

March 18, 2016

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Sherry Quirk
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RE: Potential sale of Bellefonte site

Dear Ms. Quirk,

Thank you for the opportunity to submit comments for the TVA Board of Directors to review as they consider the possible sale of the Bellefonte site near Hollywood, Alabama. We would like to commend the Board for their recent decisions to stop pursuing completion of the long-abandoned Bellefonte reactor units 1 and 2 and formally withdraw the federal licensing application with the U.S. Nuclear Regulatory Commission (NRC) for the proposed Toshiba-Westinghouse AP1000 reactor design, units 3 and 4.

As a committed stakeholder in TVA, the Southern Alliance for Clean Energy invested significant time and resources in engaging with TVA staff and executives on the development of the 2015 Integrated Resource Plan (IRP). We therefore greatly appreciate that the Board based the decision to stop pursuit of nuclear generation at the Bellefonte site on the outcomes in the 2015 IRP, which determined no large baseload generation was needed for decades into the future.

Generally, we support TVA's consideration of selling the Bellefonte site, as it makes clear that TVA will not pursue completion of any of the possible four proposed reactors. According to the August 2015 TVA Board meeting, \$53 million was budgeted for FY2016 to maintain the site.¹ According to a report by TVA to Congress, the purpose of this spending is "to preserve Bellefonte for potential future development."² Given the large financial burden to preserve the Bellefonte site, it is clearly the fiscally responsible decision to stop spending these resources on what is now a cancelled project, especially given TVA's difficult economic situation and recent decision to reduce pensions.

We specifically request that TVA notify the U.S. Nuclear Regulatory Commission (NRC) and formally request the termination and revocation of the Construction Permit for the Bellefonte Units 1 and 2 and

¹ TVA Board Meeting presentation, August 21, 2015. See slide 64 at https://www.tva.gov/file_source/TVA/Site%20Content/About%20TVA/Our%20Leadership/Board%20of%20Directors/Meetings/2015/August%2021,%202015/aug_21_2015_presentation.pdf

² TVA, Performance Report, Submitted to Congress, February 2016. See page 7 at https://www.tva.gov/file_source/TVA/Site%20Content/About%20TVA/Guidelines%20and%20Reports/FY17%20Performance%20Report%20-%20FINAL.pdf.

provide confirmation to the public that this has been completed. Any remaining outstanding proceedings and procedures occurring at the Bellefonte site with the NRC should also be formally terminated.

Transparent, Public Process

The interests of TVA's ratepayers need to be of paramount concern and to ensure that occurs, this process needs to be open and transparent, within view of the public. A reported \$6 billion has been spent over the course of many decades on the Bellefonte project.³ According to TVA's assessment of the site, there are significant assets of value, such as the two switchyards, among others.⁴ If a sale were to occur, we recommend that at a minimum, an updated economic assessment be done of the usable assets and that the list of interested parties along with their proposals for using the site be shared publicly. Additionally, these proposals must be considered as an official agenda item for a TVA Board meeting *before* the TVA Board makes any financial decision.

Promote and Pursue Clean Opportunities

We encourage the TVA Board to seize this opportunity to provide northeastern Alabama with exciting choices for the future, choices that reflect the creative innovation of the 21st Century. Choosing to use this site to continue the use of outdated, polluting, water-intensive energy technologies, such as nuclear power and fossil-fueled power plants, lacks vision and fails to tap into the potential of this region.

Though the Bellefonte complex is an industrial site, it is essentially a clean site. It is important to acknowledge that no nuclear criticality, or chain reaction, has ever occurred at this location – meaning there is no radioactive contamination to remediate and dispose of, and no highly radioactive, spent nuclear fuel to manage. For both the health and economic wealth of communities in northeastern Alabama, as well as the health of the Tennessee River and surrounding environment, it is important to maintain a clean site. To ensure the area remains safe and clean, the TVA Board must not consider nor approve the sale of this site to any buyer that intends to complete the existing Bellefonte reactor units 1 and 2,⁵ the proposed Bellefonte 3 and 4 reactor units, or any other nuclear power technologies, including small modular reactors (SMRs). These are all extremely expensive, risky technologies that would degrade the area, not enhance it.

