



Bellefonte Efficiency & Sustainability Team

B.E.S.T.

A local chapter of Blue Ridge Environmental Defense League



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August 22, 2013

Neil McBride
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re: BEST/MATRR Report On Health Hazards Surrounding Browns Ferry NPP

Dear TVA Directors,

Today we bring you our report, *Radioactive Emissions and Health Hazards Surrounding Browns Ferry Nuclear Power Plant in Alabama*,¹ which reveals serious health hazards for communities near and downwind of the plant. Largely an epidemiological study for north Alabama, more importantly, we hope the report is a wake-up call for this board of directors to reconsider the gamble you are taking every day this aged plant remains online with nearly 300 million curies of radioactivity stored in its vulnerable cooling pools. Our April 2013 letter provided you links to multiple studies on why nuclear power is dirty and unhealthy, but this study brings the issue home to the Tennessee Valley. Ultimately you, as TVA Directors, are responsible for the decision to continue down this dark nuclear path, but you also have the power to redirect our energy future toward the light of efficiency and sustainable, earth-friendly energy choices.

Our report offers a brief history of unplanned risk factors at Browns Ferry, revealing the cumulative dangers inherent in this 40 year old plant with multiple ongoing issues. We have all been complacent about the industry and government standards for what are called 'acceptable' radiation doses, even though we know there is no threshold – no safe dose of radiation.² It is a fact that any radiation exposure can harm our genes and our cells. But because radiation is slow acting and invisible, we deceive our logic to 'believe' that it will not harm us – even though we know from hard science that it will, whether we are aware of it or not.³ In continuing to make radioactive waste that remains harmful for a million years and continuing to allow radioactive emissions from nuclear plants to enter our environmental biosphere and food chain, TVA is clearly gambling with genetic mutations and subsequent malformations and disease for our progeny.

¹ Joseph Mangano, MPH, Gretel Johnston, *Radioactive Emissions and Health Hazards Surrounding Browns Ferry Nuclear Power Plant in Alabama*, June 6, 2013, http://best-matrr.org/pdfs/AL_BFN_Report_2013-final-dig2.pdf

² National Academy of Sciences, "Health Risks from Exposure to Low Levels of Ionizing Radiation," Biological Effects of Ionizing Radiation BEIR VII Phase 2 report, page 311. http://www.nap.edu/catalog.php?record_id=11340

³ Herbert Abrams, M.D., "Hazards of Ionizing Low Level Radiation: Controversy and Evidence," presentation at the "Medical and Ecological Consequences of the Fukushima Nuclear Accident Symposium, March 11-12, 2013," <http://www.totalwebcasting.com/view/?id=hcf#>

The epidemiologist who authored our report, Joseph Mangano, MPH, MBA, Executive Director of the Radiation and Public Health Project, found that death rates in counties near and downwind of Browns Ferry rose from 1.7% above the U.S. rate when the plant came online in the 1970s to 20.5% in 2010. Mortality is much worse for young people, with the death rate for those who die before age 25 at 27.4% above average. On pages 28 and 29, you will see that infant mortality jumped in the years 1974-1978, when Browns Ferry first came online, then declined until the late 1990's when it began rising to 22% above the national rate. It is even worse for Hispanic families with the infant death rate at 40.3% and white infant deaths here are 32.6% above the U.S. rate.

Our group of concerned citizens established 50 monitoring sites in the area surrounding Browns Ferry and found radiation up to 40 times background levels as far as 70 miles downwind, while finding only near background levels upwind. We are concerned that these very old Fukushima-style reactors, with multiple problems throughout their lives, are suffering from age and fatigue and are subsequently leaking radiation into our valley. We are concerned that TVA continues an unacknowledged policy of waiting until a nuclear component breaks down before replacing it, even though its design-life may have expired decades earlier.⁴ We are concerned that the NRC's required quarterly emissions annual reports are incomplete, and that TVA has not increased its monitoring efforts to reflect the increasing age of this troubled plant. And finally, we are concerned that communities who are being exposed to radioactive emissions are not informed of radiation levels and of precautions they could take to reduce their exposure, like using umbrellas in the rain when downwind of Browns Ferry. In light of our report, we ask TVA to publish radioactive emission levels daily to inform the public of this health hazard.

We can only hope that the hard facts in our report of historical and current health trends, provided by the Centers for Disease Control and Prevention (CDC) and the National Cancer Institutes (NCI) data, will supply enough evidence to instill a moment of realistic doubt, doubt in the infallibility of nuclear power. Our national media has done us all a disservice by under-reporting the devastating effects of Chernobyl and Fukushima. As former TVA Chairman David Freeman so colorfully phrases it, "Just because a dog is asleep, doesn't mean he isn't going to wake up and bite you," and plainly, "We need to kill nuclear power before it kills us."⁵

Thank you for your time and consideration, and for your service to our valley.

Respectfully,

Gretel Johnston
for BEST/MATRR

Bellefonte Efficiency & Sustainability Team (BEST)
Mothers Against Tennessee River Radiation (MATRR)

⁴ Brian Lawson, "Browns Ferry Nuclear Plant Control Room Fire," The Huntsville Times, July 13, 2012 http://blog.al.com/breaking/2012/07/browns_ferry_nuclear_plant_had.html

⁵ David S. Freeman, "Kill Nuclear Power Before It Kills Us," EON preview interview for forthcoming documentary, "SHUTDOWN: The Case of San Onofre", pub. April 12, 2013, <http://youtu.be/W1R4jc2wlGs>