

Draft Proposal
Intermittent Resource Capacity Treatment in Forward Capacity Market
Revision: 2 (07/07/06)

Purpose: To establish a distinct method to determine the Qualified Capacity MW value of intermittent resources in the Forward Capacity Market (“FCM”)

Background: The FCM requires that potential capacity resources (Existing or New) must submit qualification information no later than the qualification deadline in order to receive Qualified Capacity MW credit for their capacity resource. The Settlement Agreement, dated March 6, 2006, directed that a method should be developed to determine the Qualified Capacity MW value of intermittent resources in a manner that recognizes contribution to system reliability over the winter and summer periods. The method needs to be developed by the fourth quarter of 2006. In addition, because these resources are exempt from availability penalties and/or the poor performing resource treatment imposed on all other capacity resources, the method should consider how to address poorly performing intermittent resources. Intermittent resources include wind, solar, and run-of-river hydro. The Market Rules should address how intermittent resources will be defined as New Capacity in the FCM.

Discussion: The FCM should allow intermittent resources (“IR”) to submit Qualified Capacity MW offers during the primary and reconfiguration auctions in the same manner as all other potential capacity resources. IR resources will not be subject to the application of an Availability Metric as applied to all other Qualified Capacity MW resources, however the payments to IR resources will be based on the application of the methodology for determining the Qualified Capacity MW value (developed below) for the relevant period immediately prior to the start of the FCM Commitment period. In the event that the Qualified Capacity MW value of an intermittent capacity resource is less than the amount awarded in the Forward Capacity Auction (“FCA”) for that resource, the ISO may, as appropriate, make up any shortfall through the next reconfiguration auction. A suggested method to derive an amount of Qualified Capacity MW from Existing IR resources that can be offered into a FCM primary or reconfiguration auctions could be as follows (need to pick one):

[Method A: The amount of Qualified Capacity for monthly payment will be comprised of two separate seasonal values. The Summer Period value will be derived as determined below and will be paid the FCA clearing price during the summer period. The Summer Period value will be placed into the annual FCA primary auction. The Winter Period value will be derived as determined below and will be paid the FCA clearing price during the winter period

Winter Period Qualified Capacity MW value = *The IR resources median amount (MW) of interconnected hourly generation flow during the Winter Period Reliability Hours over the previous 8 month winter period (Oct-May). The Winter Period Reliability Hours will consist of <to be determined by a study of the best*

possible estimate of generation from each type of IR resource during the relevant hours and years of system peak load> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above> period.

Summer Period Qualified Capacity MW value= *The IR resources median amount (MW) of interconnected hourly generation flow during the Summer Period Reliability Hours over the previous 4 month summer period (June-Sept). The Summer Period Reliability Hours will consist of <to be determined-see above> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above>-year period.*

Method B: The annual amount of Qualified Capacity for monthly payment will be equal to the weighted average of the two separate seasonal values derived as determined below. *ISO-NE will determine the weighting factors for each season in a manner that recognizes contribution to system reliability over the Winter and Summer Periods. The justification for such weighting factors will be included in the ISO's (annual/method of calculating?) Installed Capability Requirement filing at the FERC for the primary FCA and any related reconfiguration auctions. Note: Consensus for further development of this approach is contingent on the ISO developing a method to determine the weighting factors for calculating the Qualified Capacity by the fourth quarter of 2006* This average value will be placed into the annual FCA primary auction.

Winter Period Qualified Capacity MW value = *The IR resources median amount (MW) of interconnected hourly generation flow during the Winter Period Reliability Hours over the previous [8 month winter period (Oct-May)]. The Winter Period Reliability Hours will consist of <to be determined-see above> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above> period.*

Summer Period Qualified Capacity MW value= *The IR resources median amount (MW) of interconnected hourly generation flow during the Summer Period Reliability Hours over the previous [4 month summer period (June-Sept)]. The Summer Period Reliability Hours will consist of <to be determined-see above> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above>-year period.*

Method C: The amount of Qualified Capacity for monthly payment will be comprised of two separate seasonal values. The Summer Period value will be derived as determined below and will be paid the FCA clearing price during the summer period. The Summer

Period value will be placed into the annual FCA primary auction. The Winter Period value will be derived as determined below and the capacity differential between the Summer Period Value and the Winter Period value may be used to trade or De-List in Monthly and Seasonal Reconfiguration Auctions, Bilateral Contracting, or offered in the FCA pursuant to an Offer Composed of Separate Resources.

Winter Period Qualified Capacity MW value = *The IR resources median amount (MW) of interconnected hourly generation flow during the Winter Period Reliability Hours over the previous 8 month winter period (Oct-May). The Winter Period Reliability Hours will consist of <to be determined-see above> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above> period.*

Summer Period Qualified Capacity MW value= *The IR resources median amount (MW) of interconnected hourly generation flow during the Summer Period Reliability Hours over the previous 4 month summer period (June-Sept). The Summer Period Reliability Hours will consist of <to be determined-see above> during the period plus any additional hours when the ISO has declared a Shortage Hour event beginning with the first FCM Commitment Period. This value will be averaged over a rolling <to be determined-see above>-year period.]*

Treatment of New Intermittent Capacity Resources: Parties would be free to specify the appropriate level of Qualified Capacity MW credit for a New IR resource for qualification in the FCM, up to the proposed intermittent capacity resource's nameplate capacity. As part of the qualification process, a new intermittent capacity resource must demonstrate it has measured and recorded applicable site specific data be it wind speed, water flow and/or irradiance values when it submits its qualification package to participate in the FCA. This data, provided as part of the intermittent capacity resource's qualification package, will be used in conjunction with the resource's physical design characteristics to establish its Qualified Capacity MW value for its initial Commitment Period. [*A New IR resources Qualified Capacity MW value will be adjusted based on a projection of its annual availability factor*]

Intermittent capacity resources shall be treated the same as any other capacity resource that clears in an FCA or a reconfiguration auction. All suppliers of new capacity resources must satisfy the milestone requirements established during the qualification process. In order to receive capacity payments during the Commitment Period new intermittent capacity resources must have been declared commercial and tested for its capacity rating. New intermittent capacity resources will have an additional milestone requirement during qualification of proving its Qualified Capacity MW value during its Commitment Period using actual data as it becomes available. It shall lose its awarded Qualified Capacity MW value to the extent not provided and shall forfeit any financial assurance previously provided by it with respect to that awarded value during its Commitment Period using the following procedure:

- 1) After the First Year of the Commitment Period – The Qualified Capacity Value (Winter/Summer) will be weighted by 2/3 of the Qualification data and 1/3 of the IR resources actual performance data.
- 2) After the Second Year of the Commitment Period – The Qualified Capacity Value (Winter/Summer) will be weighted by 1/3 of the Qualification data and 2/3 of the IR Resources actual performance data.
- 3) After the Third Year of the Commitment Period – The Qualified Capacity Value (Winter/Summer) will be based entirely on the actual performance data of the IR resource.

In the event that the Qualified Capacity MW value of an intermittent capacity resource is less than the amount awarded in the FCA, the ISO may, as appropriate, make up any shortfall through the next reconfiguration auction.