

July 6, 2007

Subject: WECC/TEPPC Comments on DOE Draft National Interest Electric Transmission Corridor Designations

TO: U.S. Department of Energy

FROM: WECC Transmission Expansion Policy Planning Committee (TEPPC)

TEPPC appreciates the opportunity to provide comments on the U.S. Department of Energy's (DOE) Draft National Interest Electric Transmission Corridor (NIETC) Designations, dated April 26, 2007. TEPPC is not advocating for or against the draft corridors. Rather, TEPPC's comments pertain to (1) the ongoing role of the Transmission Expansion Policy Planning Committee (TEPPC) to facilitate coordinated transmission planning in the west and intention to work with DOE in annual congestion updates and future congestion studies; (2) follow-up analyses that DOE may expect of entities in response to the draft designations; (3) limited analysis for NIETC and definition of congestion; and, (4) specific questions about DOE's interpretation and application of planning criteria, factual questions about location of generation, accuracy of maps, and continued concern from WECC's October 10, 2006 *Comments on DOE's National Electric Transmission Congestion Study, August 2006*.

(1) Ongoing Role of TEPPC

TEPPC provides impartial and reliable data, public process leadership, and analytical tools and services to help meet the Western Interconnection's needs for regional economic transmission planning and analysis. TEPPC's members represent the spectrum of stakeholders in the west including all geographic sub-regions, state commissions, utilities, generators, consumers, and the environmental perspective.

TEPPC has assumed the responsibility for, and looks forward to working closely with DOE on annual updates of the initial western congestion assessment study performed in 2006 by the Western Congestion Assessment Task Force (WCATF) and on the next triennial study in 2009.

(2) Congestion Analysis in Designated NIETC Area

Presuming DOE designates the broad Southwest NIETC area as proposed in the Draft Designations or some narrower, more defined corridor or corridors, what follow-up steps (e.g., studies, assessments, progress reports) will DOE expect from sub-regional planning groups and/or from TEPPC? For example, will DOE expect just progress reports, as in the annual updates, of *already proposed* projects in the corridor(s) that would relieve congestion? (This would be in addition to updates regarding major assumptions in these areas, e.g., load growth, new plants, retired plants.) Or in addition, will DOE expect studies and assessments of *new* proposals to relieve identified congested areas? Will DOE look to sub-regional planning groups and TEPPC as a catalyst or advocate for these projects or act in some other capacity?

(3) Limited Analysis for NIETC and Definition of Congestion

TEPPC is concerned with the limited technical analysis used by DOE, lack of clarity in the definition and measurement of congestion, and lack of public vetting of the data and interpretation of analyses used by DOE.

DOE cites and appears to rely on three key pieces of information in support of the draft NIETC. These are the data provided by the WCATF for the August 2006 DOE National Electric Transmission Congestion Study report to Congress, analyses by the California ISO, and information on denied transmission requests from the Western Area Power Administration. The historical flow and transmission modeling information provided to DOE by the WCATF paints an unclear picture of transmission congestion in the proposed NIETC. WCATF performed comparisons of the various congestion metrics for the major paths in the draft NIETC and other paths in the western interconnection and the data does not support an unequivocal finding of congestion on paths within the draft NIETC as compared to other paths within the western interconnection. The CAISO Branch Group data for the 2004 to 2006 noted in Table IX-2 shows wide annual swings in the six transmission paths. For example, between 2005 and 2006 the day-ahead market congestion revenue on the BLYTHE_BG path dropped 99 percent and on the ELDORADO_BG path hour-ahead market congestion revenue dropped by 81 percent. There does not appear to be a clear pattern over a number of years. With respect to requests denied by Western Area Power Administration, DOE does not address the amount of real-time capacity available by Western on their posted paths. Denial of long term transmission service could be a contractual issue rather than a physical issue. More importantly, DOE should not conclude significant and recurring congestion occurs for NIETC designation purposes without further detailed analysis of historical flows and Available Transmission Capacity (ATC) as previously recommended by TEPPC.

As TEPPC has previously commented to DOE, the WCATF found considerable inconsistency in the ranking of congestion areas using the existing congestion metrics. The studies that WCATF compiled for the first congestion study were not designed with NIETC criteria available. Ideally, congestion studies will be designed to address the NIETC criteria and metrics adopted by DOE. DOE should have clear, objective, and measurable criteria to ensure studies are successful in meeting the objectives. TEPPC believes the key to being successful is developing consensus on criteria and how to measure “congestion” and “transmission constraints.” TEPPC recommends DOE provide a clear and concise definition of congestion that includes a method for measurement.

TEPPC is concerned that DOE might rely heavily on data from transmission service providers that have not been publicly vetted and reviewed by a wide public audience. TEPPC recommends that DOE sponsor a western interconnection-wide forum to critique all data used in DOE analysis prior to a final NIETC designation. The forum should address the technical analysis used by DOE, clarity in the definition and measurement of congestion, and public comment on the data and interpretation of analyses used by DOE.

(4) Interpretation and Application of Planning Criteria; Factual Questions about Location of Generation; Accuracy of Maps; Continued Concern from WECC’s

October 10, 2006 Comments on DOE's National Electric Transmission Congestion Study

Before designating a NIETC, TEPPC recommends DOE resolve the following questions and issues:

(a) Planning Criteria

TEPPC seeks to understand DOE's assessment that single contingencies are more critical than double contingencies for Southern California (see page 4 of DOE Findings & Conclusions and page 25917 of the Federal Register) stating loss of a single path (N-1) might cause a loss of 1500 MW and loss of two lines on South of Lugo (N-2) might cause loss of 500 to 1000 MW. What is the reasoning and analysis behind this counter-intuitive result?

(b) Generation Plants

The Arizona counties of Yuma, La Paz, and Maricopa are shown as resource zones for generation, but half of the generation plants cited in the DOE report are in other counties in Arizona (see Table IX-4). No generation from Yuma County is included in the generation plants listed and half of the generation plants cited as being independent merchant plants are generation plants owned by vertically integrated utilities.

(c) Accuracy of Map

The Mead-Perkins 500kV line, an existing major component that is part of WECC Path 49 (East of River) is missing from the map (see Figure IX-6). Is the map intended to show existing facilities or existing and future facilities? A significant number of 500kV substations in the Arizona area that do not exist and are not planned are shown on the map.

(d) Comments that follow from WECC's October 10, 2006 Comments on DOE's National Electric Transmission Congestion Study

TEPPC provided comments to DOE on the August 2006 report in a letter to DOE on October 10. TEPPC noted a number of technical items that TEPPC believes should be addressed or corrected prior to using the report as the basis for NIETC designation. TEPPC wishes to emphasize the need for addressing and implementing the recommended issues prior to finalizing the report and making final NIETC designation. One specific previously submitted comment that requires immediate attention is Figure 4-6 in the DOE August 2006 report. This figure was not part of the WCATF submittal to DOE but was used in the report by DOE. The WCATF had evaluated this graph and decided that it should not be included in the final submittal to DOE due to problematic comparison of data (the system configuration is different for the cases in the comparison). Without a thorough explanation of system configurations, comparing 2004 actual to 2008 and 2015 modeling is misleading. Lastly, as the WCATF noted in the limitation of the analysis it

performed, the WCATF focused its efforts on the identification congestion on existing paths. The WCATF did not provide an analysis of the economic benefits of relieving this congestion or the consumer and generator impacts.