STATE OF FLORIDA SITING BOARD

FLORIDA POWER AND LIGHT COMPANY TURKEY POINT POWER PLANT UNITS 3 – 5 MODIFICATION TO CONDITIONS OF CERTIFICATION

OGC CASE NO. 14-0510 DOAH CASE NO. 15-1559EPP

FINAL ORDER

This proceeding arose under the Florida Electrical Power Plant Siting Act (PPSA)¹ and requires the Siting Board to take action on Florida Power & Light's (FPL) application to modify Condition XII of the Conditions of Certification of the existing Site Certification for Turkey Point Power Plant Units 3, 4, and 5, located in Southeast Miami-Dade County.² The modification to Condition XII authorizes construction and operation of six new production wells to withdraw 14 million gallons per day (mgd) of Upper Floridan Aquifer (UFA) water for use in the Turkey Point cooling canal system (CCS) for salinity reduction and management purposes.

BACKGROUND

FPL filed a petition for modification of Condition XII with the Department of Environmental Protection (DEP or Department) on September 5, 2014. See Joint Ex. 2. The petition for modification sought to authorize three system improvement projects related to water use: (1) construction and operation of the new UFA production wells for

¹ Sections 403.501 et seq., Florida Statutes.

² Condition XII contain the South Florida Water Management District conditions for water use. See § 403.511, Fla. Stat. (2015) (reflecting that Site Certification is the sole license of the state and any affected agency).

use in the CCS; (2) utilization of one of the new production wells as a dual purpose well to comply with a recent order of the United States (U.S.) Nuclear Regulatory

Commission related to providing emergency cooling water supplies for the nuclear-fueled Units 3 and 4; and (3) re-allocation of authorized water withdrawn from an existing production well for Unit 5 (Well No. PW-3) as a source of process water for Units 3 and 4. See Joint Ex. 2.

On December 23, 2014, DEP issued a notice of intent to modify Condition XII to authorize the three proposed projects. All required public notices were published by FPL and DEP. DEP received three written objections to the proposed production wells to provide water for use in the CCS. No objections were raised regarding the two other FPL projects and DEP issued a final order approving those two modifications to Condition XII. See Joint Ex. 1.3 This modification proceeding involves only the proposal to construct and operate new UFA production wells to discharge water into the CCS.

Miami-Dade County, Tropical Audubon Society, Inc., and South Florida Water Management District (SFWMD) each filed notices of their intent to be parties to the modification proceeding. Miami-Dade County and Tropical Audubon Society, Inc., later voluntarily withdrew from the proceeding. Atlantic Civil, Inc. (ACI), filed a Motion to Intervene on March 24, 2015, which was denied. On April 3, 2015, ACI filed an Amended Motion to Intervene, which was granted. On October 30, 2015, ACI filed a Second Amended Motion to Intervene, which was granted over the objection of FPL.

³ Rule 62-17.211(1)(b)5, Florida Administrative Code, provides that if written objections only address a portion of the requested modification, the Department shall issue a final order approving the portion to which no objections were filed, unless that portion is substantially related to or necessary to implement the portion to which written objections were filed.

The final hearing was held on December 1-4, 2015, in Miami, Florida. No member of the public requested the opportunity to offer testimony on the proposed modification, and no written comments were received from the public. The parties were allowed to file proposed recommended orders and the Transcript of the final hearing was filed with the Division of Administrative Hearings (DOAH). On January 25, 2016, an administrative law judge (ALJ) with the DOAH submitted a Recommended Order (RO). The RO shows that copies were served on counsel for FPL and DEP. The RO also shows that it was served to counsel for the Intervenor ACI, and counsel for the SFWMD. A copy of the RO is attached hereto as Exhibit A. On February 9, the DEP filed its Exception to the RO, and ACI also filed Exceptions to the RO. FPL, DEP, and SFWMD, on February 19, filed their joint response to ACI's Exceptions.

This matter is now before the Governor and Cabinet, sitting as the State of Florida Siting Board, for final action under the PPSA, Sections 403.501 *et seq.*, Florida Statutes.

SUMMARY OF THE RECOMMENDED ORDER

In the RO, the ALJ recommended that the Siting Board enter a Final Order approving the modification as proposed by the Department on December 23, 2014, with an additional condition that was stipulated by the parties. (RO at page 24). The ALJ found that FPL provided reasonable assurance that the proposed modification would comply with all applicable water use regulatory criteria. (RO ¶¶ 55, 58-60, 67, 69, 71). The ALJ also concluded that the proposed modification met the PPSA criteria for approval in Section 403.509(3)(a) through (g). (RO ¶¶ 61, 69).

STANDARDS OF REVIEW OF DOAH RECOMMENDED ORDERS

Section 120.57(1)(I), prescribes that an agency reviewing a recommended order (here the Governor and Cabinet sitting as the Siting Board) may not reject or modify the findings of fact of an ALJ, "unless the agency first determines from a review of the entire record, and states with particularity in the order, that the findings of fact were not based on competent substantial evidence." § 120.57(1)(I), Fla. Stat. (2015); Charlotte Cnty. v. IMC Phosphates Co., 18 So. 3d 1089 (Fla. 2d DCA 2009); Wills v. Fla. Elections Comm'n, 955 So. 2d 61 (Fla. 1st DCA 2007). The term "competent substantial evidence" does not relate to the quality, character, convincing power, probative value or weight of the evidence. Rather, "competent substantial evidence" refers to the existence of some evidence (quantity) as to each essential element and as to its admissibility under legal rules of evidence. See e.g., Scholastic Book Fairs, Inc. v. Unemployment Appeals Comm'n, 671 So. 2d 287, 289 n.3 (Fla. 5th DCA 1996).

Thus the Siting Board may not reweigh the evidence presented at a DOAH final hearing, attempt to resolve conflicts therein, or judge the credibility of witnesses. See e.g., Rogers v. Dep't of Health, 920 So. 2d 27, 30 (Fla. 1st DCA 2005); Belleau v. Dep't of Envtl. Prot., 695 So. 2d 1305, 1307 (Fla. 1st DCA 1997); Dunham v. Highlands

County Sch. Bd., 652 So. 2d 894 (Fla. 2d DCA 1995). Also, the ALJ's decision to accept the testimony of one expert witness over that of another expert is an evidentiary ruling that cannot be altered by a reviewing agency, absent a complete lack of any competent substantial evidence of record supporting this decision. See e.g., Peace River/Manasota Reg'l Water Supply Auth. v. IMC Phosphates Co., 18 So. 3d 1079, 1088 (Fla. 2d DCA 2009). Therefore, if the DOAH record discloses any competent substantial evidence

supporting a challenged factual finding of the ALJ, the agency is bound by such factual finding in preparing the Final Order. See, e.g., Walker v. Bd. of Prof'l Eng'rs, 946 So. 2d 604 (Fla. 1st DCA 2006); Fla. Dep't of Corr. v. Bradley, 510 So. 2d 1122, 1123 (Fla. 1st DCA 1987). If there is competent substantial evidence to support an ALJ's findings of fact, it is irrelevant that there may also be competent substantial evidence supporting a contrary finding. See, e.g., Arand Construction Co. v. Dyer, 592 So. 2d 276, 280 (Fla. 1st DCA 1991); Conshor, Inc. v. Roberts, 498 So. 2d 622 (Fla. 1st DCA 1986). In addition, an agency has no authority to make independent or supplemental findings of fact. See, e.g., Fla. Power & Light Co. v. Siting Bd., 693 So. 2d 1025, 1026-1027 (Fla. 1st DCA 1997); North Port, Fla. v. Consol. Minerals, 645 So. 2d 485, 487 (Fla. 2d DCA 1994).

