

July 3, 2019

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation
ER19-2347-000**

Filing to Supplement the Record and Correct Attachment

Dear Secretary Bose:

On July 2, 2019, the California Independent System Operator Corporation (CAISO) filed a tariff amendment in this proceeding to include three separate and distinct measures that facilitate participation of fast ramping hydroelectric resources in the western energy imbalance market (EIM) by improving the local market power mitigation process and cost-based bids used for such resources to be mitigated. The CAISO has determined that it submitted the wrong stakeholder comment matrix in Attachment L in the July 2 filing. The CAISO erroneously attached the stakeholder comment matrix related to the draft tariff language and not the policy development stakeholder comment matrix as it had intended. The CAISO now submits this instant filing to correct the error. The CAISO has served this filing on the same entities that were served with the July 2 filing.

Honorable Kimberly D. Bose
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Please contact the undersigned if you have any questions regarding the foregoing.

Respectfully submitted,

By: /s/ Anna A. McKenna

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Counsel for the California Independent
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Attachment L – Matrix of Stakeholder Comments and CAISO Response

Local Market Power Mitigation Enhancements

California Independent System Operator Corporation

Stakeholder Process: Local Market Power Mitigation Enhancements Proposal

Summary of Submitted Comments

Stakeholders submitted four rounds of written comments to the ISO on the following dates:

- Round One: Issue Paper and Straw Proposal comments received 10/4/18
- Round Two: Supplemental Issue Paper and Straw Proposal comments received 10/18/18
- Round Three: Revised Straw Proposal comments received 12/10/18
- Round Four: Draft Final Proposal comments received 2/11/19

Parties that submitted written comments: Bonneville Power Administration, Chelan County Public Utility District, Deseret Power, Department of Market Monitoring, Idaho Power Company, Middle River Power, National Hydro Association, NRG Energy, NV Energy, PacifiCorp, Pacific Gas & Electric, Portland General Electric, Public Generating Pool, Powerex, Public Power Council, Puget Sound Energy, Southern California Edison, Seattle City Light, Six Cities, and Western Power Trading Forum.

Stakeholder comments are posted at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalMarketPowerMitigationEnhancements2018.aspx>

Other stakeholder efforts include:

- Technical workshop meeting, 4/30/18
- Technical workshop meeting, 7/19/18
- Issue Paper and Straw Proposal conference call, 9/19/18
- Working group meeting, 10/10/18
- Revised Straw Proposal conference call, 11/28/18
- Draft Final Proposal conference call, 1/23/19

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
Bonneville Power Administration	Strongly supports because hydro DEB adequately captures relevant factors of opportunity costs calculations for hydro resources.	Supports because enhancement improves mitigation accuracy.	Supports ability to update gas floor component of hydro default energy bid to reflect current gas prices. No comment on other elements.
Chelan County Public Utility District	Supports because proposed hydro DEB reasonably reflects a variety of hydro resources' opportunity costs.	No comment	No comment
Department of Market Monitoring	Conditionally supports but believes including opportunity costs of bilateral sales at other than a resource's location inappropriately includes transmission value in DEB. Also believes fixed storage horizon may overstate opportunity costs because it can extend beyond a hydro cycle.	Supports because enhancement improves mitigation accuracy.	Supports because enhancements include updating real-time market commitment cost bid caps and default energy bids with current gas prices.
Idaho Power Company	Supports proposed hydro DEB framework, but believes multipliers for gas floor, short-term, and long-term components are too low.	Generally supports	No comment
Middle River Power	No comment	No comment	Supports and encourages the ISO to implement the proposal to use a "Monday-Only" index as soon as possible.

