Powers Engineering

November 19, 2008

Mr. Ryan Pletka
Black & Veatch Corporation
2999 Oak Rd, Suite 490
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Subject: Powers Engineering Comments on November 2008 RETI Phase 1B Draft Report

Dear Ryan:

The Powers Engineering comments on the November 2008 RETI Phase 1B draft report are provided in the following paragraphs.

Scope of RETI Is Overly Restrictive

RETI focuses primarily on remote utility-scale renewable energy resources as the exclusive mechanism for meeting the 33 percent target. This is the reason the RETI mission statement states "*these policies will require extensive improvements to California's electric transmission infrastructure*."[1] In reality the complete reliance on remote renewable energy generation as put forth by RETI is just one scenario for meeting the 33 percent RPS.

The Phase 1B draft report also describes a scenario that completely addresses the 33 percent renewable energy target by adding distributed PV in 20 MW increments at existing utility substations around California.[2] No transmission additions are necessary in this scenario. Large scale deployment of low cost point-of-use thin-film solar photovoltaics (PV) in the urban/suburban core of California's cities and towns is another scenario. This scenario is not addressed in the RETI Phase 1B draft report. A mix of these scenarios is the most likely route that California will take to reach the 33 percent by 2020 target. A mixed scenario is also not addressed in the Phase 1B draft report.

RETI eliminates point-of-use PV as a significant contributor to achieving the 33 percent RPS target by presuming that the only deployment of point-of-use PV over the next decade will be via the California Solar Initiative (CSI), and only 50 percent of the CSI PV will count toward the 33 percent RPS target. This is an obsolete

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[1] RETI Mission Statement, April 25, 2008, p. 1. See: http://www.energy.ca.gov/reti/Mission_Statement.pdf

[2] RETI Phase 1B Draft Report, November 2008, p. 6-16, p. 6-23. The 20 MW PV arrays at 1,375 substations around California would provide 58,775 GWh of energy per year. Powers Engineering calculates that the net short renewable energy demand in 2020 would be 57,000 GWh if the correct 2007 IEPR energy demand forecast is used, not the 68,000 GWh net short assumed by RETI based on an alternative CEC forecast.

assumption, as two of California's three investor-owned utilities (IOU) have already applied to the California Public Utilities Commission (CPUC) to build IOU-owned urban PV projects that are outside the CSI program.[3]

The urban residential/commercial PV market is a major focus of thin-film PV manufacturers and RETI errs by ignoring this resource. First Solar, the current volume leader in thin-film PV production, has invested $25 million in Solar City in exchange for a minority equity interest. Solar City operates a business model that drives continuous cost reduction and strong economies of scale for urban/suburban deployments of PV. The objective of the alliance is to make solar electricity an affordable option for homeowners and businesses. The two companies have entered into a five-year 100 MW module purchase and supply agreement.[4]

First Solar production capacity in 2008 is 300 MW per year. First Solar projects that production capacity will be over 1,000 MW per year by the end of 2009 as new First Solar manufacturing facilities under construction come online.[5]

Nanosolar, based in San Jose, has developed a low-cost, high volume 1 GW production tool to produce copper-indium-gallium-selenide (CIGS) thin-film PV panels. Nanosolar prints solar cells using nanoparticle ink. Printing is a non-vacuum coating process that eliminates the need for a high-vacuum chamber. Nanosolar is initiating commercial production.[6]

Some thin-film PV manufacturers specifically target the commercial rooftop market. Solyndra operates a 110 MW per year manufacturing facility in Fremont making bundled tube CIGS thin-film PV panels that are designed for easy installation on flat commercial rooftops. The company is in the planning stages of a second facility with a capacity of 420 MW a year.[7] UniSolar makes flexible amorphous silicon thin-film PV specifically for the commercial flat roof market and currently has a manufacturing capacity of 300 MW per year. UniSolar will expand production to 420 MW per year by the end of 2009.[8]

Thin-film PV is available now in utility-scale quantities and is particularly suitable for urban/suburban commercial applications.

California's IOUs are now eligible for the 30 percent solar investment tax credit and accelerated depreciation as a component of the $700 billion federal financial bail-out package approved in early October 2008. It is reasonable to assume that the IOUs will expand utility-owned point-of-use PV systems as a cost-competitive approach to meeting renewable energy mandates.

