



STATE OF IOWA

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DEPARTMENT OF NATURAL RESOURCES
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U.S. Environmental Protection Agency (EPA)
Air and Radiation Docket and Information Center, EPA/DC
WJC West Building, Room 3334
1301 Constitution Ave. NW.
Washington, DC 20004
Attention: Docket ID No. EPA-HQ-OAR-2016-0751

The Iowa Department of Natural Resources (DNR) respectfully submits the following comments pursuant to the "*Notice of Availability of the Environmental Protection Agency's Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard (NAAQS)*" published in the Federal Register (FR) on January 6, 2017 (82 FR 1733).

General Comments

The Iowa DNR appreciates that the U.S. Environmental Protection Agency (EPA) provided a 90-day comment period for this notice. Conducting a meaningful review of complex regional modeling and emissions forecasting products is a resource intensive process. The Iowa DNR encourages EPA to continue to provide at least 90 days for the review of such large datasets.

Comments on IPM

In each of the last three years, the State has provided comments to EPA regarding inaccuracies in the electric generating unit (EGU) forecasts produced by the Integrated Planning Model (IPM). While the most recent IPM forecast (v5.16) shows improvement in certain respects, it is clear that not all of the State's previous recommendations have been adequately addressed. A common problem with all the IPM runs, despite many of the State's comments, is that the model continues to retire or idle units that are expected to remain operational.

To eliminate this persistent problem, EPA should be willing to either use IPM in a manner that produces forecasts consistent with the best information currently available or to employ alternative methods. Since the deficiencies the State has identified in the IPM predictions over the years are cause for concern, perhaps the best solution lies with the use of alternative models. The Iowa DNR suggests that EPA employ more than one model to forecast changes in the EGU sector and then allow states to evaluate each approach and make recommendations on their preferred methods.

If an alternative modeling approach is not taken, then the Iowa DNR urges EPA to constrain IPM according to the specific comments provided below. The Iowa DNR believes this information represents the best available data and it should be used to produce a more reasonable IPM forecast.

City of Ames (Ames Electric Services Power Plant, ORIS Code: 1122)

In each of its last three iterations (v5.13, v5.14, and v5.15) IPM has failed to produce a reasonable forecast for the City of Ames. In v5.13, IPM retired Unit 7 (Unique ID 1122_B_7) and retrofitted Unit 8 (Unique ID 1122_B_8) with mercury and SO₂ (dry sorbent injection) controls. The Iowa DNR commented that these units would both be converted to natural gas and that there were no plans to retire Unit 7.¹ While IPM v5.14 properly accounted for the gas conversion, it idled both units. The Iowa DNR then informed EPA that both units burn refuse derived fuel (RDF) and will continue to operate as there are no other economic refuse disposal options in the area.² However, the State's comments were not addressed, and these units remained idle in v5.15. The State's comments on the proposed CSAPR Update Rule again informed EPA that these units will continue to operate due to the solid waste disposal problems created by idling these units.³ Unfortunately, v5.16 retains this problem as IPM has once again idled both units. EPA can easily rectify this error by ensuring that IPM continues to operate these units. The fuels burned should reflect a mixture of natural gas and RDF. Natural gas is the primary fuel and RDF is the secondary fuel; these units are permitted to burn up to 30% by weight of RDF.

IPL – Burlington (ORIS Code: 1104)

Unit 1 at Interstate Power and Light's (IPL's) Burlington Generating Station (Unique ID 1104_B_1) is properly forecasted by IPM as a "Coal to Gas" unit, but its primary fuel should be natural gas, not coal. IPM's prediction that this unit will burn coal in 2023 is not permissible under federal consent decree No. C15-0061 EJM⁴. The consent decree requires that Burlington Unit 1 either retire or burn natural gas by December 31, 2021.

IPL – Lansing (ORIS Code: 1047)

IPM's prediction that IPL - Lansing Unit 4 (Unique ID 1047_B_4) will retire is questionable. The DNR is not aware of any plans to retire this unit. A more plausible forecast would keep this unit operational. Additionally, the NEEDS database includes an SO₂ Permit Rate of 1.2 lbs/MMBtu for this unit, but the consent decree mentioned above requires this unit to meet an SO₂ limit of 0.075 lbs/MMBtu.

IPL – Milton L Kapp (ORIS Code: 1048)

IPM's prediction that IPL - Milton L Kapp Unit 2 (Unique ID 1048_B_2) will retire is questionable. The DNR is not aware of any plans to retire this unit. A more plausible forecast would keep this unit operational.

IPL – Ottumwa (ORIS Code: 6254)

For Unit 1 at IPL's Ottumwa Generating Station (Unique ID 6254_B_1) the NEEDS database includes an SO₂ Permit Rate of 0.08 lbs/MMBtu, but the consent decree mentioned above requires this unit to meet an SO₂ limit of 0.075 lbs/MMBtu.

¹ Comments from the Iowa DNR dated June 16, 2014, submitted pursuant to EPA's "Notice of Availability of the Environmental Protection Agency's 2018 Emissions Modeling Platform" (79 FR 2437, January 14, 2014). Docket file ID: EPA-HQ-OAR-2013-0809-0019.