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
NRG Energy	No comment	No comment	Supports and encourages the ISO to implement the proposal to use a "Monday-Only" index as soon as possible.
NV Energy	Supports, but believes in addition to hydro resources, DEBs for use-limited gas resources should also include opportunity costs of bilateral sales at other than a resource's location.	Generally supports, but believes Management's proposed 10 cent maximum amount for an adder to mitigated bid prices to ensure mitigated prices are at least as high as competitive prices outside of a mitigated region is too high. They point out it is greater than a similar adder, which is 1 cent, that the EIM market applies to costs of energy transfers between EIM balancing authority areas so that it selects the most direct transfer path.	No comment
PacifiCorp	Supports because proposed hydro DEB acknowledges both short- and long-term opportunity costs of hydro resources with storage.	Supports	Supports
Pacific Gas and Electric	Supports, stating proposed DEB will more accurately reflect hydro resources' costs	Supports because enhancement improves mitigation accuracy.	Supports

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
Portland General Electric	No comment	Supports	No comment
Public Generating Pool	Strongly supports because proposed hydro DEB recognizes short- and long-term limitations and provides an adequate DEB price that ensures minimal inefficient dispatch	Supports	No comment
Powerex	Strongly supports, notes including opportunity costs of bilateral sales at other than a resource's location is particularly important. Maintains more than one trading hub should be included in short-term component in some circumstances.	Supports because enhancement improves mitigation accuracy.	No comment
Public Power Council	Supports, particularly including DEB gas floor component based on average peaking gas generator cost.	Supports	No comment
Puget Sound Energy	Supports	Supports	Supports
Southern California Edison	Supports	Supports, states proposed maximum 10 cent mitigated bid adder is minimal and will not negatively impact locational marginal prices.	Supports, but requests clarification of the criteria the ISO will use to determine if a gas price index represents a sufficient amount of

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
			trading so that it is appropriate to use to establish commitment cost bid caps and default energy bids.
Seattle City Light	Supports, particularly including opportunity costs of bilateral sales at other than a resource's location.	Supports	No comment
Six Cities	Supports	Supports	Supports, but requests the ISO clarify how it will account for gas costs for Mondays when the "Monday-Only" index is not available.
Western Power Trading Forum	Supports proposal but believes, in addition to hydro resources, DEBs for gas resources should also reflect opportunity costs of bilateral sales at other than a resource's location and should also reflect daily limitations.	Supports	Supports and encourages the ISO to implement the proposal to use a "Monday-Only" index as soon as possible. Requests clarification of the criteria the ISO will use to determine if a gas price index represents a sufficient amount of trading such that it is appropriate to use to establish commitment cost bid caps and default energy bids.
Management's response	Management believes it is appropriate to include opportunity costs of bilateral sales at other than a resource's location because energy sales at locations other than hydro	Management will specify in the tariff language to implement this enhancement that the maximum adder to mitigated bid prices will be 1	Management will develop criteria the ISO will use to determine if a gas price index represents a sufficient amount of trading such that it is

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
	<p>resources' locations are typically linked to the output of the hydro resource. Energy purchasers often specifically purchase energy produced by hydro resources to meet carbon reduction goals.</p> <p>In addition, suppliers point out that in the bilateral market, transmission's value cannot be separated from energy's value because there is not a robust bilateral market for unused transmission.</p> <p>Management also believes its proposal for using a fixed storage horizon reasonably balances the practical considerations of implementation complexity and the difficulties in precisely modeling every hydro resource's operation. For example, there is the possibility that some hydro resources do not face maximum storage limitations each year. In addition, any default energy bid price inflation due to using a fixed storage horizon will be small and market power is not as much of a concern in the later months of the year as it is in other months.</p> <p>Management does not believe it is appropriate to include more than one hub in the short-term floor component of the DEB. This component is intended to account for</p>	<p>cent, rather than 10 cents. As NV Energy points out, this will be consistent with a similar adder the EIM applies to energy transfer costs. Management will determine the actual adder the EIM will use through market optimization tuning prior to implementation.</p>	<p>appropriate to use to establish commitment cost bid caps and default energy bids. It will establish this criteria consistent with existing FERC rules and will document the criteria in the tariff and/or in the appropriate business process manual.</p> <p>Management clarifies it will retain the existing 25 percent "reasonableness threshold" for suppliers to request adjustments to a resource's commitment cost bid caps and default energy bids for Mondays when the "Monday-Only" index was not used. The Monday-Only index is not used if it is not published or does not meet liquidity requirements.</p> <p>Management is submitting a separate tariff amendment to FERC so that the ISO can use the "Monday-Only" index for the day-ahead market over this summer. It will do this as a modification to temporary tariff provisions to update gas prices used for the day-ahead market the Board previously authorized.</p>