Section 120.57(1)(I), authorizes an agency to reject or modify an ALJ's conclusions of law and interpretations of administrative rules "over which it has substantive jurisdiction." See Barfield v. Dep't of Health, 805 So. 2d 1008 (Fla. 1st DCA 2001); L.B. Bryan & Co. v. Sch. Bd. of Broward County, 746 So. 2d 1194 (Fla. 1st DCA 1999); Deep Lagoon Boat Club, Ltd. v. Sheridan, 784 So. 2d 1140 (Fla. 2d DCA 2001). However, the agency should not label what is essentially an ultimate factual determination as a "conclusion of law" in order to modify or overturn what it may view as an unfavorable finding of fact. See, e.g., Stokes v. State, Bd. of Prof'l Eng'rs, 952 So. 2d 1224 (Fla. 1st DCA 2007).

Thus, the Siting Board's review of legal conclusions in a recommended order is restricted to those that concern matters within the agency's field of expertise or "substantive jurisdiction." See, e.g., Charlotte County v. IMC Phosphates Co., 18 So. 3d

1089 (Fla. 2d DCA 2009); *G.E.L. Corp. v. Dep't of Envtl. Prot.*, 875 So. 2d 1257, 1264 (Fla. 5th DCA 2004). Deference should be accorded to an agency's interpretation of statutes and rules within its regulatory jurisdiction, and such agency interpretation should not be overturned unless "clearly erroneous." *See, e.g., Falk v. Beard*, 614 So. 2d 1086, 1089 (Fla. 1993); *Dep't of Envtl. Regulation v. Goldring*, 477 So. 2d 532, 534 (Fla. 1985). Furthermore, agency interpretations of statutes and rules within their regulatory jurisdiction do not have to be the only reasonable interpretations. It is enough if such agency interpretations are "permissible" ones. *See, e.g., Suddath Van Lines, Inc. v. Dep't of Envtl. Prot.*, 668 So. 2d 209, 212 (Fla. 1st DCA 1996).

Agencies do not have jurisdiction to modify or reject rulings on the admissibility of evidence. Evidentiary rulings of the ALJ that deal with "factual issues susceptible to ordinary methods of proof that are not infused with [agency] policy considerations," are not matters over which the agency has "substantive jurisdiction." See Martuccio v. Dep't of Prof'l Regulation, 622 So. 2d 607, 609 (Fla. 1st DCA 1993); Heifetz v. Dep't of Bus. Regulation, 475 So. 2d 1277, 1281 (Fla. 1st DCA 1985); Fla. Power & Light Co. v. Siting Bd., 693 So. 2d 1025, 1028 (Fla. 1st DCA 1997). Evidentiary rulings are matters within the ALJ's sound "prerogative . . . as the finder of fact" and may not be reversed on agency review. See Martuccio, 622 So. 2d at 609.

RULINGS ON EXCEPTIONS

The case law of Florida holds that parties to formal administrative proceedings must alert reviewing agencies to any perceived defects in DOAH hearing procedures or in the findings of fact of ALJs by filing exceptions to DOAH recommended orders. See, e.g., Comm'n on Ethics v. Barker, 677 So. 2d 254, 256 (Fla. 1996); Henderson v. Dep't

of Health, Bd. of Nursing, 954 So. 2d 77 (Fla. 5th DCA 2007); Fla. Dep't of Corrs. v. Bradley, 510 So. 2d 1122, 1124 (Fla. 1st DCA 1987). Having filed no exceptions to certain findings of fact the party "has thereby expressed its agreement with, or at least waived any objection to, those findings of fact." Envtl. Coal. of Fla., Inc. v. Broward County, 586 So. 2d 1212, 1213 (Fla. 1st DCA 1991); see also Colonnade Med. Ctr., Inc. v. State of Fla., Agency for Health Care Admin., 847 So. 2d 540, 542 (Fla. 4th DCA 2003).

Limited Scope of PPSA modification

The scope of this modification proceeding is not in the nature of a challenge to the existing Site Certification (Uprate).⁴ The issue in the instant proceeding is not whether the 2008 Uprate was properly evaluated, but whether the proposed modification meets the applicable conditions for issuance. The Siting Board's review includes only that portion of the 2008 Uprate that is proposed to be modified or is affected by the modification. See Conservancy of S.W. Fla. v. G.L. Homes of Naples Assoc. II, Ltd, Case No. 06-4922 ¶109 (DOAH May 15, 2007; SFWMD July 18, 2007). It is well established that a modification does not burden the applicant with providing "reasonable assurances" anew with respect to the original permit. See Friends of the Everglades v. Dep't of Envtl. Regulation, 496 So. 2d 181, 183 (Fla. 1st DCA 1986) (reflecting that the agency's interpretation of the scope of a modification application was a permissible one). This modification proceeding is limited to whether the application to modify Condition XII meets the applicable water use regulatory criteria and PPSA

⁴ See In Re: Fla. Power & Light Co. Turkey Point Unit 3 and 4 Uprate Power Plant Siting Application No. PA74-02, Case No. 08-0378EPP (Fla. DEP October 29, 2008).

criteria. Similarly, standing is based upon whether there is sufficient evidence to demonstrate that, if the adverse impacts of the proposed modification were proven,⁵ ACI's substantial interests would be affected by the final agency action.

The ALJ found that FPL provided reasonable assurance that the proposed modification would comply with all applicable water use regulatory criteria. (RO ¶¶ 55, 58-60, 67, 69, 71). The ALJ also concluded that the proposed modification met the PPSA criteria for approval in Section 403.509(3)(a) through (g). (RO ¶¶ 61, 69). In addition, as the ALJ pointed out in paragraph 73, this modification proceeding is not an enforcement proceeding.

Therefore, based on the foregoing reasons, paragraphs 63 and 64 of the Final Order are amended as follows:

63. ACI has standing in this proceeding because the alleged potential harm encompasses legal uses of the water resource, like ACI's uses, that could be affected by the addition of 14 mgd of water to the CSS. ACI alleges the modification will interfere with its legal use of groundwater, and that saline intrusion from the proposed modification would degrade the water quality of the Biscayne Aquifer which they use for industrial purposes.

64. Respondents cite Agrico v. Department of Environmental Regulation, 406 So. 2d 478, 482 (Fla. 2d DCA 1981), in support of their argument that ACI has not demonstrated standing because the proposed modification does not present an immediate threat to ACI's property. ACI contends that the proposed modification will exert a greater westward push on the hypersaline plume towards ACI's property. The injury to ACI is immediate in the sense that it is predictable based on current conditions, as affected by the proposed modification, and does not require the occurrence of other intervening events or forces.

⁵ The ALJ found that while "ACI contends the FPL proposal would worsen groundwater conditions ... ACI's exhibits 38, 39, 42, 51, and 63 appear to support Respondents' contention that the FPL proposal would slow the rate of saltwater intrusion." (RO ¶ 54).

ACI's Exceptions

Exception No. 1

ACI takes exception to paragraph 28 of the RO, where the ALJ found that ACI did not refute FPL's evidence "that elimination of the thermal output from Unit 2 offset the thermal output from the uprate of Units 3 and 4, so that the total thermal output is now about four percent less." (RO ¶ 28). The competent substantial evidence that supports this finding was in the form of expert testimony from an FPL witness (Scroggs, T. Vol. I, p. 54, lines 4-10). ACI argues that the ALJ's finding "should be rejected and modified to find that operation of Units 3 and 4 in their uprated conditions have been the primary cause of increased average temperature and salinity in the CCS since 2011." See ACI's Exceptions at pages 6-7. However, ACI did not take exception to paragraph 29 where the ALJ found that "the recent spike in salinity and the relative influence of contributing factors shows it is a complex subject . . ." See Envtl. Coal. Of Fla., Inc. v. Broward County, 586 So. 2d 1212, 1213 (Fla. 1st DCA 1991) (Having filed no exceptions to certain findings of fact the party "has thereby expressed its agreement with, or at least waived any objection to, those findings of fact."). ACI argues that there's a difference between the testimony of FPL's witness and the ALJ's description of it, and that the testimony of ACI's witness should be accepted. See ACI's Exceptions at pages 4-7. Thus, ACI wants the Siting Board to reweigh the evidence and make additional findings of fact.

