

Base Case Modeling Assumptions for 2007-08 NYCA IRM Requirement Study (2007 Study)

Parameter	2006 Study Modeling Assumptions	Recommended 2007 Study Modeling Assumptions	Basis for Recommended 2006 Assumptions	Possible Impact on IRM
NYCA Load Model				
Peak Load	32,400 MW	33,831 MW	2006 Gold Book	
Load Shape Model	2002 Load Shape	2002 Load Shape	Analysis indicates 2002 load shape remains an appropriate representation for this analysis.	
Load Uncertainty Model	Statewide and zonal model updated to reflect current data.	Statewide and zonal model updated to reflect current data.	Updated data from LIPA, Con Ed, and NYISO.	
NYCA Capacity Model				
Generating Unit Capacities	2005 Gold Book	Updated DMNC test values.	2006 Gold Book	
New Units	See 2006-07 ICR Report	Gold Book (table III) units plus:	2006 Gold Book and those with Interconnection agreements signed by August 1.	
Wind Resources	Derived from hourly wind data with summer peak hours capacity factor of 10.9%	Derived from hourly wind data with average summer Capacity Factor of xx%	Based on collected hourly wind data in 2002.	
Retirements	Huntley 63&64- 60.6 MW	2/8-Poletti 1 (888 MW), 12/07-Russell (231 MW), 6/07-Lovett 5 (176 MW)	2006 Gold Book	
Forced & Partial	5-year (2000-04) GADS data.	5-year (2001-05) GADS data.	Most recent 5-year period.	

PRELIMINARY DRAFT 4/25/06
 For ICS discussion purposes only

Parameter	2006 Study Modeling Assumptions	Recommended 2007 Study Modeling Assumptions	Basis for Recommended 2006 Assumptions	Possible Impact on IRM
Outage Rates	Those units with less than five years data used available representative data.	(Those units with less than five years data will use available representative data.)		
DMNC Derating	DMNC derating = 125 MW	DMNC derating = xxx MW.	Adjust for errors found in historical bid MW values.	
Planned Outages	Based on schedules received by NYISO as of Sept. 2004 & adjusted for history.	Based on schedules received by NYISO as of Sept. 2005 & adjusted for history.	Updated schedules.	
Summer Maintenance	Approximately 150 MW based on historical data.	Approximately 150 MW consistent with last year's study.	Review of 2004 and 2005 data.	
Gas Turbines Ambient Derate	Derate curve based on historic loads above DMNC test temperature.	Derate curve based on historic loads above DMNC test temperature.	Updated data.	
Non-NYPA Hydro Capacity Modeling	45% derating.	Intermittent modeling is under review by GE and NYISO		
Special Case Resources	1016 MW sold; modeled as 935 MW in July and August and proportional to monthly peak load in other months.	xxxx MW sold; modeled as yyy MW in July and August and proportional to monthly peak load in other months.	SCR modeling is under review by GE and NYISO. Values to be provided by NYISO	
EDRP Resources	466 MW registered; modeled as 210 MW in July and Aug and proportional as above. Limit to 5 calls per month.	xxxx MW registered; modeled as yyy MW in July and Aug and proportional as above. Limit to 5 calls per month.	Those registered for the program, discounted to historic availability. (45% overall). NYISO to review overall efficiency.	

Parameter	2006 Study Modeling Assumptions	Recommended 2007 Study Modeling Assumptions	Basis for Recommended 2006 Assumptions	Possible Impact on IRM
External Capacity (FIRM)	2755 MW total, 1000 from HQ, 400 from NE, 1300 from PJM, and 55 from Ontario.	2755 MW total, xxxx from HQ, yyy from NE, zZzz from PJM, and aa from Ontario.	Fully subscribed with incorporation of demand curve. Amount from each Area as per contractual activity and actual history.	
EOPs (other than SCR and EDRP)	See Attachment C and 2006-07 ICS Requirement Report.	See Attachment C.	Based on TO information and measured data.	
Transmission System Model				
Interface Limits	Based on 2005 Operating Study.	Updated interfaces to reflect studies and analyses. See Attachment D.	Based on 2006 Operating Study, 2006 Operations Engineering Voltage Studies, 2005, 2006 Area Transmission Reviews, 2006 Comprehensive Planning Process and additional analysis.	
Transmission Cable Forced Outage Rate	All existing Cable EFORs updated on LI and NYC	All existing Cable EFORs updated on LI and NYC.	Based on TO analysis.	
Cross Sound Controllable Line	Units modeled in New York Dummy area to reflect ability of line to provide emergency assistance when those units are unavailable.		Under investigation through ICS task force.	
Outside World Area Models	Zonal representations for NE and PJM provided by those RTOs.		Updated per information supplied by external Control Areas	