BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider Electric Procurement Policy Refinements Pursuant to the Joint Reliability Plan	R.14-02-001 (Dated February 5, 2014)

INFORMAL COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) ON THE TRACK TWO CONCEPT PAPER

CHARLES R. MIDDLEKAUFF
MARK R. HUFFMAN

Pacific Gas and Electric Company
77 Beale Street, B30A
Post Office Box 7442
San Francisco, CA 94120
Telephone: (415) 973-3842
Facsimile: (415) 973-5520
E-Mail: MRH2@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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Pursuant to the direction provided in David Miller's April 10, 2015 e-mail, Pacific Gas and Electric Company (PG&E) is providing these informal comments on the Energy Division's March 25, 2015 *Joint Reliability Plan Track Two Unified Long Term Reliability Planning Assessment Tool Concept Paper* (JRP Track 2 Concept Paper) and associated April 9, 2015 workshop. In addition, for the convenience of the parties to the Joint Reliability Plan (JRP) proceeding, PG&E is serving these comments on the JRP service list.

The following sections respond directly to the questions raised in the JRP Track 2 Concept Paper.

1. General Comments

a. Overall Framework: Does the proposed two-part approach sufficiently address issues raised in the JRP scoping memo and, in general, will it provide for an improved reliability planning framework? Will the proposed modeling approach give parties a better understanding of the potential for inefficient resource retirements within the next ten years?

Generally speaking, PG&E supports the effort to periodically obtain information from California Public Utilities Commission (Commission)-jurisdictional load serving entities (LSEs) on their contracted resources. PG&E recommends this request/reporting occur every other year, and that LSEs submit the contracting data information by late January of each reporting year. While PG&E has not objected to an annual process, a biennial process may better balance the

need to periodically update the information on resources contracted to the LSEs with the demands on time that information gathering and processing will place not only the LSEs, but also on Commission staff.

PG&E strongly urges the Commission to keep the data gathering effort as simple and straightforward as possible, while still accomplishing the intended purpose. The format for gathering information with the changes discussed during the April 9 workshop meets these objectives, and PG&E supports it.

As the JRP Track 2 Concept Paper acknowledges, once staff gathers the data, it will be important for that information to be published on a sufficiently aggregated basis so that market sensitive information is not compromised. The aggregation level used by staff in the October 2014 *Joint Reliability Plan Track One Staff Report* (JRP Track 1 Report) meets this objective.[1]

Turning to the proposal to periodically assess the risk of retirement for supply resources, PG&E generally supports the idea of a periodic assessment, if done on a "checklist" basis in the long-term procurement plan (LTPP) proceedings.

PG&E strongly recommends against the complex modeling approach that is contemplated in the JRP Track 2 Concept Paper. That approach brings a false precision to the effort. Rather than a complex production simulation modeling approach, whether deterministic or stochastic in nature, PG&E recommends a simpler "checklist" approach that focuses on the likely drivers of resource retirement. This checklist approach is much simpler, and is likely to provide as good – if not better – insight into whether adequate resources are likely to be available to meet grid reliability needs, system, local, and flexible, in the four-to-ten-year forward timeframe.

The periodic risk-of-retirement assessment should occur in conjunction with the LTPP proceeding. Parties evaluating the need for new resources in that proceeding already must make

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[1] *See*, JRP Track 1 Report, Figures 3-6, pp. 20-23.

implicit or explicit assumptions regarding the level of retirement of existing resources in the 10-year ahead timeframe. Conducting an explicit, checklist-based risk-of-retirement assessment in the initial stage of each LTPP is likely to help inform the need analysis that parties perform as a part of the proceeding.

2. Needs and Supply Database Questions

a. General Database Questions

i. Timing: When should Staff release the annual update of the forward needs and supply database?

As noted above, PG&E recommends a biennial, rather than an annual, basis for this information gathering process. Since information was gathered last year, PG&E proposes that the next update occur in early 2016.

