

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Environmental cost recovery clause.

DOCKET NO. 20170007-EI

DATED: November 13, 2017

**SOUTHERN ALLIANCE FOR CLEAN ENERGY'S POSTHEARING  
STATEMENT, AND FINDINGS OF FACT AND CONCLUSIONS OF LAW**

The Southern Alliance for Clean Energy ("SACE"), by and through its undersigned counsel, pursuant to Order No. PSC-2017-0106-PCO-EI as amended by the Commission on October 27, 2017, hereby submits its Post-Hearing Statement, and Findings of Fact and Conclusions of Law. References to the hearing transcript will be denoted by "T." page number. References to exhibits will be denoted as "Ex." Exhibit number, "p." page number.

**STATEMENT OF BASIC POSITION**

Florida Power and Light ("FPL") knew or should have known in 1978, or by 1992 at the latest, that its cooling canal system ("CCS") at the Turkey Point plant was causing an underground hyper-saline contamination plume spreading well beyond the CCS boundary and adversely impacting adjacent waters and the Biscayne Aquifer. FPL misled the South Florida Management District ("SFWMD") and this Commission by omitting material information on the magnitude of the adverse environmental impacts from the operation of the CCS. FPL's imprudent and negligent operation of the CCS violated drinking water standards which has led to environmental compliance requirements being placed upon it by the Department of Environmental Protection ("DEP") and Miami-Dade County to remediate the hyper-saline plume. It now seeks to recover those compliance

costs from customers – the price tag is over \$200 million. FPL customers should not have to pay for FPL’s legacy of negligence and deception in the operation of the CCS. Moreover, it is obscene that FPL is requesting to recover a profit for its shareholders for a portion of the value of the recovery well equipment to be used in the clean up of FPL’s mess. The Company violated state water quality standards, it should not be rewarded for its imprudent and negligent operation of the CCS with cost recovery on the backs of its customers, nor make additional profit for shareholders on its mandated remediation obligations.

The CCS is a 5,900 acre system of unlined canals that was designed to provide cooling for Turkey Point Units 1 through 4 and is currently serving that purpose for the nuclear Units 3 & 4. The temperature and salinity of the water, and the movement of water are all important variables in the operation of the CCS. Given south Florida’s porous geology, the CCS water interacts with groundwater. As water within the CCS gets warmer it evaporates making the remaining CCS water saltier. Water that has a higher concentration of salt is denser, and all else being equal, will sink. As the CCS water develops a higher concentration of salinity – it will sink. Back in the 1970s, regulators knew the CCS system would generally operate this way. At the time the CCS first began operation, G-II groundwater (potable drinking water) lay just west of the CCS western boundary. To ensure that drinking water resource were not impacted by the operation of the CCS, FPL’s federal industrial wastewater discharge permit (“NPDES”) set forth a requirement that the operation of the CCS will not adversely impact G-II groundwater – the drinking water resource for Miami-Dade County and the Florida Keys. Regulators and FPL agreed to install pumps and a canal lining the western boundary of the CCS for

the purpose of maintaining a hydrologic dam of sorts to block the CCS super-salty (“hyper-saline”) water from westward movement. This canal is referred to as the Interceptor Ditch (“ID”). The state-operated “L-31” canal travels the length of the CCS boundary west of the ID.

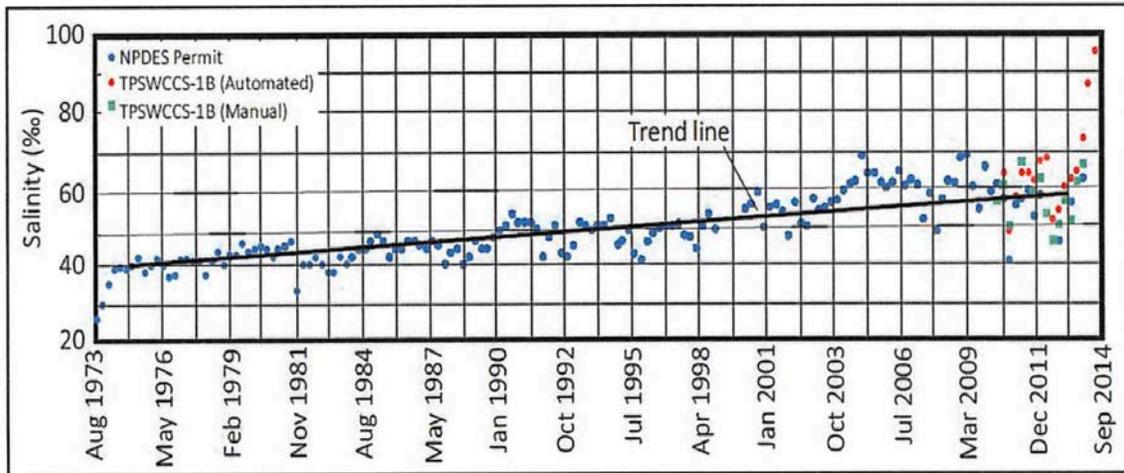
Pursuant to monitoring agreements with the SFWMD, FPL has utilized monitoring wells to measure groundwater salt concentration outside of the CCS boundary since 1973. While the maximum observed salt concentrations varied a bit from year to year, the increasing trend of hyper-salinity in monitoring wells outside the boundary of the CCS is undeniable and has not been refuted.

In 1978, 1990 and 1992, FPL’s long time consultant, Dames and Moore, conducted field investigations and provided ground water monitoring reports to FPL. The Dames and Moore reports showed a significant and increasing salinity contribution from the CCS moving westward of the L-31. Over the years a hyper-saline plume has been advancing westward and pushing the saltwater interface westward adversely impacting G-II waters. In 1978, increasing trends of salinity vales were observed in the five G-series wells located on a line 2,000 feet west of the L-31. By 2012, there was evidence that the CCS hyper-saline water had migrated as far as 3 miles out from the western boundary of the CCS.

The Company failed to take any action to address the impacts of the CCS on the Biscayne drinking water aquifer to the west until 2013 – when the temperature and salinity spiked in the CCS and the SFWMD called-in FPL for a consultation. In the 2014 timeframe, as an emergency measure, FPL began augmenting the CCS with less saline water in order to reduce the salinity of the CCS.

The paramount question before the Commission in this proceeding is the prudence of FPL's actions and inactions. Central to the prudence determination is establishing when FPL's operation of the CCS created a hyper-saline plume that migrated outside of the CCS boundary; and what a reasonable utility manager would have done with information FPL had at the time. The evidence in this case clearly demonstrates that a reasonable utility manager would have taken corrective action by working with regulators to mitigate the impacts from the CCS, or act to remediate the plume long before 2014. Unfortunately, FPL did just the opposite; it sat on information of a growing hyper-saline plume for over 40 years – which allowed the hyper-saline plume to grow in size and concentration.