As outlined in the standard of review, the Siting Board may not reweigh the evidence, attempt to resolve conflicts therein, or judge the credibility of witnesses. See e.g., Rogers v. Dep't of Health, 920 So. 2d 27, 30 (Fla. 1st DCA 2005). Also, the ALJ's

decision to accept the testimony of one expert witness over that of another expert is an evidentiary ruling that cannot be altered by a reviewing agency, absent a complete lack of any competent substantial evidence of record supporting the decision. See e.g., Peace River/Manasota Reg'l Water Supply Auth. V. IMC Phosphates Co., 18 So. 3d 1079, 1088 (Fla. 2d DCA 2009). In addition, the Siting Board has no authority to make independent or supplemental findings of fact. See, e.g., Fla. Power & Light Co. v. Siting Bd., 693 So. 2d 1025, 1026-1027 (Fla. 1st DCA 1997).

Therefore, based on the foregoing reasons, ACI's Exception No. 1 is denied.

Exception No. 2

ACI takes exception to paragraphs 49 and 50 of the RO, on the basis that "[n]o expert for any party" testified that the hypersaline plume would freshen, shrink, and eventually disappear. See ACI's Exceptions at page 7. ACI also argues the phrase "eventually disappear" overlooks or misstates the collective expert opinions offered by all parties in the final hearing. See ACI's Exceptions at page 7.

Contrary to ACI's argument, paragraph 49 (reflecting that FPL presented evidence to show "that the hypersaline plume would begin to shrink and eventually disappear") and paragraph 50 (reflecting that "the [FPL] model's prediction that groundwater in the area would steadily freshen and the hypersaline plume would shrink and eventually disappear"), are fully supported by the testimony of FPL's expert groundwater modeling witness, Peter Andersen (Andersen, T. Vol. II, p. 136, lines 4-5; FPL Ex. 22). If there is competent substantial evidence to support an ALJ's findings of fact, it is irrelevant that there may also be competent substantial evidence supporting a

contrary finding. See, e.g., Arand Construction Co. v. Dyer, 592 So. 2d 276, 280 (Fla. 1st DCA 1991); Conshor, Inc. v. Roberts, 498 So. 2d 622 (Fla. 1st DCA 1986).

Therefore, based on the foregoing reasons, ACI's Exception No. 2 is denied.

Exception No. 3

ACI takes exception to paragraph 68 of the RO by arguing that it "must be rejected." See ACI's Exceptions at page 9. In paragraph 68, the ALJ concluded that:

68. ACI claims in its Proposed Recommended Order that FPL failed to demonstrate a need for the amount of water it requested and did not consider mitigative measures, but these issues were not raised in ACI's amended petition to intervene.

ACI concedes that "the ALJ is correct that no specific allegation regarding FPL's failure to demonstrate an open-ended need for five billion gallons per year, and the District's failure to consider mitigative measures were not raised in those specific words in ACI's Petition." *Id.* at page 10. However, ACI asserts "that the issues were identified and raised in the proceeding" by virtue of generic references to various regulatory and statutory provisions in ACI's original and amended petitions to intervene, its [amended] statement of issues, and the prehearing stipulation. However, none of those references contain any specific allegations regarding FPL's "need" for UFA water or consideration of "mitigative measures." Thus, the ALJ's statement in paragraph 68 is accurate.

In addition, paragraph 68 is the type of evidentiary ruling of the ALJ that is not within the substantive jurisdiction of the Siting Board. Evidentiary rulings of the ALJ that deal with "factual issues susceptible to ordinary methods of proof that are not infused with [agency] policy considerations," are not matters over which the agency has "substantive jurisdiction." See Martuccio v. Dep't of Prof'l Regulation, 622 So. 2d 607,

609 (Fla. 1st DCA 1993); Fla. Power & Light Co. v. Siting Bd., 693 So .2d 1025, 1028 (Fla. 1st DCA 1997). Also, an agency has no authority to reweigh the evidence and make independent or supplemental findings of fact. *Id.*

ACI asserts that these determinations are important in evaluating whether or not the proposed use of water is a reasonable beneficial use, which is one of the water use regulatory criteria. However, ACI did not take exception to the ALJ's findings in paragraphs 60 and 61 that FPL's proposal meets all applicable water use regulatory criteria and applicable PPSA criteria. See Envtl. Coal. Of Fla., Inc. v. Broward County, 586 So. 2d 1212 (Fla. 1st DCA 1991).

Therefore, based on the foregoing reasons, ACI's Exception No. 3 is denied.

Exception No. 4

ACI takes exception to paragraph 69 of the RO, where the ALJ concluded:

69. ACI claims the proposed use of the 14 mgd of water, in contrast to the withdrawal of the water, was not properly reviewed by SFWMD under the reasonable-beneficial use criteria. However, SFWMD reviewed the proposed use of the water under the public interest test, which is consistent with its rules and practices. The FPL proposal is consistent with the public interest because it would likely improve current groundwater conditions. It would also reduce water temperature in the CCS to avoid the shutdown of the nuclear generating units pursuant to Nuclear Regulatory Commission requirements.

ACI contends that this conclusion constitutes an unreasonable and incorrect application of the applicable statutes and rules because under the water use permitting three-prong test in Section 373.223(1), "[a] proposed water use must be both a reasonable and beneficial use and in the public interest." See ACI's Exceptions at page 12. ACI cites to the definition of "reasonable beneficial use" in Section 373.019(16), and acknowledges

that the definition also includes that the water use must be consistent with the public interest. However, without citation to any authority, ACI argues that these are two separate and distinct public interest requirements such that the SFWMD's interpretation is unreasonable. See ACI's Exceptions at pages 12-13.

Contrary to ACI's argument the case law shows that the same evidence and analysis is frequently used to satisfy both the "consistent with the public interest" requirement that is part of the definition of "reasonable beneficial use," and the seemingly separate "consistent with the public interest" third prong of the three-prong statutory test. See, e.g., Sierra Club, Inc., et al v. Sleepy Creek Lands, LLC, Case No. 14-2608 ¶¶ 314-323, 346 (DOAH April 29, 2015; SJRWMD July 14, 2015). In this case, the ALJ found in paragraph 60 that the proposed modification met all applicable water use regulatory criteria, to which ACI did not take exception. In addition, the competent substantial record evidence also demonstrates that the SFWMD reviewed the proposed modification for compliance with the applicable reasonable-beneficial use criteria (Sunderland, T. Vol. IV, pp. 410, 430, 431-432, 440, 441, 445).

Deference should be accorded to an agency's interpretation of statutes and rules within its regulatory jurisdiction, and such agency interpretation should not be overturned unless "clearly erroneous." See, e.g., Falk v. Beard, 614 So. 2d 1086, 1089 (Fla. 1993); Dep't of Envtl. Regulation v. Goldring, 477 So. 2d 532, 534 (Fla. 1985). Furthermore, agency interpretations of statutes and rules within their regulatory jurisdiction do not have to be the only reasonable interpretations. It is enough if such agency interpretations are "permissible" ones. See, e.g., Suddath Van Lines, Inc. v. Dep't of Envtl. Prot., 668 So. 2d 209, 212 (Fla. 1st DCA 1996).

