BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity Concerning the Devers-Palo Verde No. 2 Transmission Line Project.	Application 05-04-015 (Filed April 11, 2005)
Order Instituting Investigation on the Commission's Own Motion into Methodology for Economic Assessment of Transmission Projects.	Investigation 05-06-041 (Filed June 30, 2005)

REPLY BRIEF ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR

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Since no party challenges the likelihood that Southern California Edison's ("SCE") proposed 500 kV Devers-Palo Verde No. 2 ("DPV2") transmission line will provide ratepayers net economic benefits, the California Independent System Operator Corporation ("CAISO") focuses its reply brief on issues raised in parties' opening briefs that address the Commission's investigation of methodologies for assessing the economic benefits of proposed transmission upgrades.

I. INTRODUCTION

Most, but not quite all, of the hesitation parties expressed over a comprehensive acceptance of TEAM by the Commission arose from uncertainty regarding how detailed the CAISO would define TEAM. A common observation was that any attempt by the Commission to narrowly prescribe the characteristics of TEAM or any other acceptable methodology for assessing economic projects would be futile and counter-productive. TURN, for instance, emphasized the need for transmission economic assessments to remain evolutionary and

cautioned the Commission from taking action that would put "a halt to that evolution." (TURN Opening Brief ("OB") at 3.) SCE acknowledged that "most of the experts generally agree that the Commission should employ the CAISO TEAM principles," yet called for "flexibility" in TEAM implementation. (SCE at 15.) The Bay Area Municipal Transmission Group ("BAMx") characterized TEAM as "a useful analytical framework for evaluating the economic benefits of transmission projects." (BAMx OB at 3.) DRA concluded that "[b]roadly speaking, the TEAM approach … is consistent with time-honored principles" it favors. (DRA OB at 8.) However, DRA recommended adoption of "general *principles* to facilitate the evaluation of 'economic' projects going forward, but did not prescribe specific methodologies in any detail and instead allow applicants flexibility in preparing and presenting their economic justifications." (DRA OB at 1.)

The CAISO strongly concurs that the detailed methods for evaluating transmission economics should be dynamic and that the Commission should not be overly prescriptive. In this regard, the CAISO believes it has largely allayed any lingering apprehension over TEAM by defining the "requirements" of TEAM as a set of overarching principles that create an effective and generally applicable analytical framework that promotes evolution in study implementation. For convenience, the CAISO has summarized those principles below.

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TEAM Principle	Requirements [1]	Justification
1. Consistent benefit framework	Demonstrate: [2] • Total Societal Benefit is equal to the difference in WECC production costs. TB = ?PC • Total Societal Benefit is equal to the sum of all participant benefits. TB = S participant benefits • Total Societal Benefit is equal to the change in all Consumer, Generator, and Transmission Surplus. TB = ?CS + ?GS + ?TS • The societal Cost-To-Load is equal to all generating revenue plus all congestion revenue. CTL = GR + CR • CAISO Ratepayer and Participant Benefit are equal to the change in CA IOU consumer surplus, retained-generation[3] surplus, and transmission surplus. TB = ?CS + ?GS + ?TS	• Standard economic equations used for benefit calculations • Internally consistent and accurate means of computing relevant benefits • Standard template to provide transparency of benefit computation and interpretation.
2. Physical flows & nodal prices in the network representation	Full network model using DC-OPF (variable or fixed shift factors) or AC-OPF.	Accurately models physical impact and feasibility of potential transmission expansion and associated nodal prices.
3. Strategic bidding to understand impact on market prices	Incorporate a defensible method of comprehensive strategic bidding that demonstrates the impact on competition and resulting market prices.	Demonstrates benefits to consumers of more competitive marketplace. Forecasting prices is essential to fully understand economic benefit upgrade.
4. Uncertainty analysis to understand the distribution of benefits	Produce one or more histograms to demonstrate benefit distribution including the upside potential and downside risk.	Necessary to understand expected value, range, and distribution of benefits for risk management and evaluation purposes.
5. Resource substitution to understand alternatives to the project	Identify, discuss, and evaluate resource alternatives in importing zone and transmission substitutes.	Intrinsic value of line is based on consideration of alternatives.

[1] The two potential exceptions to this list of requirements are: (1) if the CAISO Ratepayer BCR for the cost-based reference is substantially greater than 1.0 or (2) if the project is intra-regional with a capital cost of less than $20 million. In both exceptions, the benefit framework and resource substitution are required. For the high BCR exception, the network model is also required. For the intra-regional project less than $20 million exception, the network model requirement may not be necessary.

