The ISO received comments on the topics discussed at the November 5, 2018 stakeholder call from the following:

1. Bay Area Municipal Transmission group (BAMx)
2. Southern California Edison (SCE)

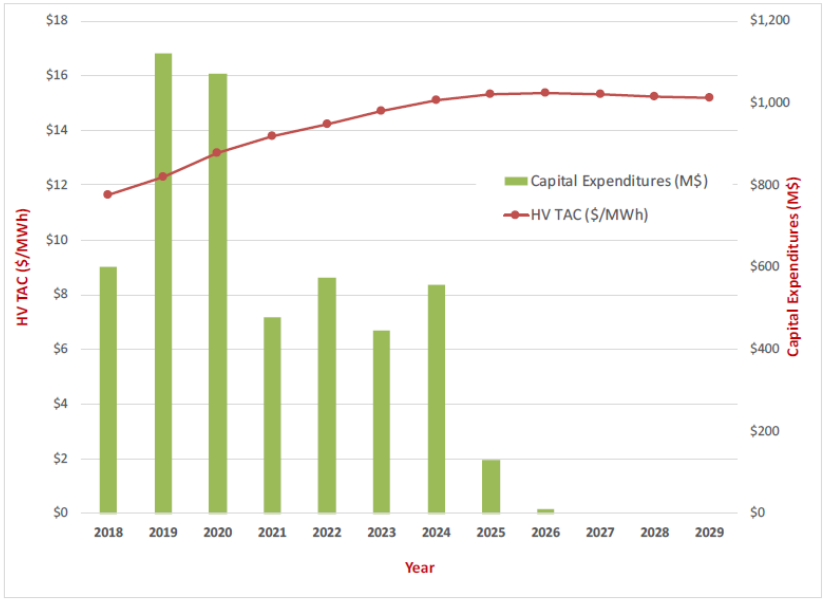
Copies of the comments submitted are located on the Transmission Planning Process Page at:

http://www.caiso.com/planning/Pages/TransmissionPlanning/Default.aspx

The following are the ISO's responses to the comments.

No	Comment Submitted	CAISO Response
1	Bay Area Municipal Transmission group (BAMx) Submitted by: Moisés Melgoza	
1a	Introduction and Stakeholder Review The Bay Area Municipal Transmission group (BAMx) appreciates the continued work of the CAISO in keeping the stakeholders updated about the likely impact of its decision to approve transmission projects on the High Voltage (HV) Transmission Access Charge (TAC). So far, the PTOs have not followed the CAISO's lead in developing their own utility-specific Low Voltage TAC forecasts, however we hope they do so going forward. The CAISO's decisions with respect to capital transmission projects whose costs are recovered through the LV TAC have also contributed significantly to the rapidly growing PG&E LV TAC. BAMx wants to emphasize the importance of having a forecast and robust discussion of the forecast for all entities paying the TAC charges administered by the CAISO. It appears to us that the CAISO, in the past, has wanted to focus on the role that its approval of transmission projects plays in affecting the HV TAC charges. But forecasts of all components of TAC charges is extremely important to improve/allow reasonable budgeting efforts by a growing set of suppliers of electric service to customers of entities that take transmission service from the CAISO. We urge the CAISO to recognize the value of focusing on that additional aspect of its efforts in this area. Charges for transmission service have grown to be a significant component of the cost to supply service to ultimate electric consumers. The fact that some of the components of a forecast of total TAC charges are not influenced by CAISO decisions should not be the reason to not have the CAISO lead a robust forecasting effort for all TAC components.	As the ISO has noted previously, the ISO's intent in developing the HV TAC model was "to estimate future trends in the High Voltage Transmission Access Charge (HV TAC) to provide an estimation of the impact of the capital projects identified in the 10 Year Transmission Plan on the access charge." Please refer to the above comment. The ISO's purpose in developing the HV TAC model has not changed since its inception. BAMx suggests a more active role for the ISO in exploring more detailed forecasting of other costs that are not part of an ISO approval process. The cost issues raised are the subject of the utilities' revenue requirement-related filings at FERC, and are the subject of industry scrutiny by the participants in those proceedings.
1b	Proposed Suggestions for the Current Version of TAC Model for CAISO's Consideration 1. Accounting for All Drivers of the HV TAC In the 2017-2018 Transmission plan, the CAISO provided a representation of just the incremental impact of the capital expenditures on CAISO-approved projects. Although this representation is informative, as we elaborate below, it does not provide the complete picture of the overall HV TAC trajectory. We believe that it is a worthy goal to also improve the accuracy of the forecast	As the ISO has noted in past transmission plans, the ISO's intent in developing the HV TAC model was "to estimate future trends in the High Voltage Transmission Access Charge (HV TAC) to provide an estimation of the impact of the capital projects identified in the 10 Year Transmission Plan on the access charge." This was in direct response to stakeholder feedback to ensure that there is an awareness of the

