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## **SMUD Comments on Draft Publicly Owned Utlity Integrated Resource Plan Guidelines and Related Material**

Additional submitted attachment is included below.

### STATE OF CALIFORNIA BEFORE THE CALIFORNIA ENERGY COMMISSION

In the matter of:	Docket No. 17-IEPR-07
2017 Integrated Policy Report (2017 IEPR) and Integrated Resource Plans (Publicly Owned Utilities)	SMUD Comments on Draft Publicly Owned Utility Integrated Resource Plans Guidelines and Related Material
)	June 15 <sup>th</sup> , 2017

# Comments of the Sacramento Municipal Utility District on the Draft Publicly Owned Utility Integrated Resource Plan Guidelines and Related Material

The Sacramento Municipal Utility District (SMUD) respectfully submits the following comments regarding the *Draft Publicly Owned Utilities Integrated Resource Plan Submission and Review Guidelines* (Draft Guidelines), the four standardized integrated resource plan (IRP) tables, and the proposed plug-in vehicle transportation electrification (TE) greenhouse gas (GHG) calculator. The Draft Guidelines were discussed at a workshop on May 25, 2017, and the standardized tables and TE calculator were discussed at webinars held on May 31, 2017.

SMUD appreciates the CEC staff work that has resulted in the Draft Guidelines and related material. SMUD believes that in general the Draft Guidelines have accurately reflected the roles and responsibilities of POU Governing Boards to develop IRPs that are consistent with SB 350 and adopt and file those IRPs at the CEC and the CEC role of providing Guidelines and reviewing the IRPs filed.

SMUD also supports the Joint POU comments filed by the California Municipal Utilities Association (CMUA). In particular, SMUD agrees with CMUA in expressing appreciation for the collaborative working relationship with CEC staff and general support for many current provisions of the Guidelines, reflecting appropriate changes from previous documents.

#### A. Comments on Text of Draft Guidelines

**General:** SMUD appreciates the degree to which the Draft Guidelines distinguish between that material in the IRPs that is clearly required by provisions in SB 350 and other material that is "optional" – not specifically required but "encouraged" to be submitted to the extent available. It is not definitively clear, however, whether the CEC's determination of an IRP as either consistent or inconsistent can rest on any of the optional material proposed in the Draft Guidelines. SMUD suggests a statement be

included either in the Introduction section at the beginning of the document or in Chapter 3, part B that reads:

"These Guidelines identify specific mandatory information that must be in a POU IRP filing and other information that is encouraged but not mandatory, which a POU may report or include in the IRP at its discretion. The CEC will not make a determination about consistency or inconsistency with PUC Section 9621 as a result of the nature of or presence of optional information in the IRP filing.

**Supporting Information:** The Draft Guidelines describe a requirement to provide Supporting Information that the POU used or relied upon in creating the IRP (page 4, Chapter 2, section D). While SMUD recognizes that information directly relied upon by a POU to prepare its IRP is appropriate for the CEC's review, SMUD is concerned that this requirement is vague and potentially overly broad because many sources of information go into the thinking of resource planners as they address the diverse resource needs of the utility and state goals. Thus, the POU should have discretion over what to include as Supporting Information. If the POU has exercised that discretion correctly, the CEC should be able to determine from the content of the IRPs and the Supporting Information provided how the data in the four standardized tables is derived. If the CEC cannot follow a POU's reasoning then the CEC can request additional information.

**Demand Forecast:** The Draft Guidelines describe on pages 4 and 5 (Chapter 2, Section E) aspects of demand forecasting that should be included in an IRP filing. The language suggests that if a filing POU uses the CEC's demand forecast (or a forecast from another public source) that this forecast be included as Supporting Information. It is unclear to SMUD what is to be included here, other than stating the source of the forecast in the IRP and the actual forecast values (in IRP text as necessary and in the standard tables as appropriate). It should not be necessary for a filing IOU to "attach" or include the CEC's own forecast documentation.

