

Survey responses from Sierra Club, NRDC, and Sustainable FERC Project

VRR Curve feedback and questions.

Brattle should evaluate VRR curve shape, including an assessment of whether the VRR curve should pass through the Reliability Requirement at Net CONE, as does the curve for ISO-NE.

Brattle should include an evaluation of the marginal reliability impact (MRI) demand curve-based approach that is used in ISO-NE to model the system and import- and export-constrained locations to determine how it performs compared to the current structure.

Brattle should return to the original approach of a time-sequential model (the original Hobbs simulation model was of that type) for evaluating the VRR curve shape as suggested on slide 14 of the August 5 presentation, and drop the “Monte Carlo” model which does not provide an accurate representation of resource entry decisions (see Affidavit of James Wilson, Docket No. ER14-2940-000, at PP 41-54 for a description of the problems with the Monte Carlo model, and the relative advantages of a sequential approach).

The model should simulate developments and actions between the BRA and delivery year, such as resolution of uncertainty about the load forecast, adjustments to new entry and retirement plans, and transactions in incremental auctions. Any modeling should also consider the availability of new or uncleared supply (especially DR and other short-lead capacity) in incremental auctions in response to low reserve margins resulting from the BRA.

Specifically to Brattle’s Monte Carlo model, if it is used: the normalization procedure (2018 review pp38-40) appears to introduce artificial scarcity if a high administrative Net CONE is used. Regardless of the Net CONE used for the VRR curve, the normalization should be to the best estimate of empirical Net CONE. Similarly, any study should not assume that the admin. Net CONE is the same as the market entry price.

Brattle should discuss RPM price patterns over time, and what this tells about the market’s reactions to expectations about changes in load forecast, retirements, new entry, etc. Specifically, while prices in the RTO region tend to go high and low year to year, price excursions high or low are typically followed by a return to average levels, and the three-year average is smoother. Brattle should consider whether the VRR curve modeling used is realistic given this empirical information. Brattle should discuss RPM price patterns over time, and what this tells about the market’s reactions to expectations about changes in load forecast, retirements, new entry, etc. Brattle should discuss the causes of the lack of price convergence between base residual and incremental auctions, the potential value of better price convergence, and potential changes to improve this price convergence, such as virtual capacity offers.

We support a thorough discussion of the causes of over-procurement in RPM, as well as proposals to address that problem. Examples of possible causes to be examined include: consistently excessive load forecasts, administrative Net CONE values that regularly far exceed empirical Net CONE, the continued right-shift of the demand curve (relative to a curve that

passes through the Reliability Requirement at Net CONE), and the lack of a seasonal capacity construct. The LOLE associated with any particular demand curve evaluated by Brattle should be presented in the context of the (1) perpetually excessive load forecast, and (2) the large amount of capacity in the region that remains in operation without a capacity obligation (either because it did not offer or did not clear).

CONE feedback and questions.

The original intent of RPM was to reach equilibrium near (Net CONE, IRM). The study should re-evaluate if that is still RPM's design intention. It may be illuminating to present a VRR curve based on historical data that would have met those goals to be evaluate what changes would be needed to the curve to realize that objective, if in fact it remains the design intention.

Brattle should evaluate using empirical Net CONE as the price parameter, or as the basis for a collar on the administrative Net CONE (e.g., empirical Net CONE +/- 20%). Insofar as Brattle develops an administrative Net CONE based on a reference resource, the short list of potential reference resources should include at least one non-fossil resource; for example, NYISO evaluated battery technology as part of its list of potential reference technologies. Insofar as Brattle evaluates a CT as one candidate for the reference resource, it should provide a thorough evaluation of the uncertainties associated with the cost of developing such a resource (in either a greenfield or brownfield setting), and the uncertainties associated with estimating E&AS revenues (including whether the use of the 10% adder is justified in estimating that offset, and whether the CTs AS revenues under the new ORDC are relatively challenging to forecast). Brattle should provide results where a line-item adjustment in reserve revenues is not reflected for the new operating reserve demand curve design, especially if the CT remains the reference technology.

Brattle should include applications of major maintenance costs as a variable or fixed for stakeholder review. As Brattle moves forward we would like to know how these costs are included.

Brattle should evaluate the "time to market" for any reference resource evaluated and the salience of any differences in "time to market", as this is a factor PJM and FERC have considered relevant in recent VRR curve filings.

Insofar as Brattle presents sensitivities or "stress tests" regarding uncertainties in the E&AS offset or overall Net CONE, Brattle should present context regarding the sensitivities chosen, the likelihood of such outliers, and how market participants might manage such uncertainties to mitigate the impacts.

Brattle should look at how to establish seasonal resource adequacy criteria, reliability requirements, and VRR curves, and how to modify RPM to fully recognize resources' seasonal capacity values and to clear capacity to satisfy seasonal requirements. Brattle should evaluate the Capacity Performance "opportunity cost" concept that underlies current seller market power

mitigation and other market design parameters in light of empirical information about how resources offer into RPM.

E&AS Offset Methodology feedback and questions.

The list of potential gas and electric hubs should not be overly constrained by liquidity and open interest criteria. For example, it doesn't make much sense to continue to use Western Hub for Eastern MAAC. As to Ancillary Services revenues, the analysis should consider the ORDC reforms, and also the likely future interrelationship between energy and AS prices.