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)	Application 06-08-010
Necessity for the Sunrise Powerlink)	(Filed August 4, 2006)
Transmission Project.)	
)	

REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON EXHIBIT COMPLIANCE-1

Nancy Saracino, General Counsel Judith B. Sanders, Counsel CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION 151 Blue Ravine Road Folsom California 95630

Tel. (916) 351-4400 Fax. (916) 608-7296 Email: jsanders@caiso.com Jeffrey P. Gray DAVIS WRIGHT TREMAINE LLP Suite 800 505 Montgomery Street San Francisco, CA 94111-6533 Tel. (415) 276-6500

Fax. (415) 276-6599 Email: jeffgray@dwt.com

Attorneys for CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

September 10, 2008

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)	Application 06-08-010
Necessity for the Sunrise Powerlink)	(Filed August 4, 2006)
Transmission Project.)	· · · · · ·
)	

REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON EXHIBIT COMPLIANCE-1

Pursuant to the August 28, 2008 ruling of Administrative Law Judge Vieth, the California Independent System Operator Corporation ("CAISO") submits this reply brief on Exhibit Compliance-1 ("Exhibit C-1). Specifically, CAISO replies to the opening briefs filed by the Utilities Consumers' Action Network ("UCAN"), the Division of Ratepayer Advocates ("DRA"), and The Nevada Hydro Company ("TNHC"). As discussed in CAISO's opening brief on Exhibit C-1, CAISO continues to support Commission approval of San Diego Gas & Electric Company's ("SDG&E") Sunrise Powerlink Transmission Project ("Sunrise"). The points raised in the respective opening briefs of UCAN, DRA, and TNHC have done nothing to alter this position. On the contrary, theses briefs confirm that, using reasonable assumptions, Sunrise produces significant net economic benefits.

I. OVERVIEW OF OPENING BRIEFS

The opening briefs of UCAN, DRA and TNHC are indicative of the approach each of these parties has taken throughout this proceeding: taking issue with a smattering of elements in the case while ignoring the important and substantive assumptions that are significant to the decision the Commission is being asked to make. UCAN's opening brief in particular is illustrative of this approach. While UCAN identifies a long litany of purported errors regarding

the underlying assumptions used by CAISO to prepare Exhibit C-1 and CAISO's analysis,

UCAN does not address or dispute the reasonableness of the Phase 2 combustion turbine ("CT")

cost assumption nor the 33% renewables portfolio standard ("RPS") target used in Cases 10-13

in Exhibit C-1. Indeed, none of the parties that filed opening briefs on Exhibit C-1 address these

critical assumptions. As CAISO explained in its opening brief, it is the use of these two

assumptions in Cases 10-13 that makes these cases the most relevant cases for evaluating the

cost effectiveness of Sunrise. In contrast, the failure of Cases 1-9 to include both of these

assumptions is a fundamental flaw that, as a practical matter, renders these cases irreparably

defective for evaluative purposes.

Long-term transmission planning is not an exact science. Regulators and planners must necessarily make judgment calls regarding the inputs and assumptions used to determine the need, timing, and benefits associated with new infrastructure investments. The goal in making these judgment calls is to select the most reasonable and plausible assumptions. Exhibit C-1 presents two assumptions each for the RPS target and CT costs. Thus, the cases in Exhibit C-1 which include the most reasonable and plausible of these assumptions are the cases the Commission should consider when assessing the cost effectiveness of Sunrise.²

As CAISO demonstrated in its opening brief, it is inconsistent with existing and well established Commission policy on renewable procurement and the greenhouse gas emissions reductions mandated by Assembly Bill ("AB") 32, to assume that, for purposes of evaluating the cost effectiveness of Sunrise, SDG&E will not procure more than 20% renewables by 2020.³ On the contrary, based solely on the emissions reduction requirements in AB 32, SDG&E will likely need to procure *at least* 33% renewables by 2020.

¹ See CAISO Opening Brief on Exhibit C-1 at 5-8, 9-10.

² As CAISO discussed in its opening brief, Exhibit C-1 should only be considered within the context of the Phase 2 record. *See* CAISO Opening Brief on Exhibit C-1 at 3-4.

Similarly, it is simply not credible to rely upon old and outdated Phase 1 CT costs in light of the more recent Phase 2 CT costs, which more accurately reflect market conditions, and materials and labor costs. Indeed, the Phase 2 CT costs are based on a 2007 California Energy Commission ("CEC") report that specifically updated the 2003 CEC report upon which CAISO's Phase 1 CT costs were based. Thus, there is no probative value in using out-of-date Phase 1 CT costs to assess the net benefits of Sunrise.

As CAISO explained in its opening brief, because only three assumptions change across the 13 cases evaluated in Exhibit C-1,⁴ the exhibit essentially isolates the impact that the RPS target and CT costs have on net benefits.⁵ More specifically, Exhibit C-1 demonstrates that these two assumptions are the primary inputs "driving" the net benefits analysis of Sunrise. Cases 11 and 12 show annual net benefits in excess of \$129 million,⁶ when a 33% RPS target and Phase 2 CT costs are used. While CAISO has identified fundamental flaws in the cases where the 33% RPS target and Phase 2 CT costs are *not* applied, no party has questioned the reasonableness of these two assumptions underlying Cases 11 and 12. Indeed, the vast majority of the issues addressed in the respective opening briefs of UCAN and DRA address assumptions and analysis that affect cases *other than Cases 11 and 12*.

For the reasons stated in CAISO's opening brief, of all the cases evaluated in Exhibit C-1, Cases 11 and 12 provide the most realistic analysis of the net benefits of Sunrise. This analysis confirms the conclusions reached by CAISO in Phase 2 that Sunrise provides greater net benefits than other proposed alternatives evaluated in this proceeding. The opening briefs of UCAN, DRA, and TNHC do not dispute this conclusion.

3

³ See CAISO Opening Brief on Exhibit C-1 at 5-7.

⁴ These assumptions are (1) renewable procurement levels (20% v. 33% in 2020); (2) CT costs (Phase 1 v. Phase 2); and (3) the retirement date for the South Bay Power Plant.

⁵ See CAISO Opening Brief on Exhibit C-1 at 2-3.

⁶ See "Summary of Net Benefits" table attached to Exhibit C-1.

II. CAISO'S RESPONSE TO SPECIFIC ISSUES RAISED IN UCAN'S OPENING BRIEF

A. Deferring Sunrise would impose risks on ratepayers

UCAN asserts that ratepayers are better off with Sunrise deferred one year because Exhibit C-1 shows that bringing Sunrise on-line in 2012 (Case 6) as opposed to 2011 (Case 9) results in an additional \$2 million of net benefits annually. While Case 6 does show an additional \$2 million of net benefits annually, CAISO cautions the Commission that attempting to predict the exact date upon which a transmission line will produce the highest economic benefits could have serious consequences for ratepayers that far exceed any perceived ratepayer savings.

Calculating the full economic benefits of a transmission line with a life expectancy of nearly 60 years involves making long-term assumptions that are difficult to accurately develop using short-term planning information. Indeed, the Phase 1 record is clear that "deferral" benefits are directly linked to assumptions about transmission and generation inflation. For example, the cost of renewable energy procurement has been increasing in real dollars over the last several years. Although Exhibit C-1 does not account for this trend, building Sunrise sooner (for instance in 2011 as opposed to 2012) would mitigate a portion of this cost increase. The same argument applies to rapidy increasing costs of generation. Building Sunrise sooner would mitigate a portion of new generation cost increases as well.

In addition, the cost of advancing a project a few years before its "optimal" least cost implementation date (if the assumptions are conservative) will likely not have a significant impact on ratepayers when compared to the risks associated with grid reliability if the project is not timely placed in service. This is particularly true with respect to Cases 6 and 9 where the difference in net benefits is so small. In light of the large number of assumptions used to prepare

Exhibit C-1, CAISO considers the \$2 million difference in Case 6 and Case 9 net benefits to be "within the noise" and not material.

B. The cost effectiveness of Sunrise should be assessed based on a 33% RPS target⁸

As Cases 2 and 3 show, Sunrise is not cost effective assuming a 20% RPS target in 2020 and Phase 1 CT costs. However, a 20% RPS target understates renewable procurement in 2020 and Phase 1 CT costs are no longer valid. For the reasons discussed above and in CAISO's opening brief, it is unreasonable to assume an RPS target that is less than 33% in 2020 or use Phase 1 CT costs in assessing the cost-effectiveness of Sunrise. An RPS target of less than 33% simply should not factor into the decision making, so arguments making assumptions of lesser RPS targets should not be given any weight.

In addition, if Phase 2 CT costs are assumed, the benefits are even greater, even using lower RPS targets for 2020. As CAISO has previously discussed, assuming a 20% RPS target in 2020 is a fundamental flaw that, as a practical matter, renders Cases 1-4 irreparably defective for evaluative purposes. Nevertheless, UCAN notes that, assuming a 20% RPS target, CAISO has understated the cost of renewables in Cases 2 and 3 relative to the reference case (Case 1). As a result, UCAN provides that CAISO has overstated the economic benefits of Cases 2 and 3 by \$90 million per year.

Ignoring for a moment the (un)reasonableness of assuming a 20% RPS target, Exhibit C-1 demonstrates that Cases 2 and 3 have negative net benefits, irrespective of UCAN's proposed \$90 million adjustment. Given these cases already have negative net benefits, making their values even more negative would not change the fundamental conclusion that Cases 2 and 3 are

⁷ UCAN Opening Brief at 11.

⁸ UCAN Opening Brief at 11-12.

