	FILED 10/31/2017		274
1	DOCUMENT NO. 09326-20 FPSC - COMMISSION CLE	BK	
1	FLORIDA	PUBLIC SERVICE COMMISSION	
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4	In the Matter of:		
5		DOCKET NO. 20170007-EI	-
	ENVIRONMENTAL COST	RECOVERY	
6	CLAUSE.	/	
7			
8	_	VOLUME 3	
9	PI	AGES 274 through 475	
10	PROCEEDINGS:	HEARING	
11	COMMISSIONERS PARTICIPATING:	CHAIRMAN JULIE I. BROWN	
12	FACILCIPATING	COMMISSIONER ART GRAHAM	
13		COMMISSIONER RONALD A. BRISÉ COMMISSIONER DONALD J. POLMANN COMMISSIONER GARY F. CLARK	
14	DATE:	Thursday, October 26, 2017	
15		-	
16	TIME:	Commenced at 9:00 a.m. Concluded at 1:30 p.m.	
17	PLACE:	Betty Easley Conference Center Room 148	
18		4075 Esplanade Way Tallahassee, Florida	
19			
20	REPORTED BY:	DEBRA R. KRICK Court Reporter	
21	APPEARANCES:	(As heretofore noted.)	
22			
23		PREMIER REPORTING 114 W. 5TH AVENUE	
24	ŗ	<pre>FALLAHASSEE, FLORIDA (850) 894-0828</pre>	
25		·/	
25			

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1	PROCEEDINGS	
2	(Transcript follows in sequence from Volume	
3	2.)	
4	CHAIR BROWN: All right. Good morning. Thank	
5	you. I hope everyone got some rest.	
6	Today is October 26th. This is day two of the	;
7	07 clause docket. And we stopped last night with	
8	Ms. Deaton, concluded with her, and this morning we	ì
9	are taking up Mr. Sole.	
10	FPL.	
11	MS. CANO: Good morning. Yes, FPL calls	
12	Michael Sole to the stand.	
13	MR. REHWINKEL: Madam Chairman, before we take	ì
14	that up, I just a housekeeping matter. Again,	
15	we appreciate the accommodation last night. FPL, I	•
16	believe, has the corrected version of Exhibit 67,	
17	and I would ask if now would be a good time for us	
18	to handle that	
19	CHAIRMAN BROWN: Yes.	
20	MR. REHWINKEL: and admit it into the	
21	record.	
22	CHAIRMAN BROWN: Can we have that distributed	
23	to the Commission as well as the clerk and the	
24	parties? Thank you.	
25	While that's being distributed, are there I	

1 guess we will hold off. Are there any other 2 preliminary matters? 3 MR. REHWINKEL: No. We have -- per your 4 wishes and directive, we have distributed all of 5 Mr. Sole's direct exhibits from the Public Counsel 6 to all the parties, the witness and the Commission 7 and the clerk. I have asked that the -- they be 8 distributed to the company and to the witness 9 upside down. I am going to endeavor to come from 10 the bottom forward. 11 Thank you for that. CHAIRMAN BROWN: 12 MR. REHWINKEL: Thank you. 13 CHAIRMAN BROWN: With that -- and I see all 14 the parties have the updated Exhibit No. 67. Are 15 there any objections to entering that into evidence 16 right now? Seeing none, we will go ahead and move 17 that into the record. 18 (Whereupon, Exhibit No. 67 was received into 19 evidence.) 20 CHAIR BROWN: All right. So FPL. 21 MS. CANO: We are good. Okay. 22 EXAMINATION 23 BY MS. CANO: 24 Mr. Sole, you were sworn in yesterday, yes? 0 25 Α Yes, ma'am.

1 Would you please state your name and Q Okay. 2 business address for the record? 3 Α Michael Wilson Sole, 700 Universe Boulevard, 4 Juno Beach, Florida. 5 Q By whom are you employed and in what capacity? 6 Α NextEra Energy, Vice-President Environmental 7 Services. 8 Q Did you prepare and cause to be filed 42 pages 9 of prefiled direct testimony in this proceeding on 10 July 19th, 2017? 11 I did. Α 12 And you also filed errata on October 11th, Q 13 2017? 14 That is correct. Α 15 Do you have any changes or revisions to make 0 16 to your prefiled testimony beyond those errata? 17 Α I do not. 18 With the edits, if I were to ask you the same Q 19 questions contained in your prefiled testimony, would 20 your answers be the same? 21 Α They would. 22 MS. CANO: Chairman Brown, we ask that the 23 prefiled direct testimony and the errata of Mr. 24 Sole be entered into the record as though read. 25 CHAIRMAN BROWN: We will go a old had and

1	certi	ified.				
2		(Whereupon,	prefiled	testimony	was	inserted.)
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost Recovery Clause DOCKET NO. 20170007-EI FILED: October 11, 2017

ERRATA SHEET

JULY 19, 2017 TESTIMONY OF MICHAEL W. SOLE

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<u>PAGE #</u>	LINE #	
Page 3	Line 6	Insert "MWS-1 – FPL Supplemental CAIR/MATS/CAVR Filing"
Page 17	Line 14	Change "("CESM")" to "("CSEM")"
Exhibit #		
MWS-14		Insert "State of Florida Consent Order" in box found on Line "Floridan Aquifer System Wells" Column "Requirement"

APRIL 3, 2017 TESTIMONY OF RENAE B. DEATON

Page 8 Line 16 Change "("585")" to "("600")"

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		TESTIMONY OF MICHAEL W. SOLE
4		DOCKET NO. 20170007- EI
5		JULY 19, 2017
6		
7	Q.	Please state your name and address.
8	A.	My name is Michael W. Sole and my business address is 700 Universe
9		Boulevard, Juno Beach, Florida 33408.
10	Q.	By whom are you employed and in what capacity?
11	A.	I am employed by NextEra Energy, Inc. ("NEE") as Vice President of
12		Environmental Services.
13	Q.	Please describe your educational background and professional
14		experience.
15	A.	I received a Bachelor's of Science degree in Marine Biology from the Florida
16		Institute of Technology in 1986. I served as an Officer in the United States
17		Marine Corps from 1985 through 1990 attaining the rank of Captain. I was
18		employed by the Florida Department of Environmental Protection ("FDEP") in
19		multiple roles from 1990 to 2010 and served as the Secretary of the FDEP
20		from 2007-2010. I have been employed by Florida Power & Light Company
21		("FPL" or the "Company"), or its affiliate NextEra Energy Resources, in
22		multiple roles since 2010. Since November 2016, I have held the position of

Vice President of Environmental Services. In that role, I have overall
 responsibility for environmental, licensing, and compliance efforts for the
 Company. In May 2017, I was appointed by Governor Scott to the Florida
 Fish and Wildlife Conservation Commission.

5 Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide a status update for the Turkey
Point Cooling Canal Monitoring Plan ("TPCCMP") Project, addressing
the recent regulatory actions that are affecting the environmental
compliance activities undertaken by FPL pursuant to this Project. In order to
put those regulatory actions into context, my testimony also provides a brief
overview of the Turkey Point Cooling Canal System ("CCS") and its
regulatory and operational history.

13

14 Additionally, my testimony presents FPL's request to expand its approved 15 Manatee Temporary Heating System ("MTHS") Project to include a manatee 16 temporary heating system for FPL's Fort Lauderdale Plant site ("PFL"). As 17 noted in FPL's 2017-2026 Ten Year Site Plan filed with the Commission in 18 April 2017, FPL plans to further modernize its power generation fleet by 19 retiring two existing first generation combined cycle units at its existing PFL 20 site in 2018 and converting them into a highly efficient, clean-burning, gas-21 fired combined cycle unit (the "Modernization Project") to be named the 22 Dania Beach Clean Energy Center ("DBEC"). Finally, I will present an

1		update to FPL's approved National Pollutant Discharge Elimination System
2		("NPDES") Permit Renewal Requirements Project.
3	Q.	Have you prepared, or caused to be prepared under your direction,
4		supervision, or control, any exhibits in this proceeding?
5	A.	Yes. I am sponsoring the following exhibits:
6		• MWS-2 - 1971 U.S. Department of Justice ("USDOJ") Settlement
7		Agreement
8		• MWS-3 - NPDES/Industrial Wastewater ("IWW") Permit Number
9		FL0001562
10		• MWS-4 - Fifth Supplemental Agreement between the South Florida
11		Water Management District ("SFWMD") and FPL
12		• MWS-5 – Turkey Point Extended Power Uprate Site Certification
13		Conditions of Certification IX and X
14		• MWS-6 – 2013 SFWMD Letter Requesting Consultation
15		• MWS-7 - December 2014 FDEP Administrative Order
16		• MWS-8 – October 2015 Miami-Dade County Department of
17		Environmental Resources Management Notice of Violation
18		• MWS-9 - October 2015 Miami-Dade County Department of
19		Environmental Resources Management Consent Agreement and
20		Related Correspondence
21		• MWS-10 - April 2016 Final FDEP Administrative Order
22		• MWS-11 - April 2016 FDEP Warning Letter and Notice of Violation

1		• MWS-12 – June 2016 FDEP Consent Order
2		• MWS-13 - Addendum to October 2015 Consent Agreement and
3		Related Correspondence
4		• MWS-14 – TPCCMP Project O&M Expenses and Capital Costs
5		• MWS-15 – FDEP Industrial Wastewater Facility ("IWWF") Permit
6		Number FL0001503 for PFL
7		• MWS-16 – PFL Manatee Protection Plan ("MPP")
8		• MWS-17 – U.S. Fish and Wildlife Service ("FWS") letter to FPL
9		regarding manatee protection at PFL
10		• MWS-18 – PFL Manatee Temporary Heating System Conceptual
11		Location of heated refuge, heater and pump systems
12		• MWS-19 – Excerpt from PSL NPDES Permit
12 13	Q.	• MWS-19 – Excerpt from PSL NPDES Permit Please summarize your testimony.
	Q. A.	
13	-	Please summarize your testimony.
13 14	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey
13 14 15	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey Point CCS in compliance with all applicable permits and regulations, working
13 14 15 16	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey Point CCS in compliance with all applicable permits and regulations, working collaboratively with federal, state, and local agencies to monitor any impacts
13 14 15 16 17	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey Point CCS in compliance with all applicable permits and regulations, working collaboratively with federal, state, and local agencies to monitor any impacts from the CCS and address issues as they were identified. Required
 13 14 15 16 17 18 	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey Point CCS in compliance with all applicable permits and regulations, working collaboratively with federal, state, and local agencies to monitor any impacts from the CCS and address issues as they were identified. Required environmental compliance activities have progressed from monitoring, to
 13 14 15 16 17 18 19 	-	Please summarize your testimony. Since it was constructed more than 40 years ago, FPL has operated the Turkey Point CCS in compliance with all applicable permits and regulations, working collaboratively with federal, state, and local agencies to monitor any impacts from the CCS and address issues as they were identified. Required environmental compliance activities have progressed from monitoring, to expanded monitoring, to identification of the need for corrective actions, and

outcome. Indeed, FPL has reflected incremental costs for the expansion of FPL's environmental compliance activities each year, and the Commission 3 has approved the recovery of those costs.

5 Specifically, as a result of expanded groundwater monitoring that was 6 required prior to the implementation of the Extended Power Uprate Project at 7 Turkey Point, it was determined that a number of corrective actions were 8 required to address impacts resulting from the hypersalinity of the CCS. FPL 9 has not violated any of the operational requirements in the environmental 10 permits associated with the CCS. Rather, the expanded monitoring enhanced 11 the ability of FPL and the relevant regulatory authorities to ascertain the 12 extent to which the hypersaline condition of the CCS was impacting the 13 groundwater below, and ultimately that monitoring pointed to the need for 14 corrective action. In compliance with the directives of the various 15 environmental agencies charged with oversight of the CCS, FPL is now in the 16 mitigation and remediation phase. Already FPL's actions are achieving 17 improvements in CCS salinity and thermal efficiency.

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19 My testimony also addresses FPL's proposed expansion of its MTHS Project 20 to include temporary heaters at PFL during the construction of the DBEC, as 21 well as additional required activities at its St. Lucie plant under the NPDES

1		Renewal Requirements Project. These activities are necessary to maintain
2		compliance with environmental requirements at each of those sites.
3		
4		PART I: TURKEY POINT COOLING CANAL SYSTEM
5		A. CCS BACKGROUND
6		
7	Q.	Please describe the CCS.
8	А.	The CCS is an approximately 5,900-acre closed loop system that was
9		designed to provide condenser and auxiliary equipment cooling for Turkey
10		Point Units 1 through 4 and is currently serving that purpose for Units 3 and 4.
11		The CCS also receives cooling tower blowdown from Unit 5 and other
12		permitted discharges. The system was constructed by drag line and was
13		initially filled by in-seepage of saline groundwater. Being a large open air
14		system, water enters and leaves the system through a number of natural and
15		engineered processes. Water enters the system through precipitation,
16		groundwater in-seepage and water sources that have been developed to assist
17		achieving and maintaining low target salinity. Water leaves the system
18		through evaporation and groundwater out-seepage.
19	Q.	Please provide a brief description of why the CCS was designed and
20		created.
21	A.	Units 1 and 2 became operational in the 1960s using Biscayne Bay as the
22		source of cooling water and returning the warm water discharge back to

1 Biscayne Bay, a method known as "once through cooling." In the late 1960s 2 FPL began the design and construction of Units 3 and 4, intending to similarly 3 use a once through cooling design. In 1971, in response to a settlement of litigation with the USDOJ, FPL modified its original once through cooling 4 5 design and constructed the CCS to serve all four units. A copy of the USDOJ 6 settlement agreement is attached as Exhibit MWS-2. In February 1972, FPL 7 entered into an agreement with the Southern and Central Florida Flood Control District (the predecessor agency of the South Florida Water 8 9 Management District; both will be referred to as "SFWMD") which 10 established the SFWMD's oversight and approval authority for FPL's final 11 design, construction, operation and monitoring of the CCS (the "SFWMD 12 Agreement").

13 Q. Does FPL hold environmental permits that apply to operation of the 14 CCS?

15 Yes, the CCS is a permitted industrial wastewater facility. FPL is the A. permittee and operates the CCS under NPDES/IWW Permit Number 16 17 FL0001562. The Environmental Protection Agency ("EPA") issued the 18 facility's initial permit on June 14, 1978. The Florida Department of Environmental Regulation (now FDEP) issued an IWW discharge permit on 19 20 October 15, 1982. These permits were combined following the delegation of 21 the NPDES program to the FDEP on May 1, 1995. A copy of the current 22 NPDES permit is attached as Exhibit MWS-3.

Since the inception of the CCS more than 40 years ago, its construction and operation have been closely monitored by federal, state, and local agencies to ensure ongoing protection of water quality and the environment. FPL has complied with all operational requirements of applicable permits, while working collaboratively with federal, state, and local agencies to make decisions and to take action to meet applicable regulatory requirements related to the CCS.

8 Q. Were groundwater salinity levels a concern when the CCS was originally 9 designed?

A. Yes. Prior to construction of the CCS, saltwater had already intruded into the
Biscayne Aquifer for several miles inland. Near the coast, the aquifer was
saline for the full depth of the aquifer. Therefore, when the cooling canals
were constructed by drag line, the salinity of the water infiltrating into the
CCS was consistent with that of the adjacent Biscayne Bay.

15

It was understood by the scientific community that saltwater intrusion in the area around the Turkey Point plant was due to many factors such as freshwater withdrawals by local communities, drought, drainage and flood control structures, and other human activities. Further, during the design and permitting of the CCS, it was well understood that the unlined cooling canals would exchange with the saline groundwater below, and that salinity could increase in the canals during operations. Q. Please explain how salinity in the CCS has increased, and the migration
 of that hypersaline water.

