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Pacific Gas and Electric_Title 20 Comments

Additional submitted attachment is included below.
October 17, 2016

SUBMITTED ELECTRONICALLY TO DOCKET 16-OIR-03

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 16-OIR-03
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Title 20 Data Collection Regulations – Comments of Pacific Gas and Electric Company on Working Draft Document Shared at September 26, 2016 Staff Workshop

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide preliminary comments to the California Energy Commission (CEC) on its “Working Draft Document” (Draft) setting forth proposed amendments to the Title 20 data collection regulations. Given the extensive detail in the draft data collection regulations as well as the limited time provided to interested parties to review and evaluate the draft regulations, PG&E reserves the right to provide further comments based on more detailed review as the rulemaking moves forward.

As PG&E noted at the September 26 staff workshop, the proposed amended regulations would, if adopted, significantly expand the quantities and types of data to be collected by the CEC from the investor-owned utilities (IOUs), publicly-owned utilities (POUs), non-utility load serving entities, energy marketers, energy suppliers, and other participants in California’s energy markets, including personally identifiable information from individual consumers and energy users.

PG&E agrees with the goals of Senate Bill 350 and Assembly Bill 802 which authorize the CEC to collect additional energy-related data in order to make its energy supply, demand and energy conservation forecasting and policy recommendations more accurate and consistent with actual data in energy markets. However, the Legislature also has directed the CEC to minimize the data it collects in order to protect personal privacy and confidentiality and to reduce duplicative, unnecessary and burdensome reporting obligations on the entities and consumer from which it collects the data. The CEC’s development of the amended regulations should be informed by a discussion among all interested parties as to what data are available from utilities, what data are not collected, are there alternatives to collect the data going forward if not currently collected, and how to minimize the overall data collection to ensure that only data that are necessary for the CEC’s forecasting and policymaking needs are collected. Just as importantly, in order to protect

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1 Public Resources Code Sections 25320.
Pacific Gas and Electric Company Comments on Working Draft Document Shared at September 26, 2016 Staff Workshop
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Page 2

the privacy and confidentiality of consumers and utility customers, the amended regulations should exclude collection of customer specific data except through voluntary participation and notification in surveys and other research techniques as required by Public Resources Code Section 25320(d) and the California Information Practices Act (California Civil Code Section 1798.17).

PG&E appreciates the willingness of the CEC to have informal discussions with parties as consideration of the amended data collection regulations moves forward. We look forward to fully participating in that process. In order to provide initial detailed comments on the draft regulations prior to our further review, PG&E’s comments in Attachment A provide information on which proposed modifications are achievable and to which PG&E has no objection to the proposed language, as well as information on the data PG&E does and does not collect in a variety of areas.

Very truly yours,

/s/
ATTACHMENT – PRELIMINARY PG&E DETAILED COMMENTS

I. Numerous Definitions Must be Modified

PG&E has reviewed the definitions set forth on pages 2 through 8 of the Draft and recommends modifications to the severals to reflect the correct legal structure or to avoid double counting issues.

CCA has been defined in the Draft as a “group of customers…who have organized to secure alternative energy supply contracts on a community wide basis.” That is not the correct definition of CCA. PG&E requests that the definition be modified as follows:

(58) “Community Choice Aggregator” means any legally authorized entity (Cities, Counties, Kings River Conservation District, Sonoma County Water Agency and any entity that possesses the statutory authority to generate and deliver electricity at retail) which has taken on the default role of providing electric supply within its political boundaries. CCAs can only operate within the service areas of an investor-owned utility, and must provide customers with the opportunity to opt-out. group of customers within a utility who have organized to secure alternative energy supply contracts on a communitywide basis.

PG&E also recommends modifications to the “Load Serving Entity” definition because a LSE does not have to be a company (as the Draft currently defines it). Consistency in the definitions across regulators is important to avoid confusion among complying parties.

