope, no transmission facilities associated with any of these proposed projects were even included in the DEIR scope.

²⁰³ See Ex. U-98, p. 8, CAISO queue project 78.

²⁰⁴ Id. There are 5 other projects in the CAISO queue that plan to interconnect at Imperial Valley (projects 124, 164, 168, 169, and 178B), but none of them has an interconnection agreement with the CAISO.

²⁰⁵ Ex. D-106.

of years before it is even possible for direct-connected generation at the IV substation or along SWPL to reach 1150 Mw.²⁰⁶

3. When and if the dispatch limit comes into operation, it will not act limit renewable generation for additional years.

When and if there are more than 1150 Mw of generation directly connected to SWPL and the IV substation, it will be theoretically possible for the 1150 Mw pre-dispatch limiter to come into play if all or most of that generation tries to schedule its output simultaneously. However, even in that situation, the decision as to which generation would be allowed to run and which generation would be required to curtail would be an economic decision. SDG&E's economic modeling took the 1150 Mw limiter into account and showed that the generators affected by the limiter would be fossil-fueled generators, not renewable energy generators.²⁰⁷

4. The dispatch limiter will not prevent SDG&E from providing reliable service to its customers.

In the absence of STP, the SDG&E import limit for reliability purposes is 2500 Mw, based on the Path 44 emergency rating when STP is out of service. Limiting schedules over SWPL from direct-connected generation to 1150 Mw when SWPL is in service does not change the fact that SWPL carries zero Mw under the G-1/N-1 conditions that are the basis for SDG&E reliability planning. All alternatives being proposed in this case are based on either the 2500 Mw G-1/N-1 limit or increases to that limit involving TE/VIS or Path 44.²⁰⁸ The dispatch limiter has no effect on the Path 44 or TE/VIS ratings, and thus it has no effect on import capability for reliability purposes.

5. The dispatch limiter is not a reason to license STP.

Given the lack of a technical record in support of CAISO's limiter, the certainty that it will not take effect for some years, and SDG&E modeling showing that it will not affect renewable generation even in 2015, there is no reason for the Commission to conclude that the limiter would affect renewable

²⁰⁶ RT at 5319-20 (Sparks) the CAISO confirms that the 1150 Mw limiter has never yet been used because there are less than 1150 Mw of generation potentially subject to it.

²⁰⁷ Ex. U-86, showing no effect of the limiter on renewable generation even without Sunrise, even in 2015.

²⁰⁸ Ex. SD-142, pp. 1 and 3, "San Diego Area Import Capability" line, plus UCAN Phase 1 and Phase 2 OBs re Path 44.

resource generation.²⁰⁹ It also would not affect reliability. Thus there is no reason for the prospective 1150 Mw limiter to affect the Commission's decision for or against STP.

B. Increased N-2 risk for southern routes is a false issue.

The CAISO claims that “because the [southern routes] would each share a common corridor with SWPL for approximately 36 miles, these alternatives result in a WECC Category C” risk that requires load dropping after an N-2 contingency.²¹⁰ That claim is false. The increased risks that allegedly require a load-dropping RAS are not because of the 36 miles of common corridor. The risks of a common mode outage in those 36 miles are minimal.²¹¹ Rather, it is the alleged risks west of the point of divergence between SWPL and the southern routes that SDG&E used as the basis for its claim of a significant N-2 risk associated with southern routes. As the CAISO would know if it had done an independent analysis, fires west of the point of divergence may cause N-1-1 contingencies, but they are extremely unlikely to cause N-2 contingencies. An N-2 contingency would require lines separated by miles to trip out within 30 minutes of one another.²¹² N-1-1 outages of both SWPL and STP are indeed possible, but they are possible with both Southern and Northern routes, and indeed would likely have occurred already if STP existed today along a northern route.²¹³

²⁰⁹ When and if SDG&E can show that permitted and under construction new renewable resources directly connected to SWPL or the IV substation would have simultaneous output in excess of 1150 Mw for more than a trivial number of hours (say, 1 percent) per year, then UCAN would agree that the 1150 Mw pre-dispatch constraint would affect renewable resource generation. That situation never occurs in SDG&E's current modeling of the year 2015. If it occurs in reality, and if the CAISO at that time demonstrates that there is no other cost-effective alternative to the 1150 Mw limiter, then the Commission could consider the effects of the limiter on renewable resource generation in reconsidering the Sunrise proposal. See Exh. 101, p. 17, where UCAN previously suggested the possibility of reconsidering Sunrise when and if renewable resource development reached a level high enough that SWPL would no longer be sufficient.

²¹⁰ CAISO OB, pp. 10-11. Note that the CAISO carefully does **not** say that UCAN's Jacumba alternative would be subject to load dropping after an N-2 contingency (CAISO OB, p. 27, discussing both the UCAN Southern Route and Jacumba alternatives, and attributing N-2 load dropping to only one of them. So the CAISO apparently concedes that there is no significant N-2 risk west of Jacumba. But Ex. U-101 demonstrates that there is no significant N-2 risk east of Jacumba.

²¹¹ Ex. U-101, pp. 27.

²¹² Id.

²¹³ See UCAN OB, pp. 270-271, re overlapping outages of SWPL and lines along the Sunrise proposed route in years prior to 2007. See Ex. SD-35, attachment 5-2 for a list of overlapping outages of SWPL and lines along the Sunrise proposed route during the October 2007 fires.