3 A. The system experienced seasonal fluctuations in salinity corresponding to the 4 annual variation in precipitation. Salinity in the CCS typically peaked in May, 5 prior to the rainy season, and was at its lowest in November. During drought 6 years the overall salinity at end of year was higher than the prior year resulting 7 in a ratcheting effect. In this manner, annual average salinity gradually 8 increased from approximately 34 Practical Salinity Units ("PSU") in the early 9 1970s to approximately 70 PSU in 2013. Throughout that time period, there 10 were no external water sources provided to augment annual precipitation and 11 groundwater inflow.

12

13 As noted, the unlined canals allow for communication of the surface waters of 14 the CCS with the groundwater in the aquifer below. As the CCS salinity 15 levels increased, a hydraulic gradient developed whereby the higher salinity 16 surface water was heavier than the lower salinity surface water below. Over 17 the decades the aquifer immediately below the CCS became saturated with the 18 higher salinity water moving down into the aquifer. Current measurements 19 indicate that the aquifer below the CCS has salinity on the order of 60 PSU. 20 At the base of the aquifer (about 85 to 105 feet below ground surface) there is 21 a much less transmissive limestone layer that defines the bottom of the aquifer 22 and prevents further downward movement of the higher saline water. So once

the aquifer below the CCS was saturated, the only direction of movement available to the higher salinity water was lateral, carrying the water west and north within the aquifer. Some horizontal layers within the aquifer are more transmissive than others resulting in greater lateral movement in those zones. In this manner, hypersaline water moved out from under the CCS to a current extent of approximately 1.5 miles from the CCS western boundary.

Q. Were any steps taken at the time of the CCS construction in recognition of the exchange of water between the CCS and the groundwater below?

9 A. Yes. In recognition of these factors, as well as a common desire to limit 10 the westward migration of saltwater, FPL entered into an agreement with the 11 SFWMD that required FPL to design, construct and operate the CCS with an 12 approximately 18 foot deep interceptor ditch along the western edge of the 13 CCS to restrict movement of saline water from the CCS west of the L-31 14 Canal to amounts that otherwise would have occurred without the existence of 15 the CCS. Operational criteria for interceptor ditch pumps were spelled out 16 in the SFWMD Agreement along with a monitoring plan consisting of 38 17 monitoring well sites and seven surface water sites monitored bi-weekly and 18 Monitoring data was shared with the SFWMD in quarterly monthly. 19 meetings. The SFWMD Agreement provided that if, in the sole judgment of 20 the SFWMD, the objectives of the agreement were not being achieved, FPL 21 would be required to implement other feasible engineering measures to 22 achieve those objectives.

1 In addition, an accommodation for managing salinity through discharges to 2 the Biscayne Bay (in the event that the salinities in the CCS exceeded 110% 3 of the average salinity of Biscayne Bay) was initially provided by the permitting authorities. However, this ability to control salinity in the CCS via 4 5 surface water discharges to the bay was removed from the operating permits 6 in 1978 after five years of CCS operation. As a result of this change, the 7 ongoing salinity behavior of the system became a function of the natural water 8 balance, essentially subject to seasonal and annual weather patterns.

9

Q. Has the SFWMD Agreement been modified over time?

10 Yes, the original agreement has been amended several times with the first A. 11 three amendments focused on changes related to the construction of the CCS. 12 In July 1983, the SFWMD Agreement was modified again based on findings 13 by the SFWMD that FPL had met all its obligations in the original SFWMD 14 Agreement and that past monitoring activities indicated that monitoring the 15 impacts of the CCS could be accomplished by a reduced monitoring network. 16 The monitoring network was reduced to four wells and five surface water 17 transects across the interceptor ditch and CCS. Monitoring was required 18 quarterly for groundwater and bi-weekly for surface water. The data was 19 summarized and reported to the SFWMD for their review annually. FPL has 20 provided the periodic monitoring reports to SFWMD consistent with the 1983 21 modification.

1 The SFWMD Agreement was modified most recently in 2009. This version, 2 referred to as the Fifth Supplemental Agreement, included a more extensive 3 monitoring program for the CCS. A copy of the Fifth Supplemental 4 Agreement is attached as Exhibit MWS-4.

5 Q. Why was the SFWMD Agreement modified in 2009 to include more 6 extensive monitoring?

- 7 A. As a result of the environmental review conducted under the Power Plant 8 Siting Act in 2008, Conditions of Certification IX and X ("COC IX and X") 9 were included in the Site Certification Modification that required FPL to 10 develop a monitoring plan for the CCS and the areas surrounding the CCS under the provisions of the agreement between FPL and the SFWMD. COC 11 IX and X are contained within the Turkey Point Plant Conditions of 12 13 Certification document, the current edition is attached as Exhibit MWS-5. 14 The resulting monitoring plan was finalized in October 2009 and included 15 new requirements related to additional groundwater and surface water 16 monitoring stations, increased data collection and reporting, and a requirement 17 to determine the vertical and horizontal effects and extent of the CCS on 18 existing and projected groundwater and ecological conditions surrounding 19 Turkey Point.
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Q. Please summarize the environmental regulatory activity and
corresponding FPL action related to the CCS that occurred in 2009
through 2012.

6 A. Commencing in 2009, FPL began implementing the groundwater monitoring 7 program required pursuant to COC IX and X. Construction of the monitoring network and initiation of monitoring began in 2010. 8 The expanded 9 monitoring network was comprised of 47 monitoring wells, 22 surface water 10 monitoring stations, 12 meteorological sites, three CCS flowmeter sites, 32 11 ecological transect sites located in freshwater/marine wetlands and Biscayne Bay and 200 porewater sample sites. Automated data from the surface water 12 13 and groundwater sites initially were collected every 15 minutes. The 14 Comprehensive Pre-uprate Monitoring Report containing data and analyses 15 covering the pre-uprate monitoring period of June 2010 through June 2012 16 was completed and submitted to the appropriate agencies on October 31, 17 2012.

18 Q. Please summarize the environmental regulatory activity that occurred in 19 2013 through 2016.

A. In April 2013, the SFWMD sent a letter to FPL indicating that the District had
 completed its technical analysis of data associated with implementation of the
 comprehensive pre-uprate monitoring report. The letter also provided notice

1 to FPL to begin consultation with the SFWMD to identify measures to 2 mitigate, abate, or remediate the movement of CCS saline water. A copy of 3 the consultation letter is attached as Exhibit MWS-6. Following the issuance of this letter, FPL began active consultation with the FDEP, SFWMD, and 4 5 Miami-Dade County Department of Environmental Resources Management 6 ("MDC DERM"). The result of that consultation was an Administrative 7 Order ("AO") issued by the FDEP in December 2014 directing FPL to 8 develop a Salinity Management Plan to lower salinity in the CCS, among 9 other requirements. A copy of the AO is attached as Exhibit MWS-7.

10

11 The AO was challenged by several parties, including MDC DERM. On 12 October 2, 2015, MDC DERM issued a Notice of Violation ("NOV") to FPL 13 for alleged violations of County water quality standards and criteria in 14 groundwater. A copy of the October 2015 NOV is attached as Exhibit MWS-15 8. At the time the NOV was issued, FPL was working with MDC DERM to 16 address its challenge to the AO. On October 7, 2015, MDC DERM entered 17 into a Consent Agreement ("2015 CA") with FPL, which acknowledged FPL's 18 plans to reduce salinity in the CCS, and required FPL to implement actions to 19 intercept, capture, contain, and retract hypersaline groundwater west and north 20 of the FPL property boundary. It also required FPL to conduct additional monitoring and reporting. A copy of the 2015 CA and related correspondence 21 22 is attached as Exhibit MWS-9.

The remaining challenges to the AO led to an administrative hearing in which the Administrative Law Judge issued a recommended order to rescind or modify the AO. In response to that recommended order, the FDEP modified and issued the AO as a Final Administrative Order ("Final AO") on April 21, 2016. A copy of the Final AO is attached as MWS-10.

6

7 On April 25, 2016, the FDEP issued a NOV regarding the hypersaline 8 groundwater to the west of the CCS and a Warning Letter identifying 9 concerns related to water quality in deep artificial channels in four specific 10 areas immediately adjacent to the east and south of the CCS. The NOV and 11 Warning Letter are attached as Exhibit MWS-11. The NOV directed FPL to 12 enter into consultations to develop a Consent Order to address abatement and 13 remediation measures to address the hypersaline water's impact on saltwater 14 intrusion. On June 20, 2016, a Consent Order ("2016 CO") was executed 15 between FPL and the FDEP. A copy of the 2016 CO is attached as Exhibit 16 MWS-12. The three objectives of the 2016 CO are to cease discharges from 17 the CCS that impair the reasonable beneficial use of adjacent G-II 18 groundwater, prevent releases of groundwater from the CCS to surface waters 19 connected to Biscayne Bay that result in exceedances of saltwater standards, 20 and provide mitigation for impacts related to historic operation of the CCS. 21 The 2016 CO did not include any fines against FPL. The 2016 CO and FPL's 22 compliance with its requirements incorporate the issues and requirements

identified in the Final AO, as well as the NOV and the Warning Letter. As
 such, the 2016 CO supersedes all requirements of the Final AO and rescinds
 the AO.

4

5 On August 15, 2016, MDC DERM and FPL executed an addendum to the 6 October 2015 CA (referred to as "2016 CAA"). The 2016 CAA requires FPL 7 to take action to address MDC DERM's alleged violations of water quality 8 standards and cleanup target levels relating to the exceedance of ammonia in 9 deep remnant canals adjacent to the Turkey Point CCS. A copy of the 2016 10 CAA and related correspondence is attached as Exhibit MWS-13.

11 Q. Please describe the objectives of the 2015 CA.

A. The 2015 CA resolved MDC DERM's October 2015 NOV and defined actions that FPL must take. The specific objectives of the 2015 CA are: (1) for FPL to demonstrate a statistically valid reduction in salt mass and volumetric extent of the hypersaline water in groundwater west and north of FPL's property without creating adverse environmental impacts; and (2) to reduce the rate of and -- as an ultimate goal -- arrest migration of hypersaline groundwater.

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- Q. What are the specific environmental requirements imposed by the 2015
 CA?
- 3 The 2015 CA acknowledged the abatement activities that FPL was A. 4 undertaking to lower the salinity of the CCS, thus reducing the movement of 5 hypersaline water into the groundwater. It also requires the following: 6 Remediation of the hypersaline groundwater plume north and west of the • CCS by design, construction and operation of a Biscayne Aquifer 7 Recovery Well System ("RWS"); 8 9 Completion of regional hydrologic improvement projects; and • 10 Additional extensive monitoring and reporting, including: 11 facilitating MDC DERM access to all data from continuous 0 12 electronically monitored stations; 13 providing monthly and quarterly reports; 0 14 employing Continuous Surface Electromagnetic Mapping ("CESM") 0 15 methods to assess the location and orientation of the hypersaline plume 16 west and north of the CCS; adding three groundwater monitoring clusters to monitor groundwater 17 0 18 conditions in the model lands basin; and 19 submitting annual reports providing an evaluation of progress in 0 20 achieving the objectives of the 2015 CA and recommending any 21 refinements to 2015 CA required activities.
- 22

1		The 2015 CA also recognized that factors beyond FPL's control may
2		influence movement of groundwater in the surficial aquifer, and FPL must
3		take into account such factors when developing and implementing remedial
4		actions to minimize the timeframe for achieving compliance with the 2015
5		CA. FPL continues to receive correspondence from MDC DERM regarding
6		implementation of the CA (see Exhibit MWS-9).
7	Q.	What specific activities is FPL undertaking to comply with the 2015 CA?
8	A.	FPL is moving forward with the implementation of the following activities
9		required by the 2015 CA:
10		• Permitting, modeling, design, and construction activities related to the
11		development and implementation of the RWS;
12		• Groundwater modeling analysis related to MDC DERM's approval of the
13		RWS design;
14		• Completion of an analysis with input from the FDEP and other agencies
15		using the variable density three dimensional groundwater model to
16		allocate relative contributions of other entities or factors to the movement
17		of the saltwater interface;
18		• Permitting, construction, and implementation activities related to new
19		groundwater or surface water monitoring well sites;
20		• Extraction of hypersaline groundwater from Biscayne Aquifer wells for
21		injection in the onsite Underground Injection Control Well to the Boulder
22		Zone of the Floridan Aquifer, and associated monitoring;

1		• Implementation of the baseline continuous surface electromagnetic survey
2		and groundwater monitoring (as required by both the 2015 CA and 2016
3		CO) to identify the initial orientation of the hypersaline CCS groundwater
4		west and north of the CCS;
5		• Continuation of required monitoring and reporting of existing stations as
6		required in the 2015 CA; and
7		• Additional activities to comply with required monitoring and reporting,
8		including regular status meetings with MDC DERM.
9		
10		FPL expects to complete and submit the 2017 annual report evaluating the
11		progress achieved in meeting the objectives of the 2015 CA in the fourth
12		quarter of 2017. In 2018, FPL is planning to complete construction of the
13		RWS and commence full operation; complete and submit the RWS Start-Up
14		Report outlining baseline conditions and summarizing results of the first three
15		months of operations; commence RWS monitoring; and continue groundwater
16		modeling updates and analyses and regular reporting as required.
17	Q.	Please describe the objectives of the 2016 CO.
18	A.	The primary objectives of the 2016 CO are to: (1) cease discharges from the
19		CCS that impair the reasonable and beneficial use of the adjacent G-II ground
20		waters west of the CCS; (2) prevent releases of groundwater from the CCS to
21		surface waters connected to Biscayne Bay that result in exceedances of

22 surface water quality standards in Biscayne Bay by undertaking restoration

1		projects at Turtle Point and Barge Basin, and; (3) provide mitigation to
2		address impacts due to historic operation of the CCS.
3	Q.	What are the specific environmental requirements imposed by the 2016
4		CO?
5	А.	As set forth in Exhibit MWS-12, the 2016 CO requires FPL to take actions to
6		meet the following conditions:
7		• Reduce and maintain an annual average salinity of the CCS surface waters
8		at or below 34 PSU at the completion of the fourth year of freshening
9		activities;
10		o develop and implement a Nutrient Management Plan and
11		o submit a Thermal Efficiency Plan (e.g., sediment management) that
12		describes actions for the CCS to maintain a minimum of 70% thermal
13		efficiency;
14		• Implement a RWS to halt and reduce the western migration and extent of
15		the hypersaline water from the CCS to the L-31E canal within 10 years,
16		including additional monitoring of the extent and volume of the
17		hypersaline plume;
18		• Provide mitigation for impacts due to historic operation including entering
19		into an agreement with the SFWMD to convey FPL property interests in
20		essential properties within the Biscayne Bay Coastal Wetlands Phase I
21		project and depositing \$1.5 million into a Florida Department of Financial

1 Services escrow account to finance projects in the Turkey Point region 2 that support mitigation of saltwater intrusion; 3 Implement restoration projects in the Barge Basin and Turtle Point to 4 prevent releases of groundwater from the CCS to surface waters connected 5 to Biscayne Bay that would result in exceedances of surface water quality 6 standards in Biscayne Bay; 7 Inspect the peripheral levees forming the CCS by an independent entity 8 and repair of any identified material breaches or structural defects; 9 Complete an analysis using the variable density three dimensional 10 groundwater model that seeks to allocate relative contributions of other 11 entities or factors to the movement of the saltwater interface; and 12 Continue existing water quality monitoring and reporting and implement • 13 new and more extensive water quality monitoring and reporting. 14 0. What specific activities is FPL undertaking to comply with the 2016 CO? 15 A. FPL is moving forward with the following 2016 CO activities: 16 Implementation of the Nutrient Management Plan and Thermal Efficiency • 17 Plan, as directed by the FDEP; 18 Completion of Upper Floridan Aquifer well system to provide up to 14 19 millions of gallons per day ("MGD") of low salinity freshening water; 20 Permitting and construction activities related to the implementation of the 21 RWS;