Market participant	New default energy bid (DEB) option for hydro resources	Enhancement to prevent dispatching resources to export power from constrained region at mitigated bid prices only because of market power when importing in earlier interval	Enhancements to processes for updating commitment cost bid caps and DEBs
	<p>short-term water availability limitations to ensure the ISO market does not dispatch a hydro resource too often on any particular day. It is not intended to directly reflect opportunity costs of sales outside the ISO market. Rather, it accounts for dispatch at EIM prices based on day-ahead bilateral prices at a representative hub and using multiplier. Management designed it based on the historical relationship of prices at single hubs to EIM prices.</p> <p>Applying the hydro DEB to gas resources is not appropriate because its components were designed to specifically reflect hydro resource limitations and the stakeholder process did not consider gas resource limitations. Any modifications to gas resource DEBs would have to be considered in a future stakeholder process.</p>		

Local Market Power Mitigation Enhancements 2018 – Draft Final Proposal

Draft Final Proposal (Updated) Section #	Stakeholder & Corresponding Comments Page #	Stakeholder Comments	CAISO Management Response
<p>6.1.2 Prevention of Economic Displacement between Mitigated Balancing Authority Areas (BAAs)</p>	<p>Department of Market Monitoring Page 5</p>	<p>“It was only through the current stakeholder initiative that DMM became aware that the ISO is allocating 100% of congestion rents from the sufficiency test net to export constraints to the BAA failing the test. Therefore, DMM has sought to assess the current policy of allocating 100% of congestion rents to either type of net export constraint.</p> <p>The ISO’s proposal raises some concern because otherwise the ISO evenly splits the congestion rents from any transfer constraint between two BAAs. The proposal to allocate 100% of congestion rents from a net export constraint to one BAA could create incentives for BAAs to not bid resources at marginal cost. BAAs may do this in order to try to increase the odds that they trigger their net export constraint and increase their share of congestion rents between themselves and neighboring EIM BAAs from 50% to 100%.</p> <p>However, alternatives that DMM has considered for allocating net export constraint congestion rents can create outcomes that are potentially even more problematic. Therefore, DMM does not currently have a proposal for an alternative allocation scheme. The ISO should be aware that its policies to enforce net export constraints for both sufficiency test failures and mitigation can create incentives for inefficient bidding behavior. This undesirable consequence of net export constraints needs to be weighed against the benefits the constraints provide in encouraging EIM participation.”</p>	<p>The ISO believes that the benefit of the net transfer rule included in this initiative exceeds concerns about any potential bidding behavior the rule could potentially incent. This rule should increase EIM benefits by reducing EIM participants’ incentive to limit the amount of transmission and/or supply they make available to the EIM to avoid selling energy at resources’ default energy bids. They could potentially do this even with the proposed hydro DEB because there will always be the potential that a standardized cost calculation administered by a third party such as the ISO does not account for all of a resource’s costs.</p>
<p>6.2 Hydro Resource Default Energy Bid</p>	<p>Department of Market Monitoring Page 6</p>	<p>“... DMM continues to question the validity of the ISO’s proposal for using trading hubs that are significantly different (geographically and pricewise) from the geographically closest hub in the formulation of opportunity costs. DMM also has some concerns about the provision that would allow DEBs to be based on up to 12 months of futures prices.”</p>	<p>While the ISO agrees that at a theoretical level default energy bids should only be based on prices at a resource’s location, in practice not allowing suppliers to reflect the opportunity cost of sales at other locations would interfere with the bilateral market. Suppliers point out their energy sales for deliveries at locations other than their hydro resources location are nonetheless linked to the output of that hydro resource. This is because energy purchasers often specifically purchase energy produced by hydro resources to meet carbon reduction goals. In addition, suppliers point out that in practice in the bilateral</p>