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[3] SCE March 27, 2008 application and SDG&E July 11, 2008 application.
[4] Transcript of Q3 2008 First Solar revenue conference call with financial analysts, October 29, 2008.
[5] First Solar, Comments on the Renewable Energy Transmission Initiative (RETI) Phase 1A Draft Report, April 4, 2008.
[6] Nanosolar website: http://www.nanosolar.com/
[7] CleanTech Media, Solyndra reveals thin-film solar tubes, October 6, 2008.
[8] UniSolar press release, Energy Conversion Devices Selects Battle Creek Site for its Next 120-Megawatt Solar Cell Manufacturing Plant, October 14, 2008. See: http://investor.shareholder.com/ovonics/releasedetail.cfm?ReleaseID=340384

California's utilities also pay considerably higher rates than the market price referent (MPR) for commercial point-of-use solar power produced during on-peak summer demand periods. The on-peak solar rate in PG&E and SCE territories is approximately three times the MPR.[9] PV systems produce a disproportionate amount of power during the summer months and most of this power is produced during the on-peak period.[10] Current utility rate structures provide a significant economic incentive to locate PV systems at the point-of-use.

The penalizing of point-of-use PV in the RPS program by crediting only 50 percent of the PV output to meeting the RPS unfairly penalizes point-of-use PV designed to favor utility-scale projects and will be rectified. This unfair policy should not be used to handicap point-of-use PV in a strategic renewable energy planning process like RETI. It is highly likely that IOUs will seek to greatly expand their own point-of-use PV deployments given the IOUs are now eligible for the same solar investment tax credit and accelerated depreciation as third-party commercial PV project developers.

<u>Recommendation 1</u>: Identify the basecase scenario used in the Phase 1B draft report as the "all utility-scale remote renewable energy" scenario and state that other scenarios that utilize much higher percentages of distributed PV (substation sites) or point-of-use PV could also achieve the 33 percent RPS target.

<u>Recommendation 2</u>: Describe the distributed PV scenario in the executive summary of the Phase 1B report. Identify the distributed PV scenario as potentially the least-cost scenario for achieving 33 percent RPS by 2020 assuming current thin-film PV pricing is the RETI PV basecase.

RETI Uses Obsolete PV Price Assumptions

Black & Veatch (B&V) correctly identified the current range of thin-film PV capital cost and cost of energy (COE) in the May 2008 Phase 1A final report. The large-scale availability of low-cost thin film PV is a revolutionary development in the world of renewable energy options for California. This development was well documented in public comments on the RETI Phase 1A draft report provided by First Solar and OptiSolar in April 2008. Both the final Phase 1A report and the draft Phase 1B report include reasonably accurate information on current thin-film PV pricing. However, this information is presented deep in the body of the report and is not presented in the executive summary. High cost single-axis polycrystalline silicon PV is inappropriately used as the PV basecase.

As noted, B&V was advised relatively early in the RETI process that single-axis polycrystalline silicon PV is the wrong basecase for utility-scale PV installations in 2008. This was noted in the RETI Phase 1A final report:[11]

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[9] B. Powers, San Diego Smart Energy 2020, October 2007, p. 44. See also CEC's 2007 IEPR, p. 143.
[10] RETI Stakeholder Steering Committee RETI Phase 1B – Resource Report, August 16, 2008, p. 6-6.
[11] RETI Phase 1A final report, May 2008, Appendix B, p. 5-5.

> "Two parties (OptiSolar and First Solar) commented that Black & Veatch should assume thin film technology with a declining capital cost instead of the crystalline system chosen in the report. First Solar asserts several points in support of its lower price: (1) SCE's recent announcement of 250 MW of distributed PV at $3,500/kWp ($5,000/kWe), (2) First Solar's Blythe PPA announced by SCE and signed below the Market Price Referent, and (3) their cost of module production at $1,120/kWp ($1,454/kWe).
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> An "alternate scenario" was proposed in the report (Section 3.8) to test lower future solar costs. Black & Veatch will run this scenario for thin film photovoltaic systems with a capital cost of $2,700/kWe to $3,500/kWe. This is based on module costs of $1,500/kWe to $1,700/kWe and "balance of system" costs of $1,200/kWe to $1,800/kWe. These module costs are based on First Solar's 2010 target production cost of $0.90/watt (dc). Balance of system includes inverters, installation, mounting systems and site costs."