1	• Initiation of an analysis with input from the FDEP and other agencies
2	expanding the variable density three dimensional groundwater model
3	developed under the 2015 CA to allocate relative contributions of other
4	entities or factors to the movement of the saltwater interface;
5	• Design and permitting activities related to the restoration projects in the
6	Barge Basin and Turtle Point Canal;
7	• Implementation of berm and dike maintenance recommendations resulting
8	from the CCS periphery inspection;
9	• Execution of an agreement with the SFWMD to convey FPL property
10	interests;
11	• Depositing \$1.5 million into a Florida Department of Financial Services
12	escrow account to finance projects that mitigate saltwater intrusion in the
13	region;
14	• Conducting a baseline CSEM survey of the hypersaline plume prior to
15	initiation of the RWS;
16	• Permitting, construction, and other activities related to additional
17	monitoring wells and sampling activities;
18	• Preparing and submitting the annual monitoring report; and
19	• Additional activities including regular status meetings with the FDEP as
20	needed to comply with required monitoring and reporting.
21	

1		In 2018, FPL is planning to continue implementation of the Nutrient		
2		Management Plan and Thermal Efficiency Plan; complete construction of the		
3		RWS and commence full operation; initiate construction of Barge Basin and		
4		Turtle Point Canal restoration projects; and prepare and submit the 2018		
5		annual monitoring report in addition to regular status meetings with the FDEP		
6		to comply with required monitoring and reporting.		
7	Q.	What are the specific environmental requirements imposed by the 2016		
8		CAA?		
9	A.	The 2016 CAA requires FPL to undertake the following activities:		
10		• Submit a Site Assessment Plan ("SAP") to MDC DERM to allow for the		
11		identification of source(s) of the ammonia exceedances and the delineation		
12		of the vertical and horizontal extent of the subject ammonia exceedances		
13		in surface water. The SAP must also be adequate to address the ammonia		
14		exceedances to the surface waters surrounding the facility, including but		
15		not limited to, waters tidally connected to Biscayne Bay;		
16		• Upon approval of the SAP, implement the SAP and submit to the MDC		
17		DERM for review and approval a Site Assessment Report ("SAR") which		
18		addresses the requirements of the approved SAP;		
19		• Upon approval of the SAR, submit to MDC DERM for review and		
20		approval a Corrective Action Plan ("CAP") consisting of an		
21		environmental restoration plan to correct the exceedances of ammonia,		
22		details of proposed process modifications or changes in operational		

1		systems to manage and control the source(s) of ammonia to prevent future
2		ammonia exceedances, and physical, structural, or hydraulic modifications
3		to the area of the CCS to eliminate contributions of CCS water to surface
4		water and including a timetable for implementation and completion of the
5		CAP; and
6		• Pay MDC DERM administrative costs in the amount of \$5,000.
7		
8		FPL continues to receive correspondence from MDC DERM regarding
9		implementation of the 2016 CAA (see Exhibit MWS-13).
10	Q.	What specific activities is FPL undertaking to comply with the 2016
11		CAA?
12	Α.	FPL is implementing the following activities:
13		• Execution of MDC approved Site Assessment Plan seeking to collect
14		groundwater, porewater and surface water samples to determine if the
15		CCS is contributing to elevated ammonia in adjacent canals;
16		• Conducting analyses and submitting the required SAR;
17		• Coordinating with MDC on their review and approval of the SAR; and
18		• Implementation of any requirements contained in the SAR upon approval.
19		
20		In 2018, FPL plans to implement the requirements contained in the approved
21		SAR.
22		

Q. Please summarize the pending legal activity related to the CCS.

2 A. On July 12, 2016, the Southern Alliance for Clean Energy ("SACE") and the 3 Tropical Audubon Society, Incorporated ("TAS") filed a citizen suit with the United States District Court (Southern District of Florida) alleging that FPL 4 5 violated the conditions of its NPDES Permit Number FL0001562 with respect 6 to operation of the CCS. The citizen suit seeks to compel FPL to take actions 7 to abate alleged discharges from the CCS, remediate contamination alleged to have resulted from those discharges, and mitigate alleged environmental 8 9 damages; it also seeks to impose civil penalties and to recover SACE's and 10 TAS's litigation costs. The MDC DERM and the FDEP regulatory requirements reflected in the 2015 CA, 2016 CO and 2016 CAA are not 11 affected by the filing of the citizen suit. FPL has a pending motion to dismiss 12 13 believes that those regulatory requirements fully address and the 14 environmental conditions alleged in the citizen suit, such that the suit is 15 unwarranted and unnecessary.

16 Q. Have FPL's actions resulted in improved conditions in the CCS?

A. Yes. The actions FPL has taken over the last few years has resulted in
improved conditions within the CCS. Most notably, FPL has observed
improvements in thermal efficiency of the CCS as a direct result of sediment
management activities. FPL has also been able to better control water salinity
and algae that can result from significant drought conditions.

Q.

Has the construction and use of the RWS resulted in removal of hypersaline groundwater as expected?

3 Yes. Since operations of the underground injection well testing phase of the A. 4 RWS began on September 28, 2016, as of June 30, 2017, approximately 3.7 5 billion gallons of hypersaline groundwater from beneath the CCS has been 6 extracted and disposed of in the naturally saline Boulder Zone Formation 7 located 3,200 feet below the surface. This amounts to approximately 890,000 tons of salts removed from the Biscayne aquifer beneath the CCS. 8 9 Construction of the 10 RWS extraction wells began in June 2017 and the 10 wells are expected to begin operations in March 2018. Groundwater models 11 of the RWS indicate the westward migration of the hypersaline plume will be 12 stopped in three years of operation, with retraction of the hypersaline plume 13 north and west of the CCS beginning in 5 years. Retraction of the plume back 14 to the FPL site boundary is projected in ten years.

Q. Please describe the results achieved from the use of the Upper Floridan aquifer freshening well system.

A. Operation of the 14 MGD Upper Floridan aquifer freshening well system
began on November 28, 2016. The brackish water from the Floridan wells
(2.5 PSU compared to Bay salinity at 34 PSU) is being used to help reduce the
CCS salinity to an average annual level of 34 PSU, essentially equivalent to
the salinity of the Bay. The addition of this water was instrumental in
minimizing the increase in salinity that ordinarily occurs during the dry

1		season. Continued operation of the freshening wells during the wet season
2		will further reduce CCS salinities, achieving progress towards the overall goal
3		of 34 PSU.
4		
5		C. TPCCMP PROJECT BACKGROUND AND
6		CURRENT COST RECOVERY REQUEST
7		
8	Q.	Did FPL seek and receive Commission approval for an ECRC project to
9		recover the costs of complying with environmental requirements that
10		have been imposed on the CCS?
11	A.	Yes. In Docket No. 20090007-EI, FPL petitioned for approval of the
12		TPCCMP Project, and it was approved by stipulation in Order No. PSC-2009-
13		0759-FOF-EI.
14	Q.	What was the scope of the TPCCMP Project, as presented by FPL and
15		approved by the Commission?
16	A.	The initial focus of the TPCCMP Project was on implementing groundwater
17		monitoring in the vicinity of the CCS to determine the impact of the Turkey
18		Point EPU on the groundwater in the vicinity of the CCS. Those were the
19		initial requirements of COC IX and X. However, the testimony
20		accompanying FPL's petition for approval of the TPCCMP Project made it
21		clear that if the FDEP, in consultation with the SFWMD and the MDC
22		DERM, found that water from the CCS was causing harm or potential harm to

adjacent waters, expanded assessment and remediation measures would be
 required pursuant to COC IX and X.

Q. Has FPL submitted updates to the Commission regarding the scope and costs of the TPCCMP Project?

5 Yes. Throughout the period since the TPCCMP Project was approved, FPL A. has filed multiple updates concerning the TPCCMP Project. As required, FPL 6 7 has annually filed all cost data concerning the project, including information 8 relating to actual and estimated costs, and final true-up amounts. FPL has also 9 filed project description and progress reports annually to provide the 10 Commission with information concerning project accomplishments and 11 expenditures. In 2013, FPL filed testimony in Docket No. 20130007-EI to 12 describe activities FPL was required to perform following the completion of 13 consultation with the SFWMD, FDEP, and MDC DERM related to increasing 14 salinity trends. In 2015, FPL filed testimony in Docket No. 20150007-EI that 15 discussed additional salinity reduction related activities FPL was required to undertake pursuant to updated regulatory requirements. These activities 16 17 included, but were not limited to, water delivery projects and sediment 18 management. FPL also discussed TPCCMP Project activities at length in 19 testimony filed last year in Docket No. 20160007-EI.

- 20
- 21

- 1
 Q. Since 2009, has the Commission approved recovery of the TPCCMP

 2
 Project related costs?
- 3 Yes. Since 2009, the Commission has approved ECRC recovery for both the A. 4 monitoring and corrective action activities related to hypersalinity conditions 5 in the CCS. See Order Nos. PSC-2009-0759-FOF-EI, PSC-2011-0083-FOF-EI, PSC-2011-0553-FOF-EI, PSC-2011-0553A-FOF-EI, PSC-2012-0613-6 7 FOF-EI, PSC-2013-0606-FOF-EI, PSC-2014-0643-FOF-EI, PSC-2015-0536-8 FOF-EI, and PSC-2016-0535-FOF-EI. Initially, the compliance costs were 9 for monitoring, but as described above, over time the results of the monitoring 10 led both the FDEP and MDC DERM to direct FPL to take corrective and remedial actions. Since 2013, the TPCCMP Project has included projects 11 12 related to the development, planning, and implementation of mitigation and 13 remediation activities directed at addressing salinity reduction requirements.

14 Q. Is it common for environmental compliance activities and costs to evolve
15 from monitoring to mitigation and remediation?

A. Yes. The stepwise progression from initial monitoring and data collection to
 more extensive monitoring and mitigation and/or remediation activities is
 common in environmental regulatory processes. Environmental regulators
 typically engage site owners or facility operators to determine what additional
 steps must be taken. FPL explained in its 2009 testimony that the TPCCMP
 Project could follow a similar evolution.

Q. What is FPL's current estimate of 2017 costs associated with required TPCCMP Project activities?

A. In 2017 FPL is projected to incur approximately \$39.1 million in capital
expenditures and \$37.7 million in O&M expenses for the TPCCMP Project.
Estimated O&M expenses and capital costs are provided in more detail in
Exhibit MWS-14.

7 Q. How much does FPL expect to spend on TPCCMP Project compliance 8 activities in total?

9 A. Based on current understanding and assumptions regarding environmental 10 conditions and required compliance activities, FPL expects to incur 11 approximately \$176.4 million in O&M and Capital compliance costs over the 12 period of 2017 through 2026. Construction of major compliance facilities 13 such as the recovery and monitoring wells must occur at the outset, and are expected to be completed by the end of this year. After 2017, it is anticipated 14 15 that the level of costs for the TPCCMP Project will significantly decrease. 16 Information concerning the 2017-2026 compliance costs is provided in more 17 detail on Exhibit MWS-14.

18 Q. How does FPL ensure that the costs incurred are reasonable and 19 prudently incurred?

A. In general, FPL competitively bids the procurement of materials and services.
 FPL benefits from its strong market presence allowing it to leverage
 corporate-wide procurement activities to the specific benefit of individual

1 project procurement activities. However, consistent with applicable policies 2 and procedures, single or sole source procurement also may be used. All 3 initial commitments and contract change orders will be appropriately 4 authorized. FPL's Project Controls group maintains the project scope, budget, 5 and schedule and tracks project costs through various approval processes, 6 procedures, and databases. 7 Is FPL recovering the costs of the TPCCMP Project activities through 0. 8 any other mechanism? 9 A. No. 10 11 PART II: MODIFICATION TO MANATEE TEMPORARY HEATING 12 SYSTEM PROJECT 13 14 Please briefly describe FPL's currently approved MTHS Project. Q. 15 A. On April 13, 2009, FPL petitioned the Commission for approval of the MTHS 16 Project, which involved the installation of an electric heating system at its 17 Riviera Plant ("PRV"), in order to provide a "manatee refuge" by discharging 18 warm water when necessary into the manatee embayment area during the 19 conversion of PRV to the Riviera Beach Next Generation Clean Energy 20 Center. On August 28, 2009, FPL petitioned the Commission to expand the 21 proposed MTHS Project to include FPL's Cape Canaveral Plant ("PCC") 22 during the conversion of PCC to the Cape Canaveral Next Generation Clean Energy Center. The MTHS Project at PRV and PCC was approved by Order
 No. PSC-2009-0759-FOF-EI.

3

On January 13, 2012, FPL petitioned the Commission to expand the MTHS
Project to include a MTHS at its Port Everglades Plant during its conversion
to the Port Everglades Next Generation Clean Energy Center. This expansion
of the existing MTHS Project was approved by Order No. PSC-2012-0613FOF-EI.

9 Q. Why is FPL proposing to expand the MTHS Project again?

10 A. FPL intends to implement a modernization project at PFL that will consist of 11 retiring two existing first generation combined cycle units in 2018 and 12 replacing them with a highly efficient, clean-burning, gas-fired combined 13 cycle unit. On May 22, 2017, FPL petitioned for exemption from the RFP 14 requirement of Rule 25-22.082, F.A.C. ("bid rule exemption"), which the 15 Commission approved as proposed agency action at its July 13, 2017 agenda 16 conference (Docket No. 20170122-EI). As a result of the Commission 17 approval of the exemption, FPL intends to petition for a determination of need 18 for the PFL modernization project.

19

As has been the case with the earlier modernization projects described above, this will result in a period of time when there will be no generating unit producing a warm water discharge at the site. Accordingly, FPL is proposing 1 to expand the MTHS Project to include a temporary water heating system at 2 PFL in order to ensure compliance with its existing Manatee Protection Plan 3 ("MPP"), which is Specific Condition I.C.13 to the IWWF Permit Number FL0001503, issued by the FDEP for PFL on June 8, 2015. Specific Condition 4 5 I.C.13 to the IWWF Permit states "the permittee shall continue compliance 6 with the facility's Manatee Protection Plan approved by the Department on 7 August 18, 1999 et seq." The IWWF Permit containing Specific Condition 8 I.C.13 is attached as Exhibit MWS-15.

9

10 Installing a MTHS at PFL will ensure that FPL complies with the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361, et. seq.), and the 11 12 Endangered Species Act of 1973 (16 U.S.C. 1531, et. seq.), which protect the 13 Florida manatee. On June 8, 2017, the FWS provided comments in a letter to FPL regarding the modernization project at PFL. In its letter, the FWS 14 15 indicated that measures will be necessary to protect the manatees from cold 16 water impacts during the transition period. A copy of the FWS letter to FPL is 17 attached as Exhibit MWS-17.

18 Q. Please briefly describe the MTHS Project at PFL.

A. FPL plans to install an electric heating system at PFL in 2018, in order to
 continue to provide warm water when necessary into the manatee warm water
 refuge beginning in November 2018 and continuing until the modernization
 project is complete in 2022. Implementing the modernization project will

require the existing combined cycle units to be dismantled and the new combined cycle facility to be built. During this construction period, no generating units will be available to provide warm water for compliance with the MPP, which currently defines the manatee heating season at PFL to be from November 15 to March 31 of each year. The current schedule for the modernization project requires that the existing combined cycle units be taken out of service around the end of 2018.

8

9 Primary activities integral to the expansion of the MTHS Project at PFL 10 include designing, permitting, and installing pipes, heater and pump systems, 11 interconnection to the FPL power system, and testing, operating, and 12 monitoring the electric heating system, and monitoring manatees. The 13 conceptual location of the temporary heating system is shown on Exhibit 14 MWS-18.

