



Stakeholder Comments Template

Excess Behind the Meter Production: Straw Proposal

This template has been created for submission of stakeholder comments on the **Excess Behind the Meter Production: Revised Straw Proposal** that was published on **November 5, 2019**. The presentation and all related information for this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/ExcessBehindTheMeterProduction.aspx>.

Submitted by	Organization	Date Submitted
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Upon completion, please submit this template to initiativecomments@caiso.com by end of day **November 27, 2018**.

Please provide your organization's comments on the following issues and questions:

1) **Gross Load tariff definition clarification**

Please state your organization's position on the **Gross Load tariff definition clarification** as described within the **Revised Straw Proposal**: (Support / Support with Caveat / Oppose)

If you replied supports with caveats or opposes, please further explain your position and include examples:

The Public Advocates Office at the California Public Utilities Commission, formerly the Office of Ratepayer Advocates,¹ has no comments at this time, but reserves the right to comment on this issue in the future.

¹ The Office of Ratepayer Advocates was renamed the Public Advocates Office of the Public Utilities Commission pursuant to Senate Bill No. 854, which was signed by the Governor on June 27, 2018 (Chapter 51, Statutes of 2018).

2) Excess Behind the Meter Production tariff definition

Please state your organization's position on the **Excess Behind the Meter Production tariff definition**, as described in the **Revised Straw Proposal**: (Support / Support with Caveat / Oppose)

If you replied supports with caveats or opposes, please further explain your position and include examples:

The Public Advocates Office has no comment at this time, but reserves the right to comment on this issue in the future.

3) Excess behind-the-meter production reporting and settlements

Please state your organization's position on the **Excess Behind the Meter Production reporting and settlements**, including the proposal to update the current **Unaccounted-for-Energy (UFE) determination**, as described in the **Revised Straw Proposal**: (Support / Support with Caveat / Oppose)

If you support with caveat or oppose, please further explain your position and include examples:

The Public Advocates Office has no comment at this time, but reserves the right to comment on this issue in the future.

4) Amended charge codes allocated based on gross load

Please state your organization's position on the **Excess Behind the Meter Production charge codes related to reliability (rather than energy), for allocation based on gross load**, as described in the **Revised Straw Proposal**: (Support / Support with Caveat / Oppose)

If you support with caveat or oppose, please further explain your position and include examples:

The Public Advocates Office has no comment at this time, but reserves the right to comment on this issue in the future.

5) Application of losses

Please state your organization's position on the **Excess Behind the Meter Production application of losses**, as described in the **Revised Straw Proposal**: (Support / Support with Caveat / Oppose)

If you support with caveat or oppose, please further explain your position and include examples:

The Public Advocates Office supports the Revised Straw Proposal's methodology for the application of losses, under the assumption that excess behind-the-meter (BTM) production is consumed locally and not transmitted in a manner that merits the application of loss factors.

Additional comments

Please offer any other feedback your organization would like to provide on the **Excess Behind the Meter Production: Revised Straw Proposal**.

The exemption of certain entities from the proposed excess behind-the-meter (BTM) reporting standards:

The California Independent System Operator's (CAISO) Straw Proposal in the Excess Behind-the-Meter (BTM) Production Initiative, released on September 5, 2018, exempts certain entities from the requirement to report both gross load and excess BTM production to the CAISO (and to not subtract excess BTM production from gross load when doing so). The Straw Proposal describes these exempt entities as having "preexisting metering arrangements with the ISO."² When the Public Advocates Office protested this exemption in our September 26, 2018 comments on the Straw Proposal, the CAISO explained in the Revised Straw Proposal that the proposed exemption would apply to only 13% of the CAISO's load,³ and therefore the exemption would only have a *de minimis* impact on calculations such as the Transmission Access Charge (TAC), which depend on gross load. However, the CAISO did not provide an estimate of the impact that this exemption would have on TAC collection. If the policies in the Revised Straw Proposal are adopted, these exempt entities will continue to net BTM production from gross load and only pay TAC on load that is netted (gross load minus excess BTM production). Additionally, this proposed exemption is inconsistent with the goal of providing "greater insight into the impact excess BTM production has on the ISO system,"⁴ as stated in the CAISO's June 28, 2018 Issue Paper. Concerns regarding this exemption are shared by other stakeholders; Southern California Edison Company (SCE) stated in its

² *Excess Behind the Meter Production: Straw Proposal*. September 5, 2018. California Independent System Operator Corporation. P.13. Retrieved from <http://www.caiso.com/Documents/StrawProposal-ExcessBehindtheMeterProduction.pdf>.

