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Gallagher, Carol

From: charles alton [charles.alton@earthlink.net]
Sent: Monday, July 25, 2011 7:24 PM
To: Gallagher, Carol
Subject: Docket ID NRC-2009-0039: Draft Supplement 44, Crystal River Unit 3 Nuclear Generating Plant

Docket ID NRC-2009-0039

Florida Power Corporation, Crystal River Unit 3 Nuclear Generating Plant

Draft Supplement 44 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants

Dear Review Committee,

In response to your Federal Register Notice dated June 3, 2011, I have reviewed the Florida Power Corporation, Crystal River Unit 3 Nuclear Generating Plant License Renewal Draft Supplement. I recommend the Crystal River Unit 3 Nuclear Generating Plant not be renewed based on serious, potential significant impacts. Based on that review I have the following comments.

The Alternatives are inconsistent with NRC's statement on pages xxi and xxii under Purpose and Need For Action that, "[t]he NRC does not have a role in the energy-planning decisions such as those of State regulators and utility officials as to whether a particular nuclear power plant should continue to operate." Under the Alternatives on page xxv the NRC states, "[t]he NRC considered the environmental impacts associated with alternatives to renewing the CR-3 operating license." It continued on to state, "... alternatives include other methods of power generation ...power alternatives considered were supercritical coal-fired generation, natural gas combined-cycle generation; and a combination alternative that includes natural gas and conservation." These alternatives to renewing the CR-3 operating license (the no-action alternative) definitely seem to be of the energy planning nature. Therefore, the NRC should require Florida Power Corporation to consider the alternative of distributed solar generation as well as other renewable energy resources.

The Draft Supplement 44 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants addresses possible renewable energy alternatives but dismisses them for two reasons; they can't serve as central station base load resources because of their intermittent nature and the technologies are expensive or effects are unknown. The NRC has a responsibility under 40 CFR 1502.14, "[a]gencies shall: (c) Include reasonable alternatives not within the jurisdiction of the lead agency."

First, central station renewable resources are not the only alternative for renewable energy. Distributed generation such as solar PV or wind is an option which reduces line losses from electrical transmission over the miles of line to deliver the power and the environmental impacts from putting these resources on already developed home sites or commercial facilities would be negligible. The relicensing of the Crystal River Unit 3 Nuclear Generating Plant which has had at least two "delaminations" as engineers acknowledge the unknown and uncertainty about such repairs has a far greater chance of potential for significant impact in both in context and intensity (40 CFR 1508.27). A repair of over billion dollar with potential to increase or lead to a possible nuclear clean-up due to more or worsening delaminations would be a far greater cost than any renewable energy resources.

Second, the concern for intermittent energy supply is not founded. According to the Draft Supplement 44 on page 8-34, "flat-plate PVs tend to be roughly 24 percent efficient, a solar-powered alternative will require at least 13,450 acres of collectors to provide an amount of electricity equivalent to that generated by CR-3." That means in Progress Energy's Service Territory of 20,000 square miles they would need 585,882,000 ft² of roof space or other covered areas that could be fitted with PV panels. This amount of roof space equates to less than

1% of the Service territory which should be achievable considering all of the parking garages, homes, commercial buildings, and other coverings in Progress Energy's well populated service areas. The following are the simple calculations.

1 acre = 43 560 square foot

1 square mile = 27 878 400 square foot

Progress Service Territory 20,000 miles²

$13,450 \text{ ac} \times 43,560 \text{ ft}^2 = 585,882,000 \text{ ft}^2$

$585,882,000 \text{ ft}^2 / 27,878,400 \text{ ft}^2 = 21 \text{ miles}^2$

$21 \text{ miles}^2 / 20,000 \text{ miles}^2 = .001$

1% of Service Territory space needed to equal power of Crystal River Nuclear Plant 3

At the very least, the opportunity to offset a main station base load resource makes sense from reducing the peak load demand during the day-time hours, decreasing the need for new power lines over time, and the national security benefits from distributed generation. Progress Energy, its customers, and the public as a whole would reap these benefits.

Thank you for your consideration of this important issue to Floridians.

Sincerely,

Charles C. Alton