RETI indicates that as of August 2008 there were BLM applications for 32 utility-scale PV projects totaling approximately 21,000 MW.[12] Most of these PV projects will use either First Solar or OptiSolar thin-film PV. Governor Schwarzenegger underscored the significance of the thin-film PV revolution by announcing his November 17, 2008 executive order requiring California's utilities to reach 33 percent renewable energy by 2020 at the OptiSolar's new manufacturing plant in Sacramento.[13]

Tens of thousands of MW of utility-scale PV projects are being proposed because thin-film PV technology is cost-competitive with other solar options such as solar trough. In contrast single-axis polycrystalline silicon PV is not cost competitive with solar trough or any other renewable energy technology, as shown in Figure 1-3 and Table 1-1 of the RETI Phase 1A final report.

There are numerous examples of utility acceptance of thin-film PV as a cost-competitive alternative for utility-scale solar projects. Sempra, SDG&E's parent company, is currently developing approximately 900 MW of thin-film PV projects. Sempra Energy states it will build 300 to 400 MW of thin-film PV at its combined cycle plants in Nevada and Arizona over the next 2-3 years.[14] Sempra has also applied to build a 500 MW thin-film PV project in Imperial County.[15]

PG&E contracted for 800 MW of thin-film PV projects in coastal San Luis Obispo County in August 2008. SCE applied to the CPUC in March 2008 to build a 250 to 500 MW urban PV project at an estimated installed cost of $3.50/watt (dc) based

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[12] RETI Stakeholder Steering Committee RETI Phase 1B – Resource Report, August 16, 2008, Table 3-3. Pre-Identified Resources by Source and Resource Type (all locations).

[13] Governor's office press release, Governor Schwarzenegger Advances State's Renewable Energy Development - *Signs Executive Order to Raise California's Renewable Energy Goals to 33 Percent by 2020, Clear Red Tape for Renewable Projects*, November 17, 2008.

[14] Reuters, "For solar power, Sempra favors thin film," August 21, 2008.

[15] RETI draft Phase 1B report, November 2008, Appendix A, p. 11 of 15. July 21, 2008 Sempra application for 500 MW PV project in Imperial County.

on thin-film PV technology. SCE also indicated in its March 2008 application that there are several times the 250 to 500 MW of PV described in the CPUC application under the control of the warehouse owners it is working with. SCE paints a picture in its application of a straightforward process to add up to 2,000 MW of urban point-of-use PV to the grid.

First Solar has executed a framework agreement with Edison Mission Energy, the non-regulated developer subsidiary of Edison International. Edison International is the parent company of SCE. The framework agreement creates a strategy relationship between First Solar and Mission Energy, under which Mission and First Solar work as a team to develop large solar utility projects within the United States.[16]

The use by B&V of single axis-polycrystalline silicon PV at $7,000/kW and a COE of $240/MWh as the basecase assumption for PV pricing is obsolete.[17] The thin-film PV capital cost identified in the draft Phase 1B report is $3,700/KWe, with an associated COE ranging from $114/MWh to $176/MWh.[18] This compares to an incrementally higher COE cost range identified by B&V for solar trough of $143/MWh to $192/MWh.[19]

As a result of using single axis-polycrystalline silicon PV as the PV basecase, the Phase 1A final report and the Phase 1B draft document are out-of-date on a critical cost factor that will have a major effect on whether and how much new transmission is necessary for California to achieve the least-cost pathway to 33 percent RPS by 2020. Using the COE ranges shown by B&V for solar trough and thin-film PV, distributed thin-film PV built in 20 MW arrays at utility substations would be no more costly than solar trough for the same capacity and would require no transmission additions to provide 58,775 GWh of annual renewable energy production. This distributed PV option is not cost competitive if single-axis polycrystalline silicon PV is assumed. Reliance by B&V on a high and out-of-date PV cost will negatively impact the perception of the RETI process as a credible strategic planning vehicle for achieving the 33 percent RPS target.