Q. Has FPL observed a substantial number of manatees in the PFL warm water refuge previously?

A. Yes. Aerial surveys for manatees have been conducted by Mote Marine
Laboratory on behalf of FPL for decades. In addition, Broward County has
also been conducting aerial surveys for years. In January 2012, Broward
County documented a record 947 manatees during an aerial survey over PFL.

- 21
- 22

1 **Q.**

Please describe the temporary heating system proposed for PFL.

2 A. The proposed temporary heating system will consist of an approximately 33 3 million Btu per hour electric heater along with the associated pumping system, piping, and electrical equipment. The intake piping and pump systems will be 4 5 installed in the northeast portion of the cooling pond east of the existing 6 discharge canal. Cooling pond water will be pumped through the electric 7 heater and discharged into the southern portion of the southeast leg of the 8 temporary manatee refuge area when the ambient water temperature falls 9 below a specified trigger temperature. The water depth in this area varies 10 from approximately 4 feet to 25 feet. The proposed temporary heating system has been modeled to provide an approximate 0.72 acres of water surface area 11 12 at or above 68°F during the conditions under which the MPP requires that 13 PFL provide heated water for manatee protection.

14 Q. Has FPL estimated the cost of the proposed PFL MTHS?

A. Yes. The total estimated capital cost for the PFL MTHS is \$7.3 million. This
estimate includes expenditures for equipment, design and engineering of the
system, labor for installation, and interconnection to the FPL power system,
and is expected to be spent in 2017 and 2018.

19

FPL's total O&M estimate for the PFL MTHS is \$0.67 million. FPL expects
to begin incurring O&M expenses to monitor the manatees at PFL beginning
in 2018. Anticipated biological and environmental monitoring activities will

1 include thermal monitoring of ambient and refuge water temperatures, visual 2 observation of manatees utilizing the refuge, potential tracking of manatee 3 movements, and meetings with the FWS and FWC staff to discuss monitoring results. These monitoring expenses will continue while PFL's MTHS is in 4 5 service. In addition, once installation and commissioning of the MTHS at 6 PFL is completed in 2018, FPL will incur O&M expenses associated with 7 materials, supplies and services necessary to maintain the system. 8 9 These projected O&M costs do not include the electrical costs to operate the 10 MTHS. FPL cannot predict how often the system will operate but does not 11 expect the electrical costs to be significant. Therefore, FPL is not seeking 12 recovery through the ECRC for the electrical costs. Additional activities may 13 be required for compliance with the manatee requirements of PFL's IWWF 14 and MPP in the future, but FPL is not aware of any such requirements at this 15 time. 16 **Q**. What will happen to the MTHS at PFL once the Modernization Project is 17 completed in 2022? 18 A. Because FPL does not expect to need the temporary heating system once the 19 modernized combined cycle unit goes into service, FPL plans to dismantle the 20 system at that time. Therefore, FPL proposes to amortize the cost of the

22 through June 2022). FPL will incur removal costs for the temporary heating

system over its operating life at PFL (i.e., the 44 months from November 2018

system in 2022, which will be offset by any salvage value that FPL is able to
obtain for the system. Because FPL cannot accurately predict either the
removal costs or the salvage value at this time, we have assumed that they net
to zero for the purpose of the current cost projections and FPL will true up the
projections later as better information becomes available. Any surplus of
salvage value over removal costs would be returned to customers via the
ECRC.

8 Q. Please describe the measures FPL is taking to ensure that costs of the 9 MTHS Project at PFL are reasonable and prudently incurred.

10 A. In general, FPL competitively bids the procurement of materials and services. 11 FPL benefits from its strong market presence allowing it to leverage 12 corporate-wide procurement activities to the specific benefit of individual 13 project procurement activities. However, consistent with applicable policies 14 and procedures, single or sole source procurement also may be used. All 15 initial commitments and contract change orders will be appropriately 16 authorized. FPL's Project Controls group maintains the project scope, budget, 17 and schedule and tracks project costs through various approval processes, 18 procedures, and databases. FPL also will use its prior experience and lessons 19 learned with the temporary manatee heating systems at PRV, PCC and PEEC 20 to ensure a cost-effective design and equipment selection process.

1	Q	Is FPL recovering through any other mechanism the costs for the
2		proposed MTHS Project at PFL for which it is petitioning for ECRC
3		recovery?
4	A.	No.
5		
6	PA	RT III: UPDATE FOR NPDES PERMIT RENEWAL REQUIREMENTS
7		
8	Q.	Please summarize FPL's approved NPDES Permit Renewal
9		Requirements Project.
10	А.	The Federal Clean Water Act requires all point source discharges to navigable
11		waters from industrial facilities to obtain permits under the NPDES program.
12		Pursuant to the EPA's approval, the FDEP implements the NPDES permitting
13		program in Florida. Affected facilities are required to apply for renewal of the
14		5-year-duration NPDES permits prior to their expiration.
15		
16		By Order No. PSC-2011-0553-FOF-EI issued in Docket No. 20110007-EI on
17		December 7, 2011, the Commission approved FPL's NPDES Permit Renewal
18		Requirements Project to recover costs associated with new requirements for
19		whole effluent toxicity monitoring and reporting, as well as for preparing
20		Storm Water Pollution Prevention Plans that were contained in the then-latest
21		renewals for FPL's NPDES permits.
22		

1	By Order No. PSC-2012-0613-FOF-EI, issued in Docket No. 20120007-EI on
2	November 16, 2012, the Commission approved an update to FPL's approved
3	NPDES Permit Renewal Requirements Project to recover costs associated
4	with the requirement of the renewed NPDES permit for the St. Lucie Plant
5	("PSL"), which became effective September 29, 2011. This permit required
6	that PSL prepare, submit and implement a Total Residual Oxidants ("TRO")
7	Plan of Study ("TROPOS").

8 Q. Please describe the current update to this project that FPL is presenting.

- 9 A. The renewed NPDES permit for PSL, which became effective November 4,
 2016, contains two new requirements. Because the renewed NPDES permit
 11 was not issued until November 4, 2016, FPL did not have an opportunity to
 12 reflect the projected costs of complying with its requirements in FPL's ECRC
 13 projection filing for the year 2017.
- 14

The first new requirement is that PSL meet with the FDEP to discuss a Mixing Zone Re-evaluation Plan ("MZRP") for its FDEP-approved mixing zones, prepare and implement the plan, and then submit the results of the reevaluation to the FDEP. The relevant excerpt from the PSL NPDES Permit is included as Exhibit MWS-19.

20

21 Through the TROPOS process, PSL determined that a properly sized mixing 22 zone would allow the plant to meet the FDEP's Class III water quality

1		standard of 0.01 mg/l for TRO in discharges from its cooling water system. To
2		complete this process, PSL utilized a proprietary model to determine the
3		appropriate mixing zone size. The purpose of the MZRP is to utilize a model
4		that is EPA-approved and in the public domain to demonstrate that discharges
5		from the PSL cooling water system meet the FDEP's Class III water quality
6		standard of 0.01 mg/l for TRO.
7		
8		The second new requirement is that PSL initiate, by November 4, 2017, a
9		chlorine optimization study ("COS"), consisting of three phases: Phase I
10		consists of project baseline data collection and planning; Phase II is the actual
11		project implementation, which includes preparation, project initiation and
12		completion, and report writing; and Phase III is post-implementation support.
12 13	Q.	completion, and report writing; and Phase III is post-implementation support. Please describe the proposed activities associated with this update.
	Q. A.	
13	-	Please describe the proposed activities associated with this update.
13 14	-	Please describe the proposed activities associated with this update. FPL has retained a consultant to prepare the MZRP, which must be completed
13 14 15	-	Please describe the proposed activities associated with this update. FPL has retained a consultant to prepare the MZRP, which must be completed prior to November 4, 2017 and submitted to the FDEP for approval.
13 14 15 16	-	Please describe the proposed activities associated with this update.FPL has retained a consultant to prepare the MZRP, which must be completed prior to November 4, 2017 and submitted to the FDEP for approval.Following approval, the MZRP must be implemented within 24 months with a
13 14 15 16 17	-	Please describe the proposed activities associated with this update. FPL has retained a consultant to prepare the MZRP, which must be completed prior to November 4, 2017 and submitted to the FDEP for approval. Following approval, the MZRP must be implemented within 24 months with a requirement to submit the results with the next Industrial Wastewater Permit
13 14 15 16 17 18	-	Please describe the proposed activities associated with this update. FPL has retained a consultant to prepare the MZRP, which must be completed prior to November 4, 2017 and submitted to the FDEP for approval. Following approval, the MZRP must be implemented within 24 months with a requirement to submit the results with the next Industrial Wastewater Permit renewal (i.e. by May 7, 2021). Another consultant will be selected to conduct
 13 14 15 16 17 18 19 	-	Please describe the proposed activities associated with this update. FPL has retained a consultant to prepare the MZRP, which must be completed prior to November 4, 2017 and submitted to the FDEP for approval. Following approval, the MZRP must be implemented within 24 months with a requirement to submit the results with the next Industrial Wastewater Permit renewal (i.e. by May 7, 2021). Another consultant will be selected to conduct

1		• Phase I – a vendor will be selected to conduct literature searches to
2		investigate topics such as benchmarking other industry optimization
3		studies, identify other viable oxidant/biocide treatment options,
4		perform modeling of the cooling system, determine the efficacy of raw
5		water biofouling control options determined to be most viable, as well
6		as several other activities.
7		• Phase II – the vendor will prepare, initiate and complete the project,
8		then submit a report on the results.
9		• Phase III is post-implementation support. Costs and actual scope for
10		Phase III have not been estimated at this time and will be established
11		after the optimized chlorine protocol is identified.
12	Q.	Has FPL estimated the O&M costs associated with this update?
13	А.	Yes. FPL projects spending \$17,700 in 2017 and approximately \$50,000 in
14		late 2019 or 2020 for O&M costs associated with the MZRP study.
15		Additionally, FPL projects spending \$50,000 in 2017 and approximately
16		\$230,000 in 2018 for O&M costs associated with the COS. If the completion
17		of the COS and associated adjustments to the plants operational practices
18		indicate that PSL is able to meet the 0.01 mg/L TRO standard at the facility's
19		point of discharge (compliance location) without the aid of a mixing zone, the
20		MZRP modeling may not be required.
21		

- 1 **Q**. How will FPL ensure that the costs incurred for this update are 2 reasonable and prudently incurred? 3 As it does for all projects, FPL complies with its applicable policies and A. 4 procedures for competitive bidding and single or sole source procurement. In 5 this instance, competitive bidding was not required for the development of the 6 initial MZRP because it was estimated to cost less than \$50,000. FPL selected 7 a former FDEP water subject matter expert to support the determination that FPL's MZRP met the intent of the rule, and that sampling in the Atlantic 8 9 Ocean should not be required. This resulted in significant savings for the 10 overall project. FPL also confirmed that this consultant's hourly rates are 11 comparable to other vendor rates.
- 12

FPL will continue to comply with applicable procurement policies and procedures. FPL will also rely on its Project Controls group to maintain the project scope, budget, and schedule and to track project costs through various approval processes, procedures, and databases.

Q. Is FPL recovering the cost of the additional NPDES Permit Renewal
 Requirements Project activities described in this update through any
 other mechanism?

- 20 A. No.
- 21 Q. Does this conclude your testimony?
- 22 A. Yes.

1	BY MS. CANO:
2	Q And you also sponsor, or cosponsor exhibits to
3	your direct testimony?
4	A I do.
5	Q And those consist of exhibits MWS-1 through
6	MWS-19, and you also cosponsor RBD-3; is that right?
7	A That is correct.
8	Q Okay.
9	MS. CANO: I would note that these have been
10	premarked for identification as Exhibit Nos. 2
11	through 20 and 24.
12	CHAIRMAN BROWN: Thank you.
13	BY MS. CANO:
14	Q Would you please provide a summary of your
15	direct testimony to the Commission?
16	A I will.
17	Good morning, Chairman. Good morning,
18	Commissioners. My testimony addresses three projects.
19	I will focus my summary on the Turkey Point Cooling
20	Canaling Monitoring Plan project. To understand the
21	genesis of this 2009 approved project, it's important to
22	provide background on the operational and regulatory
23	history of to the cooling canal system.
24	In the late 1960s, the original cooling design
1	
25	of the new Units 3 and 4 of Turkey Point facility was

ſ

similar to the fossil units that existed. It included
once through cooling design, using Biscayne Bay as the
source of cooling water, and then returning that warm
water back to Biscayne Bay.

5 In 1971, as required by a United States Department of Justice settlement agreement, FPL modified 6 the design and constructed the cooling canal systems to 7 8 serve all four units. Because of its proximity to 9 Biscayne Bay, the groundwater beneath the cooling canal 10 system was already saltwater intruded. And the cooling 11 canal system was actually initially filled in by 12 in-seepage of this saline groundwater.

13 Because the saline groundwater in the canals 14 could increase in salinity due to the oper -- excuse 15 me -- due to evaporative losses, in 1972, FPL entered 16 into an agreement with the Central and South Florida 17 Flood Control District, now the South Florida Water 18 Management District, that required FPL to construct a 19 seepage control barrier, commonly referred to as the 20 interceptor ditch, to control salinity migration into 21 the water. This agreement identified specific design, 22 operational requirements and objectives with a robust 23 monitoring plan to identify the efficacy of the seepage barrier. 24

The water management district also maintained

clear regulatory oversight, and retained the authority to require FPL to implement other measures if, in the sole judgment of the district, the objectives of the agreement were not being achieved.

5 FPL has operated the interceptor ditch and the 6 cooling canal system in accordance with its permits and 7 the agreement with the water management district. 8 Throughout most of its operation, monitoring and 9 reporting identified little adverse impact on salinity, 10 and the water management district did not direct FPL to 11 take any action beyond continued operation of the 12 interceptor ditch.

13 When FPL proposed the Turkey Point's Units 3 14 and 4 uprate project in 2008, agencies did identify 15 potential concerns that the interceptor ditch may not be 16 effective in restricting movement of saline water; and as a result, required the extensive monitoring that 17 18 initiated the Turkey Point Cooling Canal Monitoring Plan 19 project to delineate any historical and current impacts 20 and, if necessary, take appropriate action.

Since 2009, this project has progressed from the expanded monitoring to the identification of the need for corrective action by three separate environmental agencies, and now implementation of corrective action as documented in two separate orders.

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In my experience, as former Secretary of FDEP,
 I can testify that it's common for environmental
 projects to progress from monitoring to mitigation and
 remediation activities. It's also common for
 environmental regulators to engage site owners to
 collaboratively resolve the identified issues.

FPL has worked collaboratively with the regulatory agencies throughout the CCS's 40 year plus operation, and only upon recent evaluation of the expanded monitoring was there sufficient information to discern an actionable impact.

