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**STAFF MEMORANDUM**

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**TO:** COMMISSIONERS AND ADVISORS  
**FROM:** PATRICK STEFFENSEN & AMANDA REISS  
**RE:** EL17-040 - In the Matter of the Filing of MidAmerican Energy Company for Determination of Its Energy Cost Adjustment Factor as Applied to Repowered Wind Facilities  
**DATE:** December 13, 2017

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**BACKGROUND**

On September 29, 2017, the South Dakota Public Utilities Commission (Commission) received a filing from MidAmerican Energy Company (MidAmerican) requesting a determination that new Production Tax Credits (PTCs) associated with the process of repowering up to 706 existing wind turbines will not be subject to the provisions of its Energy Cost Adjustment (ECA) tariff. MidAmerican's ECA tariff (South Dakota Electric Tariff Schedule No. 2, Sheet No. 78) states (in relevant part):

“The cost of energy will be adjusted by the pre-tax amount of any federal production tax credits associated with renewable power projects whose costs have been approved for inclusion in rate base in a rate proceeding, grossed up at the rate of 1.538 as entered into account 409.1, reduced for any negative energy settlements from those renewable power projects that result during the period the projects are eligible for the production tax credit, as recorded in account 447.043.”

The existing wind turbines that are subject to repowering will have been in service for over ten years at the time of repowering, thus ineligible for continuation of the PTCs that were based on the initial investment. These repowering efforts will include replacing much of the machinery and equipment inside the nacelle and the blades, effectively resulting in a new turbine on top of an existing structure. It is this new investment which will requalify these facilities for an additional ten-year PTC period, as the fair market value of the used property that is part of the repowered wind turbine is expected to be less than twenty percent of the total value of the repowered wind turbine.

All of the turbines that are subject to the repowering efforts are currently included in South Dakota rate base, and the associated PTCs were credited to ratepayers through the ECA; however, MidAmerican will not include the costs of repowering in rates until their inclusion is requested in a future rate case. MidAmerican has indicated in its initial filing that a future rate case “is not anticipated for many years”.

## **STAFF ANALYSIS**

Staff's analysis of this docket and the new PTCs focused on three main areas: 1) the appropriate ECA treatment given the investment which makes them eligible, 2) the lower fuel cost benefits, and 3) an analysis of future rate case activity.

### **Appropriate ECA Treatment**

As indicated above, this repowering process will result in replacement of much of the machinery and equipment inside the nacelle as well as the blades. Thus, this repowering project will result in a new turbine on top of an existing structure. As this process will essentially create brand new turbines, and it is the cost of this repowering project that creates the new PTCs, it would be reasonable not to include the PTCs in the ECA until the costs of repowering are included in MidAmerican's cost of service.

### **Lower Fuel Cost Benefit**

As indicated in MidAmerican's initial filing, "the result of the repowering process is an increase in the amount of generation from the turbines, which increases benefits to customers through lower fuel costs, which will flow through to customers through the ECA". MidAmerican estimates that the overall ECA benefits, including increased wholesale revenues, for South Dakota customers through the year 2029 will be approximately \$1.7 million. Customers will see these benefits immediately despite the fact they will not see the cost of the repowering until MidAmerican requests inclusion of these costs in a future rate case.

### **Rate Case Analysis**

Staff's final analysis of this docket focused around a review of the cumulative ratepayer impact if MidAmerican was required to flow these new PTC's resulting from the repowering through the ECA to ratepayers, resulting in eventual under-earning by MidAmerican and future rate case activity.

While on the surface, and as depicted in MidAmerican's response to data request 1-4, the resulting revenue requirement from the repowering alone is actually less than the value of the PTCs they will receive, a deeper dive into future rate case filing estimates indicates a cumulative burden to ratepayers.

MidAmerican's response to data request 3-1 provides insight into MidAmerican's future rate case activity under two different scenarios: 1) MidAmerican is not required to flow the new PTCs through the ECA, and 2) MidAmerican is required to flow the new PTCs through the ECA. This future rate case forecast through 2022 shows an approximate \$228,000 cumulative benefit to ratepayers if MidAmerican is allowed to retain the PTCs and avoid filing rate cases in the near future.

## **RECOMMENDATION**

Given the new PTCs are attributable to new investment by MidAmerican, the immediate fuel cost savings for MidAmerican's customers, and the projected rate case burden placed on ratepayers if

MidAmerican is not allowed to retain the PTCs, Staff recommends the Commission approve the determination that these new PTCs resulting from the repowering of up to 706 existing wind turbines are not subject to the provisions of MidAmerican's ECA tariff.

Staff would also recommend that this approval does not constitute a prudence determination. This determination will come when MidAmerican requests inclusion in its cost of service in a future rate proceeding.

Furthermore, if MidAmerican were to file a future rate case or the Commission were to call them in for a rate case (i.e. change in tax law), Staff expects a revision to this rate treatment may be necessary, and this will be subject to change.