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Inter-RPO IPM Global Parameter Decisions

This document summarizes the decisions as made by VISTAS, MRPO, CENRAP, and MANE-VU for global assumptions to be used in EGU forecasting with IPM. These decisions and changes are made to IPM version 2.1.9 assumptions which can be referenced via EPA's IPM website at: <http://www.epa.gov/airmarkets/epa-ipm/>

A. Market Assumptions

1. National Electricity and Peak Demand

Decision: Use unadjusted EIA AEO 2005 national electricity and peak demand values.

2. Regional Electricity and Demand Breakout

Decision: Use the existing IPM region breakdown as conducted in earlier modeling.

3. Natural Gas Supply Curve and Price Forecast

Decision: Take existing supply curves and scale application to EIA AEO 2005 price point. In this approach the EPA 2.1.9 gas supply curves will be scaled in such a manner that IPM will solve for AEO 2005 gas prices when the power sector gas demand in IPM is consistent with AEO 2005 power sector gas demand projections. In instances where the power sector gas demand in IPM is lower than that of AEO 2005 projections, IPM will project gas prices that are lower than that in AEO 2005 and vice versa.

4. Oil Price Forecast

Decision: Use EIA AEO 2005 values.

5. Coal Supply and Price Forecast

Decision: Take existing supply curves and scale application to EIA AEO 2005 price points, coal supply regions, and coal grades. In this approach, the coal supply curves used in EPA 2.1.9 are scaled in such a manner that the average mine mouth coal prices that the IPM is solving in aggregated coal supply regions are comparable to AEO 2005. Due to the fact that the coal grades and supply regions between AEO 2005 and the EPA 2.1.9 are not directly comparable, this is an approximate approach and has to be performed in an iterative fashion. This approach does not involve updating the coal transportation matrix with EIA assumptions due to significant differences between the EPA 2.1.9 and EIA AEO 2005 coal supply and coal demand regions.

B. Technical Assumptions

1. Firmly Planned Capacity Assumptions

Decision: Use revisions and new data as provided by RPOs and stakeholders.

Decision: Allow NC Clean Smokestacks 2009 data as provided to define "must run" units.

2. Pollution Control Retrofit Cost and Performance [SO₂, NO_x, Hg]

Decision: Retain pollution control retrofit cost and performance values.

3. New Conventional Capacity cost and performance assumptions

Decision: Use EIA AEO 2005 cost and performance assumptions for new conventional capacity.

Decision: Retain existing 2.1.9 framework cost and performance for new renewable capacity.

Decision: Exclude constraint on new capacity type builds (i.e., no new coal).

4. SO₂ Title IV Allowance Bank

Decision: Use existing SO₂ allowance bank value (4.99 million tons) for 2007.

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5. Nuclear Re-licensing and Uprate

Decision: Use existing IPM configuration with updated EIA AEO 2005 (~\$27/kW) incurrence cost for continued operation.

C. Strategy Assumptions

1. Clear Air Mercury Rule (CAMR)

Decision: Include CAMR in future rounds of IPM modeling.

2. Renewable Portfolio Standards

Decision: Model RPS based on the most recent RGGI documentation using a single RPS region for MA, RI, NY, NJ, MD and CT. The RPS requirements within these states can be met by renewable generation from New England, New York and PJM. EPA 2.1.9 methodology and hardwired EIA AEO 2004 projected renewable builds for the remainder of the country.

D. Other Assumptions

1. Run Years

Decision: Revise runs years to 2008 [2007-08], 2009 [2009], 2012 [2010-13], 2015 [2014-17], 2018 [2018], 2020 [2019-22], and 2026 [2023-2030].

2. Canadian Sources

Decision: Utilize existing v.2.1.9 configuration (no Canadian site specific sources).