C. The expansion option to SCE is not free.

The CAISO says that “the expansion option is effectively *free*.”²¹⁴ On the next page the CAISO says that expansion would be “low cost.” However, the DEIR says that expansion would require 91.2 miles of new 500 kV transmission, with 6 of those miles going through an Indian Reservation, plus a new 500 kV “switching station.”²¹⁵ That makes it not only not free, but (according to SDG&E) not even feasible.

D. The “unacceptable risk of load shedding” is, in fact, acceptable.

The CAISO claims that the ESSRA (and, by implication, all southern routes) would have an “unacceptable risk of load shedding.”²¹⁶ But the risk of load shedding is actually precisely what is allowed by WECC reliability rules, and hence is perfectly acceptable. SDG&E claims that the frequency of an N-2 event for SWPL and ESSRA would be between once in 21 years and once in some centuries.²¹⁷ SDG&E admits there would be a less than 10 percent chance that the N-2 event would occur at a time when loads were high enough to require load shedding.²¹⁸ SDG&E says that the amount of load shed would be no more than 1000 Mw, and then only if imports were at 4100 Mw,²¹⁹ so that the amount of load shed would be less than 25% of SDG&E customer load.²²⁰ A less than 10 percent chance of shedding less than 25% of load no more often than once every 21 years after a Category C contingency is completely within WECC reliability criteria.²²¹ When the CAISO uses the word “unacceptable” it is disavowing the very reliability criteria it is their job to uphold.

²¹⁴ CAISO OB, p. 12. Emphasis in original.

²¹⁵ DEIR, p. B-30, Figure B-12b.

²¹⁶ CAISO OB, p. 13.

²¹⁷ Ex. U-101, p. 53, citing SDG&E’s analysis for the WECC.

²¹⁸ Id.

²¹⁹ Id.

²²⁰ 1000 is less than 25% of 4100. If SDG&E has net imports of 4100 Mw, it must have load in excess of 4100 Mw, since local generation cannot go below zero.

²²¹ WECC reliability criteria allow load dropping for N-2 contingencies. The issue in SDG&E’s WECC petition was not whether load dropping was allowed, or whether it might happen after an N-2 contingency, but whether SDG&E would be required to spend money to set up a RAS to control the post-N-2 load dropping. See Ex. SD-35, Chapter 6, section II.C, pp. 6.16-23.

Note that for an individual customer the expected outcome corresponds to an expected outage less than once every 840 years, based on an N-2 event once per 21+ years, but only one in 10 events requires any load dropping and only one in four of those requiring load dropping affects any particular customer. $21 \times 10 \times 4 = 840$.

E. Economic impacts are too speculative upon which to base a decision.

As it did in the *Valley-Rainbow* case, the CAISO asserts economic values which are too speculative or unsubstantiated upon which to base a decision.²²² In this proceeding, the CAISO improperly overstates the benefits of displacing CTs to arrive at finding that STP is cost-effective.

First, the CAISO's figure for economic benefits is inflated by \$97 million per year relative to SDG&E due solely to their different treatment of the impact of CT construction cost changes between Phase 1 and Phase 2. The CAISO claims that the ENR will provide levelized net benefits of \$145-318 million per year, and the ESSRA even larger benefits.²²³ Some of that net benefit is the effect of increasing the assumed price of CTs in the Reference Case, from \$78/kw-year to \$162/kw-year.²²⁴ SDG&E also used \$162/kw-year as the cost of a CT,²²⁵ and concluded that the **total** levelized cost for CTs in the CT Reference Case would be \$44.1 million per year.²²⁶ That means that at \$78/kw-year, the levelized fixed cost of the CT Reference case would be \$21.2 million per year,²²⁷ some \$23 million per year less.²²⁸

In other words, SDG&E's data show that increasing the fixed costs of CTs increases Phase 2 levelized net benefits compared to the CT Reference Case by \$23 million per year. But the CAISO claims that the same change increases benefits by \$119 million per year!²²⁹ This amounts to about \$97 million more than SDG&E's data suggests,²³⁰ and almost completely explains why the CAISO's net benefit number for the ENR is \$103 million per year more than SDG&E's.²³¹

As a result, the Commission is presented with a challenge – should it rely upon the ever-changing CT cost assumptions of SDG&E or the CAISO? UCAN thinks the Commission has no choice but to rely upon those costs SDG&E identified and used for its updated Phase 2 CT Reference Case,²³² and provided extensive detail on how it converted those costs into levelized revenue requirements.²³³

²²² D. 02-12-066, p. 69-70

²²³ CAISO Phase 2 OB, p. 13, Table 1.

²²⁴ CAISO Phase 2 OB, p. 8.

²²⁵ RT at 5539 (Orans)

²²⁶ Ex. U-93; Ex. SD-143, p. 20. first column.

²²⁷ $\$44.1 \times 78/162 = \21.2 million per year.

²²⁸ $\$44.1 - \$21.2 = \$22.9$ million per year.

²²⁹ CAISO Phase 2 OB, p. 8.

²³⁰ $\$119$ million (CAISO) - $\$23$ million (SDG&E) = $\$97$ million per year difference.

