Energy Imbalance Market Design
Third Revised Straw Proposal

Submitted by	Company	Date Submitted
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Powerex is pleased to have this opportunity to provide these comments in response to the Energy Imbalance Market (EIM) Design Third Revised Straw Proposal ("Third Straw Proposal"). Powerex's comments provided herein are supplemental to its previous comments submitted in this stakeholder process.

The CAISO should delay CAISO-EIM transfers and associated issues to a second phase

Powerex strongly suggests the CAISO develop and implement the EIM in phases, providing the ability to put off making final decisions on key issues that need additional time for careful consideration and dialogue with affected stakeholders. For example, in a first phase or pilot phase the CAISO could consider providing restrictions on all flows between the CAISO and the EIM footprint, thereby reducing the number of issues that must be addressed prior to the initial EIM launch date. This approach would allow more time for the CAISO and stakeholders to work through several complex EIM design issues that arise only under an EIM design that permits CAISO/EIM transfers, including (i) independent governance, (ii) carbon charges, (iii) CAISO transmission charges, and (iv) necessary improvements to the CAISO's day ahead resource sufficiency framework. This phased in or pilot approach has worked well with other CAISO initiatives with inter-regional impacts such as the dynamic scheduling of imports.

Powerex urges the CAISO to consider this phased in approach for several reasons. First, Powerex has serious concerns with the CAISO's proposal to delay independent governance of the EIM until well after the EIM market is fully designed and launched. Using the CAISO's governance structure, which is structured primarily with California's interests in mind, to oversee the development and initial operational phase of a multi-state EIM that will operate predominantly outside of California is problematic in itself. Enabling transfers between the CAISO and the EIM, prior to implementing independent governance of the EIM, increases this governance concern considerably. In Powerex's view, the design and implementation of CAISO/EIM transfers should only occur after the EIM has an independent governance structure in place to oversee and develop a framework that is designed and operated in a manner which takes into consideration the differing interests of all EIM entities and participants.

Second, Powerex believes the CAISO's carbon proposal raises numerous legal, equity, and efficiency issues that require considerably more discussion. Including carbon-related issues in the initial EIM design that will be brought before the Federal Energy Regulatory Commission

("FERC" or "Commission") for approval significantly increases the likelihood of opposition to the EIM as a whole, and thus the potential for significant delays in implementation of the EIM. Powerex further discusses these carbon-related concerns below.

Third, Powerex has raised numerous concerns with EIM transmission pricing which are largely associated with transfers between the CAISO and the EIM Entities. The CAISO's primary response to these concerns is to provide free transmission service for the first year (or longer) while a more thorough discussion on transmission design can take place. Similar to Powerex's carbon concerns, Powerex believes the CAISO's free transmission approach also presents serious legal, equity and efficiency issues which increase the likelihood of opposition to the EIM. Delaying CAISO/EIM transfers until after these transmission design issues have been worked through will greatly reduce transmission pricing concerns with the initial EIM implementation.

Fourth, EIM Entities and the CAISO will continue to operate in very different market designs in their respective temporal markets prior to the EIM. Attempting to develop and launch an EIM on top of an existing OATT framework that is also designed to be co-optimized with the CAISO's real-time market significantly raises the risk of substantive unintended consequences. Designing and stabilizing an EIM without a co-optimized dispatch with the CAISO market will simplify the EIM design challenges considerably. At the same time, this approach would provide additional time for the CAISO to make necessary design changes in its market, such as improving the CAISO's resource sufficiency framework, which may be required to prudently and equitably enable CAISO/EIM transfers.

Fifth, the CAISO has stated that it expects very limited transfer capability between the EIM and the CAISO in the first year, and hence delaying CAISO/EIM transfers should be expected to only marginally reduce the potential benefits of the EIM. For all of these reasons, Powerex urges the CAISO to consider a phased approach, with CAISO/EIM transfers moved to a second phase of implementation.

