

May 22, 2015

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**Re: Comments on Turkey Point Expansion, NRC-2009-0337, 2009-02417 (SP-MLC)**

Dear Ms. Bladey and Ms. Clouser,

Please consider these comments from the Southern Alliance for Clean Energy (SACE) on the U.S. Nuclear Regulatory Commission's (NRC) Draft Environmental Impact Statement (DEIS) for Combined Licenses (COLs) for Turkey Point Units 6 & 7, Docket ID NRC-2009-0337, and as publicly noticed by the U.S. Army Corps of Engineers (USACE), 2009-02417 (SP-MLC). SACE is a regional non-profit organization with members in Florida, in FPL's service region, and across the Southeast concerned about the impacts energy choices have on our health, economy and environment.

We continue to have serious concerns about FPL's proposal to potentially build two new Toshiba-Westinghouse AP1000 reactors at their existing Turkey Point site in Miami-Dade County. The uncertainties of this more than \$20 billion, decade-delayed project continue to escalate, putting utility ratepayers and the environment at increasing risk. Fundamentally, there is no purpose and need for the two reactors.

Further, if the expansion of Turkey Point does occur, it could have profound and unacceptable environmental impacts to regional water resources, Biscayne and Everglades National Parks, wildlife, wetlands and threaten public health and safety. There are more affordable, less water-intensive ways for FPL to meet energy demand<sup>1</sup> while protecting the environment and addressing climate change. SACE believes that the DEIS fails to adequately discuss and analyze these potentially adverse impacts and insufficient proposals for mitigation. As such, we recommend that the NRC and USACE support the "No Action" alternative.

<sup>1</sup> See [http://www.cleanenergy.org/wp-content/uploads/F\\_SACE\\_CleanenergysolutionstoTurkeyPtreactors\\_040915.pdf](http://www.cleanenergy.org/wp-content/uploads/F_SACE_CleanenergysolutionstoTurkeyPtreactors_040915.pdf).

Our comments focus on the need for power and the NRC's misplaced reliance on Florida's need determination process, water impacts including groundwater and cooling water concerns, speculative mitigation concerns, highly radioactive nuclear waste and public notification and accessibility concerns. These comments are in addition to the oral comments SACE Florida Policy Attorney George Cavros provided at the NRC's April 22, 2015 public hearing in Miami.<sup>2</sup>

### **Need for Power**

The NRC's reliance on the Florida need determination process is misplaced. The foundation for the need for power, which is a foundational consideration in the DEIS, is based on a 2008 state need determination order by the Florida Public Service Commission (PSC), whose underlying assumptions have been not stood the test of time. In fact, the load forecast assumptions made in 2008 regarding the need for the reactors to meet demand bear no resemblance to today's load forecast realities. Moreover, the NRC analysis of the need determination order is cursory and not weighed against current forecast realities to determine if the process meets the NRC's own requirements (NUREG-1455) for responsiveness to forecasting uncertainty.

Instead, the NRC offers a conclusory opinion with mere references to the order that are not independently verified by FPL's own subsequent filings with the Florida PSC. Therefore, the NRC should take a "hard look" at the underlying need for power by conducting an analysis of Florida regulations and the load forecasts, as they exist today, in rendering a decision on the need determination's responsiveness to load forecasting uncertainty. If it does so in a through manner, it can only conclude that the process that determined need for the plant is obsolete, not remotely responsive to load forecast uncertainty, and does not support the need for power upon which the DEIS is based.

The NRC relies exclusively on the PSC's Order No. 08-0237-FOF-EI in concluding that there is a need for power. (DEIS 8-4 – 8-12). Yet, the load projections, and the related assumption for the need for the reactors in the 2008 need determination were flat wrong. The order states, in part that "FPL's peak load is expected to increase by over 6,000 MW by the year 2020." (PSC Order 08-0237-FOF-EI p.10). In fact, the increase in peak load demand projected from the Company's 2015 Ten Year Site Plan shows that the increased peak load from 2008 to 2014 and projected peak load out to 2020 only amounts to a 3,847 MW increase in peak demand. (FPL 2015 Ten Year Site Plan, p. 42).