²³¹ The CAISO says the ENR has \$143 million per year of net benefits relative to a CT reference case (CAISO OB, p. 13, Table 1; SDG&E says \$40 million per year (Ex. SD-142, p. 14). $\$143 - \$40 = \$103$ million per year difference.

²³² Ex. SD-142, p. 3.

²³³ Ex. SD-143.

The CAISO quantified the **change** in its overall economic results due to changing CT cost assumptions, but provided no testimony as to what its actual Phase 2 CT costs or quantities were either before or after it revised its testimony.²³⁴ SDG&E prepared its CT Reference Case analysis, (Exhibits SD-142 and SD-143), after the CAISO had submitted all of its Phase 2 testimony, and had every opportunity to adopt whatever methodology the CAISO used to get a \$119 million per year impact from increasing CT construction costs, if it had thought the CAISO's methodology was correct. Based on the later date and clearer documentation for the SDG&E numbers, the Commission should reject the extra \$97 million per year of costs that the CAISO (but not SDG&E) attributes to changing CT construction cost estimates between Phase 1 and Phase 2.

UCAN submits that the CAISO's number is also flawed because it assumed that SDG&E would build (and pay for) 1000 Mw of CTs in the absence of STP, rather than the 140 Mw which are that is needed in 2010-12 and the 326 Mw that are all that are needed in 2016.²³⁵ In the absence of any explanation by the CAISO and SDG&E for the difference in the assumptions, the Commission should give weight to the CAISO's admission that it used SDG&E assumptions for levelization term, weighted average cost of capital, revenue requirement multiplier, and levelization factor,²³⁶ and they both used \$162/kw-year for the cost of CTs.²³⁷ But as UCAN has pointed out before in Phase 1,²³⁸ one of the benefits of not building STP is that resource additions can be sized to match load growth, rather than added in a hugely oversized lump (STP) that results in excessively large reserves.²³⁹

Finally, the CAISO's upper bound numbers (and to a lesser extent its lower numbers as well) depend on the shaky assumptions that there will be both more and cheaper renewables in the Imperial Valley than elsewhere and that without STP, utilities will build and buy more expensive renewable generation. So the higher numbers should be ignored, and the lower numbers given little weight. The difference between the CAISO's lower and higher numbers for net benefits are entirely due to changes in RPS assumptions.²⁴⁰ Even the CAISO's lower bound numbers show STP benefits that are largely

²³⁴ See Ex. I-12, Phase 2 Table 4. This is the only table with CT cost impacts in the CAISO's Phase 2 testimony. Note that in Ex. I-6 from Phase 1, Table 6, CT costs (including transmission) are shown as \$491 million per year (\$363 million per year for CTs plus \$128 million per year for associated transmission) without Sunrise and labeled as "San Diego and LA," suggesting that the CAISO may be attributing impacts on LA Basin CT costs to Sunrise.

²³⁵ Ex. SD-142, p. 3, "Generic Gas Turbine Additions" line.

²³⁶ CAISO Phase 2 OB, p. 17.

²³⁷ CAISO, OB, p. 8. SDG&E OB, p. 281

²³⁸ Ex. U-3,

²³⁹ Ex, SD-142, p. 3, last line (planning reserve margins of 22-23% in all years with CT Reference Case) and p. 1, last line (planning reserve margin at 42% in the year Sunrise starts, and still at 36% five years later)

²⁴⁰ See Ex. I-6 from Phase 1, Tables 6 and 7, showing that the only differences are in line 14 ("Adjusted RPS Cost") and the summary lines (lines 15 and 17) that reflect line 14.

based on claimed RPS benefits.²⁴¹ In Phase 2, the CAISO has not provided any tables that disaggregate its claimed total benefits into their individual components like those in Phase 1.²⁴²

The CAISO's claim of RPS benefits is based on the premises that (a) there will be more renewables developed in the Imperial Valley with STP than without, (b) California LSEs will develop just as much renewable generation with STP as without, (c) to make up for any lower levels of development in the Imperial Valley without STP there would have to be greater levels of renewable development outside of the Imperial Valley without STP, and (d) renewables outside of the Imperial Valley will cost more than renewables inside the Imperial Valley.²⁴³ All four of (a)-(d) need to be true to make the CAISO's RPS benefit calculations work.

UCAN disputes (a), on the grounds that the CAISO has both too high a number for the level of renewable development in the Imperial Valley with STP, and too high a number for the incremental development attributable to STP, because it ignores the usability of SWPL, Path 42, and IID's proposed lines to Arizona and Devers to export renewables without STP.²⁴⁴ UCAN disputes (d) on the grounds that there is simply no record that the renewables that will be developed in the Imperial Valley will be cheaper than those developed elsewhere, on average.²⁴⁵

UCAN does not dispute (b) or (c), nor does SDG&E in its economic analyses.²⁴⁶ However, when SDG&E witnesses start to argue that there will be more GHG emissions without STP, they are effectively disputing (b) and (c), and thus undercutting the CAISO's claim that RPS impacts of STP will save ratepayers money. If the extra renewables in the Imperial Valley due to STP occur as the CAISO and SDG&E GHG witnesses assert, and they are not offset elsewhere (as the CAISO assumes but SDG&E's GHG witnesses do not), then the economic benefits that Orans calculates will simply not exist. The Commission can ultimately believe the CAISO (RPS dollar benefit from STP, but no GHG

²⁴¹ See Ex. I-6 from Phase 1, Table 6, lines 14 and 17 showing that RPS benefits make up \$45 million per year out of the total net benefit of \$42 million per year attributed to Sunrise.