EIM Transmission Usage and Cost Allocation must be consistent with FERC's Non-Discriminatory Open Access Transmission Policies

Powerex continues to have very serious concerns with the CAISO's approach to transmission rights and pricing in the EIM. Powerex has provided substantive comments on EIM transmission design issues in both this stakeholder process and the PacifiCorp stakeholder process which it believes have not yet been thoroughly addressed.

As a threshold matter, Powerex reiterates its strong support for the CAISO's efforts to achieve dispatch efficiency in both the EIM and its own wholesale energy markets. Powerex also believes this pursuit of dispatch efficiency should include examining, among other issues, transmission pricing design. However, Powerex does not believe that the laudable objective of dispatch efficiency should be a single over-arching goal that justifies the CAISO's current proposed EIM transmission design which (i) largely ignores equity and efficiency issues associated with OATT transmission rights and investments; (ii) provides preferential transmission pricing to EIM participants, ahead of CAISO demand and non-EIM export demand; and (iii) violates FERC's fundamental open and non-discriminatory access and transmission pricing principles.   Further, Powerex believes the CAISO's proposed transmission design will lead to significant unintended consequences, including undermining the dynamic efficiency of western wholesale energy markets by distorting transmission investment price signals.

Powerex provides additional detailed comments as follows:

Transmission Charge Comparability

In Section 3.8 of the Third Straw Proposal, CAISO reiterates its proposal that, since the transfer capability between the ISO and initial EIM Entities may be limited; there would initially be no charge between the ISO and EIM Entities for EIM's use of "as-available" transmission. CAISO explains that once the EIM is in place, EIM Entities will be included in the real-time market footprint, making it reasonable to extend its transmission access charge concept (which applies to load and exports) to the entirety of the new footprint, including the EIM Entities. CAISO endorses the alternative of no-charge, as-available transmission, although it provides three other alternatives for comment.

Alternative One, which CAISO supports, is no-charge, purportedly as-available transmission either as a transitional approach for a year or a permanent structure. CAISO claims this would reflect reciprocity by mutually waiving transmission charges, and states that it will continue to assess its current transmission access charge except for energy dispatched within the ISO and EIM footprints. Citing to its own tariff exclusively, CAISO argues that the position that there is a disparity between charges that would accrue to the use of such transmission service in the day-ahead market and the EIM is not accurate. It claims that transmission used in the EIM is "effectively a Transmission Ownership Right" and that use of such rights does not trigger access charges.

CAISO characterizes Alternative Two as "a step toward a regional transmission rate design" as it would consider the percentage of demand settled in the EIM compared to the total settled demand and seek to collect such percentage through an EIM-wide revenue requirement. CAISO explains that "[t]his approach would consider an access charge to load and exports to Balancing Authority Areas ("BAAs") that are not EIM Entity BAAs, based on the amount of positive demand deviation consumed in real-time." CAISO claims that transmission rights holders, even if not the EIM Entity, "could be assured of recovering transmission revenues for the portion of their capacity that is made available to and used by EIM" under this approach.

Alternative Three - Transfer Charge as a Minimum Shadow Price - would impose a transmission charge based on the amount of transfer from one BAA to another. Using this option, LMPs would reflect the cost of transmission. CAISO perceives downsides to this approach, explaining, among other things, that it would impose a constraint on cost-based dispatch among resources in different EIM Entities, which it characterizes as a "hurdle rate" and creating "friction".

In Alternative Four -- Transmission Access Charge Applicable to Load and Wheeling -- an option CAISO brings forth in response to stakeholder comments, CAISO explains that if equal access to all market participants in its market across all timeframes were a primary goal, one way to reach this goal would be “to assess the CAISO’s transmission access charge only to load within the ISO’s BAA and to wheeling schedules (which impose transmission costs but would not otherwise contribute to the ISO’s transmission revenue requirement), and not to exports on any intertie in any market.” CAISO makes clear that it is not proposing the adoption of Alternative Four.