[2] CAISO ***recommends*** that the Societal, CAISO Ratepayer, and CAISO Participant benefits also be calculated from a "modified" perspective that excludes monopoly rents. Monopoly rents are defined as that portion of the profit that is due to the generator bidding above marginal costs.

[3] CAISO Ratepayer Generation Surplus is based on IOU-retained generation. CAISO Participant Generation Surplus is based on all participants in the CAISO market including independent power producers.

In light of the CAISO's description of TEAM as a flexible set of principles, not a prescriptive detailed set of methods, there is virtual unanimity regarding the value of applying four of TEAM's five principles – benefits framework, uncertainty, market prices, and resource substitution. The one exception relates to the requirement that project proponents use, at a minimum, a DC-OPF model with full network representation.

The opposition to this TEAM requirement from Global Energy Decisions ("GED"), a for-profit corporation with a direct and tangible economic interest in preserving the commercial status of its transportation model, was not surprising, but, as discussed below, inaccurate. With respect to the other parties, it is critical to recognize that there was *no objection* to the accuracy or reasonableness of DC-OPF model outcomes. Indeed, Pacific Gas and Electric Company ("PG&E") acknowledged that "at least a DC-optimal power flow" model is required where capturing the effects of transmission constraints is critical to estimating the benefits of the upgrade. (PG&E OB at 6.) BAMx more affirmatively concluded, "a DC model with full network representation is the minimum network representation needed." (BAMx at OB 7.) Rather, parties' resistance, if any, emanated from the perceived rigidity of imposing this element of TEAM as a uniform requirement for economic assessments of all transmission upgrades.[4]

Accordingly, in its reply, the CAISO further explains the need to accurately model the physical flows of an interconnected system as well as produce nodal prices for economic studies whether evaluating an "inter-regional" or an "intra-regional" transmission project. The CAISO also (1) clarifies some apparent confusion regarding the role of production costs in the TEAM benefits framework and (2) corrects some false statements made by GED regarding the attributes of the CAISO's PLEXOS model. The CAISO addresses this latter topic not to promote a particular model

[4] As noted above, the network model requirement may be relaxed for intra-regional projects with a capital cost of less than $20 million.

and, in fact, expressly declines to endorse PLEXOS,[5] but rather to refute GED's attempted intimation that either the limitations of DC-OPF models outweigh any improved accuracy in modeling the transmission system or that the CAISO lacks understanding regarding current modeling techniques.

Finally, PG&E and San Diego Gas & Electric Company ("SDG&E") explicitly support the Commission granting deference to the CAISO's determination that a proposed upgrade promotes economic efficiency and will provide CAISO ratepayers with net economic benefits. (PG&E OB at 2; SDG&E OB at 2.) SCE appears concerned that deference will erode the project applicant's control of the CPCN process. The CAISO disagrees. One of the benefits of adopting the TEAM principles is to promote consistency in the analytical framework that will allow the CAISO to verify the validity of the applicant's evaluation, rather than performing its own. Thus, contrary to SCE's concern, the CPCN application process will still be driven by the applicant's submission. Further, none of the other parties offers any procedural or substantive barrier to the Commission taking affirmative action that eliminates regulatory duplication and better synchronizes the showings project proponents must make at the CAISO and the Commission to ensure efficient transmission infrastructure is constructed.

[5] In an apparent attempt to obfuscate the real issues before the Commission, GED argues, "although (the CAISO) claims that it is not endorsing any particular model . . . the CAISO's testimony on these points suggested the opposite. If the matter were left to the team that testified in this proceeding, the CAISO's analysis of PVD2 and future transmission line projects would utilize the PLEXOS model." (GED OB at 16-17.) The CAISO has also used the ABB Gridview software for an economic transmission evaluation in 2005. Consistent with this action, the CAISO has repeatedly stated that there is no commitment on the part of CAISO to use PLEXOS, Gridview or any other vendor or consultant in the future to implement the five TEAM key principles. The CAISO has gone to great lengths to ensure that this policy or principle is fully understood by all parties and stakeholders and GED continued accusations in this regard should be ignored.