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			<p>market transmission’s value cannot be separated from energy’s value because there is not a robust market for their unused transmission.</p> <p>Management believes its proposal for a using a fixed storage horizon reasonably balances the practical considerations of implementation complexity and the difficulties in precisely modeling every hydro resource’s operation. For example, there is the possibility that some hydro resources do not face maximum storage limitations each year. In addition, any default energy bid price inflation due to using a fixed storage horizon will be small and market power is not as much of a concern in the later months of the year as it is in other months.</p>
<p>6.2 Hydro Resource Default Energy Bid</p>	<p>Deseret Power Page 2</p>	<p>“...expand the DEB definition such that a bid would be constrained by a band — defined by both a ceiling and a floor — when market power is determined to exist in a region rather than the current implementation which only includes a DEB ceiling.</p> <p>In the absence of a must-offer obligation, the owner of multiple resources in an export constrained region could be incented to select the single resource with the most negative DEB floor and only offer to reduce that resource’s output during periods when the region is export constrained. To mitigate this additional phenomenon, a market indexed DEB floor should be considered as an appropriate constraint to negative bids.”</p>	<p>Deseret is describing decremental market power, which is an entirely different issue than discussed in Local Market Power Mitigation Enhancements 2018. Deseret is correct that the ISO currently does not have mitigation rules for resources who bid below their marginal costs. The ISO will include a description of an initiative that would address this issue as a potential initiative in its draft 2020 Policy Initiative Catalog.</p>
<p>6.2 Hydro Resource Default Energy Bid</p>	<p>Idaho Power Company Pages 2-3</p>	<p>“Regarding the gas floor, the multiplier of 1.1 is too low and does not reflect the volatility that can occur in gas prices. A higher multiplier, such as 1.25, would be more accurate. In addition, CAISO has indicated it plans to use its current process for hydro resources to set up a gas price index. Idaho Power urges CAISO to allow more flexibility in this process. For example, if either of two gas price indices could apply, based on a resource’s location, the resource should be allowed to consider both and use the greater of the two.</p> <p>The multipliers for the short-term and long-term/geographic floors are also too low to accurately capture volatility....A higher multiplier is necessary to capture potential volatility and</p>	<p>The ISO believes that a 1.1 multiplier on the gas component is appropriate and consistent with current default energy bids for natural gas resources multipliers. The ISO notes that its proposal includes provisions to update gas prices on the morning of the real-time market to account for gas price volatility. Additionally, a 1.1 multiplier is sufficient when combined with the 1.4 multiplier of the short-term floor component. As described in the draft final proposal, the ISO conducted studies to determine if the default energy bid, in its entirety, was sufficient to avoid dispatching hydro resources too frequently. This study showed the 1.4 multiplier resulted in dispatching most resources no more than 4 hours per day. Market participants generally came to a consensus that four</p>

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		<p>reduce the instances of inefficient dispatch. Further, the multipliers should be reevaluated on a regular basis to respond to varying conditions, including water conditions (that is, the type of water year that is occurring).”</p>	<p>hours per day represents a reasonable approximation of most hydro resources’ short-term water limitations. The ISO intends for the hydro default energy bid to accommodate a range of hydro resources’ limitations while maintaining market power protections. Suppliers can still negotiate default energy bids for individual resources if the standard hydro default energy bid does not account for a resource’s limitations.</p> <p>The ISO does not believe a multiplier higher than 1.1 is appropriate for the long-term/geographic component to capture volatility. The long-term/geographic component uses a simplified heuristic approach to estimate these opportunity costs. For example, it may establish an opportunity cost for a resource with a 12-month storage horizon based on the highest monthly index price looking out 12 months. However, if the resource can continuously produce energy for longer than one month in this period, its opportunity cost is actually that of the second highest priced month. However, the ISO’s proposed approach uses the highest priced month acknowledging that hourly prices can be higher or lower than the published index prices and to avoid the ISO having to estimate a resource’s actual water supply., .</p> <p>The ISO agrees that the multipliers should be revised if conditions change from those that it used to develop the multiplier. The ISO will address this in its FERC filing to implement the hydro DEB.</p>
<p>6.4 Gas Price Indices</p>	<p>Middle River Power Page 1</p>	<p>“MRP also asks the CAISO to clarify the criteria for when the CAISO will use the Monday-Only index. The current language, “the CAISO may use the Monday-only index when it’s available...”, is unclear and subject to discretionary implementation.</p> <p>Although MRP supports the CAISO’s proposal above, we also believe a broader fix is necessary to better align the gas trading markets and CAISO Day-Ahead awards on all trade days. There is currently a substantial divergence in the timing to procure gas for the Day-Ahead power market awards.”</p>	<p>The ISO will develop guidelines to ensure that the price indices it uses are liquid and thus accurately represent prevailing market prices.</p> <p>The CAISO recently considered changes to its day-ahead market timeline to align with gas markets as part of its compliance with FERC Order No. 809. After a stakeholder process and based on stakeholder feedback, the ISO concluded that moving the timing of the publication of the day-ahead market would have more drawbacks than benefits. (see: http://www.caiso.com/Documents/Jul23_2015_ComplianceFiling_SchedulingPractices_CaliforniaSODay-AheadMarket_EL14-22.pdf)</p>