Recognizing that “designing an appropriate EIM transmission service rate will be among the critical issues” that need to be resolved in the longer term, CAISO believes that due to lack of both consensus and information at present, Alternative 1 is appropriate to adopt for at least the first year of the EIM.

Alternative One is Inconsistent with Open Access Transmission Policies and should not be Implemented Even for a Transition Period

In the excerpt above, CAISO, on the one hand, acknowledges how critically important designing an appropriate EIM transmission service rate is, and, on the other hand, all but gives up on doing the right thing right now with regard to the design of that transmission rate. Speed, however, is not nearly as important as accuracy. Flawed market design concepts incorporated into the EIM at the outset will only impede the long-term (and even short-term) success of the EIM, lead to market distortions, preclude its expansion to other BAAs, and open the door to troublesome market activities by those seeking to access this newly-available “free” transmission.

Powerex has highlighted its concerns regarding the “free” transmission proposal in comments in response both to the First and Second Straw Proposals. It appears that CAISO has proffered Alternative Four in the Third Straw Proposal in response to Powerex’s concerns. While Powerex is appreciative of this addition, CAISO has not veered from its support of Alternative One’s no-charge, as-available transmission, and has even suggested that this could be more than a one-year transitional approach and instead may be a permanent solution. Powerex has grave concerns that this approach is ill-advised and contrary to the dictates of the Federal Power Act.

The FERC has recognized that selective discounting of transmission services violates the Federal Power Act’s prohibition on undue discrimination and preference. Consequently, Commission policy prohibits transmission service discounts except when necessary to increase throughput on a transmission provider’s system and requires that any such discount be offered to all eligible customers for the same time period on all unconstrained paths that go the same point of delivery. In its Transmission Pricing Policy Statement, the Commission recognized that “a utility must allocate among individual customers or classes of customers that portion of the total revenue requirement that is attributable to providing transmission services, in a manner which appropriately reflects the costs of providing transmission service to such customers or classes of customers.”

While the Commission supports the elimination of pancaked rates where appropriate, it has found in various proceedings that limiting benefits of pancaked-rate elimination to discrete customers is not appropriate. For example, in the proceedings that led to both PJM

Interconnection, L.L.C. and Midwest Independent Transmission System Operator, Inc. ("MISO") becoming ISOs, concerns were raised that transmission owners would reap the benefits of the single-system rate for transmission transactions while customers with pre-existing contracts would be bound by those prior rate arrangements. The Commission determined that it was unreasonable for transmission owners to implement a restructuring that limits the benefits of the new rates to certain entities. The Commission went so far as to determine that pre-existing agreements must be amended to ensure that no customer pays pancaked rates that would exceed the tariff rate. In response, MISO suggested that there be a phase-in of the renegotiation. However, the Commission determined that this process to address critical comparability issues should be concluded *before* MISO was to commence operation.

This precedent highlights the imprudence of CAISO's proposal to wait until a year *after* implementation to address these comparability concerns. As in these examples, CAISO should resolve the problems that Powerex has identified *before* implementing the market. As CAISO has acknowledged the existence of other alternatives, there is no valid justification to pursue a path that raises these comparability concerns.

Beyond these legal concerns, Powerex believes the CAISO's proposal to offer free transmission service in the EIM is both inconsistent with efficient market outcomes and raises serious equity issues for both California ratepayers and external market participants. To be clear, Powerex does not object to the CAISO's primary motivation for supporting free transmission in the EIM – to improve dispatch efficiency by eliminating rate pancaking.

