

Thursday, June 18, 2009

Proposed PATH is not our energy solution

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The Gazette printed on June 4 a letter to the editor from H. Russell Frisby Jr. ("PATH is the sensible, high-tech solution critical to our region").

He has acknowledged his law firm represents the PATH Education and Awareness Team, which is likely a group formed by Allegheny Energy.

A similar letter appeared in a Virginia newspaper signed by a former member of the Virginia Service Commission, and both mirror those of Allegheny officials.

Sugarloaf Conservancy has corrected these erroneous statements made by Allegheny officials on numerous occasions.

He tries to frighten the public with claims that the lights will go out if the Potomac-Appalachian Transmission Highline is not constructed. Energy usage has declined dramatically due to economic conditions and conservation efforts. There are no projections by authorities showing the economy will soar in the near future and force the need for PATH.

Further, a letter from 10 East Coast governors to congressional leaders stated, "a ratepayer-funded revenue guarantee for land-based wind and other generation resources in the Great Plains would have significant, negative consequences for our region; it would hinder our efforts to meet regional renewable energy goals with regional resources and would establish financial conditions in our electricity markets that would impede development of the vast wind resources onshore and just off our shores for decades to come."

This is precisely the negative consequence that will result if the PATH project is constructed, as Allegheny would receive a guaranteed 14.3 percent profit from the Federal Energy Regulatory Commission. Ratepayers will finance this project, and the result will be high prices being paid for low-cost coal generated electricity.

Mr. Frisby states that a 765kV line uses only a 200-foot right of way. High voltage direct current (HVDC) could accomplish the same purpose with only 20 feet, and can be buried underground instead of on towers up to 200 feet tall.

He states that HVDC is not an option and all significant lengths are underwater. One land-based example is the MurrayLink project in Australia that is 85 miles of underground cable.

He also stated that for AC cable, there is one outage per 100 miles of cable per year. The Cross Sound and Murray Link HVDC projects were constructed in 2002, and there has been only one fault in that time, attributed to external damage. AC cables cannot match this reliability.

Stations to convert DC to AC would not have to use 55 acres, as planned for the PATH substation in Kempton. Using newer HVDC modular technology, the station would be smaller and could be designed to look like a farmhouse.

Mr. Frisby is correct that the HVDC substations do consume more power than AC substations; however, due to the substantially increased efficiency in the transmission of the electricity, a project using HVDC is far more efficient overall.

A 765kV AC cable generates so much heat (energy loss) that it would be impossible to bury this line. On the other hand, since DC loses so little power it can be buried.

He states that no line has been built underground for the length of the entire PATH project, and if only a portion of the line was underground it would cost 10-20 times AC. This would be true if the entire line used AC technology except for a short length of HVDC underground; however, if the entire project used HVDC, and only a portion was underground, the costs could be equal to using 765kV AC cable. The reason is simple. Every circuit of AC cable requires three lines whereas DC cable only requires, and DC towers would also be smaller. Also, for the underground portion in populated areas, expensive land would not have to be purchased; existing right of ways could be used.

Most importantly, due to its efficiency, substantially more power would reach the end user and would not be wasted by heat loss from the cables. One does not have to take our word; we suggest readers go to www.abb.com, a leader in the power industry or visit our Web sites, www.sugarloafconservancy.org and www.nomore towers.org.

Doug Kaplan, Urbana

The writer is president of the Sugarloaf Conservancy.