

**California Transmission Planning Group (CTPG)
Technical Study Team Response to the
January 30, 2012, Comments of
Clean Line Energy Partners (Clean Line)
and Centennial West Clean Line (Centennial West)
on the CTPG's Draft 2011 Statewide Transmission Plan**

Comment:

California, in line with the state's 33% by 2020 Renewable Portfolio Standard (RPS) goal, should pursue a broad range of opportunities to increase the share of renewable resources in its overall generation portfolio in an efficient and cost effective manner. With this goal in mind, California should take full advantage of low-cost imported renewable energy from other Western states and the transmission infrastructure designed to facilitate these imports.

CTPG Technical Study Team Response:

The CTPG Technical Study Team agrees with Clean Line and Centennial West that out-of-state renewable resources will be an important part of the mix of renewable resources that meet California's 33-percent RPS requirement in 2020. All seven of the renewable resource development portfolios included in the CTPG's 2011 study work include out-of-state renewable resources. (See Tables 9 through 15 in the CTPG's draft 2011 statewide transmission plan.)

Comment:

Developing high potential transmission corridors as promulgated in this draft plan is a good first step in the important process of identifying both the best resources and the best transmission options available to integrate those resources. It is essential, however, that the 2012 CTPG planning cycle refine and advance this process of identification. If future plans continue to focus on transmission upgrades, especially only upgrades within California, while leaving transmission corridor analysis at a high level, the entire planning effort runs the risk of providing sub-optimal, contradictory results.

As an example, the current scenarios look at a select group of new renewable generation, almost all of which is located in Southern California. The scenarios are then modeled to determine which potential upgrades can mitigate reliability standards violations created by this new generation. If, however, the high potential corridors eventually provide a link to different generation that is less expensive and offers diversity benefits, the current process would not identify the upgrades that would mitigate any violations created by integrating this new, "corridor-accessible" generation. If potential transmission projects in the high-potential corridors, and the generation they link to, are incorporated into the same studies as the current high-and-medium potential upgrades, a more complete picture emerges. Even if some corridor projects are in the early stages of development, the draft Plan has a 10 year horizon and

acknowledges the merits of planning for such projects now. The potential benefits they offer in a future that may include increased RPS and GHG reduction goals, or renewable energy exports, should not be overlooked.

CTPG Technical Study Team Response:

The CTPG Technical Study Team agrees with Clean Line and Centennial West that further “corridor analysis” is warranted. Section 1.3.3 of CTPG’s Draft 2011 Statewide Transmission Plan states that

“...the Pacific Northwest Corridor, the Northwest Nevada Corridor and the Southwest Corridor have been selected as high potential transmission corridors. CTPG expects that these corridors will be the subject of further study to determine whether the development of new transmission within these corridors would be an economical and environmentally sound means of supporting California’s 33% renewable requirement.”

Clean Line and Centennial West assert that the CTPG’s “current [study] process would not identify the upgrades that would mitigate any violations created by integrating...new, ‘corridor-accessible’ generation.” The CTPG Technical Study Team disagrees. The CTPG’s study methodology explicitly modeled, for each of the seven renewable resource development portfolios, all forecast renewable generation located along and/or injecting power at the out-of-state terminus of these corridors. Whether reliability standard violations on existing facilities within or along these corridors are identified depends, in part, on the amount and type of renewable resources in the seven renewable resource development portfolios used in the CTPG’s 2011 study work. It also depends on the location of fossil-fired generation which is decremented to accommodate the output of these renewable resources.

Even in the West of River Import Scenario with 50% Palo Verde Injection (scenario 9) – the scenario with the largest amount of renewable generation in the Arizona/New Mexico areas¹ – no reliability-standard violations along the West of River path were found. The CTPG Technical Study Team welcomes any information that Clean Line and Centennial West can provide that would indicate (1) it is reasonable to assume still greater amounts of new renewable resources will be built along and/or injecting power at the out-of-state terminus of the “high potential” transmission corridors identified by the CTPG; and (2) the locations, amounts and technologies of renewable resources modeled by the CTPG to date that are unlikely to be built as a result of still greater amounts of new renewable resources being built along and/or injecting power at the out-of-state terminus of the “high potential” transmission corridors.

