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COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION

APPLICATION OF)
)
PATH ALLEGHENY VIRGINIA)
TRANSMISSION CORPORATION) CASE NO. PUE 2009-00043
)
For approval and certificate of electric)
transmission facilities under Va. code)
Sec. 56-46.1 and the Utilities Facilities Act,)
Va Code sec. 65-265.1 et seq:)

DIREST TESTIMONY OF
MICHAEL E. JOHNSON

1. Q: Identify yourself and describe your property.

A: My name is Michael Johnson and together with my wife , Lauren and our children Tori and Skylar we are owners of 4 acres of rolling hills and picturesque views in Frederick county Virginia. This property is adjacent to land which Dominion and Allegheny electric currently have an overhead 138kv voltage transmission line (80 ft. high) and an 500kv very high voltage transmission line in existence (120 ft high). Our property is tree lined at the perimeter and our visibility of those lines is mostly obscured by these 40-50 foot trees(except in the winter when the leaves are off, then we have a direct unobstructed view). Our children play with their friends every day in the spring, summer and fall in our backyard. We purchased this house in April 2006 with the intentions of providing a safe place for our 3 and 4 year old daughters to grow up, but with a slight reservation of being in close proximity to the existing power lines.

With the help of our current local realtor we asked and uncovered every bit of information about the potential for any future power line easements that was being sought. At that time the conclusions were that there hadn't been any activity for over 20 years and none were planned.

From what I've uncovered the Path project has been in existence for several years now but the original corridors that were being sought were north of us in WV and MD. It wasn't until Dec 2008 that we found out that the line had been moved multiple times south due to citizen uproar in areas like Martinsburg, WV and other areas. Now path seeks to find the "Path of least resistance" through a more rural area in which I live.

2. Q: What is your occupation?

A: I have been an airline pilot for 20 years.. the last 12 years with United Airlines.
I am also a licensed real estate agent and loan officer.

3. Q: What economic effect would Path's 765kv line have on your property?

A: The towers for the power line are projected to be "double circuited" through my area. That means that they will take the existing 138kv line and put it on top of the 765kv line making the height of the new towers 180-200 feet. This will have a destructive influence on our view shed and on the value of my property. I will go from a reasonably obscured view to a direct **unobstructed** view of the new towers that will extend much higher than my tree line will cover. This will create a year round eye sore that any realtor in the business says will severely depreciate the value of my property. There is absolutely nothing Path-VA could do to mitigate in any way the visual impact of its projected towers.

4. Q: What does Path-VA Customer Service say about your property value?

A: Path-VA Customer Service claims they will minimize the adverse conditions to my property.
Unless Path-VA writes me a check for the loss of my property value I don't see how this is possible. I've had local real estate agents evaluate my particular property and suggest I personally can anticipate 30% property value loss if the new power lines protrude above the tree line.

5. Q: Do you believe that the increased EMF from a new 765kv line will have any long term health consequences to you, your wife or your children?

A: Yes.. after reading expert testimony from multiple sources, I've concluded that my young daughters are at risk from EMF. My wife is also frightened due to the studies on pregnant woman and EMF, as we are currently trying for a 3rd child.

I am anxiously waiting to see an independent study on the cumulative effects of having a 138kv, 500kv and 765kv line all in the same corridor, all in

close proximity to people homes. I hope and pray that the Virginia SCC makes this a requirement to for Path to continue.

6. Q: What is your opinion of the effect of the PATH Project on your property if the project is approved?

A: PATH-VA's application purports to take an easement interest only. Yet, PATH-VA's Application demonstrates that it will possess and exercise all of the rights of a fee owner on the ROW. PATH-VA will: (1) remove all trees from its ROW and prevent the fee owner from using the air space above his/her land; (2) will flood the area within the proposed ROW with dangerously high levels of electromagnetic fields; and (3) may drill down to any depths necessary to support the poles from which the 765 kV line will be suspended. PATH-VA proposes to take an easement interest only when in fact it has appropriated the air above the land, the land surface and the sub-surface. Aerial use of herbicides threatens respondents' land outside the ROW. It is a basic principle of real estate law that the fee owner owns the surface, the air above the surface and the subsurface as well as the riparian rights to any watercourse.

PATH-VA's proposed ROW will deny the respondents' their surface rights, the area above the surface, subsurface and riparian rights. The depths for the foundations would range between 15 and 45 feet. and it will not be known what the final embedment depths will be as it would depend on geotechnical conditions at the site which will not be known until after the CPNC is approved. Also, whether blasting would be necessary is not presently known. Blasting could affect our well.