Therefore, based on the foregoing reasons, ACI's Exception No. 4 is denied.

Exception No. 5

In this exception ACI argues that paragraph 70 must be rejected because it is "directly contradicted by . . . [paragraphs] 43 and 44." See ACI's Exceptions at page 14. In making this argument ACI confuses existing conditions with the expected effects from the proposed modification. As stated above, ACI did not take exception to the ALJ's findings in paragraphs 60 and 61 that FPL's proposal meets all applicable water use regulatory criteria and applicable PPSA criteria. Likewise, paragraph 49 (reflecting that FPL presented evidence to show "that the hypersaline plume would begin to shrink and eventually disappear") and paragraph 50 (reflecting that "the [FPL] model's prediction that groundwater in the area would steadily freshen and the hypersaline plume would shrink and eventually disappear"), are fully supported by the testimony of FPL's expert groundwater modeling witness. Based upon these facts and the ALJ's conclusion that the FPL proposal will "likely improve current groundwater conditions" there is no basis to suggest that the modification is inconsistent with the industrial wastewater/NPDES permit.

For these reasons, ACI's Exception No. 5 is denied.

Exception No. 6

ACI takes exception to paragraph 71 of the RO, where the ALJ concluded that "FPL provided reasonable assurance that the proposed modification would comply with all applicable water use regulatory criteria." For the reasons outlined in the rulings on Exception Nos. 3, 4, and 5, this exception is denied.

Exception No. 7

ACI takes exception to paragraph 72 of the RO, where the ALJ states:

72. However, ACI urges the Siting Board to deny the proposed modification because ACI believes it perpetuates a problem created by the CCS and fails to prevent the eventual contamination of the groundwater resources that ACI relies on for its agricultural and mining operations. ACI does not propose a condition or conditions under which FPL's proposal could be approved.

ACI argues that paragraph 72 "somehow [improperly] places the burden on ACI to formulate conditions for the modification." See ACI's Exceptions at pages 15-17.

It is well established that once FPL provided a *prima facie* showing of "reasonable assurances," it was incumbent on ACI to present "contrary evidence of equivalent quality" to show why the proposed modification should be rejected or additional conditions imposed. *See Fla. Dep't of Transp. v. J.W.C. Co., Inc.*, 396 So. 2d 778, 789 (Fla. 1st DCA 1981); *see also* § 120.569(2)(p), Fla. Stat. (2015). The ALJ had previously concluded in paragraph 71 that "FPL provided reasonable assurances that the proposed modification would comply with all applicable water use regulatory criteria." The ALJ also found in paragraphs 60 and 61 that "FPL provided reasonable assurance that the FPL proposal meets all applicable water use regulatory criteria" and "that the record evidence supports an affirmative determination by the Siting Board regarding the certification criteria in section 403.509(3)(a) through (g)." Thus, ACI did not show why the proposed modification should be denied or additional conditions imposed.

Therefore, based on the foregoing reasons, ACI's Exception No. 7 is denied.

DEP'S Exception

DEP takes exception to paragraph 33 of the RO, where the ALJ refers to "chloride concentration" when describing how DEP classifies G-II and G-III groundwater. DEP explains that the competent substantial record evidence (Coram, T. Vol. III, p. 348, lines 4-13 and p. 359), and the classifications in Rule 62-520.410(1), Florida Administrative Code, show that the correct reference is to "total dissolved solids." This exception is granted.

CONCLUSION

The ALJ concluded that FPL provided reasonable assurance that the proposed modification would comply with all applicable water use regulatory criteria, and the PPSA criteria for approval in Section 403.509(3)(a) through (g). Thus, the ALJ recommended that the Siting Board enter a Final Order approving the modification as proposed by the Department on December 23, 2014, with the additional condition that was stipulated by the parties.

Having reviewed the matters of record and being otherwise duly advised, the Siting Board adopts the ALJ's recommendation.

It is therefore ORDERED that:

- A. The Recommended Order (Exhibit A) is adopted, except as modified by paragraphs 63 and 64, and is incorporated by reference herein.
- B. FPL's modification of Condition XII, as proposed by the Department on December 23, 2014, is APPROVED.
- C. The additional condition stipulated by the parties set forth on pages 24-25 of the Recommended Order (Exhibit A), is APPROVED.

JUDICIAL REVIEW

Any party to this proceeding has the right to seek judicial review of this Final Order pursuant to Section 120.68, Florida Statutes, by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Final Order is filed with the clerk of the Department.

DONE AND ORDERED this day of pril, 2016, in Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and constituted Cabinet meeting held on March 29, 2016.

THE GOVERNOR AND CABINET SITTING AS THE SITING BOARD

THE HONORABLE RICK SCOTT

GOVERNOR

FILING IS ACKNOWLEDGED ON THIS DATE, PURSUANT TO § 120.52, FLORIDA STATUTES, WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED.

CLERK

DATE

CERTIFICATE OF SERVICE

I CERTIFY that a copy of the foregoing Final Order has been sent by electronic

mail to:

Florida Power & Light Company

Peter Cunningham, Esquire
Gary V. Perko, Esquire
Douglas S. Roberts, Esquire
Jonathan Harrison Maurer, Esquire
Hopping Green & Sams, P.A.
P.O. Box 6526
Tallahassee, FL 32314
peterc@hgslaw.com
garyp@hgslaw.com
douglasr@hgslaw.com

Peter Cocotos, Esquire Florida Power & Light Company 215 South Monroe Street, Suite 810 Tallahassee, FL 32301 Peter cocotos@fpl.com

Atlantic Civil, Inc.

Andrew J. Baumann, Esquire
Alfred J. Malefatto, Esquire
Rachel B. Santana, Esquire
Lewis, Longman and Walker, P.A.
515 North Flagler Drive, Suite 1500
West Palm Beach, FL 33401
abaumann@llw-law.com
amalefatto@llw-law.com
rsantana@llaw-law.com

Florida Public Service Commission

Adam Teitzman, Esquire 2450 Shumard Oak Blvd. Tallahassee, FL 32399-0850 ateitzman@mypalmbeachclerk.com Department of Economic Opportunity Christina Arzillo Shideler, Esquire MSC110 107 East Madison Street

Tallahassee, FL 32399

Christina.shideler@deo.myflorida.com

Fish and Wildlife Conservation Comm.

Anthony Pinzino, Asst. Gen. Cnsl. 620 S. Meridian Street
Tallahassee, FL 32399-1600
anthony.pinzino@myfwc.com

Department of Transportation

Kimberly Menchion, Asst. Gen. Cnsl. 605 Suwannee Street, MS 58 Tallahassee, FL 32399-0450 Kimberly.Menchion@dot.state.fl.us

South Florida Water Mgt. District

Carlyn H. Kowalsky, Esquire 3301 Gun Club Road West Palm Beach, FL 33406 ckowalski@sfwmd.gov

Department of State

Deena Woodward
Division of Historical Resources
RA Gray Building, 4th Floor
500 S. Bronough Street
Tallahassee, FL 32399
Deena.woodward@dos.myflorida.com

South Florida Regional Planning Council

Sam Goren, Esquire Goren, Cherof, Doody, Ezrol 3099 E. Commercial Blvd., Suite 200 Ft. Lauderdale, FL 33308 sgoren@cityatty.com

Miami-Dade County

Abbie Raurell, Esquire 111 NW First Street, Suite 2810 Miami, FL 33128 ans1@miamidade.gov

