# BAMx Comments on the CAISO Deliverability Assessment Methodology Straw Proposal

## Introduction

The Bay Area Municipal Transmission group (BAMx)[1] appreciates the opportunity to comment on the CAISO Deliverability Assessment Methodology Straw Proposal discussed during the August 5, 2019 stakeholder call. BAMx supports the CAISO having a separate Stakeholder process on its proposal to revise their deliverability methodology. Revisions are clearly needed to keep the CAISO studies correlated to the maximum extent with the implementation of the effective load carrying capability (ELCC) methodology being adopted by the CPUC in conformance with State law. The proposed solar and wind output assumptions for the revised on-peak deliverability assessment are expected to result in fewer transmission upgrades required for the generators to achieve Full Capacity Deliverability Status (FCDS). For purposes of modeling production levels, the CAISO proposes to not model resources at a production level lower than the average Qualifying Capacity (QC) number based on the ELCC methodology. However, these proposed solar and wind output assumptions do not adequately reflect the ELCC based QC values.[2] Modeling the solar and wind output levels consistent with the ELCC based QC values should further minimize the excessive and unneeded transmission upgrades identified from the deliverability assessment in both the generation interconnection study process and TPP process. Therefore, BAMx urges the CAISO to retain the flexibility to revise the production levels, especially for the intermittent generators. For example, in the future, if the CAISO finds that the proposed assumption of setting the intermittent generators to 20% exceedance level during the selected hours to study the Highest System Need Scenario is not consistent with the ELCC based QC values, then it should be revised in consultation with the stakeholders.

BAMx believes that the CAISO proposal is headed in the right direction with its revisions to the deliverability methodology. It should provide a better indication of the capability of the existing transmission system to accommodate the renewables necessary to achieve California's policy goals. However, we are concerned that the CAISO's proposal to provide additional visibility/certainty regarding possible curtailment levels by enhancing the current off-peak deliverability assessment as part of the Generation Interconnection Process (GIP) studies to address excessive curtailment is misdirected and will likely delay the implementation of the revisions to the deliverability methodology that is long overdue.

[1] BAMx consists of City of Palo Alto Utilities and City of Santa Clara, Silicon Valley Power.
[2] CAISO Generation Deliverability Assessment Methodology Straw Proposal Stakeholder Call, August 5, 2019, page 22.

## Any Additional Studies Options Considered to Address Curtailment Concern within the GIP Should be for Information Only

The Straw Proposal seems to respond to the concerns about the deliverability methodology revisions leading to increasing levels of generation curtailment due to congestion. BAMx believes that the existing Transmission Economic Assessment Methodology (TEAM) provides a decent framework for that to be studied thoroughly, which would lead to transmission upgrades if they are economically justified. BAMx believes that TEAM is well suited to determine the need for any transmission additions that can be justified on the basis of reducing generation curtailments. This appears to be the exact type of application for why TEAM was developed.

As we mentioned in our May 16th comments[3], it is important to note that curtailment is not a resource adequacy (RA) issue for which the deliverability assessment is designed, but rather an operational issue. Since any increase in curtailments can be addressed by identifying needed policy and economic driven transmission upgrades in the Transmission Planning Process (TPP), we do not believe there is any need for such assessment in the GIP.

Since the Straw Proposal has included only those options[4] that perform curtailments studies within the GIP, BAMx supports Option 1 among them, which includes an informational off-peak deliverability assessment.[5] The CAISO does not seem to recommend this option as "it would not facilitate the development of low-cost upgrades needed to address excessive curtailment.[6]" Although we agree that the interconnection customers are unlikely to have sufficient incentive to pursue merchant transmission upgrades identified in the GIP studies, if these upgrades are truly needed to address economic concerns associated with excessive renewable curtailment, then they would be approved as part of the economic assessment under the CAISO TPP. As the Straw Proposal points out, Option 1 would require minimal tariff changes and could be implemented with the least amount of effort relative to the other options. Therefore, BAMx views Option 1 to be the only reasonable option among the options outlined in the Straw Proposal to study curtailment concerns within the GIP.

The CAISO Straw Proposal appears to be leaning towards the following two options to address the curtailment concern within the GIP.

- Option 4: Optional off-peak local network upgrades (OLNU) with reimbursement cap; and

[3] BAMx Comments on the CAISO Deliverability Assessment Methodology Issue Paper, May 16, 2019, p.2.
[4] Straw Proposal, pp.10-12.
[5] This option would rely on the interconnection reliability study and deliverability studies to identify curtailment issues by updating study assumptions for the off-peak deliverability assessment such that the results provide some indication of curtailment due to transmission constraints.
[6] CAISO Stakeholder Meeting Presentation, August 5, 2019, p. 30.