7. Q: Are you concerned with any other EMF effects the PATH Project would have on you?

A: Yes. I'm concerned with the health effects from the electro-magnetic field that would be created by PATH-VA's 765 kV line. According to PATH's expert, Mr. J. Michael Silva "Under typical loading conditions, the magnetic fields from PATH in Virginia at 100 feet from centerline range from approximately 79 mG to 102 mG, depending on structure type and location along the line. Under peak loading conditions, the magnetic fields from PATH at 100 feet from centerline range from approximately 102 mG to 133 mG.

For a maximum contingency load (emergency load due to loss of a critical system element) the magnetic fields from PATH at 100 feet from centerline range from approximately 118 mG to 156 mG." PATH-VA.'s application at volume one, exhibit 3, pages 64-67.

At these levels, the electro-magnetic field at the edge of the ROW is approximately twenty-five (25) to fifty (50) times the level that the latest epidemiological studies (2 – 4mG){milli-Gauss) demonstrate for an association, link or causal effect with HVAC and childhood leukemia.

8. Q: Are there homes near the existing and proposed line 765 kV line in your immediate area?

A: Yes. My home is south of the existing line There are at least 20 homes within a quarter mile on either side of my home in the immediate area.. I have personally visited nearly all of them and have heard families dealing with "cancerous

tumors in livestock and autoimmune problems which are consistent with exposure to electromagnetic fields.” Also had a couple tell me that there is so much static in their house that they could touch the metal roof on their shed with a voltmeter and get a reading. They also said that everything they touch in their home gives them a shock.

9. Q: Why do these milligauss numbers in Mr. Silva’s testimony concern you?

A: There are numerous epidemiology studies that document adverse health effects from mG levels far below those set forth in Mr. Silva’s testimony. The Swedish government established a safety limit for exposure to EMFs at 2.5mG (milli-Gauss). This standard and guideline is widely accepted throughout the world (but not in the United States) and means that constant exposure to levels that exceed that limit place persons at risk for developing a multitude of health problems from headaches to miscarriages and childhood leukemia.

There is a statistically significant increase in acute lymphoblastic leukemia in children exposed to power line magnetic fields in excess of 3 mG.

Personally I believe with all this current data from around the world on EMF, that we here in the United States need an independent studies on multiple power lines in the same corridor in relationship to human health. And one that is not paid for by the companies that profit from building more transmission lines.

The fact that the PATH “fact sheet” and PATH-VA.’s application is silent on the distances from the ROW where the EMF drops to an acceptable level of 2 mG or 4mG is alarming.

10. Q: Do you have an opinion on whether the PATH line is needed, and if so, what is your opinion?

A: In my opinion the line is not needed, and my opinion is supported by the following facts:

The essentials of the PATH Project were set forth by American Electric Power in its January 31, 2006 report entitled: “**The AEP Interstate Project Proposal: A 765Kv Transmission Line from West Virginia to New Jersey.**” This report states: “...AEP is proposing ... a 765 kV transmission line and associated facilities emanating from AEP’s 765 kV station in West Virginia through Allegheny Power’s Doub’s Station in Maryland, and terminating at Public Service Electric and Gas’ Deans Station in New Jersey (AEP Interstate Project). The line will be approximately 550 miles long ... and will cost approximately \$3 billion nominally ... The projected in-service date is 2014 assuming three years to site and acquire rights-of-way, and five years to construct...transmission additions may present the potential for connections that provide transmission support to the Baltimore and Washington, Dc. Area.” The report does not contain a single reference to Virginia; in fact, the proposed line did not come through Virginia at all.

It is significant that this project was announced **before** PJM modeled alleged “reliability violations” in Virginia. Reliability violations alone, do not cause voltage collapses, brownouts and blackouts.