B&V can readily verify the panel cost and installed cost of recent thin-film installations by requesting this information from RETI stakeholders that are deploying thin-film technology now. These stakeholders include SDG&E (parent Sempra is just completing 10 MW thin-film PV deployment in Nevada) and SCE (two urban arrays to date).[20] SMUD has also contracted/ built a large thin-film PV array in 2008. PG&E can provide the price basis for the power purchase agreement with OptiSolar for the 550 MW PV project in San Luis Obispo County. As OptiSolar correctly pointed-out in its April 2008 comment letter on the Phase 1A draft, thin-

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[16] Transcript of Q3 2008 First Solar revenue conference call with financial analysts, October 29, 2008.
[17] RETI Phase 1A Final Report, Figure 1.3 and Table 1-1. Figure 1-3 shows mid-range levelized COE for PV of $240/MWh. Table 1-1 shows a mid-range PV capital cost of $7,000/kW.
[18] RETI draft Phase 1B report, November 2008, Table 6-3, p. 6-22.
[19] RETI Phase 1A Final Report, May 2008, Table 1-1, p. 1-8.
[20] Transcript of Q3 2008 First Solar revenue conference call with financial analysts, October 29, 2008.

film PV manufacturers will have to meet or beat the current thin-film PV price or they will not gain market share.

Recommendation 3: Utilize the thin-film PV COE range shown in Table 6-3 of the draft Phase 1B draft report as the basecase PV cost for utility-scale PV deployments. This modification to the draft document will assure that the RETI Phase 1B report is not obsolete on the critical point of PV pricing, and therefore of limited use as a strategic planning document, when it is issued in final form.

RETI Presents Most Expensive Scenario for Achieving 33 Percent RPS by 2020

RETI presumes that existing transmission lines are dedicated to existing imports and that new remote renewable resources will transmit to load centers primarily via new transmission lines. Table ES-2 lists the top ten RETI CREZ based on environmental ranking. These projects sum to approximately 100,000 GWh per year. There is one geothermal CREZ, Imperial North-A, that would have a capacity of approximately 1,300 MW to produce just over 10,000 GWh per year (at 90 percent capacity factor). The other CREZ are a mix of solar thermal and wind (Fairmont, Tehachapi, Victorville-A, San Bernardino-Lucerne), only solar thermal (Twentynine Palms), or only wind (Pisgah-A, Mountain Pass, Palm Springs).

Approximately 60,000 GWh of additional renewable resources beyond the 10,000 GWh of geothermal will be necessary to reach the 68,000 GWh "net short" described in the Phase 1B draft report. Assuming a generic 0.30 capacity factor for both solar thermal and wind, approximately 23,000 MW of combined solar thermal and wind resources would be necessary to provide this 60,000 GWh of energy production. The total MW capacity of the geothermal, solar, and wind to produce 68,000 GWh per year would be approximately 24,000 MW nameplate capacity.

Is it realistic to think that 24,000 MW of new transmission capacity will be built to access these renewable resources? No. Southern California has approximately 20,000 MW of existing transmission import capability to serve a market (SCE, LADWP, and SDG&E) with a combined average load of about 14,000 MW.[21] Leaving local reliability issues aside for the purposes of discussion, Southern California can already meet 100 percent of its current average load with existing transmission import capacity. If renewable energy projects are preferentially sited along existing transmission corridors there would be little need, beyond the Tehachapi wind collector system, to add additional transmission capacity. However, there would be a need to reallocate existing IOU transmission capacity allocation from fossil power imports to renewable power imports.

However, many of the high value CREZ identified by B&V will require transmission trunklines to access the resource as they are not adjacent to existing transmission corridors (see RETI Phase 1B draft report Southeast CA map). It also does not appear that there is any expectation in RETI that the IOUs will gradually transfer

[21] See discussion on p. 10 of this comment letter.

transmission line capacity rights from existing fossil power import sources to new renewable energy suppliers. Without such a transfer of transmission capacity rights, a new parallel transmission system will have to be constructed to transmit remote renewable energy from the high-value CREZs described in the Phase 1B draft report.