³ *Excess Behind the Meter Production: Revised Straw Proposal*. November 5, 2018. California Independent System Operator Corporation. P.20. Retrieved from <http://www.caiso.com/Documents/RevisedStrawProposal-ExcessBehind-MeterProduction.pdf>.

⁴ *Excess Behind the Meter Production: Issue Paper*. June 28, 2018. California Independent System Operator Corporation. P.9. Retrieved from <http://www.caiso.com/Documents/IssuePaper-ExcessBehindtheMeterProduction.pdf>.

September 26, 2018 comments on the Straw Proposal that it was concerned about the “disparate treatment between Participating Transmission Owners (PTOs) with respect to the billing of the Transmission Access Charge.”⁵ Pacific Gas and Electric Company (PG&E) expressed the same concern in regard to how this exemption policy would potentially shift TAC costs.⁶ While the CAISO implies that this exemption policy would not have a significant impact, there is evidence of significant BTM resources in the areas that are known to be exempt,⁷ and netting the excess production from these resources could substantially alter the exempt entities’ TAC payments and shift TAC costs to ratepayers in non-exempt areas. To avoid this, the Public Advocates Office recommends both estimating the potential cost shifts and exploring other options for entities to report excess BTM production that would not pose disparate costs on those entities. Adopting feasible options would ensure that all load-submitting entities are treated equally by the CAISO. The Public Advocates Office recommends the following solutions that the CAISO should explore further in this initiative.

- 1) Estimate the potential cost shifts: It would help to understand the cost impacts to PTOs reporting their net load instead of their gross load. The following suggestion is one method for estimating excess BTM production in an exempt area and its impact on the collection of TAC and its cost allocation.
 - i. Estimate the BTM resources within an exempt area by using the California Distributed Generation Statistics (CDGS) database⁸ - which is updated monthly and maintained by the CPUC, the investor-owned utilities, and other administrators - to determine the number of interconnected solar photovoltaic (PV) systems in that area. For example, this database indicates that there are 5,930 net energy metered solar systems in the Six Cities with a capacity of 47,414 kilowatts alternating current (AC) (the power rating of the solar system after it has been converted from direct current - which is produced by the solar panels - to AC, which is used by the distribution grid at large).
 - ii. Estimate how the load for an average residence in the exempt area is distributed throughout the day using the Energy Information Administration’s Residential Energy Consumption Survey, which uses a survey of more than 5,600 households to develop a regionalized assessment of daily household energy consumption.⁹ Then, using the baseline data for daily electricity

⁵ *Comments on the Excess Behind the Meter Production Initiative Straw Proposal*. September 26, 2018. Southern California Edison (SCE). P.3. Retrieved from <http://www.caiso.com/Documents/SCEComments-ExcessBehindtheMeterProduction-StrawProposal.pdf>.

⁶ Phone conversation between the Public Advocates Office (Steven Shoemaker) and PG&E (Simon Ou) on November 19, 2018. PG&E.

⁷ *Publicly Owned Utility (POU) and Other Solar Data*. Updated June 30, 2018. California Distributed Generation Statistics. Retrieved from <https://www.californiadgstats.ca.gov/downloads/>.

⁸ *Publicly Owned Utility (POU) and Other Solar Data*. Updated June 30, 2018. California Distributed Generation Statistics. Retrieved from <https://www.californiadgstats.ca.gov/downloads/>.

⁹ *Residential Energy Consumption Survey*. 2015. Energy Information Administration. Retrieved from <https://www.eia.gov/consumption/residential/data/2015/>.

consumption developed by the local utility (usually publicly available as it is used to set rates), develop an average residential daily load curve.

- iii. Determine the average size of a solar PV system for that region or ones adjacent to it using the CDGS database, then use the National Renewable Energy Lab's "PV Watts" Tool (which uses localized meteorological data to estimate what a solar PV system in a given area will produce),¹⁰ to estimate the average PV system's hourly production for one year. Apply the estimated production of the average system to the average load curve to create an average net load curve with solar. From that, estimate the average annual excess BTM production, and multiply the average annual excess BTM production by the total number of systems within the service territory of a given entity.
- iv. Subtract that annual excess BTM production from the load submitted to the CAISO for TAC calculations and use these calculations to determine the TAC that each PTO must pay.