Comment:

¹ The renewable resource development portfolio modeled for this scenario includes a total of 4,924 MW of new installed renewable generation capacity in the Arizona/New Mexico area, 290 MW in Arizona, 32 MW in New Mexico, 3621 MW injected at the Palo Verde substation, and 981 MW injected at the North Gila substation. (See Table 15 in the CTPG’s Draft 2011 Statewide Transmission Plan.

Given the uncertainty associated with some projects included in the current scenarios, and the short and long term benefits of other resource areas not contemplated in this plan, it is imperative the CTPG build on its high potential corridor analysis by modeling additional planned transmission and generation facilities. These facilities are already being studied by other regional planning bodies and merit inclusion in California's analysis of possible energy futures. Only when all available options are considered can California choose the best path forward.

Technical Study Team Response:

Clean Line and Centennial West state that there is “uncertainty associated with some projects included in the current scenarios.” The CTPG Technical Study Team does not know to which “projects” Clean Line and Centennial West are referring, and is not certain whether these are transmission projects or generation projects. It would be helpful if Clean Line and Centennial West could be specific as to the “projects” to which they are referring and provide details as to the nature of the referenced “uncertainty” – that is, there is some level of “uncertainty” associated with virtually all planned transmission and generation projects included in the CTPG’s 2011 studies and without greater definition as to the level of “uncertainty” being raised by the comment, the CTPG Technical Study Team cannot fully evaluate the comment.

Clean Line and Centennial West state that there are “short and long term benefits of other resource areas not contemplated in [CTPG’s draft 2011 statewide transmission] plan.” The CTPG Technical Study Team is unclear as to exactly where the referenced “other resource areas” are, and what the asserted “short and long term benefits” of these areas are. Again, it would be helpful if Clean Line and Centennial West could be specific as to the location of these areas and the nature of the “short and long term benefits” Clean Line and Centennial West believes were not considered in the CTPG’s studies.

Clean Line and Centennial West advocate that “CTPG build on its high potential corridor analysis by modeling additional planned transmission and generation facilities;” facilities which Clean Line and Centennial West indicate “are already being studied by other regional planning bodies.” The CTPG Technical Study Team requests that Clean Line and Centennial West indicate what the referenced “planned transmission” is “additional” to, provide a list of these “additional planned transmission” facilities, and provide support for why the CTPG should model these particular “additional planned transmission” facilities instead of the many other planned transmission projects. This information may be helpful in developing the CTPG’s future work plans.

Similarly, the CTPG Technical Study Team requests that Clean Line and Centennial West indicate what the referenced “planned...generation” is “additional” to, provide a list of these “planned...generation” facilities, and provide support for why the CTPG should model these particular “additional planned...generation” facilities instead of the many other planned generation projects. This information would be helpful in developing the CTPG’s future work plans.

The CTPG Technical Study Team asks that Clean Line and Centennial West indicate which “regional planning bodies” are studying which specific “additional planned transmission and generation facilities,” and provide an explanation as to why the planned transmission and generation facilities studied by other regional planning entities should not be studied. This information may prove useful in the development of the CTPG’s future study work.

Finally, Clean Line’s and Centennial West’s reference to “all available options” appears to suggest that Clean Line and Centennial West are recommending that the CTPG undertake an evaluation of a broad range of wires- and non-wires alternatives for mitigating identified reliability standard violations. This range could include transmission and/or generation infrastructure solutions, pre-contingency generation redispatch (congestion management), and contingency-based generation tripping. The CTPG requests that Clean Line and Centennial West confirm the CTPG Technical Study Team’s understanding. The CTPG Technical Study Team notes that, to date, the CTPG has generally not undertaken an assessment of different mitigation alternatives. Such evaluations could however be considered for the CTPG’s future study work.