

**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  
Transmission Project )     (Filed December 14, 2005)  
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**UCAN COMMENTS ON THE ALJs’ PROPOSED DECISION AND  
THE GRUENEICH ALTERNATE DECISION**

**I. OVERVIEW OF UCAN COMMENTS**

On October 31<sup>st</sup>, the Assigned Commissioner and ALJs each issued a decision based upon the evidentiary record. Pursuant to Rule 14.3, UCAN will explain why it supports the ALJs’ proposed decision, why it opposes the Grueneich alternate and how both decisions fail to properly incorporate the evidentiary record.

In addition, at the November 7<sup>th</sup> oral argument, a number of Commissioners directed the parties to address specific issues that they raised. These include:

- Do either the PD or the alternate provide any cost, comparative cost analysis between combustible turbines and the renewable sources in the Imperial Valley on the preferred route, the Sunrise route and the southern route? Does the Commission have assurances have the necessary empirical backing to support lower cost to ratepayers while we balance our environmental goals? (Simon & Bohn)
- Whether rejecting Sunrise is consistent with our approval of Imperial Valley and whether it would result in the stranding of renewable generation projects in Imperial Valley. (Chong)
- If Sunrise is not built, how will geothermal, solar, and wind projects from Imperial Valley and Baja Mexico tie into the grid. (Chong & Bohn)

- The centralized distribution model versus distributed generation. (Bohn)
- How utilities meet their goals without the Sunrise project. (Chong)

UCAN will address each of the Commissioners' questions posed at the oral arguments in these comments as well. These comments will explain how the 33% RPS assumption underlying the AD imposes more than \$24 billion in costs upon the state's ratepayers – over 10 times greater than the \$1.7 billion cost advertised for Sunrise. And this cost is limited only to the renewable energy that would be accessed in Imperial Valley due to the addition of Sunrise.

And these comments will also address the blatant misrepresentations made by the CEO of Stirling Energy Systems at the conclusion of the oral arguments, regarding the viability of the 900 Mw Stirling project with and without Sunrise. Finally, UCAN will address the three “commitments” offered by SDG&E CEO Debra Reed offered as a compromise in exchange for removing the conditions outlined in the alternate decision. It will detail how SDG&E has a \$96 million *annual* disincentive to honor its commitment to use Sunrise for renewable energy. Without addressing SDG&E's economic incentives, the Commission will be unable to ensure that Sunrise is used for the purposes of securing renewable energy for California.

## **II. UCAN COMMENTS ON THE PROPOSED DECISION**

The proposed decision (PD) by Administrative Law Judges Weissman and Vieth is the only viable decision based upon the evidentiary record. As set forth in the PD, the proponents of Sunrise have failed to establish that it is a cost-effective project, that it is needed for reliability and that it is environmentally superior to the alternatives. Because the record established by the proponents is based upon a 20% RPS objective, there is no way in which the Commission can find that the application is a beneficial use of ratepayers' money.

While the PD does arrive at the only conclusion that can be supported by the evidentiary record, it still suffers from some deficiencies. Foremost is its failure to fully integrate UCAN's alternate proposal.

The record shows that SDG&E only needs 310 Mw of new resources beyond the baseline level to meet its reliability needs in 2018, and less than 100 Mw to meet its needs until 2016.<sup>1</sup>

In this proceeding, UCAN has devised a set of low-cost, incremental and flexible alternatives which, taken as a package, provide more reliability and comparable renewable benefits of Sunrise at a decidedly lower cost. In contrast, SDG&E has chosen to address its reliability needs wholly through the construction of a singular 500kV transmission line project through a desert state park. In Phase I of the proceeding, UCAN set forth a substantially lower-cost, feasible means of increasing SDG&E's import capability by 350MW, and separately identified new resources which would address SDG&E's projected energy needs through 2018. UCAN's transmission proposal would provide 350 Mw of new import capability from upgrading Path 44. Thus UCAN's transmission proposal alone would meet SDG&E's system reliability needs through the entire period of analysis covered by the DEIR.

UCAN's resource alternative involves SDG&E's commitment to (a) post-2008 CPUC-ordered energy efficiency, (b) CPUC-approved AMI, (c) already contracted for dispatchable demand response, (d) already contracted for and CPUC-approved near term peaking capacity, and (e) one under-50 Mw CT from its current RFOs for peaking capacity in 2008 and 2010-2012.<sup>2</sup> SDG&E's numbers in this proceeding ignore numerous demand-side alternatives which should either be part of the baseline or are likely to be developed prior to 2018 (the existing EnerNoc contract; the CEC-approved 2008 building standards; post-2008 energy conservation not embedded in the CEC forecast; SDG&E-proposed AMI savings not included in SDG&E's demand forecast).<sup>3</sup>

The PD concurs with most of UCAN's analysis, yet it does not conclude that the UCAN proposals constitute an acceptable alternative. UCAN believes the basis for the PD's reluctance to accept the UCAN proposal as an alternative rests upon the feasibility of the proposed Path 44 upgrade. The PD issues an order requiring SDG&E to take the necessary steps to institute a review of Path 44's rating and, within 90 days of the

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<sup>1</sup> AD, p. 104, Table 5.

<sup>2</sup> UCAN Phase I Opening Brief, p. 77-156. UCAN Phase II Opening Brief, p. 102-107

<sup>3</sup> See Ex. U-100,

effective date of this decision, shall report on the status of that review and shall serve the report on the parties (Ordering Paragraph #7). But it errs in that it does not accept the evidence in support of the upgrade presented by UCAN and agreed to by the CAISO. And it errs in that it doesn't conclude that if Path 44's rating is found to be upgradeable, then UCAN's proposal constitutes a comprehensive alternative to SDG&E's Sunrise proposal.

The PD also errs in its failure to consider SDG&E's reliance upon a seismically challenged substation to almost 70% of SDG&E's entire import capacity. In its application, SDG&E did not address the potential for seismic activity to compromise the project.<sup>4</sup> The CAISO had not addressed this matter either. The very pronounced danger of seismic activity in the Imperial Valley is magnified by the fact that SDG&E proposes to place the terminus of almost 3000MW of capacity in one of the most seismically active areas in the United States.<sup>5</sup> UCAN laid out this issue in cross-examination and its briefs.<sup>6</sup> Neither the PD nor the AD addresses this issue.

