

Assumption Process Update: Regional Greenhouse Gas Initiative Analysis

Presented To:

New York RGGI Stakeholders

August 3, 2004

Modeling Subgroup Tentative Recommendations

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Assumptions Category	Proposed Data Source	Comments
Non-RGGI Regional Electricity and Peak Demand Forecasts	EIA Annual Energy Outlook 2004 (AEO 2004)	<ul style="list-style-type: none"> • For use outside the RGGI region • Checking consistency with RGGI-region forecasts
RGGI Regional Electricity and Demand Forecasts	Regional ISOs	<ul style="list-style-type: none"> • NY ISO load forecast developed through an econometric modeling exercise. It matches almost exactly the load forecast developed by NYSERDA for the State Energy Plan that starts with the EIA forecast and then accounts for NY state energy efficiency programs • ISO NE forecast was also developed through an independent econometric model • PJM load forecast is derived from rolled-up load forecasts from the individual utilities • As many of the ISO forecasts go out only 10 years, the SWG modeling subgroup felt that the best way to extend the forecast forward for the time period encompassed by the IPM analysis is to scale the average 10-year growth rate down by the same difference reflected in the long-term AEO2004 projections

Modeling Subgroup Tentative Recommendations continued

Assumptions Category	Proposed Data Source/Assumption	Comments
Natural Gas Price Forecasts (for Reference Case)	AEO 2004 w/ potential near-term calibration to market	<ul style="list-style-type: none"> • Consistent oil price trajectory required (available from AEO 2004) • Comparison chart provided in this document
Development of New Coal-Fired Capacity	No new coal-fired capacity allowed to be built within the RGGI-affected region	<ul style="list-style-type: none"> • Non-RGGI regions given the option of building new coal-fired capacity on an economic basis
Treatment of Existing Nuclear Capacity	Allow relicensing and capacity uprates if economic (Potential data sources: EIA, other)	<ul style="list-style-type: none"> • Research continuing on relicensing costs (EPA and EIA now assume nuclear units are automatically relicensed, but EPA once assumed (v. 2.1) capital cost of \$350/kW (2003\$) for 20-year relicensing at age 40) • Decommissioning costs and uprate costs also being researched

Continuing Assumptions Development Work

Assumptions Development – Continuing Work

Assumptions Category	Potential Data Source	Comments
Firmly Planned Capacity Additions	ISOs	<ul style="list-style-type: none"> ICF has prepared list to be reviewed with states and ISOs
New Conventional Capacity Cost and Performance	AEO 2004	
Pollution Control Retrofit Cost and Performance	EPA Base Case Version 2.1.6	<ul style="list-style-type: none"> Investigating EIA June 2004 Multipollutant Study cost and performance
Renewable Resource Availability and Cost/Performance	NREL, AEO 2004, EPA, others	<ul style="list-style-type: none"> Assumptions used for CT analysis provided as starting point for discussion (provided in later section in this document)

Assumptions Development – Continuing Work continued

Assumptions Category	Potential Data Source	Comments
Existing Transmission TTCs	ISOs	<ul style="list-style-type: none">ICF providing model regions and transmission transfer capability maps to ISOs for review
RTO Structure and Transmission Tariffs	ISOs	<ul style="list-style-type: none">ICF providing model regions and transmission transfer capability maps to ISOs for review
New/Enhanced Transmission Line Capacity	ISOs	

Natural Gas Price Trajectory Comparison

Trend Applied to EEA Forecast

3-Year Moving Average