PG&E suggests the following edits to the definition of the thermal output for cogeneration units. These edits will make the CEC reporting requirements consistent with the ARB’s Mandatory Reporting Requirements (MRR) and preempt any inconsistencies in the reporting of the thermal output. PG&E had previously suggested these modifications to the CEC in the 2012 IEPR and it incorporates those suggestions by reference.²

(60) “Useful Qualified thermal output” means the thermal energy made available in a cogeneration system for and used onsite in any industrial or commercial process, heating or cooling application that is not in support of or a part of the electricity generation or cogeneration system or delivered to other particular end users, i.e., total thermal energy made available used for processes and applications other than electrical generation. These end-users include any entity, under the same or different operational control, that is not a part of the facility. Report each end-user’s facility name, NAICS code, and the types of thermal energy product provided. Exclude from this quantity the amount of thermal energy that is vented, radiated, wasted, or discharged before the energy is provided to the end-user.

² See http://www.energy.ca.gov/2012_energypolicy/documents/2012-02-16_workshop/comments/Pacific_Gas_and_Electric_Company_Comments_2012-03-12_TN-64134.pdf
Definition (67) for Electric Vehicle Service Equipment (EVSE) is overly broad and could result in double-counting of equipment. For example, many of the items that would be considered EVSE would also be included in “charging station equipment”. Furthermore, with such a broad definition of EVSE, the very detailed reporting proposed later in the Draft would be virtually impossible. To illustrate this, consider that a Level 1 cordset (the portable cord that comes with a car) is provided to every purchaser of an EV with their car; such detailed information is not available to the utility in most cases.

PG&E also notes on page 51 that information is requested on electric vehicle charging stations. However, this term is not contained in the definitions section. Any request for electric vehicle charging station information should clearly set forth how it is to be distinguished from EVSE.

II. Consumer-Specific Information Should be Excluded from the Data Collected From Third-Parties Such as PG&E. Instead, Consumer-Specific Information Should Only Be Collected If Necessary to the CEC’s Energy Forecasting and Policymaking Needs and Only Pursuant to Voluntary Participation by Consumers

Sections 1308(d) and 1306(b) should be amended to delete the collection of consumer-specific energy usage and billing data, except where necessary and where the data is collected by voluntary consumer participation through surveys or other research techniques, as required by Public Resources Code Section 25320(d) and the California Information Practices Act. Consumer demand and billing data can be collected, but only in an anonymized or aggregated form that prevents the direct or indirect identification of the individual consumer without their consent.

III. Mapping of Information to Categories or Climate Zones Is Best Performed by Use of a Relational Database

As PG&E noted at the September 26 workshop, the Draft would require the complying parties to map certain categories of data to a CEC-specified definition. For example, on pages 2 and 3, numerous customer sectors are defined with certain NAICS codes being eliminated from one category and being added to another. These definitions may or may not be comparable to how a utility defines these categories. Accordingly, if the utility is providing data at a NAICS code level, the CEC should develop a Relational Database to perform its own mapping, rather than asking the utilities to manipulate the data in a manner that the utilities do not use.

Another example of where a Relational Database would be helpful is where the CEC requests that information be mapped to subareas (i.e., climate zones or geographic subdivisions of the transmission system area)\(^2\) that the CEC specifies. As discussed at the Workshop, PG&E noted that in past Integrated Energy Policy Reports, the utility climate zones and those developed by the CEC may differ. Accordingly, if the utilities are providing information at a disaggregated

\(^2\) See pages 50 and 51 of Draft.
level, the CEC could use this geographic data to map the data to meet its preferred definitions, rather than have the utilities re-map the information to a level not needed for utility operations.

**IV. Detailed Information on Electric Vehicle Ownership is Not Collected by the Utilities**

Various reporting requirements are set forth for EVs on pages 51 and 52. Generally, the requirements in this section are extremely rigorous and detailed, yet poorly defined and terms are used interchangeably, which is confusing. Further discussion on the need for and authority to collect this level of detail is needed. Finally, the utilities may not gather this information and it is unclear whether the CEC is able to gather this information from others, including other state agencies.

On page 39, as part of the section on monthly customer demand and billing data, the CEC seeks information on whether customers have PEVs and EVSEs. PG&E recommends the elimination of many of these subparts listed, particularly (1)(k), (l), and (m) and (2)(k), (l), and (m), given the utility is not able to identify current PEV owners unless they are on an EV rate, which only encompasses 25-30% of PEV owners and PG&E does not otherwise track this. While some customers call the utility to perform a service check when installing home charging stations (e.g., higher-power Level 2 chargers), the customer is under no obligation to do so and, if they have existing panel capacity to support the charger, they may not call PG&E. Furthermore, car ownership changes fairly regularly, unlike solar installation for example, so it is not feasible for the utility to keep track of what type of car a customer owns. The CEC may wish to seek information on PEV ownership from the State's Department of Motor Vehicles; however, that information is not readily available to PG&E.