The order upon which the NRC relies, goes on to state the following:

[I]f load forecasts were to dramatically drop or the amount of DSM or renewable generation available were to substantially increase, the likely result would be the deferral or avoidance of some natural gas-fired power plants which have not been certified to date, *rather than the deferral* or avoidance of new nuclear base-load generation.(emphasis added). (PSC Order 08-0237-FOF-EI p.10).

Truth is, with the dramatic drop in demand, it is the proposed reactors that have been pushed back, *not* new natural gas plants. The in-service dates for Turkey Point 6 and 7 have been delayed several times. It was most recently announced that the new projected in-service dates for

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<sup>2</sup> Available at [http://www.cleanenergy.org/wp-content/uploads/F\\_SACETurkeyPointNRCDEISmtgcmnts042215.pdf](http://www.cleanenergy.org/wp-content/uploads/F_SACETurkeyPointNRCDEISmtgcmnts042215.pdf).

the reactors is 2027/2028.<sup>3</sup> The determination of need never contemplated an in-service date pushed back almost a decade. (PSC Order 08-0237-FOF-EI p.1).

In the absence of the proposed reactors, the Company has continued to repower existing natural gas plants and intends to return to the PSC for another determination of need for a natural gas combined cycle plant this year with a projected in-service date of 2019. (FPL 2015 Ten Year Site Plan, p. 9). There is no discussion of this new dynamic in the DEIS.

The DEIS continues to be riddled with inaccuracies. It states that FPL is expected to fall below the 20 percent summer reserve margin requirement in 2016 by 824 MW. By 2022, the projected year referenced in the DEIS during which Unit 6 might become operational, the reserve margin would be 5.4 percent. (DEIS 8-9). This is simply incorrect and not consistent with FPL's 2015 Ten Year Site Plan and further indicates the NRC's careless analysis of PSC Order 08-0237-FOF-EI against the realities that exist in Florida today. Moreover, the NRC inexplicably shifts its focus from the 2018/2020 timeframe (in service dates used in the need determination) to a 2022 timeframe without any explanation of how it transitioned to that year nor why it failed to incorporate the most recent projected operation dates of 2027/28. (DEIS 8-9). The DEIS must analyze its conclusion that there is a need for power in the context of the FPL's current resource planning scenario as identified in its 2015 Ten Year Site Plan.

The DEIS does not directly address the fact that FPL has currently missed the projected in service dates by almost a decade, nor does it address the issue that the utility continues to not commit to actually construct the proposed reactors<sup>4</sup> and simply continues to seek determinations of need for natural gas combined cycle facilities that were not contemplated in the very PSC order on which the NRC places its reliance.

Not only have the facts today proven that the Turkey Point 6 and 7 need determination is not responsive to forecast uncertainty, as a matter of law, once the order is issued, it cannot be revisited – rendering any decision related to need unresponsive to load forecast uncertainty. The Florida PSC is the sole forum for a determination of need as plainly stated in Florida statute.

In making its determination on a proposed electrical power plant using nuclear materials or synthesis gas produced by integrated gasification combined cycle power plant as fuel, the commission shall hold a hearing within 90 days after the filing of the petition to determine need and shall issue an order granting or denying the petition within 135 days after the date of the filing of the petition. The commission shall be the sole forum for the determination of this matter and the issues addressed in the petition, which accordingly *shall not be reviewed in any other forum*, or in the review of proceedings in such other forum. (emphasis added).