The IOUs have a strong financial incentive to see new transmission built to transmit renewable energy instead of phasing-out fossil power capacity agreements on existing lines to accommodate new renewable energy generation. The primary mechanism available to an IOU to increase its revenue stream is the construction of new infrastructure in the form of power plants, transmission lines, and meters. Transmission projects are typically the most lucrative projects an IOU can build, with a guaranteed rate of return to the IOU in the range of 11 to 12 percent. The cost of IOU transmission projects are borne collectively by all California IOU ratepayers.[22]

What does new high voltage transmission cost? SDG&E has applied to the CPUC to build the proposed 1,000 MW Sunrise Powerlink transmission line. The estimated cost of the line is $1.883 billion.[23] This a unit transmission cost adder to remote renewable energy generation of just under $2,000/kW.

If it is conservatively assumed that only 10,000 MW of new high voltage transmission will be built by 2020 to realize the RETI net short target of 68,000 GWh, the estimated cost of this transmission will be in the range of $20 billion in 2008 dollars based on SDG&E's projections for the Sunrise Powerlink. How much thin-film PV located at IOU substations or at the point-of-use on commercial buildings or parking lots could the IOUs purchase for this same $20 billion? The IOUs are now eligible for the 30 percent federal solar investment tax credit and accelerated depreciation. This lowers the gross installed capital cost of the PV system by 58 percent. As a result, a $2,700 to $3,500/KWe gross installed cost becomes $1,130 to $1,470/kWe. This equals an installed thin-film PV capacity of 14,000 to 18,000 MW for a $20 billion investment.

B&V must use reasonable thin-film PV cost as the PV basecase in the RETI Phase 1B report. There is no possible economic justification for constructing high cost transmission to remote wind and solar resources if for the same transmission investment California IOUs can build far more thin-film PV at substations or at the point-of-use than the transmission lines built at such high cost can actually carry. Stated another way, there is no economic justification from a ratepayer standpoint for building high cost transmission to access 21,000 MW of thin-film PV currently in the BLM application queue when that same PV can be built at existing substations or at the urban/suburban point-of-use with no new transmission.[24]

[22] FERC approval, rate schedule for Trans Bay Cable (Pittsburg, CA), June 2005.
[23] SDG&E - Application A.06.08.010, Notice of Ex Parte Communication, November 14, 2008, p. 2.
[24] RETI Stakeholder Steering Committee RETI Phase 1B – Resource Report, August 18, 2008, Table 3-3. Pre-Identified Resources by Source and Resource Type (all locations).

As B&V correctly points-out, 27,500 MW of PV, equaling 58,775 GWh of annual energy production, could be added at existing utility substations with zero new transmission cost. As SCE is demonstrating, adding 100s or even 1,000s of MW of PV in the urban/suburban core can also be done with zero new transmission cost. These models are far more favorable to ratepayers than the 100 percent remote renewable energy model assumed in the RETI Phase 1B draft report that relies so heavily on new and expensive transmission.

Recommendation 4: Address the issue of transferring of IOU transmission line capacity rights from existing fossil power import sources to renewable energy suppliers on existing transmission lines that serve high value CREZs to minimize the amount of new transmission construction necessary for the development of these CREZs.

Net Short Renewable Energy Should Be 40,000 GWh, Not 68,000 GWh

The CPUC issued landmark energy efficiency decision D.07-10-032 on October 18, 2007 that requires the IOUs to achieve 100 percent of cost-effective energy efficiency measures by 2020. The net effect of this decision will be an average absolute decline in annual energy usage between 0.5 and 1 percent per year from 2008 forward, and no growth in peak demand over time. The 100 percent of cost-effective energy efficiency forecast is represented by the yellow squares in 2016 in Figures 1 and 2 below. In practical terms this means that the 68,000 GWh "net short" assumed in RETI based on a 2020 demand of 335,000 GWh should be a "net short" of approximately 40,000 GWh based on a 2020 demand of approximately 230,000 GWh.[25]

The December 2007 IEPR forecast does not acknowledge that CPUC Decision D.07-10-032 took place in October 2007 nor does it identify the new baseline target, defined in that decision, as 100 percent of cost-effective energy efficiency by 2020.