II. THE TEAM TRANSMISSION MODELING REQUIREMENT IS REASONABLE AND APPROPRIATE

PG&E observed that "[i]n the real world, electric system costs and benefits are influenced by transmission congestion. The economic benefit of a transmission project is due to its ability to reduce transmission congestion. Therefore, to reasonably estimate the benefits of an economic transmission project, the methodology needs to appropriately consider transmission constraints." (PG&E OB at 6.) The CAISO, as the operator of much of California's transmission grid, is in a unique position to appreciate the real-world effects of congestion. Based on this experience, TEAM requires that physical flows of an interconnected system be modeled and nodal prices be produced.[6] Nodal prices, which cannot be calculated using a simplified transportation or "bubble" representation of the network, are necessary to correctly compute the CAISO Consumer, Generator, and Transmission benefits. In other words, it is the full network presentation that facilitates an accurate assessment of not only the magnitude of the benefits, but also how those benefits are allocated among market participants.

The CAISO has not dictated a specific model, or the exact type of analysis to be utilized, provided that the principle above is satisfied. Currently, there are three technical options available for transmission modeling that meet the requirement: (a) DC-OPF with fixed shift factors; (b) DC-OPF with variable shift factors; and (c) AC-OPF. At this point, the minimum TEAM standard is a DC-OPF analysis with fixed shift factors. PG&E agreed that for "an inter-regional project," it will most often will require "a methodology that uses a detailed network model (e.g. from a WECC power flow base case) and, at least, a DC-optimal power flow." (PG&E OB at 6.) BAMx similarly stated that the "Commission should indicate that a DC model with full network representation is the minimum network representation needed for purposes of a safe-harbor analysis." (BAMx OB at 7.)

[6] Exhibit 11, Attachment 1 at ES-7.

If a stakeholder wishes to perform a study using a DC-OPF with variable shift factors, or with an AC-OPF, that would be acceptable provided that the study scope met the other TEAM principles regarding uncertainty, market pricing, benefit computation, and resource substitution.

Both types of DC-OPF options use Power Transmission Distribution Factors (PTDFs or shift factors). GED's concept of a "true" DC-OPF versus a "PTDF-based" model is inaccurate and misleading. (See, GED OB at 26-28.) Both types of options use the DC-OPF and both types of models use PTDFs. The DC-OPF with variable shift factors computes shift factors every hour. The DC-OPF with fixed shift factors computes shift factors once at the beginning of each year.

If there are no transmission additions or transmission outages, the shift factors are relatively constant throughout the year and do not need to be recalculated. The impact of generator availability on the shift factors is substantially less than the transmission availability and is usually ignored. Hence, using variable shift factors was not necessary for the TEAM and DPV2 studies, since the transmission system was held constant throughout the year, and transmission outages were not modeled due to lack of outage data. Most DC-OPF models have the capability to use either fixed or variable shift factors, including the two models used by the CAISO for economic transmission evaluation.

The concept of mandating a DC-OPF with variable shift factors is not appropriate and would unnecessarily limit the scope and uncertainty analysis of the study at this time in the evolution of models, analytical techniques, and computer capabilities. Since the computer execution time required with variable shift factors is at 10 to 100 times as long,[7] and since the DC-OPF with variable shift factors requires considerably more user intervention to resolve non-convergence

[7] At the CAISO, experience has shown that using variable instead of fixed shift factors increases run time by a factor of roughly 10 times. If one compares the execution time that GED provided for their DC-OPF with variable shift factors (or 5 hours per week), the execution time is over 100 times as long. (Tr. 298:1-3.)

issues,[8] forcing the analyst to use a DC-OPF with variable shift factors unnecessarily limits the number of hours and the number of scenarios the analyst can perform to understand the uncertainty of forecast economic benefits. This trade-off should be left to the analyst and not made *a priori*.

A. Reliance "Exclusively" on Transportation Models is Inconsistent with TEAM

Several parties argued that the transportation model, by itself, is an acceptable methodology for evaluating the economic benefits of certain proposed transmission expansion projects. The CAISO disagrees with this assertion since the transportation model fails to model physical flows or produce nodal prices.[9] The CAISO understands that SCE used a transportation model for its analysis of DPV2. Given the preliminary nature of the TEAM transmission requirement at the time SCE initiated its analysis, this action is understandable and acceptable. In fact, the CAISO validated the benefits of DPV2 by fully applying TEAM to reach its recommendation. However, the CAISO cannot, and will not, rely solely on an economic analysis performed *solely* with a transportation model in the future.