On the other hand, if the filing POU develops and uses their own forecasts, the Draft Guidelines indicate that Supporting Information must include any economic and demographic information that are primary drivers of demand growth in a filing. To the extent that these economic and demographic drivers are adequately described and documented (pointing to sources, etc.), there should be no need for Supporting Information that is duplicative.

**Energy Storage**: The Draft Guidelines on page 8 (Chapter 2, Section F.4.) reflects the requirement from SB 350 that IRPs address procurement of energy storage. However, individual POUs may or may not have a reason for or need for procuring energy storage resources, and hence may simply say in their IRPs that no storage procurement is anticipated or relied upon. SMUD appreciates the optional nature of the recommendation in the Draft Guidelines that POUs describe "to the extent possible" the role of storage to address over-generation and ramping concerns. This issue is more of a Balancing Authority concern, rather than relevant to a specific individual POU.

Individual POUs may or may not have any analyses or opinions on this question, may or may not perceive over-generation and/or ramping issues in their systems for which storage procurement may be considered. Hence, it is reasonable that addressing this specific aspect of storage procurement is fully optional in the Draft Guidelines.

Flexible Capacity: The Draft Guidelines on page 11 (Chapter 2, Section G.3) include a requirement that IRPs must demonstrate that "... sufficient flexible, dispatchable resources to address any potential over-generation and meet ramping needs associated with solar generation." SMUD believes that this requirement should not be included as mandatory information in a POU's IRP, and instead be made voluntary. Addressing the need for flexible capacity is not required by SB 350. Individual filing POUs will generally not have POU-system specific reliability issues that derive from over-generation or ramping. This is a system or balancing authority level issue to address, not one that should be addressed by each individual POU. SMUD suggests that the language here be modified to focus on voluntary provision of information if the POU has done any analyses of the general issue and the potential interaction, if any, of the procurement described in the IRP to the general questions of flexibility, over-generation, or ramping. There should not be a mandatory demonstration of "sufficient resources" for each POU – this is likely to be duplicative and inefficient from a system perspective.

Rates: The Draft Guidelines indicate on page 12 (Chapter 2, Section I) that IRPs must include, as Supporting Information; "... a report or study of rate impacts under the IRP scenario." SMUD agrees that SB 350 requires IRPs to address minimization of rate impacts amongst the other IRP requirements. Generally, in the integrated resource planning process, the long-term rate impacts of various procurement choices is examined in a qualitative way. IRPs will not include a comprehensive report or study of rate impacts as in a 3-year rate case or similar rate action adopted by a POU Governing Board. Rather than definitive projections of future rates or actual rate actions, the rate impacts addressed in an IRP are useful for evaluating long-term procurement choices. There may be dramatic changes in resource costs and policy questions over time that render the actual rates that are put in place ten years down the road significantly different than the qualitative rough projections in an IRP.

Since IRP filings are public documents, SMUD is concerned about quantitative long-term estimates of rates inadvertently setting some premature public expectation for rate increases. Instead, the IRP itself should include a qualitative discussion of the methodology used in assessing rate impacts between any number of IRP scenarios and how this assessment ensures rate impacts are "just and reasonable" and "minimizes impacts on ratepayer bills." Again, any Supporting Information that may be necessary to help explain what is in the IRP can be provided as appropriate or available, or requested if needed by the CEC.

**Disadvantaged Communities**: The Draft Guidelines discuss on page 13 (Chapter 2, Section K) the issue of addressing localized air pollutants and disadvantaged communities. As POU service territories differ significantly with respect to local air pollution and disadvantaged communities of various kinds, SMUD simply requests that

POUs be allowed to address the specific needs and issues relevant in their service territories, rather than being required to address these issues using CalEnviroScreen or similar state-developed structures.

**Appendix B – IRP Checklist**: SMUD appreciates the inclusion of an IRP checklist – it will be useful for ensuring that all the required elements of the guidelines are included in an IRP filing. For this purpose, the checklist should include only those items that are required, and not include any optional or "encouraged" information. SMUD asks that the CEC verify that this is the case as the final guidelines are developed.