RETI states that it is using the CEC statewide load forecast prepared as part of the 2007 IEPR process.[26] This is incorrect. The forecast used in RETI is significantly higher than the CEC forecast used in the 2007 IEPR. The forecast used by RETI projects a statewide load in 2010 of 297,062 GWh.[27] The forecast used in the 2007 IEPR projects a statewide load in 2010 of approximately 267,000 GWh (see Figure 1). The projected statewide load in 2020, extrapolating from the forecast used in the 2007 IEPR, would be approximately 300,000 GWh. This is essentially the statewide load that RETI assumes for 2010. The demand forecast used in RETI assumes a considerably higher demand growth rate than the forecast used in the

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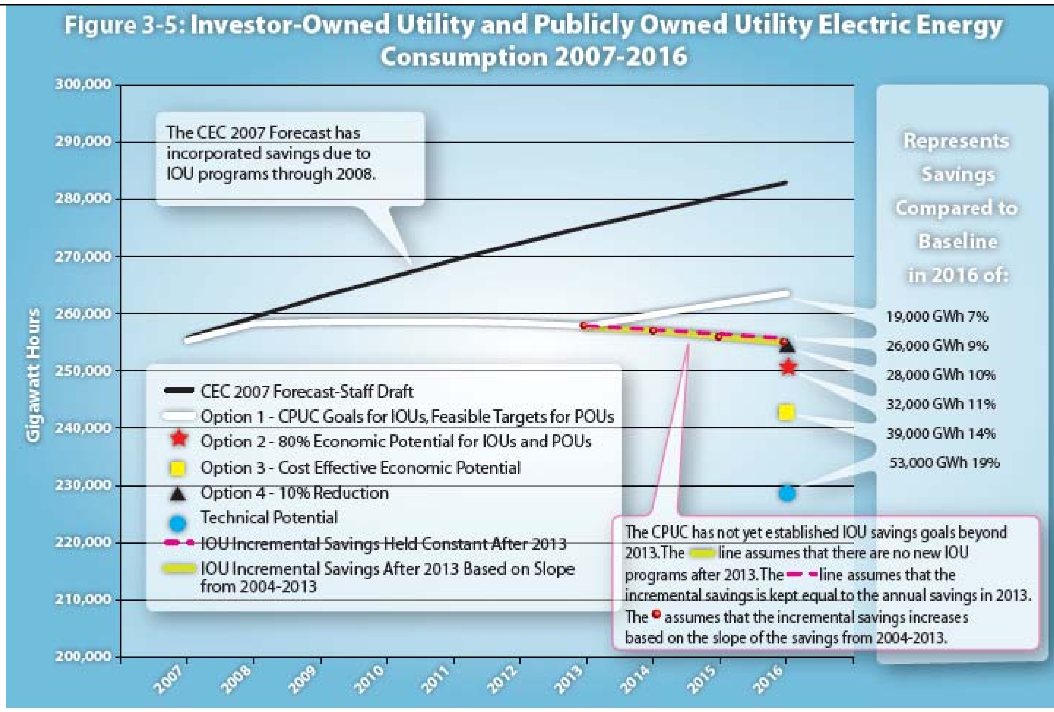
[25] The 230,000 GWh value was determined by extrapolating the "100 percent cost-effective EE" line in Figure 1 from 2016 to 2020.
[26] RETI Phase 1B draft report, November 2008, p. 3-32.
[27] RETI Phase 1B draft report, November 2008, p. 3-38.

2007 IEPR. The net short using the 2007 IEPR forecast would be approximately 57,000 GWh in 2020.[28]

Figure 1. CEC projection in 2007 IEPR of impact of varying levels of energy efficiency (EE) on electric energy consumption by California utilities – yellow square represents achievement of 100% of cost-effective EE measures