The complexity of this record is evidenced by both the PD and AD overlooking a very simple means of protecting against the unwanted import of fossil-based fuels. The PD and AD give short shrift to the Jacumba alternative identified by UCAN. Both decisions missed the fact that by authorizing a transmission line only west of SDG&E's proposed Jacumba substation, as suggested by UCAN,<sup>7</sup> the CPUC could avoid potential use of the new line to transport coal imports. A Jacumba-Sycamore Canyon line would provide access to all of the nearest-term Imperial Valley-area renewable projects which are in the ISO interconnection queue, while the small IID-area geothermal projects that have contracted with SDG&E could be delivered using the existing SWPL line.<sup>8</sup> Yet, the AD appears to have overlooked this fairly simple fix to its concerns about the proper utilization of Imperial Valley renewable.

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<sup>4</sup> RT at 5784 (Schug)

<sup>5</sup> Ex. U-107

<sup>6</sup> UCAN Phase II opening brief, p. 173-176

<sup>7</sup> Ex. U-101, section III.

<sup>8</sup> Ex. U-101, section III.D.2.

### III. UCAN COMMENTS ON ALTERNATE DECISION

The alternate decision (AD) sponsored by Commissioner Grueneich takes a different approach to the evidentiary record. It properly accepts the evidentiary findings of the ALJs. However, it assumes a 33% RPS objective in justifying the economics of the Sunrise project. This 33% objective is extra-evidentiary in that there is no current obligation for any utility to comply with this requirement. Nor were the parties' directed to assess Sunrise based upon such an objective. However, the AD posits that current CPUC policy is designed to move towards a 33% RPS objective by 2020.

Like the PD, the AD accepts that there is no compelling reliability needs that compel completion of the line prior to 2014.<sup>9</sup> However, it permits an earlier construction of the line on the basis that the state's rushed need for renewable energy development justifies an in-service date prior to when the line might be needed to provide for reliability. It errs by failing to tie any in-service date with an obligation to comply with a 33% RPS obligation.

Perhaps the most disturbing element of the AD is its failure to address the costs associated with an accelerated embrace of a 33% RPS. The logic behind the thinking of Commissioner Grueneich's AD is captured in this syllogism:

*Fact: Sunrise doesn't make economic sense unless at least 1900 MW from Imperial Valley is used by California utilities that wouldn't have been developed without Sunrise.*

*Fact: The state must commit the state's utilities to a 33% RPS in order to justify the purchase of an extra 1900MW of Imperial Valley renewable power beyond the 700 Mw or so of new Imperial Valley renewables expected without Sunrise.*

*Therefore, the state must make a 33% RPS mandatory in order to justify the approval of Sunrise.*

To its credit, the AD doesn't just assume a fact. It appropriately calls for a compliance filing that will demonstrate how California can be sure of achieving the levels of renewable resource development in the Imperial Valley that SDG&E and the

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<sup>9</sup> AD at p. 104; AD at p. 145

ISO rely upon in their economic and environmental justifications for Sunrise.<sup>10</sup> The specific levels of incremental Imperial Valley generation associated with Sunrise are 321 Mw through 2010,<sup>11</sup> and another 1600 Mw in 2011-2015,<sup>12</sup> for a total of 1921 Mw.<sup>13</sup>

However, the AD does not quantify or even consider the fact that extra renewable generation in the Imperial Valley attributed to Sunrise by the CAISO in 2015 is just offsetting renewable generation in the Tehachapi and Reno areas, as discussed below in response to Commissioner Chong's question at oral argument.

Moreover, the AD fails to consider whether this 1921MW is actually displacing fossil fuels. Thus, it doesn't consider the cost associated with the direct environmental benefit from the extra renewable generation. In fact, the cost would be significant. And this cost has not previously been quantified in this proceeding.

At the oral argument on November 7, Commissioner Simon inquired as to what that economic cost might be. The reason no party could answer him directly was that SDG&E assumes no increase in IV renewable generation due to Sunrise,<sup>14</sup> so that in SDG&E's application there is no cost associated with replacing fossil fueled generation with renewables when Sunrise is built. Similarly, the CAISO assumes no increase in WECC-wide renewable generation due to Sunrise, as discussed in the previous paragraph, so that it too has no cost for replacing fossil-fueled generation with renewables when Sunrise is built.<sup>15</sup> Nor does the AD attempt to address this cost. Nevertheless, there is data in the record by which the Commission can quantify the cost of Imperial Valley renewable generation as compared to fossil-fueled generation, thereby answering Commissioner Simon's question. UCAN calculates that based upon the

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<sup>10</sup> AD, Ordering paragraph 2, particularly paragraph 2(c), referencing the ISO's Mw figures in AD Table 2 in section 6.10 of the AD.

<sup>11</sup> 300 Mw of solar thermal plus 21 Mw of wind, per Table 2, section 6.10 of the AD, CAISO row.

<sup>12</sup> The AD shows 900 Mw of solar additions and 1600 Mw of geothermal additions in 2011-2015, per the CAISO. However, this is an error because the 900 Mw of solar double-counts 300 Mw installed by 2010, and the 1600 Mw of geothermal double-counts 600 Mw forecasted to have been installed in 2008-10. The correct figures for ISO-forecasted additions in 2011-2015 are the same as shown in AD Table 2 for SDG&E: 600 Mw of solar thermal and 1000 Mw of geothermal.

<sup>13</sup> 321 Mw by 2010 plus a corrected figure of 1600 Mw in 2011-2015 = 1921 Mw by 2015.

<sup>14</sup> AD, Section 6.10, Table 2, SDG&E row.

<sup>15</sup> If either SDG&E or the CAISO are correct, then there is no WECC-wide increase in renewable generation due to licensing Sunrise, and so the GHG justification for the AD's approval of Sunrise disappears. UCAN previously addressed claims of GHG benefits from Sunrise in Ex. U-101, section VIII.O. The AD fails to make a finding rejecting the CAISO and SDG&E modeling positions.

evidentiary record, the extra cost imposed upon the state's ratepayers if Sunrise is approved amounts to about \$16-24 billion in nominal dollars (\$393-420 million levelized dollars per year over 40-58 years).

