DOCKETED

Docket Number:	17-IEPR-07
Project Title:	Integrated Resource Planning
TN #:	216494
Document Title:	Comments of the Sacramento Municipal Utility District on the Joint Agency Workshop Regarding Integrated Resource Planning
Description:	N/A
Filer:	System
Organization:	Sacramento Municipal Utility District
Submitter Role:	Public Agency
Submission Date:	3/9/2017 4:05:07 PM
Docketed Date:	3/9/2017

Comment Received From: William Westerfield
Submitted On: 3/9/2017
Docket Number: 17-IEPR-07

Comments of the Sacramento Municipal Utility District on the Joint Agency Workshop Regarding Integrated Resource Planning

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	)	SMUD Comments on Joint Agency
(2017 IEPR)	)	Workshop Re Integrated Resource
	)	Planning
	)	
	)	March 9, 2017
	)	

Comments of the Sacramento Municipal Utility District on the Joint Agency Workshop Regarding Integrated Resource Planning

The Sacramento Municipal Utility District (SMUD) respectfully submits the following comments to the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) pursuant to the Joint Agency Workshop on February 23rd that examined high level concepts for implementing an electric sector GHG target and dividing this target between CEC-jurisdictional entities and CPUC-jurisdictional entities.

Senate Bill 350, the Clean Energy and Pollution Act of 2015 (SB 350), requires large local publicly owned electric utilities (POUs) to adopt integrated resource plans (IRPs) periodically to ensure that a number of key state environmental policies, including significant GHG reductions, will be met.[1] Integrated resource planning has been an accepted way for utilities to create long-term resource plans since the late 1980s.[2] SMUD has been engaged in integrated resource planning since the mid-1980s, and has used its IRP process to project achievement of all state goals and policies since these key state environmental policies (e.g., the RPS) were begun in the early 2000s. As a result, SMUD has substantial experience and has had great success in ensuring achievement of state environmental policies through its IRP process. SMUD is not unique among POUs in this regard, as many other large POUs have significant experience with integrated resource planning as well.[3] While the CPUC has required utility resource planning by the investor-owned utilities (IOUs) through the Long-Term Procurement Plan (LTPP) process for some time, California did not have an IRP rule

[1] "The term 'integrated resource planning' means, in the case of an electric utility, a planning and selection process for new energy resources that evaluate the full range of alternative, including new generating capacity, power purchases, energy conservation and efficiency, cogeneration and district heating and cooling applications, and renewable energy resources, in order to provide adequate and reliable service to its electric customers at the lowest possible cost." Energy Policy Act of 1992. §111(d)(19).
[2] Wilson R., Peterson P, "A Brief Survey of State Integrated Resource Planning Rules and Requirements", Synapse Energy Economics (April 2011).
[3] CEC Workshop, Publicly Owned Utility Integrated Resources Plans, April 18, 2016.

until SB 350 was enacted less than two years ago.[4] Thus, the California Legislature was correct in placing primary responsibility for developing IRPs to ensure achievement of GHG reduction targets and related environmental goals with the POUs.

The particular goals that were the subject of the Joint Agency Workshop on the morning of February 23rd are GHG emissions reduction targets for the electricity sector and for the large POUs that will reflect the electricity sector's contribution to reductions of state GHG emissions to 40% below 1990 levels by 2030. As noted above, the California POUs have primary responsibility for meeting these GHG emissions reduction targets in their service territories. The California Air Resources Board (CARB), in parallel, has *exclusive* authority for "establishing" these targets. SB 350 requires the POU to adopt an IRP that:

> …(1) Meets the greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the commission and the Energy Commission, for the electricity sector and each publicly-owned electric utility …[5]

While CARB was given the authority to establish GHG reduction targets, SB 350 created a distinct role for the CEC to "coordinate" with CARB in the process. SMUD recognizes and welcomes the CEC's assistance. However, there can be only one regulatory agency that actually establishes the targets, and that agency is clearly the Air Resources Board. CARB indicated in the Joint Workshop that there will be a transparent regulatory process in 2017 for establishing these targets. The CEC should lend its unique expertise and analytical capabilities to CARB in that process. SMUD is puzzled why the CEC finds it necessary to create a separate public process, independent of regulatory proceeding planned by CARB, to "coordinate" with CARB. SMUD believes that coordination with CARB would be more effective and certainly more efficient if it takes place in a single, regulatory process.

