Necessary enhancements to the Forward Capacity Market

Over the past three years, ISO New England (ISO-NE or ISO) successfully implemented the Forward Capacity Market (FCM) and completed three Forward Capacity Auctions (FCAs) to procure resources to meet the future reliability needs of the region. The FCM is a locational forward capacity market that is intended to provide competitive price signals to attract sufficient capacity resources, both new and existing, to ensure the adequacy of supply in New England. The ISO has gained experience through these initial auctions and is now proposing modifications to further enhance the effectiveness of the region's capacity market. In addition, the ISO's Internal Market Monitor [1](INTMMU) has reported inadequacies in the FCM and has recommended changes to certain rules to improve the operation of the market. Based on the experience gained in the auctions and the INTMMU's report, the ISO is proactively identifying FCM rules that are not operating as intended and could affect the ability of future FCAs to send appropriate price signals. The ISO is working with the New England states and NEPOOL to discuss and refine proposed modifications to the FCM rules. There are two major issues being discussed:

The FCM was designed to ensure that the capacity auction clearing price reflects the cost of a new resource entering the market when new resources are needed. When certain activities occur that prevent the auction from clearing at competitive levels, an effective adjustment mechanism is necessary to ensure that the FCM attracts and retains competitive, market-based resources.

The FCM framework recognizes that out-of-market (OOM) activities can distort prices in the FCA so that the clearing price does not appropriately reflect the cost of a new resource when new resources are needed. The Alternative Price Rule (APR) is an adjustment mechanism that was developed with the intention of having it reduce price volatility by setting prices closer to competitive levels when OOM resources[2] are bidding in the FCA and otherwise depressing the FCA price. To the extent that OOM resources in the FCA lower capacity clearing prices and the APR fails to raise prices toward competitive levels – artificially low prices will result. These artificially low prices have the unintended consequence of potentially suppressing timely market-based investment and can result in premature retirements of existing resources. Additionally, these artificially low prices will result in higher overall capacity clearing prices in the long-run because of the increased risk related to the FCA clearing price and the significant volatility between the artificially low prices and the necessarily higher clearing prices in future FCAs . For example, if the true cost of a new resource to enter the market is $8/kw-month on average and the presence of OOM resources has artificially lowered the clearing price in the FCA to $2/kw-month, future FCAs must clear at $14/kw-month to induce the new capacity investment required to clear the market. This price volatility increases the risk to a new entrant, which might raise its "true cost" to $10/kW-mo from $8/kW-mo. In sum, auction prices must on average equal new entry costs, and risk can increase those costs.

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[1] http://www.iso-ne.com/markets/mktmonmit/rpts/other/fcm_report_final.pdf

[2] Out of market resources are those that participate in the FCM at prices below their costs no matter how low the auction price drops. These resources typically are built or provided by a party with a contract that ensures full payment for the resource regardless of the level of FCM clearing prices.

As a result of the experience of the first FCAs, the ISO is proposing changes to the APR. In the first two auctions, the ISO identified OOM bids that were sufficient to lower the FCA clearing price in successive years yet were not captured by the existing APR. If the FCA clearing price is lowered by such actions and the APR is not triggered, the FCM is not properly revealing the market cost of new resources. The ISO is concerned that if modifications to the APR are not implemented, the current rules will allow for OOM resources to increase price volatility. This volatility will lead to new resources bidding in the capacity market with high risk premiums which will in turn raise capacity prices for the region.

The FCM was designed to provide locational price signals so that new resources will locate where and when they are needed. If these price signals are obscured, the region may not attract competitive new resources and will likely pay higher out of market payments to existing resources to maintain reliability.

The FCM was designed to procure sufficient resources to meet both regional and local reliability needs. In the first two FCAs, there was sufficient capacity to meet the local resource adequacy requirements for all zones. However, during the first FCA, the ISO rejected certain delist bids based not on the local resource adequacy requirements currently reflected in the market rules, but rather based on transmission security requirements. These transmission security requirements are met by the same capacity counted to meet the local resource adequacy requirements. The transmission security requirement is simply another measure of the amount of capacity needed to meet local reliability needs. Sometimes it will be higher and sometimes it will be lower than the equivalent local resource adequacy calculation. Because of this lack of consistency in outcomes from the application of two different reliability requirements, the transparency of the FCM is reduced, appropriate price signals are masked, and resources are more likely to be paid out of market to maintain reliability. Based on the experience gained in the first FCA and to remedy this potential issue in future auctions, the ISO is recommending an approach to buy sufficient resources based on the higher of the two standards. This change to the FCM rules will promote the dual objectives of using the competitive market to set capacity prices and minimizing the use of higher out of market payments.

If the issues with the current FCM rules are not addressed, there will be uncertainty in the marketplace which could lead to difficulty in meeting reliability requirements and potentially higher auction clearing prices.

The current FCM rules, by improperly setting capacity prices in some circumstances, result in increased price volatility. This increased price volatility increases risk to potential new entrants and will ultimately raise prices to consumers to account for this risk. The current rules also do not reflect actual local reliability needs, in some cases understating those needs. This results in the FCM not procuring enough resources to meet local needs and prices insufficient to attract and retain needed resources. ISO's proposals under discussion in the FCM Working Group are designed to close these gaps.