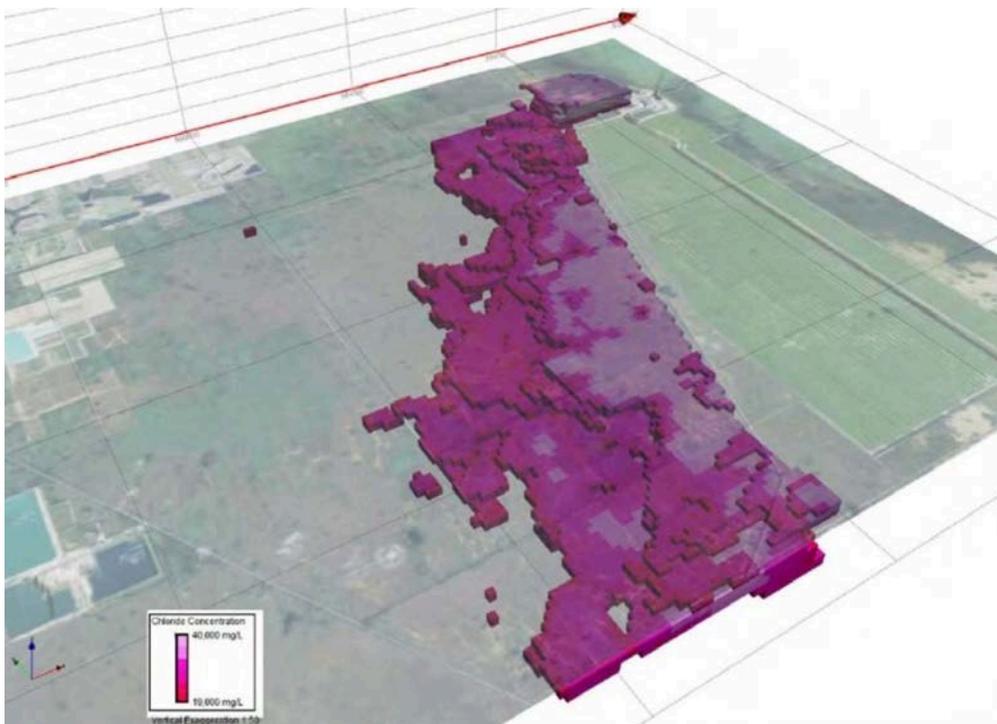
As the annual average salinity in water within the CCS increased over time, so did the size and concentration of the hyper-saline plume. The salinity in the CCS water increased from approximately 34 Practical Salinity Units (“PSU”) in the mid-1970s to over 70 PSU in 2013. A reasonable utility manager with the same information would have acted proactively to address the growing salinity within the CCS, not wait until 2013 for the SFWMD to initiate conversations with them on solutions. The graph below clearly shows that as FPL sat on its hands, the salt concentrations in the CCS incrementally increased over time. Ex. 46, p.7. As that hyper-saline CCS water migrated underground forming a hyper-saline contamination plume that grew in concentration and size over time, the cost and complexity of remediation likewise grew.



FPL’s failure to react to mounting evidence, dating back to 1978, that its operation of the CCS at its Turkey Point plant was leading to a growing underground contamination plume is imprudent and negligent. The impact to the drinking water aquifer was a foreseeable event, there was damage to drinking water resources and FPL failed in its duty to properly manage its cooling water technology to prevent or minimize the adverse impacts on the surrounding water resources. But for the CCS, the hyper-saline plume that FPL is mandated to clean up, would not be there. As such, remediation costs now flowing from FPL’s imprudence and negligence are not recoverable from customers.

At the evidentiary hearing, FPL argued that it operated the CCS properly, but that the hyper-saline plume is an “unintended consequence.” While this case deals with complex hydrogeological concepts, it also deals with basic hydrogeological realities. When two water bodies interact with each other, and one has a higher salt concentration than the other one, it will sink to the bottom. The company allowed CCS water to develop a higher concentration of salt than the groundwater with which it was interacting, and due to the transmissive nature of south Florida’s geology, the saltier water leached

underground and formed a spreading hyper-saline plume - the remediation for which – FPL is now seeking cost recovery from FPL customers. In hydrogeological context, that is not an unintended consequence. It’s a consequence that a prudent utility manger would have anticipated and acted upon. FPL could have, for instance, at any time prior to 2013, gone to regulators with a plan, for instance, to augment the CCS water with less saline water from another source in order to reduce the CCS salinity. In 2010, FPL consultants provided a feasibility analysis to FPL that identified remediation options – the most cost-effective being adding water to the CCS system from a less saline source (“freshening”). It would allegedly have lowered the salt content of hyper-saline CCS water to that of seawater in 3 years. FPL failed to act on the recommendation. The extent of the hyper-saline plume that had migrated west of the CCS boundary in 2016 is depicted in the purple colors in the image below. Ex. 46, p. 17.



The most troubling of FPL's imprudent actions is that it misled regulators. For instance, FPL's submittal of monitoring reports to SFWMD for 2005, 2006, and 2007 were not submitted until 2008. At that time, FPL provided the SFWMD with data, but failed to analyze or address the effectiveness of the ID in preventing westward migration of the hyper-saline plume from the CCS - a requirement of an agreement between FPL and the SFWMD at the time. The monitoring data in 2005 through 2008 showed greater and growing salinity concentrations west of the CCS, but FPL's paid consultant, de-emphasized the information contending it was due to seasonal variations in rainfall and water levels.

In the 2008 timeframe FPL had an application pending with regulators for the uprate of its nuclear Units 3 & 4. The uprate would have allowed the units to produce more power – thereby running harder and hotter and impacting temperature in the CCS. Had the SFWMD been provided with complete monitoring analysis data in the 2005 through 2008 timeframe, consistent with its obligation, the approval of FPL's Units 3 & 4 uprate application might have been placed in jeopardy. The uprate application was ultimately approved and signed by DEP Secretary Michael Sole on October 29, 2008 - with Conditions of Certification that placed enhanced monitoring requirements on FPL. The 2009 5<sup>th</sup> Supplemental Agreement between the SFWMD and FPL implemented the new monitoring plan. The 5<sup>th</sup> Supplemental Agreement, states that the SFWMD relied on assurances from FPL in 2008 that the ID was working effectively to keep hyper-saline water from migrating west of FPL's property. How could FPL provide such an assurance if it never performed an analysis on the effectiveness of the ID?

Likewise, FPL misled this Commission regarding the impact to waters outside the CCS boundary in 2009 when it filed its request for approval the Turkey Point Cooling Canal Monitory Plan (“TPCCMP”). The plan called for expanded monitoring and if the monitoring indicated impacts to waters of the State, or violations of water quality standards, additional measures may be necessary to abate such impacts. While these conditions were placed on FPL in the Conditions of Certification of the Units 3 & 4 as part of the uprate approval, it is implausible that FPL did not have knowledge at that time that there would be a need for corrective action when it asked the Commission to approve the TPCCMP. It was never a question of whether additional measures may be necessary to abate impacts to State waters or violations of water quality standards. There was already evidence that those impacts had already occurred – for instance, evidence before 2010 showed that the saltwater boundary had moved to 3.3 to 4.1 miles west of the CCS boundary. The water within the CCS water at almost record salinity levels in 2009. In fact, FPL’s consultants began drawing up compliance strategies just several months after the Commission approved the TPCCMP. Yet, FPL’s 2009 testimony in this docket does not reveal that remediation measures were being considered by FPL, or that the need for remediation measures was likely, let alone and almost certain.

The regulatory process was riddled with holes. It appears, for instance, that there were no monitoring data or collection activities between 1992 and 2003. The monitoring record provided in discovery for the 1970’s, 1980’s and 1990’s were poor. It was also revealed at the hearing that FPL co-wrote the 2015 DEP Administrative Order that placed certain compliance requirements on FPL. That order was challenged by several parties as inadequate and Administrative Law Judge Canter in his Recommended Order remanded

it back to DEP in part because it lacked the most fundamental element of an enforcement action: charges.