Renewables, energy efficiency, conservation

Given the reported infrastructure available at the 1600-acre site, it could provide a wealth of opportunities for clean energy technologies, including renewables such as solar. The site could serve as an education and research hub, for instance, to study and test emerging clean, renewable energy and energy efficiency and conservation technologies. With classrooms on site and other buildings ready to

³ Dave Flessner, Chattanooga Times Free Press, "TVA wants to sell unfinished \$6 billion Bellefonte nuclear plant," February 17, 2016. At <http://www.timesfreepress.com/news/business/aroundregion/story/2016/feb/17/tva-eyes-sale-unfinished-6-billion-bellefonte-nuclear-plant/350581/>.

⁴ See TVA's request for public comment with itemized list of assets at <https://www.tva.gov/Newsroom/Press-Releases/TVA-Seeks-Comment-on-Potential-Sale-of-Bellefonte-Nuclear-Plant-Site>.

⁵ SACE previously documented the serious design flaws with the antiquated Bellefonte 1 & 2 reactor designs in a technical report, which can be accessed at http://www.cleanenergy.org/wp-content/uploads/F_SACE_Bellefonte_Rpt_080911.pdf along with a video (<http://www.cleanenergy.org/2011/08/09/fairewinds-report-for-sace-tva-bellefonte-plant/>) and blog post (<http://blog.cleanenergy.org/2011/08/11/sace-tva-bellefonte-report/>). We also reviewed a privatization scheme on completing the Bellefonte reactors, analysis accessible at http://www.cleanenergy.org/wp-content/uploads/SACE_TVA_Resources_Oct2013.pdf.

be retrofitted, the Bellefonte site is poised to become a dynamic location that can help jumpstart job development, further clean energy opportunities in Alabama, the region and even the nation, as well as boosting tourism for the nearby communities.

The opportunities at the site for solar power should be researched and encouraged, in terms of both solar generation and solar development and job training. With a range of approximately 8-9 acres needed per Megawatt (MW) or 8.5 acres/MW on average, and given most solar farms are smaller than 100 MW, there appears to be enough acreage at the site to support solar generation development.⁶ A detailed site-analysis should be done to fully determine availability of land acreage suitable for solar panel installation. Additionally, if any of the current warehouse buildings will be used at the site for the foreseeable future, those buildings could host rooftop solar panels to help offset energy use.

Buildings on site that will be used and occupied could serve as job-training facilities for the installation and maintenance required for solar photovoltaic (PV) panels and solar-thermal water heaters, for example.

Testing and subsequently retrofitting buildings to increase the energy efficiency provides other opportunities for both job training and technology research. Gaining skilled labor in the energy efficiency field will only help Alabama's economy by creating new, entry-level jobs. In the field, this new workforce would help reduce the overall amount utility customers spend on power generation and would allow those saved dollars to flow into other parts of Alabama's economy.

Researching water efficiency and conservation technologies could also be another exciting role for the Bellefonte site. Increasing the water efficiency of the energy sector, among other sectors as well, is becoming ever more important as droughts become more frequent and occur over a longer duration. Buildings on site could be converted for use as labs to research and test water-efficiency technologies (low-flow shower heads, toilets, irrigation systems, etc.). Identifying and then testing water-saving cooling technologies for instance could be a way to re-purpose the existing two cooling towers.

Recommendations

In summary, we request the following of TVA as they consider the possible sale of the Bellefonte site:

- Conduct an open, transparent process with public review and input;
- Termination of the Construction Permit with the U.S. NRC for Bellefonte reactor units 1 and 2;
- Cessation/revocation of all relevant proceedings and procedures with the U.S. NRC regarding all proposed Bellefonte reactor proposals;
- Confirmation that the possible sale of the property will not be allowed for any activities that would harm public health and safety and degrade the environment; such as nuclear power or fossil fuel-based power plants or related research;
- Consideration of clean energy technologies and water-saving technologies and job development, including education, research and implementation; and
- Commitment to advance 21st Century innovation to provide an economically prosperous future for

⁶ For information on the range of acreage required, see the National Renewables Energy Laboratory report, Land-Use Requirements for Solar Power Plants in the United States, June 2013 at <http://www.nrel.gov/docs/fy13osti/56290.pdf> and related article at <http://www.renewableenergyworld.com/articles/2013/08/calculating-solar-energys-land-use-footprint.html>.

northeastern Alabama.

Thank you again for the opportunity to comment on this proposal that could provide an innovative, exciting future for not only northeastern Alabama, but also the southeastern region of the U.S. Please feel free to contact me if you have any questions or would like to discuss our recommendations further.

Sincerely,

A handwritten signature in cursive script that reads "Stephen A. Smith".

Stephen A. Smith
Executive Director of the Southern Alliance for Clean Energy
TVA Regional Energy Resource Council Member

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