## Wellhead Comments on 2012 – 2013 TPP Policy Portfolios

Wellhead appreciates the opportunity to comment on the portfolios that will be a primary driver in the 2012-2013 TPP process to identify policy driven facilities. In summary, the portfolios identified continue to have a major flaw in that they do NOT reflect current cost and commercial interest information as to the competitive viability of significant solar PV resource areas in the Central Valley of California.

For example, approximately 90,000 acres of land with attractive insolation characteristics owned by the Westlands Water District near Fresno is "drainage impacted" and thus is no longer usable for prime agricultural production. These lands are predominately outside of the Westlands CREZ and thus do not appear to be represented in the portfolios proposed for use in the 2012-2013 TPP.

Wellhead also notes that this area was previously identified in the RETI and in the current RPS calculator as having a significant advantage from an environmental perspective as the land is previously disturbed and continues to be disturbed as it is used periodically for dry-land farming (i.e. low value crops that can survive based only on rainfall in some years).

Additionally, existing transmission facilities in the area of these lands are easily accessible and there are little or no system upgrades (beyond the basic interconnection) that would be required to accommodate significant amounts of generation at these locations.

As a result, there has been high solar PV development activity in the WWD. Nevertheless, the RPS calculator reports that there is little "commercial interest" in the WWD. Why? Because a project is required to have both a PPA and a data adequate permit filing to be recognized in the "commercial interest" category of the RPS.

But few if any projects were awarded PPAs in the WWD area in the RPS RFO because the CAISO interconnection process produced wildly inflated interconnection cost estimates. Therefore, real commercial interest in an environmentally prime solar province was totally ignored for RPS purposes. The CPUC and the CAISO need to revise their planning process to include interconnection requests when determining the location of commercial interest for the purpose of future transmission plans. It should be noted that independent engineering studies have shown at least 550MW of available transmission capacity is available without upgrades in the WWD. The is another 300MW of capacity that could be located in Tulare County which would not need upgrades. And a \$10 million investment in the Borden-Gregg line would enable 800MW in Fresno county. Yet, this nearly 1700MW of existing capacity in the Central Valley requiring little or no upgrades was hidden from procurement managers, and good projects were not selected for PPAs, because of the ISO's interconnection study methodology. The ISO has indicated it will be remedying the above problem with changes to the interconnection process implemented as part of the TPP-GIP reform to inform developers and procurement decision-makers what would fit on the existing transmission system. However, it is imperative that the CPUC make itself aware of existing capacity and the

amount of commercial interest in the Central Valley as evidenced by historical interconnection requests when developing its transmission planning scenarios.

Wellhead understands that historically, the Central Valley was not viewed as commercially viable because forecast costs of PV technologies were very high, with the result that only areas with the highest available solar radiation were possibly competitive. THAT IS NO LONGER THE CASE. There seems to be clear evidence of this change in the technology selection of projects in recent competitive solicitations by LSEs. This development also is evidenced by solar thermal projects that have converted to PV.

The fact that PV has experienced significant reductions in its cost has also allowed the areas in which PV can compete to greatly expand. For the TPP, this means that PV projects do not necessarily need to go to the desert where new high voltage transmission lines must be built.

To fully understand the implications of this, we refer the CAISO to a very recent *Statement before the Senate Finance Subcommittee on Energy, Natural Resources, and Infrastructure* on March 27. 2012, by Dr. Benjamin Zycher of the American Enterprise Institute which pointed out a number of key conclusions regarding transmission for renewables including:

- A survey of transmission studies for wind project conducted in 2001 to 2008 found that the median transmission cost was \$15 per mWh.
- An analysis by the CPUC for 33% renewables suggested a \$12 billion of investment in new transmission lines would be required with a result cost of \$6.39 per mWh.

Central Valley projects, most of which have insolation characteristics that are within 10% of projects in the desert, and needing no or only minor network upgrades, can be now be built on a cost basis that ranges from competitive to superior compared to projects in the desert when avoided network upgrade costs of \$6.39 per mWh to over \$15 per mWh are considered.

Given the competitive to superior total costs of Central Valley PV projects, it is clear that the policy-driven portfolios need to be updated to include the WWD and other Central Valley solar PV areas as attractive renewable resources from both a total cost and commercial interest perspective.