Edwin A. Steinmeyer, Esquire Steinmeyer Fiveash, LLP 310 West College Avenue Tallahassee, FL 32301 eas@steinmeyerfiveash.com

Department of Environmental Protection

Jeffrey Brown, Deputy General Counsel
Benjamin Melnick, Assistant General Counsel
Office of General Counsel
3900 Commonwealth Boulevard, MS 35
Tallahassee, Florida 32399-3000
Jeffrey.brown@dep.state.fl.us
Benjamin.Melnick@dep.state.fl.us

and by electronic filing to:

Division of Administrative Hearings The DeSoto Building 1230 Apalachee Parkway Tallahassee, FL 32399-1550

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FRANCINE M. FFOLKES
Administrative Law Counsel

3900 Commonwealth Blvd., M.S. 35 Tallahassee, FL 32399-3000 Telephone 850/245-2242

STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

FLORIDA POWER AND LIGHT COMPANY TURKEY POINT POWER PLANT UNITS 3-5 MODIFICATION TO CONDITIONS OF CERTIFICATION Case No. 15-1559EPP

RECOMMENDED ORDER

The final hearing in this matter was held on December 1-4, 2015, in Miami, Florida, before Bram D. E. Canter, an Administrative Law Judge of the Division of Administrative Hearings ("DOAH").

APPEARANCES

For Florida Power and Light Company ("FPL"):

Peter C. Cunningham, Esquire Gary V. Perko, Esquire Douglas S. Roberts, Esquire Jonathan Harrison Maurer, Esquire Hopping, Green and Sams, P.A. Post Office Box 6526 Tallahassee, Florida 32314

Peter Cocotos, Esquire Florida Power and Light Company 215 South Monroe Street, Suite 810 Tallahassee, Florida 32301

For Department of Environmental Protection ("DEP"):

Sarah M. Doar, Esquire
Department of Environmental Protection
Office of General Counsel
Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

For South Florida Water Management District ("SFWMD"):

Carlyn H. Kowalsky, Esquire South Florida Water Management District Mail Stop Code 1410 3301 Gun Club Road West Palm Beach, Florida 33406

For Intervenor Atlantic Civil, Inc. ("ACI")

Andrew J. Baumann, Esquire
Alfred J. Malefatto, Esquire
Rachel B. Santana, Esquire
Lewis, Longman and Walker, P.A.
515 North Flagler Drive, Suite 1500
West Palm Beach, Florida 33401

STATEMENT OF THE ISSUE

The issue to be determined in this case is whether the Governor and Cabinet, in their capacity as the Siting Board and pursuant to the Florida Electrical Power Plant Siting Act ("PPSA"), should approve FPL's request to modify the Conditions of Certification for Units 3, 4, and 5 of the Turkey Point Power Plant in southeast Miami-Dade County.

PRELIMINARY STATEMENT

On September 5, 2014, FPL filed a petition with DEP pursuant to the PPSA, chapter 403, Part II, Florida Statutes, to modify the Conditions of Certification for Turkey Point Units 3, 4, and 5 to authorize three "system improvement projects," including the construction and operation of up to six new production wells to withdraw 14 million gallons per day ("mgd") of Upper Floridan Aquifer ("UFA") water for use in the Turkey Point cooling canal

system ("CCS") for salinity and temperature management purposes. On December 23, 2014, DEP issued notice of its intent to modify the Conditions of Certification to authorize the three projects proposed by FPL. All required public notices were published by FPL and DEP.

On March 19, 2015, DEP issued a final order authorizing the requested modifications for which no objections had been raised.

Miami-Dade County, Tropical Audubon Society, Inc., and SFWMD each filed notices of their intent to be parties to the modification proceeding. Miami-Dade County and Tropical Audubon Society, Inc., later voluntarily withdrew from the proceeding.

On March 24, 2015, ACI filed a Motion to Intervene, which was opposed by FPL. The motion to intervene was denied for failing to include an adequate explanation of ACI's alleged injury, but ACI was granted leave to file another motion to intervene. On April 3, 2015, ACI filed an Amended Motion to Intervene, which was granted. On October 30, 2015, ACI filed a Second Amended Motion to Intervene, which was granted over the objection of FPL.

At the final hearing, Joint Exhibits 1-6 were admitted into evidence. FPL presented the testimony of: Steven Scroggs,

Senior Director of Project Development for FPL, who was accepted as an expert in power plant engineering, design, and siting;

Peter Andersen, P.E., who was accepted as an expert in

groundwater hydrology and groundwater flow and transport modeling; and Gregory Powell, Ph.D. FPL also submitted pre-filed expert testimony of: Dr. Powell, James Andersen, Karl Bullock, Kerri Kitchen, Kennard Kosky, and James Lindsay. FPL Exhibits 1-6, 12-13, 19-22, 44, 46, 48, 54-59, and 61 were admitted into evidence.

DEP presented the testimony of: Ann Seiler, an Environmental Specialist III within DEP's Siting Coordination Office; Justin Green, a former Program Administrator for the Siting Coordination Office; and Phillip Coram, a DEP Program Administrator who was accepted as an expert in environmental engineering. DEP Exhibits 23 and 28 were admitted into evidence.

SFWMD presented the testimony of: Simon Sunderland, SFWMD's Section Leader for Lower East Coast Planning, Permitting, and Compliance; and Jefferson Giddings, a Principal Scientist at SFWMD who was accepted as an expert in groundwater modeling.

SFWMD Exhibits 1, 2, 10, and 13 were admitted into evidence.

ACI's President; Marc Harris, a DEP employee responsible for issuing National Pollution Discharge Elimination System permits for power plants; Steven Krupa, who is in charge of the hydrogeology section in the SFWMD's Water Supply Department and who was accepted as an expert in hydrogeology and geology; William Nuttle, Ph.D., who was accepted as an expert in coastal

wetlands hydrology with emphasis in the area of water and salt budgets; Elezier Wexler, who was accepted as an expert in groundwater hydrology and groundwater transport modeling; and Edward Swakon, who was accepted as an expert in groundwater resources and groundwater monitoring. ACI Exhibits 9-11, 14-16, 18, 24-26, 28, 31, 34-36, 38, 42, 48-50, 50A, 51, 52, 57, 61, 63, and 65 were admitted into evidence.

No member of the public requested the opportunity to offer testimony on the proposed modification. No written comments were received from the public.

The six-volume Transcript of the final hearing was filed with DOAH. The parties filed proposed recommended orders that were considered in the preparation of this Recommended Order.

FINDINGS OF FACT

The Parties

- 1. FPL is a subsidiary of NextEra Energy and a regulated Florida utility. It provides electric service to 4.7 million customers in 35 counties. The Turkey Point Power Plant in southeast Miami-Dade County is one of 14 generating facilities operated by FPL.
- 2. DEP is the state agency charged with administering the PPSA pursuant to chapter 403, Part II.
- 3. SFWMD is a regional agency created by chapter 373, Florida Statutes, with regulatory authority over water use

permitting within its geographic jurisdiction, which includes the Turkey Point Power Plant site.

- 4. ACI owns 2,598 acres of land in southeast Miami-Dade County approximately four miles west of the Turkey Point CCS.

 ACI has used its property for agriculture and limerock mining for many years and continues to do so.
- 5. ACI withdraws and uses water from the Biscayne Aquifer pursuant to two SFWMD water use permits. ACI also has a Life-of-the-Mine Environmental Resource Permit issued by DEP for its mining activities. The Life-of-the-Mine permit requires that mining be terminated if monitoring data indicate the occurrence of chloride concentrations greater than 250 milligrams per liter ("mg/L") in the mine pit.