Powerex does, however, strongly object to the manner in which the CAISO seeks to achieve this objective – by effectively setting up a bilateral transmission free trade zone, between it and the respective EIM Entities. In effect, the CAISO proposes to offer PacifiCorp (and other EIM Entities and/or participants) free use of the CAISO transmission grid to serve load in the EIM footprint, in exchange for PacifiCorp offering the CAISO free use of the PacifiCorp grid to serve CAISO load. This is in contrast to the widely accepted and appropriate methods of eliminating or reducing rate pancaking – either through transmission rate consolidation into a single transmission access charge or single OATT transmission rate structure; or alternatively, transmission rate consolidation into multiple differing regional transmission access charges. Importantly, such transmission rate consolidation:

i) Is implemented across all market timeframes to prevent "shifting" of trading, scheduling and/or dispatch activities between different market timeframes (i.e., Day Ahead to Real-time) as well as other unintended undesirable outcomes; and

ii) Should result from a thorough and inclusive transmission stakeholder process which includes consideration of existing transmission investments, negotiations of interim and long-term rates and potential transfer payments, negotiations of phase-in periods, as well as other equity and market efficiency issues.

Approval of the CAISO/PacifiCorp bilateral "free transmission" construct would be both unprecedented and deeply troubling. Extension of this construct, for example, could lead to transmission providers elsewhere in the western interconnect setting up transmission free trade zones through bilateral negotiations amongst only themselves, thereby similarly providing each other with inappropriate competitive advantages in western wholesale markets. The potential Balkanization and widespread discrimination resulting from such an approach would fly in the face of FERC's thrust toward uniform regional transmission and rate policies.

Another point to consider is the disparity in PacifiCorp's transmission rates and CAISO transmission access charges. On an estimated basis, PacifiCorp's customers can procure firm and/or non-firm OATT transmission rights to serve PacifiCorp demand for approximately $3 per MWh. In comparison, CAISO's customers are exposed to a transmission access charge ("TAC") of approximately $9 per MWh in serving CAISO demand. Under the CAISO's free transmission proposal, PacifiCorp's demand would therefore pay only $3 per MWh to deliver power from a generator located in the CAISO footprint, across both the CAISO and PacifiCorp transmission systems, while CAISO demand would continue to pay $9 per MWh in CAISO TAC for deliveries from the same generator, with power flowing only across the CAISO transmission system. Clearly, this outcome raises serious equity issues for CAISO demand, as well as the potential for unintended outcomes in both the long-term and short-term energy and transmission markets.

As Powerex has previously pointed out, there is no specific nexus between transmission rate pancaking and an EIM. Unfortunately, the CAISO and PacifiCorp have incorrectly included dispatch efficiency benefits associated with reduced rate pancaking in their initial evaluation of EIM benefits, thereby creating a false impression of such a link.

Reducing or eliminating rate pancaking must be addressed in a more holistic manner through transmission rate re-design (and/or consolidation) across all market timeframes as part of a separate initiative. In such an initiative, Powerex believes transmission rates can be re-designed to achieve increased dispatch efficiencies across all market timeframes, with due consideration to equity issues as well as long-term transmission investment incentives (both within and outside the CAISO), and in a manner consistent with FERC's open access and transmission rate design policies.

Powerex believes the CAISO's continued defense and justification of free transmission in the EIM, even on a temporary basis, only serves to reinforce the impression that certain EIM design decisions were made prior to stakeholder involvement, and are not subject to change regardless of the validity of arguments and alternative proposals brought forth in this stakeholder process. This, in turn, highlights the independent governance concerns previously discussed.

Powerex encourages the CAISO to simply apply its existing transmission rate design to the EIM, and explore alternative transmission rate design proposals in a separate initiative from the EIM.

OATT Investments Must Be Respected

Powerex has previously raised several concerns related to the interaction of the proposed EIM market and the OATT framework that will continue to exist outside the CAISO footprint, including:

1) The potential for EIM transmission use to conflict with OATT usage priorities, particularly during periods of OATT curtailments; and

2) The fact the proposed EIM design will dispatch the EIM on a level playing field with dispatches in its real-time 15-minute market, independent of OATT usage priorities, in contrast to the "as available" statements of the CAISO.

