**From:** Beekman, Christopher [mailto:christopher.beekman@epa.ohio.gov]
**Sent:** Friday, August 29, 2014 1:37 PM
**To:** Cain, Alexis
**Cc:** Hodanbosi, Robert; Ward, Adam; Van Vlerah, Jennifer; Bergman, Andrew
**Subject:** Ohio EPA IPM request

Alexis:

During our call this past Wednesday, USEPA’s willingness to assist in resolving Ohio EPA’s outstanding IPM issues was expressed.

Firstly, I would very much like to have this call soon.  My availability next week is as follows:

Tuesday, September 2: 8:30 AM until 5:00 PM

Wednesday, September 3: 1:00 PM until 5:00 PM

Friday, September 5: 8:30 AM until 5:00 PM

Secondly, please find attached Ohio EPA’s specific request.  If you need additional information prior to our call, please feel free to contact me.

Regards,

Chris Beekman

Ohio EPA, Division of Air Pollution Control

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Pursuant to our hub call on Wednesday, 8/27/2014, I am providing a description of Ohio EPA’s assessment of the available IPM result.  I am working with the IPM output RPE files, and aggregating the data specifically for Ohio.  This is simple enough.  I am able to accurately account for emissions and generation in the state for our existing units based on fuel type for coal, co-fired biomass, biomass, wind, natural gas combustion turbines, NGCC, hydro, nuclear, and the remainder.  I am also able to account for new wind generation in Ohio.   Thus, the only source of discrepancies is the distribution of new combined cycle natural gas units, which, in the RPE files, are treated as region/RTO specific units. Although on a macro scale this approach has logic, but states need to meet specific targets and must know if there are or are not to be new fossil-fuel fired EGUs within our borders or contributing significant amounts of generation to our state.

In the parsed data that is available, one can easily determine how these new units are distributed to each state in terms of generation and emissions.  When one has to rely on only the RPE outputs, this distribution cannot be replicated or estimated based on the information that is available. We are requesting that USEPA either help us locate this information, provide the information directly, or provide us with the information and methodology necessary to make these determinations.

I will use the Base Case, 2025 results for Ohio as an example of our main issue.

The parsed results indicate that *existing* NGCC units in Ohio generated 11,752,832 MWh, with 5,064,609 tons of CO2 in the 2025 base case.  These are matched 100% by the *existing* NGCC units in the RPE file.

However, the parsed file indicates three new NGCC units, as follows (Ohio data only):

|  |  |  |
| --- | --- | --- |
| Region | Total MWh | Total CO2 |
| PJM\_ATSI | 13,514,595 | 5,087,058 |
| PJM\_EMAC | 1,251.86 | 471 |
| S\_C\_KY | 12,620.61 | 4,750 |

This additional generation and the associated emissions would be incorporated into the projected situation in Ohio for that year and scenario.

Examination of the RPE file for that same year and scenario shows these three new NGCC units as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| UNIT ID | Region | Total MWh | Total CO2 |
| 46318 | PJM\_ATSI | 17,075,381 | 6,427,382 |
| 45874 | PJM\_EMAC | 23,306,598 | 8,772,888 |
| 46595 | S\_C\_KY | 1,194,349 | 825,980 |

As can be seen, the units are identifiable and accessible via the RPE file, but the generation and emissions appear to be distributed by some unknown proportion to other states/regions in addition to Ohio, which is clearly and plainly demonstrated in the parsed results, above, but not in the RPE files.

We have the parsed file to compare in this case, but do not in most other instances. As we try to analyze and develop comments for various scenarios, it is critical that we are able to accurately distribute and translate the generation and emissions from these new NGCC units to Ohio, using only the available RPE results for most cases.  This issue arises in all other cases that we have analyzed, and appears to be specific to new natural gas units (at least for Ohio).

I would appreciate if we could focus an upcoming informal call on getting this discrepancy resolved for the following cases, based on RPE data alone:

State Plan, Option 1, 2025 and 2030

Base Case, 2025 and 2030

Regional Plan, 2025 and 2030

State Plan, Alternative RE, 2025 and 2030

State Plan, Blocks 1 and 2 only, 2025 and 2030

I have all of the data parsed out from the RPE files, by fuel type, for all ten of the scenario/year combinations listed above, and would like to be able to get all of our emissions and generation for new natural gas combined units accurately parsed and get total emissions to resolve with those listed in the state emission reports for each scenario and year above.

Thank you for your willingness to assist Ohio EPA in this matter,

Regards,

Christopher Beekman

Ohio EPA, Division of Air Pollution Control

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