The company uses a number of arguments to deflect the scrutiny away from its inaction – including that the monitoring protocol at the time did not provide a complete picture of the exact geographic extent of the hyper-saline plume or the CCS’s relative contribution to the plume. Even if one assumes those arguments to be legitimate, it does not naturally follow that there is no contamination beyond the boundary CCS, nor does it naturally follow that the CCS is not the major contributor to the plume. In fact there were many years of data to support the existence of a hyper-saline plume spreading well beyond the boundary of the CCS prior to 2013 and the CCS contribution to that plume. FPL statements of uncertainty about the exact geographic “extent” of the contamination, or the CCS’s relative contribution does not relieve the Company from acknowledging hyper-saline contamination of fresh drinking water beyond the CCS boundary, and do not obviate the need for FPL to take action to mitigate the CCS’s contribution to the growing contamination plume that was increasing in salinity concentration and size over time.

Truth is, there was no provision in any agreement between FPL and regulators that prevented FPL from proactively proposing operational changes so that the CCS would operate in a less environmentally destructive way. FPL drove the monitoring data collection and analysis. FPL’s paid consultants collected the data, and FPL was the first to review the data, reports and analysis before it was provided to regulators. Yet, FPL failed to proactively engage regulators to acknowledge the existence of a problem with the operation of the CCS and to discuss corrective action.

FPL customers should not have to pay for the company's legacy of negligence and deception in the operation of the CCS for over 40 years. This Commission should not reward FPL's failure. It should deny the company's unfair request to recover clean up costs and company profits from its customers.

## COMPANY SPECIFIC ISSUES

### FLORIDA POWER & LIGHT

**ISSUE 10A:** Should FPL be allowed to recover, through the ECRC, prudently incurred costs, if any, associated with the June 20, 2016 Consent Order between FPL and the Florida Department of Environmental Protection and the October 2015 Consent Agreement between FPL and the Miami-Dade County Department of Environmental Resources Management (as amended by the August 15, 2016 Consent Agreement Addendum)?

**SACE:** **\*No. FPL was issued a Notice of Violation by the DEP in 2016 and by Miami-Dade County in 2015. The Commission has never allowed a utility to recover costs through the Environmental Cost Recovery Clause (ECRC) for compliance costs arising from a violation of law. Doing so in this case would establish a dangerous precedent in future ECRC proceedings. Regardless, recovery of costs should not be allowed because FPL's failure to mitigate the impact of CCS-caused hyper-saline plume before 2014 was imprudent. \***

**ISSUE 10B:** Which costs, if any, associated with the June 20, 2016 Consent Order between FPL and the Florida Department of Environmental Protection and the October 2015 Consent Agreement between FPL and the Miami-Dade County Department of Environmental Resources Management (as amended by the August 15, 2016 Consent Agreement Addendum) were prudently incurred?

**SACE:** **\*None. Customers should not have to pay for FPL's mistakes. FPL knew or should have known that the CCS was causing an underground hyper-saline contamination plume spreading from its Turkey Point plant property by 1978, and certainly by 1992 at the latest. It failed to take any action to mitigate the impacts of the CCS on the Biscayne Aquifer (a G-II water source) until 2014. A prudent utility manager would have acted promptly and proactively well before 2014 to mitigate and / or remediate the growing hyper-salinity contamination plume outside the CCS boundary. \***

**ISSUE 10C:** Should the costs FPL seeks to recover in this docket be considered part of its Turkey Point Cooling Canal Monitoring Plan project?

**SACE:** **\*No. FPL omitted material information on its exposure to significant environmental corrective action and costs related to its operation of the CCS. FPL knew that the CCS-caused hyper-saline plume had pushed the saltwater interface well west of the boundary of the CCS in 2009. In fact, the company's consultants started developing remediation plans months after the Commission approved the project. Regardless, recovery of costs should not be allowed because FPL's failure to mitigate the impact of CCS-caused hyper-saline plume before 2014 was imprudent \***

**ISSUE 10D:** Is FPL's proposed allocation of costs associated with the June 20, 2016 Consent Order between FPL and the Florida Department of Environmental Protection and the October 2015 Consent Agreement between FPL and the Miami-Dade County Department of Environmental Resources Management (as amended by the August 15, 2016 Consent Agreement Addendum) between O&M and capital appropriate? If not, what is the correct allocation of costs between O&M and capital?

**SACE:** **\*No. FPL shareholders should not be permitted to benefit from FPL's mistakes. FPL argues that its Recovery Well System is preventative. Yet, the requirements stemming from the Consent Order and Consent Agreement are not preventative. The term "abatement" as used in the Consent Order means to "minimize." The Recovery Well System, that is intended to "remediate" will not prevent hyper-salinity in deeper layers from migrating westward. GAAP accounting principles are permissive on allocating costs to capital investment. Regardless, recovery of costs should not be allowed because FPL's failure to mitigate the impact of CCS-caused hyper-saline plume before 2014 was imprudent. \***

**ISSUE 10E:** How should the costs associated with the June 20, 2016 Consent Order between FPL and the Florida Department of Environmental Protection and the October 2015 Consent Agreement between FPL and the Miami-Dade County Department of Environmental Resources Management (as amended by the August 15, 2016 Consent Agreement Addendum) be allocated to the rate classes?

**SACE:** **\* No customer, regardless of class, should have to pay for FPL's mistakes. FPL knew or should have known that the CCS was causing an underground hyper-saline contamination plume spreading from its Turkey Point plant property by 1978, and certainly by 1992 at the latest. It failed to take any action to mitigate the impacts of the CCS on the Biscayne Aquifer (a G-II water source) until 2014. A prudent utility manager would have acted promptly and proactively well before**

**2014 to mitigate and or remediate the growing hyper-salinity contamination plume outside the CCS boundary.\***

**FINDINGS OF FACT AND CONCLUSIONS OF LAW (Issues 10A-E)**

Findings of Fact

***The hyper-saline plume caused by the CCS is not an unforeseen nor “unintended” event***

1. The CCS is a 5,900 acre system of canals that holds a total of 5 billion gallons of surface water. Ex. 61, p. 2. It’s a significantly sized area. Its purpose is to cool power plant infrastructure. T. 483.

2. FPL originally had a provision in the 1971 consent decree with the U.S. Department of Justice that allowed it to maintain or freshen the CCS by discharging to Biscayne Bay to the east and taking on clean or new water from Biscayne Bay. That ability was eliminated in approximately 1976 because the salinity of the CCS had become greater than that of Biscayne Bay. T. 505.

3. Since then, it is well established that “the system is closed to external surface water influences, but subject to interaction with ambient weather phenomena, groundwater inflows and outflows, and a lesser input of industrial effluents from the power plants located at the site. It is a subtle balance.” Ex. 61, p.2. Simply stated, the CCS is a weather dependent system. T. 505.

4. It is likewise well established that salinity, temperature and the movement of water are all important variables in the operation of the CCS. T. 484-85. There is clearly an interaction with CCS water and groundwater. Id. As water within the CCS gets warmer it evaporates making remaining CCS water saltier. Id. Water that has a higher

concentration of salt is denser, and all else being equal, will sink. T. 485-6. Given the interaction between the CCS water and the groundwater, one would expect the CCS water – as it gets saltier than the surrounding groundwater to sink. It is neither unforeseen nor “unexpected” for saltier water to sink and spread.