²⁴² Ex. I-6, Tables 1, 3, 4, 6, 6B, and 7 each disaggregate total benefits into 10 subcategories, four for energy (related to GridView), two for RMR, two for CT impacts, one for the system RA impacts first identified by UCAN, and one for RPS impacts.

²⁴³ Ex. I-2, Chapter 4. In particular, compare Tables 4.6 and 4.7, showing the sources, quantities, and costs of renewables with and without Sunrise.

²⁴⁴ See Ex. U-3 and UCAN's Phase 1 OB, as well as Exs. ID-2 and ID-3.

²⁴⁵ For example, see RT at 2704-2705 (Marcus – Phase 1) testimony regarding the sensitivity of the CAISO's results to assumptions about solar prices and solar vs. wind development. Since the CAISO accepts that the first 600 Mw of new Imperial Valley generation can be developed with or without Sunrise (Ex. I-2, Tables 4.5 and 4.6, "Imperial Path 42" line), the Commission could wait until that first 600 Mw is under construction and has more solid cost estimates before concluding that the next 1900 Mw (Ex. I-2, Table 4.5, "Imperial-Sunrise" line) is cost-effective.

²⁴⁶ RT at 4723 (Strack) confirms that SDG&E assumes the same level of RPS development in all cases except for extra renewables in DEIR Alternatives 1 and 2. However, when SDG&E witnesses like Held start arguing that there will be more renewable development with Sunrise than without it, they are disavowing Mr. Strack's testimony and the economic benefits calculated by Mr. Strack.

benefit because renewables get built somewhere with or without STP). Or it can ultimately believe SDG&E's GHG witnesses (RPS GHG benefit from STP-facilitated renewables with no offsetting renewable development elsewhere, but an associated economic penalty for the cost of those STP-facilitated renewables). Or it can ultimately believe UCAN and SDG&E witness Strack (neither an economic nor a GHG benefit from RPS due to STP, because the same amount of renewables, in the same places, gets built with or without STP). But the Commission cannot believe both the CAISO and SDG&E's GHG witnesses, because their positions are mutually contradictory. Nor can it believe both the CAISO and SDG&E's economic witness Strack, because they also have mutually contradictory assumptions.

VII. Legal Issues.

A. Applicability of the Valley-Rainbow and Jefferson-Martin Decisions in this proceeding.

The Commission is assisted in addressing the issues in this case by relying upon precedent established by two other recently decided Commission decisions cited by SDG&E in its opening brief: *Valley-Rainbow*²⁴⁷ and *Jefferson-Martin*.²⁴⁸ But they assist the Commission for different reasons than those cited by SDG&E. These cases are instructive for a number of reasons, including the fact that they find:

- A five-year planning horizon for new generation is reasonable.²⁴⁹
- Assumptions of retirement of existing resources cannot be accepted unless strongly documented.²⁵⁰
- Capacity requirements are not set in stone and can be affected by interim measures by a utility.²⁵¹

²⁴⁷ D. 02-12-066 (2002)

²⁴⁸ D. 04-08-046 (2004)

²⁴⁹ D. 02-12-066, p. 16

²⁵⁰ D. 02-12-066, pp. 25-26

²⁵¹ In *Valley-Rainbow*, the Commission wrote: "we note that SDG&E admitted it only looked at transmission alternatives to meet its capacity requirements (RT 1337:6-7), even though SDG&E has the ability to ensure that Otay Mesa or additional generation is developed within the San Diego area. For example, under questioning by the ALJ, SDG&E agreed that the Commission could order it to build generation in its service territory. (RT at 1334:25-28.) SDG&E could contract with a

- A No-Project alternative established in an FEIR is a very specific proposal and that where alternatives are environmentally preferable, the No-Project alternative shouldn't be considered.²⁵²
- EMF exposure may increase the risk of certain health effects. In routing transmission lines, it is entirely appropriate and prudent for the Commission to consider the EMF levels that would be created by the various possible routings and configurations of the project.²⁵³
- A specific cost cap is appropriate and has a bearing upon what utility may seek for approval by FERC.²⁵⁴
- Contingency factors provided by an applicant in its estimating procedure are of a sufficient reliability so that the CPUC can adopt a specific, unqualified cost cap.²⁵⁵

In its opening brief, SDG&E advances a novel legal theory that alternatives to STP may not be considered unless those alternative projects are licensed by state authorities. This theory is not only unsupported by state law but it is impractical and even contradicted by SDG&E itself --- after all, STP is not licensed and yet it is being advanced as a project.