⁹ UCAN Opening Brief at 17.

¹⁰ UCAN Opening Brief at 18.

not cost effective. Moreover, as UCAN acknowledges in its opening brief, this issue only applies to Cases 2 and 3. The RPS benefits for all other cases – in particular Cases 11 and 12 – would remain unchanged.

CAISO continues to believe that building a new transmission line that will allow additional renewable resources to be developed and delivered to loads will not increase the costs of renewable resources.

C. CAISO's ramp model uses conservative assumptions for calculating reliability benefits

UCAN asserts that CAISO's use of the ramp model overstates reliability benefits because it unreasonably assumes that "SDG&E will build 1000 M[W] of extra CTs without Sunrise and keep that extra 1000 M[W] for the following 40+ years." In addition, UCAN claims that the ramp model is flawed because its assumes that no combined cycle gas turbine ("CCGT") plants will be built after 2013 in the SDG&E area while thousands of megawatts of CTs would be built over a 60 year period. 12 UCAN fails to appreciate that, from a reliability benefits perspective, the ramp model represents a conservative approach.

As an initial matter, CAISO has used the ramp model to assess the cost-effectiveness of Sunrise continuously throughout this proceeding, and the Assigned Commissioner/ALJ Ruling did not direct CAISO to alter the use of the model. On the contrary, the Assigned Commissioner/ALJ Ruling specifically directed CAISO to use its "preferred modeling" assumptions from Phase 2" if a particular modeling assumption has not been specified in the ruling. 13 Neither the original Appendix to the Assigned Commissioner/ALJ Ruling nor the Annotated Appendix prepared by CAISO specified the use of a modeling approach different than the ramp model.

¹¹ UCAN Opening Brief at 14.¹² UCAN Opening Brief at 14.

Furthermore, the ramp model's use of a CT proxy represents a conservative approach to calculating reliability benefits because CTs are the *lowest* cost generation that could be built to provide pure capacity. A CCGT is essentially a CT with more equipment (e.g., a heat recovery system). Thus, all other factors being equal, it is inconceivable that the same party could build a CCGT plant in lieu of a CT unit at a lower cost than the CT for purposes of providing reliability benefits. ¹⁴ Accordingly, while it may be reasonable to assume that new CCGTs may make up a portion of the 1000 MW of generation displaced by Sunrise, such an assumption would only increase the reliability benefits of Surise. While both UCAN and DRA have argued that there is a case to be made for a reference case based on CCGTs, this approach is not consistent with the Assigned Commissioner/ALJ Ruling and ignores that future load growth will likely be met by renwable resources under AB32.

UCAN would also have the Commission evaluate the cost effectiveness of Sunrise based only on reliability benefits through 2025, 15 notwithstanding that Sunrise will have a useful life that approaches 60 years. CAISO is not aware of any Commission directive, much less a policy basis, for assessing cost-effectiveness based on less than one-fourth of an asset's useful life. Such a skewed evaluation methodology would be extremely biased against any capital intensive project, and does not conform to the Transmission Economic Assessment Methodology adopted by CAISO and the Commission for evaluating of transmission projects. ¹⁶ Indeed, UCAN's proposed approach violate basic engineering economics.

Assigned Commissioner/ALJ Ruling at 2-3.
 See also CAISO/Orans Tr. at 5542-43 (stating that it is "unreasonable" to assume the cost of a CCGT would be lower than the cost of a CT).

¹⁵ UCAN Opening Brief at 15.

¹⁶ See Decision 06-11-018; see also Transmission Economic Assessment Methodology, CAISO June 2004 at §2.4.

D. Exhibit C-1 includes reasonable O&M Costs

UCAN claims that CAISO has failed to include *any* O&M costs in its calculation of the total costs of Sunrise (and the Sunrise alternative scenarios) and that by so doing, did not comply with the *Assigned Commissioner/ALJ Ruling* that UCAN's O&M cost derivation be used for Exhibit C-1.¹⁷

CAISO's cost calculations do include an O&M component. CAISO relied on SDG&E's revenue requirements models to scale capital costs to revenue requirements levels. The O&M calculations used by CAISO for purposes of Exhibit C-1 are consistent with the Sunrise cost information developed by SDG&E and used for the purposes of updating the net benefits calculation in CAISO's Phase 2 testimony.¹⁸

Given that CAISO consistently used the SDG&E revenue requirements calculations to determine the O&M component of Sunrise costs, CAISO inadvertently did not use UCAN's estimate of transmission O&M costs in place of SDG&E's estimate. Unfortunately, the SDG&E revenue requirement models are not fully functional versions, and to use UCAN's O&M costs, SDG&E would need to re-run the model to determine the levelized cost changes. Moreover, the UCAN estimate of O&M would also have to be adjusted to provide a levelized cost estimate over the same period used by SDG&E and to use the same discount and inflation rates

Short of that analysis, which is impractical at this point, the level of O&M costs that are already included in SDG&E's revenue requirement models is approximately \$3.9 million per

¹⁸ CAISO Ex. I-13 (Orans Rebuttal) at 23.

8

¹⁷ UCAN Opening Brief at 18-19.

¹⁹ It is unfortunate that this oversight was not brought to CAISO's attention at the workshop when it would have been possible to reformulate the O&M costs to comport with UCAN's formula. Indeed, identifying such an oversight was the primary purpose for holding the workshop.

year over a 58 year life in 2010 dollars.²⁰ If this estimate were increased to \$26.3 million per year, as proposed by UCAN, ²¹ this would decrease the net benefits of each of the 13 cases by \$22.4 million per year. If this adjustment is made, Cases 6 and 7 would have benefits approximately equal to their costs, while Cases 11 and 12 would still remain highly cost effective.

Notwithstanding the fact that Sunrise remains cost effective when Phase 2 CT costs and a 33% RPS targets are used (i.e., Cases 11 and 12), CAISO believes that UCAN's estimate of O&M costs is extremely high and driven by two fundamental flaws. First, UCAN applies an average O&M cost derived as a percentage of rate base to a brand new transmission facility.²² In contrast, it would be more reasonable to assume that newer facilities have substantially lower O&M costs per dollar of net book than the average for the existing stock.

Second, UCAN applies the percentage of O&M costs, derived using historical data, to the total cost of Sunrise. The accuracy of this approach depends on the same ratio of historical O&M expenditures to capital costs for projects already in SDG&E's ratebase and Sunrise. The recent run up in the costs of transmission construction materials, which has been extensively discussed in this proceeding, ²³ suggests that the ratio of O&M costs to capital costs is more likely to be declining in recent years. The use of historical averages, based on the entire SDG&E system, serves to unreasonably inflate the estimated level of O&M costs that will actually be incurred for a brand-new transmission line.

 $^{^{20}\} This\ number\ is\ derived\ from\ "Sunrise\ Powerlink\ A.\ 06-08-010\ SDG\&E's\ Phase\ 2\ Direct\ Testimony\ Workpapers$ 3/12/08" CD, "Sunrise Rev Reg Results Summary" file and consistent with the E3 Revenue Requirement Workpapers attached to this compliance filing. It is simply the discounted present value of the stream of estimated O&M costs using the FERC settlement discount rate of 7.81 percent levelized over the life of the project and presented in 2010 dollars.

¹ See UCAN Opening Brief at 19.

²² See UCAN Ex. U-4at 174-75.

²³ See e.g. CAISO Ex I-16 at 63.

E. CAISO's cost escalation factors are reasonable

UCAN asserts that CAISO has inappropriately "doubled" CT interconnection costs, resulting in Cases 11 and 12 overstating net benefits by \$28 million per year. 24 In support of its position, UCAN argues that because "the [CA]ISO (and SDG&E) have not doubled their estimated cost for Sunrise transmission between Phase 1 and 2 . . . there is no reason they should be doubling the estimated cost for CT interconnections either."²⁵

UCAN is correct that the cost estimate for Sunrise has not increased at the same rate as the CT cost estimate. This fact alone, however, does not in any way demonstrate that Exhibit C-1 overstates CT interconnection costs. For instance, the fact that Sunrise costs did not increase at the same rate as CT costs from Phase 1 to Phase 2 could simply be the result of the Sunrise cost estimate being based on more accurate data than the CT cost estimate. Unlike the Phase 1 and Phase 2 CT cost estimates, the cost of Sunrise was developed knowing that construction would not begin until a future date. As a result, the Phase 1 cost estimate included escalation factors consistent with recent increases in the cost of equipment, materials and labor. Because the Phase 1 generic CT cost estimate did not include similar escalation factors, it is entirely reasonable to assume that CT costs have increased at a greater rate than the cost of Sunrise. Nevertheless, even if UCAN's position is accepted, the reduction in benefits would be small, and Cases 11 and 12 would still provide significant net benefits.

F. System RA costs are not driven by increases in CT costs

UCAN believes that an increase in CT costs should also increase system Resource Adequacy ("RA") costs. 26 UCAN, however, fails to realize that system RA costs have nothing to do with new CTs installed for capacity. Utilities can procure system RA from any generator that

10

UCAN Opening Brief at 21-22.UCAN Opening Brief at 22.

²⁶ UCAN Opening Brief at 22-23.

can deliver power to the California grid. While CAISO does not have access to the utilities' actual procurement costs, it estimated system RA costs based on the difference between the cost of a CCGT and the net revenues that the generator could receive through market sales. Thus, it is not the CT cost that is important driver, but rather, the cost of a CCGT and the net revenue that a CCGT would make in the market. As a result, even if plant costs were to increase, if market prices also increased, there would be no reason to expect system RA costs to increase substantially.

