UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket Nos. 50-250 & 50-251
FLORIDA POWER & LIGHT COMPANY	)	ASLBP No. 18-957-01-SLR-DB01
(Turkey Point Nuclear Generating Station, Unit Nos. 3 and 4)	)	December 23, 2019
(Subsequent License Renewal Application)	)	

REPLY OF FRIENDS OF THE EARTH, NATURAL RESOURCES DEFENSE COUNCIL, AND MIAMI WATERKEEPER IN SUPPORT OF PETITION FOR REVIEW OF THE ATOMIC SAFETY AND LICENSING BOARD'S RULINGS IN LBP-19-08

Richard E. Ayres
2923 Foxhall Road, N.W.
Washington, D.C. 20016
202-722-6930
ayresr@ayreslawgroup.com
Counsel for Friends of the Earth

Kenneth J. Rumelt
Environmental Advocacy Clinic
Vermont Law School
164 Chelsea Street, PO Box 96
South Royalton, VT 05068
802-831-1031
krumelt@vermontlaw.edu
Counsel for Friends of the Earth

Geoffrey Fettus, Caroline Reiser
Natural Resources Defense Council
1152 15th Street, NW, Suite 300
Washington, DC 20005
202-289-2371
gfettus@nrdc.org
creiser@nrdc.org
Counsel for NRDC

Kelly Cox
Miami Waterkeeper
2103 Coral Way 2nd Floor
Miami, FL 33145
305-905-0856
kelly@miamiwaterkeeper.org
Counsel for Miami Waterkeeper

1. *Regarding Contention 5-Eb,* Staff and Florida Power & Light Company ("FPL") erroneously deny that Petitioners offered evidence that Turkey Point contributes to elevated ammonia levels and that crocodiles inhabit those areas, both of which are established in the record.[1] Petitioners cited a letter from Miami-Dade County explaining "that *the data supports* that the CCS[2] is a contributing source to the ammonia concentrations," and that the "statistically significant increasing trend" has "a concentration gradient *emanating from the CCS*."[3] Petitioners also showed that crocodiles "conceivably might be exposed to elevated ammonia levels"[4] through evidence in the Draft Supplemental Environmental Impact Statement ("DSEIS") that crocodiles nest on berms next to canals with elevated ammonia.[5] The Board did not "properly exclude"[6] the data from DSEIS reference documents showing where elevated ammonia has been documented and where crocodiles nest;[7] Chairman Hawkens allowed the evidence at the hearing[8] and neither Staff nor FPL moved to strike it. The Board should have sent this factual matter to a full hearing.

2. *Regarding necessity for a waiver,* the Board and FPL mistakenly assert that a waiver is

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[1] [FPL] Ans. Opposing [Petitioners'] Pet. for Review of LBP-19-8 at 6 (Dec. 13, 2019) ("FPL Br."); NRC Staff's Br. in Response to Intervenors' Petition for Review of LBP-19-8 at 16 (Dec. 13, 2019) ("NRC Br."). While both Staff and FPL uphold the Order for "carefully and thoroughly review[ing] the DSEIS's evaluation," NRC Br. 15, *see also* FPL Br. 5, at the admissibility stage the Board need only consider if Petitioners showed a genuine dispute. 10 C.F.R. § 2.309(f)(1).

[2] "Cooling canal system."

[3] Letter from Wilbur Mayorga (Miami-Dade Cnty., Division of Envr. Resources Management) to Matthew J. Raffenberg (Applicant) (July 10, 2018) (DSEIS cites as MDC 2018a) (emphasis added). *Compare with* FPL Br. 7, 8 n.39. While FPL now discounts this letter, FPL previously relied on it to assert the DSEIS "recogniz[es] Turkey Point as a possible source of ammonia." FPL's Motion to Dismiss [] Petitioner's Contention 5-E as Moot, at 4 (May 20, 2019) (ML19140A356).