At page 169 of its opening brief, SDG&E asserts that the DEIR's Alternative 1 cannot be considered by the Commission because none of the generation units exist or are under construction. SDG&E cites to Commission decisions *Valley-Rainbow* and *Jefferson-Martin* to support its contention that "assumed future generation units should be considered in evaluating the need for Sunrise."²⁵⁶ However, SDG&E's construction of those cases is wrong – neither of the cases suggests that alternatives cannot be considered unless those alternatives are under construction or already built. The cases, instead, discuss the parameters for a conservative assessment of need.²⁵⁷ In fact, *Valley-Rainbow* did not even address DEIR alternatives because no DEIR was conducted; the project was found to be cost-ineffective and thus no DEIR was conducted.

generation developer, Calpine, for example, to secure the output of Otay Mesa through a long-term contract which could improve the likelihood of completion of Otay Mesa. Likewise, SDG&E could have considered implementing demand response programs or installation of distributed generation or renewables. SDG&E pursued none of these options to reduce its demand or increase its supply. Any of these options could significantly impact the timing of any potential capacity deficiency." (Id. p. 53)

²⁵² D. 04-08-046, pp. 39-40

²⁵³ Id, p. 93

²⁵⁴ Id, p. 129

²⁵⁵ Id, p. 132. The Commission notes that if a cost cap is exceeded, then the applicant can seek an increase in the cost cap pursuant to § 1005.5(b).

²⁵⁶ SDG&E OB, p. 171

²⁵⁷ The Commission states its objective in *Valley-Rainbow* as: "In essence, we must determine whether there is a reliability need under a reasonably foreseeable supply and demand forecast based on today's best information within an appropriate planning horizon..... However, in this phase of the proceeding, we are only attempting to determine whether a need for the project exists, not evaluate alternatives." D. 02-12-066, p. 8-9

SDG&E's citation to *Jefferson-Martin* is not dispositive. SDG&E offers the Commission's discussion to support its contention that unlicensed power plants may not be considered. In fact, the decision doesn't take that position. It discusses the CCSF turbines in great depth and concludes that, from the evidence before it, it cannot include it in its determination to assess need. SDG&E omits the last sentence of the paragraph: "We have no information regarding the fate of the fourth CCSF combustion turbine."²⁵⁸ This sentence, and the previous sentence, informs the reader that the Commission is making a fact-based determination and is not establishing a broad policy that unlicensed projects may not be considered for purposes of assessing need.

Moreover, the decisions themselves contradict SDG&E's assertions in many ways. For example, in *Valley-Rainbow*, the Commission finds that it can consider Palomar as a feasible alternative:

"However, we note that Sempra Energy Resources, the developer of Palomar and an SDG&E affiliate, is actively pursuing a permit at the CEC and was not amongst the generating companies listed by SDG&E witness Avery as suffering from poor financial conditions. If Palomar completes its permitting process as scheduled, it would be assumed to come online in 2005, under standard industry practice, at essentially the same output as Otay Mesa."²⁵⁹

SDG&E's misapplication of *Valley-Rainbow* is even more telling, as the decision found that a Path 44 upgrade could also serve as part of an alternative but for the fact that there was no evidence such an upgrade was planned:

"From the evidence, it is clear that transmission improvements on SCE's system North-of-SONGS could result in an upgrade to the Path 44 non-simultaneous import limit rating. However, no evidence was presented to show that such improvements are currently planned and therefore, we do not modify the Path 44 non-simultaneous import limit rating for purposes of assessing SDG&E's reliability need."²⁶⁰

However, in this case, there is clear evidence that the Path 44 upgrade is planned.²⁶¹ Pursuant to the language in the *Valley-Rainbow* case, the Commission can properly consider this planned upgrade. Similarly, the Commission found that CFE will soon have a strong incentive to upgrade the capacity of its east-west transmission lines in order to make room for its own east-to-west transfers and that upgrades on the CFE transmission system will increase the ability of SDG&E to rely on through-flow and exports from Mexico in the future.²⁶²

²⁵⁸ D. 04-08-046, p. 43)

²⁵⁹ D. 02-12-066, p. 35

²⁶⁰ D. 02-12-066, p. 38

²⁶¹ Ex. U-101, pp. 46,57 and Attachment 1

²⁶² D. 02-12-066, p. 74, findings of fact #18 & 19

B. Backstop Cost Recovery under P.U. Code §399.25

SDG&E advances another novel legal theory in its opening brief involving retail rate recovery of transmission related costs. SDG&E seeks to establish that STP is a high-voltage, bulk transfer facility that will be used imminently to serve multiple RPS-eligible generators.²⁶³ UCAN opposes this theory for at least three reasons:

1. It is rendered moot by a TO3 settlement at FERC by SDG&E (and the CPUC);
2. STP is not serving as a bulk transfer facility that would be used *imminently* to serve RPS-eligible generators; and
3. STP's capacity will not be fully utilized by renewable power. In fact, only a fraction of the line's capacity will be utilized.

Because it is a relatively recent statute, there is a paucity of legal precedent interpreting Section 399.25.²⁶⁴ But there are compelling reasons that the Commission should not make a finding that it is appropriate to SDG&E with an assurance that it will recover prudently incurred costs of STP. First, it is a moot issue under the terms of a TO3 settlement at FERC in which SDG&E's transmission projects are not to be subject to a normal prudency review.²⁶⁵

Second, the language of PU Code §399.25 has been interpreted by the Commission to require that as part of a 399.25 review the applicant must show and the Commission must consider:

" . . . the status of the RPS compliance to date, including, but not limited to any approved procurement plans, the results of RPS solicitations, existing bilateral contracts, the number of short listed bidders, the transmission cost studies and requests for system impact studies, etc. This type of probative review will occur as part of the CPUC proceeding for a proposed facility."²⁶⁶

This proceeding has not established sufficient facts by which the Commission can conclude that SDG&E's RPS compliance has been laudable, that sufficient bilateral contracts exist and that there are a sufficient number of short-listed bidders in the Imperial Valley.²⁶⁷ However, the evidentiary record actually works against applicant's request. As SDG&E acknowledges in its opening brief, eligibility for 399.25 is triggered "where it has been established that the amount of added transmission capacity will

²⁶³ SDG&E OB, p. 351.