12 The required correct actions are discussed in 13 detail in my prefiled testimony, and FPL is already 14 seeing positive results from implementing them. We will 15 continue to execute on the requirements established in 16 these regulatory orders to improve the cooling canal 17 system's operations, to eliminate future impacts and 18 remediate the existing hypersaline plume. 19 This concludes my summary. Mr. Sole is available for 20 MS. CANO: 21 cross-examination. 22 CHAIRMAN BROWN: Thank you. 23 And good morning, Mr. Sole. 24 Good morning, Chairman. THE WITNESS: 25 I think it's going to be a CHAIRMAN BROWN:

1 long morning. 2 THE WITNESS: I get that sense, too. 3 CHAIRMAN BROWN: We will start with Public Counsel. 4 5 MR. REHWINKEL: Thank you, Madam Chairman. 6 EXAMINATION 7 BY MR. REHWINKEL: 8 0 I will endeavor to make it shorter, but we 9 will see. 10 Good morning, Mr. Sole. I feel like I should 11 call you Mike but I think --12 Α Fine. 13 -- I should call you Mr. Sole in the hearing. Q 14 Call me Mike. Α Thank you. 15 0 Thank you. 16 I think you testified -- well, first of all, 17 in your summary, you made reference near the end to what 18 was common -- that you are -- as a former DEP secretary, 19 something that was common. I think you said for the 20 agency and the permittee to move from mitigation -- from 21 monitoring to mitigation to corrective action; is 22 that --23 Α The terms that I used, Mr. Rehwinkel, were, in 24 my experience as former secretary, I can testify that it 25 is common for environmental projects to progress from (850) 894-0828 Premier Reporting

1	monitoring to mitigation and remediation activities.
2	Q Okay. Now, I appreciate your testimony on
3	that point. Now, you didn't specifically reference your
4	experience as DEP Secretary in your direct testimony
5	that you filed, did you?
6	A I did point out that I was Secretary of the
7	Department of Environmental Protection as my historical
8	background.
9	Q But that experiential aspect you didn't
10	testify to, right?
11	A Yes, sir, I did.
12	Q You did in your direct?
13	A In my direct testimony stand by.
14	CHAIRMAN BROWN: It's on page one
15	THE WITNESS: On page one thank you,
16	Chairman.
17	BY MR. REHWINKEL:
18	Q I mean the part about going from monitoring to
19	mitigation and remediation, you didn't testify to that
20	as part of your experience as DEP Secretary in your
21	direct testimony, did you?
22	A I believe in my testimony I did say it is
23	normal for projects to run from monitoring to
24	remediation
25	Q Okay.

1	A	sort of the normal progress.
2	Q	So you are Vice-President Environmental
3	Services	for NextEra, the parent of FPL; is that right?
4	A	Yes, sir.
5	Q	And to whom do you directly report?
6	A	Charles Seiving.
7	Q	And he is General Counsel of NextEra?
8	A	He is the General Counsel of NextEra Energy.
9	Q	Okay. Do you have any dotted line reporting
10	to anybod	ly in Florida Power & Light?
11	A	I support Florida Power & Light's CEO,
12	President	Eric Silagy.
13	Q	Okay. Are you also considered Vice-President
14	Environme	ental Services for FPL?
15	A	I am an officer of Florida Power & Light.
16	0	
	Q	And what is your title in that?
17	Q A	And what is your title in that? Officer as Florida Power & Light,
17 18		Officer as Florida Power & Light,
	A	Officer as Florida Power & Light,
18	A Vice-Pres	Officer as Florida Power & Light, sident. Okay. And Mr say his name again.
18 19	A Vice-Pres Q	Officer as Florida Power & Light, sident. Okay. And Mr say his name again.
18 19 20	A Vice-Pres Q Charles -	Officer as Florida Power & Light, sident. Okay. And Mr say his name again.
18 19 20 21	A Vice-Pres Q Charles - A	Officer as Florida Power & Light, sident. Okay. And Mr say his name again. Seiving.
18 19 20 21 22	A Vice-Pres Q Charles - A Q	Officer as Florida Power & Light, sident. Okay. And Mr say his name again. Seiving. Seving (sic), S-E-V-I-N-G?

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1	NextEra Energy.
2	Q In any event, you are very senior in the
3	executive chain of both FPL and NextEra, is that
4	correct?
5	A I am an officer of Florida Power & Light and
6	Vice-President of NextEra Energy.
7	Q Okay. You are the most senior person
8	testifying on behalf of FPL in this hearing, right?
9	A I believe so, yes.
10	Q And isn't it true that this is your first time
11	testifying as an expert, other than the one time in the
12	mid-1990s, when you testified as a marine biologist
13	about turtles?
14	A I believe that is true.
15	Q Okay. And isn't it true that you are not a
16	hydrogeologist?
17	A It is true that I am not a hydrogeologist.
18	Q And isn't it true that you are not an
19	engineer?
20	A It is true that I am not an engineer.
21	Q Okay. And your degree is in marine biology,
22	correct?
23	A My degree is in biology with emphasis in the
24	marine field. That's correct.
25	Q Okay. Mr. Sole, I want to ask you a

hypothetical to try to put the case before the
Commission in perspective, so I am going to ask you to
bear with me with this -- with this hypothetical, and it
is a hypothetical.

A Got it.

5

6 So let's say that FPL owns a 5,000-acre piece 0 7 of property that is fenced and borders some sensitive 8 wetlands on the west, and FPL may use this property in 9 the future to put a solar array or other generating 10 In the meantime, FPL has converted a cattle ranch site. 11 that is now a dairy farm that was called the H3 Ranch. 12 And instead of being branded, the 300-head of milk cows 13 on the property all have ear tags that have a 14 distinctive capital H with a subscript three on them as 15 the brand, and they are milked at a barn in the 16 southeast corner of the farm. The company that put the 17 fence up told you that it was the best fence, and it 18 would prevent a massive escape of cattle.

Anyway, a few years of drought, followed by very wet weather and a windstorm caused a few trees outside the H3 property to fall across the fence on the far northwest corner. A neighbor out is that way calls and tells you that the fence may be down, and she sees there are a lot of cows off to the southeast heading west towards the fallen trees; but after you hang up the

1 phone, you say to yourself, that can't be, the fence is 2 guaranteed, and you have never actually seen the cows go on to that property anyway. 3 4 CHAIRMAN BROWN: It sounds like a very long 5 narrative. 6 MR. REHWINKEL: It is. It's --7 I'm trying to take notes. THE WITNESS: 8 I know. I am already lost. CHAIRMAN BROWN: 9 BY MR. REHWINKEL: 10 So you don't go out and inspect the fence, or 0 11 go out to try to turn your cows around, but 12 nevertheless, 100 cows eventually get out of the fence 13 line where the trees fell across the fence, and soon the 14 Sheriff stops by the barn and tells you that there are 15 about 100 cows all with H3 tags on their ears causing 16 enormous damage, and you need to come and get them right 17 away and clean up the mess they made. 18 So you agree to go get the cows and bring them 19 inside the fence, to clean up the cowpies in the 20 wetlands, to restore the trampled area and to fix all 21 the problems. After paying the cleanup costs, and 22 hiring cowboys to round up the cows and repairing the 23 damage, including repairing the fence, it costs you 24 \$65 million in all --25 Madam Chairman --MS. CANO:

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1 CHAIRMAN BROWN: Objection sustained. 2 MS. CANO: Thank you. 3 MR. REHWINKEL: What is the objection? 4 MS. CANO: This is such a long narrative that 5 there is no way the witness could remember the details of the story and then try to answer any 6 7 question that follows. 8 There are multiple causes CHAIRMAN BROWN: 9 here. 10 It's a hypothetical, Madam MR. REHWINKEL: 11 Chairman, and hypotheticals are not required to 12 meet other evidentiary standards. 13 If I -- I would proffer this question, but I 14 want to put this question out there. It's analogy, 15 and I am entitled to inquire about the case on an 16 above-ground basis. We are dealing with science 17 that's all below the ground --18 CHAIRMAN BROWN: I understand. 19 MR. REHWINKEL: -- and I am entitled to do 20 that. I am entitled to finish my question. 21 I understand. CHAIRMAN BROWN: When the 22 question runs about five minutes long, the witness, 23 though, has a propensity to lose track of what you 24 are actually asking. 25 MR. REHWINKEL: We can let the witness say

1 that at the end of the question. 2 CHAIRMAN BROWN: One second. 3 Legal. 4 MS. HELTON: If Mr. Rehwinkel wants to proffer 5 the question, I do think he is entitled to finish 6 the question, and then I think my recommendation 7 would be to see if Mr. Sole can answer it. And if 8 he -- if he can or can't, then we can go from 9 there. 10 CHAIRMAN BROWN: You may ask it. 11 I don't have but one of these MR. REHWINKEL: 12 questions. The rest of the questions are the 13 factual variety. 14 CHAIRMAN BROWN: It's a way to start the 15 morning, I will tell you. 16 MR. REHWINKEL: Well --17 BY MR. REHWINKEL: 18 So some guy named Bob crunches some numbers Q 19 back at the barn and says, the H3 dairy brand will have 20 to add a dollar to every gallon of milk you sell to recoup the costs of this \$65 million. So you do what 21 22 Bob says, and immediately your customers start buying milk from another utility owned farm, the H2 farm up in 23 24 Levy County, for a dollar less. 25 And my question to you is, isn't this scenario

1 analogous to what happened to the real FPL with 2 saltwater and the outcome you seek, which is forced 3 recovery of Bob's surcharge to pay for neglecting to 4 watch and contain your cows, or the salt, when you 5 should have been more vigilant? That's my question. 6 Α No. 7 Okav. So, Mr. Sole, have you seen the Q 8 demonstrative that the Public Counsel has put up behind 9 you? 10 Α I have. 11 And would you agree with me that that Q Okay. 12 demonstrative is a fair representation of demonstrative 13 14-B in Dr. Panday's testimony? 14 Α I believe it is, yes. 15 That demonstrative was prepared for 0 Okay. 16 FPL, correct? 17 Α Ask the question again. 18 Q Yeah. Let me ask it a better way. 19 The report that that demonstrative comes from was prepared on behalf of FPL by a consultant? 20 21 Α Yes, it was. 22 Okay. We are here today because FPL is Q 23 seeking to recover \$64 million in 2017 and 2018 in costs 24 to fix a problem that FPL caused, correct? 25 We are here today to seek cost recovery to Α

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1 address an unintended impact of saline intrusion 2 associated with the cooling canal system at Turkey 3 Point. 4 0 Was that a yes followed by an explanation? 5 Α That's a good point. Yes. 6 0 Okay. And, Mr. Sole, isn't it true that FPL 7 is spending these millions of dollars to remedy 8 violations of law and a violation of its permit to 9 operate the CCS? 10 I disagree with that characterization. Α No. 11 Isn't it true that the purple mass on 0 Okay. 12 Dr. Panday's 14-B represents hundreds of millions, if 13 not billions, of pounds of salt that is polluting the 14 Biscayne Aquifer? 15 Α I have not calculated the salt mass associated 16 with the hypersaline plume, but it is a salt mass 17 nonetheless. 18 Isn't, in fact, this is just the Q Okay. 19 densest portion of the salt mass that is shown in the 20 purple, i.e., that is above the hypersaline level? 21 Α The graphic that Mr. Rehwinkel -- yes. The 22 graphic that Mr. Rehwinkel is identifying represents the 23 hypersaline plume associated with water that has 24 migrated beyond the boundaries of the cooling canal 25 This hypersaline plume is that which FPL is system.

1 obligated to remediate as established in both the consent agreement and consent order. 2 3 0 Isn't it also true that but for the operation 4 of the CCS, that plume of hypersaline pollution wouldn't 5 be there? 6 Α Yes, that is true, that exact plume would not 7 be there; but I think it's also important to note in the 8 Golder report in 2011, it has been documented that 9 hypersalinity in this area occurs naturally, and that on 10 a coastal margin in these low lying areas, hypersaline 11 conditions in the groundwater do occur. 12 Q You would agree with me that there is no other 13 source but the CCS for salt at that level of 14 concentration, i.e., hypersalinity in the area of Turkey 15 Point? 16 Α No, I would not. As I just answered, 17 hypersalinity does exist from natural conditions as a 18 result of run-up and -- no different than evaporation in 19 the cooling canal systems. You have salt run-up in the 20 marsh. You have evaporation of that salt, and so you 21 have a natural salt loading that occurs in these 22 marginal fringes of the coast. Hypersalinity has 23 existed in this area previous to the cooling canal 24 system naturally. 25 You would -- but you would agree with me that 0

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1	hypersalinity at the level that is shown in the light
2	pink on the demonstrative and I have also passed out
3	a demonstrative that you could look at in front of you.
4	CHAIRMAN BROWN: Would you like that marked as
5	an exhibit number?
6	MR. REHWINKEL: Madam Chairman, we can. It's
7	in Dr. Panday's testimony.
8	CHAIRMAN BROWN: Let's go ahead and mark that
9	as Exhibit 69.
10	MR. REHWINKEL: Okay.
11	CHAIRMAN BROWN: And we will title it OPC
12	Demonstrative Panday.
13	MR. REHWINKEL: It would be 68?
14	CHAIRMAN BROWN: 69.
15	MR. REHWINKEL: 69, okay.
16	(Whereupon, Exhibit No. 69 was marked for
17	identification.)
18	BY MR. REHWINKEL:
19	Q So let me ask let me restate my question
20	for you.
21	A Yes, sir.
22	Q You would agree that the lighter shaded
23	areas I think they look more white on the paper copy
24	than the pink on the demonstrative, but the lighter
25	shaded areas have the high is salinity in this
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1 representation, would you agree with me? 2 Yes, I would. Α 3 Q Okay. And you would agree with me that, 4 according to the bar graph, those salinities are at 40 5 parts per thousand, correct? 6 Α It is labeled as 40,000 milligrams per liter. 7 CHAIRMAN BROWN: Mr. Rehwinkel, Commissioner 8 Graham has a question, actually. 9 COMMISSIONER GRAHAM: Mr. Rehwinkel, if I 10 could, before you continue, can I get you to walk 11 us through what we are looking at here? 12 MR. REHWINKEL: Yeah. I can do that with the 13 witness. 14 CHAIRMAN BROWN: Thank you. 15 BY MR. REHWINKEL: 16 Mr. Sole, would you agree with me that the 0 17 document that's 60 -- that is Exhibit 69, that is a the 18 demonstrative behind you, and that is Dr. Panday's 19 14-B -- is a representation of what they call the CSEM 20 survey that was done by Intercon in 2016 for FPL? 21 Α Yes, I would. 22 And this document shows a salt mass emanating 0 23 from the CCS that is above the level of hypersalinity, 24 which, in this scale, is 19 parts per thousand, correct? 25 That is correct, but I think a little bit more Α

1 description is appropriate, if I may. 2 0 Sure. 3 Δ The continuous surface electromagnetic 4 document, or mapping here, is a technology used to try 5 to provide a 3D view of salinity in the groundwater. 6 Prior to this 2016 event, we only had a handful of wells 7 to discern the extent of salinity, or in this case, 8 hypersalinity. 9 This technology is basically a modeling tool 10 that uses resistivity to discern the extent of salt or 11 total dissolved solids in the groundwater, and 12 represents a pictorial graphic of the extent of 13 hypersalinity in this case. 14 And, Mr. Sole, wouldn't you agree that this Q 15 representation here is considered state-of-the-art, or 16 the most accurate representation of the existence of 17 salt mass in the aquifer? 18 Α Yes and no. Sorry. 19 Yes, it is state-of-the-art. And it provides 20 the best available data that we have to be able to 21 discern in between wells what's going on in the 22 Its accuracy is not going to be as precise groundwater. 23 as a direct sampling of a groundwater well to actually 24 say it is 19,000 milligrams per liter of chloride, but 25 it does provide a good 3D view of the extent of

1 groundwater hypersalinity.

