

Broad Mountain Wind Power Additional Input

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I am providing this input as a supplement and reinforcement to the information that I provided at the Broad Mountain Wind Power public hearing at the Panther Valley High School on December 4, 2019. All the testimony at the meeting reinforced how environmentally special the area of the proposed wind project is. The project area is 290 acres of hardwood forest that is at the headwaters of five exceptional value streams. Additionally, over eight acres of wetlands and at least 25 seeps and springs have been identified on the property. Because of the significant amount of water resources concentrated in a relatively small area the potential to impact the entirety of the various watersheds is great. The NPDES permit application submitted by Broad Mountain Wind Power is incomplete and inadequate to evaluate and mitigate the potential impact on the water resources for the following reasons:

- The application does not address the primary purpose of the permit application, to construct 21 wind turbines. Other than some circles marked as clearances for turbine foundation, there are no details of the size, depth, or design of the foundations. There are no excavation plans and no construction sequencing. Based on the size of the foundations for another wind power project the excavations will likely require the removal and disposal of in excess of 2,500 cu yd of material for each of the 21 foundations.
- Despite the high probability of groundwater being very near the surface as indicated by the wetlands, seeps, and springs, there is no acknowledgement that any excavations will likely require pumping and disposal of groundwater from (dewatering) the excavation to allow construction to proceed. This pumped groundwater will likely far exceed any storm water events that have been evaluated and could exceed 1,000,000 gallons for each of the 21 foundations.
- The permit application references the potential for blasting during excavation depending on the conditions encountered. There is no evidence of drilling or geological studies that have been performed to evaluate the condition and depth to bedrock. There also is no evidence of drilling or geological studies that have been performed to identify depth of groundwater, and potential in-flow rates that would impact the amount of water to be pumped during construction.
- There is no apparent evaluation of the impact of dewatering the excavations on adjacent wetland, seeps, springs, nor on the flow in the various watersheds. Also, if blasting is required the competence of the bedrock may be challenged, causing fractures that could impact the groundwater.
- There is no apparent evaluation of the long-term impacts on adjacent wetland, seeps, springs, nor on the flow in the various watersheds due to construction activities such as deforestation, soil compaction, and installation of 21 massive impervious reinforced concrete foundations.

I have attended numerous Packer Township Zoning Board hearings. Whenever the Broad Mountain Power expert witness on the environmental aspects was asked for more details the response was “we aren’t at that point yet”. I agree. This is not a parking lot, mall, or road project. This is a project that will have 21 massive excavations that will likely require pumping large volumes of groundwater. This project may impact not one, not two, but five exceptional value watersheds and over eight acres of wetlands. The NPDES permit application should be rejected and resubmitted when they have:

- a completed turbine foundation design
- a construction plan and schedule
- supporting geological studies
- a disposal plan for excavated soil
- a dewatering plan for excavations
- pre and post construction studies evaluating the impact of the project on the adjacent wetlands, seeps, springs, and flow in the various watersheds.

After reviewing the information submitted for the NPDES permit I can understand why Broad Mountain Power did not want a public hearing. I’m not sure if they are as incompetent as they seem, or if they assume that the public isn’t sophisticated enough to evaluate their project. In my 30+ years in engineering and construction management if I had ever proposed submitting such a poorly prepared permit application to a regulatory agency at a minimum I would have been thrown out of my supervisor’s office, and possibly fired.