1. MPCA requests certain corrections to EGU operating status/characteristics used in calculating Minnesota's goals

Northern States Power Minnesota—Sherburne County—Unit 3—ORIS 6090

This 900 MW coal-fired electric generating unit was out of service during the entire calendar year 2012 due to an explosion in 2010 in the turbine as the unit was returning to service after an outage. The unit was off line for about 2.5 years while repairs were made. The unit is not scheduled for retirement, and Minnesota will rely on its generation through the duration of the planning period for this rule, and beyond. We believe that this unplanned outage makes the starting assumptions for coal-fired generation in Minnesota atypical and thus requiring adjustment.

We understand that this "missing" generation was made up elsewhere within the MISO region, and that EPA may want to consider "rebalancing" generation.

Mankato Energy—ORIS 56104

Mankato Energy has a current capacity of a maximum of 375 MW at 6 degrees F. The nameplate capacity reported to EIA of 530 MW is due to the large capacity of the unit's steam turbine, if the facility had been constructed with all components. At this time, the steam turbine portion is oversized as the facility has only one combustion turbine and one HRSG.

The actual capacity of 375 MW is made up of 295 MW of combined cycle output with 80 MW of peaking power developed in the HRSG by employing duct burners. The existing Mankato Energy Center consists of one Siemens 501FD combustion turbine generator, one Nooter/Erikson heat recovery steam generator, a Toshiba TCDF 40L steam turbine generator, and other ancillary equipment. In order to be able to generate up to 530 MW of power as the name plate capacity states, the unit must be modified. This addition is under review by the Minnesota Public Utilities Commission in a current proceeding to secure additional generation resources. (MN PUC Docket No. CN-14-1240).

Because the plant is physically unable to generate 530 MW, EPA should revise its presumption of the potential generation capacity for this unit to 375 MW.

Hutchinson Plant #2—ORIS 6358—Generators 2 and 3

In EPA's preamble (*79 FR 34892)* EPA states that state goals reflect EPA's quantification of CO2 from affected units. Hutchinson Plant #2 does not meet the criteria of an affected unit because its average annual operation has been below 219,000 MWh. These units have never operated at or above this threshold. These units should be removed from EPA's list of affected sources. Accordingly, the NGCC capacity in MN should also be revised to remove this EGU.

2. **MPCA requests clarification regarding the treatment of large biomass-fired units under EPA's affected units definition.**

Are large biomass boilers considered affected facilities if they have the capability of burning greater than 250 mmbtu/hr of a fossil fuel (e.g. natural gas for startup or coal for combustion stability)?

3. Baseline date when Block 3 and Block 4 actions should start "counting" should be no later than 2012, not 2014 or 2020.

Because 2012 is the baseline year, emissions reductions resulting from EE/RE measures in effect any time thereafter should be available for use in state plan crediting. Otherwise, measures reducing CO2 levels from the 2012 baseline (but occurring prior to the 2014 proposal or the 2020 start of the compliance period) would essentially be "wasted."

4. [How should] Hydro power be accounted for in a state plan

Minnesota utilities are entering into agreements with hydro generation in Manitoba or other parts of Canada as a means to reduce their emissions or replace other, more carbon-intensive forms of generation. EPA is clear that existing (pre-2012) hydro was not included in the denominator when setting state goals.

Under what conditions would EPA consider counting generation from hydro installed pre-2012 (or pre-proposal) toward goal compliance after 2020? If a utility adds hydro to its generation portfolio by signing a new (post-proposal) power purchase agreement from a hydro generator built prior to 2012 or 2014, which represents new zero-emission generation for the state but does not represent "newly built" hydro capacity, only a new PPA with existing facilities. Do the incremental MW count toward goal compliance?

5. EPA's NGCC "building block" capacity assessment overlooks the role NGCC has in support of wind and solar energy.

The ease in which gas can be substituted for coal is oversimplified. Minnesota relies on NGCC as a backup for wind generation; we can't simply assume they are generally available to run at capacities greater than 40% due to the integration of wind and solar generation.

Minnesota had about 2733 MW of wind at the end of 2011, which would have generated about 7,900,000 MWH in 2012. If Minnesota had not built this wind, and half of that generation were instead sourced from the state's existing NGCCs (which may be a conservative assumption), then Minnesota's NGCCs might have operated at about a 40% capacity factor rather than 23.5% in 2012.

MPCA would suggest EPA use a lower capacity factor for NGCC, or, minimally, subdivide the NGCC analysis into conventional generation versus gas that "follows" wind generation.