Because the utility does not track this information, modifications to other sections of the Draft are also needed. On page 51, (D) the request should be modified to reflect “light-duty plug-in onroad electric vehicle charging” and the requested disaggregation by vehicle type should be eliminated, as PG&E does not currently forecast for BEVs vs. PHEVs and tariffs. For the reasons noted elsewhere in this document, PG&E does not have the information on the vehicle type to be able to provide this sort of detailed tariff and metering information.

In any event, PG&E questions how the CEC will collect this information. There are thousands of commercial electric vehicle charging stations installed that are not utility-owned. It is unclear how the CEC will collect this information from non-utility entities. Furthermore, it may be difficult, if not unrealistic to expect every owner/manager/operator of stations to comply. In many cases, the owner, manager, and operator could be two or three different entities. It is unclear upon whom the reporting responsibility would fall. Additional thought on this reporting requirement is merited.

In addition to these questions, PG&E has numerous questions on definitions of numerous other items on page 52. For example, Item (u) pricing structure is unclear. Does this mean price per kWh or pricing under a particular tariff? Item (4)(e) is also unclear – does “charging rate” mean kilowatts or dollars? Similarly, item (Z) asking for “type of organization” or “infrastructure” is unclear – is infrastructure the same as EVSE? Information is also sought on EVSE at an electric
vehicle charging station. As noted above, electric vehicle charging station should be defined. Throughout this section, terms like EV Station Equipment, EVSE, Charging Station, are used interchangeably. The CEC will need to use consistent, well defined terms to ensure it gets meaningful information if it can be provided.

Item (BB) appears to be redundant of what is requested in (w) and (x). Finally, Item (3) asking for "status, operational and billing information" is vague, as is the request to provide information on these "as frequently as possible" or "at least daily". Such an open ended request would require tremendous resources to gather and report this information, and it would seem that an annual or quarterly report would be more feasible if the details of what is to be reported can be addressed.

V. Additional Refinements to CHP Reporting are Needed to Meet the CEC’s Goals

At the September 26 Workshop, the CEC noted that the modifications to the CHP reporting sections were intended to allow the CEC to gain information on the on-site electric generation usage that is currently not visible to the CEC. This information is needed to ensure GHG emissions are appropriately captured.

These modifications are a step in the right direction, as PG&E notes above in the “Definitions” section. PG&E recommends additional refinements to this section to ensure that California agencies are using consistent methodologies to measure thermal output and to measure GHG emissions, as outlined in PG&E’s 2012 Integrated Energy Policy Report comments on this topic. These refinements are presented below in redline/strikeout.

1. P.g. 19-22- Section 1304 Power Plant Reports

G) if the power plant is a cogenerator, the Customer Classification code of the entity to which the power plant supplies waste heat useful qualified thermal energy;

Sub-sections –
(A) For power plants with nameplate capacity of one megawatt or more and less than ten megawatts, the following data shall be submitted annually:
(B) For power plants with nameplate capacity of ten megawatts or more and less than fifty megawatts, the following data shall be submitted quarterly:
(C) For power plants with nameplate capacity of fifty megawatts or more, the following data shall be submitted quarterly:

4. fuel use, by fuel type, for useful qualified thermal energy production and electricity generation of each cogenerator;

See also the Air Resources Board’s Mandatory Reporting Requirements at [https://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2013-clean.pdf](https://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2013-clean.pdf)