[4] This is the standard the DSEIS claims to have used to determine which species to analyze ammonia impacts for. LBP-19-08, 90 NRC __ (slip op. at 14) (citing DSEIS at 4-62 to 4-67).

[5] The confusion FPL portrays regarding which canals are within the CCS originates from the DSEIS's inconsistent depiction of the CCS boundaries. *Compare* FPL Br. 8 *with* Biological Assessment at 28, Figure 12.

[6] FPL Br. 8.

[7] *See* [Petitioners'] Petition for Review of the [Board's] Ruling in LBP-19-08 at 4 n.16&17 (Nov. 18, 2019) ("Petition").

[8] Official Transcript of Proceedings, [FPL] Turkey Point Nuclear Generating Units 3 and 4 at 353-354 (Sept. 9, 2019) ("Tr.").

required for Contention 7-E under Limerick CLI-12-19. In CLI-12-19 the petitioner used new information in the license renewal Environmental Report to dispute the continued viability of analysis in the original license issuance Environmental Statement.[9] The Commission explained that, "if a petitioner wishes to litigate the adequacy of *a previously-conducted* [] analysis in a license renewal adjudication, a waiver [] would be required."[10] However, a "[Petitioner] may challenge the adequacy of *the new information* provided in the [] Environmental Report" without a waiver.[11] Here, Petitioners only challenge the adequacy of new information, not any previously conducted analysis.[12] Generic rulemakings are meant to "remov[e] . . . generic issues from staff review and adjudicatory resolution in individual license proceedings,"[13] not to shield the Staff's site-specific analysis in an individual license proceeding. Staff opened the door to this issue by rejecting the vetted generic analysis from the GEIS and instead conducting new site-specific analysis that has yet to be publicly scrutinized as required by NEPA. Petitioners should not be barred or forced to jump through hoops to challenge the inadequacies of this new analysis.

3. *Regarding the first Millstone factor for obtaining a waiver*, the requisite showing is that "the rule's strict application would not serve the purposes for which it was adopted."[14] To satisfy this requirement, the Board would demand proof that during the subsequent license renewal

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[9] *Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377 (2012). While the challenge in CLI-12-19 was about the exemption of site specific severe accident mitigation alternatives ("SAMA") analysis from a license renewal Environmental Report because Staff previously considered it in the license issuance Environmental Statement, the Commission liked it to a petitioner claiming new information challenges a Category 1, broadly applicable environmental finding.

[10] *Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199 (slip op. at 14) (relying on CLI-12-19).

[11] CLI-12-19, 76 NRC at 386.

[12] Contrary to FPL's argument, Petitioners do not challenge the GEIS. The DSEIS says it treats the issue as Category 1, FPL Br. 19 *citing* DSEIS at 4-2 to 4-3, but functionally treated it as Category 2 by conducting site-specific analysis. DSEIS 4-24 to 4-28. And while the DSEIS concludes the impacts will be "small" during the subsequent license renewal period, FPL Br. 19, Petitioners establish a genuine dispute with that conclusion as the site-specific measures required to reach the "small" impact level are unlikely to be successful. Petition 45.

[13] Environmental Review for Renewal of Operating Licenses, 58 Fed. Reg. 47016, 47018 (Sep. 17, 1991).

[14] *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-05-24, 62 NRC 551 (2005).

period groundwater quality impacts would be greater than "small" as determined in the GEIS—which is what the Contention itself argued.[15] Thus, under the Board's ruling, Petitioners would need a waiver in order to obtain an *opportunity* to prove the merits of a contention, but they could not get a waiver without first *proving* the merits of their contention.[16] Surely this Catch-22 cannot be the Commission's intent in its Millstone opinion.