#### A. The Economic Cost of 1900 MW of fossil-based energy

In its RPS analysis, the ISO estimates that the incremental Imperial Valley renewable generation associated with the Sunrise line will be 1000 Mw (7971 gwh/year) of geothermal at a levelized cost of \$86/Mwh, plus 900 Mw (1892 gwh/year) of solar thermal at a levelized cost of \$120/Mwh.<sup>16</sup> This results in a weighted average levelized cost of \$93/Mwh for 9864 gwh/year of generation,<sup>17</sup> or \$913 million/year.<sup>18</sup> To this must be added the Sunrise levelized cost. The ISO has estimated the levelized cost in 2010 dollars of a Southern Route as \$161.5 million/year, based on a capital cost of \$1719 million.<sup>19</sup> The ISO's \$1719 million capital cost is identical to the capital cost in the AD.<sup>20</sup> However, the ISO failed to take into account \$22 million per year of O&M costs which it was directed to use in the compliance filing.<sup>21</sup> In addition, at the 11/7/08 oral argument, SDG&E asserted that the \$1719 million capital figure should be increased.<sup>22</sup> During an ex parte meeting, SDG&E asserted that the correct cost for Sunrise as described in the AD is \$1883 million.<sup>23</sup> A capital cost of \$1883 million would be \$164 million, or 9.5 percent, higher than the capital cost assumed by the ISO and the AD.<sup>24</sup> SDG&E's position would increase the levelized cost of Sunrise by \$15.4 million per year, to \$177 million per year.<sup>25</sup> Accounting for the O&M costs adopted in the AD would

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<sup>16</sup> Ex. I-2, p. 56 of 88, Table 4.3. The 7971 gwh/year figure for geothermal generation is the sum of "Salton Sea" generation of 6377 gwh/year plus "Brawley" and "Heber" generation of 797 gwh/year each.  $6377+797+797 = 7971$  gwh/year. Note that the total of 7971 gwh/year of geothermal plus 1892 gwh/year of solar thermal equals 9863 gwh/year, which matches the 9864 gwh/year shown in Table 4.4 and the 9.9 Twh/year shown in Table 4.7.

<sup>17</sup> Ex. I-2, Table 4.4, "Imperial" line.

<sup>18</sup>  $7971 \text{ gwh/year} \times \$86/\text{Mw} = \$686 \text{ million/year}$ .  $1892 \text{ gwh/yr} \times \$120/\text{Mwh} = \$227 \text{ million/year}$ .  $686 + 227 = \$913 \text{ million/year}$ .

<sup>19</sup> ISO, Ex. Compliance-1, August 2008, p. 9 of 31, column G, lines 20 (levelized cost in 2010 dollars) and 14 (capital cost).

<sup>20</sup> AD, p. 270.

<sup>21</sup> The ISO understated O&M costs by \$22 million per year. AD, p. 151.

<sup>22</sup> The Peevey AD estimates the number at \$1.89 billion (Peevey AD, p. 274)

<sup>23</sup> SDG&E, ex parte notice of November 14, 2008, p. 2.

<sup>24</sup>  $1883 - 1719 = 164$ .  $164/1719 = .0954$ .

<sup>25</sup>  $.0954 * 161.5 = 15.4$ .  $161.5 + 15.4 = 176.9$ .

raise that figure another \$22 million per year, to \$199 million per year. Depending on which Sunrise cost one uses<sup>26</sup>, the total levelized cost of 1900 Mw of new renewables facilitated by Sunrise would be \$1075-1112 million per year,<sup>27</sup> or over a billion dollars per year.

Without Sunrise, according to the ISO, 9864 gwh of Imperial Valley renewable generation would not exist and would have to be replaced from some other source. The ISO analysis assumes that source would be (in 2015) renewable generation in the Reno and Tehachapi areas.<sup>28</sup> By 2020, the ISO assumes foregone Imperial Valley renewable generation would be replaced with renewable generation from Wyoming and (to a much lesser extent) British Columbia,<sup>29</sup> at levelized delivered costs of \$109-112/Mwh.<sup>30</sup> But if the replacement generation were fossil-fueled generation instead, the cost would be far less.

The GridView model used in this proceeding by both SDG&E and the ISO calculates prices for each region based on the most expensive resource needed to operate in that region. This is called locational marginal pricing (LMP). Because renewable resources have low or zero fuel costs, they are seldom if ever the marginal resources. Thus, LMPs represent marginal fossil fuel costs. LMPs for loads take into account transmission losses incurred in delivering generation to the loads. Thus, load-side LMPs represent the marginal delivered cost of fossil-fueled generation.

In developing their testimony, both the CAISO and SDG&E made many GridView runs. Usually their GridView results for LMPs were available via workpapers, if at all. However, Exhibit 143 contains LMP data from SDG&E GridView runs done late in Phase 2. In particular, Exhibit 143 studied a scenario with no Sunrise, but with SDG&E-area CTs and the Carlsbad Energy Center project built instead to meet SDG&E local area reliability needs. This scenario is exactly what the AD contemplates as the no-

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<sup>26</sup> \$162 million/year per ISO compliance filing, \$177 million per year per SDG&E's ex parte estimate of capital cost, or \$199 million per year per SDG&E's ex parte capital cost and the AD-adopted O&M costs.

<sup>27</sup> \$913 million/year for 9864 gwh/year of Imperial Valley renewable generation, plus \$162-199 million/year for Sunrise transmission.  $913 + 162 = \$1075$  million/year.  $913 + 199 = \$1112$  million per year.

<sup>28</sup> Ex. I-2, 2015 difference between 2015 cost columns of Tables 4.6 and 4.7.

<sup>29</sup> Ex. I-2, 2015 difference between 2020 cost columns of Tables 4.6 and 4.7.

<sup>30</sup> Ex. I-2, Table 4.7, showing the levelized cost of Wyoming renewables as \$109/Mwh and the levelized cost of British Columbia renewables as \$112/Mwh. See also AD, p. 131, Figure 1.

Sunrise likely case – CTs added at Margarita and Orange Grove and the Carlsbad Energy Center online in 2013.

Exhibit 143 provides average demand-side LMPs by geographical sub-area for the entire WSCC for the year 2015. For the ISO, the average 2015 LMP is \$49.72/Mwh.<sup>31</sup> However, SDG&E’s GridView results are expressed in 2005 dollars, and this number must be multiplied by 1.2271 to convert it to 2015 nominal dollars.<sup>32</sup> The 2015 nominal number must then be multiplied by 1.134 to convert them to levelized dollars.<sup>33</sup> The result is that the ISO-wide demand-side LMP in Exhibit 143 corresponds to a levelized cost of \$69.19/Mwh.<sup>34</sup>

Obtaining 9864 gwh/year of fossil-fueled energy at a levelized marginal price of \$69.19/Mwh would cost some \$682 million/year.<sup>35</sup>

### **B. Economic cost of renewable generation provided by Sunrise**

The AD calls for a compliance plan to assure that California will actually obtain about 1900 Mw more Mw of Imperial Valley generation with Sunrise than without it.<sup>36</sup> The analysis above shows that the economic cost of doing so would be \$393-420 million per year, based on data in the record in this proceeding.<sup>37</sup> Instead of spending \$682 million per year for marginal-priced fossil fueled generation, CAISO customers would spend \$913 million per year for incremental Imperial Valley renewable generation, and another \$162-199 million per year on top of that for Sunrise costs. This \$393-420 million per year figure is in levelized nominal dollars. SDG&E has asserted that Sunrise

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<sup>31</sup> Ex. SD-143, p. 7, Bottom full “CAISO” line, leftmost numerical column. The SDG&E-only LMP shown farther up the same column is slightly lower.