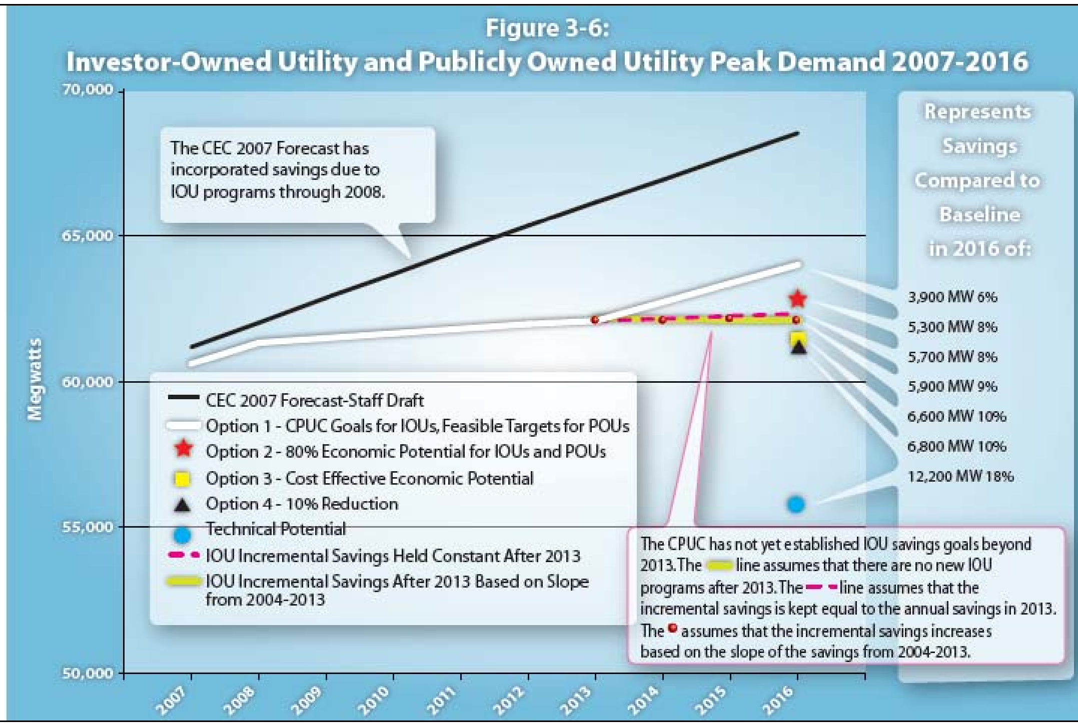


Source: California Energy Commission. From *Achieving All Cost-Effective Energy Efficiency for California Utilities*. CEC-200-2007-019-SF.

Source: This is Figure 3-5 from the CEC's 2007 Integrated Energy Policy Report, December 2007, p. 84.

[28] Demand = 300,000 GWh. 33 percent renewable energy component = 100,000 GWh. Available baseline renewable resources = 43,000 GWh (RETI Phase 1B draft report, Table 3-24, p. 3-38). Net short: 100,000 GWh – 43,000 GWh = 57,000 GWh.

Figure 2. CEC projection in 2007 IEPR of impact of varying levels of EE on peak demand by California utilities – yellow square represents achievement of 100% of cost-effective EE measures



Source: This is Figure 3-6 from the CEC's 2007 Integrated Energy Policy Report, December 2007, p. 85.

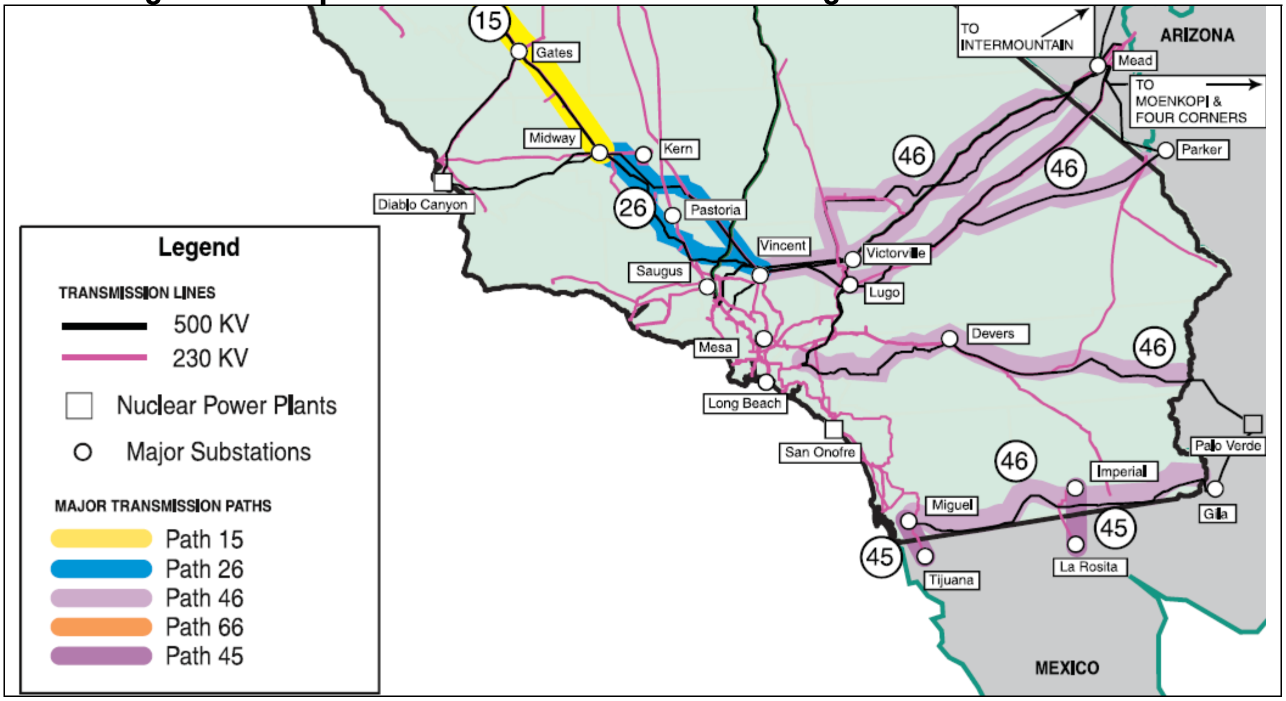
California Has Adequate Existing Transmission to Reach 33 Percent RPS Target