2 But you would agree with me that this exact 0 3 CSEM survey methodology is an important aspect of the 4 consent order you signed with DEP, correct? 5 Α Undeniably -- yes. Undeniably it's an 6 important aspect, because it is this tool, especially 7 under the consent agreement that we signed with Miami-Dade County, that we are to use to identify that 8 9 we have retracted the hypersaline water back to the 10 boundary of the cooling canal system. And it is also 11 articulated in consent order with the Department of 12 Environmental Protection. 13 Yeah. And I will have some questions for you 0 14 later on about that aspect of it, but --15 MR. REHWINKEL: Commissioner Graham, does that 16 help? Thank you. 17 BY MR. REHWINKEL: 18 So, Mr. Sole, you would agree with me that the Q 19 representation of hypersalinity here -- and I don't 20 think you can tell it on this map, but on the lower half 21 of that mass, that -- there is a faint white line that 22 goes north and south. That's what they call Tallahassee 23 Road, isn't it? 24 Α Can I use the --Yes, absolutely. 25 CHAIRMAN BROWN:

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1	THE WITNESS: Thank you.Mr. Rehwinkel, if you
2	are speaking of this line.
3	BY MR. REHWINKEL:
4	Q Iam.
5	A That is roughly the location or is the
6	location of Tallahassee Road.
7	Q Okay. And Tallahassee Road is, what, a
8	mile-and-a-half or so west?
9	A Roughly a mile-and-a-half west.
10	Q Okay. So the hypersalinity that is portrayed
11	in this survey output on Exhibit Exhibit 69, is not
12	the kind of incidental hypersalinity salt concentration
13	in the marshes that you referred to in an earlier answer
14	to me, is that correct?
15	A That is correct.
16	Q Okay. This hypersalinity is caused by manmade
17	activities, i.e., the CCS; correct?
18	A We believe the hypersalinity identified here
19	is predominantly caused by the cooling canal system.
20	Yes.
21	Q Okay. If you could, please, take the first
22	exhibit that I have put in front of you.
23	A Is that 69?
24	Q Oh, I am sorry. No, in the stack.
25	CHAIRMAN BROWN: It's turned over.
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1 BY MR. REHWINKEL: 2 Q Yes, turn it over. 3 MR. REHWINKEL: This is, Madam Chairman --4 THE WITNESS: Mr. Rehwinkel, can I ask for 5 directions? Do I do this and start looking or --6 BY MR. REHWINKEL: 7 I am going to ask you to turn from the bottom Q 8 up. 9 Α Do this. 10 Exactly. Just take --0 Yes. 11 Understand. Α 12 Q Thank you. 13 So the document before you, I think you 14 recognize it, it is a 1978 Dames & Moore report to the 15 South Florida Water Management District? 16 Α Yes, I do. 17 CHAIRMAN BROWN: So we are going to go mark 18 that right now, Mr. Rehwinkel, as Exhibit 70. 19 MR. REHWINKEL: Okay. And we are going to title it 20 CHAIRMAN BROWN: 21 Dames & Moore Evaluation. 22 MR. REHWINKEL: 1978. 23 CHAIRMAN BROWN: 1978. 24 MR. REHWINKEL: Yep. 25 (Whereupon, Exhibit No. 70 was marked for

1	identification.)
2	BY MR. REHWINKEL:
3	Q And can we agree on a convention, Mr. Sole,
4	that when I say the district, we mean the South Florida
5	Water Management District?
6	A Yes.
7	Q Okay. And if I say the county, we mean
8	Miami-Dade County, Department of Environmental Resource
9	Management, DERM?
10	A Yes.
11	Q Yes. And when we say DEP, we mean the Florida
12	State Department of Environmental Protection that you
13	were the secretary of?
14	A Yes.
15	Q Okay. Now, you have read this 1978 Dames &
16	Moore report, correct?
17	A I have.
18	Q Okay. Can I get you to turn to Figures 6.5
19	and 6.8, which are following page 79 of this document?
20	A I am there.
21	Q Okay. And you recognize if I get you to
22	look at 6.5, that is in the lower right-hand corner,
23	it says, freshwater-saltwater interface under original
24	groundwater conditions. Do you see that?
25	A I do.

1 Q And this is a represen -- first of all, you 2 recognize this exhibit from Dr. Panday's testimony, do 3 you not? 4 Α I do. 5 Q Okay. And then if I -- and this document 6 represents an estimation by Dames & Moore of the state 7 of the saltwater interface underneath the cooling canal 8 system at or before the inception of operations there, 9 is that correct? 10 Α That is correct. 11 So we see over to the left, at the bottom, we 0 12 see, it says December 1972, right? 13 Α That is correct. 14 Okay. And when did the CCS start operating? Q 15 Roughly in '73, I believe it was finally Α 16 closed, maybe '74, the final closure to no longer 17 discharge to the bay. 18 Q Okay. And if I get you to turn a few pages 19 over to 6.8. And this is, in the lower right-hand 20 corner it says, freshwater-saltwater interface under 21 projected groundwater conditions. Do you see that? 22 I apologize, I went to 6.6. Let me go to 6.8. Α 23 I do see that. 24 CHAIRMAN BROWN: And just for the record, Mr. 25 Rehwinkel, the Bates stamp at the bottom is ECRC,

1 and the last three digits are 127 for 2 commissioners. 3 MR. REHWINKEL: Yes. Thank you, Madam 4 Chairman. 5 BY MR. REHWINKEL: 6 0 And if I get you to look over to the left-hand 7 side in the legend at the bottom, it says -- it has the 8 dates 1974 through 1976 at depths 20, 40 and 60 feet. 9 Do you see that? 10 Α I do. 11 So if I compared 6.5 and 6.8, this is Q Okay. 12 Dames & Moore's best estimation, or projection of what 13 the saltwater at 11 parts per thousand on 6.8 in the far 14 western edge of that saltwater wedge, and 21 parts per 15 thousand in the eastern part of that wedge. Do you see 16 that? 17 Α No. Do it again. I apologize. 18 I apologize. Q 19 I am trying. Α 20 So if I get you to look in the graphic, in the Q illustration, there is a hatched area underneath the 21 22 cooling canal. Do you see that? 23 Α I do. 24 And if I go to the -- to -- there is a well 0 25 that sticks down into the hatched area, and there is --Premier Reporting

1	it says, 11 PPT. Do you see that?
2	A If you are speaking of well G-27.
3	Q I am.
4	A And the bottom, showing 11 parts per thousand,
5	yes.
6	Q Okay. And over on the right-hand side, it
7	looks like there is a well or there is a canal
8	east return canal, and underneath that it says, 21 parts
9	per thousand. And that's an area between the west
10	the eastern edge of the CCS and the Biscayne Bay,
11	correct?
12	A That is correct.
13	Q Okay. And if we can go look out halfway sort
14	of in that illustration, we see where Tallahassee Road
15	is, and there is a well that goes down just above the
16	top of the of the edge of the transition zone. Do
17	you see that?
18	A I do.
19	Q Okay. So clearly, in this and so my
20	question to you was, 6.5 is before the operation of the
21	CCS, and 6.8 is after maybe three years of operation of
22	the CCS based on Dames & Moore's estimations and
23	predictions, correct?
24	A That is correct.
25	Q Okay. So what we see on this document is

1 hypersalinity in parts per thousand is 19 parts --2 19,000, correct? That's the --3 Α That is the definition of hypersalinity. 4 0 Okay. And it would appear that the 5 hypersaline portion of this area underneath the canal is 6 in the area adjacent to Biscayne Bay, and the levels of salinity are almost half of that in the western edge of 7 8 this hypersaline -- of this saline wedge, correct? 9 Α That is correct. 10 And you would agree with me that the 0 Okay. 11 inception of the canal, this is the best knowledge about 12 the state of the saline wedge with respect to the CCS 13 vicinity; correct? 14 Α Can you ask that again just to make sure I am 15 clear as to what I am agreeing to? 16 Yeah, let me ask it a better way. Q 17 This 6.8 is the -- after three years of 18 operation of the CCS, this is the best estimation of the 19 extent of the saline wedge influenced by the CCS at that 20 time? 21 Α Yes, I believe that is correct. 22 Okay. Q 23 You can go to page 105 of your document, and Α you can see how Dames & Moore actually described this 24 25 And if you go and start on page 105 -- I scenario. (850) 894-0828 Premier Reporting

apologize, it begins at the bottom of 104. The last sentence on the bottom of 104 reads: The end result will be the ultimate growth of the salt wedge to about the western boundary of the canal system as if the shoreline had moved to that point by opening of a new bay. That was the interpretation at the time.

Q Okay. So just so I can -- and what I am trying do here with this illustrative and what is now 6 -- Exhibit 69, is 6.5 and 6.8 are the starting point, and that 14-B, or Exhibit 69, is kind of where we are today with respect to migration of saline water and hypersaline water caused by the CCS; is that fair?

13 Not really, because it only shows one piece of Α 14 What the demonstrative that you presented the puzzle. 15 that's also in Dr. Panday's document doesn't show is the 16 extent of the existing saltwater intrusion in the area. And you can see it, albeit not as clearly the way they 17 18 have graphically described it, that saltwater already 19 existed in much of this aquifer prior to the cooling 20 canal system.

And if I can go back to the demonstrative that you have here to give you a general sense. In 2011, the South Florida Water Management District and FPL had Golder do a report that pealed back all the data that was collected in 1972 and 1973, prior to the existence of the cooling canal system, to get a better understanding of the extent of saltwater intrusion. And in that document, it clearly showed that the G-III/G-II boundary, that of which is considered to be potable water, and that which is considered to be non-potable water, extended far beyond Tallahassee Road.

7 So just to give you a sense of the document, 8 it showed that the G-II/G-III boundary was approximately 9 in this location. And this is an important premise to 10 understand as you look at the extent of hypersalinity 11 impacting potable or non-potable water. In this case, 12 you can see that the non-potable water boundary was far 13 west of even the current location of the hypersaline 14 plume that's depicted in this graphic.

15 Q So is your testimony that the depiction in 6.8 16 is inaccurate?

17 A Inaccurate as of today or inaccurate as of at18 the time that they presented the information?

19

At the time.

A No, I believe that Dames & Moore firmly believed that the conditions at the site showed, as a result of the creation of the cooling canal system, the shoreline basically is being moved to the west as a result of the cooling canal system. And that information was presented to the water management

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district under the requirements that we operated at the time -- and in fact, I think it was the third amended agreement with the water management district -- that showed, yes, here is the impact of the cooling canal system; and we believe that we are going to basically move the shoreline in to the west to that location, and this is what we believe will be the extent of it.

8 And in fact, later on in that portion of the 9 document that you provide, which I think is No. 70, it 10 Having moved to that point, there are goes on to say: 11 no heads or forces operating with the system that could 12 cause further westward movement of the wedge, and it 13 would respond only to natural changes in groundwater 14 gradients in the same manner as if it were totally 15 natural salt front.

16 Q But that turned out not to be true, didn't it?
17 A Different con -- different conditions have
18 existed today. That is correct.

19 Q If what Dames & Moore said then was true, that 20 wouldn't have happened, that meaning that purple mass 21 right there? 22 A That is -- yes, that is correct.

23 Q Okay. And that is the harm that FPL's CCS 24 operation caused that needs to be fixed pursuant to the 25 consent order and the consent agreement, correct?

1	A Yes.			
2	Q Even if you were somehow able to repair that			
3	harm that FPL proposes, there will be significant			
4	saltwater that is just below the level of hypersalinity			
5	still miles west of the CCS; correct?			
6	A I apologize, I tripped on the word somehow.			
7	The design that			
8	Q Strike the words somehow.			
9	A Okay. Thank you.			
10	Yes. After remediation of the hypersaline			
11	plume, there will still be saltwater in the environment			
12	as it existed also prior to the existence of the cooling			
13	canal system.			
14	Q And the modeling in the proposal to freshen			
15	are to a level of 34 and not below 34, correct 34			
16	PSU. I have changed the units here.			
17	A That's all right.			
18	Q 34 PSU is the equivalent of 19 PPT, correct?			
19	A That is correct.			
20	Ask the question again.			
21	Q So FPL's modeling, and the proposal to freshen			
22	and to retract are to only take the level of water in			
23	and adjacent to the CCS to a level of just below			
24	hypersalinity; is that correct?			
25	MS. CANO: Mr. Rehwinkel, I apologize, but you			

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1 referred to freshening, but I am not sure, freshening what? Could you clarify, please? 2 3 MR. REHWINKEL: Okay. BY MR. REHWINKEL: 4 5 Q You have a proposal to freshen the water in 6 the CCS, and you have a proposal to retract the 7 hypersaline water outside the boundary of the CCS back 8 into the CCS boundary as a result of the consent order 9 and consent agreement, correct? 10 Α Yes. 11 And those proposals do not envision taking the 0 12 level of salinity in the CCS or outside the CCS under 13 those actions to a level significantly below the level of hypersalinity, correct? 14 15 No, I disagree with that statement. Α 16 The consent order and the consent agreement 17 both have threshold requirements that we are to 18 establish in the cooling canal system an average 34 PSU 19 salinity in the cooling canals. The consent order and 20 the consent agreement also have a threshold requirement 21 that we are to bring back to the boundaries of the 22 property water that exceeds this hypersaline threshold 23 of 19,000 parts per milligram -- or milligrams per 24 liter, excuse me. 25 Those are threshold regulatory requirements

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established in the consent order and consent agreement.
As we implement and execute on both, I reasonably expect
that the cooling canal systems will probably be below 34
PSU, to not only attain an average of 34 over the year,
but just as a measure of operation.

I also would expect that, as we continue to operate the recovery well system over the 20-year period that is envisioned, that we would expect to see less than 34 PSU, or 19,000 milligrams per liter of chloride to occur beyond the cooling canal system.

11 So the regulatory requirements and thresholds 12 that FPL have are to meet, are -- yes, to answer your 13 question, that is the regulatory requirements. The 14 operational, which is the way you asked the question, 15 Charles -- or Mr. Rehwinkel -- the operational is, no, I 16 expect it to actually perform even better as we progress 17 through this.

18 Q So you are modeling to hit the target of the 19 regulatory requirement, correct?

20

A Absolutely.

Q Okay. And the cost recovery that you are asking for is based on that modeling, so in essence, you are telling the Commission you are going to take it down to the regulatory requirement level; correct? A Yes, our proposal is to make sure we achieve

1 the regulatory requirement, and do so on a 2 cost-effective manner for customers. 3 0 But FPL is willing to spend the money and take 4 actions to -- to make the water cleaner even if it's not 5 required, is that right? 6 Α That's not my testimony. 7 Q Okay. 8 My expectation is that, as we operate the Α 9 system, we will see improvements not only to achieve the 10 regulatory requirements, but I expect that we will also 11 begin to see improvements in the overall conditions in 12 the groundwater and the cooling canal water itself. 13 You would agree with me that there will be Q 14 hypersaline water in the lower levels of the Biscayne 15 Aquifer that, under your current proposal, you will not 16 be able to retract; correct? 17 Α No, I would not agree with that. 18 Mr. Sole, FPL has acknowledged that the CCS Q 19 has caused hypersaline water to move west of the Biscayne Aquifer, correct? 20 21 Α Yes. 22 Let's turn to MS -- MWS-10 of your --Q Okay. 23 in your testimony. I apologize I don't know exactly 24 what exhibit number that's been given in the -- it looks 25 like that's Exhibit 11 as identified by the Commission. Premier Reporting

1 I am going to call it MWS-10 so you can find your way 2 around. 3 Α Thank you for doing so. 4 CHAIRMAN BROWN: That's better for us, too. 5 MR. REHWINKEL: Yeah. 6 THE WITNESS: The administrative order? 7 BY MR. REHWINKEL: 8 Q Yes, well --9 Α The final --10 Let's look at actually page 43 of 63. 0 11 We can either read these into the Okay. 12 record, or you can agree that these are correct, 38, 39 13 and 40. These are the -- these are the findings of water quality violations by Bram Canter, the ALJ; is 14 15 that correct? 16 Α They are. 17 Q Okay. Do you know Mr. Canter? 18 Yes, I do. Α 19 Mr. Canter is probably the preeminent water 0 20 law expert in the state of Florida, wouldn't you agree? 21 Α I would say that Mr. Canter, Judge Canter, 22 does have quite a bit of experience of water law in 23 Florida. 24 I mean, you would agree with me that he 0 Yeah. 25 was one of the authors in 1980 of Florida water law,

1 would you agree with that? 2 Α I would agree with that. 3 Q Okay. And so --4 CHAIRMAN BROWN: Is that a demonstrative 5 exhibit right there? 6 MR. REHWINKEL: Somewhat. This is a law 7 school book from my ancient days. 8 BY MR. REHWINKEL: 9 0 All right. So it's true, these were the 10 findings, and then the Secretary of DEP accepted these 11 findings over FPL's objections or exceptions; correct? 12 Α They did. 13 In fact, let's go to -- so FPL, if we Q Okay. 14 go to MWS-10, page 21 of 63, this is where the Secretary 15 is considering the exceptions that DE -- that FPL made 16 on the paragraphs 38, 39 and 40; right? That is correct. 17 Α 18 Okay. And then if we turn over to page 22, Q 19 the next pa --20 Α I think I would like to read this just to be 21 clear --22 Q Oh, yes. 23 -- so I am -- I know what we are agreeing to. Α 24 Please. 0 25 Α Stand by.