These concerns remain largely unaddressed by either the CAISO or PacifiCorp. Moreover, Powerex is increasingly concerned that the CAISO continues to take a widespread approach of largely ignoring transmission investments under the OATT framework in the design of the EIM, and in its markets more generally. While Powerex recognizes there are challenges associated with operating a centrally dispatched LMP market on top of an existing OATT framework, these challenges should not be resolved by simply ignoring, and thereby undermining, existing investments and ongoing investment incentives in long-term OATT transmission. The more appropriate approach is to explore solutions which achieve LMP dispatch efficiency while returning appropriate proportionate value back to OATT investors.

Powerex urges the CAISO to commence dialogue on these important seams issues between the proposed EIM design and the OATT framework. At the same time, Powerex concurrently urges OATT providers across the western interconnect to tread carefully in enabling any CAISO/EIM use of their transmission systems prior to these issues being thoroughly discussed and resolved in an equitable and efficient manner. Real-time deliveries to and from the CAISO-EIM footprint and the rest of the west should continue to occur under the hourly and sub-hourly scheduling options available within the OATT framework.

The economic consequences of permitting the CAISO to continue its approach of ignoring external OATT investments in its market design, and expanding this approach to the EIM, will ultimately fall upon ratepayers external to CAISO markets. Nullifying the value of, and muting the price signal for investment in OATT long-term firm transmission rights will inevitably result in lower third party revenues for external transmission providers, increasing transmission costs for native load in these external regions. For some transmission providers, this potential loss of third party transmission revenue may greatly exceed any expected overall efficiency benefits of an EIM.

To be clear, Powerex is not advocating solutions that undermine the ability to achieve dispatch efficiency in either the EIM or other western wholesale markets. Rather, Powerex is advocating for open dialogue to address these transmission seams issues in an equitable manner consistent with efficient energy and transmission market outcomes – both short-term and long-term.

The CAISO's existing resource sufficiency framework and proposed EIM resource sufficiency framework is materially deficient

Powerex has submitted substantive comments on the CAISO's proposal to ensure that EIM Entities are required to be resource sufficient, thereby preventing "capacity leaning" on the CAISO and/or other EIMs. Powerex has also highlighted deficiencies in the CAISO's own resource sufficiency framework that, if not addressed, will likely lead to the CAISO leaning on

EIM Entity(s) to solve its capacity shortfalls. Powerex provides the following additional comments.

First, Powerex urges the CAISO to ensure that all EIM Entity(s) are resource sufficient in the day ahead timeframe. It is a well-established principle in organized markets across the country that generation capacity sufficiency must be achieved both day ahead and again in real-time to protect reliability of the grid. Day ahead resource sufficiency is necessary due to the lead time required to start-up and deliver energy from many generation units on the grid. Relying on the commitment and start-up of generating units solely in real-time to meet expected load may lead to reliability risks. Real-time resource sufficiency is also required due to changes in load forecasts, changes in variable resource output, as well as generation and transmission contingencies on the grid that may all occur after the day ahead market and day ahead resource sufficiency processes have been completed.

Powerex understands the CAISO intends to provide an advisory day ahead resource sufficiency check of each EIM Entity, without **any** consequences for EIM Entity(s) that fail this check. Powerex believes this advisory check should be expanded to include the following consequences:

1) Posting publicly in the day ahead timeframe notice of failure of any EIM Entity(s) of this check;

2) Suspension of an EIM Entity(s) EIM imports from all other EIM Entity(s) and the CAISO in circumstances of 3 failures of the check within any calendar month; and

3) Referral to FERC of any repeat monthly suspensions within any 12 month period for further investigation

Powerex believes these additional consequences will strike the right balance of providing incentives to ensure day ahead resource sufficiency is achieved, while recognizing that circumstances can arise which inadvertently lead to an infrequent failure of the day ahead resource sufficiency check.