Furthermore, new renewable resources would likely place significant downward pressure on system RA costs, particularly if renewable resources come on-line at a faster rate than California's expected net load growth. Since qualified system RA must only be delivered to the grid and not to the load, and the majority of renewable resources are located outside of load pockets, these renewable resources should generally drive down the costs of system RA. The impact on LCR pricing will be case specific and depend on whether or not the renewable resources can be delivered directly into load pockets.

G. Rooftop PV costs in Cases 4b, 8b, and 13b are incremental

UCAN asserts that if the Commission's "CSI program achieves its goals, then already committed funds will have led to the development of all of the SDG&E-area rooftop PV (135 Mw by 2015) in the nonwires Cases." Accordingly, UCAN contends that "there will be no incremental cost to achieving rooftop PV."

The non-wires cases evaluated in Exhibit C-1 include renewables from the draft Environmental Impact Report/Environmental Impact Statement ("DEIR/EIS") In-Area All Source Generation Alternative. CAISO believes these costs are incremental to the CSI PV costs based on language in the DEIR/EIS:

The Solar Photovoltaic (PV) component of the New In-Area Renewable Generation Alternative would involve installing solar PV systems on residential, commercial, or industrial building rooftops in sufficient number to provide 105 MW of reliable (firm On-Peak) capacity by 2010. In its PEA, SDG&E discounts the nameplate rated capacity of solar PV systems by 50 percent because only a fraction of a PV system's rated capacity is available during the utility's hour of peak demand. This would require installation of systems with a total nameplate capacity of 210 MW. The solar photovoltaic component of this alternative would be in addition to PV systems that would be installed even without the project. ²⁷

In light of the DEIR/EIS, it is reasonable to assume that rooftop PV costs in Cases 4b, 8b, and 13b are incremental.

H. UCAN's proposed Path 44 upgrades do not provide reliability benefits

UCAN's Path 44 upgrades, proposed as part of the myriad of options that UCAN asserts can serve as an alternative to Sunrise, have been addressed and rebutted by CAISO in Phases 1 and 2. Specifically, CAISO has repeatedly explained that not only do UCAN's proposed Path 44 upgrades fail to provide the reliability benefits to be realized from Sunrise, but these upgrades actually cause reliability concerns. Not to be deterred, UCAN once again attempts to make the case for the Path 44 upgrades in its opening brief by extrapolating reliability "values" from the reliability benefits for each case evaluated in Exhibit C-1, and then comparing these "values" to UCAN's estimated Path 44 upgrade costs. ²⁹

As an initial matter, this reliability benefits calculation, while ostensibly based on the analysis in Exhibit C-1, introduces new information about a Sunrise alternative (the UCAN No Project Alternative) not selected for evaluation in the *Assigned Commissioner/ALJ Ruling*. For this reason alone UCAN's arguments should be disregarded. Moreover, from a substantive point of view, UCAN's extrapolated reliability "values" for the Path 44 upgrades fail to take into the

-

²⁷ DEIR/EIS at section E.5.1.2 (citations omitted) (emphasis added).

²⁸ See, e.g., CAISO Phase 2 Reply Brief at 20.

consideration the negative impacts on the Los Anegeles Basin LCR area described in CAISO's Phase 2 Rebuttal Testimony. These impacts, as well as the bulk system reliability criteria violations also described in CAISO's Phase 1 and Phase 2 testimony, reduce the reliability "value" of the proposed Path 44 upgrades to zero. Accordingly, Exhibit C-1 cannot be used to support a finding that UCAN's Path 44 upgrades proposal has any merit whatsoever.

I. CAISO complied with the *Assigned Commissioner/ALJ Ruling* regarding SDG&E's long term procurement plan

The Assigned Commissioner/ALJ *Ruling* directed CAISO to use the "CEC 10/2007 forecast of 1-in-10 loads from LTPP" and to make adjustments to loads "from LTPP" for demand response, energy efficiency, CSI, and distributed generation. A note at the end of the Appendix to the ruling indicates that "LTPP= [Decision] 07-12-052." Notwithstanding this note, the appropriate source reference for "LTPP" was unclear because Decision 07-12-052, and SDG&E's subsequent April 18, 2008 compliance filing (Advice Letter 1983-E), utilized a 1-in-2 load forecast. Given this confusion, CAISO relied on SDG&E's compliance filing to make load adjustments to the L&R tables contained in Exhibit C-1. UCAN accuses CAISO of making a "major error" by using SDG&E's compliance filing because the compliance filing does not reflect the same level of non-price demand response shown in Decision 07-12-052 (Interruptible/DR Curtailable Programs).³¹ This discrepancy amounts to 100 MW per year.

CAISO does not know the reason for the difference between Decision 07-12-052 and SDG&E's compliance filing, and would look to SDG&E for clarification. Nevertheless, CAISO believes that the use of a lower non-price demand response forecast is preferable because, as noted in CAISO's opening brief, such load adjustments are extremely speculative.³²

²⁹ UCAN Opening Brief at 35.

³⁰ CAISO Ex. I-9 at 12.

³¹ UCAN Opening Brief at 25-26.

³² CAISO Opening Brief at 13.

Furthermore, in Decision 07-12-052, the Commission noted that energy efficiency and demand response "targets and goals are set in separate proceedings and the IOUs' projections of meeting EE and DR targets are not reviewed for compliance purposes in this proceeding."³³ Thus, it would seem that the demand response levels set forth in SDG&E's compliance filing are appropriate for the purposes of Exhibit C-1. Certainly, CAISO did not commit a "major error" by using the most recent SDG&E demand response estimations.

J. CAISO correctly excluded Miramar 2.

UCAN claims that the Miramar 2 CT project should have been included in CAISO L&R tables contained in Exhibit C-1 and the addition of its 46 MW would delay Sunrise by one year.³⁴ However, on the July 2, 2008 all party conference call, when this issue was raised by UCAN, CAISO was specifically instructed by the ALJ not to use Miramar 2. Thus, CAISO was correct to exclude Miramar 2.

K. UCAN misunderstands CAISO's post-contingency loss adjustment

Line 19 of L&R tables in Exhibit C-1, reflecting a loss adjustment associated with the N-1/G-1 contingency condition, engendered a lengthy discussion during the August 22, 2008 workshop in response to written questions posed by UCAN. In response to that discussion, CAISO modified line 19 to provide that the loss adjustment would be 40 MW in years 2008-2010 and 58 MW in years 2013-2020.

Nonetheless, UCAN includes three pages of criticism in its opening brief, basically arguing that the loss adjustment should have been 40 MW (or lower) for the entire study period in each table.³⁵ UCAN's position is based on a fundamental misreading of CAISO's derivation

Decision 07-12-052, mimeo at 292 (Conclusion of Law 9).
 UCAN Opening Brief at 39.

³⁵ UCAN Opening Brief at 40-43.

of the 58 MW loss adjustment which was based on Table 5.1 on page 72 of CAISO Ex. I-2. At the top of page 42 UCAN makes the following incorrect statement.

Table 5.1 of Exhibit I-2 shows that the 40 Mw increase in post-SWPL-outage losses is associated with a scenario having 2832 Mw of internal SDG&E generation, while the 58 Mw increase in post-SWPL-outage losses is associated with a scenario having 2271 Mw of internal SDG&E generation. The scenario with 561 fewer Mw of internal generation has 18 Mw more of post-contingency losses.

This statement is incorrect because the case used to develop the 58 MW adjustment included 2836 MW of internal generation. UCAN overlooked the 565 MW of required CTs set forth in Table 5.1. This 18 MW loss increase is caused by removing South Bay from service, which results in the vast majority of the resources serving the San Diego load during the G-1/N-1 condition being located in the Northern half of the SDG&E local capacity area. Since UCAN's argument is based on their incorrect reading of Table 5.1, they have incorrectly concluded that that the 40 MW loss adjustment should be used for all scenarios regardless of the status of South Bay. CAISO loss adjustment of 58 MW in scenarios without South Bay is the appropriate value.

L. The demand response and energy efficiency load adjustments developed by CAISO are reasonable and require no further adjustment

After criticizing CAISO for not complying with the LTPP directives in the *Assigned Commissioner/ALJ Ruling* Appendix, UCAN goes on to identify other "errors and omissions" in the L&R tables, many of which are not based on SDG&E's LTPP but come from other sources.³⁶ For example, the 35-52 MW of SDG&E rooftop solar that UCAN claims should have been included in the compliance filing are taken from an SDG&E filing dated July 11, 2008 and not part of this record.³⁷ Similarly, UCAN apparently believes that CAISO should have taken into account "not-yet-adopted" energy efficiency (EE) programs that were not included in the CEC forecast but "could" produce an additional 128 MW of peak load reduction by 2016 if initiated

³⁶ UCAN Opening Brief at 38.

by SDG&E.³⁸ Indeed, in this section of its opening brief, UCAN goes so far as to state that CAISO has "effectively allowed SDG&E to fail to comply with D.04-09-060."

The additional load adjustments proposed by UCAN have no merit. In particular, with respect to the 128 MW of EE peak load reductions not included in CAISO L&R tables, UCAN conveniently overlooks notation 4 in Table IV-1 of the SDG&E April 18, 2008 LTPP Compliance Filing advising that "Future program years (2009 onwards) are considered uncommitted. In fact, the Commission expects to review and revise as necessary the 2009-2016 energy savings and demand reduction goals before 2009." Given this statement and the fact that this 128 MW of energy efficiency was intentionally excluded by the CEC in their load forecast, it was appropriate for CAISO to exclude this uncommitted amount as well. In other words, because the CEC stated that energy efficiency was already included in their load forecast, CAISO did not adjust the load forecast any further for EE.