1 So, Mr. Rehwinkel, going back a little bit, 2 you mentioned Judge Canter's rulings and findings of 3 water quality violations. Here, I think it's very 4 important that we talk about what that violation was. 5 Judge Canter ruled, despite the fact -- and 6 you can see this where Mr. Rehwinkel was, on page 21 --7 despite the fact that the DEP could not identify a 8 violation at the time that we were at hearing, which was 9 in 2015 I believe, Judge Canter went ahead and ruled 10 that, no, there was a violation, that violation is a 11 violation of Florida's minimum criteria under Chapter 12 62-520. 13 I think it's extremely important that we 14 describe what that criteria is, because this is what we 15 define a narrative standard. It is not a threshold 16 standard that we are used to working with in water quality violation, where, as we talk about 19,000 17 18 milligrams per liter, that's a clear requirement. Here, 19 it's a narrative standard. 20 And what the minimum criteria in this case was 21 basically trying to say is, well, if you impair the 22 reasonable and beneficial use of an adjacent water, 23 that's a violation. And there is no clear bright line analysis to do so, especially in a situation that we 24 25 have here at the cooling canal system, where we are

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1 putting saltwater into an already salt intruded 2 environment. 3 And I think, just for context, as we used the 4 term violation, I think it's important that we define 5 that violation; and it's a narrative violation that took 6 judgment on the part of DEP to identify whether, yes or 7 no, it was a violation. 8 And it's worth noting that, at the time of the 9 hearing in 2015, as Mr. Rehwinkel is on that page, that 10 even DEP, at the time, could not discern whether there 11 was that impairment of reasonable and beneficial use of 12 the adjacent aquifer. 13 So I just want to set that predicate as we go 14 through this administrative order, because I think it 15 tells the full story of what transpired here. 16 Okay. Well, since you have done that, Q 17 let's -- let's do this. I am going to -- I am going to 18 read paragraph 38 and ask you if you agree with it. 19 At the final hearing, a DEP administrator 20 testified that DEP was unable to identify a specific 21 violation of State groundwater or surface water quality 22 standards attributable to the CCS, but DEP's position 23 cannot be reconciled with the undisputed evidence that 24 the CCS has a groundwater discharge of hypersaline water 25 that is contributing to saltwater intrusion, Florida

1	Administrative Code Rule 62-520.400, comma, entitled			
2	Minimum Criteria for Groundwater, prohibits a discharge			
3	in concentrations that impair the reasonable and			
4	beneficial use of adjacent waters.			
5	Did I read that correctly?			
6	A You did.			
7	Q And the DEP Secretary, on page 22, rejected			
8	the exceptions and adopted that finding of Judge Canter;			
9	correct?			
10	A That is correct.			
11	Q And then paragraph 39, saltwater intrusion			
12	into the area west of the CCS is impairing the			
13	reasonable and beneficial use of adjacent G-II			
14	groundwater and, therefore, is a violation of the			
15	minimum criteria for groundwater in Rule 62-520.400.			
16	Did I read that correct?			
17	A Yes, you did.			
18	Q And the DEP Secretary rejected the exceptions			
19	and made that finding, correct?			
20	A That is correct.			
21	Q And then finally in 40, in addition, sodium			
22	levels detected in monitoring wells west of the CCS and			
23	beyond FPL's zone of discharge are many times greater			
24	than the applicable G-II groundwater standard for			
25	sodium. The preponderance of the evidence shows that			
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1 the CCS is contributing to a violation of the sodium 2 And that finding of Judge Canter was accepted standard. 3 by the DEP secretary, correct? 4 Α I am not confident that finding was accepted. 5 Could you show me where that was? I apologize, Mr. 6 Rehwinkel. 7 0 Okay. Let's look on page 22. 8 Α Back on 22. 9 0 Above FPL's remaining exceptions. It says, 10 therefore, based on the foregoing reasons, the 11 respondent's exceptions to paragraphs --12 Α 38 through 40. 13 -- 38-40 and 96 are denied, so you would agree 0 14 with me? 15 I would agree they accepted that, at the same Α 16 time, I would also point out in the NOV that the Department subsequently issued did not issue a violation 17 18 associated with elevation of sodium. 19 So because of the DEP secretary's Okay. 0 20 rulings, and FPL's subsequent inaction, that administrative order became final, and those findings 21 22 became final as a matter of law; correct? 23 Α That is my understanding. 24 Now, four days later, on April 25th, four days 0 25 later from the date the DEP Secretary issued this order, (850) 894-0828 Reported by: Debbie Krick Premier Reporting

1 DEP issued a notice of violation to you; correct? 2 That is correct. Α 3 0 So if we look on page 26 and 27 of your MWS-10, this is the conclusion, this section under the 4 heading conclusion, up to above judicial review, that is 5 6 the conclusion of the DEP Secretary with respect to this 7 order; correct? 8 Α That is correct. 9 0 And if we look on page 27 at the top, the 10 secretary sentence says, accordingly, Department staff 11 shall consider the findings of this order, specifically 12 those related to the findings in the RO at paragraphs 13 38-40, as well as any other additional information staff 14 might have available at this time and take any further 15 action as is necessary; correct? 16 Α I think, in this case, DEP is trying to Yes. 17 express the significant amount of work that had been 18 done since the April 2013 letter issued by the water 19 management district that initiated this. 20 Again, let's -- let's roll back through time a 21 little bit to give this context. In April of 2013, 22 under the supplemental agreement -- the fifth 23 supplemental agreement that we had with the water 24 management district, as well as under the conditions of 25 certification for the site, the water management

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district initiated consultation based upon the view that the cooling canal system, and specifically the interceptor ditch, was not preventing the migration of hypersaline water from the cooling canal system. FPL agreed, and immediately began working with the water management district, and subsequently with DEP, to identify measures to take to abate that problem.

8 FPL also continued to conduct the monitoring 9 in order to better understand what transpired. It took, 10 unfortunately, until roughly until December of 2014 11 before the initial administrative order was issued. 12 Then we went through an entire year of hearing. And 13 now, at the very beginning of 2016, we finally get to a 14 point where we have a final order.

15 FPL had been working collaboratively with DEP 16 and the water management district throughout that entire timeframe looking at options and activities that can be 17 18 taken to abate and remediate the hypersaline plume that 19 continued to be identified. The context of this 20 paragraph here is intended, in my opinion, to 21 acknowledge that, hey, since we started this --22 MR. MOYLE: I am -- I am going to object to 23 this. I mean, he is not the DEP Secretary, Jon 24 Steverson, entered this order. The document speaks 25 for itself.

1 It's improper for him to say, here's what I 2 think DEP was thinking at the time. There is no foundation for it. 3 It's improper. It requires 4 speculation. 5 CHAIRMAN BROWN: FPL. 6 MS. CANO: This testimony isn't necessarily 7 related to his former experience at FDEP. He is 8 familiar with the events that unfolded leading to 9 these documents, so he is providing information 10 from his personal knowledge here. 11 Madam Chairman, I was going to MR. REHWINKEL: 12 let the witness finish before I voiced an 13 objection, but since we are now at a breaking point 14 on this answer, I am trying to go through a 15 predicate narrative with respect to these 16 I am happy to hear from Mr. Sole, who documents. 17 has a lot of experience with FPL, NextEra and DEP, 18 but that was really beyond the question I asked, 19 but it's up to the Commission as far as whether 20 they want to hear the narrative. 21 Thank you. CHAIRMAN BROWN: I was enjoying 22 it, quite frankly, as background material, but I 23 will allow -- I will sustain the objection and have 24 the witness move, and counsel, move along with the 25 questions.

1 MR. REHWINKEL: Thank you. 2 BY MR. REHWINKEL: 3 0 So the -- I was asking you, Mr. Sole, about 4 the second sentence, and it appears to me that this is a 5 directive from the Secretary to his enforcement staff to 6 take enforcement action against FPL with regard to 7 paragraphs 38 and 40, and perhaps other information; and 8 that's what they did, correct? 9 Α That is correct. 10 Okay. So four days after this order was 0 11 issued, a document came to FPL called a Notice of 12 Violation and Orders for Corrective action as shown on 13 Ms -- MWS-11, correct? 14 Α Yes. 15 So it would be fair to say that DEP 0 16 enforcement staff followed up quickly with the notice of violation and order for corrective action -- and I am 17 18 going to call it the NOV, is that fair? 19 Α Absolutely. And this document essentially charged FPL with 20 Q 21 violation of the law, specifically Section 22 403.161(1)(b), Florida Statutes; correct? And I am on 23 page three of MWS-11. 24 That is correct. Α 25 0 Okay. And actually, on page four of MWS-11,

1 the penultimate paragraph under the conclusions of law 2 The facts set forth above constitute a section savs: 3 violation of Section 403.161(1)(b), Florida Statutes, 4 for failing to comply with condition IV.1 of the permit, 5 is that correct? 6 Α That is correct. 7 And the permit that is referred to there is Q 8 your NPDES/IWW permit, which is your permit to operate 9 the CCS; correct? 10 That's correct. And I think I have that as Α 11 Exhibit -- I apologize, it's Exhibit 3. 12 Q Okay, but I want to go -- I want to take you 13 first back to paragraph 11 of the NOV in your page 14 three. 15 I am there. Α 16 And the NOV states that the following Q Okay. 17 findings in the final order are hereby incorporated in 18 this notice of violation, A, the CCS is the major 19 contributing cause to the continuing westward movement 20 of the saline water interface. Did I read that correctly? 21 22 Α You did read that correctly. 23 And that's a true statement, isn't it? Q 24 It is true that that is a finding that was Α established as part of the administrative order, and a 25 (850) 894-0828 Premier Reporting

1	finding that DEP also included in their NOV.					
2	Scientifically, that has yet to be proven, but					
3	admittedly, it is a matter of law.					
4	Q Okay. And B says the the CCS groundwater					
5	discharge of hypersaline water contributes to saltwater					
6	intrusion. That's a did I read that correctly?					
7	A You did read that correctly.					
8	Q And that is a true fact, isn't it? I mean,					
9	that is true, is it not?					
10	A Yes and no. I apologize, Mr. Rehwinkel. This					
11	is where terminology really begins to mire an					
12	understanding of the issue in front of us.					
13	Do you define saltwater intrusion as that					
14	western line, that is the western extent of saltwater in					
15	the environment? Or do you define saltwater intrusion					
16	from a vertical scenario? Do you call any increase in					
17	salt an increase in saltwater intrusion even if the					
18	groundwater is already classified as a non-potable G-III					
19	aquifer?					
20	So it's important to understand the context,					
21	or the regulatory context that we are speaking on. So					
22	when you ask me is that true; yes, there is increased					
23	saltwater as a result of the CCS going into the					
24	groundwater. I agree with that. It's important to					
25	understand our definition of saltwater intrusion so that					
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1	we are clear as to what the ramifications are.
2	Q Well, DEP, the environmental regulator of the
3	state of Florida, has a lot of experience in saltwater
4	intrusion, do they not?
5	A I would say they have experience. I would say
6	the water management district has more experience.
7	Q Okay. And C says, Rule 62-520.400, Florida
8	Administrative Code, prohibits a discharge in
9	concentrations that impair the reasonable and beneficial
10	use of adjacent waters. Did I read that correctly?
11	A Yes, sir, you did.
12	Q And then D says, saltwater intrusion into the
13	area west of the CCS is impairing the reasonable and
14	beneficial use of adjacent G-II groundwater, and
15	therefore, is a violation of the minimum criteria for
16	groundwater in Rule 62-520.400, Florida Administrative
17	Code. Did I read that correctly?
18	A Absolutely.
19	Q And I think you have already given a narrative
20	about the narrative related to this rule, correct?
21	A That is correct.
22	Q Okay. So the way DEP looks at it is there are
23	these factual predicates that are found by the
24	Administrative Law Judge, the Secretary, and so they
25	form the basis for the NOV, which says, you did these
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things, that violates your permit, violating your permit, violating the rule are a violation of this statute, is that how it works? This statute, meaning 4 403.161(1)(b).

It does. 5 Α My -- my challenge -- yes, however, 6 the terminology you did these things, let's be clear, we 7 complied with all the operational requirements of both 8 of our permits as well as our agreement with the South 9 Florida Water Management District. And throughout that 10 continued compliance, and operating in compliance with 11 those rules -- excuse me, with those permits and 12 agreements, this occurred nonetheless.

13 So when you say, you did these things, the 14 answer is, those things were we complied with our 15 permits. We operated in accordance with our permits. 16 We did the monitoring as required by the permits, and we provided that data to primarily the water management 17 18 district. So, yes, we did those things, and as a result 19 of that compliance with the permit requirements, we did 20 have this water quality violation.

Q Okay. Well, I was going to try to skip this, if I look on MWS-11, page four, paragraphs 15 through 17 are important too, because they define FPL as a person. You hold a permit, and you operate the CCS under the permit, correct?

1	A That is absolutely correct. Yes.	
2	Q They can't go after saltwater fairies. They	
3	have to go after somebody, and the somebody operates the	
4	CCS, and the CCS was responsible for that hypersaline	
5	plume; that's correct?	
6	A That is correct.	
7	Q Okay. So if I look on MS MWS-12. This is	
8	the document that I believe was entered into in June	
9	June 20th of 2016, right?	
10	A I believe so, yes.	
11	Q Okay.	
12	A Yes.	
13	Q So administrative order April 21, NOV	
14	April 25, consent order June 20, 2016?	
15	A That is correct.	
16	Q Okay. So they got your attention, and you	
17	got you sat down with DEP and you worked out a	
18	consent order that you agreed to and you signed,	
19	correct? I say you. I mean FPL.	
20	A I understand.	
21	MS. CANO: Before you respond, Mr. Sole.	
22	I object to the categorization that they got	
23	FPL's attention.	
24	MR. REHWINKEL: He already answered that	
25	question.	

1 CHAIRMAN BROWN: He did. 2 Yeah, we -- we -- we received THE WITNESS: 3 their attention in April of 2013, and we continued 4 to work with them since that time, all the way 5 through an administrative order, a hearing, an NOV 6 and the negotiation of a consent order. 7 BY MR. REHWINKEL: 8 Q Okay, but the --9 Α And in between, there was a consent agreement 10 with Miami -- Miami-Dade. 11 April, that letter was from the district, Q 12 though, right? 13 Α It was. 14 Q Okay. So --15 So what was the question? Α I am sorry, Mr. 16 Rehwinkel, because I don't think I answered your 17 question. I apologize. 18 Q I was really just looking at the timing. 19 Α Okay. 20 Q And so things happened fairly quickly. 21 Let's look back on page 24 of 27. 22 I apologize, which exhibit? Α 23 Of MWS-12. Q 24 Thank you. Α 25 0 Sure.