<sup>32</sup> SDG&E, Phase 1 Tables H-16, H-18, H-20, H-22, et. al., ratio of net CAISO consumer energy savings in 2015 as shown in nominal dollars and the same savings as shown in 2005 dollars. In every table, the ratio is 1.2271. E.g., in Table H-18,  $203.8/166.06 = 1.2271$ .

<sup>33</sup> Ex. I-2, ratio of levelized GridView costs on line 1 of Table 3.5 to the 2015 nominal GridView costs on line 1 of table 3.3.

<sup>34</sup>  $\$49.72/\text{Mw (2005 nominal)} \times 1.2271 \text{ (2015 nominal/2005 nominal)} \times 1.134 \text{ (levelized/2015 nominal)} =$

<sup>35</sup>  $9864 \text{ gwh} \times 1000 \text{ Mw/gwh} \times \$69.19/\text{Mwh} = \$682.49 \text{ million.}$

<sup>36</sup> AD, Ordering Paragraph 2.

<sup>37</sup> \$1075 million/year for Sunrise plus Imperial Valley renewables, minus \$682 million/year for fossil-fueled generation, equals \$393 million/year. \$1112 million/year for Sunrise plus Imperial Valley renewables, minus \$682 million/year for fossil-fueled generation, equals \$420 million/year.

is a 58-year project and the proposed decisions have accepted SDG&E's 58-year project life, thus the nominal cost is over \$24 billion.<sup>38</sup>

### **C. The AD overstates the benefits of Sunrise**

The AD makes an error in its estimation of the benefits offered by Sunrise. The AD indicates that Sunrise, in a world with a 33% RPS standard, would provide net economic benefits of \$36 million per year as compared to the EIR "All Source Generation" alternative.<sup>39</sup> But if SDG&E's capital cost estimate of \$1.883 billion is accurate, then the levelized cost of Sunrise will be some \$15 million per year higher than shown in the AD, and the \$36 million/year cost advantage of Sunrise will be reduced some 42%, to \$21 million per year. Any AD approving Sunrise needs to have net benefit findings consistent with the capital cost assumptions. In particular, Finding of Fact 16 would no longer be accurate with a capital cost of \$1.883 billion.

### **D. The AD relies upon erroneous data in Table 2**

Table 2 of the AD shows various parties' assumptions regarding Imperial Valley resource additions in various future years. The Table shows 1600 Mw of geothermal additions and 900 Mw of solar additions in 2011-2015 per the ISO. These figures are incorrect. The correct figures for the ISO for 2011-2015 additions should be the same as the SDG&E figures which are shown in the line above. Table 2 also shows 785 Mw of geothermal additions by 2010, according to both SDG&E and the ISO. The SDG&E figure was correct for Phase 1, but was reduced by SDG&E in Phase 2 by 185 Mw to

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<sup>38</sup> In Phase 1, SDG&E estimated annual costs and benefits of STP and alternatives over a 40 year project life. In Phase 2, to enhance the project's economics, SDG&E assumed a 58 year project life.<sup>38</sup> The effect of a longer project life is to enable SDG&E to claim credit for STP "RMR" and dispatch (GridView) benefits for 18 additional years compared to Phase 1, increasing the apparent benefits of the project. The AD adopts this 58-year figure in its calculations for cost-effectiveness. (AD, p. 36) \$393-420 million per year, times 58 years, equals \$22.8-24.4 billion.

<sup>39</sup> AD, pp. 152-153, last column of Table 13, difference between cases 12 and 13b. \$110 million per year minus \$74 million per year equals \$36 million per year.

reflect UCAN's Phase 1 "Case 400" assumptions. Thus the correct SDG&E figure for Phase 2 is 600 Mw of geothermal additions by 2010.<sup>40</sup>

## **IV. COMMISSIONERS' ORAL ARGUMENT QUESTIONS**

### **A. The Real Cost of Sunrise**

Commissioner Simon may have posed the seminal question during the oral argument. He essentially sought to determine whether the PD or the alternate provide any comparative cost analysis between combustible turbines and the renewable sources in the Imperial Valley on the preferred route, the Sunrise route and the Commission-designed southern route. He sought to establish assurances that the Commission has the "necessary empirical backing to support lower cost to ratepayers while we balance our environmental goals".

What Commissioner Simon's question addresses is the fact that if the AD were adopted, the state's ratepayers would absorb more than just the \$1.7-1.9 billion price tag for Sunrise.<sup>41</sup> As discussed above, ratepayers will also be obligated to contract for the 1900 MW of power that will need to be contracted for in the Imperial Valley to justify the \$1.7-1.9 billion price tag. Put another way, Commissioner Simon was attempting to establish the total cost of Sunrise, for both the line and the power that will be purchased as a result of Sunrise. And that answer is not found in either proposed decision nor in any of the documents submitted by proponents. But, as discussed above, it exceeds \$24 billion.

The answer is important as it reflects the premium that California ratepayers will have to pay if Sunrise is built. SDG&E and the CAISO have focused their analysis solely on the cost to ratepayers if Sunrise is built vs. if Sunrise isn't built. But both of

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<sup>40</sup> Ex. U-99, SDG&E responses to UCAN data requests 41-1 (list of geothermal plants assumed added each year in SDG&E's Phase 2 analysis) and 41-2 (removal of a 185 Mw Phase 1 geothermal generator from SDG&E's Phase 2 GridView analyses and UCAN's "Case 400" Phase 1 analysis).

<sup>41</sup> \$1.719 billion per AD; \$1.883 billion per SDG&E ex parte communications notice of 11/14/08, p. 2.

their assumptions assume that the 1900 MW of renewables will be purchased by the state's ratepayers whether or not Sunrise is built.<sup>42</sup>

Commissioner Simon's question goes to one that policy makers need to consider but, so far, have not done so in this proceeding. That is: what is the cost of Sunrise plus incremental Imperial Valley renewable power compared to the cost of no-Sunrise and conventional (non-renewable) power?

The answer to this question, as discussed above, is \$393-420 million per year multiplied by 58 years, or a total 58-year cost of \$23-24 billion. So the Sunrise question becomes a \$24 billion question. Is it worth it to build Sunrise and accelerate a 33% RPS standard if doing so will cost the state some \$23 billion – or about 4 cents per kilowatt hour for every new kilowatthour of Imperial Valley renewable generation?<sup>43</sup>

Commission Simon, and the other Commissioners, need to consider and justify this expenditure before accepting the underlying assumptions contained in the AD.

