Comments of VIASYN
Reliability Services Working Group Discussion

Submitted by	Company	Date Submitted
Sean Breiner (907) 378-9392	VIASYN, Inc.	March 3, 2014

VIASYN appreciates the opportunity to comment on the ISO's Reliability Services Initiative and Working Group discussion held on February 24, 2014. We support the ISO's direction in developing a market-based auction mechanism to facilitate the procurement of Resource Adequacy and backstop capacity.

1. Support for an Annual Residual Procurement Mechanism (RPM) Auction

A voluntary capacity auction that facilitates the trade of capacity, above and beyond that of a bilateral market alone, will provide significant benefits to the capacity market in the form of improved liquidity, reduced transaction costs, improved price discovery, and improved competitive procurement of least-cost capacity.

We support the direction laid out by the ISO in the Working Group discussion to develop an annual RPM auction that is utilized to (1) clear a voluntary market for RA capacity; (2) resolve RA procurement deficiencies including substitution and replacement; and (3) resolve unsystematic CPM needs (to the extent that such unsystematic needs cannot be resolved in an LMP-like component as described in the Contingency Modeling Enhancements (CME) Initiative). We believe that an annual RPM auction with a voluntary and mandatory segment separated by a one month cure period is sufficient to meet monthly and intra-monthly backstop needs. We view the use of a monthly auction as overly extensive and unnecessary (see comment section 2).

1.1 Incorporate Intra-monthly Unsystematic Backstop Procurement into CME Initiative

Annual/monthly RA backstop and outage substitution/replacement procurement should be the primary objectives of the mandatory segment of the annual RPM auction. To the greatest extent practical, other intra-monthly unsystematic CPM needs, such as exceptional dispatch designations, should be resolved in an LMP-like component as described in the CME Initiative.

The capacity market and associated auctions should be used to address supply adequacy. Exceptional dispatches are contingencies and resolve topographical limitations of the electrical system and distribution of resources, and should therefore be resolved through Locational Marginal Prices that are optimized in real-time.

1.2 Public Disclosure of Aggregated Auction Information

The ISO should consider publicly disclosing the aggregated supply and demand curve of the voluntary and mandatory segments of the annual RPM auction, as this will further improve price discovery and capacity contract negotiations.

1.3 Supply-Side Participation in Annual RPM Auction

Table 1 illustrates the likelihood of supply-side participation in the different segments of the annual RPM auction based on capacity contract type. We suspect that resources in capacity contracts for durations of longer than a year are unlikely to participate in the RPM because of their obligation to serve as RA, substitution, and replacement capacity for their counterparty.

If this is the case, and the RPM does not require minimum participation in the mandatory segment of the RPM, only merchant capacity and short-term procured capacity will be available to the ISO to resolve the needs specified in the mandatory segment of the RPM.

Table 1: Supply-Side Participation

Capacity Contract Type	Annual RPM Auction Segment		
	Voluntary Segment Participation?	Cure Period Participation?	Mandatory Segment Participation?
Long-Term	No	No	Unlikely
Short-Term (> 1 Year)	Unlikely	Unlikely	Unlikely
Short-Term (< 1 Year)	Likely	Likely	Yes
Merchant	Yes	Yes	Yes

To the extent that a minimum supply-side participation requirement is specified in the mandatory segment of the RPM, the ISO stands to gain a broader pool of resources to resolve CPM needs, with the trade off of potentially lower backstop capacity prices cleared from the auction.[1] This low clearing price[2] may not

[1] Long-term procured capacity is less likely to bid at fixed-cost in the mandatory segment of the annual RPM because they have revenue certainty through their long-term PPA, which is not shared by merchant or short-term procured capacity. If the ISO considers a minimum supply-side participation requirement in the mandatory segment of the annual RPM, the ISO should either consider a price floor or a bid-at-cost requirement. See section 4 of these comments for a perspective on a price floor.

[2] The voluntary and mandatory segments of the annual RPM should both utilize market clearing prices, to the greatest extent practical as constrained by CPM need specificity.

provide an incentive for LSEs to cure RA procurement deficiencies prior to the mandatory segment of the RPM auction.

Additional analysis from the ISO regarding the anticipated pool of resources expected to participate in the voluntary and mandatory segments of the annual RPM auction will be useful in assessing the efficacy of the mechanism in incentivizing full procurement of RA prior to the mandatory segment of the RPM, and may shed light on the anticipated clearing price of the two (voluntary and mandatory) RPM segments.