In addition, the CEC has "undertaken several steps to establish GHG planning targets for … POUs" that evidence more than a coordination role, but rather a primary role in establishing GHG emission reduction targets, such as:

- Define the electric sector GHG emission reduction target or target range for use in IRP;
- Adopt a methodology to divide this target for planning purposes in the Energy Commission's IRP process; and
- Adopt a methodology for setting POU-specific GHG reduction targets

Again, under the statute, setting electricity sector targets is explicitly CARB's role. Likewise, setting POU-specific GHG reduction targets are also CARB's job. SMUD does not read SB 350 as granting this responsibility to the CEC, and we do not understand why the CEC finds it necessary to forestall the planned regulatory process

[4] Id. at 13.
[5] CA Pub. Util. Code §9621(b)(1).

of CARB. CARB will complete their process of setting GHG targets in plenty of time (potentially one year in advance of the deadline for the POUs to adopt IRPs) for SMUD and the other POUs to plug those targets into their annual planning processes. Moreover, SMUD does not read SB 350 as requiring the CEC to "adopt" an "IRP process". The Legislature assigned the responsibility for preparing IRPs to the POUs, and it is the POUs who have the deep experience in preparing IRPs to integrate their resources to meet state goals.

The CEC's supportive, not preemptive, role in setting GHG reduction targets is underscored by statutory text that places target-setting authority with CARB and a coordination role with the CEC. The CEC's secondary role in IRP development is evident in Section 9622(b), where the Legislature limited the CEC to "review" and "recommendations" not an approval function that is characteristic of state public service/utilities commissions in IRP states.[6] SMUD finds that the process that has begun at the CEC is irregular to say the least and could easily be viewed as over-reaching its statutory authority. SMUD suggests that the CEC re-evaluate its initiative and defer and participate in the CARB process soon to come.

SMUD provides answers to the questions from the notice and discussed at the February 23rd Workshop below.

1. Under Part 1, which of the options do you recommend, and why? What issues should be considered when implementing that option, and how should those issues be addressed?

SMUD recommends neither Option A nor Option B. Instead, SMUD recommends that a statewide electric sector emissions planning target range for 2030 should be set by CARB after a deliberative process that fully accounts for various uncertainties in the electric sector and that considers maximum preservation of the intent of the Cap and Trade market. The electric sector is subject to several complementary policies including the 50% Renewable Portfolio Standard (RPS) and doubling of energy efficiency requirements established in SB 350. These policies, along with California's Emission Performance Standard that prevents procurement of new, long-term, contracts for high-GHG resources, are the main drivers of emission reductions in the electric sector.

The Cap and Trade program provides an incentive to further reduce GHG emissions in order to reduce compliance obligations, but also provides the flexibility for all sectors, including the electric sector (and individual sources within that sector), to trade with each other and with other sectors to achieve the overall statewide target at the least cost. The State should avoid establishing specific targets for subsectors (and individual obligated entities) that would constrain the "trade" element of Cap and Trade. SMUD

[6] CA Pub. Util. Code §9622(b).

believes that a carefully crafted planning target range for the electric sector, structured in terms of GHG intensity – tons of GHG/amount of electricity generated – minimizes adverse impacts in the Cap and Trade marketplace. Further, SMUD would like to ensure that any GHG planning targets set under this process are just that, planning targets, which could be used by the CEC to measure the State's progress towards GHG reduction goals. These GHG planning targets should not be confused with Cap and Trade compliance which, as previously mentioned, can be achieved in various ways.

2. **If recommending Part 1 Option A, should the IRP process use an emission reduction target equal to the lower end of this range (42 MMTCO2e), the higher end of this range (62 MMTCO2e), or a target somewhere within this range?**

SMUD is not recommending Part 1 Option A, but believes that an answer to this question is still pertinent. SMUD supports establishing a planning target range, rather than attempting to choose a specific planning target at the lower end, higher end, or in-between a set of numbers in an ARB Draft 2030 Scoping Plan. As a planning target used for measuring the State's progress towards GHG reduction goals, it is not necessary to set a specific target. Establishing a target range incorporates and reflects uncertainty in load growth, including the impacts of energy efficiency programs and electrification; and uncertainty in resource availability – particularly hydroelectric resources that can vary significantly from year to year. For example, SMUD's hydroelectric generation has varied recently from 31% of our generation sources in 2010 to just 9% in 2014. GHG planning targets for the electric sector should reflect these and other variations. Additional uncertainty comes from contracted renewable resources. New contracts may not perform as expected, as is the case with at least two of SMUD's expected resources, and older contracts are subject to uncertainty about the procurement of that power past the end of the contract life.

3. **Are there any other methods that should be considered for assigning an overall electricity sector target in 2030 for IRP purposes? If so, please describe the method in as much detail as possible and explain why it is preferable to the options listed above?**

SMUD recommends that a statewide electric sector emissions planning target range for 2030 should be set by CARB after a deliberative process that fully accounts for various uncertainties in the electric sector and that considers maximum preservation of the intent of the Cap and Trade market. This option is supported by the CARB staff presentation at the February 23rd workshop, which indicated that CARB target-setting for the electric sector would follow a formal process, with workshops, a formal proposal

and formal comment periods, followed by Air Board adoption (see slide 3). Slide 10 of the CARB staff presentation shows that this process is scheduled for the fall of 2017, after Air Board consideration of the Draft 2030 Scoping Plan. Hence, the model results currently in the Draft Scoping Plan, showing 2030 projected GHG emissions ranging from approximately 42 million metric tons to 62 million metric tons, should not be considered a CARB-approved target range for the electric sector.