- Option 5: Optional off-peak deliverability status service with mandatory local off-peak transmission upgrades.

BAMx believes that any off peak deliverability status (OPDS) upgrade including a local deliverability network upgrade (LDNU) triggered by an interconnecting customer (IC) needs to be paid by that IC, unless it is also identified to be needed for the renewable portfolios studied under the CAISO TPP. Since Option 4 and Option 5 allow for partial and full reimbursement to new generators triggering any OPDS upgrades, respectively, we oppose both these options. Departing from cost causation principals would lead to decisions that are not in CAISO ratepayers best interests.

While opposing both, BAMx considers that Option 4 is less problematic than Option 5 as Option 4's treatment is limited to local upgrades to avoid excessive curtailment beyond oversupply curtailment. Furthermore, under Option 4, the upgrade costs will be reimbursable to the ICs with a reimbursement limit. However, BAMx notes that the Straw Proposal lacks clarity in terms of how a reimbursement limit would be determined under Option 4.

BAMx finds Option 5 to be the most problematic option that is meant to determine the OPDS upgrades that would be built at the CAISO ratepayer's expense. There are several issues with Option 5. Under this Option, the IC electing the OPDS gets a higher scheduling priority over non-OPDS resources in the market. This concept is a stark departure from the CAISO's operations tradition that does not distinguish between the full capacity or energy only generators for scheduling priority. Although a concept of off-peak deliverability already exists in the CAISO tariff, a change in scheduling priority would constitute a significant change to the CAISO tariff and could be challenged at FERC. One such challenge would be the likely discriminatory treatment against the existing energy only deliverability status (EODS) generators under Option 5. If BAMx understands correctly, the new full capacity deliverability status (FCDS) or EODS ICs with OPDS (by potentially making an upfront payment towards the OPDS upgrade) will not get scheduling priority over the existing FCDS (or PDS) generators. However, they would get priority over the existing EODS generators. Under Option 5, there is no opportunity for the existing EODS to achieve OPDS. Similarly, a new FCDS resource paying for on-peak deliverability status will be at a relative disadvantage to the OPDS resource in terms of scheduling priority given that the OPDS curtailment priority applies during all periods, not just off-peak, and under all conditions. Another discriminatory aspect of the OPDS resource receiving scheduling/curtailment priority for all periods is that it would receive priority even during the oversupply hours, which by definition are not the hours when renewable curtailments are caused due to lack of transmission.

The proposals like Options 4 and 5 that provide ratepayer funding to transmission upgrades identified in the GIP gives us a sense of déjà vu. Prior to the implementation of Generator Interconnection and Deliverability Allocation Procedures (GIDAP) study processes, billions of

dollars of area delivery network upgrades (ADNUs) were approved as part of the GIP without any stakeholder review to accommodate primarily solar FCDS resources. These resources have very little RA value now and are expected to have even lower RA value moving forward given their low QCs based on the ELCC methodology. Essentially, large-scale historical ADNUs identified within the GIP are being paid by the CAISO ratepayers even though those upgrades have proven to be of little economic value. Some may argue that those ADNUs albeit not very valuable from the RA standpoint provide congestion and/or renewable curtailment relief. However, no economic analysis was performed to justify those ADNUs in the approval process. So, the GIP-driven CAISO ratepayers-funded upgrades have been of very little value to them. Some may claim that such an outcome could not be foreseen but this is an example of why the developers of new generation projects should be the ones to take such risks- not CAISO ratepayers. Although the CAISO anticipates that only some low-cost LDNUs (versus high-cost ADNUs) will be needed to address the off-peak deliverability status to avoid large-scale renewable curtailments, it is possible that these multiple LDNUs approved as part of GIP without any economic assessment will add up and the CAISO ratepayers would ultimately bear those expenses. In summary, if proposals like Option 4 or Option 5 are implemented, we would be repeating the same mistakes that were made in the pre-GIDAP era.

BAMx appreciates the CAISO's intentions to holistically address the resource adequacy aspect of deliverability assessment and related economic aspect of renewable curtailments. However, BAMx is concerned that the fundamental flaws as well as the contentious issues, such as the dispatch priority element under Option 5, may delay implementation of the new deliverability methodology. Therefore, we urge the CAISO to implement their proposed methodology as soon as possible while continuing to assess the curtailment concern within the GIP.

## Conclusion

BAMx would encourage the CAISO to implement their proposed methodology without any further delay by considering the study within the GIP to address curtailment risk as information only at this time.

If you have any questions concerning these comments, please contact Paulo Apolinario (papolinario@svpower.com or (408) 615-6630).