1.4 Demand Curve

VIASYN supports the use of a non-vertical demand curve and demand bids as this will incentivize participation of load beyond that level of participation necessitated by procurement insufficiency in bilateral arrangements, improving the overall efficacy of the mechanism. On the other hand, LSEs will only provide non-vertical demand bids to the extent that their existing bilateral contracts do not cover their procurement obligations or to the extent that LSEs expect the RPM clearing price to be more attractive than existing/potential bilateral arrangements.

We expect the demand curve to be steep, if not vertical, because the most significant LSEs are likely to have procured the majority of their RA needs through long-term PPAs with clauses that specify the trade of ownership of "all capacity attributes" related to the energy being procured. As well, because we only discuss an *annual* RPM, not a multi-year forward auction, and because of oversaturated market conditions, LSEs (particularly large ones) can acquire RA capacity from the market at near zero ($0) cost.

1.5 Cure Period

All else equal, suppliers of capacity are incentivized to participate in the voluntary segment of the annual RPM and subsequent cure period to the greatest extent practical, as constrained by preceding bilateral arrangements, because they are likely to receive a more attractive price for their capacity than in the bilateral market.[3] Prior to the mandatory segment of the annual RPM auction, therefore, supply must be provided the opportunity to offer updated supply bids, as the supply curve of the voluntary segment of the auction will be outdated.

[3] The desirability of participating in the annual RPM is highly contingent upon the details of its operation and requirements, however supply is likely to receive a more desirable price for their capacity in the auction than in the bilateral market because (1) capacity procured in the bilateral market trends towards zero ($0) in oversaturated market conditions, (2) LSEs are likely participating in the RPM due to procurement insufficiency in the bilateral market, and (3) the supply participating in the RPM is likely to be short-term contracted and merchant capacity--resources more likely to bid at cost than those in long-term contracts.

As well, to capture the value of non-vertical demand bids in the voluntary segment of the annual RPM the ISO should extend the subsequent "cure period" to around a month in duration, as a reasonable timeframe should be provided to resolve the uncleared portion of the demand curve prior to the backstop portion of the annual RPM auction. Providing a sufficient post-auction cure period further improves the market because bilateral arrangements resolved in this time period are informed by the clearing price and supply/demand curve of the auction, improving the competitive procurement of capacity.

2. RPM Auction to Resolve Monthly and Intra-Monthly Needs

A monthly RPM auction appears unnecessarily extensive. The market mechanism developed in this initiative is to resolve capacity needs and therefore address the fixed costs of valued capacity. Fixed costs can be estimated on an annual basis with sufficient accuracy. Intra-annual adjustments to supply bids should be allowed only under specific circumstances, such as: significant events to cost profiles, RA contract changes, or new capacity additions.

Suppliers should bid into the voluntary segment of the annual RPM auction with the goal of supplying annual RA capacity. After the subsequent cure period, suppliers should submit updated bids into the mandatory segment of the annual RPM auction with the goal of resolving: annual RA procurement deficiencies, monthly RA procurement deficiencies, outage substitution/replacement, and exceptional dispatches (to the extent that unsystematic CPM needs cannot be addressed in the CME Initiative).

Market procurement of monthly RA should remain bilateral only, as monthly RA procurement is marginal to annual RA procurement--in essence an "imbalance" capacity market. Utilizing a monthly RPM auction introduces excessive complexity and transaction costs that are likely to overshadow the added value of a monthly auction.

3. Replacement and Exceptional Dispatch

Whether the ISO resolves to utilize an annual RPM auction in isolation or in conjunction with a monthly auction we encourage the ISO to allow the mechanism be used to meet intra-month planned/forced outage replacement. Particularly for small resources, or suppliers without large pools of resources, managing replacement capacity and insuring SCP availability requirements are met involves relatively significant transaction costs.

We also encourage the ISO to explore the extent to which the Contingency Modeling Enhancements (CME) Initiative can be modified to incorporate *all* cases of exceptional dispatch procurement needs, as mentioned in section 1.1 of these comments.

