A Touchstone Energy® Cooperative

the Environment

Joint Committee for Energy & the Environment Wayne E. Penrod, Executive Manager, Environmental Policy October 17, 2011

Cross State Air Pollution Rule

- Rule is effective 1/1/2012. Sunflower is one of the entities requesting a stay of rule. Kansas facilities, along with a few other states in our region were not expecting to have to reduce emissions at all.
- H1 will experience a \$6.5 million cost penalty associated with moving a planned Low-NOx Burner/Over Fire Air project from 2013 to early 2012 for a total cost expected to be as much as \$16.5 million. The final cost of this installation will be \$600 to \$700/ton per NO_x reductions more than EPA's claimed \$500.
- Gas unit improvements have not been fully evaluated, but will be needed on Great Bend Station, Fort Dodge Station, and S2 at Garden City Station. EPA has incorrectly presumed that these units will be retired. Given the energy use of these facilities as intermediate peaking and wind-chaser, the cost of these improvements could be as much as \$3000/ton NO_X. Monitoring improvements (CEMS or PEMS) will be needed at Clifton Station and on S4 and S5 at Garden City Station.
- We expect to buy a limited number of allowances for 2012, depending upon the H1 outage schedule and on how much we will need to use the gas units to meet the load.
- EPA has proposed to relax the penalty provision until 2014, which MAY help with GBS, FDS, and S2. This comes too late for H1.
- We anticipate that purchased power will cost more and are concerned about grid reliability. We will be positioned to either not conform to SPP reliability standards or to not conform to EPA "arbitrary" requirements.
- H2 will not have adequate allowances to operate. Will likely require us to install \$150 million SCR improvement on H1 to "make room" for H2.

Electric Generating Unit Maximum Achievable Control Techology for Hazardous Air Pollutants

- Final rule to be issued in mid-November 2011. Rule effective date is May 4, 2011. Some changes from the proposed rule are certain, but the range of changes is unknown. Litigation will follow as the impact on most existing coal units is severe.
- H1 will need to install mercury control equipment before November 2014. H1 will meet all of the other requirements, and does so now, except that the proposed limits are perilously close to being too low to measure. Subject to these testing procedure clarifications we will meet the existing unit MACT with the mercury technology.
- Gas units not impacted by the MACT unless oil is burned; impacts on Sunflower not evaluated.
- H2 cannot be constructed unless a much revised rule is promulgated. This can take the shape of:
 - An additional sub-classification for the 12 new projects for which permits have been issued but for which construction has not yet started.
 - o A determination that these 12 projects are existing units.
 - A change in the proposed level to much less stringent values is a third alternative.

New Source Performance Standards for Green House Gases (NSPS GHG) (Materials provided to EPA regarding the difficulties attendant to establishing a single NSPS related to CO₂ to fit all circumstances.)

- EPA will establish GHS limitations on <u>new EGUs</u> under Section 111 of the Clean Air Act. Indications are that the CO₂ emissions from new EGU's will correspond to natural gas combined cycle plants. This is referenced as an efficiency standard by EPA.
- EPA will establish state budgets for the states to effectively limit existing EGU's (all fuels) to some % efficiency as well with some discussions that a 5% reduction would be the NSPS target. Existing plants no matter the fuel source cannot reduce their emissions by 5% using the same fuel they currently use.
- EPA was set to propose a GHG BACT rule, first in July, then in September, now in ???.
- Sunflower and others presented information to EPA under the Small Business Regulatory Fairness Act (SBREFA) in June that contributed to an EPA decision to delay proposing the rule up to 2 months.

Coal Combustion Residuals (CCR) (Materials provided to EPA regarding the continuation of a performance-based landfill design criteria for CCR)

- EPA has proposed to federalize the existing state-operated EGU landfill programs. They
 propose a range of possible rulemakings, including reclassifying the CCR as a
 hazardous waste and requiring disposal in a Subtitle C landfill as one proposal and
 establishing a derivative of the existing municipal solid waste program known as subtitle
 D as another.
- The Kansas program, as it relates to the Holcomb CCR landfill is most akin to the Subtitle D landfill. Sunflower and KDHE have together developed a strong performance based landfill at Holcomb that should meet the requirements currently in a typical Subtitle D landfill. This is, in part, due to the materials disposed, the dry landfill configuration employed for CCR, and the site conditions which impact the landfill design. This landfill is to be used for both H1 and H2.
- Many of the engineering studies for the Holcomb landfill was submitted to EPA during the public comment period. EPA has now published those documents as part of the docket for public comment. This comment period expires on November 14th.
- The existing CCR program meets the needs of the regulated community and the people of Kansas and should be a model rule for EPA to adapt in any final federal rulemaking.