

Comments Received on the Draft Scopes of Work for 2015 Economic Studies Discussed with the PAC

The ISO received comments either during or after the May 21 presentation to the PAC of the Draft Scopes of Work for 2015 Economic Studies. The following summarizes the comments received and the ISO New England responses for discussion with the PAC on June 17.

The ISO truly appreciates the many thoughtful comments provided and has carefully reviewed every comment and compiled this summary for discussion purposes. The ISO has made a good-faith effort to accurately summarize the major comments and recognizes that this summary may not comprehensively address all comments discussed and/or submitted to PACMatters@iso-ne.com.

Comment Received	Response
Load - Local load profiles within areas of interest have changed since 2006 due to changes in industrial production. The loads should be adjusted to reflect this change.	ISO will use the latest bus loads that were developed by the Transmission Owners for the latest power flow updates and use these to model the loads in the production cost simulation program. The ISO will contact the Transmission Owners and confirm that the system model reflects the closing of mills in the area of study.
Wind profiles – Rather than use the older NEWIS wind profiles that do not include local wind diversity, could the wind profiles for individual wind plants be used, to the extent the data is available from the 2012 NREL update?	The DOE/NREL wind profiles are the industry standard that are used in virtually all production cost studies. ISO will endeavor to use the 113 wind profiles for New England wind sites developed for EWITS and updated by NREL in 2012. These reflect the latest composite power curve estimates of wind speed to generation. Hourly data will be used.
Hydro profiles – Representing the synergies of hydro and wind behind a constrained export needs to be reflected. Fixed hydro profiles that were assumed to exist previously are not responsive.	Given the wind profiles within each area are “known,” ISO will create explicit hourly hydro generation schedules for each month in the areas of interest to maximize the use of the combined resources.
Curtailment Priorities – Because of the ability to reflect various per MWh incentives, wind is able to bid into the market at lower prices than either hydro or imports.	ISO will represent the dispatch priority such that wind is the last resource curtailed (dispatch cost of \$0/MWh). Hydro will be curtailed prior to wind because of a modeled \$5/MWh dispatch price. Imports will be curtailed before hydro next because of a modeled \$10/MWh dispatch price.
Imports from New Brunswick – The recommended amounts of imports from New Brunswick are too low and should be increased to reflect the refurbishment of older resources plus the addition of new hydro resources from Newfoundland and Labrador.	The ISO will continue to use daily diurnal profiles to represent interchange with external areas. For New Brunswick, the modeled flows will represent the highest of the 2013 and 2014 monthly diurnal profiles. Additionally, a sensitivity case will be included that models an import of 1000 MW (24x7) to allow the effect of imports on Maine interfaces to be quantified.
Economics of New Brunswick Interchange – Modeling New Brunswick would allow prices to be created dynamically and this would improve the modeling of interchange and reflection the more	Modeling of New Brunswick will not necessarily improve the representation of the interchange dynamics because there are many factors that affect the bidding behavior that cannot be suitably modeled.

flexible interchange market rules.	
Coordinated Transaction Scheduling (CTS) – With the implementation of CTS, there will be a dramatic shift in the region’s dispatch and economics.	CTS is intended to minimize the inefficiencies that arise in the real-time between New York and New England. The assumed fixed profile representing interchange with New York does not require any additional CTS type adjustments.
“Active” Demand Response and Real-time Emergency Generators – Modeling these resources as price responsive resources is much better than a fixed profile.	ISO will continue to use a pre-specified profile to model Active DR and RTEG. These are the hours that under perfect foresight and uniform risk of generator outages (e.g. constant EFOR) where the utilization of these resource are most likely. To create a more price driven representation would require numerous monte-carlo simulations of resource outages and weather uncertainty. This would not materially affect any of the “expected value” metrics that the study is attempting to develop (87,600 hours per 10 year simulation).
Carrying Charges – The assumed an 18-22% annual carrying charge on transmission investments appear too high.	The ISO will assume a range of annual carrying charges of 14 to 16 percent.
LMP Reporting Areas – Average LMPs aggregated at the level of a Load Zone or RSP area do not reflect smaller areas of interest such as Keene Road.	GridView calculates LMPs at each bus and these can be reported at any level of aggregation. In consultation with the PAC, the ISO will report metrics at appropriate levels of aggregation consistent with information policy requirements.
Market Efficiency Transmission Upgrade – The RENEW and Sun Edison studies should calculate a 10-year Net Present Value that would allow these projects to be considered for a METU.	ISO will perform a needs analysis for a period representing a 10 year period for these two studies.
Capacity Charges – Economic metrics related to capacity charges must be included in the economic study.	The introduction of larger quantities of renewable resources would be expected to increase both CONE and offers from competitive capacity suppliers. CONE would increase because additional renewable resources, which typically act as price takers in the energy market, would be expected to decrease energy prices and therefore net revenues for all resources in the energy market. This expected reduction would be reflected in reduced net energy market revenues calculated for the hypothetical new entrant as part of the CONE calculation. A reduction in net energy market revenues would increase the amount that a new entrant would require from the capacity market in order to move forward.