## **B. Sunrise does not add additional renewable energy capacity to California**

Commissioner Chong expressed concerns that without the development of Imperial Valley renewable energy, the state might not have access to sufficient renewables to achieve its renewable portfolio goals. However, the evidentiary record shows just the opposite: Sunrise does promote the development of renewable in the Imperial Valley but only by cannibalizing renewable power that might otherwise be developed in the Tehachapi and Reno regions. Sunrise does not add more renewable power than would otherwise be available to California.

While the CAISO modeling in this case includes 1921 Mw more Imperial Valley renewables with Sunrise than without,<sup>44</sup> the Commissioners may be surprised to learn

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<sup>42</sup> SDG&E assumes it will be built in the Imperial Valley. The ISO assumes an equal amount of renewable energy production capacity will be built outside the Imperial Valley (Ex. I-2, Tables 4.6 and 4.7).

<sup>43</sup> The ISO says Imperial Valley renewable generation facilitated by Sunrise will cost \$109/Mwh (Ex. I-2, Table 4.7, and also Figure 1 on p. 131 of the AD). Fossil-fueled generation would cost \$69/Mwh, as described above, based on SDG&E GridView modeling in Ex. SD-143. \$109/Mwh minus \$69/Mwh is \$40/Mwh, or 4 cents per kwh.

<sup>44</sup> AD, Table 2, p. 68, as corrected (see UCAN comment below regarding errors in Table 2).

that the CAISO modeling does not indicate that there will be more renewables overall with Sunrise than without. In both its GridView modeling and its RPS modeling,<sup>45</sup> the CAISO assumed that extra IV renewables in the with-Sunrise case would be offset by extra non-IV renewables in the no-Sunrise case.

Specifically, in GridView the ISO's no-Sunrise case has 1690 Mw of extra non-IV renewables, producing 11,019 gwh per year of renewable generation.<sup>46</sup> In the ISO's corresponding 2015 RPS analysis, building Sunrise allows for an extra 1900 Mw and 9900 gwh (9.9Twh) of renewable energy from the Imperial Valley,<sup>47</sup> but this is exactly offset by a reduction of 7.1 Twh in Tehachapi generation<sup>48</sup> and a reduction of 2.8 Twh in Reno-area renewable generation.<sup>49</sup>

SDG&E has been equally clear on this point. In SDG&E's Phase 2 analysis, it shows that Imperial Valley renewable generation is exactly the same with Sunrise, with LEAPS instead of Sunrise, or with in-basin generation instead of Sunrise.<sup>50</sup>

### **C. Conflict between distributed vs. centralized power paradigms**

Commissioner Bohn posed a very important question – and one that isn't addressed in either of the decision despite attempts by a number of parties to incorporate this matter into the context of the application. The Commissioner stated:

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<sup>45</sup> The ISO has admitted that its GridView and RPS analyses did not use “scenarios that were entirely consistent.” See Ex. I-2, p. 36 of 88, lines 8-16.

<sup>46</sup> Ex. I-2, p. 35 of 88, Table 2.2, bottom line. 1690 Mw = 3670 Mw of non-IV renewables without Sunrise, minus 1980 Mw of non-IV renewables with Sunrise. The extra 1690 Mw of non-Imperial Valley renewables in the no-Sunrise case produce just as much energy as the 1900 Mw of Imperial Valley renewables in the with-Sunrise case.

<sup>47</sup> ISO, Ex. I-2, comparing Tables 4.6 (RPS compliance without Sunrise) and 4.7 (RPS compliance with Sunrise). The first line of the latter table shows 9.9 Twh, or 9.9 thousand gwh, of “Imperial-Sunrise” renewable generation. Table 4.4 of Ex. I-2 provides a more precise estimate of the 9.9 Twh: 9864 gwh of energy and 1900 Mw of capacity.

<sup>48</sup> ISO, Ex. I-2, comparing Tables 4.6 (RPS compliance without Sunrise) and 4.7 (RPS compliance with Sunrise). The “Tehachapi” line of Table 4.6 shows that all 13.8 Twh of potential Tehachapi generation are included in 2015 RPS costs, but the Tehachapi line of Table 4.7 includes only 597/1224. The reduction in 2015 Tehachapi generation in the with-Sunrise table is 13.8 Twh x (1224-597)/1224 = 7.1 Twh.

<sup>49</sup> ISO, Ex. I-2, comparing Tables 4.6 (RPS compliance without Sunrise) and 4.7 (RPS compliance with Sunrise). The “Reno Area” line of Table 4.6 shows that 258/546 of the potential 5.9 Twh of Reno Area generation are included in 2015 RPS costs, but the Reno Area line of Table 4.7 shows that none is included. The reduction in 2015 Reno Area generation in the with-Sunrise table is 5.9 Twh x 258/546, or 2.8 Twh.

<sup>50</sup> Ex. U-86, pp. 4-6, SDG&E 4/11/08 responses to UCAN data request 39-10d.

“This is a really bigger case than the facts of this case because it comes at a time when we as a commission and, indeed, the state are struggling with some fundamental issues relative to the utility of the future. These are issues that deal with the centralized distribution model versus distributed generation.” (R.T. at 6234-6235)

Both Powers Engineering and UCAN, as well as the environmental groups, spent a fair amount of time exploring this issue. Both UCAN and Powers Engineering submitted researched and feasible options by which distributed generation might serve the San Diego region more cost-effectively than Sunrise and the centralized renewable paradigm it furthers. Specifically, the Commission was asked to consider the value of a \$1.7+ transmission line to import \$6+ per watt power compared to an expenditure of approximately the same to generate distributed PV power within the region.<sup>51</sup>

The PD acknowledges the UCAN argument.<sup>52</sup> And both of them acknowledge that :

San Diego’s service area contains sufficient renewable resources to pursue this alternative. Aggressive projections show that the San Diego region has approximately 7,400 MW of solar PV potential on commercial and residential structures; more modest projections show a potential for over 4,100 MW of solar rooftop PV. Regardless of the wide range between these estimates, even the low end represents substantial potential. As of January 2006, SDG&E had 18 MW of solar PV installed in its service area; SDG&E’s recently filed solar PV application seeks authority for 77 MW, and SDG&E has acknowledged that its service area could support a program similar to one that Edison has proposed (250 MW, with the potential to expand to 500 MW).<sup>53</sup>

Yet, neither the PD nor AD fully assess the \$23 billion project-life cost of Sunrise in comparison to a \$700 million deployment of in-basin PV, as set forth in the Smart Energy 2020 plan and as validated by the 250MW SCE thin-film deployment. UCAN presented a case in which SDG&E could deploy PV similar to that contained within the Smart Energy 2020 report. This, combined with UCAN’s No-Action plan would provide greater in-basin generation along with increased import capacity that would address all of SDG&E’s reliability and renewable needs at a fraction of the costs contemplated by the AD.