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			To address MRP’s concern regarding the alignment of gas procurement, the ISO already has authority under the Aliso Canyon temporary measures to release information regarding the possible gas burn based on the advisory runs of the day-ahead market run two days before the trading day. The ISO intends to make this a permanent feature of its market rules in an upcoming FERC filing.
6.4 Gas Price Indices	NRG Page 1	“Finally, in the stakeholder call held on January 28, market participants asked the CAISO to identify the conditions under which the CAISO would not use the ICE MO price when it was available. While the CAISO then demurred, NRG respectfully requests the CAISO to clarify in its proposed amendment the conditions under which the CAISO would not use the ICE MO price when it was available.”	The ISO will develop guidelines to ensure that the price indices it uses are liquid and thus accurately represent prevailing market prices.
6.2 Hydro Resource Default Energy Bid	NV Energy Page 7	“NV Energy seeks consistency in two ways. First, there should be a consistent approach between the commitment cost initiative and the LMPM initiative as to whether or not the relevant bilateral markets should be considered in the opportunity cost determination. Second, if the bilateral market opportunity is relevant, it should be relevant for all resources not just for hydro facilities. Use-limited gas resources also have environmental limitations and are also available to participate in the bilateral market. There should be no reason to segregate this proposal for only hydro resources with limitations. There should not be a resource specific preference for a higher opportunity cost adder to the Default Energy Bid.”	The ISO recently completed the Commitment Cost Phase 3 initiative in which it developed an opportunity cost methodology for use-limited gas resources. During that initiative, no stakeholders pointed out their gas resources had opportunity costs due to bilateral sales. The ISO is only proposing to make this default energy bid available to hydro resources because the framework is only applicable to hydro resources. The “storage horizon” concept as it has been defined in this initiative would not be applicable and the short-term limitation concept based on 4 hours daily availability may not be applicable to gas resources. However, in response to NV Energy’s and WPTF’s comments, the ISO added a potential initiative to its policy initiative catalog that would address gas-resources’ bilateral opportunity costs and short-term limitations.
6.2 Hydro Resource Default Energy Bid	PacifiCorp Page 1	“While PacifiCorp understands and supports the need to demonstrate firm transmission rights to a geographic trading hub, or one that is electrically similar, the CAISO should also include in that demonstration an ability to utilize resources across an entity’s system to access different trading hubs across the Western Interconnect. CAISO should not strictly require a demonstration of firm transmission directly to the market hub.”	The ISO agrees that access to transmission that is comparable to firm transmission rights would qualify a resource to include additional hubs in its default energy bid.