5. The salinity in the CCS water increased dramatically over time. Ex 46, p. 7. The maximum observed salinity in 1973 was approximately 30 practical salinity units (“PSU”). In 1991, it was 54 PSU, in 2001 it was 60 PSU, in 2005 it was 70. In 2013 to 2014 salinity spiked to over 70 PSU. Id.

6. “Hyper-salinity” occurs when water has a measurement of over 34 PSU (more than the salinity of seawater). T. 614-615.

7. FPL concedes that the CCS system salinity increased over time due the a “ratcheting effect.” The “system experienced seasonal fluctuations in salinity corresponding to the annual variation in precipitation. Salinity in the CCS typically peaked in May, prior to the rainy season, and was at its lowest in November. During drought years the overall salinity at end of year was higher than the prior year resulting in a ratcheting effect. In this manner, annual average salinity gradually increased....” T. 290

8. Due to “freshening” activities (the addition of less saline water into the CCS) initiated in the 2013-14 timeframe to address a salinity and temperature spike in the CCS, the CCS water was reduced to a salinity level of 39 PSU today. T. 799, 927.

9. Expert OPC witness Panday states that “when FPL was not allowed to discharge water from the CCS into Biscayne Bay for managing CCS salinity [in 1976], (when the [salinity] became 110% of that of the surrounding bay), it would have been reasonable to conclude that CCS salinities would continue to get higher due to the process of

evaporation, which would then contribute additional salt mass to the Biscayne Aquifer due to the exchange with groundwater. This is actually what happened ....” T. 621.

10. FPL’s argues that the hyper-saline plume caused by the operation of CCS was “unintended.” T. 414, 426. This argument is not credible.

***A hyper-saline plume from the operation of the CCS has been driving the saltwater interface west of the western boundary of the CCS since 1975***

11. In 1978, the groundwater boundary between saltwater and fresh water (saltwater interface) was just west of the western CCS boundary. Ex. 70, Figure 6.5.

12. The groundwater GII-GIII delineation is the boundary between fresh water and saltwater respectively. T. 470.

13. The hyper-saline plume from the CCS is **the** major contributing cause to the western movement of the saltwater interface. T. 486; Ex. 13, p. 5.

14. The 1978 Dames & Moore report identified saltwater migrating west of the system as a result of the presence of the CCS. T. 619-20. Increasing trends of salinity vales were observed in the five G-series wells located on a line 2,000 feet west of the L- 31. Ex. 70, p. 30; Ex. 46, p. 1. The 1990 and 1992 groundwater monitoring reports by Dames & Moore also demonstrated a significant salinity contribution from the CCS moving westward of the L-31. T. 623; Ex. 46, p. 9.

15. Tritium levels in groundwater also indicated increasing contributions of contaminated water from the CCS to the Biscayne Aquifer. T. 618. Tritium is a unique

tracer for identifying CCS water in groundwater beyond the CCS boundary. T. 803 The CCS's tritium fingerprint was identified in groundwater west of the CCS in the 1975 and 1976 data found in the 1978 Dames & Moore report. T. 618

16. The tritium markers in the 2011 and 2012 Uprate Project Semi-Annual and Annual Reports further evidenced a progression of CCS-contributed saltwater from the 1976 position to a point as far as 3 miles out in 2012. T. 618

17. Even before 2010, there was even evidence of significant migration showing that the saltwater interface had moved to well G-28 and G-21, which are 3.3 and 4.1 miles due west of the CCS western boundary respectively. T. 619.

18. If one reviews the record evidence in this docket it is clear that FPL witnesses carefully parse their words, relative to the CCS's impact on groundwater prior to 2013, to indicate that there was uncertainty as to the "extent" of the hyper-saline plume. T. 341, 861, 904. Yet FPL knew that the plume existed beyond the western boundary of the CCS.

19. In fact, FPL witness Andersen concedes the following in this exchange from the evidentiary hearing: **"Isn't it true that while the extent of the hyper-saline water to the west of the CCS may not have been known exactly, it was, in fact, known that hyper-saline water was present outside of the FPL property?"** Yes, I think it was, as - as has been shown in the Dames & Moore reports [from 1978 to 1992], that there was hyper-saline water in wells L-3, and I -- I think I point -- I think I even mention these here, that there was hyper-saline water in those wells, which are adjacent to L-31." T. 904.

20. FPL witness Sole's alleges that the determining factor in the need for action was establishing the exact geographic extent of the hyper-saline. T. 710.

***The operation of the CCS was the primary source of hyper-saline plume west of the CCS boundary since the mid-1970's.***

21. But for the operation of the CCS, the hyper-saline plume present today would not be there. T. 338. The plume developed over the course of 45 years. T. 436.

22. The 1978 Dames & Moore report identified saltwater migrating west of the system as a result of the presence of the CCS. T. 619.

23. As early as 1978 and at least by 1990 or 1992, FPL should have known that saline water from the CCS was intruding into groundwater outside of FPL's property. T. 618. During that time frame FPL should have realized that the operation of the CCS was influencing a westward movement of the saltwater interface. T-621-22

24. FPL's consultants in 1978, Dames & Moore, concluded that by the mid- 1980's to mid-1990's the salinity levels should stabilize and the wedge should extend inland westward on the order of a mile farther, and with little change in vertical movement. T. 620-21. This assumption was flawed, given the way FPL would operate the CCS, and salinity levels did not stabilize. Id.

25. The FPL data showed that salinity in groundwater from the CCS had continued to increase since 1978 across multiple depth intervals (20 to 60 feet below the top of the casing). The time history plot of salinity for well L-3 located west of the Interceptor

Ditch clearly indicates an increase in salinity over time, especially at deeper depths. T. 622; Ex. 46, pp. 5, 6.

26. Expert OPC witness Panday states that in “my expert review of data and analyses reported by Dames & Moore in their 1978 and 1990 reports clearly indicate that these reports reveal the impact of the CCS on the groundwater.” T. 623.

27. Only two years later, the 1992 Dames & Moore monitoring report continued to show a trend of increasing salinity. T. 623. Ex. 46, p. 9.

28. Subsequent groundwater monitoring reports made available by FPL for the period between 2003 and 2010 also contained salinity data that indicated the need for taking corrective action. T. 617-8. Annual monitoring reports provided for 2003 through 2011 continued to show increases in electrical conductivity measurements (or saltwater concentrations) in the groundwater. However, this information was downplayed or even ignored in the conclusions of annual reports. T. 624-25.

29. FPL commissioned a feasibility analysis of remediation options from its consultants, Geotrans, in early 2010. The objectives of the Geotrans study was to stop the westward migration of saltwater, a “portion of which migrates from the CCS” and to prevent “additional hyper-saline” from water being added to the groundwater at the “CCS source.” Ex. 75, p. I. Based on the feasibility study objectives, FPL knew prior to 2010 that water from the CCS was a primary source of the hyper-saline plume and it explored options to reduce the hyper-salinity of the CCS. FPL was rushing to complete the report to meet an unexplained internal deadline - to address data that was coming in showing impacts from the CCS on groundwater outside the CCS. T. 933. The report, while

stamped as a “Draft,” was effectively the final report. T. 929-30. Geotrans had a quick turnaround – about a month. T. 923.