The CAISO Market Surveillance Committee (MSC), which is composed of individuals with worldwide-recognized expertise regarding economic and modeling issues, notes that there "are several potential difficulties with such simplified representations."[10] These difficulties include:[11]

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[8] Mr. Lauckhart testifies "what takes time in some of this, as you are probably aware, sometimes they don't converge because of the nature of the analysis. If they don't converge, then the analyst has to look at the 168 hours, how many of the hours didn't converge and find out why they don't converge and turn some capacity on for a capacitor so that we don't have low voltage and then rerun it". (Tr. 299:1-9.)

[9] PG&E has suggested that it may be appropriate to allow transportation models for assessment of intra-regional projects. (PG&E OB at 6.) The CAISO believes that a full network model should be used to evaluate all inter-regional, and *most* intra-regional, proposed transmission projects. There may some intra-regional projects where the investment is less than $20 million that can be adequately evaluated with an approach that does not employ a full network model. However, this type of study would be the exception, rather than the rule. Thus, where project costs require CAISO Board approval (greater than $20 million), the CAISO would continue to require use of a full network model.

[10] Exhibit 13, Attachment 17 at 6.

[11] *Id.*

- Disregard of Kirchoff's law thereby allowing power flows to be directed along preferred paths so that they bypass constraints that otherwise would be binding.
- By excluding nomograms and parallel flow restrictions, transshipment (transportation) models artificially increase the feasible region of flows.
- Derating capacities in an attempt to correct for the exclusion of nomograms and parallel flow can lead to too small a feasible region for injections, thereby artificially inflating production costs.
- The process of aggregation can distort the production costs and prices in a networked system.
- There is no guarantee that a zonal price calculated by an aggregated model will closely approximate the load-weighted average locational price that would be derived by a full network model.

GED argues if it can be demonstrated that "the absence of loop flow (determined through network-based or 'nodal' analysis) was not causing misleading results," then the results of a transportation model should be accepted. (GED OB at 7.) GED further testified "that its transportation model did not have the loop flow problems of concern to the MSC." (GED OB at 25.) As the MSC noted above, however, if the loop flows are eliminated in a transportation model through the derating of transmission links, the process can artificially inflate production costs and overstate the economic value of a proposed transmission line.

When one reads the MSC Report, Section 2.2 in its entirety, it is clear that a full network model is preferable. The MSC states, "we believe that, at a minimum, transmission benefits must be verified using a linearized (so called 'DC') load flow model of the high voltage under a range of possible fuel, load, hydrological, and equipment availability conditions."[12] The MSC does carve out one exception from the transmission modeling requirement of a "full network model." This exception is that if "computational experiments under a representative range of cost and demand conditions show that little bias results from using a simpler transshipment model," then a transportation model can be used.

[12] *Id.* at 7.

This "results comparison" does not only refer to the elimination of the loop flow issues focused on by GED, but also to the actual economic benefits. A full comparison must be made between the full network model and the transportation model and the resulting prices (nodal and zonal), cost-to-load, generator revenue and costs, and congestion costs, as well as the societal and CAISO Ratepayer and Participant benefits. The "results" the CAISO, the Commission and any other decision-maker should be most interested in are the economic results, not the loop flow constraints. No party in this proceeding has demonstrated that a transportation model will not result in any economic "bias."

In summary, if this demonstration can be made as a first step, the stochastic results of a properly-designed transportation model can be a valuable evaluation tool. The transportation model can potentially complement, but does not substitute for, the required full network analysis using a DC-OPF (with fixed or variable shift factors) or an AC-OPF. As such, the use of a transportation model *in conjunction with a physical transmission model* would be acceptable if it could be proved that the economic results for multiple cases are closely correlated.[13]

B. Imposing an AC-OPF Requirement For Certain Projects is Inappropriate

GED has suggested that the "parties must perform an AC-OPF analysis . . . for projects above a specific dollar threshold (e.g. if the project is expected to cost $500 million or more)." (GED OB at 35.) As noted above, the CAISO does not discourage any party from using an AC-OPF provided they can adhere to the other TEAM key principles. However, the CAISO believes that it is currently inappropriate for the CAISO or the Commission to consider AC-OPF as a minimum

[13] The MSC "believe[d] that [a] more prudent strategy for the CAISO to follow is to use a full DC-OPF model as the default network model." It also noted, however, that it would not rule out a transportation model *a priori*. The use of a transportation model would be limited to where "it can be demonstrated that an appropriately modified zonal model adequately approximates the behavior of the actual transmission network and resulting locational prices from the DC-OPF." This is consistent with the view of the CAISO that a transportation model can be used in conjunction with a DC-OPF to determine "the resulting locational prices."

requirement. The primary reason for rejecting AC-OPF as a minimum requirement is that it is currently not feasible to perform the appropriate analytical scope with an AC-OPF model in a reasonable amount of time.