Second, Powerex believes the CAISO has failed to address its concerns of a resource sufficiency **shortfall** due to the over-statement of generation resources in an EIM Entity's base schedules. Specifically, Powerex stated:

> The CAISO has appropriately identified the potential for generation capacity shortfalls (EIM leaning) to arise from inaccurate load forecasts provided by EIM Entity's. An EIM Entity may appear to be balanced and pass the CAISO's resource sufficiency test based on its submitted generation, interchange and load forecasts, yet may be capacity insufficient, if it understates its load forecast in this process. The CAISO proposes penalties to be applied to EIM participants that have significant negative deviations in actual load from scheduled load. Powerex supports this approach but recommends that the CAISO escalate these penalties based on the magnitude of the load under-scheduling activity.

A similar EIM leaning possibility also exists from the over-statement of generation and/or over-statement of import deliveries. For example, materially overstating a VER forecast or including interruptible imports as firm imports in the EIM Entity's base schedules may enable an EIM Entity to pass the resource sufficiency test, yet be similarly resource deficient to an EIM Entity that overstates its load forecast. Powerex therefore urges the CAISO to develop a similar penalty framework applicable to the overstatement of generation and/or imports by EIM participants to address inaccurate supply forecasting. There is no materially different impact to reliability or market efficiency between the understatement of load forecasts and the overstatement of generation / import forecasts - both approaches undermine the resource sufficiency framework. This penalty framework should also escalate depending on the magnitude of variance between the generator/importer forecast and the corresponding CAISO forecast, with exemptions from penalties for participants who utilize the CAISO's VER generation forecasts and/or a strictly objective method such as VER persistency or third-party VER forecasts verified by CAISO. Import deviations should be treated in a manner consistent with this proposed treatment of generation resource deviations.

The CAISO appears to have misinterpreted Powerex' comments as focused on over-generation conditions. To the contrary, Powerex concerns are centered on the CAISO's need to ensure sufficient resources are available to meet firm load obligations by ensuring that:

(1) Load is not understated in the base schedules; and

(2) Generation and/or imports are not over-stated in the base schedules.

The CAISO only proposes to address the load understatement issue (with the use of penalties), ignoring the potential for generation and/or imports to be over-stated. Powerex notes this approach not only leaves a significant source of reliability risk unaddressed, it is also both inequitable and inefficient to institute penalties for an EIM Entity that under-states load in its base schedules, while providing the EIM Entity the unfettered ability to over-state generation resources in its base schedules.

Third, Powerex has highlighted significant gaps in the CAISO's current resource sufficiency framework related to imports, which can, and likely will, lead to the CAISO leaning on the EIM to solve its resource sufficiency shortfalls. Powerex recognizes that this is an existing reliability (and market efficiency) gap that exists today, prior to the implementation of an EIM. However, under the proposed EIM, the CAISO will now have the unique ability to solve this challenge by centrally dispatching units outside the CAISO grid, thereby increasing the risk of a resource shortfall in neighboring regions.

As previously discussed, this resource sufficiency gap exists, due to:

1) A lack of visibility into the source generation behind CAISO day ahead imports, primarily driven by the lack of a robust day ahead e-tag requirement;

2) A lack of clarity in the delivery requirements of the three types of energy products in the CAISO market (firm, unit contingent, and non-firm);

3) No effective differentiation between import awards which provide capacity commitment and those that do not; and

4) The inability of the CAISO to accurately procure RUC, operating reserves and/or flexi-ramp due to the lack of prospective visibility resulting from 1) -3) above.

Powerex urges the CAISO to either address these gaps in this stakeholder process, or alternatively, to commence a separate stakeholder process focused on import resource sufficiency in its markets.

Fourth, Powerex urges the CAISO to provide substantially more details, including example calculations and detailed parameters on its proposed resource sufficiency check. In particular, Powerex requests the CAISO set forth both the framework and parameters that will be used in evaluating the resource sufficiency "credit" provided to differing types of generation and to different qualities of imports. For example, specifically what is the methodology and calculations for determining how much capacity be attributed to variable energy resources? How will imports that may be subject to curtailment due to insufficient capacity held at the source balancing authority be treated versus imports that are not subject to such curtailments? Will firm exports be treated similar to firm load obligations? Will the CAISO allow potential curtailments to exports to qualify as capacity resources available to meet firm load?