The Requested Modifications

6. FPL is requesting to modify the Conditions of Certification to authorize three projects related to water use:

(1) construction and operation of the new UFA production wells for use in the CCS; (2) utilization of one of the new production wells as a dual purpose well to comply with a recent order of the U.S. Nuclear Regulatory Commission related to providing emergency cooling water supplies for the nuclear-fueled Units 3 and 4; and (3) re-allocation of authorized water withdrawn from an existing production well for Unit 5 (Well No. PW-3) as a source of process water for Units 3 and 4.

7. DEP received three written objections to the proposed production wells to provide water for use in the CCS. No objections were raised regarding the two other FPL projects and DEP issued a final order approving those two modifications. This proceeding involves only the proposal to construct and operate new UFA production wells to discharge water into the CCS.

Turkey Point

- 8. FPL's Turkey Point property covers approximately
 9,400 acres in unincorporated Miami-Dade County, located 25 miles
 south of the City of Miami and along the coastline adjacent to
 Biscayne Bay.
- 9. Five electrical generating units were built at Turkey Point. Units 1 and 2 were built in the 1960s. Unit 2 ceased operating as a power generation facility in 2010. Units 3 and 4 are Florida's first nuclear generating units, which FPL constructed in the 1970s. Unit 5 is a natural gas combined cycle generating unit brought into service in 2007.
- 10. Units 1 through 4 pre-date the PPSA and were not certified when they were built. However, Units 3 and 4 were certified pursuant to the PPSA in 2008 when FPL applied to increase their power output, referred to as an "uprate." Unit 5 was built after the PPSA and was certified under the Act.

The CCS

- 11. The Turkey Point CCS is a 5,900-acre network of canals, which provides a heat removal function for Units 1, 3, and 4, and receives cooling tower blowdown from Unit 5.
- 12. FPL constructed the CCS in compliance with a 1971 consent judgment with the U.S. Department of Justice in order to terminate direct discharges of heated water into Biscayne Bay.
- 13. The CCS is not a certified facility under the PPSA, but it is an "associated facility," which means it directly supports the operation of the power plant.
- 14. The CCS functions like a radiator, which uses evaporation, convective heat transfer, and radiated heat loss to lower the water temperature. When cooling water enters the plant, heat is transferred to the water by flow-through heat exchangers and then discharged to the "top" or northeast corner of the CCS. Circulating water pumps provide counter-clockwise flow of water from the discharge point, down (south) through the 32 westernmost canals, across the southern end of the CCS, and then back up the seven easternmost canals to the power plant intake.
- 15. The full circuit through the CCS from discharge to intake takes about 48 hours and results in a reduction in water temperature of about 10 to 15 degrees Fahrenheit.

- 16. The CCS canals are unlined, so they have a direct connection to the groundwater. Makeup water for the CCS comes from process water, rainfall, stormwater runoff, and groundwater infiltration to replace water lost by evaporation and seepage.
- 17. When the CCS was first constructed, FPL and SFWMD's predecessor, the Central and Southern Florida Flood Control District, entered into an agreement to address the operation and management of the CCS. The agreement has been updated from time to time. The original agreement and updates called for monitoring the potential impacts of the CCS.
- 18. Operation of the CCS is also subject to a state industrial wastewater permit and National Pollution Discharge Elimination System ("NPDES") permit administered by DEP. The state industrial wastewater/NPDES permit is incorporated into the Conditions of Certification.

Hypersaline Conditions

- 19. The original salinity levels in the CCS were probably the same as Biscayne Bay.
- 20. However, because the salt in saltwater is left behind when the water evaporates, the water in the CCS becomes saltier. Salinity levels in the CCS are also affected by the amount of rainfall, air temperature, water temperature, the volume of flow from the power plant, and the rate of water circulation.

- 21. In 2008, when FPL applied for certification of the uprate of Units 3 and 4, it reported average salinity to be 50 to 60 Practical Salinity Units ("PSU"). This is a "hypersaline" condition, which means the salinity level is higher than is typical for seawater, which is about 35 PSU.
- 22. Higher salinity makes water denser, so the hypersaline water in the CCS sinks beneath the canals and to the bottom of the Biscayne Aquifer, which is about 80 feet beneath the CCS. At this depth, there is a confining layer that separates the Biscayne Aquifer from the deeper Upper Floridan Aquifer. The confining layer stops the downward movement of the hypersaline "plume" and it spreads out in all directions.
- 23. The 2008 Conditions of Certification included a Section X, entitled "Surface Water, Ground Water, Ecological Monitoring," which, among other things, required FPL and SFWMD to execute a Fifth Supplemental Agreement regarding the operation and management of the CCS. New monitoring was required and FPL was to "delineate the vertical and horizontal extent of the hyper-saline plume that originates from the cooling canal system" and "detect changes in the quantity and quality of surface and ground water over time due to the cooling canal system."
- 24. In response, FPL installed 14 clusters of groundwater monitoring wells, each cluster allowing data to be collected from shallow, middle, and deep zones of the Biscayne Aquifer.

- 25. In late 2013, salinity levels in the CCS began to spike, reaching a high of 92 PSU in the summer of 2014.
- 26. FPL presented evidence to show the salinity spikes in recent years are attributable in part to lower than normal rainfall and to higher turbidity in the CCS caused by algal blooms.
- 27. In addition, the retirement of Unit 2 and the uprate of Units 3 and 4 during this time-period reduced flow and circulation in the CCS, which contributed to increased temperatures in the CCS, more evaporation, and higher salinity levels.
- 28. ACI contends the uprate of Units 3 and 4 is the primary cause of recent, higher water temperatures and higher salinity. In support, ACI points to FPL's uprate application, which predicted the uprate would increase CCS water temperature and salinity, as well as other data indicating a correlation between the uprate and higher temperature and salinity. However, the uprate application was filed before Unit 2 was decommissioned in 2010. FPL presented evidence that elimination of the thermal output from Unit 2 offset the thermal output from the uprate of Units 3 and 4, so that the total thermal output is now about four percent less. ACI did not refute this thermal output calculation.

- 29. It is undisputed that evaporation is the main cause of hypersalinity in the CCS, but the testimony about the recent spike in salinity and the relative influence of contributing factors shows it is a complex subject due to the number of factors, most of which vary by season and even daily. The relative contribution of the factors affecting salinity in the CCS is one that scientists can disagree about because the analyses that have been conducted to date are not comprehensive or meticulous enough to end reasonable disagreement.
- 30. FPL has taken action to reduce salinity within the CCS by adding stormwater from the L-31E Canal (pursuant to emergency orders), adding water from shallow saline water wells, and removing sediment build-up in the canals to improve flow. These actions, combined with more normal rainfall, have decreased salinity levels in the CCS to about 45 PSU at the time of the final hearing.

Saltwater Intrusion

- 31. Historical data shows that when the CCS was constructed in the 1970s, saltwater had already intruded inland along the coast due to water withdrawals, flood control structures, and other human activities.
- 32. An interceptor ditch was constructed just west of and adjacent to the CCS to restrict the movement of saline water west of the ditch. This was supposed to be accomplished by pumping

water out of the ditch as necessary to keep its water level lower than the water level in the more western L-31E Canal so that a hydraulic gradient toward the east was maintained.

- 33. The "front" or westernmost line of saltwater intrusion is referred to as the saline water interface. More specifically, the saline water interface is where groundwater with chloride concentration of 10,000 mg/L or greater meets groundwater with a lower chloride concentration. DEP classifies groundwater with a chloride concentration less than 10,000 mg/L as G-II groundwater, and groundwater with a chloride concentration equal to or greater than 10,000 mg/L as G-III groundwater, so the saline water interface can be described as the interface between G-II and G-III groundwaters.
- 34. In the 1980s, the saline water interface had moved just west of the CCS interceptor ditch. Now, the saline water interface is four or five miles west of the CCS, and it is still moving west.
- 35. The groundwater that comes from the CCS can be identified by its tritium content because tritium occurs in greater concentrations in CCS process water than occurs naturally in groundwater. CCS water has been detected four miles west of the CCS.

