DOCKETED

Docket Number:	15-RETI-02
Project Title:	Renewable Energy Transmission Initiative 2.0
TN #:	210199
Document Title:	Pacific Gas and Electric Company Comments on RETI 2.0 Technical Group Meetings Held 1.22.16
Description:	N/A
Filer:	System
Organization:	Pacific Gas and Electric Company
Submitter Role:	Public
Submission Date:	2/5/2016 2:18:41 PM
Docketed Date:	2/5/2016

Comment Received From: Nathan Bengtsson
Submitted On: 2/5/2016
Docket Number: 15-RETI-02

Pacific Gas and Electric Company Comments on RETI 2.0 Technical Group Meetings Held 1.22.16

Additional submitted attachment is included below.

Pacific Gas and Electric Company

Nathan Bengtsson
Representative
State Agency Relations

77 Beale Street, B10C
San Francisco, CA 94105

(415) 973-4912
(415) 973-7226 Fax
Nathan.Bengtsson@pge.com

February 5, 2016

VIA ELECTRONIC DOCKET
15-RETI-02

California Energy Commission
Dockets Office, MS-4
Docket No. 15-RETI-02
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Docket 15-RETI-02: Pacific Gas and Electric Company Comments on the Renewable Energy Transmission Initiative 2.0 Meeting Held January 22, 2016

I. Introduction

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the January 22, 2016, meetings of the Environmental and Land Use Technical Advisory Group (ELUTAG) and Transmission Technical Input Group (TTIG), part of the Renewable Energy Transmission Initiative (RETI) 2.0, hosted by the California Public Utilities Commission (CPUC), California Energy Commission (CEC or Commission), and California Independent System Operator (CAISO).

PG&E would like to reiterate that RETI 2.0 should focus on developing cost-effective in-state and out-of-state renewable and transmission information to inform existing regulatory proceedings and planning activities, such as the CPUC's Renewable Portfolio Standard (RPS) Calculator and Long Term Procurement Plan (LTPP) proceedings and the CAISO's transmission planning processes (TPP). To the extent possible, RETI 2.0 should use data sources and analyses that already consider Western Electricity Coordinating Council (WECC)-wide resource and transmission information.

PG&E offers the following responses to the questions presented to the ELUTAG and TTIG on January 22, 2016.

II. Answers to Questions Posed to the Environmental and Land Use Technical Advisory Group

1. What environmental data are relevant to inform renewable energy planning activities in California and in the West-wide Interconnection?

Myriad environmental data sets compiled by many different organizations are likely to be recommended for inclusion in the RETI 2.0 process. It is critical that land use and environmental data approved for consideration as part of RETI 2.0 be current, reliable, and collected according to the appropriate protocols as verified by the local, state and federal agencies that routinely approve and rely on such data. For example, biological resource data sets should be approved by the California Department of Fish and Wildlife and/or the United State Fish and Wildlife Service. Ensuring that data has been vetted by government agencies with expertise related to the particular data set is prudent to avoid lengthy disputes over the quality and methodology of data submitted.

Other minimum requirements for data considered in the RETI 2.0 process include the necessity that data be accessible in the public domain or contained in web locations such as Data Basin, and that data should be in a standardized format, geo-referenced and available on common file platforms.

2. For the available and relevant data what are the significant data gaps and what should be done to resolve them, both short-term and long-term?

One potential data gap that should be addressed is the lack of information about the locations of existing and planned renewable developments. Any attempt to address this gap should consider the land and transmission grid impacts associated with the existing and planned projects. Potential sources of data to help address this gap are the RPS Database and the RPS Calculator.

In addressing this gap, it is critical, as noted above, that RETI 2.0 rely on agency approved data. Non-verified data should not be used to for input into the RETI 2.0 planning process – even in a high-level, non-regulatory context – until it has been vetted and approved by the relevant local, state or federal agencies with expertise relating to the particular data set.

3. What are the key environmental data criteria that should be applied to the available data to evaluate relative environmental impacts of potential renewable energy transmission and/or potential transmission corridors?

PG&E agrees that it is important to compile properly vetted available data sets into one usable location and format. However, it is neither feasible nor prudent to undertake a comparison of environmental impacts of potential renewable energy developments and/or potential transmission corridors. Weighing environmental impacts across technical disciplines is the sole purview of the permitting agency with jurisdiction over a project. Some agencies may consider certain environmental criteria to have different relevant values, and attempting to perform that analysis in the non-regulatory RETI 2.0 setting would unnecessarily intrude on the jurisdiction of permitting agencies, pre-judging the outcome of the local permitting process.

Additionally, it will likely be difficult to reach consensus during the RETI 2.0 process regarding the relative importance of various environmental impacts. PG&E suggests that the RETI 2.0 process result in a comprehensive presentation of the relevant environmental data,

allowing the regulatory authority with permitting jurisdiction to make the necessary value judgements when conducting environmental analyses of proposed projects.

4. How should key environmental data best be used to inform various renewable energy planning activities in California, and in the West-wide Interconnection?