No	Comment Submitted	CAISO Response
	related to that transmission work that is not reviewed as part of the CAISO Transmission Planning Process (TPP). BAMx agrees that there is considerable uncertainty in the components of Transmission Revenue Balancing Account (TRBAA), such as non-CAISO capital, O&M cost escalation rate, HV TRBAA escalation and HV Standby Credit escalation. However, simply removing the effects of these TRBAA components would not be very helpful for the stakeholders in terms of accurately assessing the impacts of growing TAC rates. BAMx encourages the CAISO to engage additional resources to develop a TAC forecast that would help its balancing authority area participants to plan, budget and make informed decisions regarding the allocation of their resources. There are many capital projects that are rolled into PTO transmission revenue requirements that are not subject to the CAISO review or approval. When the TAC Model starts to build the TAC projections with the existing HV base TRR, it incorporates all of the PTO's revenue requirements, including all projects that need the CAISO's approval and those which do not require the CAISO's approval. However, the CAISO future HV TRR projections take into account only the "selected" major capital projects that are approved by the CAISO. The CAISO uses a capital maintenance adder estimated at 2% of gross plant per year as a proxy to incorporate capital "replacements" that are not subject to the CAISO approval. The 2% Capital Maintenance (% of Gross Plant) rate results in the annual increase in the CAISO-wide HV Gross Plant of approximately $313 million. In order to determine the reasonableness of using the 2% of Gross Plant as a proxy for the capital replacement expenditures going forward for the purpose it serves, in the past we have urged the CAISO to work with the PTOs to provide a more transparent way to estimate the capital costs associated with "replacement" projects. In our comments on the 2016-2017 TAC Estimating model, we provided the data to support our observation that 2% of Gross Plant amount does not adequately capture the HV portion of capital expenditure associated with projects that are not subject to the CAISO approval. In those comments, we also pointed out that the assumption of O&M costs escalating at 2% per year might result in an underestimation of the O&M costs based upon the historical guidance. We, therefore, request the CAISO to revisit the 2% annual O&M escalation rate assumption going forward.	impacts of each year's Transmission Plan capital program when the Transmission Plan is approved. As BAMx and other stakeholders have noted – as well as the ISO – there is significant variance year by year in other costs recovered through the HV TAC that are not related to the ISO's capital program. The ISO has therefore requested stakeholder feedback on how best to adapt the TAC model to continue to meet the primary function to provide visibility of the capital program. BAMx suggests a more active role for the ISO in exploring more detailed forecasting of other costs not part of an ISO approval process. While the ISO considers that having a reasonable and well documented model available for stakeholders to use and build upon in their own forecasting efforts, it is not reasonable at this time for the ISO to undertake further forecasting efforts on costs that are outside of the ISO's purview. In particular, many of the cost issues raised in comments are the subject of the utilities' revenue requirement-related filings at FERC, and are the subject of industry scrutiny by the participants in those proceedings. The ISO asks the PTOs periodically to comment on the reasonableness of the long term assumptions such as the annual O&M escalation rates and to provide updated values if better information is available. The ISO will continue to work with PTOs and update accordingly.

No	Comment Submitted	CAISO Response
1c	2. Caveat TAC forecast as it does not provide an accurate signal for the outer years, i.e., 2024-2029, and Corrections for Some Potential Data Discrepancies BAMx notes that the tapering off of the CAISO's HV TAC forecast in the outer years, that is, during 2025-2029 is primarily driven by the very low levels of transmission capital expenditures assumed in the HV TAC forecasting model. As shown in Figure 1, the HV TAC forecasting model assumes that the HV capital expenditures3 during the years 2024-2029, which are primarily driven by the CAISO-approved reliability driven transmission projects. Although the CAISO's November 5th presentation (slide #6) indicates that reliability projects are not assumed to drop below $250 million per year, the 2017-18 TAC model assumes these costs will be well below $250 million beginning year 2025 (as can be observed from Figure 1 below). BAMx requests the CAISO to correct these capital expenditures amounts in the TAC model. **Figure 1: A Comparison of the CAISO's HV TAC ($/MWh) and Assumed Capital Expenditures (M$)**  	The ISO will seek to ensure future presentations provide additional caveats – as are included in the transmission plans themselves. ISO will ensure that the reliability projects costs do not go below $250 million per year in the future models.