4. Value of Price Floor or Bid-At-Cost Requirement

To the extent that the ISO relies on a capacity market to ensure resource sufficiency, resources participating in the capacity market should participate with the understanding that the capacity market serves as a market function to reimburse the fixed costs associated with capacity determined to be valuable. If this is not the case, fixed cost recovery is assumed to occur in the energy market and supply-side resources are incentivized to *not* participate in capacity market to the greatest extent possible.[4]

We encourage the ISO to assess the extent to which the voluntary segment of the annual RPM auction for the voluntary procurement of RA capacity will clear above a zero ($0) market clearing price in oversaturated market conditions, as an *annual* capacity market that consistently clears at zero ($0) is an ineffective one. It would be argued that a zero ($0) market clearing price sends the signal that the market is oversaturated, however an annual capacity auction is insufficiently forward to create this incentive or disincentive. *Fixed cost recovery will simply be assumed to occur less efficiently in the energy market.* A multi-year forward capacity market is necessary for the capacity market to send an accurate price signal on capacity needs and market saturation conditions on a going forward basis.

Therefore the only consequence of a zero ($0) market clearing price in an annual capacity auction is that fixed cost recovery is assumed to occur in the energy market, reducing the relevance of the voluntary segment of the annual RPM auction, reducing participation (by supply) in the mechanism *to the greatest extent possible* due to no capacity market revenues but high must-offer obligations, and therefore reducing the overall effectiveness of the mechanism.

We encourage the ISO to explore the extent to which a price floor in the voluntary segment of the annual RPM auction (set at a percentage of the clearing price of a multi-year forward capacity auction)[5] improves the efficacy of the annual RPM auction in incentivizing participation in the mechanism and facilitating fixed cost recovery for valued capacity, and improves the robustness of the capacity market in general. The extent to which a price floor incentivizes

[4] Resources offering RA capacity in over-saturated market conditions (such as the one that currently exists) are subject to must-offer obligations but are *not compensated the fixed costs associated with such capacity* (because the market is oversaturated). Outage replacement increases the cost of participating. These factors strongly incentivize resources to participate in the RA market *as little as possible*. Ensuring *some* fixed cost recovery occurs in the RA market, even in oversaturated market conditions, is required to ensure competitive procurement and an efficacious capacity market.

[5] An administratively-set price floor, set at a percentage of the estimated fixed cost of the anticipated marginally-cleared generation type, could be considered until the deployment of a multi-year forward capacity auction.

excessive buildout of capacity should also be assessed, as this would be the primary driver behind not administering a price floor. Alternative to a price floor, the ISO should consider a bid-at-cost (fixed cost) requirement for all participating supply.

A price floor (or bid-at-cost requirement) is likely to disincentivize load from participating in the auction, as they are likely to be able to contract for RA capacity in the bilateral market at near zero ($0) cost. A minimum participation requirement by load should therefore be considered.

Whether or not a price floor (or bid-at-cost requirement) is administered in the voluntary segment of the annual RPM, one should be administered in the mandatory segment of the annual RPM because this backstop mechanism should clear at a higher price than the market price for capacity. To the extent that LSEs offer excess supply below cost into the RPM, the clearing price(s) for capacity in the mandatory segment of the RPM will be depressed, reducing the incentive to avoid the use of the backstop mechanism. Market participants will be incentivized to lean on the backstop mechanism to the greatest extent possible. A price floor or bid-at-cost requirement could solve this problem.

Ideally, a price floor in the mandatory RPM is unnecessary because a price floor or bid-at-cost requirement exists in the voluntary RPM. Supply bids in the mandatory RPM could be a function of those bids in the voluntary RPM, minimizing price floor or bid requirement redundancies.

5. Market Power

As the need being addressed in the RPM increases in specificity, the number of resources eligible to resolve the need decreases. Market power concerns therefore reside around supply withholding and bid inflation by pivotal suppliers. RA capacity that has participated in the ISO market a minimum number of days in the previous year and/or is determined to be part of a pivotal supplier portfolio not under a long-term contract could be required to participate in the RPM. This will decrease concerns associated with supply withholding. Bid inflation can be mitigated by requiring suppliers to provide a defense of their bids (based on fixed-costs) if requested by the ISO.

An additional market power concern is that LSEs could offer excess contracted supply (or obligate contracted suppliers to offer) into the RPM at a near zero ($0) bid (to ensure the capacity is awarded). This would suppress the clearing prices below fixed-costs, reduces the efficacy of the mechanism to facilitate an accurate capacity price, and reduces the incentive to avoid backstop procurement. This market power concern could be resolved by using (1) a price floor tied to the fixed cost of the anticipated marginally-cleared generator type, or (2) a price floor tied to the clearing price of a multi-year forward auction, or (3) a bid-at-cost requirement.