Finally, in the Third Straw Proposal, and in the stakeholder call, the CAISO appeared to suggest that it will only assess resource sufficiency on those resource ranges (and loads) that are bid into the EIM (i.e., the CAISO will treat base schedules as fixed flows in the resource sufficiency test). Powerex understands from further discussions with the CAISO that this is incorrect. Powerex requests that the CAISO confirm that the resource sufficiency test will encompass all base schedules, as well as, EIM bids and offers within physical operating ranges, ensuring that the EIM entity has sufficient capacity to meet all of its firm load obligations. Clearly, ignoring any portion of an EIM entity's load obligations and/or resource commitments, including those inherent in base schedules, would make any resource sufficiency test meaningless.

The CAISO's carbon proposal remains inconsistent with elements of CARB's Cap and Trade program, while raising serious jurisdictional issues

Powerex reiterates its concerns with the CAISO's approach to carbon in the EIM. As previously described, the CAISO's approach is designed to efficiently select individual low emission generators from an EIM participant's portfolio of resources while leaving higher emission generation for deemed delivery to the EIM participant's local load. This organized, algorithmic approach will systematically deem delivery of low emission generation to the state and artificially enhance the states' ability to reach its GHG related goals through the appearance of reduced GHG emissions in the spot market when likely little benefit has actually been created. A market optimization that purports to differentiate between low and high emission resources is spurious if it does not consider the GHG impacts of all activities that result from EIM price signals.

This approach appears inconsistent with AB32's overall principles and with other elements of CARB's program, including the calculation for the carbon intensity of Asset Controlling Suppliers and the proposed Mandatory Reporting Regulation to address high intensity system power imports (§ 95111.b.5).

Moreover, contrary to the CAISO's response to Powerex previous comments on this topic, there is nothing in the CAISO's proposal that will prevent a long-term response to the powerful price signal provided by the CAISO's dispatch algorithm. (For example, an EIM participant could choose to procure long-term coal resources to "free-up" their low carbon resources for offering into the EIM).

In addition to these previously raised concerns, Powerex believes the CAISO's approach of establishing an implied obligation between each EIM participant and CARB is problematic from a legal perspective.

More specifically, CAISO proposes to use its interstate reach to provide active support for California's Cap-and-Trade program, particularly with respect to dispatch of clean energy imports. In Section 3.9 of the Third Straw Proposal, CAISO states that it "is committed to working with the [CARB] and all market participants through this stakeholder process to ensure that greenhouse gas (GHG) costs are accounted for properly." In actuality, in order to implement the plans it has proposed, CAISO's role in the Cap-and-Trade program, while well intended, will be more than merely a neutral accounting function. This raises legal concerns, especially in light of the multi-state impacts that CAISO's actions will have.

In particular, the CAISO proposes to perform the following functions in support of California's GHG program:

- Allow EIM participants to submit bids with a compliance bid adder to reflect the resource's emission properties and the costs of GHG compliance;

- Adopt an EIM dispatch algorithm which will "evaluate the differences in GHG costs that these resources incur so that energy from among a number of resources with different GHG bids may be differentiated";

- Use the SCED optimization formulation to "select energy produced by EIM Participating Resources outside California for import into California based upon the resources GHG compliance bid adders"; and

- Will create e-Tags as part of the interchange checkout between the ISO and the EIM Entity to clarify the GHG related obligation of the EIM participant.

Translated, what this all means in practice for the EIM program, is that CAISO will:

- Use its bid information regarding resource characteristics and bid adders to identify the most economic sources of imported energy, including carbon costs;

- Use its dispatch authority over EIM bids to “cherry pick” clean energy regardless of whether there is, in actuality, an increase in overall clean energy output; and

- Use its dispatch authority over EIM bids to “deem” energy with higher emission factors to be delivered to areas outside of California, where the California bid adders are irrelevant and will be disregarded in determining the merit order of dispatch.