It bears repeating that engaging in the type of demand response/EE development speculation that UCAN describes is highly inappropriate for grid planning purposes and totally outside CAISO grid planning standards. The targets and forecasts underlying UCAN's calculations should be approached with extreme caution, especially when the Commission is asked to cobble together estimated peak load reductions for the purposes of making decisions about infrastructure additions. CAISO used a reasonable process to develop the demand response and EE forecasts for the years not included in the CEC load forecast and it is fully described in the workpapers. There is no reason to make further adjustments to CAISO L&R tables, particularly with respect to adjustments not captured by the SDG&E LTPP compliance filing.

27

³⁷ UCAN Opening Brief at 38-39.

³⁸ UCAN Opening Brief at 44-45.

III. CAISO'S RESPONSE TO SPECIFIC ISSUES RAISED IN DRA'S OPENING BRIEF

DRA's concerns regarding reliability benefits should be disregarded Α.

With respect to the reliability benefits reflected in Exhibit C-1, DRA reaches back to its Phase 2 testimony and claims that CAISO improperly uses its "ramp" model to derive reliability benefits. Like UCAN, DRA questions CAISO modeling assumption that Sunrise will displace 1000 MW of new CT costs. As discussed above, this argument takes issue with a modeling concept specifically adopted by the Assigned Commissioner/ALJ Ruling and thoroughly addressed in briefs and reply briefs.

In addition, DRA does not believe CAISO's ramp model is a realistic method for assessing Locational Capacity Requirements ("LCR"). 40 This assertion is based on the creation of a Greater Imperial Valley-San Diego ("GIV-SD") local area identified in several CAISO LCR studies, and the effects of Sunrise on the Southern California Edison ("SCE") local area. In Phase 2 testimony, DRA also opined that a combination of CCGT and CT generation would likely produce higher reliability benefits than a 500 kV transmission line. DRA raises no new reliability arguments in its opening brief that pertain specifically to the study results reflected in Exhibit C-1, and in Phase 2 CAISO thoroughly addressed these old arguments now once again being raised by DRA.

Specifically, in Phase 2 CAISO explained that the creation of a GIV-SD local area has been anticipated for several years and provides additional benefits to SDG&E ratepayers by connecting the Imperial Valley to the San Diego area and allowing Imperial Valley resources to be counted for RPS and RA.⁴¹ Rather than discrediting the use of the ramp model and the 1000 MW of LCR displaced by Sunrise, DRA's testimony served to underscore the validity of CAISO

17

³⁹ SDG&E LTPP Compliance Filing (Advice Letter 1983-E) at Original Sheet 144. ⁴⁰ DRA Opening Brief at 3, note 7.

analysis. Additionally, CAISO's conclusion regarding the interaction between the SDG&E and SCE local areas was discussed in great detail in Phase 2, particularly in response to issues raised by TNHC, and the concerns raised by both DRA and TNHC were soundly refuted.⁴² For the reasons discussed above, and in evidence previously submitted by CAISO, the Commission should disregard DRA's concerns about the Sunrise reliability benefits reflected in Exhibit C-1.

B. DRA agrees that it would not be reasonable to model negative reliability benefits

Like UCAN, DRA also notes that for Cases 2 and 3 CAISO constrained the adjusted RPS benefit (cost) to zero rather than allowing these values to be negative. However, unlike UCAN, DRA acknowledges that is too uses the same assumption in its estimates of Sunrise renewable benefits in both Phase 1 and 2 testimony.⁴³ This position is consistent with CAISO's implicit conclusion that utilities will not procure renewables in a manner that would increase their costs.

C. CAISO properly calculated the 20% RPS costs assumed in Cases 2, 3 and 4

Based on a review of the workpapers submitted with Exhibit C-1, DRA takes issue with the RPS cost assumption used by CAISO in the cases in which the RPS target is 20%. In particular, DRA criticizes the use of 2010 RPS costs for years 2015 and 2020, suggesting that a specific 20% level for those years should have been calculated. This position appears to be related to DRA's request that CAISO clarify whether its RPS cost values are reflected in nominal or real dollars.⁴⁴

To clarify the record, CAISO's RPS model does produce RPS costs for 2010, 2015, and 2020. However, those costs are based on the levels of renewable resources needed to meet specific RPS levels in each year. 2010 provide 20% RPS, 2015 provides 26.5%, and 2020

⁴¹ CAISO Phase 2 Reply Brief at 7

⁴² CAISO Phase 2 Reply Brief at 17.

⁴³ DRA Opening Brief at 6.

⁴⁴ DRA Opening Brief at 6-7.

provides 33% RPS levels of renewable resources. Therefore, the 2015 and 2020 numbers would not be appropriate for use in the 20% RPS cases, as they are based on higher levels of renewable resources. Because the 2010 values represent a 20% RPS level, it is appropriate to use these costs for all years in which a 20% RPS level was assumed. These values do not require any adjustments for inflation or cost escalation in 2015 or 2020 because, as stated in CAISO's Phase 1 testimony, RPS costs are constant in nominal dollars because it is assumed that technological innovation offsets inflation.⁴⁵

D. CAISO's energy benefits calculations are based on reasonable assumptions

DRA does not dispute the range of energy benefits reflected in Exhibit C-1 but claims that these benefits "may be overstated," setting forth two arguments in support of this assertion. He is safe that in order to correctly compare the energy benefits between the Gridview reference case and the Sunrise case, the level of renewable generation development should be the same in each case. This analysis is similar to the approach taken by SDG&E in deriving energy benefits, but contrasts with CAISO's consistent assumption that Sunrise will stimulate the development of 2000 MW of renewables in the Imperial Valley. As explained in Phase 1, CASIO fundamentally believes that it would be unreasonable to model a base case without Sunrise but with 2000MW of renewable resources in the Imperial Valley because that generation would never be built without sufficient transmission to allow delivery to the grid and serve load. Thus, similar to other issues raised by DRA in its opening brief, CAISO's renewable development modeling assumption has been vetted throughout Phases 1 and 2 and it has not been effectively refuted. DRA has provided no evidence upon which to reject the assumption at this late point in the proceeding.

_

⁴⁵ CAISO Ex. I-2 at 45.

⁴⁶ DRA Opening Brief at 7-9.

⁴⁷ See, e.g., CAISO Phase 1 Brief at 28-29.

DRA also speculates that CAISO analysis may overstate the reduction to energy benefits that would occur in the two renewables scenarios, particularly the 20% RPS scenario. 48 CAISO agrees that for the purposes of these compliance scenarios, the energy benefits adjustments produce estimates that should be relied upon with caution. However, it should be noted that the resulting benefits are small and do not materially affect the overall cost effectiveness results of the 20% RPS target cases.

IV. SPECIFIC ISSUES RAISED IN TNHC'S OPENING BRIEF

TNHC misinterprets the Assigned Commissioner/ALJ Ruling

Based on its interpretation of certain language contained in the Assigned Commissioner/ALJ Ruling, TNHC argues that the Commission has found the record in this proceeding to be "inadequate" and that these "inadequacies" cannot be "patched" with the compliance filing that CAISO was directed to conduct.⁴⁹ CAISO strongly disagrees that the Phase 1 and 2 records in this proceeding contain any such "holes" in need of patching. Indeed, with or without Exhibit C-1, the Commission has ample information to find that Sunrise (and the Sunrise alternative routing scenarios) provide substantial ratepayer benefits in terms of energy cost reductions, net reductions in LCR obligations, and access to renewables.

TNHC apparently bases its arguments on the following language from the Assigned Commissioner/ALJ Ruling:

> ...However, the current record does not adequately quantify the technical feasibility or the economic benefits of various alternatives using reasonable set modelling assumptions.⁵⁰

The above language does not seek additional information about study assumptions but rather seeks additional studies based on assumptions plucked from unrelated portions of the

⁴⁸ DRA Opening Comments at 8.⁴⁹ TNHC Opening Brief at 4.

⁵⁰ Assigned Commissioner/ALJ Ruling at 2 (\P 6).

record. Thus, the compliance submission directed by the *Assigned Commissioner/ALJ Ruling* hinges on the reasonableness of the assumptions that CAISO was directed to use. For example, the use of outdated Phase 1 CT costs when updated Phase 2 figures are readily available, and RPS targets below 33% unreasonable assumptions that should not be used to test technical feasibility or produce economic benefits. Similarly, as CAISO explained above, the level of UCAN-proposed O&M costs does not reflect a reasonable level of such expenses for a new high voltage transmission line. These three assumptions alone serve to improperly reduce the benefits of Sunrise and provide no valid basis upon which to assess the cost effectiveness of the project.

Nonetheless, contrary to the position taken by TNHC, Exhibit C-1 provides useful information as to the relative benefits of Sunrise and the transmission alternatives when these unreasonable assumptions are not factored into the calculations.⁵¹

B. CAISO's greenhouse gas calculation effectively assumes a 1000 MW import level for TE/VS.

TNHC argues that the CO₂ Emissions Summary Table submitted by CAISO as part of Exhibit C-1 is flawed because the increase of 226,004,434 lbs. of CO² emissions caused by the Green Path + LEAPS scenario was based on CAISO's assumption that the TE/VS line reduces LCR requirements in San Diego by 500 MW (later revised to 625 MW).⁵² As the Commission is well aware, TNHC disputes CAISO's LCR calculation and has maintained throughout this proceeding, albeit mistakenly, that the LCR reduction capability of the line is 1000 MW.