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<sup>51</sup> UCAN Phase II Opening Brief, pp. 186-190

<sup>52</sup> PD, p. 223

<sup>53</sup> Id., p. 234-235; citations omitted.

Commissioner Bohn's question also goes to timing, as developments in PV could well make Sunrise entirely obsolete within five years. Even though the record indicates that Sunrise isn't needed for reliability until 2014 at the earliest, SDG&E is pushing hard for immediate deployment so as to avoid the obsolescence exposure hinted by Commissioner Bohn's inquiry.

At the November 7th oral argument, SDG&E and the CAISO vigorously argued against any delay to the construction of Sunrise. To the extent that the AD requires SDG&E to make a showing that the claimed benefits of Sunrise which are necessary to make it approvable will really be built – namely new renewable resources at the levels projected by the ISO and SDG&E – they are correct that making such a showing will require some amount of time. But what the AD fails to address is that there is plenty of time available. Sunrise is not needed for reliability until at least 2014.<sup>54</sup> To meet an on-line date of 2012, Sunrise construction does not need to start until at least March 2010.<sup>55</sup> Thus, to meet a summer 2014 on-line date, construction would not need to start until at least March 2012. The compliance proceeding contemplated by the AD would thus have plenty of time to be completed without affecting SDG&E's service reliability. And deferral would provide valuable benefits in terms of avoiding unneeded construction (if SDG&E cannot make the required showings), technological developments in most cost-effective in-basin renewables or even duplicative construction (if other already-planned IID or LADWP alternatives, and/or the LEAPS project, are built).<sup>56</sup>

UCAN anticipates that the ISO and/or SDG&E may object to the Commission's conclusions regarding future resource assumptions which underlie the conclusion of both the PD and the AD that SDG&E has no reliability need for new transmission capacity before 2014 (and not much then). UCAN expects that the Sunrise proponents may try to argue that planned but not yet under construction supply and/or demand-side resources should be ignored in looking at future reliability needs. UCAN would merely draw the

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<sup>54</sup> AD, pp. 104, 145.

<sup>55</sup> Ex. U-101, section IV.C., especially footnote 92. The March 2010 date comes from SDG&E workpapers. In SDG&E's 3/12/08 Phase 2 direct testimony, at p. 2.21, SDG&E estimates a construction period of 22-24 months, which would allow an even later start to construction for a summer 2012 on-line date.

<sup>56</sup> See Ex. U-101, section IV, particularly sections IV.A, IV.C, IV.E, and IV.G, for a discussion of the benefits of deferring Sunrise construction and the economic argument against building both Sunrise and Green Path North.

Commission's attention to the ISO's own sworn testimony regarding appropriate assumptions in determining SDG&E's local capacity requirement: "The CAISO concurs that AMI, demand response and planned new generation should be part of the determination of LCR, and we have updated our calculations accordingly."<sup>57</sup> The Commission's Valley-Rainbow decision correctly found that SDG&E did not need a new 500 kV line by 2006 to keep the lights on. The PD and AD in this case have correctly found that SDG&E still does not need a new 500 kV line in the next 5 years to keep its lights on.

#### **D. Meeting renewable goals without Sunrise**

Both the PD and AD are clear that SDG&E can readily meet its 2010 state-mandated RPS goals without Sunrise.<sup>58</sup> This is not a factually controversial matter anymore. Even under CAISO's assumptions, Sunrise will not facilitate the economic delivery of Imperial Valley renewables under 20% RPS.<sup>59</sup> The real question – and one that isn't directly addressed in either the AD or PD is whether SDG&E is able to meet a 33% RPS target without Sunrise. UCAN submits that the record shows that SDG&E's current system – with the UCAN-promoted transmission upgrades – can readily import sufficient renewable power to meet a 33% RPS objective.

The evidentiary record was made needlessly complicated by the fact that SDG&E failed to present an accurate estimate of its renewable portfolio energy needs. As noted in the decisions, SDG&E did not offer an accurate picture in this proceeding of how many GWh of renewable resources SDG&E needs to procure to meet its 2010 RPS.<sup>60</sup> However, the record does have information on SDG&E's RPS needs in 2015.

In response to a UCAN data request, SDG&E acknowledged that its 2015 RPS obligation under a 26.5% standard would be 5033 gwh.<sup>61</sup> That corresponds to an

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<sup>57</sup> Ex. I-6, section 3.3C, "San Diego Capacity Need Date," p. 38 of 81.

<sup>58</sup> PD at p. 154.

<sup>59</sup> Id. p. 160.

<sup>60</sup> Id. p. 157. SDG&E has supplied a confidential estimate of its 2010 RPS needs (Ex. SD-7c, p. III-9). It has also supplied a non-confidential estimate of its 2015 RPS needs under a 20 percent RPS standard, which is discussed below.

<sup>61</sup> Ex. U-86, p. 12, SDG&E 4/11/08 response to UCAN data request 39-12c.

obligation under a 33% RPS standard of 6268 gwh,<sup>62</sup> of which 1819 gwh are already under contract from in-basin and SCE-area sources.<sup>63</sup> So even if SDG&E were to meet a 33% RPS standard by 2015, and even if it were to get 100 percent of its incremental RPS supplies from the Imperial Valley, and even if it were to deliver 100 percent of those incremental supplies over Sunrise, and none via SWPL or DPV2 or IID's Path 42 to SCE, it would still only need to deliver 4449 gwh over Sunrise in 2015,<sup>64</sup> or an average of 508 Mw.<sup>65</sup> That is only 38 percent<sup>66</sup> of the 1350 Mw increase in normal SDG&E import capacity<sup>67</sup> that SDG&E and the ISO claim would result from Sunrise.

Under the **current** RPS standard, SDG&E would need only 3798 gwh of renewable generation by 2015,<sup>68</sup> of which 1819 gwh is already under contract from non-Imperial Valley sources,<sup>69</sup> leaving a maximum of 1979 gwh to be obtained from Imperial Valley sources.<sup>70</sup> 1979 gwh per year corresponds to 226 Mw,<sup>71</sup> or under 17 percent of the incremental import capacity attributed to Sunrise.<sup>72</sup>

In reality, meeting a 20% RPS requirement would not require 17 percent of Sunrise capacity, and meeting a 33% RPS requirement would not require 38 percent of Sunrise capacity, because there would be ample space available on the existing SWPL line. With the Miguel substation upgrades that are part of the AD,<sup>73</sup> SWPL capacity will be 1850-1900 Mw,<sup>74</sup> of which up to 1150 Mw will be available for generation connected to the Imperial Valley substation or points west of it. The balance will be available to generation connected to the grid east of Imperial Valley substation (e.g., Palo Verde) or north of it (e.g., on the IID system, where all new geothermal is expected to

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<sup>62</sup>  $5033 \text{ gwh} \times 33/26.5 = 6267.5 \text{ gwh}$ .