Stakeholders are limited in their ability to perform these calculations due to the lack of available data. The CAISO and these exempt entities have access to higher quality data and greater expertise and would therefore be able to use this or a more accurate methodology to estimate how this exemption policy impacts TAC collection and ratepayers.

- 2) Consider requiring proposed exempt entities to identify large BTM systems in their service territories and ensure that the excess production from those systems is not netted when reporting gross load. Typically, these systems have more sophisticated metering equipment than small, residential systems.
- 3) Clarify in the Draft Final Proposal how energy that is both scheduled into the CAISO market and is located within one of these exempt entities' service area is treated. Would the CAISO subtract production from a utility-scale solar PV system participating in the CAISO market that is situated in the service area of one of these exempt entities from the gross load of that entity?
- 4) Consider the recommendation to apply reporting requirements on new BTM resources. The Six Cities suggested in their comments on the Issue Paper that they "could support going-forward requirements for metering that would identify excess BTM production for new BTM resources, subject to a reasonable advance notice and the implementation of a waiver...where necessary metering equipment is not available at a reasonable cost."¹¹ If this is feasible for exempt entities, it could minimize cost shifting that results from continued BTM resource growth.

¹⁰ *PV Watts Calculator*. The National Renewable Energy Laboratory (NREL). Retrieved from <https://pvwatts.nrel.gov/>

¹¹ *Comments of the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California on the Excess BTM Production Issue Paper*. July 25, 2018. Retrieved from <http://www.aiso.com/Documents/SixCitiesComments-ExcessBehindtheMeterProduction-IssuePaper.pdf>.

- 5) Estimate Excess BTM production: The CAISO should work with exempt entities to determine a methodology these entities can use to estimate the excess BTM production from small-scale and residential systems and stipulate that this production cannot be netted when reporting gross load. This can be accomplished by using a methodology similar to the one detailed in the first suggestion above.

The CAISO Business Practice Manual for Metering¹² and Section 10 (Metering) of the CAISO tariff¹³ do not state that these exempt entities are required to take feasible measures to avoid netting excess BTM production. If the metering agreements with these exempt entities firmly preclude the adoption of these or any other solutions meant to protect against netting of excess BTM production, then the Draft Final Proposal should provide additional detail as to the nature of those agreements and why they cannot be altered.

The CAISO states that the cost impacts of this exemption policy are *de minimis* to ratepayers but did not demonstrate this. Our preliminary research shows there are substantial BTM resources within the service areas of these exempt entities, resources which are expected to grow with the implementation of California's 2019 Building Energy Efficiency Standards,¹⁴ which require solar installations on all new residences. The Public Advocates Office proposed a methodology for estimating the distortion in TAC that would benefit from the superior data accessible by the CAISO and these exempt entities. If certain entities are able to consistently net their excess BTM production from their load, the ratepayers located in the entities' service territories that are not able to net their excess BTM production will pay disproportionately higher transmission charges. Given the significant time, effort, and expertise that goes into making the TAC allocation process as accurate as possible, accepting an easily avoidable cost shift is not reasonable. The stakeholder's comments submitted¹⁵ as part of this initiative reveal that solutions to protect against subtracting excess BTM production from gross load can be tailored to each exempt entity and can be structured in a manner that does not impose a significant burden of time or money on either the CAISO or the proposed exempt entities.

¹² *Business Practice Manual for Metering*. Revised May 24, 2018. California Independent System Operator Corporation. Version 18.

¹³ *FERC Electric Tariff. Section 10 – Metering*. California Independent System Operator Corporation. Retrieved from https://www.caiso.com/Documents/Section10_Metering_May1_2014.pdf.

¹⁴ *Residential Building Energy Efficiency Standards*. California Energy Commission. 2019. Retrieved from https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Residential_Standards.pdf

¹⁵ *Comments of the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California on the Excess BTM Production Issue Paper*. July 25, 2018. Retrieved from <http://www.caiso.com/Documents/SixCitiesComments-ExcessBehindtheMeterProduction-IssuePaper.pdf>.