See also the Air Resources Board’s Mandatory Reporting Requirements at [http://www.energy.ca.gov/2012_energypolicy/documents/2012-02-16_workshop/comments/Pacific_Gas_and_Electric_Company_Comments_2012-03-12_TN-64134.pdf](http://www.energy.ca.gov/2012_energypolicy/documents/2012-02-16_workshop/comments/Pacific_Gas_and_Electric_Company_Comments_2012-03-12_TN-64134.pdf)
8. for cogenerators providing thermal energy to an entity on site, monthly useful qualified thermal energy production of each cogenerator, in million British thermal units; and
9. for cogenerators providing thermal energy to commercial end users or industrial end-users, sales of useful qualified thermal energy to those end users, classified by Customer Classification Code, in million British thermal units, excluding sales to the wholesale market or LSE and the amount of thermal energy that is vented, radiated, wasted, or discharged before the energy is provided to the end-user

VI. Energy End User Surveys are Valuable, but the Data Requested is More than What is Needed to Perform the Surveys

PG&E has long supported energy end user surveys. It is currently conducting a customer end-use study and PG&E recently met with CEC staff to share preliminary information on that study. Next year, PG&E will be beginning a study on the commercial sector.

However, PG&E questions the need for the very detailed data needs that are found in the Draft on pages 42-48. First, the amount of resources that the requirements could entail to gather the information for industrial customers in particular (and possibly commercial) are tremendous and significantly exceed the data anyone could hope to have on these sectors. It would appear that the list is seeking perfection by asking for all the detailed data one would hope to have on California customers. PG&E cautions against collecting all of this data, given changes occur quickly in these sectors and the data become stale and of lesser value in short order. It is also unclear why the CEC needs all the data asked for and how it plans to use it. Finally, it is unclear where the funding would come from to support the significant data collection efforts that would be needed to comply with the Draft if it was adopted. This is another area that could benefit from having a discussion with the CEC on the goals of these studies and the most useful information to collect in a manner that balances cost and data availability.

PG&E offers the following feedback on specific portions of this section:

- Pg 42 (a) (3) (A-D): The language in this section is vague as to who is responsible. For example:
  - (A) …UDC responds…agreeing to comply with the Commission’s participation requirements.” Which requirements?
  - (B) – why does UDC have to provide the CEC “information and data for subsequent analyses” If the UDC is responsible for all the work, does the CEC need the data to replicate the analyses?
  - (D) Where do the utilities get the funds to do this? These surveys cost millions of dollars to conduct, and the cost will be even higher than that if all the CEC’s proposed data needs are met.

- Pg 44, (c) (1) (I) 1. requirement “…to achieve end-use saturation estimates accurate to within plus or minus 5 percent at a 95 percent confidence level;” This confidence level is not really accuracy but “precision” and it is unclear why this level of precision is needed, given the cost
to achieve that is significant. The CPUC and many other jurisdictions running energy efficiency programs typically seek to achieve 90/10 precision/confidence levels for impact studies. Achievement of such a precise level would require a much greater – and expensive – research effort. For example, in the industrial sector, achieving a 95/5 precision level would imply research on ALL the major industrial facilities, detailing all their equipment, how much energy each major end-use is responsible for, key operation behaviors, etc. This would be very expensive and, worse, require enormous engineering resources (taking them away from helping develop and estimate savings for energy efficiency projects), and significantly impact customers.

In the past, the investor-owned utilities worked with a CEC staffer for more than 2 years to build a common understanding of the level of research effort would comply with existing T20 requirements. The final estimate of what it would cost to do an Industrial End Use Survey (IEUS) using the CEC staffer’s requirements was more than $30 million. If the criteria set forth in the Draft were to be used, the cost would be significantly more today. As a result of the significant cost, the IOUs did not do the IEUS study.

- Pg 44, (c) (I) (3) 3. Require that survey methods “…ensure and verify that results are representative of the end user population…” – Additional clarity is needed to better understand what is meant by “representative” of the population. Does that include end-use equipment, behaviors, controls, etc?

- Pg 44, (d). It is unclear why results are needed every 4 years. These end use studies are very expensive and resource intensive research efforts. As noted above, even using less prescriptive data requirements, the IEUS would have cost more than $30 million. Additionally, increased frequency of studies may yield a lower participation rate – the RASS and CEUS had trouble getting the participation rates hoped for. For example, the last RASS had about 21,000 participants, whereas the RASS before that had about 40,000 participants. Customers are less willing to participate when the studies are done frequently, and less participation leads to increases in costs and heightens concerns about “bias” in the results.