²⁶⁴ D. 06-06-034 provides a fairly extensive review of the background and applicability of this statute.

²⁶⁵ Ex. U-34. See also RT at 177-178 (Avery)

²⁶⁶ D. 06-06-034, p. 28

²⁶⁷ See discussion in UCAN OB

likely be utilized by RPS-eligible generation projects within a reasonable period of time.” This means that SDG&E has to show that at least 1000 MW of RPS energy will be flowing over STP.²⁶⁸ But, as explained in UCAN’s opening brief, SDG&E admits that only a modest portion of the capacity of STP will be used by renewable energy.²⁶⁹ Thus, the Commission should find that in order to be eligible, SDG&E must provide evidence of at least 2000 MW of feasible contracts, rather than a 1000 Mw increase in SDG&E’s system import capacity under N-1-1 conditions or the claimed 1350 Mw increase (from 2850 Mw to 4200 Mw) in SDG&E’s system N-0 import capacity, since those numbers are constrained by limits on non-STP facilities.

In addition to these reasons for not making the finding requested by applicant, there are yet other procedural reasons that militate against the request. For example, in D. 06-06-034, the Commission has also found that the timing of such an application is based upon indications that the FERC will not consider recoupment of costs. It stated:

"TURN notes that the Commission should consider approving cost recovery treatment for eligible projects in advance of FERC action if the project is unlikely to be eligible for rolled in ratemaking under the existing FERC policy. TURN argues that unless there are clear indications that the facility qualifies as a network upgrade, the Commission should not defer a cost recovery request.

We agree. In circumstances where it is reasonably clear FERC will not grant rolled-in rate treatment based on FERC policy and precedent, it will unnecessarily hold up the development of needed transmission projects if the utilities must first receive a definitive ruling from FERC prior to a request for backstop cost recovery at this Commission."²⁷⁰

Based upon this language, SDG&E must show that FERC will not grant rolled-in rate treatment. SDG&E has not done so. Additionally, SDG&E is required to make a showing of sufficient RPS contracts. The Commission ruled in D. 06-06-034 that:

.”.... they (the parties) suggest that the Commission consider developing permitting and construction triggers on a case-by-case basis in the applicable certificate applications. Such triggers could reflect the need for additional renewable power to meet RPS goals, the level of utilization and/or commitment for existing phases and proposed phases, and the potential market for additional renewable power.

Alternatively, SDG&E suggests that to minimize the risk of stranded investment, “trunk lines” could be permitted in advance of contractual commitments to facilitate their development in the future. Then, once permits are in hand, the utility could hold an open season to solicit contracts for the development of new renewable projects. Actual construction of the trunk line would only

²⁶⁸ The Commission may properly find that it must contract for 2000 MW of RPS capacity. SDG&E indicates in its opening brief at page 72 that Sunrise will add 2000 MW of thermal transfer capability between the Imperial Valley and San Diego

²⁶⁹ UCAN OB, p. 182

²⁷⁰ Id, p. 29.

commence once contracts are in place ensuring that a sufficient quantity of generation will be built. Under SDG&E's proposal, the subject transmission facilities would only be built upon a determination that there were sufficient commitments to add generation in the remote area, so there should be no "under-utilization" of transmission capacity and the Commission's backstop ratemaking authority should permit transmission providers to recover the full amount of costs that the FERC does not allow to be recovered through FERC-jurisdictional rates.

We agree with the parties' recommendation to consider any necessary triggers in the applicable certificate proceedings."²⁷¹

In this case, SDG&E has not identified any appropriate permitting or construction triggers, notwithstanding its suggestion as summarized in the D. 06-06-034 excerpt above. Oddly, the Commission didn't embrace the SDG&E proposal, but it didn't reject it either. It would have been helpful had SDG&E developed a sufficient number of contracts ensuring that a sufficient quantity of generation would be built, as it recommended in that proceeding. But the evidentiary record in this case indicates that the only contract of notable size that is in place is the very controversial Stirling contract – a contract that few if any parties believe will actually be fulfilled.

For these reasons, UCAN recommends that the Commission reject SDG&E's request for a finding of backstop recovery without prejudice and invite the applicant to submit such an application if and when STP is approved by the Commission.

C. "Rebuttable presumption" of CAISO's numbers per D.06-11-018.

At page seven of its brief, SDG&E mentions in passing: "D.06-11-018, which confers a rebuttable presumption on the CAISO's findings of economic benefits, should apply here." There is no other reference nor any legal argument advanced in support of this request. The Commission should reject SDG&E's inference.