30. The recommendation by Geotrans was that reducing concentrations in the CCS by adding relatively low concentration Florida Aquifer water (freshening) was the most cost effective solution and that it would reduce concentrations in the CCS to that of seawater (34 PSU) in a period of 3 years). The recommendation received “limited comment” from FPL and was not adopted by FPL in 2010. Ex. 75, p. ii; T. 930.

31. On April 25, 2016, the DEP issued a Notice of Violation to FPL finding that the CCS is the major contributing cause to the continuing westward movement of the of the saline water interface. It also found that FPL had violated Rule 62-520.400, F.A.C. that prohibits a discharge in concentrations that impair the reasonable and beneficial use of adjacent waters. Ex.12 , p. 3. The violation of the DEP rule is also a violation of FPL’s federal NPDES Industrial-Wastewater permit, Section IV. Ex. 4, p. 10. This notice led to a Consent Order establishing compliance requirements for which FPL seeks recovery from its customers. Ex. 13.

32. On October 6, 2015, Miami-Dade County issued a Notice of Violation to FPL for violating Chapter 24 of the County code that states it is unlawful for any person to discharge cooling water and industrial wastes into waters of the County. Ex. 9. This notice led to a Consent Agreement establishing compliance requirements for which FPL seeks recovery from its customers. Ex. 14.

***FPL took no action to mitigate the impacts of the CCS hyper-saline plume prior to 2014***

33. The 1978 Dames & Moore report identified saltwater migrating west of the system as a result of the presence of the CCS. T. 619. There is no record evidence of FPL taking any corrective action in response to the 1978 report.

34. Although FPL submitted monitoring reports that showed that the salinity levels had not stabilized, as predicted by the 1978 Dames & Moore report, FPL appears to have done no follow-up analysis or meaningful corrective action on this issue for at least the next two decades. T. 620-21.

35. The increasing saltwater concentrations of the groundwater outside the CCS boundary from 1978 to 1990 should have prompted FPL to, at a minimum, consider pursuing actions. T. 621-22. There is no evidence of FPL taking any corrective action.

36. Only two years later, the 1992 Dames & Moore monitoring report continued to show a trend of increasing salinity. T. 623. Ex. 46, p. 9. There is no evidence that FPL took any corrective action.

37. The annual reports from 2003 through 2008 provided plots of salinity that showed salinity levels in wells outside the boundary that exceeded those in the 1992 Dames & Moore report. T. 625. There is no evidence that FPL took any corrective action.

38. FPL took no steps to “freshen” the CCS water from 1979 to 2013. T. 506-07. In response to questioning by Commissioner Polmann, FPL conceded that no external water sources were added to the CCS for over 40 years. T. 536

39. The SFWMD expressed concern in 2008 over the planned uprate of nuclear units 3 & 4 and its impact on the CCS and on the Biscayne drinking water aquifer (G-II

waters). Ex. 78, p. 2. There is no evidence that FPL took any corrective action to mitigate hyper-saline conditions in the CCS at that time.

40. FPL witness Sole conceded that “in 2009, the predicate was laid that the cooling canal system may have a problem, and causing or contributing to impairment of adjacent waters.”. T. 376. There is no evidence that FPL took any corrective action – based on that “predicate.”

41. It ultimately took a consultation letter by the SFWMD to FPL in April 16, 2013, to finally force FPL to take action to remediate the CCS-caused -saline plume. Ex. 7. FPL did not even consider taking action until 2013. T. 496.

42. There was no provision in any agreement between FPL and regulators that prevented FPL from proactively proposing operational changes so that the CCS would operate in a less environmentally destructive way. T. 415

43. Ironically, the remediation alternative suggested by Geotrans and dismissed by FPL in 2010 became part of a remediation solution component in a subsequent DEP Administrative Order finalized December 2014. Four critical years passed between the time FPL dismissed the freshening remediation alternative proffered by Geotrans, and the Administrative Order from DEP that required FPL to remediate the hyper-saline plume. Ex. 8. During the 2010 to 2014 timeframe, salinity in the CCS increased significantly. Ex. 46, p.7.

44. FPL claims that it would not have been reasonable to take “expensive unilateral corrective actions ...” to improve the performance of the the CCS. T. 715. First, FPL witness Sole acknowledged that “expensive” is a relative term and that early action can

be less expensive than later action. T. 798. The witness then conceded that in 2013 FPL actually took unilateral action to go the Nuclear Regulatory Commission to revise a permit due to temperature changes in the CCS. T. 799. FPL also proactively approached the SFWMD in that same time frame for a permit to allow FPL to augment CCS water with less salty water from L-31 canal to address the salinity and temperature spike in the CCS. T. 799-800.

45. Witness Sole states that other issues, besides the CCS hype-saline plume, could be contributing to the movement of the saltwater interface. T. 388.

#### ***The uprate of Units 3 & 4***

46. In 2008, FPL had an uprate application for nuclear Units 3 & 4 pending before the DEP. T. 756-57. FPL witness Mike Sole was DEP Secretary at that time. Mr. Sole left DEP in September of 2010 and went to work for FPL in October 2010. T. 482.

47. Regarding the uprate, then-Secretary Sole “was briefed routinely on the uprate issues, inclusive of concerns about whether or not the cooling canal system was contributing to any additional hypersalinity were discussed and vetted and there was even discussion about specific provisions of the monitoring that were required.” T. 293

48. As a result of the environmental review conducted under the Power Plant Siting Act in 2008 for the uprate of Units 3 & 4, Conditions of Certification IX and X (“COC IX and X”) were included in the Site Certification Modification that required FPL to develop a monitoring plan for the CCS and the areas surrounding the CCS under the provisions of the 5<sup>th</sup> Supplemental agreement between FPL and the SFWMD.” Id.; Ex. 6.

49. The SFWMD expressed concern in 2008 over the planned uprate of nuclear units 3 & 4 and its impact on the CCS and on the Biscayne drinking water aquifer (G-II

waters). Ex. 78, p. 1-2. The SFWMD expressed concerns over FPL's projection that the uprate would cause an increase of 2.5 degree (F) of water entering the canal, and a 0.9 degree (F) returning to the units. Id. The uprate caused low flow conditions that along with a drought and algae blooms led to a reduction of thermal efficiency in the CCS. T. 509.

***FPL misled the SFWMD; Regulatory process was riddled with holes***

50. To mislead means to lead in a wrong direction or into a mistaken action or belief often by deliberate deceit.<sup>1</sup>

51. Contrary to FPL's claims of a robust regulatory process related to the CCS, the process was riddled with holes. In reference to monitoring, FPL did not appropriately monitor the plume since the 1970s. The monitoring record provided in discovery was poor quality for the 1970s, 1980s, and 1990s. The reports from the 2000s demonstrate long delays in FPL's submittal of data to SFWMD: the 2005, 2006, and 2007 monitoring reports were submitted in 2008, just prior to the drafting of the 2009 5<sup>th</sup> Supplemental Agreement with SFWMD. T. 628.

52. In the development of the 5<sup>th</sup> Supplement Agreement, the SFWMD relied on assurances from FPL in 2008 that the ID was working effectively to keep hyper-saline water from migrating west of FPL's property. Ex. 5, p. 2. Yet, the time history plot of salinity for well L-3 located west of the ID clearly indicates an increase in salinity over time, especially at deeper depths. T. 621-22; Ex. 46, pp. 5, 6.