- Pg 45 – many of the requirements in the “(1) For all customers:” section are very hard to obtain in the industrial sector. Key ones are:
  - (A) & (B) - Getting even the major energy-using equipment or the energy efficiency measures in a large facility can be a major undertaking. Also, the definition of EE measures is unclear. As “industry standard practices” evolve towards more energy efficiency, the energy efficiency measures will change.
  - For (C) — most industrial and commercial customers will have a variety of controls. How well they are designed, installed, operated, and maintained can have huge implications on energy use and savings. As with energy efficiency measures, more definition is needed around the term “controls.” Additional clarity is needed and, again, getting all the data desired will require significant resources and time.
(H) “patterns of behavior…” Behavior is very hard to capture even in homes---people are very inaccurate when reporting their own behaviors, and the alternative of doing on-site metered verification/observation of behavior is extremely resource intensive.

(i) building characteristics – Often in large industrial buildings, the building shell is not a major determinant of the energy used in the facility—it is in the process side. Getting the details asked for here is good for residential and commercial sectors if the intent is to identify untapped energy efficiency opportunities for building shells and track how well these are tapped over time via subsequent surveys. But increasingly (as building shells improve), the major determinant of a facility’s energy use in residential and commercial sectors is human behavior—not the energy using equipment or building shell components.

- Pg 45-6: (5) (A) – Again, due to often unique site/facility characteristics, it will be very hard to confirm that the sample is an accurate representation of the population. One can say a result is precise based on statistical tests (how closely results cluster around a number), but not confirm accuracy (how valid is the estimate vis-a-vis the true value).

- Pg 46 (5) (B) – Additional clarity is needed on the periodicity of the interval.

VII. Natural Gas Volumes are Not Tracked at the Distribution System Level

On page 33 of the Draft, the CEC seeks monthly pipeline delivery information for all natural gas volumes delivered to locations in California or at the California border on each distribution pipeline segment.

PG&E tracks natural gas volumes that are brought on to the transmission system at all interconnects, from California production, and from storage. PG&E also tracks volumes delivered off of its system at any interconnects. All of this information is currently being reported to the CEC.

However, PG&E does not track volumes on the distribution system, with the exception of being able to report the volumes that are nominated to some individual customers. However, in the case of nominated volumes to core customers, these cannot be tracked because they are grouped into “Core Aggregation Groups” and not tracked individually. In any case, these are “nominated” and not “delivered” volumes; these can be different amounts.

Additional clarity will be needed on how “distribution pipeline segments” are defined before it can be determined if information can be provided on “maximum inlet pressure”, “maximum outlet pressure”, “maximum flow volumes” and changes in pipeline segment characteristics.
VIII. Limited Information is Available on Storage Facilities

On pages 50-51 of the Draft, various information is requested on energy storage systems, including whether charged and discharged using onsite generation or from the grid. PG&E does not collect such information on behind-the-meter storage, because sub-metering would be needed to do this and it is not required for such installations. PG&E does track adoption (MW) via the Self-Generation Incentive Program (SGIP) database and the ENOS interconnection database. It may be possible to model charge/discharge information but this would not be actual charge/discharge profiles. If the CEC would like to explore this alternative, PG&E suggests an in person meeting to discuss.

Limited information on energy storage discharging behavior is available via the Performance Based Incentive (PBI) inspections under SGIP, but these are only for systems above 30 kW, and only for a limited amount of time. The SGIP program does receive performance information on all storage projects that are above 30kW; these projects must submit 15 minute interval data. This data shows all charge/discharge activity since interconnection and PTO. However, storage is a relatively new technology to the SGIP program, and since projects take a while to build and data is submitted annually, good data are not available at this time. To the extent the desired data are produced through annual SGIP reports, the CEC should explore the use of those reports.

IX. Several Proposed Modifications to Title 20 Are Supported by PG&E

Modifications to environmental information reporting for power plant owners are shown on page 24. Providing this additional information on biological resources does not appear to be onerous or problematic and is consistent with information PG&E already tracks for license compliance at its power plants.

The elimination of the Departing Load CRS Information Form is also appropriate, given the 3000 MW exemptions granted from the Cost Responsibility Surcharge available to departing load customers have been fully subscribed.