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<sup>3</sup> FPL Press Release, January 26, 2015. At <http://newsroom.fpl.com/2015-01-26-FPL-announces-plans-to-install-more-than-1-million-solar-panels-at-three-additional-solar-power-plants-as-part-of-continued-strategy-of-advancing-affordable-clean-energy-in-Florida>. And FPL testimony from Richard O. Brown filed on May 1, 2015 with the Florida Public Service Commission, Docket No. 150009, p. 17, states: "...the in-service dates of Turkey Point 6 & 7 utilized in the 2015 feasibility analyses are changed from 2022 and 2023 to 2027 and 2028. These dates represent the earliest practical deployment date for Turkey Point 6 & 7." At <http://www.psc.state.fl.us/library/FILINGS/15/02473-15/02473-15.pdf>.

<sup>4</sup> Florida Public Service Commission, Docket No. 130009, Hearing Transcript Volume 3, p. 617.

(§403.519 (3), Fla. Stat.)

Hence, pursuant to the need determination process, the need for the Turkey Point reactors cannot be challenged or revisited once the order has been issued. Therefore, if the PSC grants a determination of need based on economic conditions which are no longer relevant, and the need determination cannot be revisited, it begs the question: how can the NRC reach its tersely explained conclusion that the need determination process *is* responsive to load forecast uncertainty, when it is in-fact not? The NRC's reliance on the state process is misplaced. The agency must take a hard look at the need for power.

### **Water Impacts**

The region surrounding the Turkey Point nuclear plant is an extremely complex and sensitive hydrological environment that is only becoming more complicated as human populations increase and the effects of global climate change emerge, including sea level rise. The history of the Everglades and the current costly restoration projects illustrate the long-term shortsightedness that has scarred Florida's waterways. When comparing types of energy generation, nuclear power has higher rates of both water withdrawal and consumption than traditional coal and natural gas and far more than renewable energy sources, such as wind and solar. Additionally, energy efficiency has the added benefit of substantially reducing energy needs, while simultaneously reducing water consumption.

As we see FPL's projected figures for water demand increase for thermoelectric power generation, the NRC needs to fully evaluate current information about less water intensive energy alternatives, efficiency and renewables, including using a combination of these energy options. The NRC also needs to better analyze the impacts such a drastic increase in water demand from the power sector could cause to this area.

### **Cooling Water Concerns**

The NRC is aware that FPL has been experiencing significant problems related to cooling water and the cooling canal system (CCS) needed for their existing Turkey Point 3 and 4 reactors. Further, on March 23, 2015 an Atomic Safety and Licensing Board panel admitted a modified contention, based on the October 14, 2014 petition of Citizens Allied for Safe Energy, Inc. (CASE) who successfully requested a hearing on license amendments issued to FPL's Turkey Point reactor Units 3 and 4, which increased the ultimate heat sink (UHS) water temperature limit for the plant's cooling canal system (CCS). Contention 1, which is still pending, states: "The NRC's environmental assessment, in support of its finding of no significant impact related to the 2014 Turkey Point Units 3 and 4 license amendments, does not adequately address the impact of increased temperature and salinity in the CCS on saltwater intrusion arising from (1) migration out of the CCS; and (2) the withdrawal of fresh water from surrounding aquifers to mitigate conditions within the CCS."<sup>5</sup>

We believe there is new information regarding reactor Units 3 and 4 that affects the analysis and/or determinations in the DEIS for reactor Units 6 and 7. The NRC has a continuing obligation to update the Turkey Point 6 and 7 EIS with new and significant information and that

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<sup>5</sup> See March 23, 2015 ASLBP Memorandum and Order, <http://pbadupws.nrc.gov/docs/ML1508/ML15082A197.pdf>.

information must be included and analyzed before an FEIS is issued.