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<sup>1</sup> Merriam Webster Dictionary, at: <https://www.merriam-webster.com/dictionary/mislead>

53. Additionally, as SFWMD indicated in 2010 based on their 2009 review of FPL's monitoring data, the monitoring reports and monitoring efforts by FPL did not evaluate the impact of the CCS or identify saltwater migration west of L-31E canal in groundwater that occurs with/without the existence of the CCS. T. 628.

54. FPL collected sufficient data prior to 2009 to perform an evaluation of the effect of the ID on CCS water within the Biscayne Aquifer; however, in all monitoring reports but one, FPL failed to analyze or address the effectiveness of the ID in preventing westward movement of CCS water. Despite its collection of this chloride data, FPL failed to provide its analysis of the data, in terms of the effectiveness of the ID prior to 2011. Only in the 2011 annual groundwater monitoring report did FPL directly address the purpose of the ID operations by discussing the effect of the ID on CCS saline water. FPL acknowledged the presence of and westward migration of CCS water within the Biscayne Aquifer below the depth of the ID. T. 633.

55. FPL witness Sole never directly addressed the reason for the delayed report submittals to the SFWMD in his rebuttal testimony. Likewise, he did not address the reason FPL provided the SFWMD reports with data, but failed to analyze or address the effectiveness of the ID in preventing westward migration of the hyper-saline plume from the CCS - a requirement of agreement between FPL and the SFWMD at the time. T. 633. A review by the SFWMD in 2009 described these monitoring practices as "errors, omissions and inconsistencies that raise concern as to the whether the operations of the ID were always consistent with the Revised Operating Manual contained in the 1983 Agreement." T. 634. Instead, witness Sole deflects the issues raised by expert OPC witness Panday by stating he is "searching for problems where none exist." T. 714.

56. It appears that there were no monitoring data or collection activities between 1992 and 2003. T. 624.

57. FPL made edits to the 2015 DEP Administrative Order that imposed compliance obligations on FPL (on itself) and sent the edits to the DEP. T. 521-22.

***FPL misled the Commission by omitting material information on the magnitude of FPL's compliance exposure related to the CCS when it sought approval of the TPCCMP in 2009***

58. FPL filed for the recovery of the TPCCMP in the 2009 Environmental Cost Recovery Clause docket and supported that request with testimony from FPL witness Randy Labauve. The plan is an outgrowth of the Conditions of Certification required by DEP for approval of FPL's plan for an uprate of nuclear units 3 & 4. Ex. 6. Labauve Testimony of August 3, 2009 described the purpose of the plan, outside of the monitoring requirements, as intended to provide a determination of the extent and effect of the CCS on groundwater ... and any changes that may occur as a result of the uprate project. (Labauve Testimony, p. 5). "If the FDEP, in consultation ... determines" the results of the monitoring "indicate harm or potential harm to the water of the State ... or water quality," additional measures may be required to evaluate or abate such impacts." (emphasis added) (Labauve Testimony, p. 12).

59. There is no mention in the Labauve testimony that in-fact additional measures would almost certainly be required to abate such impacts in light of certain facts including but not limited to: the salinity in the CCS water had increased to 70 PSU in 2009. Ex 46, p. 7; and that evidence before 2010 indicated that the saltwater interface had migrated west from to 3.3 to 4.1 miles of the CCS boundary. T.619.

60. FPL's projected cost estimates of the TPCCMP to the Commission in 2009 did not reflect the magnitude of the environmental problems with the CCS, and hence the cost to mitigate the problem. In 2009, FPL attorney, and former DEP attorney, Scott Goorland filed FPL's preliminary list of new projects. It projected the following costs: 2011-\$1.4 million; 2012-\$1 million; 2013-\$1 million; 2014-\$945,000; and 2015-\$255,000 (a total of \$4.6 million over 5 years). Ex. 77, p. 5. FPL's projection of compliance costs the TPCCMP in 2016 exploded to a total of over \$200 million dollars for the following ten years. (See Labauve 2016 testimony); Ex. 15, Ex. 22.

61. PSC Order No. 09-0750-FOF-EI was issued on November 18, 2009. FPL shortly thereafter requested that its consultant, Geotrans, quickly develop an initial phase feasibility analysis of remediation options completed by March of 2010. The first phase of the feasibility analysis was completed – approximately 4 months after the Commission issued its order approving the TPCCMP. T. 929

***FPL corrective actions will not stop the source of the pollution nor fully remediate it***

62. FPL is subject DEP Consent Order. FPL's obligation pursuant to the order is to abate impacts of the CCS on the term "abate," as used by DEP, means to "reduce in amount, degree or intensity' lessen; diminish." The term "abate" does not mean to "stop." Ex. 11, p.52. Therefore, FPL's obligation is to reduce the amount of CCS hyper-saline water entering the groundwater, not to eliminate the transmission of CCS water to groundwater. The only option that stops the introduction of additional hyper-saline water to groundwater from the CCS is cooling towers. T. 928-29.

63. The accounting treatment for the capitalization of costs is permissive under Generally Accepted Accounting Principles. The ASC rules state: “[i]n general, environmental contamination treatment costs shall be charged to expense. In certain situations, it may be appropriate to capitalize environmental remediation costs. Those costs may be capitalized if ...” (emphasis added) T. 560.

64. The Recovery Well System that is intended to remediate the hyper-saline plume will not prevent hyper-salinity in deeper layers from migrating westward. T. 895-96

65. If any portion of the clean up costs are capitalized, FPL shareholder will derive a benefit in the form of a return on equity. T. 834.

#### Conclusions of Law

#### ***FPL’s failure prior to 2014 to mitigate the impacts of the hyper-saline plume caused by the CCS on adjacent waters was imprudent, thus cost recovery must be denied***

66. A prudence determination is backwards looking in nature. The applied standard for determining prudence is consideration of what a reasonable utility manager would have done in light of conditions and circumstances which were known or reasonably should have been known at the time decisions were made. Order No. PSC-07-0816-FOF-EI, issued October 10, 2007, In Docket No.060658-EI, *In Re: Petition on behalf of Citizens of the State of Florida to require Progress Energy Florida, Inc. to refund customers \$143 million*, at 3.

An approach that limits the review of prudence to contemporaneous events fails to recognize the duty of this Commission to protect the ratepayers’ interest and the fact that utilities are not entitled to recover expenses imprudently incurred. On the other hand, the use of pure hindsight in assessing the prudence of past action is patently unfair. A utility should not be charged with knowledge of facts which cannot be foreseen or be

expected to comply with future regulatory policies. ... The prudence of decision making should be viewed from the perspective of the decision maker at the time of the decision. Id. at 3.

67. The Commission does not intend to become involved in the actual management of a utility. However, the Commission expects a utility's management to act prudently. Id. at 4.

68. As the Commission considers whether FPL acted prudently, it must ask itself: did FPL know or should FPL have known that that the operation of its CCS was causing the development of a hyper-saline plume that was moving the salt water interface further west thereby impacting G-II waters? Id. FPL knew that the CCS was a primary contributor to a hyper-saline plume migrating west. FPL knew that the western movement of the hyper-saline plume was pushing the saltwater interface further west, thereby impacting G-II waters.