For the purposes of calculating greenhouse gas ("GHG") emissions, however, CAISO's LCR evaluation of TE/VS has no relevance because the Gridview analysis documented in

_

⁵¹ Without taking UCAN's O&M expense level into account, all of the transmission scenarios studied by CAISO have positive net benefits except Cases 2, 3 and 4.

⁵² TNHC Opening Brief at 7.

Exhibit C-1 makes use of an "all-lines-in-service" case where the TE/VS line effectively has

1000 MW of import capability. The GHG results are driven by the fact that coal is on the margin

during some of the hours when the LEAPS plant is consuming electricity and it displaces gas

fired resources, which have lower GHG emission rates than coal resources when producing

electricity. TNHC raised no other concerns with the CO₂ emissions table and has failed to refute

CAISO's GHG conclusions.

V. **CONCLUSION**

As CAISO noted in its opening brief, while many of the "cases" contained in Exhibit C-1

should be disregarded because the analysis is based on unrealistic assumptions that should not be

relied upon to assess the cost effectiveness of Sunrise, the exhibit does include two cases that

confirm that Sunrise will provide significant net economic benefits in excess of \$129 million per

year. Accordingly, the CAISO urges the Commission to grant a certificate of public convenience

and necessity to SDG&E for Sunrise.

Respectfully submitted,

/s/ Jeffrey P. Gray

Jeffrey P. Gray

DAVIS WRIGHT TREMAINE LLP

Suite 800

505 Montgomery Street

San Francisco, CA 94111-6533

Tel. (415) 276-6500

Fax. (415) 276-6599

Email:jeffgray@dwt.com

Folsom California 95630 Tel. (916) 351-4400

151 Blue Ravine Road

(916) 608-7296 Fax.

Email: jsanders@caiso.com

Judith B. Sanders, Counsel

OPERATOR CORPORATION

CALIFORNIA INDEPENDENT SYSTEM

Attorneys for CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Dated: September 10, 2008

22

CERTIFICATE OF SERVICE

I, Judy Pau, certify:

I am employed in the City and County of San Francisco, California, am over eighteen years of age and am not a party to the within entitled cause. My business address is 505 Montgomery Street, Suite 800, San Francisco, California 94111.

On September 10, 2008, I caused the following to be served:

REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON EXHIBIT COMPLIANCE-1

enclosed in a sealed envelope, by first class mail on the parties listed as "Parties" and "State Service" on the attached service list who have not provided an electronic mail address, and via electronic mail to all parties on the service list who have provided the Commission with an electronic mail address.

<u>/s/ Judy Pau</u> Judy Pau

cc: Commissioner Dian M. Grueneich (via US Mail and email)
ALJ Steve Weissman (via US Mail and email)
ALJ Jean Vieth (via US Mail and email)
Service List A. 06-08-010 (via US Mail or email)



CPUC Home

CALIFORNIA PUBLIC UTILITIES COMMISSION Service Lists

PROCEEDING: A0608010 - SDG&E - CPCN FOR THE FILER: SAN DIEGO GAS & ELECTRIC COMPANY (U902E)

LAST CHANGED: SEPTEMBER 8, 2008

Parties

ARNOLD B. PODGORSKY
WRIGHT & TALISMAN, P.C.
1200 G STREET, N.W., SUITE 600
WASHINGTON, DC 20005
FOR: THE NEVADA HYDRO COMPANY

SARA FELDMAN
CA STATE PARKS FOUNDATION
714 W. OLYMPIC BLVD., SUITE 717
LOS ANGELES, CA 90015
FOR: CA STATE PARKS FOUNDATION

ARTHUR FINE
MITCHELL SILBERBERG & KNUPP LLP
11377 W. OLYMPIC BLVD.
LOS ANGELES, CA 90064-1683
FOR: DAVID H. BATCHELDER

DON WOOD SR.

PACIFIC ENERGY POLICY CENTER
4539 LEE AVENUE
LA MESA, CA 91941

INSTITUTE

LINDA A. CARSON
EXECUTIVE DIRECTOR
PARKS&RECREATION
ANZA-BORREGO FOUNDATION

MICHAEL J. THOMPSON
ATTORNEY AT LAW
WRIGHT & TALISMAN, PC
1200 G STREET, N.W., STE 600
WASHINGTON, DC 20005
FOR: THE NEVADA HYDRO COMPANY

S. NANCY WHANG
ATTORNEY AT LAW
MANATT, PHELPS & PHILLIPS, LLP
11355 WEST OLYMPIC BLVD.
LOS ANGELES, CA 90064
FOR: THE CITY OF SANTEE

THOMAS A. BURHENN
SOUTHERN CALIFORNIA EDISON
2244 WALNUT GROVE AVENUE
ROSEMEAD, CA 91770
FOR: SOUTHERN CALIFORNIA EDISON

DIANA LINSDAY
ANZA-BORREGO FOUNDATION & INSTITUTE
PO BOX 2001
BORREGO SPRINGS, CA 92004
FOR: ANZA-BORREGO FOUNDATION &

MICHAEL L. WELLS
CALIFORNIA DEPARTMENTOF

200 PALM CANYON DRIVE

PO BOX 2001 BORREGO SPRINGS, CA 92004

BORREGO SPRINGS, CA 92004 FOR: ANZA-BORREGO FOUNDATION

RAMONA, CA 92065

SCOT MARTIN DAVID LLOYD PO BOX 1549 ATTORNEY AT LAW BORREGO SPRINGS, CA 92004

CABRILLO POWER I, LLC 4600 CARLSBAD BLVD. CARLSBAD, CA 92008

FOR: CABRILLO POWER I, LLC

CONNIE BULL DIANE J. CONKLIN 24572 RUTHERFORD ROAD SPOKESPERSON

MUSSEY GRADE ROAD ALLIANCE

PO BOX 683

PAM WHALEN

PO BOX 321

FREDERICK M. ORTLIEB

RAMONA, CA 92065

FOR: MUSSEY GRADE ROAD ALLIANCE

ELIZABETH EDWARDS RAMONA VALLEY VINEYARD ASSOCIATION 26502 HIGHWAY 78 RAMONA, CA 92065

FOR: RAMONA VALLEY VINEYARD ASSOC.

24444 RUTHERFORD ROAD RAMONA, CA 92065

HEIDI FARKASH MICHAEL PAGE 17449 OAK HOLLOW ROAD JOHN & HEIDI FARKASH TRUST

RAMONA, CA 92065-6758 PO BOX 576

FOR: STARLIGHT MOUNTAIN ESTATES OWNERS RANCHO SANTA FE, CA 92067

FOR: FARKASH RANCH IN SANTA YSABEL

DENIS TRAFECANTY MARY ALDERN COMMUNITY OF SANTA YSABEL & RELATED COMM COMMUNITY ALLIANCE FOR SENSIBLE

SANTA YSABEL, CA 92070

PO BOX 305

WARNER SPRINGS, CA 92086 FOR: SELF

E. GREGORY BARNES ATTORNEY AT LAW 101 ASH STREET, HQ 13D SAN DIEGO, CA 92101

OFFICE OF CITY ATTORNEY SAN DIEGO GAS & ELECTRIC COMPANY CITY OF SAN DIEGO 1200 THIRD AVENUE, SUITE 1200 SAN DIEGO, CA 92101 FOR: SAN DIEGO GAS & ELECTRIC FOR: CITY OF SAN DIEGO

JAMES F. WALSH SAN DIEGO GAS & ELECTRIC COMPANY 101 ASH STREET SAN DIEGO, CA 92101

FOR: SAN DIEGO GAS & ELECTRIC COMPANY SAN DIEGO, CA 92101

MICHAEL P. CALABRESE ATTORNEY AT LAW CITY ATTORNEY, CITY OF SAN DIEGO 1200 THIRD AVENUE, SUITE 1100 FOR: CITY OF SAN DIEGO

SHAWN D. HAGERTY CITY OF ATTORNEY BEST BEST & KRIEGER LLP 655 W. BROADWAY, 15TH FLOOR

SAN DIEGO, CA 92101-3301 FOR: THE CITY OF SANTEE

ATTN: MICHAEL SHAMES UCAN 3100 FIFTH AVENUE, SUITE B 3820 RAY STREET SAN DIEGO, CA 92103 SAN DIEGO, CA 92104

EDWARD GORHAM WESTERNERS INCENSED BY WRECKLESS ELECTRI LAW OFFICES OF CARRIE ANNE DOWNEY 4219 LOMA RIVIERA LANE SAN DIEGO, CA 92110 FOR: SELF

KEVIN O'BEIRNE SAN DIEGO GAS & ELECTRIC COMPANY SAN DIEGO, CA 92123 FOR: SAN DIEGO GAS & ELECTRIC

KEITH RITCHEY POWERLINK ISSUES MANAGER 8744 CREEKWOOD LANE SAN DIEGO, CA 92129 FOR: WEST CHASE HOMEOWNER'S ASSOCIATION SAN DIEGO, CA 92130

(LA

JOETTA MIHALOVICH 11705 ALDERCREST POINT SAN DIEGO, CA 92131

STEPHEN KEENE ATTORNEY AT LAW IMPERIAL IRRIGATION DISTRICT 333 EAST BARIONI BLVD., PO BOX 937 FOR: SELF IMPERIAL, CA 92251 FOR: IMPERIAL IRRIGATION DISTRICT