For instance, recent reports highlight an ever-worsening situation that could have implications for the proposed Turkey Point 6 and 7 reactors, including the possibility of piping reclaimed water from the Miami Dade County's southern sewer treatment plant which was also proposed to cool the two proposed new reactors:<sup>6</sup>

*“The utility obtained an emergency permit Tuesday from the South Florida Water Management District to pump more water into the 5,900-acre loop used to cool the plant’s two nuclear reactors. But Miami-Dade County Commissioners added a strict caveat: they agreed to provide a permit to pump the water across sensitive wetlands only for a year and only if the utility comes up with a long-term fix. ...*

*The canals first began running hot last summer after the utility completed work to increase power coming from the plant on southern Biscayne Bay. The hotter and increasingly saltier canals triggered persistent algae blooms, threatened to shut down the reactors and forced the utility to scramble to find ways to better control the system.*

*But finding a solution has proved tricky and set off debates over South Florida’s fragile water supply, with the county, the city of Miami, Biscayne National Park, environmentalists and even rock miners raising objections.*

*In addition to raising the risk of power outages, the canals have pushed an underground saltwater plume closer to drinking water supplies.*

*Last summer, after the Nuclear Regulatory Commission agreed to allow operating temperatures to rise to 104 degrees, the hottest in the nation, FPL began looking for water to cool and freshen the canals. The company won temporary permission to pull water from the nearby L-31 canal — between August and October, the utility pumped 1,135 million gallons or about four times what all of Miami-Dade County uses in a day. The utility hoped to find a more permanent solution by drilling six new wells to pump up to 14 million gallons of water a day from the Floridan aquifer, a source deep beneath the shallow Biscayne Aquifer that supplies most of the county’s drinking water.*

*But local government officials and environmental groups have fought FPL’s plans, filing appeals and arguing that diverting water to the plant could derail Everglades restoration efforts intended to revive Biscayne Bay, where increasing salinity threatens marine life. County staff also said adding freshwater could also worsen the movement of underground saltwater. ...*

*Pulling water from the L-31, he explained, is intended to keep the canals working only until six wells can be drilled to pump water from the Floridan for long-term relief. FPL is also now talking with the county about piping reclaimed water from the county’s southern sewer treatment plant — water it also intends to use to cool two new reactors*

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<sup>6</sup> Jenny Staletovich, Miami Herald, “FPL needs more water to run Turkey Point,” May 19, 2015. At <http://www.miamiherald.com/news/local/environment/article21419787.html>.

*now being considered by the NRC. However, that water must be cleaned first and Scroggs said the utility has not yet determined the standards for its use.”*

These recent developments must be analyzed and considered prior to issuance of an FEIS.

### **Groundwater Concerns**

There are already a host of serious groundwater concerns given the complicated hydrology and hydrogeology in the surrounding area, which will be further exacerbated by increased demand for freshwater resources and the effects of climate change, particularly sea level rise. However, we would like to bring attention to the August 17, 2010 contention that SACE and other joint intervenors submitted, which was accepted in part by the Atomic Safety and Licensing Board Panel on February 28, 2011<sup>7</sup> and is still pending today.<sup>8</sup> Contention 2.1 as modified states, “The ER is deficient in concluding that the environmental impacts from FPL’s proposed deep injection wells will be “small” because the chemical concentrations in ER Rev. 3 Table 3.6-2 for ethylbenzene, heptachlor, tetrachloroethylene, and toluene may be inaccurate and unreliable. Accurate and reliable calculations of the concentrations of those chemicals in the wastewater are necessary so it might reasonably be concluded that those chemicals will not adversely impact the groundwater should they migrate from the Boulder Zone to the Upper Floridan Aquifer.”

Before issuing the FEIS, the NRC must ensure that those chemicals will not adversely impact the groundwater should they migrate from the Boulder Zone to the Upper Floridan Aquifer.

### **Speculative Mitigation Measures**

The following section includes a relevant portion of a contention SACE and other joint intervenors filed on April 13, 2015 with the NRC: “The DEIS for Turkey Point Units 6 and 7 does not comply with NEPA because its determination of the project’s environmental impacts, rejection of other project alternatives, and staff’s recommendation that the COL be issued, are based on impermissibly speculative mitigation measures, the effectiveness of which have not been adequately evaluated.”<sup>9</sup> Excerpt below:

*“Implicit in NEPA’s demand that an agency prepare a detailed statement on ‘any adverse environmental effects which cannot be avoided should the proposal be implemented,’ 42 USC 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided.” Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351-52 (1989).*

*“[M]itigation [must] be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.” Robertson, 490 U.S. at 352. As federal appellate courts have ruled, “a mere listing of mitigation measures is insufficient to qualify as the reasoned discussion*

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<sup>7</sup> See <http://pbadupws.nrc.gov/docs/ML1105/ML110591003.pdf>.

