Comments of the California Wind Energy Association on the California ISO Conceptual Statewide Transmission Plan

February 17, 2011

California Wind Energy Association (CalWEA) appreciates this opportunity to comment on the California ISO's (CAISO's) 2010/2011 Conceptual Statewide Transmission Plan, Revised February 1, 2011. CalWEA has been very supportive of the CAISO initiative to reform its Regional Transmission Planning process to address the need to develop transmission in its footprint in anticipation of the renewable generation development required to meet California's RPS goals.

CAISO's 2010/2011 Conceptual Statewide Transmission Plan, represents a disappointing effort that fails to meet the spirit or objectives of the Revised Transmission Planning Process (RTPP). CalWEA, therefore, is submitting these comments to identify three key flaws in the draft plan, and to request that the CAISO take corrective steps to revise the draft with a renewed focus on meeting RTPP's objectives.

First, the draft plan fails to comply with either the spirit or fundamental objectives of the RTPP, which was envisioned as a major, forward-looking, overhaul of the CAISO's transmission planning process. The central element of that reform was least regrets planning to identify critical cost-effective backbone "policy" upgrades to the transmission network to facilitate the integration of renewable generation objectively, and without preference to favored zones. The CAISO enthusiastically endorsed the least regrets approach to address the need for "an unprecedented amount of additional transmission over the next decade" in order to meet the 33 percent RPS by the 2020 target and to "take a more comprehensive, holistic approach to transmission planning and approval, rather than the current project-by-project approach," while minimizing the risk of stranded transmission investment.[1]

For these reasons, the CAISO repeatedly assured California stakeholders, regulators and the FERC that the least regrets model would form the cornerstone for all new transmission plans. Indeed, FERC accepted the CAISO's RTPP tariff on the basis of promises that the CAISO will use a "series of engineering sensitivity studies . . . to identify a common set of transmission elements that are needed under the renewable scenarios most likely to occur."[2] Moreover, the CAISO promised FERC that it "will share with stakeholders the complete scenarios examined, with an explanation as to the underlying assumptions for each one and the rationale for proposing particular transmission elements in Category 1 and Category 2."

The draft plan does neither. The draft offers no evidence that any of the transmission elements proposed in it emerged from a "series of engineering sensitivity studies" to identify new upgrades. The plan does not appear to identify a single new transmission project, but instead collected a number of previously identified projects proposed by the Participating

[1] California Independent System Operator Corporation, Revised Transmission Planning Process Proposal, Filed June 4, 2010 (FERC Docket No. ER10-1401-000).

[2] *California Independent System Operator Corp.*, 133 FERC ¶ 61,224, PP 191-92 (2010).

Transmission Owners (PTOs) and Publicly Owned Utilities (POUs). The CAISO has not provided stakeholders with "the complete scenarios examined" to select these projects, nor has it "explain[ed] the underlying assumptions for each one." The CAISO has, therefore, neither met its commitments, nor produced a plan that achieves the regional, least regrets objectives of RTPP.

Second, the failure to follow the least regrets approach is most clearly revealed by the failure of the draft plan to address one of the most obvious and pressing needs for backbone transmission in the state—transmission to eliminate north-south constraints and facilitate the delivery of new renewable generation mostly located in the south to consumers in the north. Since the CAISO has failed to share the details of the scenarios that it examined in developing its draft plan as it promised to do, there is no way to tell why the CAISO ignored these glaring needs.

The CAISO appears to have proceeded down this erroneous path because it focused on a series of single predetermined basecases studied separately to develop the individual projects in its conceptual plan. The CAISO explains at page 2 of the Draft Conceptual Plan that:

> This conceptual statewide plan reflects the ISO's conceptual vision regarding the transmission upgrades and additions that may be needed within the ISO footprint based on, among other things, the ISO's base case assumptions, studies of several sensitivity scenarios, other studies and analyses that the ISO has previously discussed with stakeholders at the December 2, 2010 public meeting and with its Board of Governors at their December meeting, as well as input from the CTPG process.

This approach is contrary to the principles of least regrets and regional transmission planning, which require developing several well-conceived sensitivity scenarios to be developed and treated as "independent basecases" with transmission plans separately developed for each. The development of a transmission solution for each independent basecase would also be based on a framework that is different from the traditional transmission planning framework where transmission solutions to deal with system needs are mainly based on local upgrades. Following a traditional approach of developing local upgrades, it will be very difficult to develop common transmission components that form a "least regrets transmission plan." Instead, in a least-regrets planning framework, every individual basecase is addressed using, to the extent practicable, a regional transmission plan that may appear to be more costly than a local solution. Once the regional solution for each of the "separate basecases" is reached in this fashion, the cross section of regional transmission solutions will constitute the regional least regrets conceptual transmission plan.