PG&E recommends that staff release its update 90 days after LSEs submit contracting data. In response to 2.d.below, PG&E recommends that LSEs submit data in late January of every other year. If this is adopted, then under PG&E's recommendation, staff would release a report in late April of the data submission years.

ii. Confidentiality: Which information in the proposed database should be made public and which should remain confidential? How should the CPUC report / aggregate information for local area resource contracting that accounts for confidentiality?

PG&E recommends that data to be released be aggregated similar to the information released in the JRP Track 1Report.[2] In the JRP Track 1 Report, staff released aggregated data for the system's anticipated requirements for system and flexible resource adequacy (RA) compared to supply and contracted capacity for the Commission-jurisdictional LSEs. The information was provided in graphs and covered up to 10 years forward to the extent data was available. Energy Division also concluded that local RA data cannot be aggregated in a manner

[2] JRP Track 1 Report, Figures 3-6, pp. 20-23.

that protects LSE-specific confidentiality for at least some local areas, and therefore should not be released.

This approach provided clear, useful information regarding LSE forward contracting while limiting the risk of revealing LSE-specific market information with significant market sensitivity. It should be continued.

b. Load Forecast Database

i. Disaggregation: Obtaining future needs based on CEC IEPR forecast is complicated by the need to disaggregate CEC and CAISO forecasts to reflect CPUC jurisdictional LSEs. If the CEC IEPR forecast is used to assess future needs, how should this disaggregation be performed?

Both peak and energy demand by agency (*e.g.*, PG&E service area) and balancing authority (*e.g.*, California Independent System Operator (CAISO)) are available as part of the California Energy Commission's (CEC) Integrated Energy Policy Report (IEPR) forecast. This is shown, for example, on Forms 1.5a and 1.5.b of the CEC's latest demand forecast.[3]

c. Available Supply Database

i. LTPP Deficit: The difference between LTPP authorizations and CPUC-approved additions reflects an expected future deficit in the available supply database. How can this deficit be incorporated into the available supply database in a manner that is consistent with LTPP procurement targets, while not biasing what resources could fill the deficit? With what spatial / temporal granularity?

PG&E recommends that the Commission rely on LSEs that have received procurement authorization to provide their best estimates as to if, how and when they intend to fill the gap between procurement authorizations and Commission-approved additions. These LSEs are in the best position to inform the process with best available information as to where and when unidentified authorized resources will be added.

[3] http://www.energy.ca.gov/2014_energypolicy/documents/demand_forecast_cmf/LSE_and_BA/LSE%20and%20BA%20Tables%20Mid%20Demand%20Baseline-Mid%20AAEE.xlsx

ii. *Data availability: In addition to information captured within the LTPP process, is any formal data request needed to more accurately capture from CPUC jurisdictional LSEs information related to available supply or retirements occurring by year within the next ten years?*

No, at least not to LSEs. Note that LSEs are generally not aware of many potential future retirements in their service areas, since retirements reflect decisions made by owners of generation.

d. Contracted Resources Database

i. *Template: Does the template developed by Staff (sent as a separate attachment) sufficiently capture LSE contracting data for the purposes of this analysis? Is any data missing, or could any data be collected more efficiently?*

Generally speaking, yes. However, PG&E recommends a few modifications. First, as discussed at the April 9, 2015 workshop, the following fields/columns should be removed from the template:

(1) Energy-only contracted amounts by month/year: Energy positions can vary based upon market prices, heat rates and fuel availability (in the case of intermittent resources).

(2) Local capacity contracted amounts by month/year: Local RA is based upon net qualifying capacity (NQC) values and the location of a resource, so providing the system/NQC contracted amounts for each resource should be sufficient. Local area designations can change year-over-year for each resource due to changes in the transmission system. The most recent Local Area designation for each resource is available on the NQC lists.

(3) Nameplate capacity: LSEs do not always have a resource's nameplate capacity, and the value can vary depending upon the definition or source used.