<sup>8</sup> See a discussion of the 2.1 contention in the Joint Intervenors’ Request for Leave to Respond to NRC Staff’s Answers to FPL’s Motion for Summary Disposition and Alternatively, Joint Intervenors’ Conditional Motion to Admit Second Amended Contention NEPA 2.1, August 20, 2012. At <http://pbadupws.nrc.gov/docs/ML1223/ML12233A743.pdf>.

<sup>9</sup> Joint Intervenors’ Motion for Leave to File a New Contention Concerning the NRC’s Reliance on Speculative Mitigation Measures and Failure to Adequately Examine the Effectiveness of These Proposed Mitigation Measures in the Draft Environmental Impact Statement for the Turkey Point Nuclear Power Plant Units 6 and 7, April 13, 2015. At <http://pbadupws.nrc.gov/docs/ML1510/ML15103A491.pdf>.

required by NEPA.” *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998) (quotation marks and citation omitted). An EIS involving mitigation must include a “serious and thorough evaluation of environmental mitigation options.” *O’Reilly v. United States Army Corps of Engineers*, 477 F.3d 225 (5th Cir. 2007)(quoting *Miss. River Basin Alliance v. Westphal*, 230 F.3d 170, 178 (5th Cir. 2000)). Moreover, “[a]n essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective.” *S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dep’t of Interior*, 588 F.3d 718, 727 (9th Cir. 2009).

The DEIS is deficient because it merely lists “potential” and “possible” mitigation measures for terrestrial impacts (including impacts to wetlands) and does not adequately examine the effectiveness of these measures in offsetting the impacts of the proposed project. See DEIS at 4-3, 4-69-4-72. The NRC assigns an impact category level- SMALL, MODERATE, or LARGE- of potential adverse impacts for each resource area. DEIS at 4-3. This determination of the impact category levels “is based on the assumption” that the mitigation measures are implemented. DEIS at 4-3. The “possible mitigation of adverse impacts” is presented in Section 4.11. DEIS at 4-3. A number of “proposed mitigation efforts” are identified including mitigation banks, an in-lieu fee program, or permittee responsible mitigation. DEIS at 10-6. The DEIS, however, does not adequately evaluate how these programs may or may not offset the expected impacts. In fact, it is not clear what combination or suite of measures will be implemented, considering for example that proposed mitigation options such as the NPS Hole-in-the Donut Mitigation Bank is not a federally approved mitigation bank or in-lieu-fee program for the U.S. Army Corps of Engineers. DEIS at 4-71. In fact, the NRC repeatedly states that the proposed mitigation measures have not even been evaluated by the United States Army Corps of Engineers because the applicant has not been able to demonstrate at this time that wetland impacts have been avoided and minimized pursuant to the Clean Water Act’s section 404(b)(1) guidelines. See DEIS pages 4-69, 4-70, 4-73. The Corps’ evaluation of the proposed mitigation is expected to be made as part of the Corps’ Record of Decision, which will not be made until after the final EIS has been issued. DEIS at 4-2. Moreover, the NRC notes that the further mitigation for impacts to wetlands and listed species may be required. See DEIS at 4-72.

Despite the absence of any real analysis regarding the effectiveness of these “possible” or “proposed” mitigation measures, the DEIS assigns an impact category to terrestrial and wetland ecology impacts and concludes with the NRC staff’s preliminary recommendation to the Commission that the COL should be issued based on the “potential mitigation measures” identified in the Environmental Report and the DEIS. DEIS at 10-28.

