South Dakota Public Utilities Commission
Docket EL16-023
MidAmerican Energy Company
Data Request No. 1-5

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1-5. Refer to the Informational Compliance Filing Required by 18 CFR 292.302, page 4.
   a) Provide the basis for the following used in the calculation of economic carrying charges and annual revenue requirements: weighted-average capital cost of 7.13%, after tax discount rate of 6.27%, 15 year tax life, tax-depreciation basis of 100%, book life of 30 years, and fixed operation and maintenance costs of $8.95/kW/year in 2015 escalating at 2.25% per year.
   b) Provide the calculations of the economic carrying charges and annual revenue requirements.
   c) Further explain what the two year bridging period is and how those prices are determined.

Response:

a) The basis for the 15 year tax life is the statutory tax life for a combustion turbine. The book life represents a reasonable book life for such an asset. The weighted average cost of capital, the after tax discount rate and the application of the 2.25% escalation are reasonable forecasts given market conditions at the time of the filing and MidAmerican's general capital structure targets. The basis for the fixed O&M is data from the Energy Information Agency. The filing letter inadvertently states the Fixed O&M value to be $8.95/kW-year value rather than the $8.87/kW-year value for fixed O&M used in the attached workbook "Confidential EL 16-023 Response 1-5 Attachment 1 - 2016 Avoided Capacity Cost" in the worksheet "ECC Calculation." The Energy Information Agency data for an Advanced CT, which is expressed in 2012 dollars, is shown in the "Fixed O&M" worksheet. Cell AE80 of the worksheet "ECC Calculation" provides the escalation to the $8.87/kW-year.

b) Refer to the workbook "Confidential EL 16-023 Response 1-5 Attachment 1 - 2016 Avoided Capacity Cost" in the workbook sheet "ECC Calculation."

c) The two year bridging period is a transition period from the market price to full build costs. The market price is based upon the MISO Planning Year ("PY") 2016-17, and then increases in two equal increments (one for PY 2017-18, and one for PY 2018-19) until the PY 2019-20 where the economic carrying charge of a new simple cycle combustion turbine is utilized.

Refer to the workbook "Confidential EL 16-023 Response 1-5 Attachment 1 - 2016 Avoided Capacity Cost" in the workbook sheet "Avoided Capacity Cost." Cell D9 of the Avoided Cost worksheet shows the economic carrying charge ("ECC") based upon an adjustment of calendar year ECCs to MISO PY 2019-20. Cells D7 and D8 provide the calculation for the two equal price increments for PY 2017-18 and PY 2018-19 based upon the pricing in PY 2016-17 and PY 2019-20. Column M adjusts the avoided costs back to calendar year values.

Please note: When opening the "Confidential EL 16-023 Response 1-5 Attachment 1 - 2016 Avoided Capacity Cost" file, which is a macro-enabled workbook, the user needs to select "enable content" for the values in the cells to appear.