California Energy Commission
DOCKETED
13-IEP-1E
TN 70922
MAY 21 2013

May 21, 2012

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 13-IEP-1E
1516 Ninth Street
Sacramento, CA 95814-5512

Re: 2013 IEPR – Transmission Planning and Permitting Issues

The Imperial Irrigation District ("IID") appreciates the opportunity to provide input into the 2013 Integrated Energy Policy Report ("IEPR"), and in particular the nexus between generation development and transmission siting developed as part of the May 7, 2013 Lead Commissioner Workshop. These Comments are broken into two general sections: (1) an update on IID and its accomplishments to interconnect renewable resources and develop transmission; and (2) our experiences relevant to siting and permitting and policy development.

Update on IID Accomplishments

Attached please find a presentation prepared for the May 7th Workshop.

Imperial County is a small geographic region of California. Still, the number of moving parts with respect to transmission in our small area demonstrates the need for coordination with respect to the siting of transmission facilities, planning approvals, and underlying procurement decisions. IID originated as an irrigation district; the majority of IID's energy infrastructure resides on rights of way adjacent to water facilities. Given the ability to exploit existing rights of way and also serve as lead agency for CEQA review, it makes sense for IID to play a lead role in any transmission development needed in the Imperial Valley.

IID currently has five renewable projects, with a total output of 177 MW, scheduled to commence construction within the next few months. Those projects should all be in-service by April 2014. We also have another 10 MW project in the pre-construction phase, and two projects of 20 MW each with PPA's in the analysis phase that have anticipated commercial operation dates of 2015. Finally, the 50 MW Hudson Ranch Geothermal facility recently came online. Relevant to this discussion, the purchaser of the energy from Hudson Ranch is the Salt River Project, whose service territory is in Arizona.

IID's interconnection queue currently consists of 17 projects with total proposed generation of 1099 MW. The breakdown is 13 solar, 1 geothermal, 1 wind and 2 solar/thermal. The cluster 1 system impact analysis is due June 2013. While we would like to see more

geothermal generation in our queue, IID can only speculate that the reason for this is that the procurement process makes it difficult for geothermal resources to compete.

IID's experimental process with its transitional cluster is ending and a stakeholder meeting has been scheduled for interested parties. The experimental process allowed generators to fund only development phase activities for required network upgrades. The development phase included issuance of Request For Proposal packages for the required network upgrades. IID has received responses to the solicitation and will review that information with the developers. Developers have an opportunity to opt out of the interconnection agreement at the end of the development phase. The experimental process was driven by the need for developers to have cost certainty with respect to planned upgrades to the system. The interconnection agreements were divided into two phases: development and construction. The thought behind allowing developers to fund the development phase activities was that in the event they opted not to move forward, no time would be lost because network facilities needed to interconnect generators coming after would already have a clearly defined scope, Engineering, Permitting and Construction bid package, right of way assessment, and permit.

One of the major network upgrades identified in the Transitional Cluster analysis process was to Path 42, IID's link to the Southern California Edison ("SCE") service territory. With the support and collaboration of SCE and the California Independent System Operator Corporation ("CAISO"), the Path 42 Upgrade project is underway. The parties have been working with the BLM on remaining permitting issues. At this time, IID anticipates physical construction will commence October 1, 2013 to be complete April 30, 2014. This will add about 900 MW of incremental transfer capability between IID and SCE. I would note that with the excess capacity available on relevant parts of the IID system, plus the Path 42 upgrades, a full and complete path to deliver incremental renewable energy to SCE from IID is available.

IID is also participating in a competitive solicitation to construct a new policy driven upgrade in Imperial Valley. IID has been deemed a qualified project sponsor, along with one other party. The Partial Participation Transmission Owner ("PPTO") project includes a collector station and transmission facility to deliver the Camp Verde solar project to the Imperial Valley ("IV") Substation. The intent is that the facilities be placed under operational control of the CAISO. This initiative grew out of efforts to resolve permitting of transmission, which sought to cross over critical water delivery facilities. This PPTO approach could help resolve transmission development and permitting issues, as well as commercial concerns of generators who desire to interconnect directly to the CAISO Controlled Grid. Again, it simply makes sense to leverage IID's existing rights of way and ability to serve as a lead agency for CEQA review.

In that regard, IID has also been working to support projects interconnecting to the CAISO at or near the IV Substation. This has taken an extraordinary amount of staff resources. Despite the fact that these projects are located in the IID Service Territory, they are proposed to be electrically interconnected to SDG&E portions of the IV Substation and still have operational impacts on IID's system that must be addressed.