² Comments from the Iowa DNR dated October 22, 2015, submitted pursuant to EPA's "Notice of Availability of the Environmental Protection Agency's Updated Ozone Transport Modeling Data for the 2008 Ozone National Ambient Air Quality Standard (NAAQS)" (80 FR 46271, August 4, 2015). Docket file ID: EPA-HQ-OAR-2015-0500-0027.

³ Comments from the State of Iowa, dated February 1, 2016, submitted pursuant to EPA's "Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS" (80 FR 75705, December 3, 2015). Docket file ID: EPA-HQ-OAR-2015-0500-0302.

⁴ Entered on September 2, 2015, in the United States District Court for the Northern District of Iowa, Cedar Rapids Division, between the United States of America; the State of Iowa; Linn County, Iowa; the Sierra Club; and IPL.

MidAmerican Energy – Louisa (ORIS Code: 6664)

IPM's prediction that MidAmerican Energy Company's (MidAmerican's) Louisa Generating Station (LGS) (Unique ID 6664_B_101) will retire is questionable. The DNR is not aware of any plans to retire LGS. A more plausible forecast would keep LGS operational.

Muscatine Power and Water (ORIS Code: 1167)

IPM's predictions that Muscatine Power and Water (MPW) will retire Units 8 and 9 (Unique IDs 1167_B_8 and 1167_B_9) are questionable, particularly given the number of industrial customers that rely on power from MPW. The DNR is not aware of any plans to retire these units. A more plausible forecast would keep these units operational. Additionally, these units are expected to continue to combust coal so IPM should not identify their fuel type as biomass.

Missing Wind Projects

The following wind generation projects are absent from the NEEDS database and IPM:

- MidAmerican completed the addition of 154.3 MW of wind capacity in Adams County, Iowa, in 2016. (This capacity is part of MidAmerican's Wind IX project.⁵)
- On August 26, 2016, the Iowa Utilities Board (IUB) approved MidAmerican's request to install additional wind turbines in Iowa by year-end 2019.⁶ The project, referred to as Wind XI, will add 2,000 megawatts (MW) of wind capacity in Iowa.⁷
- On October 25, 2016, the IUB approved IPL's plan to add 500 MW of new wind generation in Iowa through an expansion of the Whispering Willow wind farm in Franklin County.⁸ New wind generation from this project is expected by the end of 2019 (full implementation expected no later than 2020).⁹

Other Wind Issues

- The capacity of the Vienna Wind Farm (Unique ID 57874_G_VIWF) in the NEEDS database is listed at 103 MW, it should be 150 MW.
- The NEEDS database and IPM include committed unit 83630_C_1 (Plant Name: MIS_MIDA_IA_Wind). It appears that this committed unit represents MidAmerican's Wind X project that added capacity in O'Brien and Ida Counties in Iowa. If 83630_C_1 is indeed a representation of Wind X, the capacity should be 551.3 MW and not 557.7 MW.
- The NEEDS database and IPM include committed unit 83615_C_1 (Plant Name: MIS_IA_IA_Wind) that represents 703 MW of new capacity added in 2015. The DNR has not found any information that supports the existence of this project. The Iowa DNR recommends removing committed unit 83615_C_1 from the NEEDS database.

Questionable New Hydro

While IPM does account for the planned installation¹⁰ of 36 - 55 MW¹¹ of new hydro capacity at the Red Rock Reservoir, it also predicts that an additional 537 MW of new hydro capacity will be added in Iowa.

⁵ <https://www.berkshirehathawayenergyco.com/news/midamerican-energy-completes-two-major-wind-projects>

⁶ <https://efs.iowa.gov/cs/groups/external/documents/docket/mdax/nja0/~edisp/1604316.pdf>

⁷ <https://www.midamericanenergy.com/news-article.aspx?story=777>

⁸ <https://efs.iowa.gov/cs/groups/external/documents/docket/mdax/nja3/~edisp/1607556.pdf>

⁹ <http://www.alliantenergy.com/AboutAlliantEnergy/EnvironmentalCommitment/CleanEnergyFuture/208408>

¹⁰ IPM identifies the on-line year for the Red Rock project (Unique IDs 58434_G_1 and 58434_G_2) as 2016, however, power output is not expected until 2018.

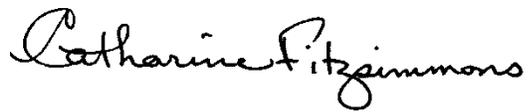
While this may be possible, it seems unlikely. If IPM is not constrained to prevent this unexpected generation, EPA should develop a suitable justification that supports the feasibility and inclusion of such an expansion of hydro capacity in Iowa.

Additional NEEDS Review

The Iowa DNR suggests that EPA provide a comment period that focuses solely on the NEEDS database prior to the next round of IPM runs. This would give all interested stakeholders an opportunity to assess EPA's latest revisions to the NEEDS database and to update that data with the most recent information.

Thank you for your consideration of the Iowa DNR's comments. If you have questions, please feel free to contact Matthew Johnson at matthew.johnson@dnr.iowa.gov or 515-725-9554.

Sincerely,



Catharine Fitzsimmons
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Iowa Department of Natural Resources

¹¹ The design output of the Red Rock project will be approximately 36 MW, but it will be capable of generating up to 55 MW at certain times of the year when water is plentiful.