- 36. CCS saline waters have also been detected northwest of the CCS, moving in the direction of Miami-Dade County's public water supply wellfields.
- 37. The hypersaline plume pushes the saline water interface further west. Although Respondents indicated there are other factors that affect saltwater intrusion, the preponderance of the evidence shows the CCS is now the primary reason the saltwater interface in this area is continuing to move inland.
- 38. Section X of the Conditions of Certification provides that, if monitoring data indicate harm or potential harm to the waters of the State, then additional measures shall be required by DEP to evaluate or to abate such impacts. DEP determined that the CCS is harming waters of the State by contributing to saltwater intrusion. Saltwater intrusion reduces the amount of fresh groundwater available for natural resources and water users.
- 39. ACI estimated that, with each day that passes, the westward march of the saltwater interface is causing the loss of 855,000 more gallons of fresh groundwater from the Biscayne Aquifer. Even if the amount is only half as much, it is a substantial loss.
- 40. The Biscayne Aquifer is the main source of potable water in Miami-Dade County and is designated by the federal

government as a sole source aquifer under the Safe Drinking Water Act.

- 41. When FPL applied to renew its NPDES permit, DEP was concerned about the effect the CCS was having on saltwater intrusion. DEP decided to administratively extend the NPDES permit, rather than renew it, while the agency determined what action should be taken to deal with the problem.
- 42. On December 23, 2014, DEP issued an Administrative
 Order ("AO") that requires FPL to prepare and submit for review
 and approval a Salinity Management Plan to reduce hypersaline
 conditions and their effect on saline water intrusion. The AO
 was challenged in a separate administrative proceeding and is not
 yet in effect.
- 43. A DEP administrator stated that DEP has not been able to identify a specific violation of state water quality standards attributable to the CCS, but his explanation did not reconcile the undisputed evidence that the CCS has a groundwater discharge of hypersaline water that is contributing to saltwater intrusion. Florida Administrative Code Rule 62-520.400, entitled "Minimum Criteria for Ground Water," prohibits a discharge in concentrations that "impair the reasonable and beneficial use of adjacent waters."
- 44. As explained in the Conclusions of Law, this is not an enforcement proceeding. However, Respondents thought it was

relevant to assert that FPL's proposal is not a response to a water quality violation. If so, it is relevant for the Administrative Law Judge to state that the record evidence and applicable law indicate FPL is in violation of the minimum criteria for groundwater in rule 62-520.400.

Effect of the Proposed Modification on Saltwater Intrusion

- 45. Respondents emphasize that the FPL proposal is better than a "no action" alternative. However, the Conditions of Certification require FPL to take action because operation of the CCS is harming water resources. Asserting that FPL's proposal is better than taking no action is no more meaningful than asserting that FPL's proposal would be beneficial.
- 46. FPL estimated that the addition of 14 mgd of water from the UFA, which has a salinity of about 2 PSU, would reduce salinity in the CCS to the salinity in Biscayne Bay, about 35 PSU, or even lower. ACI's evidence did not refute this estimate.
- 47. Adding UFA water to the CCS would also reduce water temperatures in the CCS. That is important in order to avoid exceeding the temperature limit imposed by the Nuclear Regulatory Commission on operation of the nuclear units, Units 3 and 4. The temperature limit is 104 degrees Fahrenheit and, if exceeded, would require Units 3 and 4 to be shut down.

- 48. The FPL proposal would remove the source of the hypersaline water. Hypersaline water would no longer be sinking beneath the CCS.
- 49. FPL presented evidence to show the low saline water would begin to mix with the hypersaline water already in the Biscayne Aquifer, the groundwater in the area would steadily "freshen," and the hypersaline plume would begin to shrink and eventually disappear.
- 50. ACI pointed out that the salt in the CCS and in the Biscayne Aquifer would not disappear, but ACI did not explain the significance of that fact. ACI did not explain how the modeling efforts by FPL failed to account for salt or explain how the presence of salt undermines the model's prediction that groundwater in the area would steadily freshen and the hypersaline plume would shrink and eventually disappear.
- 51. The testimony of ACI's expert hydrologists was persuasive in showing the two-dimensional groundwater model used by FPL and SFWMD to analyze and predict the effect of adding UFA water to the CCS was not the best tool for the task. A two-dimensional model cannot account for some of the factors affecting water movement and salinity. A three-dimensional model produces more reliable results and is a better predictive tool for these purposes. Nevertheless, differences between the results obtained from the two-dimensional modeling by FPL and the

three-dimensional modeling by ACI do not affect the recommendation to the Siting Board.

- 52. FPL and SFWMD estimated that the addition of 14 mgd of water into the CCS would reduce the rate of westward movement of CCS hypersaline saline waters in the Biscayne Aquifer and this, in turn, would slow the westward movement of the saline water interface.
- 53. No party believes the FPL proposal will halt the westward movement of the saline water interface.
- 54. ACI contends the FPL proposal would worsen groundwater conditions because adding water to the CCS would increase the hydraulic "head" in the CCS and exert a greater westward push on groundwaters in the Biscayne Aquifer, and a greater push on the existing hypersaline plume. However, the water in the CCS would be less dense after the UFA water is added, which Respondents' experts said would offset the increase in volume. ACI did not show how water density was accounted for in its own analyses. In addition, ACI's Exhibits 38, 39, 42, 51, and 63 appear to support Respondents' contention that the FPL proposal would slow the rate of saltwater intrusion.
- 55. The effect of the FPL proposal on the hypersaline plume is the most difficult question in the case. The evidence presented necessarily relied on many assumptions about physical features and processes, some of which had to be simplified for

practical analysis. FPL's evidence does not create certainty, but FPL met its prima facie burden to demonstrate that the proposed water use would be consistent with the public interest because the modification would improve current groundwater conditions. ACI's evidence raises serious questions, but was not sufficient to rebut FPL's showing.

- 56. Respondents estimate that it would take about 25 years for the saline water interface to reach ACI's property if the FPL proposal is implemented.
- 57. ACI's analysis focused, instead, on the movement of an advancing contour of much lower salinity, 250 mg/L, because this lower level is a limit in ACI's permit and would disrupt ACI's mining operations. This "too saline" water will reach ACI's property in 10 years, even with the FPL proposal.

Water Use Regulatory Criteria

- 58. ACI did not raise any issues regarding FPL's compliance with SFWMD water use criteria associated with the proposed withdrawal, itself. ACI does not contend that the proposed withdrawal of 14 mgd of water from the UFA would interfere with existing legal uses, cause saltwater intrusion, harm wetlands and surface waters, or adversely affect off-site land uses.
- 59. SFWMD reviewed the proposed use of the UFA water in the CCS for consistency with the public interest and determined that

the use was consistent because it would improve current conditions in the CCS and Biscayne Aquifer.

60. FPL provided reasonable assurance that the FPL proposal meets all applicable water use regulatory criteria.

PPSA Criteria for Approval

61. For the reasons stated above, the record evidence supports an affirmative determination by the Siting Board regarding the certification criteria in section 403.509(3)(a) through (g).