On other related matters, IID has also:

- Dedicated 25,000 acre-feet of water to non-agricultural projects;

- IID is planning a $200 million transmission expansion to deliver energy into coastal California, Arizona and Mexican markets.
- adopted an economic development rate for intermittent resources; streamlined our tariff process; worked with the ISO and the CPUC to solve Maximum Import Capacity (MIC) counting issues; and supported SDG&E's request for expansion of Renewable Auction Mechanism requirements to include generation within the IID service territory.

Lessons Learned and Improvements

IID would like to make three observations on the issue of synchronizing generation development and transmission siting, based on its experience interconnecting resources in the Imperial Valley.

First, IID's transmission planning and development process is hampered by a lack of visibility into procurement decisions by the investor-owned utilities. This issue was first highlighted by the Resource Adequacy ("RA") MIC counting rules, and the failure to receive RA credit for Imperial Valley resources because of a flawed methodology for counting available import capacity from IID to the CAISO. This issue has been resolved, but it highlighted the lack of transparency into the procurement process. IID had little to no knowledge about whether IV resources had PPAs or were otherwise proceeding successfully through the procurement process, which introduced considerable uncertainty into IID's interconnection queue process.

Transmission planning resources are finite, and this lack of information exchange impedes IID's ability to plan and permit its transmission system in a proactive manner and with due regard for avoiding duplication and minimizing environmental impacts. This leads IID to its second observation. IID supports renewable generation development across all technologies. This includes geothermal technologies. The Imperial Valley is home to a vast geothermal resource potential. This energy is baseload and could ameliorate certain of the ramping issues foreseen by the CAISO in its intermittent resource integration studies. Further, additional baseload generation would provide needed support for the southern high-voltage transmission system. Finally, but certainly not the least of IID's concerns, Imperial County is one of the most impoverished in the nation. Development of baseload geothermal resources in the Imperial Valley would provide lasting creation of skilled jobs and be a catalyst for sustainable economic growth.

With respect to transmission planning and permitting, geothermal resources have high capacity factors and can greater utilize high-voltage transmission upgrades. With long-term certainty of development, IID can upgrade its transmission system to deliver geothermal resources to load. Also, a lot more MWh of renewable geothermal energy can be placed on the same amount of transmission, limiting the environmental footprint of new transmission. Third, IID already has secured significant rights of way and has undertaken permitting to enable the transmission to be built out on timelines consistent with generation development.

However, geothermal resources do not appear to be selected through the "least-cost, best-fit" IOU procurement criteria. It is notable that the new geothermal resource recently on-line is

being delivered to meet Arizona renewable needs, not California. An examination of why geothermal resources are not being selected in the procurement process is relevant to the issue of minimizing the environmental footprint of transmission system expansion, and is an appropriate purpose for this IEPR cycle.

In summary, if IID has one message for this process, it would be that creating greater visibility into the procurement process, including an examination of geothermal resources in the procurement process, would greatly aid efficient and environmentally responsible build-out of the transmission system in the Imperial Valley.

Sincerely,

Jamie Asbury (213)

Jamie L. Asbury
Officer
Interconnect Transmission Customers

Attachment

IMPERIAL IRRIGATION DISTRICT

May 7, 2013

California Energy Commission

Transmission Planning Workshop

IID

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Renewable Energy Project Status Report

- Five projects commencing construction:
  - *SolarGen2 – Arkansas, Alhambra and Sonora (50 MW each totaling 150 MW PV) (export to SDG&E)*
  - *Sol Orchard Community 1 – SDSU Project – (7 MW PV) (IID)*
  - *Sol Orchard – El Centro PV Project (20 MW) (IID)*
- One project in pre-construction
  - *Ormat – Heber Solar (10 MW PV) (IID)*
- Two additional projects with PPA's in analysis phase
  - *2 PV Projects at 20 MW each*
- 50 MW Hudson Ranch Geothermal achieved commercial operation April 2012 (exporting to Salt River Project)

Transitional Cluster

- 9 projects proposing 930 MW have signed IA's
  - *Geothermal* *520 MW*
  - *Solar* *410 MW*
- Experimental interconnection agreements; generators funded development phase activities.
- Development phase complete; stakeholder meeting with generators scheduled for mid-May to discuss next steps