DONALD C. LIDDELL ATTORNEY AT LAW DOUGLASS & LIDDELL 2928 2ND AVENUE SAN DIEGO, CA 92103 FOR: STIRLING ENERGY SYSTEMS

PAUL BLACKBURN SIERRA CLUB, SAN DIEGO CHAPTER FOR: UTILITY CONSUMERS' ACTION NETWORK FOR: SIERRA CLUB, SAN DIEGO CHAPTER

> CARRIE DOWNEY 1313 YNEZ PLACE CORONADO, CA 92118 FOR: IMPERIAL IRRIGATION DISTRICT

HARVEY PAYNE RANCHO PENASQUITOS CONCERNED 8330 CENTURY PARK COURT, CP32D 13223 - 1 BLACK MOUNTAIN ROAD, 264 SAN DIEGO, CA 92129 FOR: RANCHO PENASQUITOS CONCERNED CITIZENS

> JOHN W. LESLIE, ESQ. ATTORNEY AT LAW LUCE, FORWARD, HAMILTON & SCRIPPS, 11988 EL CAMINO REAL, SUITE 200

FOR: CORAL POWER, LLC AND ENERGIA AZTECA/ENERGIA DE BAJA CALIFORNIA

ROSITA)

DAVID HOGAN CENTER FOR BIOLOGICAL DIVERSITY PO BOX 7745 SAN DIEGO, CA 92167

PATRICIA C. SCHNIER 14575 FLATHEAD RD. APPLE VALLEY, CA 92307

DWT 11760599v2 0084953-000001

JACQUELINE AYER 2010 WEST AVENUE K, NO. 701 LANCASTER, CA 93536 FOR: JACQUELINE AYER

COMPANY

MICHEL PETER FLORIO ATTORNEY AT LAW THE UTILITY REFORM NETWORK 711 VAN NESS AVENUE, SUITE 350 SAN FRANCISCO, CA 94102 FOR: TURN

MARION PELEO CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 4107 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214 FOR: DIVISION OF RATEPAYER ADVOCATES

TRAVIS FOSS CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 5028 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214 FOR: CONSUMER PROTECTION AND SAFETY DIVISION

RORY COX RATEPAYERS FOR AFFORDABLE CLEAN ENERGY ATTORNEY AT LAW 311 CALIFORNIA STREET, SUITE 650 DAY SAN FRANCISCO, CA 94104 FOR: C/O PACIFIC ENVIROMENT

REPLACEMENT

RICHARD W. RAUSHENBUSH ATTORNEY AT LAW LAMPREY LLP LATHAM & WATKINS LLP 505 MONTGOMERY STREET, SUITE 2000 SAN FRANCISCO, CA 94111 FOR: LS POWER; SOUTH BAY REPLACEMENT

BILLY BLATTNER MANAGER REGULATORY RELATIONS SAN DIEGO GAS & ELECTRIC COMPANY 601 VAN NESS AVENUE, SUITE 2060 SAN FRANCISCO, CA 94102 FOR: SAN DIEGO GAS & ELECTRIC

OSA L. WOLFF ATTORNEY AT LAW SHUTE, MIHALY & WEINBERGER, LLC 396 HAYES STREET SAN FRANCISCO, CA 94102 FOR: CITIES OF TEMECULA, MURRIETA & HEMET

NICHOLAS SHER CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 4007 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

NORMAN J. FURUTA ATTORNEY AT LAW FEDERAL EXECUTIVE AGENCIES 1455 MARKET ST., SUITE 1744 SAN FRANCISCO, CA 94103-1399 FOR: DEPARTMENT OF THE NAVY

BRIAN T. CRAGG GOODIN MACBRIDE SQUERI RITCHIE &

505 SANSOME STREET, SUITE 900 SAN FRANCISCO, CA 94111 FOR: LS POWER; SOUTH BAY

PROJECT, LLC

VIDHYA PRABHAKARAN GOODIN MACBRIDE SQUERI DAY &

505 SANSOME STREET, SUITE 900

FOR: SAN DIEGO GAS & ELECTRIC PROJECT, LLC

JEFFREY P. GRAY ATTORNEY AT LAW

DAVIS WRIGHT TREMAINE, LLP

505 MONTGOMERY STREET, SUITE 800

SAN FRANCISCO, CA 94111-6533

FOR: CALIFORNIA INDEPENDENT SYSTEM

ATTORNEY AT LAW

DIETRICH LAW

2977 YGNACIO VALLEY ROAD, NO. 613

WALNUT CREEK, CA 94598-3535

FOR: CALIFORNIA STATE PARKS ATTORNEY AT LAW FOUNDATION OPERATOR CORP.

DAVID KATES DAVID MARK AND COMPANY 3510 UNOCAL PLACE, SUITE 200 OPERATOR SANTA ROSA, CA 95403-5571 FOR: THE NEVADA HYDRO COMPANY

JEFFERY D. HARRIS ATTORNEY AT LAW ELLISON, SCHNEIDER & HARRIS LLP RECREATION 2015 H STREET SACRAMENTO, CA 95811-3109

KATHRYN J. TOBIAS ATTORNEY AT LAW FOR: CA DEPARTMENT OF PARKS AND FEDERATION RECREATION

KEVIN LYNCH IBERDROLA RENEWABLES INC 1125 NW COUCH ST., SUITE 700 PORTLAND, OR 97209

WILLIAM F. DIETRICH ATTORNEY AT LAW

AND ANZA-BORREGO FOUNDATION

JUDITH B. SANDERS ATTORNEY AT LAW CALIFORNIA INDEPENDENT SYSTEM

151 BLUE RAVINE ROAD FOLSOM, CA 95630 FOR: CALIFORNIA INDEPENDENT SYSTEM OPERATOR

BRADLY S. TORGAN ATTORNEY AT LAW CALIFORNIA DEPT. OF PARKS &

1416 NINTH STREET, ROOM 1404-06 SACRAMENTO, CA 95814 FOR: CALIFORNIA DEPT. OF PARKS & RECREATION

KAREN NORENE MILLS ATTORNEY AT LAW CA DEPT. OF PARKS AND RECREATION

1416 9TH STREET, 14TH FLOOR

SACRAMENTO, CA 95814

CALIFORNIA FARM BUREAU FEDERATION

2300 RIVER PLAZA DRIVE

SACRAMENTO, CA 95833 FOR: CALIFORNIA FARM BUREAU

Information Only

ELIZABETH KLEIN LATHAM & WATKINS, LLP 555 11TH STREET NW, STE. 1000 WASHINGTON, DC 20004

JANICE SCHNEIDER LATHAM & WATKINS, LLP 555 11TH STREET NW, STE 1000 WASHINGTON, DC 20004

JULIE B. GREENISEN LATHAM & WATKINS LLP SUITE 1000 555 ELEVENTH STREET, NW WASHINGTON, DC 20004-1304

ANDREW SWERS WRIGHT & TALISMAN, P.C. ENERGY AND NATURE
1200 G STREET, N.W., SUITE 600 PO BOX 6732
WASHINGTON, DC 20005 MINNEAPOLIS, MN 55406

STEVEN SIEGEL STAFF ATTORNEY CENTER FOR BIOLOGICAL DIVERSITY 3421 PARK PLACE EVANSTON, IL 60201 FOR: CENTER FOR BIOLOGICAL DIVERSITY

HENRY MARTINEZ LADWP POWER 111 N. HOPE ST., ROOM 921 LOS ANGELES, CA 90012

CLAY E. FABER
SOUTHERN CALIFORNIA GAS COMPANY
555 WEST FIFTH STREET, GT-14D6

RANDALL W. KEEN ATTORNEY AT LAW MANATT PHELPS & PHILLIPS, LLP LAW DEPARTMENT, ROOM 370 11355 WEST OLYMPIC BLVD. 2244 WALNUT GROVE AVENUE 11355 WEST OLYMPIC BLVD. LOS ANGELES, CA 90064 FOR: CITY OF SANTEE

DARELL HOLMES TRANSMISSION MANAGER SOUTHERN CALIFORNIA EDISON 2244 WALNIT GROVE AVE, 238M, QUADB, G01 $\,$ 167 NORTH THIRD AVENUE, STE M $\,$ ROSEMEAD, CA 91770

DONNA TISDALE BOULEVARD SPONSOR GROUP FOUNDATION PO BOX 1272

MICHAEL J. GERGEN LATHAM & WATKINS LLP SUITE 1000 555 ELEVENTH STREET, NW WASHINGTON, DC 20004-1304

KELLY FULLER

E. CRAIG SMAY E. CRAIG SMAY PC 174 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111 FOR: WILLIAM AND SHANNON DAVIS

RANDY S. HOWARD LOS ANGELES DEPT. OF WATER AND

111 NORTH HOPE STREET, ROOM 921 LOS ANGELES, CA 90012

DAVID L. HUARD ATTORNEY AT LAW MANATT, PHELPS & PHILLIPS, LLP LOS ANGELES, CA 90013 11355 WEST OLYMPIC BOULEVARD FOR: SAN DIEGO GAS & ELECTRIC COMPANY LOS ANGELES, CA 90064 FOR: CITY OF SANTEE

> CASE ADMINISTRATION SOUTHERN CALIFORNIA EDISON COMPANY ROSEMEAD, CA 91770

MONICA ARGANDONA DESERT PROGRAM DIRECTOR CALIFORNIA WILDERNESS COALITION UPLAND, CA 91786

MATTHEW JUMPER SAN DIEGO INTERFAITH HOUSING

7956 LESTER AVE

BOULEVARD, CA 91905

LEMON GROVE, CA 91945
FOR: SAN DIEGO INTERFAITH HOUSING
FOUNDATION

REBECCA PEARL
POLICY ADVOCATE, CLEAN BAY CAMPAIGN
ENVIRONMENTAL HEALTH COALITION
401 MILE OF CARS WAY, STE. 310
NATIONAL CITY, CA 91950
FOR: ENVIRONMENTAL HEALTH COALITION