<table>
<tr><th>No</th><th>Comment Submitted</th><th>CAISO Response</th></tr>
<tr><td></td><td>Clearly, one of the major reasons for a lower level of capital expenditures assumed in the outer years (2024-2029) in the TAC Forecasting Model is that they do not include the capital expenditures in the CAISO's upcoming TPP cycles. In other words, the HV TAC rates, especially for years 2025-2029, are likely going to be higher than those depicted in the current version of the HV TAC Forecasting Model.

BAMx appreciates the CAISO providing a separate spreadsheet comprising the capital costs documented for several capital projects with high voltage components4. This spreadsheet (Capital Costs Estimates) would help the CAISO and the stakeholders to easily modify the transmission projects, their commercial operation dates and related capital costs going forward. We noticed that the capital costs for some projects have been updated in the 2017-2018 TAC Model relative to those reported in 2016-2017 Model as summarized in Table 1 below.
Table 1: A Comparison of the High Voltage Transmission Access Charge Capital Costs ($ millions - current dollars) for Selected Projects
<table><tr><th>Project Name</th><th>2016-17 TAC Model</th><th>2017-18 TAC Model</th></tr><tr><td>Tehachapi Transmission Project</td><td>$ 3,135</td><td>$ 3,057</td></tr><tr><td>West of Devers Reconductoring</td><td>$ 1,273</td><td>$ 1,187</td></tr><tr><td>Colorado River Substation Expansion</td><td>$ 63</td><td>$ 134</td></tr></table>Please provide further explanations for the decline in the capital costs for the Tehachapi Transmission Project and West of Devers Reconductoring, and also the increase in the capital costs for the Colorado River Substation Expansion.</td><td>The purpose and approach used to develop the estimates, as described above, focusing on the impacts of the capital program proposed in each year's transmission plan, however, appear to be adequately described in the transmission plan itself.

The costs of the projects in the model are initially based on the best available planning level estimates at the time of approval of the project. These costs, however, are then subject to updates based on the latest cost estimates for the projects provided by the PTOs each year specifically for this purpose.
The higher costs of the Colorado River Substation expansion of the project is attributable to the inclusion of $71 Million which was included in the 'already reflected in rates' column of the High voltage Capital Cost Estimates spreadsheet. The ISO has confirmed that the variations in the other projects' costs were a result of the cost information from the PTO. The ISO does not have a reconciliation of the year-to-year differences, and as the cost estimates are provided voluntarily by the PTOs under a tight annual timeline for the sole purpose of updating the ISO's HV TAC model, the ISO does not request a detailed reconciliation.</td></tr>
</table>

No	Comment Submitted	CAISO Response
2	Southern California Edison (SCE) Submitted by: Bert Hansen	
2a	1) The Tax Cuts and Jobs Act of 2017 lowered the Federal Income Tax Rate ("FIT Rate") beginning January 1, 2018 from 35% to 21%. For any Investor-Owned Utility (which comprise the great majority of the CAISO PTOs in terms of total HV Transmission Revenue Requirements), this will materially reduce TRRs and the associated HVTRRs. SCE estimates that the TRR impact to be about 10%. The three IOUs currently each have formula rates which should fully reflect the impact of the reduced FIT Rate by 2019 or 2020 at the very latest. However, the nature of the CAISO's TAC forecast model is that is has a starting point (baseline) that is based on TRRs that were in effect on 1-1-18, all of which utilized a 35% FIT Rate. SCE believes that reflecting the lower 21% FIT Rate in the CAISO's TAC forecast would provide a better forecast over the term of the forecast period, since the tax impact will affect TRRs over almost all of the period except the 2018 and perhaps 2019 to some degree. Since the impact is easily quantifiable (as SCE notes, it is about 10%), SCE would support an immediate reflection of 10% of the TRRs for all IOU PTOs beginning in 2019 for HV TAC forecast purposes.	ISO will reflect the latest Federal Income Tax Rate in the model to be used in the 2018-2019 transmission planning cycle.
2B	2) SCE also has the following comments on various cost assumptions utilized in the forecast: a) Mesa Substation: no portion of the Mesa substation is included in 2018 rates. So SCE believes that it is not appropriate to include $83 million as "already in rates". b) Alberhill: No portion of the Alberhill project is "already in rates" for 2018 except for $8.2 million that is currently included in "Plant Held for Future Use". c) Eagle Mountain Shunt Reactors: There was $4.8 million of costs that were included in SCE's forecast costs for 2018, and so this amount is "already in rates".	ISO will work with SCE to identify and reconcile these discrepancies for next year's model.

No	Comment Submitted	CAISO Response
	d) Lugo – Eldorado Series Cap and Terminal Equipment Upgrade: No amount of this project was included in SCE's 2018 rates.	