

**CRA RESPONSES TO STAKEHOLDER QUESTIONS
REGARDING MODELS/DATA INPUTS**

QUESTIONS FROM EXISTING GENERATION SUB-TEAM RE: RPS ASSUMPTIONS

(Reference: CRA APPENDIX C & Exhibit #15)

CRA RESPONSE

- 1. New Mexico - We model as aggregated with AZ, NV, and NM.**
- 2. North Texas - We model as aggregated with the rest of ERCOT.**
- 3. North Dakota, South Dakota, Virginia, Vermont, Nebraska and Oklahoma.
Our understanding is that these RPS policies are voluntary, and thus we do not model them.**
- 4. West Virginia has an RPS, but according to the dsire website "the renewables portion of the standard functions more like a non-binding goal". Thus, we do not include it.**
- 5. Louisiana - LA has a pilot program that requires 350MW of renewable capacity by 2013, which we have not included. We can include that in the model if desired.**
- 6. Iowa has a standard that requires 105 MW of renewable capacity. But since there is much more renewable capacity in place, the policy is non-binding and we don't model it.**
- 7. Ohio - Our interpretation of the dsire website was that the OH standard only applied to investor owned utilities. We will correct if not right.**

QUESTIONS FROM ECONOMICS SUB-TEAM RE: COST OF CAPITAL

- No sources provided.
- What is the ratio of debt/equity?
- Is the cost of equity based on CAPM? If so what is the beta, market premium, and risk free rate?
- What is the cost of debt?
- How are taxes handled?
- What is the interest during construction for each technology?
- Please explain assumption that the new asset's operating life yields a zero net present value to investors.
- Does the WACC stay constant throughout the study period?

CRA RESPONSE

- In the calculation of fixed charge rates, CRA uses a real WACC of 5% for all years. The proprietary CRA fixed charge rate model internally calculates the constant real dollar charge over the operating life of the asset that has a present value at the 5% real WACC equal to the present value of the construction costs, taking into account tax depreciation. CAPM is not used.
- The debt/equity relationships are based on the assumed 5% real WACC.
- The fixed charge rate is applied to overnight costs, thus the impact of construction expenditures being expended during the construction period (e.g., IDC) are incorporated into the fixed charge rate via calculating a present value over the construction period.
- Alternative fixed charge rates can be supplied to us to use, but should reflect rates applicable to real overnight capital costs.
- The model calculates the constant real dollar charge over the operating life of the asset that has a present value at the 5% real WACC equal to the present value of the construction costs -- i.e., the present value of revenues to investors is equal to the present value of costs, yielding a zero NPV

QUESTIONS FROM ECONOMICS SUB-TEAM: RE: MRN MODEL

Questions/Concerns on Initial Tax Representation (Ref: Slide #6)

- **Balanced Budget Assumption (no net change in foreign indebtedness over time period)**
 - Apply Federal and State level lump sum taxes to ensure government maintains balance budget
 - Distorts initial tax
 - Results in “second best” world tax interaction effects are captured
 - How does this impact results?

Questions/Concerns Over Elasticities (Ref: Slide #8)

- What secondary sources were used to develop CES?
- How current are these CES?
- Domestic versus imports biases domestic. Is this appropriate?

Concerns/Questions of Implan Assumptions (Ref: Slide #14)

- While input value shares influence the results less than the other values, 2002 as the benchmark year seems very dated. Given changes in technology since 2002 can/should this be updated?

Growth Rate Assumptions (Ref: Slide #16)

- Should all regions grow at the national rate?
- Is this 1.5% used or does MRN rely on the NEEMS electric forecast?

Miscellaneous (Ref: Slide #19)

- Need to confirm that CRA AEEEI scaling factor is not double counting EE in demand forecast

CRA RESPONSE

Slide 6 - How does this impact results? Under a policy that contracts the economy, capital and labor demand will also decrease. These reductions in demand will lead to less tax revenue collection ceteris paribus. However, since the government has to maintain a balanced budget, there will be a corresponding increase in the tax rates (in the scenario).

Slide 8: The MRN production function does not follow any other CGE models in particular. However, the underlying elasticities between inputs are within the range used by the MIT's EPPA and EPA's ADAGE model.

Slide 14: Implan assumptions: As a separate exercise, we have been working to update the Implan data in MRN from 2002 to 2006. This is not yet ready, but we are expecting it will be available in time for the EIPC runs.

Slide 16: Electric demand growth in MRN-NEEM is in accordance with the description in the demand/peak demand section of the MRN-NEEM document.

Slide 19: Need clarification of this question.

Jpb

1/4/11