

## Public Notice – Environmental Permit

**PURPOSE OF NOTICE:** To seek public comment and announce a public hearing on a draft permit from the Department of Environmental Quality (DEQ) to limit air pollution from a facility in Warren County, Virginia.

**PUBLIC COMMENT PERIOD:** October 10, 2010 to November 24, 2010

**PUBLIC HEARING:** Celebration Hall, North Warren Volunteer Fire & Rescue – Company 10, 89 Rockland Road, Front Royal, Virginia on November 9, 2010 at 6:30 p.m.

**PERMIT NAME:** Prevention of Significant Deterioration (PSD) Permit issued by DEQ, under the authority of the Air Pollution Control Board

**APPLICANT NAME AND REGISTRATION NUMBER:** Virginia Electric and Power Company; 81391

**FACILITY NAME AND ADDRESS:** Warren County Power Station, Lots 3, 5, 6, 7, 8, 9 and 10 in Warren Industrial Park in Warren County, Virginia

**PROJECT DESCRIPTION:** Virginia Electric and Power Company has applied for a permit to construct the Warren County Power Station (WCPS), a natural gas-fired combined-cycle combustion turbine electric power generating facility having an electrical output capacity of approximately 1280 megawatts. The proposed facility will consist of three Mitsubishi M501 combined-cycle natural gas-fired combustion turbines, three heat recovery steam generators with supplementary natural gas-fired duct burners, one natural gas-fired auxiliary boiler, one natural gas-fired fuel gas heater, one distillate oil-fired emergency fire water pump, one distillate oil-fired emergency generator, three turbine inlet chillers, and one distillate oil storage tank. Maximum fuel proposed for use in the turbines, duct burners, boiler and fuel gas heater is 91,278 million cubic feet of natural gas per year. Additional fuel usage proposed is: 8,150 and 59,950 gallons per year of distillate oil for the emergency fire water pump and generator, respectively. The facility will be classified as a major source of air pollution and will be located in Warren Industrial Park in Warren County, Virginia.

**EMISSIONS:** The maximum annual emissions of air pollutants from the facility are expected to be: 216.1 tons per year (tpy) of total filterable & condensable particulate matter (PM) with a diameter less than or equal to 10 microns (PM<sub>10</sub>), 215.6 tpy of PM<sub>2.5</sub> (PM with a diameter less than or equal to 2.5 microns), 12.4 tpy of sulfur dioxide (SO<sub>2</sub>), 330.7 tpy of nitrogen oxides (NO<sub>x</sub>), 374.9 tpy of carbon monoxide (CO), 240.3 tpy of volatile organic compounds, 9.5 tpy of sulfuric acid mist, and 21.8 tpy of total hazardous air pollutants.

**CLASS II AREA AIR QUALITY ANALYSIS:** Class II air quality modeling analyses were performed for NO<sub>2</sub> (1-hour and annual averaging periods), CO (1-hour and 8-hour averaging periods), PM<sub>10</sub> (24-hour and annual averaging periods), and PM<sub>2.5</sub> (24-hour and annual averaging periods) for comparison to the National Ambient Air Quality Standards (NAAQS) and allowable Class II PSD increments. Based on DEQ's review of the modeling analyses, the proposed facility would not cause or significantly contribute to a predicted violation of any applicable NAAQS or Class II PSD increment. The value presented below represents the estimated increment consumed by the proposed facility based on the cumulative impact modeling analysis. The 24-hour modeled concentration of PM<sub>10</sub> (4.92 µg/m<sup>3</sup>) would consume 16% of the available increment. Modeled concentrations of all toxic pollutants are less than the Significant Ambient Air Concentrations.

<u>Pollutant</u>	<u>Averaging Period</u>	<u>Class II PSD Increment (µg/m<sup>3</sup>)</u>	<u>Increment Consumed by WCPS (µg/m<sup>3</sup>)</u>	<u>Degree of Increment Consumed by WCPS</u>
PM <sub>10</sub>	24-hour	30	4.92	16%

**CLASS I AREA AIR QUALITY ANALYSIS:** Class I air quality modeling analyses for Shenandoah National Park were performed for NO<sub>2</sub> (1-hour and annual averaging periods), CO (1-hour and 8-hour averaging periods), PM<sub>10</sub> (24-hour and annual averaging periods) and PM<sub>2.5</sub> (24-hour and annual averaging periods) for comparison to the NAAQS and allowable Class I PSD increments. Based on DEQ's review of the NAAQS and PSD increment analyses, the proposed facility would not cause or significantly contribute to a predicted violation of any applicable NAAQS or Class I PSD increment. The values presented below represent the estimated increment consumed by the proposed facility based on the cumulative impact modeling analysis. The annual modeled concentration of NO<sub>2</sub> (0.27 µg/m<sup>3</sup>) would consume 11% of its increment. The 24-hour modeled concentration of PM<sub>10</sub> (5.10 µg/m<sup>3</sup>) would consume

64% and the annual modeled concentration of PM<sub>10</sub> (0.21 µg/m<sup>3</sup>) would consume 5% of their respective increments.

<u>Class I Area</u>	<u>Pollutant and Averaging Period</u>	<u>Class I PSD Increments (µg/m<sup>3</sup>)</u>	<u>Increment Consumed by WCPS (µg/m<sup>3</sup>)</u>	<u>Degree of Increment Consumed by WCPS</u>
Shenandoah National Park	NO <sub>2</sub> – Annual	2.5	0.27	11%
	PM <sub>10</sub> – 24-hour	8	5.10	64%
	PM <sub>10</sub> – Annual	4	0.21	5%

**CLASS I AREA MITIGATION PLAN:** While no Federal Land Manager filed a formal adverse impact finding prior to the publication of this notice, the draft permit includes a mitigation plan to address potential impacts in the Shenandoah National Park Class I Area in Virginia. The proposed mitigation plan requires reduction and/or mitigation of nitrogen oxides emissions from WCPS. Reduction and/or mitigation may consist of Virginia Electric and Power Company purchasing nitrogen oxides emission offsets allowances or obtaining reductions from one or more facilities in a specified geographic area. DEQ is soliciting public comment on the Class I Area mitigation plan.

**HOW TO COMMENT AND/OR REQUEST BOARD CONSIDERATION:** DEQ accepts comments and requests for Board consideration by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for Board consideration must also include: 1) The reason why Board consideration is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. Board consideration may be granted if public response is significant, based on individual requests for Board consideration, and there are substantial, disputed issues relevant to the permit.

**DOCUMENT AVAILABILITY:** The public may review the draft permit package at the DEQ office named below and at the Samuels Public Library located at 330 E. Criser Road in Front Royal, VA. The draft permit is also available on the DEQ web site at [http://www.deq.virginia.gov/air/permitting/Dominion\\_Warren.html](http://www.deq.virginia.gov/air/permitting/Dominion_Warren.html).

**CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION:** Anita Riggleman; Valley Regional Office, P.O. Box 3000, 4411 Early Road, Harrisonburg, VA 22801; Phone: (540)574-7852; E-mail: [anita.riggleman@deq.virginia.gov](mailto:anita.riggleman@deq.virginia.gov); Fax: (540)574-7878.