Third, the CAISO's draft plan, summarized in its table reproduced on the following page, fails to identify a single new "policy" upgrade, which was a major goal of RTPP. The transmission elements in the CAISO's plan for the most part consist of previously considered transmission projects that were intended to transmit power from renewable or other generation resources, some located in peripheral portions of the grid. And while the plan does include a few major backbone projects, not one of those is a new policy upgrade. Instead, each of them is a line that has been in development by PTOs for some time – several

years in some cases. As a result, the draft plan offers no opportunity for new PTOs to contribute potentially more economic solutions to California's long-range transmission needs, which was another important goal of the RTPP. While this approach may provide a boost for the existing transmission plans of current PTOs and POUs, it forecloses new entry for true policy upgrades that lie at the heart of least regrets planning.

Balancing Authority	Area	Transmission
ISO	San Diego	Sunrise Powerlink
ISO	S. Nevada-East of Lugo area	Coolwater - Lugo 230 kV line
ISO	S. Nevada-East of Lugo area	EITP (Eldorado - Ivanpah 115 to 230 kV conversion
ISO	S. Nevada-East of Lugo area	Eldorado - Lugo 500 kV line loop-in to the new Pisgah 500 kV substation and Pisgah - Lugo 230 kV to 500 kV conversion
ISO	East of Palm Springs area	New Colorado River and RedBluff 500 kV substation, PVD 1 loop-in to Colorado River and RedBluff, and second Colorado River- RedBluff - Devers -Valley 500 kV line
ISO	East of Palm Springs area	West of Devers 230 kV reconductoring
ISO	Tehachapi area	Tehachapi Renewable Transmission Project
ISO	Path 26 area	Carrizo - Midway sections of Morro Bay - Midway 230 kV lines reconductoring
ISO	San Francisco Bay area	South of Contra Costa reconductoring
ISO	Path 15 area	Borden - Gregg 230 kV line reconductoring
ISO	Imperial County	Upgrades west of Mirage substation to increase transfer capacity on Path 42 and west of the Miguel 500 kV substation
ISO	San Joaquin Valley Area	Upgrades to increase utilization of Helms pump storage facilities for integrating renewable energy resources
LADWP	Tehachapi area	Barren Ridge-Haskell 230kV Lines
LADWP	Tehachapi area	Barren Ridge-Rinaldi 230kV Line (upgrade)
LADWP	Out of state	Southern Transmission System (IPP DC line) Upgrade
IID	Imperial County	Upgrades east of Mirage substation to increase transfer capacity on Path 42
IID	Imperial County	Midway to Bannister Transmission Project
IID	Imperial County	Dixieland-Imperial Valley Substation Transmission Project
IID	Imperial County	Highline Substation to El Centro Switching Station (ECSS) Transmission Project
IID	Imperial County	Imperial Valley Substation (IV Sub) to El Centro Switching Station (ECSS) Transmission Project.

Moreover, the draft plan fails to show how it will provide access to new renewable resources in a competitively neutral way that minimizes the risk of over-building and stranded investment. Indeed, several of the elements in the plan have obtained assurances from FERC for abandoned plant cost recovery in the event the renewable projects behind them fail to materialize. While the abandoned plant incentive serves important policy goals in appropriate circumstances, the point of least regrets planning is to identify new high-priority backbone transmission lines that are likely to be used and useful for utility service under a variety of development scenarios. Adhering to this principle in the RTPP study process would, therefore, greatly reduce (if not eliminate) the need for an abandoned plant backstop for important elements of the plan.

Beyond these key conceptual flaws with the draft plan, it appears to suffer from several technical flaws. For example, CAISO has not verified whether the transmission projects identified in the table above can even fit together in a coherent "plan," or comply with NERC and WECC planning and operating standards. For example, we are concerned that the "S. Nevada-East of Lugo area" project described as "Eldorado - Lugo 500 kV line loop-in to the new Pisgah 500 kV substation and Pisgah - Lugo 230 kV to 500 kV conversion," may not satisfy reliability criteria without upgrading the existing 230 kV lines from Eldorado to Pisgah to 500 kV lines.

Finally, the CAISO's rationale for the plan it has presented appears to be misguided. The CAISO explains that (page 1):

> The ISO's own analyses indicate that this ISO conceptual statewide plan includes enough new transmission additions, both within the ISO footprint and in the footprints of certain other California BAAs as discussed below, to accommodate the addition of 53.7 TWh of renewable energy to serve California load by the year 2020. (Draft Conceptual Plan, p. 1, footnote omitted.)

This position indicates that a set of transmission projects that mainly serve a limited set of renewable development projects (and areas) should dictate where renewable generation should be developed in and around the state. This is a case of "letting the tail wag the dog" and flies in the face of Least Regrets principles. Such an approach to the development of "policy-driven" transmission projects will lead to: (a) development of more costly and potentially more environmentally harmful renewable resources in the limited development areas served by these "pre-ordained" transmission projects, and (b) transfer market power to renewable developers in these limited development areas. Both these outcomes can be expected to potentially and significantly raise the cost of meeting the state's RPS goals, rather than identifying a transmission plan that is common to many potential renewable energy scenarios that would open the market to multiple possible outcomes.

Given its failure to meet FERC's expectations of the RTPP, we strongly recommend that the CAISO return to the drawing board to re-conceive its conceptual transmission planning process and develop a new plan.