As noted above, environmental data should be compiled into an accessible format to be used by local permitting agencies and avoid original, non-regulatory value judgements on the relative environmental sensitivities of areas where it is legally and technically feasible to develop renewable resources. Similarly, RETI 2.0 should avoid value judgements with regard to recommendations of portfolios of renewable projects. Specifically, as PG&E believes that the RETI 2.0 process should be used to inform existing regulatory processes such as the RPS Calculator, PG&E reiterates that the process should plan at a high level to delineate land use and environmental information for lands that are legally prohibited from development. This will result in outputs that are most useful to renewable developers and permitting agencies, who will ultimately weigh the environmental impacts and merits of new renewables projects through established processes. The compilation of all the available data on lands that are not prohibited from development will suffice to inform the developer in their site selection.

5. What have we learned from recent and on-going renewable energy planning activities(E.g. BLM Solar PEIS, DRECP, SJV Least Conflict Solar) that should be considered or consistently applied to renewable energy planning processes? What could we also apply from the viewpoint of individual stakeholder groups' own planning activities or study efforts that evaluate the relative environmental impacts of potential renewable energy generation, transmission and potential transmission corridors?

PG&E has been a committed participant in many of California's recent and ongoing renewable energy planning activities. Major learnings that PG&E suggests should guide the RETI 2.0 process are to maintain stringent validity and quality requirements for considered data, and to work toward easily interpretable, data-based outputs that avoid value judgements. Following these requirements will help to avoid controversy amongst stakeholders that could delay the RETI 2.0 process and complicate the outcome, and ensure that the outputs are most applicable and useful to existing regulatory proceedings.

III. Answers to Questions Posed at the Transmission Technical Input Group

1. Is the information presented today the type of information needed to inform the RETI 2.0 Process?

PG&E believes that the information presented during the January 22 workshop represents appropriate initial information to understand the various transmission planning activities and processes within California, as well as neighboring regions within the WECC. The major project presentations also offered confirmation of potentially desirable resource areas to be considered by RETI 2.0. However it is important that RETI 2.0 consider additional information regarding out-of-state renewable energy resources and other major transmission development around the

WECC. This may include cost-effective pathways for developing out-of-state renewable energy resources and any potential CAISO footprint expansion. PG&E also proposes that the TTIG study how the development of energy-only RPS resources may affect the need for new transmission to meet the 50% RPS requirement from SB 350.

2. What other information and sources of information should the TTIG turn to?

PG&E offers the following additional sources of information that should be considered by the TTIG in accessing all the available relevant transmission data:

- National Renewable Energy Laboratory (NREL) – NREL produces mesoscale analyses that provide renewable energy hourly profiles across the Western Interconnection.

- The Western Interstate Energy Board (WIEB) – WIEB tracks RPS targets and may use Western Renewable Energy Zones (WREZ) energy assessments to buildout to those targets.

- WECC's Environmental Data Task Force has developed a GIS based environmental mapping tool for environmentally and culturally sensitive areas that can be useful for both transmission and resource development.

- The WECC's new 2026 Common Case is stakeholder vetted and has the latest "expected" resource development and loads.

- Additionally, WECC also enlists consultants such as E3 and Black and Vetch to provide estimates of transmission and resources costs. TTIG should consider evaluating work done by such consultants.

- The RPS Calculator includes CAISO's recently updated estimates of transmission network availability for both fully deliverable RPS resources and energy-only RPS resources (the latter of which will, upon release of version 6.2 of the Calculator, be based on vetted estimates resulting from the 2015-2016 TPP 50% RPS Special Study). This includes availability and cost estimates for both in-state transmission as well as transmission upgrades required to deliver out-of-state RPS resources to the CAISO.

These data sources can help guide TTIG input into the Plenary Group. The benefit of using these resources is that WECC already references them for WECC-wide transmission and resources studies, which can be leveraged. PG&E believes this information can supplement other California information, including the 50% RPS study being performed by the CAISO, and can ultimately help identify cost-effective ways to meet the 50% RPS goals.

3. What relevant information can you provide?

PG&E believes that by including the additional sources of information identified in Question 2, RETI 2.0 can provide an appropriate snapshot of the existing transmission landscape.

4. How does your proposal support/improve renewable integration in California and across the West?

PG&E does not believe that the topic of calculating and improving renewable integration is in scope of the RETI 2.0 process, which will focus on renewable resources and transmission needs to meet the state's renewable energy targets. This focus on renewable resources and transmission needs is appropriate for the RETI 2.0 process, as renewable integration issues are currently being addressed in the planning context in other existing venues, including the CPUC's LTPP and the development of the RPS Calculator. It is important, however, that integration costs from the existing proceedings be included in the RETI analysis. If resource or system values are calculated by RETI, they should capture the costs of integration as well as the dynamic nature of energy, emission reduction, and capacity values as renewable penetrations increases. PG&E believes that the RETI 2.0 process should plan for creating cost-effective pathways for developing in-state and out-of-state renewable energy resources and associated transmission to meet the 50% RPS goal. Additionally, PG&E supports the RETI 2.0 process considering the impact of additional renewable energy demand in neighboring states in the WECC, such as renewable energy demand driven by EPA's Clean Power Plan.

IV. Conclusion

We appreciate this opportunity to comment on the RETI 2.0 process, and look forward to participating in future technical advisory group meetings.

Sincerely,

/s/

Nathan Bengtsson