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<p>6.1.2 Prevention of Economic Displacement between Mitigated Balancing Authority Areas (BAAs)</p> <p>and</p> <p>6.2 Hydro Resource Default Energy Bid</p>	<p>Powerex</p> <p>Pages 2-3</p>	<p>“As an initial matter, Powerex believes it would be incorrect to view Powerex’s supply as “local” only to Mid-Columbia, with Alberta being one of several potential “remote” market locations. In fact, the physical generation capability that supports Powerex’s participation in the EIM is located entirely within British Columbia, and is effectively “between” Mid-Columbia and Alberta.</p> <p>Powerex therefore requests that the “local price floor” component of the Hydro DEB be defined as the higher of the “local market hubs” for entities, such as Powerex, that participate in the EIM with the capability of resources located between (or adjacent to) two valid local hubs. In the case of Powerex, the “local price floor” would be based on the higher of Alberta or Mid-Columbia prices for the defined temporal products (<i>i.e.</i>, day-ahead, balance-of-month ... etc.).”</p>	<p>The ISO does not believe it is appropriate to include more than one hub in the short-term floor component of the DEB. This component is intended to account for short-term water availability limitations, ensuring the ISO market does not dispatch a hydro resources too often on any particular day. It is not intended to directly reflect opportunity costs of sales outside the ISO market. Rather, it predicts EIM prices based on day-ahead bilateral prices at a representative hub and using the 1.4 multiplier. The ISO developed the 1.4 multiplier based on analysis of comparing prices at single hubs to EIM prices.</p> <p>Alternatively, the long-term/geographic component more directly reflects the opportunity cost of selling energy in the bilateral market at a different location than the resources and receiving a different price than the resource’s locational marginal price in the ISO market. Provided it meets the criteria, Powerex will have the ability to include Alberta trading hub prices in its hydro resource default energy bid.</p>
<p>6.4 Gas Price Indices</p>	<p>Southern California Edison</p> <p>Pages 3</p>	<p>“Regarding the proposal to use Monday-only gas price indices in the market, the CAISO should examine whether there should be any requirement on the liquidity, for example, should the transaction volume behind the Monday-only index exceed a threshold, for the CAISO to use the index on a specific day.</p>	<p>The ISO will develop guidelines to ensure that price indices it uses are liquid and thus accurately represent prevailing market prices.</p>
<p>6.3 Reference Level Adjustments</p>	<p>Southern California Edison</p> <p>Pages 4</p>	<p>“Regarding the proposal to update reasonableness thresholds for all resources in the same fuel region when the CAISO has sufficient information either through same-day gas trades on ICE and/or manual consultations, it’s unclear how the same fuel region is defined in this context. Again, the process of how fuel regions are defined should be examined to ensure those fuel regions are appropriately assigned, consistent with the intent of the policies proposed by the CAISO.”</p>	<p>The ISO will examine how fuel regions are currently defined and assess whether or not a different methodology should be used during the implementation process.</p>
<p>6.1.2 Prevention of Economic Displacement between Mitigated Balancing Authority Areas (BAAs)</p>	<p>Western Power Trading Forum</p> <p>Page 1</p>	<p>“WPTF seeks confirmation that the CAISO is committing to publishing which net export transfer constraints are enforced for transparency purposes, in the same manner it currently publishes other constraints enforced in the market.”</p>	<p>The ISO commits to publishing which EIM balancing authority area activates the rule. In addition, the ISO also commits to publishing which net export constraints are enforced.</p>

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<p>6.2 Hydro Resource Default Energy Bid</p>	<p>Western Power Trading Forum</p> <p>Page 2</p>	<p>“As iterated in previous comments, ideally the DEB option would be made available to all resource types with opportunity costs in a similar manner as the existing options don’t exclude certain resource types. In the end, making the option available to all resource types with opportunity costs may have little impact on which resources end up using the proposed option; limiting it as an option up front for several resources will ultimately have to be approved by FERC. Additionally, WPTF wonders why this DEB option is not being made available to all EIM resources. It’s WPTF’s understanding that part of the goal was to have a DEB that enabled resources to reflect opportunity costs associated with selling to other markets. It then follows that a non-hydro EIM resource also has that same bilateral market opportunity but under the current proposal is unable to opt for this DEB option. Making the DEB option available to all resource types with opportunity costs – including bilateral market opportunity costs for non-hydro external resources – would address this concern while remaining technology and fuel agnostic.”</p>	<p>The ISO recently completed the Commitment Cost Phase 3 initiative in which it developed an opportunity cost methodology for use-limited gas resources. During that initiative, no stakeholders pointed out their gas resources had opportunity costs due to bilateral sales. The ISO is only proposing to make this default energy bid available to hydro resources because the framework is only applicable to hydro resources. The “storage horizon” concept as it has been defined in this initiative would not be applicable and the short-term limitation concept based on 4 hours daily availability may not be applicable to gas resources. However, in response to NV Energy’s and WPTF’s comments, the ISO added a potential initiative to its policy initiative catalog that would address gas-resources’ bilateral opportunity costs and short-term limitations.</p>
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CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010). I have also served all entities that initially received the July 2, 2019 filing.

Dated at Folsom, California, this 3rd day of July, 2019.

/s/ Grace Clark
Grace Clark