



RULES AND DIRECTIVES
BRANCH
USNRC

2015 MAY 27 PM 2:47

VILLAGE OF PINECREST
Office of the Village Council

Re: NUREG-2176
Cindy Bladey
Office of Administration
Mail Stop: OWFN 12 H8
U.S. Nuclear Regulatory Commission
Washington, District of Columbia 20555
TurkeyPoint.COLEIS@nrc.gov

RECEIVED

3/5/2015
OFR 10043

89

Dear Ms. Bladey:

Below please find the Village of Pinecrest's comments on U.S. NRC Environmental Impact Statement for Combined Licenses (COL) for Turkey Point Nuclear Plant Units 6 and 7. NUREG-2176.

The Village of Pinecrest is a municipality with a population of 18,000 and is situated just 14 miles north of Turkey Point. As the Nuclear Regulatory Commission awaits the final NEPA required studies, including the Environmental Impact Statement (EIS) and the Final Safety Analysis Report, there are significant environmental impacts that have not been adequately addressed in the Draft EIS and on behalf of our residents, we register our concerns through these written comments to the draft statement issued.

The first concern is that the Draft EIS fails to adequately account for the significant and substantial cumulative adverse impact that the proposed two new nuclear power plants will have on our water supply, the Biscayne Aquifer fed by the Upper Floridan Aquifer as a result of the current crisis conditions and management plan operating for Turkey Point 3&4. While there was a finding that the Biscayne Aquifer is both vulnerable to the significant water usage needs of the Turkey Point Plant and critical to the continual supply of fresh water to Miami Dade and Broward Counties, the Draft EIS has admittedly not addressed the current crisis conditions under which Turkey Point 3& 4 operate. This is a fatal flaw.

Although the proposal by FPL for Turkey Point 6 and 7 indicates they will rely on Cooling towers and reclaimed water, as opposed to the current cooling canals system used for TP 3&4, the draft statement fails to account for the several potential scenarios of a failure of, or destruction of the cooling towers, or failure of a sufficient amount of the predicted required reuse water from Miami Dade County water and sewer. If either system fails, the backup plan would have to rely on the upper Floridan aquifer, thereby perpetually competing with the sole source of drinking water for four million plus residents in South Florida.

We are currently being forced to share our drinking water source with FPL as a result of the failure of their Cooling Canal system to sufficiently cool the canals after the current nuclear plants had an "uprate" in 2014. The predictions that FPL relied on in 2008 when they first applied under the Florida Power Plant Siting Act to "uprate" the allowable amount of electricity generated by the two nuclear facilities at Turkey Point, Units 3 & 4 were wrong.

In their application they represented that the uprate would cause only an insignificant temperature increase. As a result of their failed predictions, they sought emergency relief from the NRC, to increase the temperature cutoff to 104 degrees. Based on their failure to accurately predict or play out the consequences of various scenarios, the predicted increase in water temperature entering the cooling canals, and the predicted salinity were not in fact accurate, and as a result, a management plan was required, to avert a crisis scenario of water heated to over 104 degrees.

12645 Pinecrest Parkway, Pinecrest, Florida 33156
T: 305.234.2121 | F: 305.234.2131
www.pinecrest-fl.gov



SUNSI Review Complete
Template = ADM - 013

E-RIDS= ADM-03

Add= A. Williamson
(AR 22)

FPL now consumes vast amounts of our precious water and continues to plan for future use, by drilling six Upper Floridan production wells, and the pumping of 14 million gallons per day from those wells into the Cooling canal system. The permitted temperature of 100 degrees can not be sustained, in fact it had heated to as high as 104 degrees, without the additional draw of waters from the canal and or the aquifer. This necessitated that FPL seek a permit to utilize up to 100 million gallons a day of water from the L-31 canal, a canal which is a critical component of the health of Biscayne Bay.

FPL has also sought permission from the State of Florida to pump 14 million gallons per day of water from the Upper Floridan Aquifer into the Cooling Canal system and they have received approval to draw 1 million gallons a day for a temporary period of time. However, FPL is now seeking a permit to extend access to these water resources for the next two years, hoping that they will solve the problem in that time period. At present time FPL does not have a long term solution. This failure to address the current crisis of the cooling canals, the fact that there has not been presented any proposed long term solution in the Draft EIS is a fatal flaw in the Draft statement, and can only be addressed by studying these current emergency conditions, and the cumulative effect of this new and likely long-term scenario, the impact of the uprate on the cooling canal system, the significant impact on our water sources, and the CUMULATIVE EFFECT of current conditions when planning for the future, then factoring it into the scenario for the two proposed new plants. The failure to address current conditions and to establish the potential scenario fails to provide a comprehensive evaluation as recommended by the USGC Global Sea Level Rise Scenarios for the US national Climate Assessment.