Transitional Cluster – IID Network Upgrades

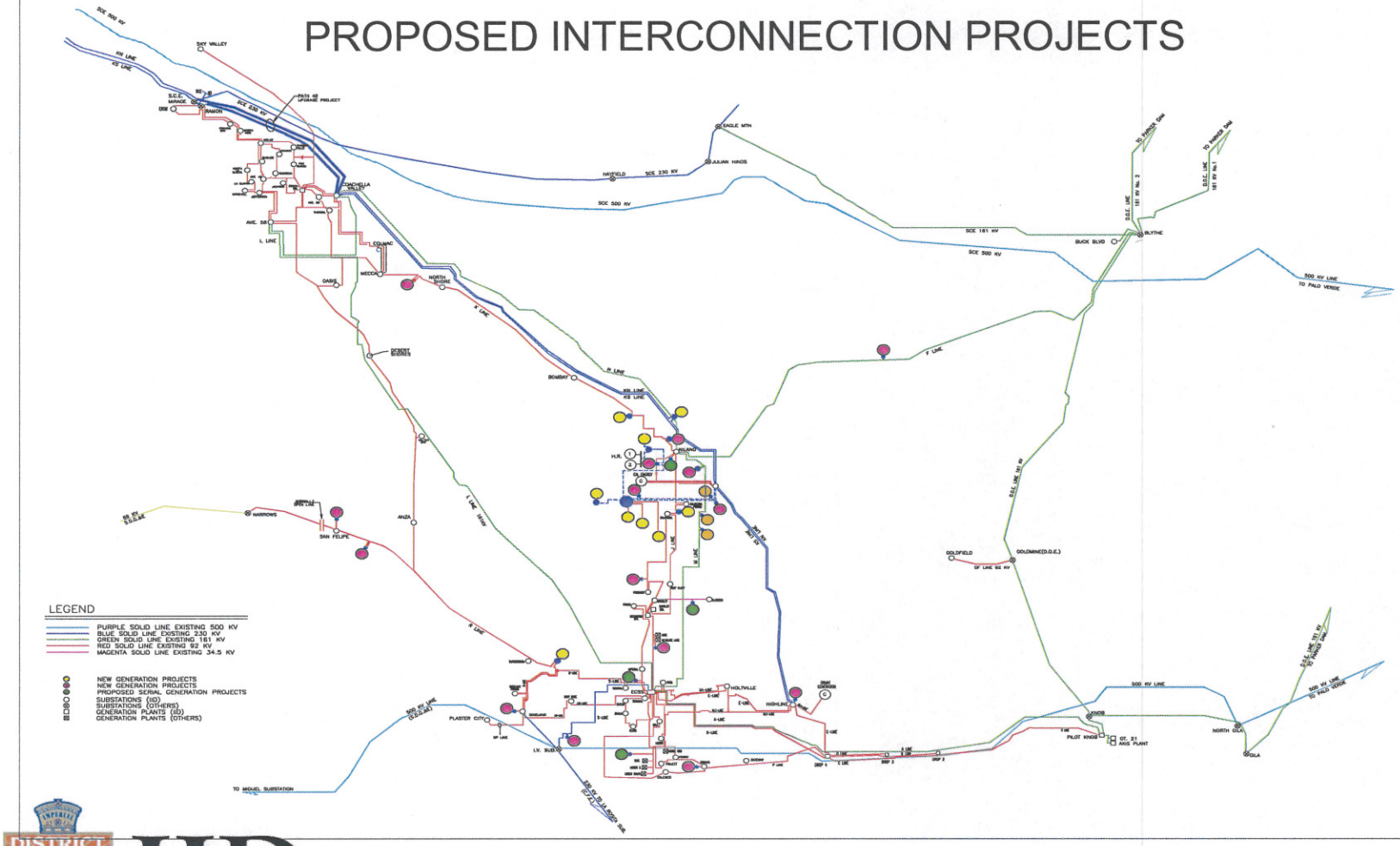
- Transitional Cluster analysis identified four required network upgrades:
  - *Path 42 – Proposed in-service date April 2014*
  - *Highline-El Centro (A-B Line Upgrade)*
  - *El Centro Switching Station-IV Sub ("S" Line Upgrade)*
  - *Midway-Bannister Phase II*
- Path 42 project is moving forward with cooperation from Southern California Edison and California Independent System Operator Corporation

IID Interconnection Queue Status

- IID has 17 projects with proposed generation of 1099 MW in the interconnection study process.
  - *Solar (13)* *721 MW*
  - *Geothermal (1)* *100 MW*
  - *Wind (1)* *70 MW*
  - *Solar/Thermal (2)* *208 MW*

- Cluster 1 Study results expected June 2012.

PROPOSED INTERCONNECTION PROJECTS



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Imperial Valley Policy Driven Upgrade

- CAISO identified policy driven upgrade in Imperial Valley to minimize crossings of critical water infrastructure
- IID submitted a response to the CAISO competitive solicitation process in effort to become project sponsor
- Final results are pending evaluation in accordance with CAISO tariff.
- In PPTO scenario, policy driven upgrade facilities would be placed under operational control of CAISO by IID.

FOR MORE INFORMATION CONTACT:

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