When Staff included new, site-specific analysis on this Category 1 issue in the DSEIS it revealed that the "NEPA obligations have [*not*] been satisfied with reference to [] previously conducted environmental analysis in the GEIS,"[17] the purpose of the rule is undermined, and a second look is needed to satisfy NEPA, despite the Commission's general rule.[18]

4. *Regarding the Board denying Contentions 6-E, 8-E, and 9-E*, it ignored, overlooked, or misunderstood the evidence. The record demonstrates that the DSEIS relied on an abandoned and unreliable model[19] to conclude FPL's "freshening" effort will reduce annual average salinity levels in the CCS to 34 practical salinity units ("PSU"). FPL abandoned the model because, in its counsel's own words, the model relied on "wetter than normal" weather data that "skewed" the simulated results of freshening to show salinity would be reduced to the target level in less than a year.[20] But there are *no other modeling results* in the DSEIS showing the target will ever be met. Thus, the DSEIS lacks a reliable scientific basis to conclude "freshening" effort will succeed.

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[15] LBP-19-8 (slip op. at 30). Notably, Staff determined that groundwater quality impacts at Turkey Point are "moderate" today, but found (erroneously) that it will be "small" in the future based on site-specific remediation.
[16] *See id.* ("the purpose of the NRC's designation of 'groundwater quality degradation (plants with cooling ponds in salt marshes)' as a Category 1 issue is satisfied here unless Joint Intervenors show that new information is significant insofar as it would lead to a determination that the environmental impact during the SLR period will be greater than 'small.'").
[17] CLI-13-7, 78 NRC 199 (slip op. at 13, 16-17) ("the purpose of [Category 1 designation] then, is to reflect our view that one [] analysis [of the Category 1 issue], as a general matter, satisfies our NEPA obligation…").
[18] If, contrariwise, the Commission believes the only way to satisfy the first Millstone requirement is to show that the environmental impacts will be greater than stated in the DSEIS during the SLR period, Petitioners have done so. See [Petitioners'] Motion to Migrate Contentions & Admit New Contentions in response to [] Staff's [DSEIS], at 44-47 (June 24, 2019) ("Motion").
[19] Described as the "Tetra Tech 2014a" in the DSEIS and the "2014 Model" in the Petition.
[20] Tr. at 391:20–392:1; 428:4–25.

During oral argument, FPL's counsel referred to an "updated" version of the model[21] he contended factors in drier and hotter climatic conditions[22] and "identified [a] longer period of time would be needed . . . in the event of extended dry period or drought."[23] This alleged "updated" model and its results were not provided in the DSEIS analysis: nor was any "updated" version identified in the reference section.[24] If the Staff ever actually considered such an "updated" model or results, the record contains no evidence of it, and neither Petitioners nor the public were provided an opportunity to review them. Public scrutiny is the fundamental mechanism provided by NEPA to improve agency decisionmaking.[25] Sheltering model results from public review fundamentally corrodes the purpose and letter of NEPA.

The Board's clear error on the CCS salinity issue permeates the rest of its decision. The remaining bases for the DSEIS' CCS salinity predictions are pure speculation (*e.g.,* the presumption of compliance, regulatory oversight "provide[s] assurance that the CCS should reach" the salinity target, FPL can implement a new plan if the current one fails, etc.). There is simply no empirical evidence presented in the DSEIS to support the assertion that FPL will meet its CCS salinity target. As Petitioners explained throughout these proceedings, reliance on these assumptions and speculation do not satisfy NEPA's "hard look" standard.

The Board's criticism of Petitioners' expert Mr. Wexler's opinion and report are baffling.

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[21] Counsel stated, "I think the big problem here stems from the fact that [Petitioners' counsel] is focused on a model that has essentially been outdated or superseded." Tr. at 428:5–7. The "big problem," which is one source of the Board's error, is that the DSEIS relied on this model to conclude the "freshening" effort would reduce salinity to the target level.

[22] These are the same flaw Petitioners identified in their Motion. *See, e.g.*, Motion at 41.

[23] ML19141A047 attach. at 8-9.

