

From: Peter Tam
Sent: Tuesday, December 16, 2008 8:13 AM
To: Salamon, Gabor; Pointer, Kenneth; Blake, Tim M.
Cc: Richard Bulavinetz; Ekaterina Lenning
Subject: Monticello - Draft RAI on environmental issues of EPU application (TAC MD9990)

Gabe, Ken:

The NRC staff is reviewing Enclosure 4 of your 11/5/08 application for extended power uprate. The NRR Environmental Branch developed the following draft RAI questions which we would like to discuss with you in a conference call.

(1) Section 6.2.4 (Increase in Circulating Water Discharge Temperature) describes the thermal impacts associated with an increased discharge temperature of 4.5 degrees F, stating that "The slight discharge canal temperature increase will not result in one half of the surface width of the river temperature exceeding the 90 degree F maximum...", and "... water temperatures downstream are not high enough to harm aquatic species or impede fish migration even in summer months." Section 6.2.6 (Mississippi River Thermal Plume) states "... roughly 30 to 70 percent of the river is unaffected by the heated discharge. This also means that up to 70% of the river width is affected by current heat discharges. And section 6.2.7 (Cold Shock) notes that compliance with State water quality standards was not possible under extreme summer flows. The thermal plume has been noted to extend six kilometers downstream of the plant. With an increase of 4.5 degrees F for thermal discharges, it appears that there can be increases in the length of the thermal plume, increases to the percent of the river affected by the heated discharge beyond the current 70%, and an increase in non-compliance with State water quality standards, which contradicts several of your findings in section 10.0 (Conclusions). Please address these concerns.

(2) Please provide additional information or clarification of the potential increase in water consumption with the uprate. The description of water use in the EA should be made clearer. Specifically, the consumptive use during current operations assuming 130 days per year of cooling tower use is 7800 acre-feet/year. With the power uprate and an increase in cooling tower use to 150 days, the estimated consumptive use is 7700 acre-feet/year, a reduction. This is counterintuitive and needs either a correction or a detailed explanation.

(3) EA Section 4.1 states that the EPU "does not significantly affect the size of the MNGP work force and does not have a material effect on the labor force required for future plant outages." While this may be a true statement with regards to future plant operations and refueling outages, it does not answer the question about the short-term socioeconomic effects from implementing the EPU at MNGP. The NRC staff is simply asking whether NSPM would require any additional workers and equipment and material deliveries to support EPU-related plant modifications during the 2009 and 2011 refueling outages. This information was not provided in NSPM's EA. Xcel's Certificate of Need paragraph provided below (4.2.2 Traffic (Minn. R. 7849.0320(B))) indicates that EPU construction would require some number of workers in addition to the average 500 refueling outage personnel, but what does "a few dozen more" workers mean? - 24? 36? 48? It also indicates that the EPU would require "similar types" of equipment deliveries as past refueling outages, but does not say how many additional deliveries would occur during the 2009 and 2011 refueling outages?

This e-mail aims solely to prepare you and others for the proposed conference call. It does not formally request for additional information and it does not convey a formal NRC staff position. We do plan to issue the above questions as a formal RAI around 1/9/09.

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