There is no need at this time for the CEC and the CPUC to jump-ahead of this CARB process. The question of how an electric sector target or target range should be established and what that target range should be needs to be established in the upcoming CARB process. It is not clear to SMUD that the question of how to divide the eventual electric sector target or target range between CEC and CPUC jurisdictions is necessary. For example, as discussed at the February 23rd workshop, a "bottoms-up" methodology for determining reasonable targets or target ranges for individual load serving entities (LSEs) can occur without answering the CEC vs. CPUC jurisdiction question – the eventual division between the jurisdictions is a result of the bottoms up process, rather than somehow guiding that process from above.

In the meantime, the CEC and CPUC can proceed with other IRP matters without having an electric sector GHG target or target range or a division of this between the CEC and CPUC jurisdictions. As the CARB (in collaboration with CEC and CPUC) process follows the adoption of the 2030 Scoping Plan later this year, the results from that can be seamlessly dropped into the IRP structure at any point in time prior to the actual running of models and scenarios to project the results of different procurement strategies with respect to meeting these targets as well as the 50% RPS target and other goals already expected to be reflected in IRPs.

4. **Do the proposed methods adequately account for interactive effects between the electric sector and other economic sectors, in particular with the transportation sector? If not, please explain how these interactive effects should be accounted for in the IRP process.**

SMUD believes that it is appropriate and even essential to consider the interactions between the electric sector and other economic sectors, particularly the transportation sector. Electrification of transportation in a variety of forms (not just light-duty vehicles), and of stationary end-uses that come with on-site GHG emissions, will have immense GHG reduction benefits overall, even as the increased electric load tends to increase electric sector GHG emissions. The proposed methods do not adequately account for these interactions, in part simply due to a lack of detail. The interactive effects must be included in the process to develop targets or target ranges, but it may be more effective

to develop the details of that inclusion farther down the line as more details of the overall target-setting structure and process are developed.

SMUD believes that Option B is particularly deficient at accounting for these interaction effects. Simply taking the electric sectors share of 2016 statewide emissions and multiplying this fraction times the statewide 2030 emissions target clearly ignores the emission increases that will result in the electric sector from electrification over the next 13 years and also the emission decreases that will result in the transportation and other sectors as a result of electrification. The interactive effects from electrification will certainly change this share over time in some fashion.

5. Under Part 2, which of the options do you recommend, and why? What issues should be considered when implementing that option, and how should those issues be addressed?

SMUD does not think that the exercise of dividing the electric sector target between CPUC jurisdictional and CEC jurisdictional areas is necessary. Of the three options presented, SMUD prefers Option C, in which a bottoms-up analysis of portfolios of each obligated entity yields a GHG planning target or target range for each entity. This methodology provides the entity specific targets mentioned in SB 350 without the unnecessary step of determining targets for CEC and CPUC-related "groups" of these entities. Should the CEC or CPUC wish to understand the overall GHG target picture for the obligated entities in their respective jurisdictions, the total of the bottoms-up approach targets or target ranges provides this information.

SMUD does not support Option A, based on CARB's allocation of allowances to electric distribution utilities. Allowance allocations should not be thought of as equivalent to or associated with planning targets for GHG emissions or reductions in the IRP process. Under the Cap and Trade structure, an entity must surrender compliance instruments to cover their emissions, whether those instruments were allocated initially or purchased on the market. Entities thus have the flexibility to emit below or above any allowances allocated to minimize costs and meet whatever goals outside compliance they have set for themselves. In addition, while the methodology CARB is using to determine allowance allocations relies on similar information as the preferred "bottoms-up" approach, it is static and dated (based on 2015 or earlier data), whereas the IRP targets or target ranges should be dynamic and updated.

SMUD also does not support Option B based on 2016 retail load forecasts for LSEs and POUs. Retail load forecasts are not an acceptable "… proxy for emissions by electric LSE and POU ...", as resource mixes to serve those load forecasts vary dramatically

amongst LSEs and POUs. These differential resource mixes at the entity level are certain to yield a different relationship between aggregated load and aggregated GHG emissions at the agency-jurisdictional level.