*A timeline of imprudence*

*1976*

69. FPL knew that in 1976, it lost the ability to discharge water from the CCS into Biscayne Bay in 1976. FPL should have known or reasonably concluded that that CCS salinities would continue to get higher due to the process of evaporation, which would then contribute additional salt mass to the Biscayne Aquifer due to the exchange with groundwater. In fact, that's what happened. Yet, FPL took no corrective action on what it knew or what it should have reasonably known at the time.

*1978*

70. FPL knew that the 1978 Dames and Moore report documented increasing trends of salinity vales in the five G-series wells located on a line 2,000 feet west of the Levee 31 (just outside the western boundary of the CCS of the Turkey Point property). Tritium levels in groundwater also indicated increasing contributions of contaminated water from the CCS to the Biscayne Aquifer. Tritium is a unique tracer for water migrating out of the CCS. The CCS's tritium fingerprint was identified in groundwater west of the CCS in the 1975 and 1976 data found in the 1978 Dames & Moore report. The tritium marker established that the CCS was a cause of the hyper-saline plume. FPL had this information, yet took no corrective action based on that information. While the Dames and Moore report stated that the salt concentrations would stabilize, subsequent data proved that this assertion did not play out.

*1990*

66. FPL knew, in fact, that saltwater concentrations (hyper-salinity) continued to rise from 1978 to 1990 across multiple depth intervals in monitoring wells west of the CCS. Hence, the plume was growing in concentration and size. The fact that salinity values did not stabilize, but instead continued to rise over the 45 years of operation of the CCS should have been caused for concern for a reasonable manager and a prod to take action. The continued rise in salinity meant that the theory developed by the Dames & Moore authors for how the CCS interacts with groundwater was incorrect. And therefore, the assuring results of the analysis based on this theory – that the increase in salinity in the CCS and groundwater would be small and local in extent – could not be accepted as reliable. FPL took no corrective action.

*1992*

71. Only two years later, FPL knew that the 1992 Dames & Moore monitoring report continued to show a trend of increasing salinity. FPL knew that the hyper-saline plume was growing in concentration, yet FPL, once again, took no corrective action.

*1992 to 2003*

72. It appears that there were no monitoring data or collection activities between 1992 and 2003. FPL not only failed to act to take corrective action, but it appears it failed to even monitor for hyper-salinity from the CCS.

*2003 to 2008*

73. FPL knew that the annual reports from 2003 through 2008 provided plots of salinity data that showed salinity levels in wells outside the boundary that exceeded those even in the 1992 Dames & Moore report. FPL had the data in the annual reports and knew of the steadily increasing hyper-saline concentrations, but once again failed to take corrective action. FPL filed the 2005, 2006, and 2007 monitoring reports to the SFWMD in 2008. FPL provided the SFWMD with data, but failed to analyze or address the effectiveness of the ID in preventing westward migration of the hyper-saline plume from the CCS - a requirement of agreement between FPL and the SFWMD at the time. Not only did FPL not take corrective action, but it actively created roadblocks to corrective action by omitting material information to regulators. A prudent utility manager would not omit material information that has the effect of slowing down the timeframe for corrective action.

74. Moreover, a prudent utility manager would not have be applied to uprate Units 3 & 4 when it knew or should have known that the uprate of the units would negatively

impacting the thermal efficiency of the CCS. On or about the time of the uprate, was completed, the CCS spiked in temperature and salinity.

*2008-09*

75. The 5<sup>th</sup> Supplemental Agreement, states that the SFWMD relied on assurances from FPL in 2008 that the ID was working effectively to keep hyper-saline water from migrating west of FPL's property. How could FPL provide such an assurance if it never performed an analysis on the effectiveness of the ID? A prudent utility manager would not mislead regulators involved in the regulation of the CCS.

*2010*

76. FPL in 2010 commissioned a Geotrans feasibility analysis on CCS remediation alternatives. The recommendation by Geotrans was that reducing concentrations in the CCS by adding relatively low concentration Florida Aquifer water (freshening) was the most cost effective solution and that it would reduce concentrations in the CCS to that of seawater in a period of 3 years. The recommendation received "limited comment" from FPL and was not adopted by FPL in 2010. Here again, as late as 2010, FPL knew the CCS was a cause of the hyper-saline plume, but failed to take corrective action – even after commissioning an internal study on corrective actions.

77. Additionally, FPL also knew that the salinity in the CCS water itself was growing significantly over time. The maximum observed salinity in 1973, was 30 PSU, in 1991, it was 54 PSU, in 2001 it was 60 PSU, in 2005 it was 70. In 2013 to 2014 salinity spiked to over 70 PSU. FPL had this data, thus it knew that salinity inside the CCS was increasing at the same time the monitoring well outside the CCS boundary were measuring

increasing salt concentrations. Yet FPL took no action until salinity spiked in 2013 and it was called-in for a consultation with the SFWMD.

78. FPL argues that extent of the hyper-saline plume and relative contribution of the CCS to the movement of the saltwater interface was unknown prior to 2012. This argument is not credible. FPL knew, based on decades of salinity and tritium data, that the CCS was contributing to spreading hyper-saline plume that was pushing the saltwater interface further west, thereby necessarily impacting G-II waters. It could and should have taken corrective action to contain the damage being caused by the operation of the CCS. Not only did it not take corrective action, it did not even propose corrective action – ever. As such, FPL’s actions and inactions were patently imprudent.

79. It is generally established that in a utility should not be charged with knowledge of facts that cannot be foreseen or be expected to comply with future regulatory policies in determining prudence. In the instant case, FPL had knowledge through monitoring data and reports dating back to 1978 that the underground hyper-saline conditions were developing west of the CCS boundary and that the CCS was a cause of the hyper-salinity. Therefore, it was reasonably foreseeable between the rising salinity levels in the CCS, the increasing salinity of the corresponding hyper-saline plume outside the boundary of the CCS, and the unique tritium marker establishing origination of the salinity from the CCS, that FPL’s operation of the CCS was pushing the saltwater interface west and impacting G-II waters. It was foreseeable that the hyper-saline plume would continue to expand and increase in concentration over time without corrective action.

80. It is also generally established one should look at prudence determination through the perspective of the decision maker at the time of the decision. What would actions

would a prudent decision maker take given the same information as FPL over the course of the same 45 year timeframe? Would the decision maker have waited to see if the conclusions in the 1978 Dames and Moore monitoring report that the salt impacts from the CCS would stabilize? That's a question that may be open to debate. But after 1978, the data clearly showed that FPL had a growing environmental problem on its hands.

81. The 1990 Dames and Moore monitoring report established that the salinity impacts from the CCS did not stabilize, in-fact they got worse – salinity increased. Would a prudent decision maker have taken corrective action or at least proposed operational changes to regulators so that the CCS would operate in a less environmentally destructive way? Absolutely. The rising saltwater concentrations of the groundwater outside the CCS boundary from 1978 to 1990 should have prompted FPL to, at a minimum, consider pursuing actions (for instance, such as additional CCS freshening) to reduce the CCS's contribution of salinity to the Biscayne Aquifer west of the CCS.

82. The 1992 Dames and Moore monitoring report established that the salinity impacts from the CCS did not stabilize, in-fact they got worse. Would a prudent decision maker have taken corrective action or at least propose operational changes to regulators so that the CCS would operate in a less environmentally destructive way? Certainly. With an additional 2 years of data to support the 1990 data, it would have been more than reasonable to start to move on corrective action.

