

## Wind IX Update September 3, 2019

### A. Background

This is MidAmerican Energy Company's ("MidAmerican") status update for the Iowa Utilities Board ("Board") in response to the Board's January 20, 2015 *Order Approving Settlement with Modifications*, and the Board's June 25, 2015 *Order Granting Modification* (changing filing dates to March 1 and September 1 of each year), both issued in Docket No. RPU-2014-0002. This document is offered in fulfillment of the requirements established in the said Board orders. Pursuant to the Board's April 19, 2019 *Order Consolidating Semi-Annual Reports*, the updates for the Wind VIII through Wind XII projects are now filed in Docket No. 2018-0003.

### B. Status for Wind IX Iowa Project (Docket No. RPU-2014-0002)

In 2015 and 2016, MidAmerican installed 161.3 MW of wind-powered generation as part of the Wind IX Iowa Project. Total costs for construction, including allowance for funds used during construction through December 31, 2018 are approximately \$235.4 million. Based on costs to date, the per kW cost of the Wind IX Iowa Project are approximately \$1,459/kW, as compared to MidAmerican's cost cap of \$1,500/kW.

#### Actual Operating and Capital Costs of Wind IX

Operating costs, through June 30, 2019, totaled \$■ million. (An unredacted copy of this page has been provided pursuant to a Request for Confidential Treatment.)

Operating capital costs associated with Wind IX, through June 30, 2019, have been \$■ million. (An unredacted copy of this page has been provided pursuant to a Request for Confidential Treatment.)

#### Amount of Customer Rate Relief Flowed Through the EAC or Returned to Ratepayers in Some Other Manner

Through June 30, 2019, customer rate relief flowed through the EAC totaled \$1.0 million.

#### Retail Fuel Cost Reduction Attributable to Wind IX

Through June 30, 2019, the retail fuel cost reduction attributable to Wind IX totaled \$2.1 million.

Income from PTCs, REC Sales, Capacity Sales, and Net System Benefits Attributed to Wind IX

Through June 30, 2019, PTC's generated from Wind IX totaled \$6.3 million. There were no REC sales. There were no capacity sales associated with these wind assets, and net system benefits totaled \$4.9 million.

**C. Transmission Studies and Off-site transmission**

Please see the transmission related discussion under the Project updates below.

As further detailed below, the Wind IX facilities were installed at two sites: the 7 MW Highland II site in O'Brien County and the 154.3 MW Adams site in Adams County.

**7 MW Highland II Site**

The Highland II site is a wind farm acquired from Highland Wind Energy LLC that interconnects to the 345 kV system at a new substation in O'Brien County. This wind farm site received an executed Conditional Generator Interconnection Agreement (Conditional GIA) dated July 22, 2014. No added transmission studies were required beyond what was completed for the Wind VIII Highland site. The full 502 MW Highland wind farm consists of 495 MW installed as part of Wind VIII and 7 MW installed as part of Wind IX. Operation of the site is guided by the Conditional GIA until the identified network upgrades and contingent facilities are completed. However, the site is no longer subject to the MISO Annual ERIS Evaluations or the MISO Quarterly Operating Limit reviews. The site is subject to the Conditional GIA's limit of site output to 475 MW until the identified upgrades and contingent facilities are completed.

**154.3 MW Adams Site**

The Adams site, located in Adams County, is a wind farm acquired from Adams Wind Energy LLC that interconnects to the 161 kV system at a new substation in Adams County.

MISO queue project J343 was studied in the August 2014 West Definitive Planning Phase (DPP) System Impact Study (SIS) which is now complete. MISO's completed transmission study is available at the following MISO link:

[https://www.misoenergy.org/planning/generator-interconnection/GI\\_Studies](https://www.misoenergy.org/planning/generator-interconnection/GI_Studies)

Once on the MISO site, select the desired documents. All MISO studies are completed; no new restudies are likely.

A Conditional GIA and was executed on June 14, 2016.

Operation of the site is guided by the Conditional GIA until the identified network upgrades and contingent facilities are completed. However, this site is no longer subject to the MISO Annual ERIS Evaluation or the MISO Quarterly Operating Limit reviews.

The transmission off-site project to increase the rating of MidAmerican's section of the Clarinda-Maryville 161 kV line was completed in December 2016. The project consisted of replacing line structures to increase the operating temperature of the line, which results in an increased line rating, and replacement of a switch at the Clarinda Substation. The transmission off-site project to increase the rating of the Clarinda-Brooks 161 kV line was completed in February 2017. The project consisted of replacing line structures to increase the operating temperature of the line, which results in an increased line rating. This project was a result of MISO's DPP study involving the Adams site. This completes the required transmission off-site projects.

**Next Report**

MidAmerican's next update is due March 2, 2020.