Shortly after AEP announced its interstate 765 kV project to New Jersey, PJM, in June 2007, essentially authorized the project as running from the Amos plant to Kemptown, Maryland with a mid-point at Bedington, West Virginia., later changed to Welton Spring, West Virginia and thereby moving the line farther south into Virginia. This chronology indicates that the alleged need and reliability violations were used to justify a project that had already been proposed and would be approved by PJM **regardless of the need.**

Projects have been cancelled in the PJM region. In the spring of 2009, the NYRI cancelled a \$2.1 billion dollar 190 mile transmission line across New York State which was designed to move power from upstate Oneida County to downstate New York. The New York State Independent Operators System issued a report in February 2009 wherein it was stated that New York State has enough in-state generating capacity to meet its needs to 2018. A segment of the MAPP Project on Maryland was cancelled. The in-service date for PATH was delayed one year. It's doubtful if Trail can meet its in-service date because it is interconnected to the Welton substation in West Virginia which has not been built. ITC Holding Corporation dropped its plans for a 345 kV line in the Detroit suburbs, after the Michigan Public Service Commission denied approval, acknowledging that demand was lacking. The Michigan PSC denied the certificate of need because of ***overly optimistic load forecasts.*** The proposed line that was only 14 miles long!

PJM has done the same thing in the Path Project: forecasting robust growth and demand from unidentified industrial users.

The ***only*** thing sustaining the PATH project is the financial incentives, particularly the 14.3% annual return. Only by modeling for high electric demand, a very robust economy and high peak demand for electricity, 5.7% for 2011, together with other assumptions, can PJM justify the PATH Project.

Mr. Michael Morris, the CEO of American Electric Power, stated during the company's second quarter conference call that AEP stands to make \$1.00 per share from its transmission subsidy alone, or about \$476 million dollars. Thus AEP, which owns the mineral rights (coal) under thousands of acres in West Virginia, owns the John Amos plant, reaps a transmission subsidy and sells the power to its customers, will reap a small fortune.

11. **Q: Are you concerned with the degradation of Virginia's air quality?**

A: Yes. PATH-VA has not done any air quality studies on the PATH Project. Also, TrAIL will interconnect with PATH at Welton Spring, West Virginia. The power source for TrAIL is coal. There will be a cumulative adverse effect on the air quality of Virginia from TrAIL and PATH. The applicant has not studied this matter.

13. Q: What do you know about the PATH Allegheny Virginia Transmission Corporation?

A: Aside from what is in the application, the company was issued a certificate of incorporation on March 16, 2009. It has a registered agent in Virginia and a two person board of directors located in Greensburg, Pennsylvania at the home address of Allegheny Energy. As a result of disclosures made to the Maryland Public Service Commission in connection with the Maryland segment of the PATH, we know that there are many entities involved in one way or the other with the PATH Project.

14. Q: What are your concerns if PATH is approved.?

A: If, but only if, his Commission concludes that PATH-VA. has demonstrated a need for the project, this Commission must conduct an in-depth analysis of alternative technologies. It is simply insufficient for PATH-VA. to argue that it looked at burying its 765 kV line and it cannot be done. Of course it cannot be done. However, there are alternatives to overhead HVAC lines, such as HVDC, HVDC Lite, and XLPE cables that can be buried within the existing ROW with virtually no economic or environmental impact on the local communities. Most importantly, and in light of PATH's startling admission that the 765 kV EMF field is extremely large and powerful, both on and off the ROW, these technologies must be investigated because they have not been linked to any health issues. If PATH-VA has not commissioned an independent analysis of underground technologies for the entire PATH project, including West Virginia, Virginia and Maryland. PJM commissioned a study of underground HVDC but it has not been produced or disclosed.

New technologies may obviate or substantially reduce the need for massive new transmission lines. It has a technology known as Energy Reconducting that substantially upgrades existing HVAC lines (including 500 kV lines) and is advertised as **"the least cost alternative."** One project has been completed.

The above-mentioned technologies would preserve the Commonwealth's woodlands and wildlife habitat from destruction, cause no health effects because they can be installed underground within Allegheny's existing ROW and have virtually no adverse economic impact on peoples' property as well as being terror-proof. PATHVA's application should be denied.

15. Q: What do you believe is the purpose of Path project?

A: I believe that energy hungry load centers on the east coast want electricity at the lowest price possible. Those states pass legislation that says they can't build new power plants in their back yards but are willing to import it long distances at someone else's expense.. **this is shifting the problems , not solving the problem..**

I also believe that the 14.3 % profit margin that guaranteed to the investors creates a motive for profit, regardless of need..

16. Q: Do you have any other solutions to the east coast electric problems?

A: Yes.. **Demand Side Management..** let's make this the 1st option.. then let's begin to implement renewables energies as they become more available and practical.

17. Q: Do you think that the SCC might receive political pressure to approve the Path project.

A: I am cautiously optimistic that although the SCC approved the TrailCo. projects and how they seemingly ignored overwhelming expert testimony for lack of need and environmental issues that they will see the Path project differently.

This concludes my testimony.