

**Response of the  
California Transmission Planning Group Technical Steering Committee  
To Comments of DayStar Farms**

**January 15, 2009**

The California Transmission Planning Group (CTPG) expresses its appreciation for the Comments of DayStar Farms regarding the CTPG's Draft Study Plan as presented during the technical conference of December 17, 2009. The Technical Steering Committee is charged with the design and performance of the planning studies being performed by the CTPG and provides these responses to DayStar Farms' Comments. In addition to the responses provided here, the CTPG Technical Steering Committee advises DayStar Farms that many of the concerns and issues raised in DayStar Farms' Comments will be addressed more completely as the work of the Technical Steering Committee progresses. The responses provided below follow the organization of the Comments as submitted by DayStar Farms.

**DayStar Farms Recommendation 1: Change the CTPG renewable generation assumptions to be in line with the RETI CREZ findings and recommendations."**

The CTPG Technical Steering Committee interprets the Comments of DayStar Farms as suggesting that the findings and recommendations of the California Renewable Energy Transmission Initiative (RETI) should be directly imported into the CTPG study process. As DayStar Farms points out, CTPG's current study work is based on a quantity and pattern of renewable resource development different from the data used to develop RETI's Phase 2A conceptual transmission plan. Those differences reflect information provided by the CTPG members with retail load-serving obligations. The information provided by these CTPG members represents the renewable resource-procurement plans upon which each load-serving entity is currently relying to meet its respective renewable resource and environmental goals. These procurement plans – which to a significant degree are based on signed Power Purchase Agreements (PPAs) and interconnection queues – suggest that the actual quantities, mix and location of renewable resource additions will be somewhat different than what was developed by RETI.

The CTPG Technical Steering Committee believes that load serving entities' renewable procurement plans, at this stage of the development of renewable resources, provide a reliable baseline for determining the amount, type and location of renewable resource additions that will actually enter operations. The RETI estimates, being based on economically feasible renewable development potential, not on actual commercial interest in that potential, can be contrasted as an "optimistic case". In addition, the RETI studies were limited in their consideration of out-of-state renewable resource development, considering resource potential in British Columbia, Washington, Oregon, Nevada, Arizona, and Baja California. The data provided by the CTPG members allowed the consideration of resource potential to Idaho and Montana. The entities supplying renewable procurement plans to CTPG are listed in Attachment 1. The CTPG Technical

Steering Committee believes that use of the adjustments to the RETI findings is warranted in light of its members' experience, but as suggested by DayStar Farms' recommendation, further iterations of CTPG's work may well result in a greater synonymy between the RETI findings and CTPG's assessments as more experience with project development is gained.

**DayStar Farms Recommendation 2: The CTPG should be responsive to stakeholders outside the CTPG planning process.**

The CTPG fully agrees that its planning and study processes must be open and transparent. The CTPG is in the earliest stages of its formation and work and, as the work of the organization progresses, we fully expect to increase the level of stakeholder participation, collaboration and influence that will be incorporated into our planning processes and studies.

**DayStar Farms Recommendation 3: The CTPG planning process should include in their baseline Transmission Plan all of the projects submitted to the CAISO via the FERC approved 2009 and 2010 Transmission Planning Process Request Windows.**

The CTPG Technical Steering Committee will take this recommendation under consideration as its planning study progresses. At this point in time, however, the CTPG and the California ISO have not yet developed the protocols for integrating and coordinating our planning processes and studies. As noted previously, the CTPG is in the earliest stages of its work. We fully expect over time to resolve integration and coordination issues, taking into account recommendations of the kind made by DayStar Farms after consultation with stakeholders and the members of the CTPG, which includes the California ISO. For the moment, however, the CTPG Technical Steering Committee has chosen not to assume all of the transmission projects submitted through the California ISO's transmission planning process request window will get built and should therefore be included in CTPG's analytic baseline. Doing so could prejudice the extent to which the existing transmission grid can facilitate the development of renewable resources and, to the extent the existing transmission system is limiting, potentially masks an objective determination of where and what new transmission is needed. In addition, there are other transmission projects under consideration in transmission planning forums other than the California ISO process, e.g., the transmission planning activities being conducted by California's Publicly Owned Utilities. Thus, there are reasons for the CTPG study process to bear differences from the California ISO project inventories. Nevertheless, the CTPG Technical Steering Committee believes that as time progresses and our work continues the recommendation of DayStar Farms will be revisited.

With respect to DayStar Farms' specific recommendation that the CTPG "incrementally add transmission projects based on those RETI CREZs that are not already accessed by currently planned projects", the CTPG Technical Steering

Committee has commenced its analysis under the assumption that only those CREZs with demonstrable commercial interest should be evaluated for purposes of developing a conceptual transmission plan that will meet California’s renewable goals. The Technical Steering Committee recognizes, however, that even where demonstrable commercial interest currently exists, there is considerable uncertainty as to what renewable resources will ultimately get built and where they will be located. For this reason, CTPG encourages stakeholders to submit specific renewable resource development scenarios, such as the DayStar Farms recommendation, they believe should be evaluated in future phases of the CTPG’s work. Pending further discussion with our stakeholders, our work will be designed so as to include the analysis of those scenarios.

## Attachment 1

### Load Serving Entities' Planned Renewable Resource Additions

The CTPG requested that each participating utility provide its planned renewable resource additions/purchases that support the utility's plan for meeting renewable energy goals and/or greenhouse gas emission reduction targets by year 2020. The following table lists the load serving entities that provided the requested information, those load-serving entities for which information on planned renewable resource additions/purchases is not known, and the respective year 2020 forecast retail sales for all of these entities.