Basically, the CAISO proposes to use its interstate reach into neighboring states and adjacent transmission systems to screen and selectively dispatch clean energy resources (and selectively deem electrons from these resources delivered to California) CAISO’s plan to function as an electron gatekeeper as a facilitator of CARB’s program is not consistent with a multi-state EIM.

Constitutional concerns regarding the extra-territorial effect of California’s Cap-and-Trade program on energy markets in the Western Electricity Coordinating Council (“WECC”), and on interstate and cross-border trade in wholesale power have been discussed in the legal community since the launch of the program in January 2013, well prior to the implementation of an EIM. However, these legal concerns with the California Cap-and-Trade program are significantly compounded by CAISO’s use of its interstate reach in the context of a FERC-regulated EIM program to support California’s GHG program through selective dispatch and allocation of resource output based on a bid component reflecting carbon intensity. More particularly, the CAISO will be requiring out-of-state generators who wish to participate in the multi-state EIM to be governed directly by CARB as a pre-condition of submitting an offer for energy in the EIM. Put another way, a participant will be exposed to potential carbon allowance obligations merely as a result of a submission of a generator offer, not as a result of a conscious decision by the participant to deliver power into the state of California.

Additionally, CAISO has failed to consider the discriminatory impact of its EIM dispatch and allocation proposal on Asset Controlling Suppliers (“ACS”) such as Powerex and the Bonneville Power Administration, whose emissions allowances are determined on a system average rather than single-source basis, and who, unlike CAISO, are subject to long-term oversight by CARB in the ACS renewal process. An ACS will be in direct competition with EIM generation in supplying 15-minute energy to the CAISO/EIM footprint, yet face a differing carbon obligation structure.

Powerex’s concerns should not be misunderstood. Powerex is supportive of CARB’s Cap-and-Trade program. Powerex has also, to date, not opposed the CAISO’s modifications to its tariff which facilitate CARB’s ability to charge carbon allowances from participants who *choose* to import power into the state of California. However, Powerex is extremely concerned that CAISO’s inclusion of the Cap and Trade program in the EIM design goes well beyond what would be expected in a multi-state organized market. Moreover, CAISO’s role in dispatch and allocation of EIM generation will likely create market distortions that are even greater than could be expected from the CARB program standing alone, and will compound the legal issues already inherent in that program, particularly for imports.

Perhaps the most troubling aspect of the Third Straw Proposal is that it is fundamentally exclusionary, with participation in the EIM program limited to entities that are both willing and able to submit to CARB's jurisdiction for purposes of registration, participation, and oversight in the Cap and Trade Program. CAISO thus preconditions an entity's participation in a FERC-regulated interstate program on submission to a state regulatory regime. This is an impermissible intrusion into FERC's exclusive jurisdiction over interstate transmission and wholesale power markets. Moreover, such a selective approach to EIM participation runs counter to FERC open access principles for RTOs.

Powerex urges the CAISO to reconsider its carbon proposal.

The CAISO's local market power mitigation runs counter to the voluntary nature of an EIM market and will hamper EIM liquidity, particularly during periods of regional scarcity and over-supply

Powerex continues to disagree with the CAISO's position on the need for local market power mitigation in a voluntary EIM market. Powerex urges the CAISO to consider applying local market power mitigation, or an alternative construct, only to transmission providers' resources in the narrow circumstances where the respective transmission providers' load customers are required to procure from, or be settled against, the EIM for energy imbalance services or other energy or capacity services. All other generation participation and all other load customers' participation should appropriately be viewed as voluntary, with application of LMPM measures both unnecessary and detrimental to market liquidity.

Powerex appreciates this opportunity to comment on the CAISO's Third Straw Proposal.