[24] *See* DSEIS at 3-49 (discussing Tetra Tech 2014a) and 6-31 (reference for Tetra Tech 2014a). FPL's contrary arguments are demonstrably misleading. FPL rephrased a quote from the DSEIS to suggest "recently published modeling results" predict CCS salinity "beyond" 2017. FPL Br. 14 (emphasis added). But this modeling was a backward-looking effort to calibrate the original model to better fit measured salinity data from June 2015 to May 2017, not "beyond." FPL 2017a at 5-6; 5-35, Figure 5.2-5.

[25] *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 769 n.2 (2004); *Delaware Riverkeeper Network v. F.E.R.C.*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (an agency "must comply with principles of reasoned decisionmaking [and] NEPA's policy of public scrutiny.") (internal quotations omitted).

Petitioners presented evidence in the form of Mr. Wexler's modeling and opinions that established a genuine issue of material fact regarding FPL's plume retraction efforts. Based on this modeling, Mr. Wexler opined that FPL's current plan will not retract the hypersaline plume.[26] The Board arbitrarily rejected his opinions for two flawed reasons: (1) he "fail[ed] to acknowledge" the DSEIS's "discussion" that regulatory oversight exists; and (2) he "provide[d] no reason to conclude that Florida would refrain from modifying current requirements . . . to achieve the desired water quality goals."[27] The first reason is nonsensical since the existence of oversight is not in dispute; the science is. The second is exasperating—the Board assumes a solution exists and then admonishes Mr. Wexler for not proving the state wouldn't adopt it. The genuine dispute of material fact was not eliminated; the Board should have admitted the Contentions.

5. *Regarding these proceedings*, Petitioners are not required to prove their case in initial pleadings; only to make the Board aware that sufficient facts and opinion exist to justify further investigation.[28] Here Petitioners met the Commission's pleading requirements.[29] These proceedings "focus[ed] litigation on concrete issues, and result[ed] in a clearer, more focused record for decision."[30] A licensing board may not use the Commission's contention admissibility standards as a justification for ignoring or misconstruing evidence presented by a Petitioner.

/Signed electronically by/

	Richard E. Ayres	Geoffrey Fettus	Kelly Cox
December 23, 2019	Kenneth Rumelt	Caroline Reiser	

[26] Decl. of E.J. Wexler in Support of [Petitioners] (Jun. 28, 2019) (ML19179A314); Petition at 15-16.
[27] FPL Br. 25 (citing LBP-19-8, 90 NRC at (slip op. at 40)).
[28] *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), LBP-09-17, 70 NRC 311, 329 (2009) (citing *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-98-21, 43 N.R.C. 235, 249 (1996)).
[29] For example, FPL admits Petitioners' citation to Section IV.B of their Motion "describe[s] concerns about groundwater modeling and the NRC Staff's analysis." FPL Br. 23 n.123. Yet the Board ignores this information in its review of Contentions 6E, 8E, and 9E.
[30] *See, e.g., Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, NE), LBP-15-15, 81 NRC 598, 601 (2015) (citing "Changes to Adjudicatory Process," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004)).

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CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that, on this date, a copy of the foregoing REPLY OF FRIENDS OF THE EARTH, NATURAL RESOURCES DEFENSE COUNCIL, AND MIAMI WATERKEEPER IN SUPPORT OF PETITION FOR REVIEW OF THE ATOMIC SAFETY AND LICENSING BOARD'S RULINGS IN LBP-19-08 was served upon the Electronic Information Exchange ("EIE," the NRC's E-Filing System), in the above-captioned docket, which to the best of my knowledge resulted in transmittal of same to those on the EIE Service List for the captioned proceeding.

/s/ Caroline Reiser
Caroline Reiser
Natural Resources Defense Council
1152 15th Street, NW, Suite 300
Washington, DC 20005
202-717-2341
creiser@nrdc.org
Counsel for NRDC

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