The language in D. 06-11-018 which addresses the rebuttable presumption places certain conditions upon such a presumption. It states:

"We will establish a rebuttable presumption with regard to economic evaluations in a CPCN proceeding in favor of a CAISO Board-approved economic evaluation provided: (1) the CAISO Board has made certain explicit findings regarding the economic value of the proposed project; (2) the CAISO Board-approved evaluation is consistent with the principles and minimum requirements set forth herein; and (3) the CAISO Board-approved evaluation is submitted to the Commission within sufficient time to be included within the scope of the proceeding. This rebuttable presumption in favor of a CAISO Board-approved economic evaluation shall be such

²⁷¹ Id. p. 36

that parties opposing the proposed project in a CPCN proceeding will bear the burden of demonstrating either (1) that the CAISO Board-approved economic evaluation does not comply with the principles and minimum requirements of this decision or (2) that the project is not cost-effective. However, we do not grant a rebuttable presumption to an evaluation not approved by the CAISO Board. "²⁷²

The CAISO's economic evaluation fails this test in a number of ways. First, the economic evaluations submitted in this CPCN were not approved by the CAISO Board. The evidence in this case is clear – the CAISO board approved an economic evaluation based upon data available to the CAISO in August 2006. For that decision, the CAISO Board relied upon a subsequent discredited Shirmohammadi-authored report. The most recent incarnation of economic evaluation presented to the Commission as performed by Dr. Orans and Mr. Sparks has not been presented to or approved by the CAISO Board.

As was described by the CAISO's Mr. Perez as well as by Orans and Sparks, the consultants were not retained until January 2007 to perform the "top to bottom" economic analysis.²⁷³ As described by Mr. Orans, the consultants found a number of material flaws in the original report presented to the CAISO Board and did a complete reworking of the economic analysis.²⁷⁴ From the CAISO staff's point of view, the Orans/Sparks analysis completely replaced the Shirmohammadi-authored report.²⁷⁵ The CAISO staff has admitted that its policy is to go back to the CAISO board when circumstances or costs have changed.²⁷⁶ But the staff has not returned to the CAISO for acceptance of its 2007 economic analysis or for any other input on STP, even though it did so for other projects (e.g. Trans-Bay Cable.)²⁷⁷

Second, UCAN and other parties have demonstrated that the project is not cost effective. In fact, based upon SDG&E's own numbers in Exhibit 142, the project is not cost-effective.²⁷⁸ Finally, as discussed below, the CAISO's evaluation is based upon principles and requirements that do not comport with Commission policy.

²⁷² D. 06-11-018, p. 3

²⁷³ RT at 1806 (Perez):

15 Q. As I understand it, the report that Dariush
16 Shirmohammadi wrote has been completely revised; isn't
17 that true?
18 A. From one end to the other.

See also RT at 2571-2571. (Orans)

²⁷⁴ RT at 2575-2577 (Orans)

²⁷⁵ RT at 1841-1842 (Perez)

²⁷⁶ RT at 1777-1779 (Perez) See also RT at 1842-1843.

²⁷⁷ Id, p. 1780, See also RT at 1808

²⁷⁸ See discussion about cost-effectiveness in UCAN OB, pp. 125, 126-128, 130

D. ABDSP General Plan is not required for projects that are “necessary for the protection of health and safety” because STP is “unquestionably a matter of public health and safety.”

SDG&E asserts that STP is necessary for the protection of health and safety. Based upon this unproven assumption, it asserts that it is exempt from the ABSDP General Plan process.²⁷⁹ This assertion is contrary to law. SDG&E’s specific route through ABSDP is not “necessary” for health and safety purposes, even if one accepts that meeting CAISO reliability standards is necessary. The existence of a variety of feasible alternatives for STP demonstrates this fact. Moreover, in Phase 1, SDG&E patently refused to model a literal “No Project” Reference Case because it argued that in every case there would be something built to meet reliability standards. SDG&E’s argument then leads the Commission to the inescapable conclusion that there will never be a case in which the absence of STP means blackouts, leading the Commission to consequently find that there is no health and safety issue raised by applicant in this proceeding.

E. Standard for recirculating an EIR.

SDG&E spends much of its brief discrediting the findings of the DEIR. However, it concludes that notwithstanding the DEIR’s alleged inaccuracies, it need not be recirculated because none of the matters raised by SDG&E rise to the level of a significant new impact.²⁸⁰ SDG&E’s conclusion is not clear-cut at all.

As acknowledged by SDG&E, “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

²⁷⁹ SDG&E Opening Brief, p. 39

²⁸⁰ Id, p. 261

Item (3) certainly is triggered by two major DEIR oversights. As stated in UCAN’s Opening Brief, UCAN submits that the DEIR’s deficiencies in describing its No Project alternative constitutes a requirement for significant new information. Moreover, the absence of IID’s Coachella-Devers project from the DEIR was a significant oversight that warrants additional comments.

IX. The Commission must disregard the Oatman testimony

In its opening brief, SDG&E refers to testimony prepared by Eugene Oatman.²⁸¹ This is regrettable, as the testimony of Mr. Oatman was thoroughly discredited during the evidentiary hearing process. First, he was offered as an independent expert offering an objective evaluation of SDG&E’s Methodologies, but it turns out that he was simply parroting information given to him by SDG&E. During his cross examination he admitted that his “expert opinion” was really just based upon materials given to him by SDG&E and he provided no independent assessment of the facts that underpinned his testimony.