The fundamental presumption of the RETI process, that California has insufficient transmission infrastructure to meet a 33 percent RPS target, is incorrect. The focus of RETI is remote utility-scale renewable energy projects in Southern California. Southern California has approximately 15,000 MW of alternating current import capacity (Paths 26, 45, and 46) and 5,000 MW of direct current import capacity from the Columbia River and Utah. This is a total of 20,000 MW of import capacity. By way of comparison, the annual average combined retail sales load in SCE, LADWP, and SDG&E service territories is approximately 14,000 MW.[29] Southern California has the highest concentration of existing transmission lines in the state. Major Southern California transmission lines are shown in Figure 3.[30]

[29] Powers Engineering, Ex Parte Notice, CPUC proceeding A.06-08-010, September 10, 2008. The combined annual average retail sales of SCE, LADWP, and SDG&E is calculated by dividing the combined annual retail sales of 119,000,000 MWh by 8,760 hours in a year. 119,000,000 MWh/yr ÷ 8,760 hr/yr = 13,600 MW.

[30] CEC, Strategic Transmission Investment Plan, Figure 1 – Major Transmission Paths (230 kV and 500 kV), November 2005.

Figure 3. Map of Transmission Lines Serving Southern California



New radial high voltage transmission lines to reach high-value renewable energy areas, like the Tehachapi wind area, are justifiable given that without the transmission the renewable resource could not be developed. However, with the exception of the Tehachapi wind area, there is ample existing transmission serving high-value solar, wind, and geothermal areas in Southern California to reach the 33 percent renewable energy target by 2020. This is true even if the 33 percent target is reached exclusively by remote renewable energy production. Displacement of fossil-fuel imports with renewable energy on existing transmission lines must be a fundamental objective of RPS compliance to minimize costs to California's ratepayers.

Conclusion

The RETI Phase 1B report should incorporate the following recommendations:

1. Identify the basecase scenario used in the Phase 1B draft report as the "all utility-scale remote renewable energy" scenario and state that other scenarios that utilize much higher percentages of distributed PV (substation sites) or point-of-use PV could also achieve the 33 percent RPS target.

2. Describe the distributed PV scenario in the executive summary of the Phase 1B report. Identify the distributed PV scenario as potentially the least-cost scenario for achieving 33 percent RPS by 2020 assuming current thin-film PV pricing is the RETI PV basecase.

3. Utilize the thin-film PV COE range shown in Table 6-3 of the draft Phase 1B draft report as the basecase PV cost for utility-scale PV deployments. This

modification to the draft document will assure that the RETI Phase 1B report is not obsolete on the critical point of PV pricing, and therefore of limited use as a strategic planning document, when it is issued in final form.

4. Address the issue of transferring of IOU transmission line capacity rights from existing fossil power import sources to renewable energy suppliers on existing transmission lines that serve high value CREZs to minimize the amount of new transmission construction necessary for the development of these CREZs.

Thank you for this opportunity to comment on the RETI Phase 1B draft report.

Regards,

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