<sup>63</sup> Ex. U-86, p. 12, SDG&E 4/11/08 response to UCAN data request 39-12e.

<sup>64</sup> 6268 gwh total RPS obligation in 2015 at 33% level, minus 1819 gwh from non-Imperial Valley sources, equals 4449 gwh.

<sup>65</sup>  $4449 \text{ gwh/year} \times 1 \text{ year}/8760 \text{ hours} \times 1000 \text{ Mwh/gwh} = 507.9 \text{ Mw}$ .

<sup>66</sup>  $508 \text{ Mw}/1350 \text{ Mw} = 0.376$ .

<sup>67</sup> From 2850 Mw to 4200 Mw. See Ex. I-5, p. 60 of 67.

<sup>68</sup> Ex. U-86, p. 12, SDG&E 4/11/08 response to UCAN data request 39-12d.

<sup>69</sup> Ex. U-86, p. 12, SDG&E 4/11/08 response to UCAN data request 39-12e.

<sup>70</sup> 3798 gwh minus 1819 gwh equals 1979 gwh.

<sup>71</sup>  $1979 \text{ gwh/yr} \times 1000 \text{ Mwh/gwh} \times 1 \text{ year}/8760 \text{ hours} = 226 \text{ Mw}$ .

<sup>72</sup>  $226 \text{ Mw}/1350 \text{ Mw} = .167$ .

<sup>73</sup> AD, pp. 79-81 and Finding of fact 4h.

<sup>74</sup> Ex. U-86, p. 13, SDG&E 4/11/08 response to UCAN data request 39-12g. The ISO says the figure is 1900 Mw (Ex. U-100, fns. 60 and 79, citing the ISO's 3/11/08 response to UCAN data requests 8-2b and 8-2d), as does the AD (p. 79).

interconnect). The 226 average Mw of renewable imports from the Imperial Valley area needed to meet an SDG&E 20% RPS standard in 2015,<sup>75</sup> or the 508 average Mw needed to meet an SDG&E 33% RPS standard in 2015, could be easily accommodated with the 1150-1900 Mw of import capability on SWPL.

At worst, as UCAN has proven in this record, there would be a small economic cost to assure access to SWPL for the renewables, a cost far lower than the cost of building Sunrise.<sup>76</sup> And moving renewables over SWPL would guarantee reduced use of SWPL for non-renewable generation such as coal generation.

## V. STERLING ENERGY PROJECT VIABILITY

Subsequent to the oral argument, the Chief Executive Officer for Stirling Energy Systems made a presentation to the Commission. The presentation by Steve Cowman clashed violently with the evidentiary record and cannot be relied upon by the Commission in its final decision.<sup>77</sup> At the hearing, Mr. Cowman asserted the following fact: “our total commitment here of running to about quarter of a billion dollars.” (R.T. at 6304) Yet, the record shows that a Stirling representative at another public hearing acknowledged during the PPH in Borrego, Stirling requires \$300-400 million to complete just Phase 1 of its contractual obligation to SDG&E.<sup>78</sup> It can be assumed that it’ll need another \$300 million to meet its second phase. Yet, its backer has committed to providing just 25% of the needed capital to meet the funding of only two of the three phases of the SDG&E contract.

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<sup>75</sup> In years before 2015, meeting a 20% RPS standard would require less than 226 Mw of Imperial Valley generation, since the 20% standard would be applied to a lower load forecast.

<sup>76</sup> Ex. U-100, section II.B.1.e. Ex. U-111 shows that for a non-Sunrise alternative (DEIR Alternative 1), the cost in 2015 to deliver generation from an Imperial Valley renewable generator to the SDG&E system would be about \$6/Mwh. See the difference between the \$43.72/Mwh “Simple Avg LMP” for the 900 Mw “SDGE Solar 1” project and the \$49-50/Mwh “Simple Avg LMP” for the many generators located inside the SDG&E service area. By contrast, the cost of moving 9864 gwh/year of renewable energy over Sunrise would be approximately \$17/Mwh (Ex. I-2, Table 4.5, “Imperial-Sunrise” line, rightmost column), or almost three times as much.

<sup>77</sup> Stirling has steadfastly refused to subject itself to any cross-examination and has resisted all discovery efforts. Its only contribution has been at public hearings where it need not present facts under oath.

<sup>78</sup> RT at 6131

Mr. Cowman also asserted that “Our application for certification has been deemed adequate by the California Energy Commission and we are on track to delivering and generating electricity in 2010.” (R.T. at 6304)

In follow-up questioning by Commissioner Grueneich, Mr. Cowman acknowledged that construction would start in 2010 and run for approximately two years. He anticipated that there here would be 300 megawatts online within two years or 2012. (R.T. at 6306) This concession clashes with Stirling’s contractual obligation to have the power available to SDG&E beginning in 2010.<sup>79</sup>

Finally, Stirling’s CEO stated: “So while it is true a portion of the project can be developed without the Sunrise Powerlink, in fact, they are cost models and the supply chain partnerships are predicated on having access to 900 megawatts. So, fundamentally, the economy of scale we will achieve is compromised.”(R.T. at 6305)

Yet, the evidentiary record shows that the SDG&E contract with Stirling is a three-phase contract with the third 300MW phase entirely optional at SDG&E’s discretion. So Stirling is only contractually assured of a market for 600MW or 2/3 of the total 900MW output. The record shows that Stirling can produce and deliver the first 300MW to SDG&E over existing transmission lines (including SWPL).<sup>80</sup> And, under UCAN’s proposal, it would be able to deliver its second-phase obligation of 300MW to SDG&E.<sup>81</sup> So the only uncertainty to which Stirling is subjected is delivery of the third-phase 300MW of electricity for which SDG&E is not contractually obligated to accept.

In sum, Stirling is blatantly misleading the Commission in suggesting that it is dependent upon Sunrise for the economies of scale needed to finance its project. Its assertion is not just unsupported by the evidentiary record, but it is contradicted.

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<sup>79</sup> PD, p. 158. See also Ex. U-86, p. 6, which specifically shows 509 gwh of generation from “SDGE Solar 1” in SDG&E’s modeling in each of the years 2010-2013, an amount that then triples in 2015. This implies that the 300 Mw first phase of Stirling is being assumed by SDG&E to be fully on-line by the **start** of 2010.

<sup>80</sup> PD, p. 158

<sup>81</sup> Ex. U-100, section II.B.1.e.