The MSC stated succinctly that "the present state of algorithms and computational technology means that it is impossible for the foreseeable future to run combined unit commitment and AC optimal power flows for all hours in a planning horizon while considering a large combination of scenarios concerning load growth, fuel prices, hydrological conditions, generator and transmission outages and other potential uncertainties about future system conditions."[14] That is a very clear statement from the MSC. It is currently "impossible" to run an appropriate unit commitment with an AC-OPF and maintain the study scope that is necessary to understand risk and uncertainty. The MSC offers no qualifications or exceptions to this fact.

The current limitations associated with using an AC-OPF are also recognized by the Western Electricity Coordinating Council (WECC). The WECC set up a Production Costing Simulation Task Force (PCSTF) to evaluate market simulation models to perform economic transmission analyses in addition to other purposes. From a list of software vendors, WECC chose three software packages for further investigation. As Mr. Lauckhart correctly notes in his rebuttal testimony, GED, with their AC-OPF capability, was not short-listed.[15] In fact, none of the three short-listed models contained AC-OPF capabilities, but all three had DC-OPF (both fixed and variable shift factors) capability. The point here is that WECC and the transmission planning experts comprising the PCSTF also recognized that it is currently infeasible to use AC-OPF software to properly evaluate the economic viability of transmission expansion.

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[14] Exhibit 13, Attachment 17 at 5.

[15] Tr. 302: 23-28 [Mr. Lauckhart attributed GED's failure to be short-listed to be a result of their inability to "automatically read the SSG-WI data." This assessment is incorrect, since PLEXOS, one of the three short-listed models, also does not have the current capability to "automatically read the SSG-WI data."]

C. The CAISO Has Not Employed a "Simplistic" or Inaccurate Model

GED's zeal to protect its economic interests should not be an excuse for hyperbole and misstatements. GED, without support, has ignored basic facts regarding the capabilities of PLEXOS and impugned the CAISO's integrity in its advocacy of TEAM. The CAISO seeks to correct the record not to endorse PLEXOS, but rather to refute GED's apparent attempt to demonstrate unfounded limitations on certain DC-OPF applications in an effort to undermine the TEAM network representation requirement.

GED states that PLEXOS "does not reasonably consider generation unit commitment and dispatch" and "ignores non-linear factors (DC lines and phase-shifting transformers)." (GED OB at 18-19, fn. 44.) These statements are false. PLEXOS performs a sophisticated unit commitment and dispatch that optimizes all system constraints simultaneously, instead of a heuristically-driven approach that iterates between the resource schedule and the constraints until a reasonable commitment and dispatch have been developed.[16] The statement that PLEXOS ignores non-linear factors is also incorrect. In PLEXOS, this optimization is performed simultaneously with all other system constraints, rather than sequentially which is the algorithm used in many other software applications.

GED further suggests that the "Commission should keep in mind that the PLEXOS model cannot be used to perform stochastic analysis." (GED OB at 22, fn. 53.) This statement is erroneous. PLEXOS has full stochastic capability. All variables can be treated as stochastic distributions and modeled according, providing the appropriate stochastic and correlation data are available. PLEXOS is also capable of generating stochastic time series by using scenarios, Monte-

[16] Perhaps some of the confusion is due to the fact that the SSG-WI data used for the DPV2 study did not contain the data necessary to perform unit commitment. This data would normally include ramp rates, minimum up- and down-times, and multi-point heat rates or input / output curves. Since PLEXOS did not have these data available to the model for either the TEAM or DPV2 study, unit commitment was not performed, although PLEXOS has the ability to do so.

Carlo, autocorrelation, Brownian Motion with Mean Reversion, and externally-derived stochastic series.

