



Ursula Kramer Nelson, P.E.
Director FAX (520) 838-7432

(520) 724-7400

9 October 2017

Mr. Conrad Spencer
Director, Tucson Power Production
Tucson Electric Power Company
88 East Broadway Boulevard, Mail Stop HQW602
Tucson, Arizona 85702

Subject: Air Quality Permit Revision Application – Technical Review
Irvington Generating Station
Permit No. 1052

Dear Mr. Spencer:

The purpose of this letter is to summarize our conference call of 4 October 2017. As we discussed during our call, the Pima County Department of Environmental Quality (PDEQ) requires the additional information listed below to continue with processing of Tucson Electric Power's Prevention of Significant Deterioration (PSD) permit application.

1. Merged Stacks: Provide written justification for the use of merged stacks in the dispersion modeling analysis. Include a discussion of how merging the stacks affects the model results. Include a scaled drawing that shows the location of each stack within the site, the distance from each stack to the nearest property boundary, the distance between stacks, and the modeled location of the merged stacks.

Load Analysis: Provide a revised load analysis that identifies the operating scenario that is expected to result in the highest ambient air quality impacts. The load analysis shall include a table of stack parameters (temperature, volumetric flow, stack diameter, and stack height) and emission rates for each pollutant at each load. The loads to be included are 25%, 50%, 75%, and 100%. The emission rates included in the load analysis are required to reflect worst-case potential emission rates (including startup emissions) and be consistent with the emission calculations provided in the permit application. Provide a detailed explanation of the startup emission scenarios included in the load analysis. The explanation should address each of the cold and warm start scenarios (3 scenarios). Manufacturer documentation will be required to establish the stack parameter and emission rates at the various loads.

9 October 2017

RE: Air Quality Permit Revision Application – Technical Review

2. If the emission rates from the application are different from the emission rates developed for the load analysis, provide updated emission calculations (including native file format).
3. Visibility analysis: Provide the emission calculations (including native file format) that detail the emissions (and emission reductions associated with shutdown) from Units 1 and 2 and the cooling towers. Provide references for each emission factor (or other basis) used in the calculations.
4. Updated Dispersion Modeling Report: Provide an updated air quality dispersion modeling report that includes revisions to the stack configuration, the stack parameters, the results of the revised load analysis (described above), and an explanation (including sample calculations) of how the modeled emission rates were calculated (including shutdown emission reductions). Provide the excel spreadsheet or native files that include modeled emission rate calculations.
5. Updated Permit Application: Provide an updated air permit application that includes the updated information that has been prepared and submitted during the permit review process.

Please submit the requested information by 19 October 2017 to continue expedited review of the application. Should you have any questions or need additional information please do not hesitate to contact me at 520-724-7341.

Sincerely,



Rupesh Patel
PDEQ Air Permit Engineering Manager

Copies to: Charles W Komadina, Tucson Electric Power
Suzanne Kennedy, Geosyntec Consultants
Kate Graf, Geosyntec Consultants
Scott McCann, Geosyntec Consultants
Shelia (Ya-Ting) Tsai, USEPA Region 9
Eugene Chen, USEPA Region 9
Cleve Holladay, USEPA Region 9
Kristin King, National Park Service