#### **B. Comments on Four Standardized Tables**

Capacity Resources Accounting Table (CRAT): The CRAT should generally allow the aggregation of smaller individual resources of the same type into an aggregate line for the resource. This could be by type of resource (e.g. solar photovoltaic), by contract type, by geographic area, or some combination of these. As an example, SMUD has about 30 solar projects in our Feed in Tariff structure, which could be aggregated under a "Solar, FIT" total. Reporting each project individually will add complication and burden without added benefit.

**Energy Balance Table (EBT):** The EBT should also allow the aggregation described above for the CRAT. In addition, SMUD supports the inclusion of a row or rows in the EBT that represents renewable procurement that is not delivered to the POU service territory, and treatment of these resources as zero-GHG resources for purposes of the generation that feeds into the GHG Emissions Accounting Table (GEAT).

GHG Emissions Accounting Table (GEAT): The GEAT should be structured to properly attribute the zero-GHG procurement of renewables not delivered to the POU service area. If the EBT includes a generation adjustment that reflects this proper attribution, one may not be necessary in the GEAT. While it appears on the surface to make sense that the GHG accounting structure in the IRP be consistent with the structure being developed for the annual source disclosure and power content label as mandated by AB 1110, it is difficult to be certain of this without that latter structure being developed. The uncertainty about how and when the AB 1110 GHG accounting structure will be developed makes SMUD reluctant to fully support language in the Draft Guidelines that connect the IRP to the AB 1110 GHG structure.

#### C. Comments on Transportation Electrification Calculator

SMUD does not believe that the transportation electrification (TE) Calculator is sufficiently developed for use in IRP efforts today. Whereas we recognize that each utility has the option of inputting their own data into the calculator tool, we believe that the default tool should be as accurate as possible to statewide conditions so anyone using the tool default can get reasonable outputs. The TE Calculator in current form is overly complex, without adequate explanation of or documentation of the inputs, assumptions and calculations in the spreadsheet. The results currently shown, without changing the default input assumptions, do not appear sensible or realistic. For

example, the TE calculator as posted suggests the improbable result that electrification increases some criteria pollutant emissions to the atmosphere.

SMUD reviewed internally and consulted with outside subject matter experts (who made a preliminary technical review of the TE Calculator), and believes that the assumptions for PM 2.5 criteria pollutants from the electric portion of the equation must be reexamined. The TE calculator appears to use emission factors for PM 2.5 associated to South Coast Air Quality Management District (SCAQMD) permit values versus GREET Model 2.0 emission factors. A majority of the TE Calculator appears to be based off GREET 2.0 data, but SCAQMD permit level criteria pollutant emission factors appear to be included as defaults in the spreadsheet. These are not representative of the entire state. Among other potential assumptions, this causes the TE Calculator to predict a highly improbable increase in PM2.5 emissions from electrification. This is not consistent with state policy and would mislead anyone using this as a default tool or as a general reference emission model.

The criteria emissions results in the TE Calculator also appear to not reflect the requirement that increased load must be met by an amount of renewable generation per the State's RPS requirements, and also does not adjust over time for the RPS requirements increasing to 50% RPS by 2030 (under current law). Hence, the TE Calculator will over-predict criteria emissions on the electric side, and is not consistent with state policy direction or is representative of expected power plant emissions reductions over time. Generally power plants emit below permit levels in order to ensure compliance with permit conditions.

In addition some of calculation methodology seems to mix and match per vehicle emissions with total emissions which causes confusion in understanding and following the emission reduction values. SMUD recommends that more time be spent correcting the tool and allowing for more in-depth technical feedback so the default values are more representative of the entire state and are consistent with state policies going forward.

In addition to reconsidering the electricity side assumptions, SMUD is uncertain that the TE calculator accurately captures differences between electric and conventional vehicles with respect to attributes such as miles travelled, degradation, etc. The TE Calculator includes a variety of assumptions on these vehicle attributes that may complicate the analysis for perhaps little benefit to get to the simple end goal of determining the impact of changing one mile of driving or one vehicle from conventional fuel use to electricity. Complication can lead to developing assumptions with little basis that end up skewing the calculation one way or another.

SMUD appreciates the opportunity to comment on the Draft Guidelines and related material.

/s/

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