GED concludes that PLEXOS is a "simplistic model." This is incorrect. A "simplistic" transmission model is one that models only economic, and not physical, transmission flows. As discussed above, PLEXOS is capable of employing a DC-OPF solution with either variable, or fixed, shift factors.[17]

Finally, GED also appears concerned that Mr. Toolson influenced the CAISO to select the PLEXOS model. (See, e.g., GED OB at 17.) These concerns are unwarranted. The decision to license PLEXOS was made by CAISO staff. The CAISO was fully aware of alternative models, including GED's model, since one of the primary CAISO evaluators had worked for several years at Henwood Energy and used their market simulation software extensively. In fact, that individual is currently employed by GED again.[18]

III. THE COMMISSION SHOULD ADOPT THE CAISO'S REBUTTABLE PRESUMPTION RECOMMENDATION

As noted in the CAISO's opening brief, this proceeding offers the opportunity to enhance the regulatory process supporting the economic evaluation of transmission projects. At a minimum, the adoption of the TEAM principles will assist in harmonizing the showings expected at both the CAISO and the Commission. PG&E correctly observed in its opening brief that the CAISO will continue to discharge its statutory responsibilities to evaluate the economics of transmission projects under the standards set forth in the CAISO Tariff and pursuant to its own accepted principles. By

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[17] As also discussed above, GED uses a unique naming system for these two capabilities – (a) "true DC-OPF"; or a (b) "PTDF-based model." This naming convention is inaccurate on several counts. First, both models use a DC-OPF. One uses it to determine the Power Transfer Distribution Factors (PTDFs) for all hours in the year, and the other uses the DC-OPF for the first hour of the year. Second, both models use PTDFs. Again, in one case the PTDFs are determined every hour, and in the other situation, the PTDFs are determined for the first hour and held constant throughout the remainder of the year. The more accurate naming convention is: (a) DC-OPF with variable PTDFs; or, (b) DC-OPF with fixed PTDFs.

[18] Tr. at 69:28-70:7.

expressly accepting the TEAM principles, the Commission can ensure both that proponents will not be required to make divergent showings at the CAISO and Commission and that the CAISO will not be compelled to perform its own independent study.

SDG&E, PG&E and BAMx explicitly advocate the Commission go further. Those parties support granting deference to the CAISO's economic assessment of a transmission upgrade as a means of eliminating duplicative regulator review and harmonizing CAISO and CPUC policies. SCE, on the other hand, appears to express a concern that granting deference would confuse the CAISO role with that of the applicant. SCE's citation to CAISO Tariff Section 3.2.1.1, which requires the project proponent to make a good faith effort to obtain all necessary approvals, misses the point. The issue here is how the Commission will review the application for that approval and what proof can be marshaled to establish an element of the applicant's right to such approval.[19] More importantly, SCE's concern that the CAISO will somehow usurp the role of the applicant is unfounded. To the extent adoption of the TEAM principles by the Commission encourages conformance with TEAM principles by applicants for purposes of CAISO review, the need for the CAISO to perform independent economic assessments will be largely obviated. In this circumstance, the CAISO will verify the validity of the applicant's conclusions. The CAISO would support its assessment at the Commission, if necessary, but it would still be the sufficiency of the applicant's underlying showing that is tested during the CPCN proceeding.

DRA and TURN advocate the status quo. TURN simply states that "there are compelling legal and practical reasons why this Commission cannot and should not simply 'defer' to the

[19] As noted by the CAISO in its opening brief, a finding by the CAISO that a project is economically efficient does not necessarily equate to a finding of "need." The Commission remains free to dictate the standards by which it discharges its statutory obligation under Public Utilities Code section 1001. However, under the CAISO's proposal, the Commission would have to explain why the presumption was overcome or what other criteria warranted rejection of the application notwithstanding the economic efficiencies anticipated from the upgrade.

CAISO, which is after all a private corporation, not a governmental agency." (TURN OB at 5.) The CAISO's rebuttable presumption proposal addresses all of these purported compelling legal and practical reasons – all due process protections are preserved. Moreover, TURN contends the Commission should not afford any single party's position "preferred" status. (*Id.*) TURN's position, however, ignores that the CAISO is the only entity likely to participate in the CPCN proceeding that is under a state and federal obligation to plan the transmission system and determine for itself whether a proposed transmission upgrade promotes economic efficiency. It is, in part, based on this reality that the Commission opened this proceeding and the CAISO's rebuttable presumption proposal is consistent with its statutory authority.

IV. CONCLUSION

Based on the foregoing, the CAISO urges the ALJ to prepare a proposed decision that (1) finds the DPV2 transmission project economically efficient and (2) adopts or endorses as minimum requirements for future economic assessments, the TEAM principles outlined herein.

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Respectfully Submitted:

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CERTIFICATE OF SERVICE

I hereby certify that I have served, by electronic and United States mail, a copy of the foregoing Reply Brief on Behalf of The California Independent System Operator to each party in Docket Nos. A.05-04-015 and I.05-06-041.

Executed on March 24, 2006 at Folsom, California.

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