#### **California Load-Serving Entities (LSEs) Renewable Resource Additions and Year 2020 Retail Sales**

California LSEs Providing Planned Renewable Resource Additions		California LSEs for Which Planned Renewable Resource Additions are Not Known to CTPG <sup>2/</sup>	
Name	Forecast Year 2020 Retail Sales <sup>2/</sup> (gWh)	Name	Forecast Year 2020 Retail Sales <sup>2/</sup> (gWh)
PG&E on behalf of bundled customers	91010	Calaveras Public Power Agency	30
SMUD	12079	City of Alameda	483
Turlock Irrigation District	2302	City of Biggs	20
SCE on behalf of bundled customers	90126	City of Gridley	42
LADWP	26365	City of Healdsburg	76
Glendale	1149	City of Lodi	527
Burbank	1213	City of Lompoc	151
SDG&E on behalf of bundled customers	19927	City of Palo Alto	1072
Imperial Irrigation District	4280	City of Redding	1012
		City of Roseville	1487
		City of San Francisco	941
		City of Shasta Lake	193
		City of Ukiah	133
		Lassen Municipal Utility District	153
		Merced Irrigation District	473
		Modesto Irrigation District	2897
		Suppliers for direct access customers in the PG&E service territory	5603
		Plumas-Sierra Rural Electric Cooperative	172
		Port of Oakland	54
		Port of Stockton	14
		Power and Water Resource Purchasing Authority	370
		Silicon Valley Power	3082
		Tuolumne County Public Power Agency	29
		Anza Electric Cooperative, Inc.	62
		Bear Valley Electric Service	176
		Boulder City/Parker Davis	137
		City of Anaheim	2819
		City of Azusa	267
		City of Banning	184
		City of Cerritos	48
		City of Colton	413
		City of Rancho Cucamonga	67
		City of Riverside	2531
		City of Vernon	1249
		Moreno Valley Utilities	65
		Suppliers for direct access customers in the SCE service territory	7869
		Valley Electric Association, Inc.	7
		Victorville Municipal	32

		City of Pasadena	1266
		Suppliers for direct access customers in the SDG&E service territory	3175
		City of Needles	58
		Mountain Utilities	4
		Pacificorp	916
		Sierra Pacific Power Company	536
		Surprise Valley Electrical Corporation	92
		Trinity Public Utility District	99
		Truckee-Donner Public Utility District	163
	<b>Total</b>	248450	<b>Total</b> 41247

Table Notes

<sup>a/</sup> It is assumed that the Central Valley Project (3320 gWh of forecast load in year 2020), Metropolitan Water District (1507 gWh of forecast load in year 2020) and California Department of Water Resources (8729 gWh of forecast load in year 2020) are exempt from California’s renewable resource goals.

<sup>b/</sup> From the California Energy Commission’s 2009 Integrated Energy Policy Report (IEPR) adopted on December 2, 2009. See Form 1.1c, “California Energy Demand 2009-2020 Staff Revised Forecast, Electricity Deliveries to End Users by Agency.”

Using the CEC’s 2009 IEPR load forecast for year 2020<sup>1</sup>, an estimated 289,697 gWh of retail loads in the state of California would be subject to the state’s renewable goal. Assuming a thirty-three percent (33%) renewables goal in year 2020, load-serving entities would be required to obtain a total of 95,600 gWh of renewable energy in order to meet the target.

Renewable generation reported in the CEC’s 2008 Net System Power Report, together with estimated renewable generation from renewable generators added and expected to be added by the end of 2009, totals 39,324 gWh. California’s Renewable Energy Transmission Initiative (RETI) estimates that there will be 2670 gWh of miscellaneous renewable resource additions added by year 2020 that is unlikely to require any new transmission facilities (e.g., digestion, landfill gas, small hydroelectric).<sup>2</sup>

Based on forecast retail sales for year 2020 (see table above), the CTPG has collected data concerning planned renewable resource additions/purchases for load serving entities representing approximately eighty-six percent (86%) of the load served by entities subject to California’s renewable resource goals. The load serving entities providing renewable data to CTPG have identified a total of 55,535 gWh of additional renewable resources/purchases by year 2020. Including existing renewable resources and RETI’s miscellaneous renewable resource additions, the CTPG 2020 study assumes a minimum of 97,529 gWh of renewable energy production in year 2020. If the load serving entities for which CTPG does not currently have planned renewable resource

<sup>1</sup> The technical studies conducted by the CTPG 2009 Study Team used, for some utilities, peak demand forecasts that reflected preliminary forecasts from the CEC staff, and for other utilities, peak demand forecasts prepared by the utilities themselves.

<sup>2</sup> California’s 2010-2020 renewable “net short” would therefore be 53,606 gWh (95600 – 39324 – 2670).

additions/purchases (representing fourteen percent (14%) of California’s retail load) intend to add other renewable resources – in addition to what is assumed here -- it would be necessary to plan for even larger amounts of renewable generation in year 2020, in potentially different locations and with potentially different technology mixes. The following table compares CTPG’s estimated renewable energy production to California’s thirty-three percent (33%) goal.

**CTPG’s Renewable Energy Planning Target for Year 2020**

Forecast Retail Load subject to California’s renewable goals	289,697 gWh
Renewable Energy Requirement assuming 33% Goal	95,600 gWh
Existing and New Renewables Expected to be on line by the end of 2009	39,324 gWh
RET I-Identified Miscellaneous Renewable Resource Additions	2670 gWh
CTPG-Identified Renewable Resource Additions	55,535 gWh
<b>Total Renewable Energy Production</b>	97,529 gWh
<b>CTPG-Identified Renewable Energy Potential as a Fraction of Retail Sales</b>	<b>33.7%</b>