NEPA requires more. The Court’s decision in *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372 (9th Cir. 1998) is instructive. In that case, the Forest Service identified certain proposed mitigation measures to offset the damage of increased sediment in creeks caused by a timber sale. The Forest Service described the mitigation as including “such projects as riparian enclosures (fences around riparian areas to keep cattle out) and fish passage restoration (removing fish passage blockages).” *Id.* at 1380. There was no discussion of which of the mitigation measures would decrease sedimentation and there was no estimate of how effective the mitigation measures would be if they were adopted or why an estimate was otherwise not possible. *Id.* at 1381. The Court found the Forest Service’s analysis insufficient

*under NEPA. Id. at 1380. Cf. Okanogan Highlands Alliance v. Williams, 236 F.3d 468, 473-74 (9th Cir. 2000) (finding the agency's discussion of mitigating measures adequate where among other things the agency gave an effectiveness rating to each proposed mitigation measure).*

*Here, the closest the NRC comes to discussing the effectiveness of the proposed wetland mitigation is listing mitigation units calculated by the applicant under the state's Uniform Mitigation Assessment Method ("UMAM") for each of the proposed mitigation measures. But the DEIS does not discuss whether, why, and how these measures will adequately offset the projected wetland loss. There is also no explanation of why the expected 1:1 mitigation ratio is adequate. In fact, the NRC concedes that the Corps has not even reviewed and verified the applicant's proposed measures. Presumably this will occur in the future as part of the Corps' ROD on the applicant's permit application under the Clean Water Act. Agencies cannot rely on untested mitigation measures and bald assertions that mitigation will be successful and adequate. See Wyoming Outdoor Council v. U.S. Army Corps of Eng'rs, 351 F.Supp.2d 1232 (D. Wyo. 2005). That the effectiveness of the mitigation measures must be fully evaluated before a final EIS is issued is underscored by the quality and extent of wetlands that will be impacted by this project<sup>10</sup> and the inherent uncertainty of the NRC's "MODERATE to LARGE" impact determination for terrestrial and wetland ecology impacts.<sup>11</sup> The DEIS does not contain the "serious and thorough evaluation of environmental mitigation options" that NEPA requires. O'Reilly, 477 F.3d 225.*

*Thus, it is entirely premature and inappropriate for the NRC to issue a DEIS, assign an impacts analysis to each affected resource, reject other project alternatives, and issue a preliminary recommendation that a COL should be issued, before the effectiveness of mitigation measures are evaluated. "[T]he very purpose of NEPA's requirement that an EIS be prepared for all actions that may significantly affect the environment is to obviate the need for []speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action." Foundation for N. Am. Wild Sheep v. U.S. Dep't of Agric., 681 F.2d 1172, 1179 (9th Cir. 1982). See also, Cabinet Res. Group v. U.S. Fish and Wildlife Serv., 465 F.Supp.2d 1067, 1100 (D. Mt. 2006) (finding that agency's failure "to attempt any assessment of the importance of the missing information calls into question the validity of the [agency's] conclusions about the impacts of the proposed action" and setting aside the EIS).*

*Given that the U.S. Army Corps of Engineers is a "cooperating agency" and will be relying in large part on this EIS to satisfy its NEPA obligations with respect to whether to issue a permit*

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<sup>10</sup> See DEIS at 1-1 explaining that FPL's permit application to the U.S. Army Corps of Engineers requests authorization to discharge fill into approximately 1,000 acres of jurisdictional wetlands. One of these wetlands is an area known as "Mud Island," which is a special aquatic site according to the 404(b)(1) Guidelines because it has "special ecological characteristics that significantly influence or positively contribute to the general overall environmental health or vitality of the entire ecosystem of a region." DEIS at 4-6.

<sup>11</sup> The NRC staff concludes that the overall cumulative impacts on terrestrial resources in the geographic area of interest from past, present, and reasonably foreseeable future actions would be MODERATE to LARGE. "A range is provided because of the review team's uncertainty about the possible effects from the complex interplay of habitat losses from building proposed Units 6 & 7 facilities; habitat loss and degradation from past, ongoing, and anticipated regional land development; the sensitivity of terrestrial habitats in the region to hydrological changes; the number and distribution of Federally-and State listed species present in the region; the presence of two national parks and numerous other conservation lands in the area, and the uncertainty with respect to success of CERP." DEIS at 7-21.