CONCLUSIONS OF LAW

Standing

- 62. Section 403.508(3)(e) describes the parties to a PPSA certification proceeding as including persons whose substantial interests are affected and being determined by the proceeding and who timely file a motion to intervene.
- 63. ACI has standing in this proceeding because the Conditions of Certification acknowledge and address the potential for harm to water resources caused by the CCS. The harm encompasses legal uses of the water resources, like ACI's uses, that will be affected by the operation of the CCS.
- Regulation, 406 So. 2d 478, 482 (Fla. 2d DCA 1981), in support of their argument that ACI has not demonstrated standing because the proposed modification does not present an immediate threat to

ACI's property. The injury to ACI is immediate in the sense that it is predictable based on current conditions and does not require the occurrence of intervening events or forces. ACI's injury is no less immediate than the injury that would be suffered by anyone downstream of a pollution source, when the timing of the "impact" and the concentration of the pollution at the time of impact can be calculated by accepted scientific methods.

Burden and Standard of Proof

65. Respondents state that FPL, as the applicant for certification, has the ultimate burden of persuasion to demonstrate entitlement to the requested modifications, citing In re: Progress Energy Florida Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 at *114; and Florida Department of Transportation v. J.W.C. Co., Inc., 396 So. 2d 778, 787 (Fla. 1st DCA 1981). However, those cases pre-date the amendment of chapter 120, Florida Statutes, to create section 120.569(2)(p). This section now places the ultimate burden of persuasion on the challenger in all licensing proceedings arising under chapter 403 after the permit applicant has introduced the permit file constituting its prima facie case. This is a licensing proceeding arising under chapter 403. Therefore, ACI has the ultimate burden of persuasion in this proceeding.

evidence. See § 120.57(1)(j), Fla. Stat. (2015). FPL must demonstrate by a preponderance of the evidence that it has provided reasonable assurances of its compliance with all applicable regulatory criteria. Reasonable assurance contemplates a "substantial likelihood that the project will be successfully implemented." Metro. Dade Cnty. v. Coscan Fla., Inc., 609 So. 2d 644, 648 (Fla. 3d DCA 1992). It does not require absolute guarantees.

Nonprocedural Agency Requirements

- 67. Section 373.223(1) provides that "[t]o obtain a [water use] permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: (a) Is a reasonable-beneficial use as defined in s. 373.019; (b) Will not interfere with any presently existing legal use of water; and, (c) Is consistent with the public interest."
- 68. ACI claims in its Proposed Recommended Order that FPL failed to demonstrate a need for the amount of water it requested and did not consider mitigative measures, but these issues were not raised in ACI's amended petition to intervene.
- 69. ACI claims the proposed use of the 14 mgd of water, in contrast to the withdrawal of the water, was not properly reviewed by SFWMD under the reasonable-beneficial use criteria. However, SFWMD reviewed the proposed use of the water under the

public interest test, which is consistent with its rules and practices. The FPL proposal is consistent with the public interest because it would likely improve current groundwater conditions. It would also reduce water temperature in the CCS to avoid the shutdown of the nuclear generating units pursuant to Nuclear Regulatory Commission requirements.

- 70. FPL's proposed modification does not create any inconsistencies with the industrial wastewater/NPDES permit.
- 71. FPL provided reasonable assurance that the proposed modification would comply with all applicable water use regulatory criteria.
- 72. However, ACI urges the Siting Board to deny the proposed modification because ACI believes it perpetuates a problem created by the CCS and fails to prevent the eventual contamination of the groundwater resources that ACI relies on for its agricultural and mining operations. ACI does not propose a condition or conditions under which FPL's proposal could be approved.
- 73. ACI points out that the Conditions of Certification are "fully enforceable," but this is not an enforcement proceeding.

 Because the preponderance of the evidence demonstrates the FPL proposal would result in an improvement in groundwater conditions, the requested modification, itself, does not fail to comply with the Conditions of Certification.

74. Respondents are probably correct that, in this certification proceeding, it is sufficient for the Siting Board's approval of FPL's proposed modification that the modification would result in an improvement over current groundwater conditions. However, it is appropriate to inform the Siting Board that the operation of the Turkey Point Power Plant, as authorized by the Siting Board under the Conditions of Certification, has caused harm to water resources because of the effects of the CCS, and the modification requested by FPL will not prevent further harm from occurring.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that the Siting Board enter a final order approving the modifications to the Turkey Point Conditions of Certification as proposed on December 23, 2014, with the addition of the following condition, which was stipulated by the parties:

FPL shall monitor the proposed Floridan production wells (F-1, F-2, F-3, F-4 and F-5) on a quarterly basis for: water level or pressure; temperature; pH, Total Dissolved Solids; specific conductance; major anions/cations (including chlorides); NH3; total nitrogen; and total phosphorus. This monitoring data shall be made available to Miami-Dade County as well as FDEP and the SFWMD. On a semi-annual basis, Miami-Dade County may collect groundwater samples of the proposed Floridan production wells (F-1, F-2, F-3, F-4 and F-5) for constituents including

but not limited to 018/16 and Strontium (87Sr/86Sr).

DONE AND ENTERED this 25th day of January, 2016, in Tallahassee, Leon County, Florida.

BRAM D. E. CANTER

Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-3060
(850) 488-9675
Fax Filing (850) 921-6847
www.doah.state.fl.us

Filed with the Clerk of the Division of Administrative Hearings this 25th day of January, 2016.

COPIES FURNISHED:

Sarah M. Doar, Esquire
Department of Environmental Protection
Office of General Counsel
Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399
(eServed)

Peter C. Cunningham, Esquire Gary V. Perko, Esquire Douglas S. Roberts, Esquire Jonathan Harrison Maurer, Esquire Hopping, Green and Sams, P.A. Post Office Box 6526 Tallahassee, Florida 32314 (eServed) Peter Cocotos, Esquire Florida Power and Light Company 215 South Monroe Street, Suite 810 Tallahassee, Florida 32301 (eServed)

Carlyn H. Kowalsky, Esquire South Florida Water Management District Mail Stop Code 1410 3301 Gun Club Road West Palm Beach, Florida 33406 (eServed)

Andrew J. Baumann, Esquire
Alfred J. Malefatto, Esquire
Rachel B. Santana, Esquire
Lewis, Longman and Walker, P.A.
515 North Flagler Drive, Suite 1500
West Palm Beach, Florida 33401
(eServed)

Abbie Schwaderer Raurell, Esquire Miami-Dade County Attorney's Office 111 Northwest 1st Street, Suite 2810 Miami, Florida 33128 (eServed)

Anthony Justin Pinzino, Esquire Florida Fish and Wildlife Conservation Commission Farris Bryant Building 620 South Meridian Street Tallahassee, Florida 32399-1600 (eServed)

Adam Teitzman, Esquire Florida Public Service Commission 2450 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Samuel S. Goren, Esquire Goren, Cherof, Doody and Ezrol, P.A. 3099 East Commercial Boulevard, Suite 200 Fort Lauderdale, Florida 33308-4311 Kimberly Clark Menchion, Esquire Department of Transportation Mail Station 58 605 Suwannee Street Tallahassee, Florida 32399 (eServed)

Deena Woodward
Department of State
Division of Historical Resources
RA Gray Building, 4th Floor
500 South Bronough Street
Tallahassee, Florida 32399

Edwin A. Steinmeyer, Esquire Steinmeyer Fiveash LLP 310 West College Avenue Tallahassee, Florida 32301 (eServed)

Christina Arzillo Shideler, Esquire Department of Economic Opportunity MSC 110 107 East Madison Street Tallahassee, Florida 32399 (eServed)

Lea Crandall, Agency Clerk
Department of Environmental Protection
Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399
(eServed)

Jonathan P. Steverson, Secretary
Department of Environmental Protection
Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399
(eServed)

Craig Varn, General Counsel
Department of Environmental Protection
Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399
(eServed)

NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.