14 Q So let me see if I understand this correctly.
15 You've made a statement here to the
16 Commission, an expert assessment, that SDG&E's conducted
17 an extensive outreach program, and you have not reviewed
18 any of the literature or any of the information provided
19 to those stakeholders, and you don't know how much
20 resources they spent on this effort; is that correct?²⁸²

And in response to the ALJ questions, Mr. Oatman conceded that he was merely offering a decision framework – that the facts underlying that framework were not validated by him.

13 Q But you didn't look at any of the evidence
14 that may suggest that in one extent or another SDG&E
15 might have had it wrong in the facts that it asserts?
16 A We were not attempting to determine the
17 accuracy of any fact or assertion.²⁸³

²⁸¹ SDG&E OB, pp. 11-12, 339

²⁸² RT at 5262 (Oatman)

²⁸³ RT at 5280 (Oatman), see also RT at 5285, RT at 5296

His testimony is further undermined by the fact that his findings are significantly at odds with SDG&E's own factual assertions, even though he purports to have relied upon SDG&E-provided documents. For example, argues that the alleged increased reliability risk from co-locating a Southern Route and SWPL for the first 36 miles out of the Imperial Valley substation would cost ratepayers over \$1.37 billion.²⁸⁴ This estimate is completely faulty and should be disregarded by the Commission. Moreover, Mr. Oatman assumes that whenever load dropping is required, the amount of required load dropping will be 1000 Mw. Again, this clashes with what SDG&E has told the WECC.²⁸⁵ And at Exhibit SD-36, p. 13.17, Mr. Oatman claims that SDG&E will have peak loads increasing from 5138 Mw in 2010 to 5879 Mw in 2015, leading to reliability shortfalls of 262 Mw in 2010, and 737 Mw in 2015. These numbers have no valid basis. They are completely inconsistent with SDG&E's own numbers, 5009 Mw in 2010 increasing to 5326 Mw in 2016 as shown in Chapter 11.²⁸⁶

Third, his testimony is riddled with a surprisingly large number of mistakes and misstatements. As outlined at Exhibit U-101, pages 57-62, his claims that in-basin peakers built for reliability will operate 600-1000 hours per, generating 1.2 to 3 million tons per year of CO2 is wrong because he used the wrong demand forecast and ignored demand-side options. He omits any mention of the fact that none of the wires alternatives in the DEIR have "started construction or has the permits to do so" either. On the demand side, AMI **has** been permitted, and the CEC Title 24 amendments for 2008 are on the verge of approval. Strictly speaking, Mr. Oatman is wrong even about generation: Otay Mesa and Lake Hodges and the 20 Mw Bull Moose biomass project are all under construction. As became obvious in his cross-examination by UCAN, DRA and the ALJ, Mr. Oatman brought no expert understanding or independent assessment to the representations offered by applicant. Nor did he offer any specific expertise on analyzing transmission projects.

Mr. Oatman's suggestion asserted by SDG&E in its opening brief -- that there is a \$2 billion cost advantage for northern routes because of reliability and expandability -- has been thoroughly discredited.²⁸⁷ It was discredited in cross-examination, as mentioned above. It was fully rebutted by UCAN in Ex. U-101 and actually is contradicted by SDG&E's own brief in which the company acknowledges that Mr. Oatman's calculations are not factually based.²⁸⁸ It was also rebutted effectively

²⁸⁴ Ex. U-101, p. 53

²⁸⁵ Id. at p. 54

²⁸⁶ Ex. U-101, p. 57-58

²⁸⁷ SDG&E OB pp. 10, 11, 12 (Table from Oatman)

²⁸⁸ SDG&E OB, p. 12, fn 14; "Note that the costs reflected in this table are illustrative"

by DRA. The rest of Oatman's assumptions, as shown in Exhibit U-101 are wrong by a combined factor of almost 2000.

Finally, the decision framework that Oatman offers is largely untested and unbelievable. He could not come up with any examples of regulatory bodies having adopted the framework that he offered the Commission, on behalf of SDG&E.²⁸⁹ For these reasons, any references to Mr. Oatman's testimony should be rejected by the Commission as non-credible and under-informed.

X. Conclusion

For the reasons described above, the Commission should disregard the myriad of uncited and unsupported contentions by SDG&E and rely on the facts in the evidentiary record in evaluating the arguments presented by applicants and CAISO. The evidentiary record in this proceeding is extensive and comprehensive. The process is honored and the ultimate decision is validated when it is based upon the details of this challenging and complex record. UCAN urges the Commission to respect the efforts made by all of the parties to amass a detailed factual basis upon which a final decision can be based. UCAN submits that based upon the record, the Commission cannot accept applicant's request for approval of STP at this time. But whatever decision is issued, we ask that the assumptions be based upon facts subjected to the scrutiny of the evidentiary process and the record be viewed through a lens that is far clearer and truer than the one offered by the applicant.

Respectfully submitted,

Dated: June 13, 2008

/s/

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²⁸⁹ R.T. at 5285-5287 (Oatman)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing **REPLY BRIEF OF UTILITY CONSUMERS' ACTION NETWORK** on all parties identified in A.06-08-010 on the attached service list by electronic mail and by overnight mail to the assigned Commissioner(s) and Administrative Law Judge(s). Dated at San Diego, California, this 13th day of June, 2008.

/s/

Laura Impastato

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