*under section 404 of the Clean Water Act, makes it all the more reason why this analysis needs to be included in the DEIS and not part of some future decision-making process. The NRC cannot delegate its NEPA responsibilities by deferring to the U.S. Army Corps of Engineers to evaluate the “possible” or “potential” mitigation measures at some later date as part of its separate review process under the Clean Water Act. See Idaho v. Interstate Commerce Comm’n., 35 F.3d 585, 595 (D.C. Cir. 1994) (citing Calvert Cliff’s Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n., 449 F.2d 1109, 1122-25 (D.C. Cir. 1971)). See also, South Fork Band Council v. U.S. Dept. of Interior, 588 F.3d 718, 726 (9th Cir. 2009) (finding that a non-NEPA document cannot satisfy a federal agency’s obligations under NEPA).*

*“NEPA emphasizes the importance of coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989). As the Supreme Court explained in Robertson v. Methow Valley, NEPA requires agencies to study the environmental impacts of their decisions so they “will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast.” Accordingly, the DEIS must include more than a simple listing of “possible” or “potential” mitigation measures and explain in sufficient detail how mitigation measures will effectively offset the anticipated impacts of the proposed project. To allow the NRC staff to defer to the Corps to evaluate the proposed mitigation until after an FEIS is issued, contravenes the very purpose of NEPA and should be prohibited.*

### **Highly Radioactive Spent Nuclear Fuel**

More operating nuclear reactors at Turkey Point will produce more long-lived, highly radioactive nuclear waste in the form of spent nuclear fuel for which no safe storage and long-term management yet exists. Coupled with the high vulnerability of this area to sea level rise and severe storm surges from extreme weather events, which will increase from the effects of global climate change, the DEIS is deficient in assessing the impacts to the environment and public health and safety of indefinite on-site, long-term, potentially permanent, storage of this nuclear waste. Having such a large amount of radioactivity clustered in a population-dense, hurricane-prone area could create significant safety and health concerns for Floridians. The NRC must address these cumulative impacts

Please note that the following section includes a relevant portion of a contention SACE filed with the NRC on April 13, 2015, which we believe is pertinent to raise in our comments on the DEIS: “The DEIS for Turkey Point Units 6 and 7 is inadequate to satisfy NEPA because (at pages 6-14 – 6-16) it incorporates by reference the generic conclusions of the Continued Spent Fuel Storage Rule and GEIS.”<sup>12</sup> Excerpt below:

*The Continued Spent Fuel Storage Rule and GEIS, in turn, suffer from numerous failures enumerated in SACE’s comments on the Rule and GEIS:*

- *In blatant violation of NEPA and the Court’s decision in New York I, the Continued Spent*

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<sup>12</sup> Southern Alliance for Clean Energy Motion for Leave to File a New Contention Concerning Reliance by Turkey Point Draft Environmental Impact Statement on the Continued Spent Fuel Storage Rule, April 13, 2015. At <http://pbadupws.nrc.gov/docs/ML1510/ML15103A468.pdf>.

*Fuel Storage GEIS fails to examine the probability and consequences of failure to site a repository. Instead of examining the risk of failing to site a repository, the GEIS rationalizes the risk away, by arbitrarily assuming that spent fuel will be protected by “institutional controls” for an infinite period of time at reactor sites. This assumption is not only absurd and inconsistent with the Nuclear Waste Policy Act (“NWPA”), but it also defeats the Court’s purpose of forcing NRC to reckon with the environmental consequences of its failure to site a repository.*