BOB & MARGARET BARELMANN 6510 FRANCISCAN ROAD CARLSBAD, CA 92011

DAVE DOWNEY
NORTH COUNTY TIMES
207 E. PENNSYLVANIA AVENUE
ESCONDIDO, CA 92025

J. HARRY JONES
SAN DIEGO UNION TRIBUNE
800 WEST VALLEY PARKWAY, SUITE 114
ESCONDIDO, CA 92025

PAT/ALBERT BIANEZ
1223 ARMSTRONG CIRCLE
ESCONDIDO, CA 92027

WALLY BESUDEN
PRESIDENT
SPANGLER PEAK RANCH, INC
PO BOX 1959
ESCONDIDO, CA 92033

DAVID W. CAREY
DAVID CAREY & ASSOCIATES, INC.
PO BOX 2481
JULIAN, CA 92036

LAUREL GRANQUIST PO BOX 2486 JULIAN, CA 92036

MARTHA BAKER

VOLCAN MOUNTAIN PRESERVE FOUNDATION

PO BOX 1625

JULIAN, CA 92036

JOHN RAIFSNIDER
PO BOX 121
JULIAN, CA 92036-0121

BRIAN KRAMER
PO BOX 516
JULIAN, CA 92036-0516

NANCY PARINELLO
PO BOX 516
JULIAN, CA 92036-0516

PAUL RIDGWAY
3027 LAKEVIEW DR.
PO BOX 1435
JULIAN, CA 92036-1435

DAVID VOSS 502 SPRINGFIELD AVENUE OCEANSIDE, CA 92057

SCOTT KARDEL
PALOMAR OBSERVATORY
PO BOX 200
PALOMAR MOUNTAIN, CA 92060

CAROLYN A. DORROH
RAMONA COMMUNITY PLANNING GROUP
17235 VOORHES LANE
RAMONA, CA 92065

CHRISTOPHER P. JEFFERS 24566 DEL AMO ROAD

JOSEPH W. MITCHELL, PH. D. M-BAR TECHNOLOGIES AND CONSULTING

RAMONA, CA 92065

19412 KIMBALL VALLEY RD RAMONA, CA 92065

JOSEPH W. MITCHELL, PHD M-BAR TECHNOLOGIES AND CONSULTING 19412 KIMBALL VALLEY RD. RAMONA, CA 92065

16828 OPEN VIEW RD RAMONA, CA 92065

LARA LOPEZ

FOR: M-BAR TECHNOLOGIES AND CONSULTING

PETER SCHULTZ OLD JULIAN CO. PO BOX 2269 RAMONA, CA 92065

PHILLIP & ELIANE BREEDLOVE 1804 CEDAR STREET RAMONA, CA 92065

WILLIAM TULLOCH 28223 HIGHWAY 78 RAMONA, CA 92065

CAROLYN MORROW GOLIGHTLY FARMS 36255 GRAPEVINE CANYON ROAD RANCHITA, CA 92066

JOSEPH RAUH RANCHITA REALTY 37554 MONTEZUMA VALLEY RD RANCHITA, CA 92066 FOR: RANCHITA REALTY

STEVE/CAROLYN ESPOSITO 37784 MONTEZUMA VALLEY ROAD RANCHITA, CA 92066

BONNIE GENDRON 4812 GLENSIDE ROAD SANTA YSABEL, CA 92070

GLENDA KIMMERLY PO BOX 305 SANTA YSABEL, CA 92070

GLENN E. DROWN PO BOX 330 SANTA YSABEL, CA 92070 JOHN&PHYLLIS BREMER PO BOX 510 SANTA YSABEL, CA 92070

RON WEBB PO BOX 375 SANTA YSABEL, CA 92070 K. RENEE MARTIN PO BOX 1276 POWAY, CA 92074

DAN PERKINS ENERGYSMARTHOMES.NET 983 PHILLIPS ST. VISTA, CA 92083

DEANNA SPEHN POLICY DIRECTOR OFFICE OF SENATOR CHRISTINE KEHOE 39TH STATE SENATE DISTRICT 2445 5TH AVENUE, SUITE 200 SAN DIEGO, CA 92101

SUSAN FREEDMAN

SENIOR REGIONAL ENERGY PLANNER

SAN DIEGO ASSOCIATION OF GOVERNMENTS

600 WEST BROADWAY, SUITE 1800

CAN DIEGO. CA 92101-3375 SUSAN FREEDMAN 401 B STREET, SUITE 800

JASON M. OHTA SAN DIEGO, CA 92101-3375 SAN DIEGO, CA 92101 COMPANY

FOR: SAN DIEGO GAS AND ELECTRIC

PATRICIA GUERRERO ATTORNEY AT LAW LATHAM & WATKINS 600 WEST BROADWAY, SUITE 1800 SAN DIEGO, CA 92101-3375 FOR: SAN DIEGO GAS AND ELECTRIC COMPANY

KATHARINE WOLFROM SIERRA CLUB OF SAN DIEGO 3802 RAY STREET SAN DIEGO, CA 92104

MICAH MITROSKY SIERRA CLUB 3820 RAY STREET SAN DIEGO, CA 92104-3623 KIM KIENER 504 CATALINA BLVD SAN DIEGO, CA 92106

JIM BELL 4862 VOLTAIRE ST. SAN DIEGO, CA 92107

STEPHEN ROGERS 1340 OPAL STREET SAN DIEGO, CA 92109

EPIC INTERN EPIC/USD SCHOOL OF LAW 5998 ALCALA PARK SAN DIEGO, CA 92110

BRUCE V. BIEGELOW STAFF WRITER THE SAN DIEGO UNION TRIBUNE PO BOX 120191S SAN DIEGO, CA 92112-0191

GEORGE COURSER 3142 COURSER AVENUE SAN DIEGO, CA 92117

CENTRAL FILES SAN DIEGO GAS & ELECTRIC 8315 CENTURY PARK COURT SAN DIEGO, CA 92123

IRENE STILLINGS EXECUTIVE DIRECTOR CALIFORNIA CENTER FOR SUSTAINABLE ENERGY CALIFORNIA CENTER FOR SUSTAINABLE 8520 TECH WAY, SUITE 110 SAN DIEGO, CA 92123

JENNIFER PORTER POLICY ANALYST 8690 BALBOA AVENUE, SUITE 100 SAN DIEGO, CA 92123

SEPHRA A. NINOW POLICY ANALYST CALIFORNIA CENTER FOR SUSTAINABLE ENERGY CITY OF SAN DIEGO 8690 BALBOA AVENUE, SUITE 100 9601 RIDGEHAVEN COURT, SUITE 120 SAN DIEGO, CA 92123

TOM BLAIR ENERGY ADMINISTRATOR SAN DIEGO, CA 92123-1636

DAHVIA LOCKE

ENIRONMENTAL RESOURCE MANAGER

COUNTY OF SAN DIEGO

TOTAL BOARD SHITTE B

ADVANCED ENERGY SOLUTION
17114 TALLOW TREE LANE
SAN DIEGO, CA 92127 SAN DIEGO, CA 92123-1666

JALEH (SHARON) FIROOZ, P.E. ADVANCED ENERGY SOLUTIONS

EILEEN BIRD 12430 DORMOUSE ROAD SAN DIEGO, CA 92129

GREGORY T. LAMBRON LAMBRON LAKESIDE RANCH, LLC PO BOX 15453 SAN DIEGO, CA 92175-5453

THOMAS ZALE BUREAU OF LAND MANAGEMENT 1661 SO. 4TH STREET EL CENTRO, CA 92243

JOHN STHURA CALIFORNIA BOTANICAL HABITAT PO BOX 1032 HEMET, CA 92546 FOR: CALIFORNIA BOTANICAL HABITAT

LOUIS NASTRO PO BOX 942896 SACRAMENTO, CA 92860-0001

DIANE I. FELLMAN

DIRECTOR, REGULATORY AFFAIRS

FPL ENERGY PROJECT MANAGEMENT, INC.

396 HAYES STREET

SAN FRANCISCO, CA 94102 SAN FRANCISCO, CA 94102

AARON QUINTANAR RATE PAYERS FOR AFFORDABLE CLEAN ENERGY ASPEN ENVIRONMENTAL GROUP 311 CALIFORNIA STREET, STE 650 235 MONTGOMERY STREET, SUITE 935 SAN FRANCISCO, CA 94104

JUSTIN AUGUSTINE CENTER FOR BIOLOGICAL DIVERSITY

351 CALIFORNIA STREET, SUITE 600

PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CA 94104

PO BOX 7442, 77 BEALE ST, B30A FOR: CENTER FOR BIOLOGICAL DIVERSITY SAN FRANCISCO, CA 94105

KIMBELRY SCHULZ 10303 CANINITO ARALIA NO 96 SAN DIEGO, CA 92131

LYNDA KASTOLL REALTY SPECIALIST BUREAU OF LAND MANAGEMENT EL CENTRO FIELD OFFICE 1661 SOUTH 4TH STREET EL CENTRO, CA 92243

J. STHURA UNDERGROUND POWER ASSOCIATION PO BOX 1032 HEMET, CA 92546 FOR: UNDERGROUND POWER ASSOCIATION

SUZANNE WILSON PO BOX 798 IDYLLWILD, CA 92549

BRUCE FOSTER SENIOR VICE PRESIDENT SOUTHERN CALIFORNIA EDISON COMPANY 601 VAN NESS AVENUE, STE. 2040 SAN FRANCISCO, CA 94102