83. Would a decision maker in 2003 – now with almost 40 years of data evidencing growing salinity within the CCS and within the hyper-saline plume – have taken corrective action? A prudent decision maker would have a had a duty to take action – the decision maker in the instant case, FPL, serves almost 5 million customers – many of

which live in S. Florida and depend on the Biscayne Aquifer as a drinking water resource. FPL should have moved swiftly to limit damage to the surrounding environment and limit clean up costs on behalf of all its ratepayers. Moreover, a utility manager, responsible for the safe, reliable operation of the power plant, necessarily brings into play a different set of considerations to judging FPL actions. In fact, the CCS is one of the components of the Turkey Point facility that MUST remain functional, in terms of being able to remove heat from the plants, at all times. The nuclear power plants cannot produce electricity without the CCS functioning, and the nuclear reactors cannot be shutdown safely without the cooling provided by the CCS. Given the critical function provided by the CCS for the primary functioning and safety of the nuclear power plants, a reasonable utility manager would be expected to have closely monitored the performance of the CCS and acted proactively to correct any deviation in the expected performance of the CCS.

84. Even assuming there was a minimal contribution from other sources, such as marshes, that did not obviate the need for FPL to act to mitigate the impact of the CCS on the growing hyper-saline plume.

85. If one reviews the record evidence in this docket it is clear that FPL witnesses carefully parse their words, relative to the CCS's impact on groundwater prior to 2013, to indicate that there was uncertainty as to the "extent" of the hyper-saline plume. T. 341, 861, 904. While there may have been uncertainty as to the exact geographical extent of the plume, there was no doubt on the part of FPL that the hyper-saline plume was there and pushing the saltwater interface west, thereby necessarily negatively impacting G-II waters.

86. Therefore, based on what FPL knew or should have known, and based on what was foreseeable, and based on what a similarly situated decision maker would have done, the only reasonable conclusion that can be reached regarding FPL's failure since as early as 1978 to mitigate the contribution of the CCS on the western-moving hyper-saline plume, or even approach regulators with solutions, is that FPL's actions and inactions were imprudent. Therefore, costs stemming from FPL's imprudence are not recoverable from its customers.

***FPL should not be allowed to recover under the Environmental Cost Recovery Clause statute.***

87. A review of past Commission orders in this docket indicates that the Commission has never approved environmental cost recovery when compliance costs stemmed from a violation of law.

88. In the instant case, On April 25, 2016, the DEP issued a Notice of Violation to FPL finding that the CCS is the major contributing cause to the continuing westward movement of the of the saline water interface. It also found that FPL had violated Rule 62-520.400, F.A.C., and On October 6, 2015, Miami-Dade County issued a Notice of Violation to FPL for violating Chapter 24 of the County code that states it is unlawful for any person to discharge cooling water and industrial wastes into waters of the County. The subsequent Consent Order with DEP and Consent Agreement with Miami-Dade County establish the compliance measures for the operation of the CCS for which FPL seeks recovery.

89. Allowing FPL cost recovery in this case would establish a dangerous precedent for cost recovery in this docket moving forward. The Commission should resist

transforming this docket into a utility “insurance policy” where a utility is assured recovery regardless of its non-compliance with the law.

90. In any event, FPL’s failure from 1978, but particularly from 1992 to 2013 to mitigate the impact of the CCS on the western-moving hyper-saline plume were imprudent and therefore costs are not recoverable from customers.

***FPL should be denied recovery based on misleading this Commission on the magnitude FPL’s exposure to significant compliance costs***

91. The Commission relied on the incomplete information presented by FPL to reach its decision approving the TPCCMP. PSC Order No. 09-0759-FOF-EI, pp. 10-13. FPL’s intentional omission of critical information regarding the almost certain outcome of the monitoring deprived the Commission of critical facts at that time on whether to approve the TPCCMP.

92. The essential elements of common-law fraud are: (1) a false statement of fact; (2) known by the person making the statement to be false at the time it was made; (3) made for the purpose of inducing another to act in reliance thereon; (4) action by the other person in reliance on the correctness of the statement; and (5) resulting damage to the other person. Mettler, Inc. v. Ellen Tracy, Inc., 648 So. 2d 253 (Fla. 2d DCA 1994)

93. In the instant case, FPL omitted material facts in 2009 that were important in how the Commission would have judged the TPCCMP. It is implausible that FPL did not know in 2009 that significant remediation measures would be necessary in the near-term future. The Commission relied on the information presented to it by FPL. If the Commission finds that FPL’s omission of facts at the time rises to the level of fraud, then

it should deny FPL cost recovery. Even if FPL's representations in 2009 fall short of the fraud criteria above, the Commission should deny FPL's request based on FPL's omission of material facts and incomplete fact sprovided to the Commission in 2009.

94. Regardless, FPL's failure from 1978, but particularly from 1992 to 2013 to mitigate the impact of the CCS on the western-moving hyper-saline plume is imprudent and therefore costs are not recoverable from customers.

***FPL should not be allowed to capitalize any investments***

95. FPL violated state law on water quality standards. FPL violated Miami-Dade County Code water standards. FPL is subject DEP Consent Order. FPL's obligation pursuant to the order is to abate impacts of the CCS on The term "abate," as used by DEP, means to "reduce in amount, degree or intensity' lessen; diminish." The term "abate" does not mean to "stop." The Recovery Well System, that is intended to remediate the hyper-saline plume, will not prevent, nor retract hyper-salinity in deeper layers of the aquifer from migrating westward. Hence, the activities for which FPL seeks recovery are not meant to prevent the source of the pollution, nor will it fully remediate it. As such, it should not be capitalized.

96. The ASC rules state: "[i]n general, environmental contamination treatment costs shall be charged to expense. In certain situations, it may be appropriate to capitalize environmental remediation costs. Hence the accounting rule is permissive.

97. As a public policy matter, it is obscene for FPL shareholders to earn a profit on decades of FPL negligence and deception and requests to capitalize costs should be denied.

98. Moreover, FPL and regulators should support the construction of cooling towers as a permanent solution. SACE supports cooling towers as the only power plant water-cooling technology that will stop the introduction of additional hyper-saline water to groundwater from the CCS.

99. In any event, FPL's failure from 1978, but particularly from 1992 to 2013 to mitigate the impact of the CCS on the western-moving hyper-saline plume is imprudent and therefore costs are not recoverable from customers. FPL customers should not and do not have to pay for FPL's mistakes.

**WHEREFORE**, for the reasons state above, SACE respectfully requests that the Commission deny FPL's request to recover environmental compliance costs from 2016 going forward in time that are related to FPL's compliance obligations associated with the June 20, 2016 Consent Order between FPL and the Florida Department of Environmental Protection and the October 2015 Consent Agreement between FPL and the Miami-Dade County Department of Environmental Resources Management (as amended by the August 15, 2016 Consent Agreement Addendum).

RESPECTFULLY SUBMITTED this 13<sup>th</sup> day of November, 2017

/s/ George Cavros

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**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true copy of Southern Alliance for Clean Energy's Motion for Reopening of the Record and Supplemental Hearing was furnished to the following by electronic mail on this 13<sup>th</sup> day of November, 2017:

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*/s/ George Cavros*

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