- *The GEIS fails to acknowledge that the Continued Spent Fuel Storage Rule is a licensing action, and therefore it distorts the statement of purpose and need for the rule as relating to administrative rather than environmental concerns. As a result, the GEIS also mischaracterizes the alternatives that must be considered. Instead of evaluating alternatives related to storage and disposal of spent fuel, the GEIS examines alternatives related to the administrative question of how to prepare an EIS. The result is a farcical cost-benefit analysis that utterly fails to address alternatives for avoiding or mitigating the environmental impacts of storing spent fuel or siting a repository.*
- *The GEIS’ analysis of the environmental impacts of extended spent fuel storage ignores the fact that NRC knows very little about the behavior of spent fuel in long-term or indefinite storage conditions, especially the potentially significant effects of long-term dry cask storage on high burnup fuel integrity. In violation of NEPA, the NRC makes no attempt to quantify these uncertainties.*
- *The GEIS fails to fully consider the environmental impacts of spent fuel pool leaks and fires. In violation of NEPA, the GEIS relies upon incomplete data, adopts a flawed concept of risk, ignores a range of causes for accidents, and fails to assess certain site specific features that could increase the impacts of a leak or fire.*
- *In violation of NEPA, the GEIS makes no attempt to show how the environmental impacts associated with the Continued Spent Fuel Storage Rule will be quantified and incorporated into cost-benefit analyses for nuclear reactors. Although spent fuel disposal and long-term storage costs are high enough to tip the balance of a cost-benefit analysis for reactor licensing away from licensing, nowhere does the NRC explain how it will take these costs into account in reactor licensing decisions.*
- *In violation of NEPA, the GEIS fails to support the limited conclusions in the Continued Spent Fuel Storage Rule and GEIS regarding the technical feasibility of spent fuel disposal.*
- *The NRC has splintered the analysis of environmental impacts associated with storage and disposal of spent fuel into an array of safety findings and environmental analyses. While the issues covered by these separate findings and analyses overlap and involve cumulative impacts, the NRC refuses to integrate them. The NRC also refuses to correct inconsistencies between them.*

### **Public Accessibility and Notification Concerns**

We believe it is important to mention problems experienced with public accessibility and public notifications associated with the release of the DEIS and related public hearings. Initially there were discrepancies in the meeting times for the afternoon public meeting in Homestead, Florida on April 23, 2015 – both on the NRC’s website and in NRC public meeting notices. There were also different email and mailing addresses to submit public comments to the NRC as listed in separate NRC public notices that were also different than what was listed in the Federal Register

Notice. There was also a problem with the DEIS itself in that hyperlinks included in the DEIS were not active, yet appeared to be resulting in the reader receiving an “Authentication Required” error message. In terms of the inactive hyperlinks, we were told that it was a publication problem that occurred during the printing process, that the links were supposed to be removed before printing and that this would be resolved when the FEIS is issued.

All of this caused confusion among the public and SACE staff spent significant time researching and bringing this to the attention of NRC staff. Though NRC staff were cordial and prompt in responding to our concerns, these discrepancies should not have happened. We hope that in the future, a more thorough review process can occur before issuing such important public notices.

### **Conclusion**

Thank you for considering our comments on the DEIS. Our comments demonstrate that there are more affordable, less water-intensive ways for FPL to meet energy demand while protecting the environment and addressing global climate change. As such, there is no purpose and need for the two reactors. If pursued by FPL, the expansion of Turkey Point could have profound and unacceptable environmental impacts to regional water resources, Biscayne and Everglades National Parks, wildlife, wetlands and threaten public health and safety.

SACE believes that the DEIS fails to adequately discuss and analyze these potentially adverse impacts and includes insufficient proposals for mitigation. We do not support the issuance of COLs for Turkey Point reactor Units 6 and 7. Instead, we recommend that the NRC and USACE support the “No Action” alternative. If you have any questions or would like to further discuss our concerns, please do not hesitate to contact us.

Sincerely,  
*(Signatures waived to expedite delivery)*

Sara Barczak  
Program Director, High Risk Energy Choices

George Cavros  
Florida Policy Attorney