SHUTE, MIHALY & WEINBERGER LLP FOR: CITIES OF TEMECULA, HEMET AND MURRIETA

BREWSTER BIRDSALL SAN FRANCISCO, CA 94104

DAVID T. KRASKA

KATARZYNA M. SMOLEN

JASON YAN

MICHAEL S. PORTER

CASSANDRA SWEET DOW JONES NEWSWIRES AFFAI

JULIE L. FIEBER JULIE L. FIEBER

FOLGER LEVIN & KAHN LLP

275 BATTERY STREET, 23RD FLOOR

CALIFORNIA ENERGI MARKEI

425 DIVISADERO ST.

SAN FRANCISCO, CA 94117 SAN FRANCISCO, CA 94111

CASE COORDINATION PACIFIC GAS AND ELECTRIC COMPANY PROTECTIO SAN FRANCISCO, CA 94177 PO BOX 770000; MC B9A

JOSEPH PAUL SENIOR CORPORATE COUNSEL DYNEGY, INC. DYNEGY, INC.
4140 DUBLIN BLVD., STE. 100 DUBLIN, CA 94568

PHILIPPE AUCLAIR 11 RUSSELL COURT WALNUT CREEK, CA 94598

MRW & ASSOCIATES, INC. 1814 FRANKLIN STREET, SUITE 720 OAKLAND, CA 94612

KEN BAGLEY R.W. BECK 14635 N. KIERLAND BLVD., SUITE 130 2106 HOMEWOOD WAY, SUITE 100 SOCTTSDALE. AZ 95254 CARMICHAEL, CA 95608

PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE STREET, MAIL CODE B13L
77 BEALE STREET, MC B9A
SAN FRANCISCO, CA 94105
SAN FRANCISCO, CA 94105

PAUL C. LACOURCIERE MICHAEL S. PORTER

PACIFIC GAS AND ELECTRIC COMPANY

THELEN REID BROWN RAYSMAN & STEINER

77 BEALE ST., MAIL CODE 13L RM 1318

SAN FRANCISCO, CA 94105

PAUL C. LACOURCIERE

THELEN REID BROWN RAYSMAN & STEINER

101 SECOND STREET, SUITE 1800

SAN FRANCISCO, CA 94105 FOR: THE NEVADA HYDRO COMPANY

> JAMES B. WOODRUFF VICE PRESIDENT REGULATORY AND GOVT

201 CALIFORNIA ST., 13TH FLOOR NEXTLIGHT RENEWABLE POWER, LLC SAN FRANCISCO, CA 94111 101 CALIFORNIA STREET, STE 2450 101 CALIFORNIA STREET, STE 2450 SAN FRANCISCO, CA 94111

CALIFORNIA ENERGY MARKETS

ROBIN HARRINGTON CAL. DEPT OF FORESTRY AND FIRE

PO BOX 944246 SACRAMENTO, CA 94244-2460

HENRY ZAININGER ZAININGER ENGINEERING COMPANY, INC. 1718 NURSERY WAY PLEASANTON, CA 94588

J.A. SAVAGE CALIFORNIA ENERGY CIRCUIT 3006 SHEFFIELD AVE OAKLAND, CA 94602

DAVID MARCUS PO BOX 1287 BERKELEY, CA 94701

W. KENT PALMERTON WK PALMERTON ASSOCIATES, LLC NANCY J. SARACINO
ATTORNEY
CALIFORNIA INDEP. SYSTEM OPERATOR CORP.
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
ENERGY

FOR: CALIFORNIA INDEP. SYSTEM OPERATOR

LEGAL & REGULATORY DEPARTMENT
CALIFORNIA ISO
151 BLUE RAVINE ROAD
FOLSOM, CA 95630
FOR: CALIFORNIA ISO

PAUL G. SCHEUERMAN
SHEUERMAN CONSULTING
3915 RAWHIDE RD.
ROCKLIN, CA 95677

DARRELL FREEMAN 1304 ANTRIM DR. ROSEVILLE, CA 95747

AUDRA HARTMANN
DYNEGY, INC.
980 NINTH STREET, SUITE 2130
SACRAMENTO, CA 95814

KELLI MCDOWELL
CA DEPT. OF PARKS AND RECREATION
COMMUNICATION
1416 NINTH STREET, ROOM 1404-06
SACRAMENTO, CA 95814

KEVIN WOODRUFF WOODRUFF EXPERT SERVICES, INC. 1100 K STREET, SUITE 204 SACRAMENTO, CA 95814

G. ALAN COMNES
CABRILLO POWER I LLC
3934 SE ASH STREET
PORTLAND, OR 97214

ZIAD ALAYWAN
ZGLOBAL INC. ENGINEERING AND ENERGY
193 BLUE RAVINE RD, STE 120
FOLSOM, CA 95630
FOR: ZGLOBAL INC. ENGINEERING AND

DAVID BRANCHCOMB
BRANCHCOMB ASSOCIATES, LLC
9360 OAKTREE LANE
ORANGEVILLE, CA 95662

LON W. HOUSE
WATER & ENERGY CONSULTING
4901 FLYING C RD.
CAMERON PARK, CA 95682

ANDREW B. BROWN
ATTORNEY AT LAW
ELLISON SCHNEIDER & HARRIS, LLP
2015 H STREET
SACRAMENTO, CA 95811

JAMES W. REEDE JR. ED.D
CALIFORNIA ENERGY COMMISSION
1516 - 9TH STREET
SACRAMENTO, CA 95814
FOR: CALIFORNIA ENERGY COMMISSION

KELLIE SMITH SENATE ENERGY/UTILITIES &

STATE CAPITOL, ROOM 4038

SACRAMENTO, CA 95814

RICHARD LAUCKHART
GLOBAL ENERGY
2379 GATEWAY OAKS DRIVE, SUITE 200
SACRAMENTO, CA 95833

DANIEL SUURKASK
WILD ROSE ENERGY SOLUTIONS, INC.
430 8170 50TH STREET
EDMONTON, AB T6B 1E6
CANADA

State Service

MARCUS NIXON CALIF PUBLIC UTILITIES COMMISSION PUBLIC ADVISOR OFFICE 320 WEST 4TH STREET SUITE 500 LOS ANGELES, CA 90013

DAVID NG CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION BRANCH ROOM 5207 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

GREGORY HEIDEN CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 5039 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

JANET A. ECONOME CALIF PUBLIC UTILITIES COMMISSION DIVISION OF ADMINISTRATIVE LAW JUDGES JUDGES ROOM 5116 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

JULIE HALLIGAN CALIF PUBLIC UTILITIES COMMISSION CALIF PUBLIC UTILITIES COMMISSION CONSUMER PROTECTION AND SAFETY DIVISION LEGAL DIVISION ROOM 2203 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

LINDA J. WOODS CALIF PUBLIC UTILITIES COMMISSION UTILITY & PAYPHONE ENFORCEMENT AREA 2-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

ROBERT ELLIOTT CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION BRANCH

BILLIE C. BLANCHARD CALIF PUBLIC UTILITIES COMMISSION ENERGY DIVISION AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

......

DONALD R. SMITH

CALIF PUBLIC UTILITIES COMMISSION ELECTRICITY PLANNING & POLICY

ROOM 4209 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

HELEN M. MICKIEWICZ CALIF PUBLIC UTILITIES COMMISSION LEGAL DIVISION ROOM 5123 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

JEAN VIETH CALIF PUBLIC UTILITIES COMMISSION DIVISION OF ADMINISTRATIVE LAW

ROOM 5010 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

LAURENCE CHASET ROOM 5131 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

MATTHEW DEAL CALIF PUBLIC UTILITIES COMMISSION EXECUTIVE DIVISION ROOM 5215 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

SCOTT CAUCHOIS CALIF PUBLIC UTILITIES COMMISSION ELECTRICITY PLANNING & POLICY

AREA 4-A 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

SCOTT LOGAN
CALIF PUBLIC UTILITIES COMMISSION
ELECTRICITY PLANNING & POLICY BRANCH
JUDGES
ROOM 4209
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214
FOR: DRA

TERRIE D. PROSPER
CALIF PUBLIC UTILITIES COMMISSION
EXECUTIVE DIVISION
ROOM 5301
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

SUSAN LEE
ASPEN ENVIRONMENTAL GROUP
235 MONTGOMERY STREET, SUITE 935
SAN FRANCISCO, CA 94104

MARC PRYOR
CALIFORNIA ENERGY COMMISSION
1516 9TH ST, MS 20
SACRAMENTO, CA 95814

THOMAS FLYNN

CALIF PUBLIC UTILITIES COMMISSION

ENERGY DIVISION

770 L STREET, SUITE 1050

SACRAMENTO, CA 95814

TOM MURPHY
VP., SACRAMENTO OPERATIONS
ASPEN ENVIRONMENTAL GROUP
8801 FOLSOM BLVD., SUITE 290
SACRAMENTO, CA 95826

ROOM 4103 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214 FOR: DRA

STEVEN A. WEISSMAN
CALIF PUBLIC UTILITIES COMMISSION
DIVISION OF ADMINISTRATIVE LAW

ROOM 5107 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3214

TRACI BONE
CALIF PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
ROOM 5206
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3214

CLARE LAUFENBERG CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET, MS 46 SACRAMENTO, CA 95814

PAUL C. RICHINS JR.
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET
SACRAMENTO, CA 95814
FOR: CALIFORNIA ENERGY COMMISSION

JUDY GRAU
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET MS-46
SACRAMENTO, CA 95814-5512