

Preliminary Straw Proposal
Intermittent Resource Capacity Treatment in Forward Capacity Auction

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

Background: The FCA 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 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 FCA.

Discussion: The FCA should allow intermittent capacity (“IC”) resources to submit Qualified Capacity MW offers during the primary and reconfiguration auctions *in the same manner* as all other potential capacity resources, which are set equal to their Summer Seasonal Claimed Capability. IC resources will not be subject to the application of an Availability Metric as applied to all other Qualified Capacity MW resources. A suggested method to derive an amount of Qualified Capacity MW that can be offered by an IC resource through the FCA primary or reconfiguration auctions could be as follows;

Winter Period Qualified Capacity MW = *The IC resources median amount (MW) of on peak (non-holiday hours ending 08-22) interconnected hourly generation flow over the previous 8 month winter period (Oct-May). This value will be averaged over a rolling 3-year period.*

Summer Period Qualified Capacity MW= *The IC resources median amount (MW) of on peak (non-holiday weekday hours ending 08-23) interconnected hourly generation flow over the previous 4 month summer period (June-Sept). This value will be averaged over a rolling 3-year period.*

(There would not be a Peak Energy Rent (PER) subtraction from an IC resource capacity payment)

The Qualified Capacity MW credit for the first year of a New IC resource will be set equal to 25 % of the IC resources nameplate capacity. New IC resources, during the qualification process, must select a three year Commitment Period when making an offer as a new Qualified Capacity resource. In all subsequent FCA auctions the IC resource will be treated as an existing capacity resource.

Conclusion: The goal of this treatment is to suggest a single method that would produce a reliable capacity amount for all IC resources that self corrects for poor performance.

Example

1 MW Nominal Wind Resource*

<u>Period</u>	<u>Median (MW)</u>	<u>Hours Operated</u>	<u>On Peak hours</u>	<u>% Operation</u>
Yr. 1 (06-09)	0.039	881	1,360	65
Yr. 2 (06-09)	0.012	778	1,376	56
Yr. 3 (06-09)	0.062	934	1,376	68

$$\text{Summer Period Qualified Capacity MW} = \frac{(0.039+0.012+0.062)}{3 \text{ Years}} = 0.038 \text{ MW}$$

Yr. 1 (10-05)	0.192	2,171	2,720	80
Yr. 2 (10-05)	0.210	2,150	2,720	79
Yr. 3 (10-05)	0.184	2,185	2,736	80

$$\text{Winter Period Qualified Capacity MW} = \frac{(0.192+0.210+0.184)}{3 \text{ Years}} = 0.195 \text{ MW}$$

- * Based on actual data for an existing wind turbine resource in New England
- Note: Median is the midpoint of the distribution. (For example: for the values 1 - 1 - 2 - 4 the median value would be 1.5 while the average value would be 2)

RWB: 04/03/06