## VI. SDG&E’S COMMITMENTS ARE ILLUSORY

During oral argument, SDG&E’s CEO Debra Reed offered three “commitments” to ensure that renewable power flows over Sunrise. She stated:

- 1 If the Commission eliminates the requirement
- 2 for renewables compliance plan application and approves
- 3 Sunrise with the appropriate cost cap without further
- 4 delay, SDG&E is prepared to make commitments that will
- 5 ensure renewables will flow over this line. SDG&E will
- 6 commit to not contract with coal generators for the
- 7 delivery of energy across the Sunrise Powerlink. SDG&E
- 8 will commit that in the event that a renewable resource
- 9 that is deliverable by Sunrise and currently under
- 10 contract, if SDG&E fails, we will seek to replace that
- 11 energy with another renewable resource from that same
- 12 region.
- 13 And SDG&E will voluntarily commit to raise our
- 14 RPS target to 33 percent by 2020. We commit to work
- 15 with the Commission, the Legislature, and other
- 16 stakeholders to develop a fair set of rules that will
- 17 apply to all load-serving entities.
- 18 We urge the Commission to accept these
- 19 commitments in a final decision granting a CPCN now with
- 20 no further delay, after no further phases. (R.T. at 6244)

UCAN submits that each of these commitments are illusory and non-binding. First, it commits to not contract with coal generation for delivery of energy, which currently is prohibited by CPUC policy. Thus, it is merely agreeing to comply with existing regulatory policy. SDG&E may argue that it is going beyond current policy because it is committing to no coal contracts at any time scale, but that argument is undercut by its plan to ignore coal generation included in “system” purchases.<sup>82</sup> All a seller has to do to evade SDG&E’s commitment is call its sale to SDG&E a “system” sale, and then use coal for some or all of the underlying generation. More importantly, SDG&E’s commitment is not binding on any other utility. Thus, there is no commitment that would stop SCE or LADWP or PG&E or SMUD, for example, from scheduling

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<sup>82</sup> All-party meeting with Commissioner Grueneich. R.T. at p. 30-33

imports of coal-based generation into California that would make use of the 1350 Mw increase in import capability into the CAISO<sup>83</sup> due to SWPL.

It is also notable that the greenhouse gas issues surrounding Sunrise do not pertain to SDG&E's energy procurement policies, as much as those of the entire state. The evidence in the record posits that the addition of an integrated transmission line such as Sunrise (in contrast to the Tehachapi project) will inevitably facilitate the additional import of fossil-based electricity including but not limited to coal. SDG&E's commitment does not address this uncontroverted fact in any way.

Second, SDG&E offers to replace a failed Imperial valley contract with a similar Imperial Valley contract from a renewable resource. This commitment may actually be undesirable in a number of ways. For example, if the Stirling contract were to fail, SDG&E is committing to attempting to find a 900 MW contract from Imperial Valley – a size that may preclude most all other renewable options. Also, this commitment has no price-tag qualifications; thus it would justify SDG&E paying excessive premiums for power that wasn't cost-effective or needed, and give market power to Imperial Valley generators. Finally, the definition of the Imperial Valley "region" is problematic, as SDG&E includes all of northern Baja (even the west coast of Baja) and southeastern San Diego County in its definition of "Imperial Valley".<sup>84</sup>

SDG&E's voluntary embrace of the 33% RPS target by 2020 is no concession at all if such a target is soon to become mandatory whether or not SDG&E agrees. It is also almost meaningless in terms of justifying construction of Sunrise many years before 2020, since Sunrise would be long built before the Commission would have any idea whether SDG&E was meeting its "commitment" or not. Most importantly, SDG&E's actual words appear to accept a 33% RPS rule for itself (by 2020) conditioned upon imposing the same rule upon all load-serving entities. Thus, SDG&E is not really agreeing to accept this commitment as a condition for it being allowed to build Sunrise. In sum, Ms. Reed's compromise offer is really no offer at all and, in some respects, it actually impedes the Commission's efforts to promote renewables.

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<sup>83</sup> Current SDG&E import capability is 2850 Mw under normal (N-0) conditions. Sunrise would increase that to 4200 Mw (Ex. I-5, p. 60 of 67), an increase of 1350 Mw.

<sup>84</sup> See UCAN Phase 1 Opening Brief, p. 140

SDG&E's failure to offer meaningful commitments to the Commission's intended use of Sunrise is an important issue. Under the AD, construction of Sunrise would be authorized contingent upon an SDG&E showing that there will be new renewables developed in the Imperial Valley to the level assumed in the ISO (and SDG&E) economic analyses. But even the showing required by the AD could not be a guarantee of new renewable project operation, since the showing would necessarily precede actual Sunrise operation by about two years. And with any weaker conditions, or with mere promises from SDG&E, the risk is even greater that ratepayers will end up paying \$1.7-1.9 billion<sup>85</sup> for Sunrise but won't see the 2600+ Mw of new Imperial Valley-area renewables that have been promised. Thus, any CPUC decision on Sunrise needs to address the issue of consequences for non-performance.

SDG&E has estimated that it will earn an after-tax profit of \$49 million in the first half-year of Sunrise operation, followed by an after-tax profit of \$96 million in the first full calendar year of operation and an average after-tax profit of over \$84 million in the next four calendar years.<sup>86</sup> Any non-performance penalty smaller than these amounts would allow SDG&E to build Sunrise, collect Sunrise costs from ratepayers via FERC-approved rates, pay the non-performance penalties, and have shareholders still come out ahead. Thus, any Commission decision dedicated to ensuring that the line is used as the Commission intends should be revised to indicate that if SDG&E builds Sunrise but the level of renewable resource development identified in AD Table 2 does not occur, the shareholders of SDG&E shall be responsible for annual after-tax transfers to ratepayers of at least \$96 million per year until such time as the forecasted level of renewable resource generation is on-line.

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<sup>85</sup> \$1.719 billion per AD, p. 270; \$1.883 billion per SDG&E, ex parte notice of 11/14/08, p. 2.

<sup>86</sup> Ex. SD-143, p. 50, "Southern Route Total" section, "Return on Common" line, values for 2012, 2013, and 2014-17. These numbers are based on SDG&E's Phase 2 construction cost estimates, and would be higher with the construction cost estimates in the AD, or even higher costs suggested by SDG&E.

## VII. CONCLUSION

For the reasons discussed above, UCAN urges the Commission to adopt the Proposed Decision and reject the Grueneich alternate. Because UCAN is not proposing modifications to either the PD or AD, it does not offer any revisions to the Findings of Fact or Law in either decision.

Respectfully submitted,

Dated: November 20, 2008

/s/

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### CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing **COMMENTS BY UTILITY CONSUMERS' ACTION NETWORK ON THE PROPOSED AND ALTERNATE DECISIONS** 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 20th day of November, 2008.

/s/

Laura Impastato

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