Further, failure to address the current crisis, the instability of Turkey Point and its entire cooling canal system as it functions today, under emergency permits, is a fatal flaw by ignoring a current crisis that may never be resolved. The Draft EIS report must take into account under what circumstances would FPL manage operations of cooling canals in a manner that does not impact surface waters of our aquifer, and how that would factor into the determination that this site could function with two new plants, if the proposed new Cooling towers failed, or the re use water failed, and its cumulative impact to maintaining both 3 & 4 and a proposed new 6&7.

However the discharge of this waste water will have an adverse impact on our ground water, which will contaminate our drinking water source. Turkey Point has now begun to compete with the people of these two counties for consumptive use of our freshwater source, to cool the current canals, and the FPL proposal for the two new plants would also rely on the Biscayne Aquifer by the use of radial collector wells which would also draw water from the same source, the Biscayne Aquifer. The draft EIS fails to account for the adverse and potentially deadly competition between a thirsty nuclear power plant and almost 4 million people, in one of the most highly populate areas of Florida. And water demand in southeast Florida, is projected to increase by more than 50% by 2060, relative to 2005, based on combined changes in population, socioeconomic conditions and climate.

The current determination that there would not be an environmental problem with the proposed radial collector wells as long as they were not used more than 60 days per year. The current emergency use of Aquifer water has certainly gone far beyond any length of time imagined, and in fact is proposed to be used for at another two year, drawing 100 million gallons of water every single day. Thus the draft statement fails to comprehensively address the long term viability of providing fresh water to the plant as a backup to the reuse water. The potable drinking water resource for 2.5 million residents of Miami Dade County will be in competition for water drawn from the aquifer for the voraciously thirsty nuclear plants.

Secondly, the draft Environmental Impact statement fails to thoroughly review and address the fact that the FPL proposed plan does not adequately take into account the plan for the sea level rise that is certain to come over the next 40 - 60 years, the lifespan of the two new reactors. The plan must be compliant with the NOAA Dec 6 2012 report, Global Sea Level Rise Scenarios for the United States National Climate Assessment. In that review, the report indicates that over Eight million people live in areas at risk of coastal flooding, and many of the nation's assets related to military readiness, energy, commerce and ecosystems are already located at or near the ocean. The report establishes a high confidence (greater than 9 in 10 chances that global mean sea level will rise at least 8 inches, and no more than 6.6 feet by 2100. The report

indicates that the highest scenario should be considered in situations where there is little tolerance for risk, eg new infrastructure with a long anticipated life cycle, such as a power plant.

The FPL plan only accounts for one foot of rise. The draft EIS utterly fails to address the commonly accepted levels of impact of projected sea level rise on the site, as well as the surrounding land, according to the US Global Change Research, which will all be several feet under water within the lifetime of the nuclear plants over 50 years.

The NRC review study failed to rely on the US Global Change Research, which rates the Vulnerability of the Turkey point area to sea level rise as "high" to "very high" and notes an "imminent threat of increased inland flooding during heavy rain events in low lying coastal areas such as Southeastern Florida, where just inches of sea level rise will impair the capacity of Stormwater drainage systems to empty into the ocean."

The access roads, and all accompanying infrastructure would make the Plant site eventually, during the projected life and operation of the plant inaccessible to maintain operation, and most importantly, crisis management would not be feasible. For example, the planned Miami Dade County reclaimed water pipeline will run 9 miles to the plant site, approximately 4-5 feet underground. By not accounting adequately for sea level rise, there would not be access to the pipeline along the 9 mile track, which would then be several feet underwater and therefore inaccessible to necessary repair. The Draft EIS fails to consider the impact of different weather events combined with scenarios of Sea Level Rise, which according to the NOAA report is crucial to developing hazard profiles for emergency planning and vulnerability impact and adaptation assessment, all of which are required to be done by the *Global Change Research Act* and in addition, the *US Army Corp of Engineers Guidance for Coastal Decision Makers*.

Finally, the draft EIS fails to properly and fully consider the superior rated alternate sites for the placement of the two new plants, sites which are located in areas significantly less vulnerable to sea level rise, storm surge and a location of Turkey Point with highly dense urban populations that would compete for water. It is clear that the site selection process was overly biased in favor of building on an existing FPL power plant site, and completely ignored the over stressed current conditions under which Turkey Point is currently operating on a temporary management plan to avert a crisis shut down.

It is not clear, or substantiated, how that would factor into the determination that the Turkey Point site could possibly remain the superior site for two new plants rather than the proposed alternate sites that do not currently operate under crisis conditions.

The determination of alternate sites is highly subjective, and the statement fails to adequately provide fact specific comparative analysis on the rationale for excluding the alternate sites as environmentally preferable. Neither of those sites are located on as vulnerable a coastal location, neither are located in the middle of two National parks, and neither would impact the sole drinking source for more than four million Floridians.

Sincerely,



Cindy Lerner, Mayor
Village of Pinecrest
12645 South Dixie Highway
Pinecrest, Florida 33156