(4) Technology, Technology – Other, Combined Heat and Power, Once-Through Cooling, Qualifying Facility, and Renewable Portfolio Standard fields: As discussed during the workshop, this information is already available to Energy Division, and so is not necessary to include in this data request.

Second, PG&E recommends a clarification to the instructions for the template that the Demand Response (DR) resources sought in this data request are limited to supply-side DR contracts, not all DR contracts.

Finally, PG&E recommends that LSEs provide contracted values for system and flexible capacity net of any sales to other LSEs. If sales transactions are excluded, capacity is likely to be double-counted.

ii. Timing: When is the ideal time each year to have CPUC staff collect the contracting data from CPUC-LSEs? Should this request and reporting occur annually? For the purpose of the upcoming study, is it acceptable to parties to include an additional off-schedule data request?

As noted above, PG&E recommends a biennial process. PG&E recommends that LSEs submit the contracting data information by late January of each reporting year. The end of January submittal timing would not overlap with other activities or compliance deadlines, including those in the annual RA process.

Turning to the question of whether it would be acceptable to PG&E to receive an additional off-schedule data request in connection this information, the answer is yes. PG&E requests that if the off-schedule request is issued, then LSEs be given three weeks, at a minimum, to respond.

3. Economic Risk Of Retirement Modeling Questions

While PG&E generally supports the idea of a periodic assessment, PG&E has significant reservations about the use of production simulation modeling, whether deterministic or stochastic, to evaluate the risk of retirement of existing resources. From PG&E's perspective, the approach, especially as described by staff in the Concept Paper, is very complex and would be very time consuming and potentially controversial.

Further, PG&E does not anticipate that the information obtained through complex modeling would be more accurate than the information that could be obtained through a simpler, checklist approach to evaluating resource viability.

Therefore, PG&E recommends the simpler checklist approach to assess the risk of retirement rather than the complex, simulation-based approach proposed by staff in the Concept Paper. PG&E recommends that this checklist approach be incorporated into the LTPP proceeding. That proceeding already makes assumptions regarding which existing units will be retiring in the 10-year ahead timeframe. The checklist approach discussed below would enhance the current planning approach used in the LTPP to address resource retirements.

PG&E proposes a simple checklist approach to focus on drivers of retirement decisions which cannot be produced by the proposed simulations. The key drivers to be evaluated under the checklist approach include:

- A resource's requirement to meet mitigation requirements from Once-Through Cooling regulations;
- A resource's ability to count towards local RA requirements;
- A resource's ability to provide flexible capacity;
- A resource's ownership such as Investor-Owned Utility-owned, Municipal Utility-owned, or other;
- A resource's age; and
- A resource's contractual situation, such as is whether it is under contract, or whether it has alternative contracting options (*e.g.*, options associated with the Public Utilities Regulatory Policy Act, or the utilities' Renewable Market-Adjusting Tariffs).

There may be a limited number of additional significant drivers that should be added to the list. However, there are other factors that should not be on the checklist. For example, whether a resource can be expected to recover amounts beyond its going forward costs of operation is not particularly relevant to whether the resource is likely to retire. Depending on a resource's financing circumstances, the resource may become involved in a bankruptcy if it cannot recover amounts beyond its going forward costs. However, if the resource is expected to recover its going forward costs, then it is an unlikely candidate for retirement, as it has more economic value operating than it would retiring.

Once the list is established, and the checklist information assembled for each resource, it will be possible to make a reasoned assessment of the risks of retirement. In making those assessments, it will be important to consider the attributes of the resources against grid reliability needs. For example, if a resource can only provide system RA value, but not local or flexible RA value, then the extent to which total system RA of existing resources exceeds the system RA requirements will need to be considered in the checklist approach.[4]

a. Stochastic Inputs: Are the stochastic inputs sufficient to capture expected uncertainties and variability?

