

Docket Number: EL20-005
Subject Matter: Second Data Request
Request to: MidAmerican Energy Company (MidAmerican or Company)
Request from: South Dakota Public Utilities Commission Staff
Date of Request: March 27, 2020
Responses Due: April 3, 2020

- 2-1. Refer to MidAmerican's response to DR 1-3.
- a. Confirm that all 510 turbines will be receiving longer blades but only the turbines going from the "SWT 2.3" to "SWT 2.7" models will be receiving larger generators.

MidAmerican Response:

All 510 turbines will receive longer blades. All turbines will also receive new generators, but only turbines going from the SWT 2.3 to SWT 2.7 model will be receiving larger generators. The turbines being repowered to the 2.3 model are safe harbor units. At the time MidAmerican purchased the safe harbor units the 2.7 model repower option was not available.

- b. Why did MidAmerican not choose to replace the generators in all 510 turbines?

MidAmerican Response:

Generators are being replaced on every turbine being repowered. The table below, originally provided in response to data request 1-3, has been expanded to show model number and blade length of the equipment before and after repowering.

TABLE IS CONFIDENTIAL

- c. Does MidAmerican face any limitations with interconnections regarding these 510 turbines and their generator sizes?

MidAmerican Response:

Yes, there are MISO interconnection limitations and Iowa Utilities Board limitations on the size of the gathering systems within each wind farm. All the machines will have either a 2.3 megawatt or 2.38 megawatt nameplate. The model SWT 2.7 machines will be limited to 2.38 megawatts to address the limitations noted.

The constraint is not temporary. Despite the constraint, the 2.7 model has superior performance. This is made evident by the capacity factors provided in the table from our previous response.

- 2-2. Refer to MidAmerican's response to DR 1-6.
- a. Confirm that the "FMV of Used Property" includes only the equipment located above ground and that this is the appropriate way to determine if the investment meets the 80/20 Rule.

MidAmerican Response:

The FMV of Used Property includes the foundation and equipment located above ground as summarized in the Headnote of Revenue Ruling 94-31:

...The Service, in concluding that each turbine/tower/pad installation constitutes a separate facility, emphasized that "each wind turbine on the windfarm can be separately operated and metered and can begin producing electricity when it is mounted atop a tower." Therefore, the Service said, the term "facility" under section 45(c)-(3) "means the wind turbine together with the tower on which the wind turbine is mounted and the pad on which the tower is situated."

The Service added that "a facility would also qualify as originally placed in service even though it contains some used property, provided the fair market value of the used property is not more than 20 percent of the facility's total value."

- b. Provide what the value of this "FMV of Used Property" was when it was new.

MidAmerican Response:

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- 2-3. Refer to the "Rev. Requirement 1-1" tab of Exhibit A. Provide a revised version of this sheet with the corrected South Dakota allocations as described in MidAmerican's response to DR 1-8.

MidAmerican Response:

See Attachment 2-3.

- 2-4. Refer to "Exhibit A-Revised Sheets" provided with MidAmerican's response to DR 1-8. Reconcile 1) the "Total revenue requirement from Siemens repowering, excluding PTCs" amounts on line 25 of the "Rev. Req. 2-2" tab, 2) the "Pre-tax" PTCs on line 13 of the "ROE-Forecast 3-1,1-2" tab, and 3) the "South Dakota revenue requirement" on line 9 of the sheet requested in DR 2-3. Should 1 minus 2 equal 3? Explain.

MidAmerican Response:

Not necessarily. The stand-alone analysis evaluates the overall economics of the project using assumptions that span the entire life of the project, such as capital structure and cost of capital. The “Pre-tax” PTCs on line 13 of the “ROE-Forecast 3-1,1-2” tab are consistent with the stand-alone analysis. However, the “Total revenue requirement from Siemens repowering, excluding PTCs” amounts on line 25 of the “Rev. Req. 2-2” tab includes both the stand-alone results and all other forecasted aspects of the South Dakota electric jurisdiction that are not included in the stand-alone project analysis.

- 2-5. Refer to the “ECA recoveries before Siemens repowering” amounts on line 8 of the “ROE-Forecast 3-1,1-2” tab of the “Exhibit A-Revised Sheets” provided with MidAmerican’s response to DR 1-8. Why are these amounts much larger than the amounts provided on the “ECA change excluding PTCs” line in Revised Attachment 3-1 in docket EL17-040?

MidAmerican Response:

The base for the Siemens repowering analysis was different than that for the GE repowering analysis; i.e., it used MidAmerican’s plan for the following year. One notable difference is that the “ECA recoveries before Siemens repowering” line in the Siemens analysis includes the forecasted impact of the GE repowering on the South Dakota ECA, whereas by definition, the “ECA change excluding PTCs” line in the GE repowering analysis did not. Other, less significant, variances would also exist from one forecast to the next.

- 2-6. Refer to the amounts on line 23 of the “Rev. Req. 2-2” tab of “Exhibit A-Revised Sheets” provided with MidAmerican’s response to DR 1-8. What caused the \$90,000 increase in operating income in 2021 after accounting for the Siemens repowering?

MidAmerican Response:

This increase is predominantly attributable to higher wholesale margins, which are not reflected in the analysis in the response to DR 1-8.