California Transmission Planning Group (CTPG)
Technical Study Team Response to
January 18, 2012 Comments of
Modesto Irrigation District (MID)

Comment:

In Section 3.5 (WECC Seed Cases), it is stated that new renewable resources that are to be actually located on the distribution system were being modeled in the base cases as a load reduction on a transmission substation. This probably won't be accurate for most of the new renewable sources that are typically located in remote or rural areas where the distribution and transmission substation loads are small, and hence most of the renewable source megawatts will therefore flow from the distribution lines up into the transmission station and out onto the transmission system lines.

CTPG Technical Study Team Response:
The CTPG Technical Study Team agrees with MID's basic point that where there is a relatively high concentration of distribution-level renewable generation in an area with relatively low loads (such as in "remote or rural areas"), energy from renewable resources in excess of the local loads will "flow from the distribution lines up into the transmission station and out onto the transmission system lines."

However, based on the methodology used by CTPG to distribute the distribution-level renewable resources across the various transmission substations, CTPG does not believe the above-referenced situation would occur. The methodology distributes the distribution-level renewable generation across all transmission substations in proportion to the load served from those substations. Since the aggregate amounts of distribution-level generation are much smaller than the aggregate amount of load, CTPG's modeling would not result in any "flow from the distribution lines up into the transmission station and out onto the transmission system lines."

See footnote 10 in CTPG's final 2011 Phase 2 Study Report for a simple example of how distribution-level renewable resources were distributed across the various transmission substations. This report is available at *www.CTPG.us*.