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May 5, 2008

David K. Paylor, Director
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218

Re: The Virginia City Hybrid Energy Center
Response to the State Air Pollution Control Board's Comments

Dear Mr. Paylor:

On April 16, 2008, three members of the State Air Pollution Control Board submitted information requests in regard to the Virginia City Hybrid Energy Center's (VCHC) draft air permit. The attached report provides answers to all of the questions that have been raised by the three Board members.

We appreciate the range and rigor of the board members' questions and we have worked hard to be as responsive as possible to their inquiries. As requested by Department of Environmental Quality staff, the responses are organized in three separate binders. Each binder contains answers to all of the questions asked by a given Board member. The reports have been numbered by identifying the page number(s) of the Board member's request. While there are overlapping answers among board members, each binder contains a complete set of responses for that Board member.

The draft permits currently before the Board present a strong environmental package that controls all of the regulated pollutants to very low levels while minimizing water use and allowing the facility to consume waste coal and carbon neutral biomass. The ability to utilize waste coal is an important environmental benefit of the project, as doing so will help clean up the hundreds of abandoned waste coal piles that the Department of Mines, Minerals, and Energy estimates are located in Southwest Virginia. The attached report includes testimony from Secretary McGinty of Pennsylvania on the environmental benefits of using waste coal as fuel in power stations.

As the analysis in the permit application, the engineering analysis, and the attached materials demonstrate, the proposed limits represent "best available control technology." Therefore, the technology selected for the project is appropriate. Given the critical need for this project to meet the energy needs of our customers and the importance of the project for Southwest Virginia, we are willing to discuss potential reductions in emission

limits that the technology may be able to achieve to make that strong package even stronger. Dominion is proud of its environmental record and looks forward to operating this project in an environmentally responsible manner. Our commitment to convert Bremono Power Station to natural gas once this project becomes operational and regulatory approvals for the conversion are received is an example of this commitment, as is our agreement with the U.S. Forest Service to offset or reduce half of the permitted SO₂ emissions.

Going forward, we are mindful that there are inevitable tradeoffs that will be involved in adjusting limits for given pollutants at the very low levels of emissions as set forth in the draft permits before the Board. The complexity of the systems involved in controlling the various emissions makes it very difficult to simplify these tradeoffs. ***It is very important to emphasize that over-control of one pollutant can result in the unintended increase in levels of other pollutants.*** For example:

- One CFB project cited has lower mercury actual emissions than the draft permit limit for this project, but its permit limit for sulfur dioxide is nearly five times higher. Given the VCHEC's very low SO₂ limit in the draft permit, the facility must remove a large portion of the fly ash prior to collection in the baghouse to avoid interference between the fly ash and the flue gas desulfurization system. This fly ash contains unburned carbon which is very effective at collecting mercury. The VCHEC will employ a full suite of mercury controls including activated carbon injection (ACI) to achieve and surpass MACT.
- Using 100 percent¹ washed coal would severely limit the project's ability to use carbon neutral biomass due to the corrosive nature of the alkali in the wood and would create additional waste coal. Overuse of washed coal would increase the project's greenhouse gas emissions due to reduced ability to use biomass and increased moisture in the coal, which would reduce boiler efficiency.
- Limiting the use of waste coal may increase mercury emissions if washed coal is substituted for the waste coal as evidenced by the lower mercury NSPS (vacated) limit for waste coal relative to bituminous coal.
- Lower SO₂ limits could involve some tradeoffs in NO_x emissions because increased limestone injection leads to higher NO_x emissions. In addition, attempting to control this increase could lead to ammonia slip levels that are unacceptable operationally.
- The washing of Virginia coal has different impacts than the washing of Pennsylvania coal. As a result of the low level of pyritic sulfur in Virginia coal,

¹ Board members questions have noted that Dominion typically uses washed coal at other power stations in Virginia. This is done because of the pulverized coal generation technology used at these stations and is also a reflection of the need to transport the coal over long distances to the station. A CFB boiler does not require washed coal and VCHEC will be procuring fuel from nearby sites in Southwest Virginia.

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the impact on SO₂ from washing Virginia coal is minimal. This is discussed in detail in our responses to Board member questions. While some portion of mercury can be removed by washing coal, the benefit is small when weighted against the resulting rise in other pollutants as described above. The situation is very different for the Pennsylvania coal described in board member comments.

We are open to discussions on use of some amount of washed coal for this project without impacting other pollutants. We are also open to reducing the maximum specification for coal sulfur content, currently set at 2.28 percent. We believe a discussion along these lines, focused on annual emissions limits, would be helpful, especially if Dominion could have some flexibility to use the most prudent, environmentally responsible means of meeting the limits.

We look forward to working with you and the DEQ staff on these issues.

If you have any questions about the attached report, please do not hesitate to call Mr. Bob Bisha at (804) 273-3010 or email him at Robert.M.Bisha@dom.com. Thank you for the opportunity to provide this information. My team and I look forward to discussing this information with you.

Sincerely,

A handwritten signature in black ink that reads "Pamela F. Faggert". The signature is written in a cursive style with a large initial 'P' and 'F'.

Pamela F. Faggert

Attachment- Response to Comments