As discussed above, PG&E recommends against a production simulation modeling approach for this effort. If the Commission nonetheless determines to continue down the production simulation path, PG&E recommends that the Commission staff seek input from the CAISO and other parties in the JRP proceeding as to the stochastic inputs that staff proposes to use for the assessment. In particular, some of these inputs are being defined/refined in the 2014 LTPP Phase 1b proceeding pursuant to a March 25, 2015 assigned administrative law judge ruling in that proceeding.

PG&E also recommends that the assessment should incorporate the results of other work being carried out in phase 1b of the LTPP, including common definitions, metrics, and standards, and the overall model calibration process.

b. Fixed O&M Costs: What should be the basis for calculating fixed O&M costs?

If staff continues with its proposed modeling approach, PG&E recommends that it seek input from the CEC, National Renewables Energy Lab and other industry sources to develop class estimates for estimation of fixed operations and maintenance (O&M) costs. Based on this information, staff and parties should then consider whether these estimates for fixed O&M costs

[4] Although not the focus of this proceeding, it is also important to note that there should be less concern about the retirement of resources, from a planning perspective, to the extent that the attributes those resources are contributing to the grid are already readily available to the grid. That is, some retirements may very well be "efficient" retirements.

should be updated to account for changing patterns in resource starts and cycling caused by the need to operate the resources to integrate increasing amounts of renewable generation over time.

c. *Local Capacity Technical Studies: CAISO Local Capacity Technical Studies examine the importance of generators for local reliability. How can results of the CAISO Local Capacity Technical studies be used to understand inefficient retirements?*

The CAISO's local capacity technical studies may be used to identify situations where a given local reliability area might become deficient if one or more resources are retired.

d. *Inefficient Retirements: "Whether a resource is determined to be at risk of inefficiently retiring is dependent upon a factor test, which encompasses both the valuable attributes of the resource and its financial situation." How can a factor test be developed to inform determination of inefficient retirement? What additional factors should be considered?*

PG&E sees its recommended checklist approach as conceptually very similar to a "factor test" as referenced in this question. The factors, or items to be evaluated under the checklist approach, should be developed to capture the key variables that are likely to affect resources' determinations of whether to retire. Consideration should also be given to identifying factors that are capable of having fairly clear, objective answers. PG&E's initial list of questions, or factors, to be evaluated under the checklist approach, is provided above in PG&E's general response to this "section 3" group of questions.

In order to develop a robust factor list, staff could request parties to identify key, relatively easy to evaluate factors that are likely to significantly influence resources' determinations of whether to retire. A follow-up workshop could refine the factor list/checklist approach. While it may not be possible to develop a complete consensus among all the parties on the factors to be considered, it may be possible to develop a checklist of objective factors that all of the parties would support as helping to provide a reasonable insight into whether resources are likely to retire.

e. Sensitivity Studies and Benchmarking: What sensitivity and benchmarking studies, in addition to what are described in this paper, should be performed?

PG&E has no additional recommendations for additional sensitivity and benchmarking studies at this time.

Respectfully submitted,

CHARLES R. MIDDLEKAUFF
MARK R. HUFFMAN

By: _____
MARK R. HUFFMAN

Pacific Gas and Electric Company
77 Beale Street, B30A
Post Office Box 7442
San Francisco, CA 94120
Telephone: (415) 973-3842
Facsimile: (415) 973-5520
E-Mail: MRH2@pge.com

Attorneys for
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CERTIFICATE OF SERVICE

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is Pacific Gas and Electric Company, Law Department B30A, 77 Beale Street, San Francisco, CA 94105.

On the 23rd day of April, 2015, I caused to be served a true copy of:

INFORMAL COMMENTS OF
PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)
ON THE TRACK TWO CONCEPT PAPER

[XX] By Electronic Mail – serving the above via e-mail transmission to each of the parties listed on the official service list for R.14-02-001.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 23rd day of April, 2015, at San Francisco, California.

Stephanie Louie
STEPHANIE LOUIE