6. **Are there any other methods that should be considered for dividing the GHG emissions reduction target between the CPUC's and Energy Commission's respective IRP processes? If so, please describe the method in as much detail as possible and explain why it is preferable to the options listed above?**

SMUD has no other methods to suggest at this time but reiterates that the question of how to divide the eventual electric sector target or target range between CEC and CPUC jurisdictions appears unnecessary. For example, as discussed at the February 23rd workshop, a "bottoms-up" methodology for determining reasonable targets or target ranges for individual load serving entities (LSEs) can occur without answering the CEC vs. CPUC jurisdiction question – the eventual division between the jurisdictions should be a result of the bottoms up process, rather than somehow guiding that process from above.

7. **What are the data requirements associated with the methodology you recommend? If these data entail forecasting or simulation, please describe the input data needed and potential sources of this data.**

The data requirements for the recommended bottoms up methodology are the same data requirements for an IRP in general – a load forecast and a projection of resources to meet that load. The load forecast should reflect expected transportation and other electrification and the resource projection should reflect at a minimum achieving the 50% RPS, but should also reflect the local goals and conditions of the individual POUs and LSEs.

8. **How do we account for hydro variability, and what are the target GHG reductions during average hydro years? How do we incorporate uncertainty?"**

Establishing an intensity-based target range is the best way to incorporate and reflect uncertainty in load growth, including the impacts of energy efficiency programs and electrification; and uncertainty in resource availability – particularly hydroelectric resources that can vary significantly from year to year. For example, SMUD's hydroelectric generation has varied recently from 31% of our generation sources in 2010 to just 9% in 2014. Other POUs may see wider or significantly less hydroelectric

variability risk, depending on their portfolios. GHG planning targets for the electric sector should reflect these and other variations. Additional uncertainty comes from contracted renewable resources. New contracts may not end up generating as expected, as is the case with at least two of SMUD's expected resources, and older contracts are subject to uncertainty about the procurement of that power past the end of the contract life.

An intensity-based target range – a GHG per MWh basis – incorporates and reflects load growth uncertainty well. Additional load, from electrification or just economic growth, can be accommodated significantly more easily with an intensity-based target than with a mass-based target. Lower than expected load, from energy efficiency programs or simply economic effects, will also be handled more easily with an intensity-based target.

9. What are reasonable expectations to allocate GHG targets for the other POUs (not just the 16 largest that are required to do IRPs)?

Smaller POUs, like the larger 16, are subject to the complementary policies of a 50% RPS by 2030, a doubling of energy efficiency, as well as participation in the Cap and Trade program. It is these policies that will drive GHG emission reductions for the smaller POUs, not an allocation of GHG targets. SB 350 does not require the smaller POUs to adopt and provide IRPs, and provides no authority or any requirement to "allocate" GHG targets to these entities. CARB (in collaboration with the CEC and CPUC) will determine an electric sector target or target range later this year. That target or target range may or may not include GHG emissions and emission reductions from the smaller POUs as well as other possible actors in the electric sector (cogenerators, water conveyers, etc.). A bottoms up approach to determining target ranges for those entities that are mentioned in SB 350 avoids any need to "allocate" the electric sector target or target range to obligated and non-obligated entities.

10. What are stakeholder thoughts on the evolution of filing requirements between compliance periods, particularly between the first and second compliance filings?

SMUD suggests that it is reasonable if not inevitable that filing requirements, etc. will evolve over time as a new process or processes (at the CPUC and CEC) begin. This evolution is likely to be more significant at the beginning, between the first and second compliance filings. However, the CEC should strive to streamline the reporting process and requirements, and ensure that duplicative reporting is avoided between the IRP and IEPR process and other CEC filings. The CEC should also be sensitive to the ever

increasing reporting burden that Utilities already deal with at both the State and Federal level and attempt not to add to this burden

11. Should utilities consider the GHG emissions for their own facilities and their vehicle fleets?

SMUD does not think that the GHG emissions from utility facilities or fleets should be included in the IRP process. These emissions are quite small in comparison to the GHG emissions from serving power to our customers.

12. How should the Energy Commission and CPUC address publicly-owned utilities becoming community choice aggregators, and whose jurisdiction does that fall under for IRPs?

SMUD has no response to this question at this time.

13. Should utilities consider short-lived climate pollutants in their IRPs?

SMUD suggests that this is a decision that utilities can make for themselves. The CPUC and CEC should not require utilities to consider short-lived climate pollutants (SLCPs) in their IRPs.

SMUD appreciates the opportunity to comment on the Staff Paper, and looks forward to meeting with Commission staff to discuss our proposal in further detail.

/s/

WILLIAM WESTERFIELD
Senior Attorney
Sacramento Municipal Utility District
P.O. Box 15830, MS A311
Sacramento, CA 95852-0830

/s/

TIMOTHY TUTT
Program Manager, State Regulatory Affairs
Sacramento Municipal Utility District
P.O. Box 15830, MS A313
Sacramento, CA 95852-0830

cc: Corporate Files (LEG 2017-0116)