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1 CHAIRMAN BROWN: And what page did you say? 2 MR. REHWINKEL: 24. 3 CHAIRMAN BROWN: Thank you. 4 BY MR. REHWINKEL: 5 Q This shows that the consent order is signed by 6 Randy Labauve -- I think they say Randall Labauve --7 your predecessor, correct? 8 Α Yes, that is correct. 9 0 Okay. So his title here is Vice-President 10 Environmental Services Florida Power & Light Company, 11 but he was also a Vice-President Environmental Services 12 NextEra, correct? 13 Α That is correct. 14 Q And if you were representing FPL, you would 15 sign something the same exact way? 16 Α Yes, I would. 17 Now, if I -- if I could get you to just Q Okay. 18 quickly flip over to MWS-9. That's the page 11. This 19 is the consent agreement that you signed with Miami --20 with the County in December of 2015, that you referred 21 to in a previous answer, right? 22 Α That is correct. 23 All right. Now, I see that this consent Q agreement is signed by Eric Silagy, President and CEO of 24 25 Florida Power & Light?

Α

1 That is correct. 2 So I just want to understand, the fact 0 Okay. 3 that Mr. Silagy signed the County agreement and 4 Mr. Labauve, who's the same as you today, signed the consent order with DEP, that doesn't mean Mr. Labauve's 5 6 signature on the DEP consent order has any less force 7 and effect or significance than the County agreement 8 just because he is not the President, right? 9 Α No, it does not. 10 So just having -- just so I understand, 0 Okay. 11 Mr. Labauve signing it isn't the regulatory equivalent 12 of having your hand behind your back and your fingers 13 It's full, force and effect of DEP -crossed, right? 14 of FPL's commitment to this agreement, right? 15 Α Mr. Labauve and Mr. Silagy can sign these 16 documents and put the emphasis of FPL's compliance, yes. 17 So would it be fair to say that FPL Q Okay. 18 entered into the consent order as a direct result of the 19 administrative order and NOV? 20 Α No, because, again, I do not believe the administrative order is what initiated these 21 22 proceedings. It really was initiated by the April 2013

23 letter to seek consultation to address what was an

24 apparent impairment of the groundwater adjacent to

25 Since that time, FPL has continued to Turkey Point.

1 work with all the regulatory agencies, regardless of 2 which format you are in, to identify the appropriate 3 corrective actions.

And so my answer is, no, this initiated upon 4 5 the April 13 -- or April 2013 request for consultation. Okay. I appreciate your answer, but I had the 6 0 7 word direct in my question, so maybe I should have asked 8 it this way, which is, but for the administrative order 9 and NOV, you wouldn't have signed this consent order, 10 would you? 11 No, legally that's correct. А There is no 12 premise to sign a consent order without some action, 13 even though an NOV is not necessary, candidly, now that 14 I go back through my administrative legal stuff, you 15 know. These actions all could have been taken 16 17 pursuant to the conditions of certification. As the 18 Commission may recall, the Turkey Point Cooling Canal 19 Monitoring Plan was initiated as a result of the 20 conditions of certification in 2009 as a result of the

21 uprate.

The conditions of certification were very clear. Monitor the cooling canal systems, and if you see a problem, come back to us, identify things to require abatement, remediation -- well, it didn't say

remediation. It did say abatement, mitigation or other
 actions as necessary.

3 FPL, upon the initial consultation, began 4 working under that permit provision. These things just 5 transpired through multiple administrative proceedings. And that's why I struggle to answer your question, 6 7 Charles, as you put it, because at the beginning, in 8 2009, the predicate was laid that the cooling canal 9 system may have a problem, and causing or contributing 10 to impairment of adjacent waters. We need to monitor. 11 If there is a concern identified by the district, or 12 DEP, consult and take actions and identify those actions 13 that are needed to abate that. That was initiated as 14 part of the 2009 conditions of certification.

15 So going back to the administrative order, you 0 16 didn't challenge that, or appeal it in any way, right? 17 Α No, we did not challenge. It was -- FPL was 18 in -- this is an important answer. FPL undeniably did 19 not agree, and had exceptions on some of the provisions 20 in the administrative order. There was inadequate 21 science to defend, in our opinion, some of the findings 22 that were provided. At the same time, FPL was in the 23 mode of, we need to get on with remediating. We need to get on with abating the harm, and we are not in the mode 24 25 of arguing that there is not an issue in front of us.

1 There was. It's time to move on to address the problem. 2 Let me get you quickly to look at MWS-9, page 0 3 11. This is the County agreement, the consent 4 agreement. The County is consent agreement. DEP is 5 consent order. That's how we keep them straight. 6 Α Yes, sir. I am there. 7 All right. So read aloud, if you would, Q 8 page -- paragraph 32. 9 Α This consent agreement shall neither be 10 evidence of a prior violation of this chapter, nor shall 11 it be deemed to impose any limitation upon any 12 investigation or action by DERM in the enforcement of 13 Chapter 24 of the code of Miami-Dade County. 14 Now, the first part of that, there is 0 Okay. 15 not a similar provision in the consent order with DEP 16 that says it's not deemed acknowledgment of a violation 17 or anything like that? 18 Α That's correct. 19 Okay. 0 20 Α Although, I don't recall seeing anything that 21 it says FPL admits to a violation in the consent order, 22 which sometimes you see and sometimes you don't. 23 Okay, but FPL does not state -- there is not a Q provision in there that there is anything in here you 24 25 don't agree with, is there? In the consent order. Premier Reporting

1 No, we willfully signed the consent order as Α 2 we did willfully sign the consent agreement. 3 Q Okay. And you would agree with me that the 4 DEP consent order independently requires you to build 5 the RWS and to conduct the freshening? 6 Α I apologize, I didn't hear consent order or 7 consent agreement, even though the answer is both yes. 8 Q So I asked you about the consent order. 9 Α Okay. Yes. 10 And if I get you to look on MWS-12, 0 Okay. page four. 11 12 Α I am there. 13 Do you see the -- in paragraph 10, the Q Okay. 14 last sentence, it says, this consent order supersedes 15 all of the requirements of that administrative order. 16 Do you see that? 17 Α I do. 18 Q That means that it doesn't replace the Okay. 19 administrative order in any other way, and the findings 20 of fact are undisturbed in the administrative order; 21 correct? 22 Α That is my understanding. Correct. 23 And paragraph nine on that same page, Q Okay. it says that the interceptor ditch didn't work, didn't 24 25 it?

1	A	No, it does not.		
2	Q	Okay.		
3	A	Paragraph nine actually establishes that the		
4	intercept	or ditch worked at the top of the aquifer, but		
5	was ineffective at controlling migration at the bottom			
6	of the aquifer. So it was effective in controlling			
7	migration of saline water from the cooling canal system,			
8	and			
9	Q	Okay. So the interceptor ditch is about		
10	18 feet d	eep, right?		
11	A	Yes.		
12	Q	And the aquifer is about 100 feet deep, right?		
13	A	Roughly 90, yes		
14	Q	Okay.		
15	A	in this area.		
16	Q	So saltwater sinks, hypersaline saltwater		
17	sinks eve	n further faster, right?		
18	A	Absolutely.		
19	Q	Okay. So it just went down and below the		
20	effect of	the interceptor ditch and then moved westward,		
21	right?			
22	А	That is the finding, yes.		
23	Q	It effectively bypassed the interceptor ditch?		
24	A	Correct.		
25	Q	Okay. This finding in paragraph nine or		

1 this language in paragraph nine also is effectively the 2 same as a violation of the fourth supplemental agreement 3 with the District, right? I mean, it represents a 4 district -- a violation of that agreement in that the 5 interceptor ditch didn't stop the saltwater from going 6 beyond L-31 canal, right? 7 Well, I guess I disagree with the Α 8 characterization of that. If we go to the fourth 9 supplemental agreement, which unfortunately is -- do you 10 have it in your exhibit? It's my rebuttal exhibit, 11 which would be Exhibit 20 in my rebuttal testimony. 12 Q Yeah. 13 Α But it's -- stand by. 14 I only have these miniature versions that you Q 15 probably couldn't read. 16 The fourth supplemental agreement Α Okay. 17 establishes the intent of the interceptor ditch and the 18 objectives of the interceptor ditch, but it also 19 establishes that the determination of action is in the sole judgment of the water management district. 20 21 At the beginning, we talked a little bit about 22 this narrative standard that existed, the minimum 23 criteria. Well, operating under the supplemental 24 agreements, or the original agreement with the water 25 management district, was also a narrative standard. The Premier Reporting

1 narrative standard was, you should operate the 2 interceptor ditch so that -- and I should read it 3 directly -- so that it does not result in migration of saline water more than it would have if the CCS did not 4 5 exist. But then it went on to say, and the 6 determination is in the sole juris -- sole judgment of 7 the water management district. 8 So we had this narrative standard, and to 9 understand it, and the complexity of that narrative 10 standard, it's important to go back to the original 11 agreement with the water management district. And if 12 you --13 You want to read that provision? Q 14 I want to read the original agreement Α 15 provision so there is a clear understanding, which most 16 of that original agreement survived. 17 CHAIRMAN BROWN: And, Commissioners, that's in 18 volume three. Are you referring to your 20? 19 I, unfortunately, no. THE WITNESS: The 20 original agreement is not an exhibit. I can read 21 it if the Commission is comfortable. 22 MR. MOYLE: You should probably have it as an 23 exhibit, I would think, you know. 24 It was a POD, I believe. THE WITNESS: 25 MR. MOYLE: I mean, it's not --

1 CHAIRMAN BROWN: FPL, do you have a --2 MR. BUTLER: Madam Chairman, we have a copy 3 that actually we intend to use in examination of 4 Dr. Panday, and I wouldn't have an objection to 5 passing it out --6 CHAIRMAN BROWN: Now --7 MR. BUTLER: -- now if you prefer. 8 CHAIRMAN BROWN: That would be great. Let's 9 do that. 10 I have no objection to that. MR. REHWINKEL: 11 Oh, I was just going to do CHAIRMAN BROWN: 12 it. 13 Staff, can you -- thank you. 14 We would like to see what we are -- what's 15 being referenced. 16 THE WITNESS: I fully understand. 17 CHAIRMAN BROWN: All right. So we are going 18 to go ahead and mark that for identification, we 19 are going to mark it as Exhibit 71, and title 1972 20 CCS Agreement. 21 (Whereupon, Exhibit No. 71 was marked for 22 identification.) 23 All right. Public Counsel, CHAIRMAN BROWN: 24 ready? 25 MR. REHWINKEL: I think part of the pending Premier Reporting

1 answer was he wanted to read that. So I was --Т 2 was willing to let him read it as part of his 3 answer. 4 Thank you. CHAIRMAN BROWN: Yes. 5 THE WITNESS: So, Chairman, the original 6 agreement in Exhibit 71 established the obligations 7 between FPL and the water management district. 8 This is an agreement, not a regulatory permit. 9 But in that agreement, if you go to page two, 10 at the bottom of page two, paragraph six, I think 11 this is what Mr. Rehwinkel is referencing, and I 12 think it's important to understand this narrative. 13 FPL and FCD -- and at the time they It reads: 14 were Florida Flood Control District. So FCD stands 15 for then the water management district. FPL and 16 FCD agree that the purpose of the seepage control 17 system are, A, to restrict movement of the saline 18 water from cooling system westward of Levee 31E 19 adjacent to the cooling area to those amounts which 20 would occur without the existence of the cooling 21 area. 22 And B, to limit the loss of freshwater from 23 the area west of L-31 adjacent to the cooling area 24 to those amounts which would occur without the 25 existence of the cooling area.

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1 The important part that I wanted to point out 2 is that originally -- you see this narrative 3 standard, but originally there was a desire to come 4 up with a better standard, and it identifies in the 5 next sentence, both parties further agree that 6 insufficient background data are presently 7 available to permit at this time the establishment 8 of a specific -- or excuse me -- of specific 9 standards in regard to inland movement of saline 10 water and eastward movement of freshwater.

11 In 1972, when we began, both FPL, then the 12 Flood Control District, understood we were working 13 in a salt intruded environment; understood there 14 was the potential for salt from the cooling canal 15 system to also migrate through groundwater. And so 16 there was this narrative proposal of, let's monitor 17 it. Let's try to establish, at least narratively, 18 that it shouldn't get any worse than if the cooling 19 canal system existed. There was a desire to 20 establish a more clear threshold to operate under. 21 Throughout the five, or at least the four iterative 22 agreements, no such threshold ever occurred. 23 So as Mr. Rehwinkel pointed out, we have 24 operated under this provision of the objective with the clear understanding, which is also later 25

1 pointed out on -- excuse me -- page five, paragraph 2 If in the sole judgment of FCD it is 13: 3 determined that operational changes, as specified 4 under paragraph (b)(12) are not adequate, the 5 objectives of paragraph (b)(6) FPL will promptly 6 take action. 7 So we have this narrative obligation, and we 8 also have the water management district operating 9 as the sole judge as to whether is there harm or is 10 there not harm? 11 BY MR. REHWINKEL: 12 Q Thank you. 13 So, Mr. Sole, I want to get to kind of where we are in the, kind of the penultimate part of this 14 15 regulatory legal history with DEP and take you to your 16 MWS-12, page seven. And this -- this paragraph 19, you 17 would agree, is kind of the keystone of why we are here? 18 I would agree with that. Α Yes. 19 So I can read it, or you can read it, 0 Okay. 20 but I would like you to read kind of the first half, 21 down to the word adverse environmental impacts of that 22 paragraph 19. Can you read that aloud? 23 Α Yes. 24 The first objective of this order is for FPL 25 to cease discharges from the CCS that impair the

1 reasonable and beneficial use of the adjacent G-II 2 groundwaters to the west of the CCS in violation of 3 condition 4.1 of the permit, and rule 65-520.400, 4 Florida Administrative Code. FPL shall accomplish this 5 first objective by undertaking freshening activities as 6 authorized in the Turkey Point site certification by 7 eliminating the CCS contribution to the hypersaline 8 plume by maintaining the average annual salinity of the 9 CCS at or below 34 Practical Salinity Units, by halting 10 the westward migration of the hypersaline plume -- or 11 excuse me -- hypersaline water from the CCS, and by 12 reducing the westward extent of the hypersaline plume to 13 the L-31E within 10 years, thereby removing its 14 influence on the saltwater interface without creating 15 adverse environmental impacts. 16 And there are -- I mean, there are two 0 Okay. 17 and three objectives also in this, and I am not trying 18 to minimize those. If you want to read those, you can, 19 but I just wanted to ask you a question about this, the 20 first part. 21 That's fine. Α 22 First of all, this paragraph here, Q Okav. 23 obviously FPL agreed to it; correct? 24 We absolutely signed the consent order. Α 25 And it talks about a violation of 0 Okay.

1 condition four of the permit, the NPDES industrial 2 wastewater permit, right? 3 Α That is correct. 4 0 And this last clause, it says, thereby 5 removing -- in the last part that you read, thereby 6 removing its influence on the saline saltwater interface 7 without creating adverse environmental impacts. Do you 8 see that? 9 Α I do. 10 And it's saying that the CCS was influencing 0 11 the saltwater interface? 12 Α That is correct. 13 And you agree that it does? Q 14 I do agree that it does. Α 15 The rest of the paragraph, as I said, 0 Okay. 16 it sets out the remaining two objectives, which are to 17 prevent -- well, we can see them in here, but these are 18 also part of your request for cost recovery in this 19 case, correct? 20 Α These are also obligations of FPL to not only 21 address FPL's influence on the saltwater interface, but 22 also to prevent the releases from the CCS from affecting 23 adjacent waters. 24 There are additional obligations to include 25 mitigation, and I don't know, Mr. Rehwinkel, if you want

1 me go to through that now, or whether you plan to 2 address that later, but one of those issues are to 3 better understand the influence of the CCS on the 4 saltwater interface.

5 It's worth noting, while there has been a 6 finding that, yes, the CCS has had an impact. The 7 extend of that impact was clearly not understood by DEP, and that's why DEP established a specific condition in 8 9 the permit to oblig -- or the consent order -- to 10 obligate FPL to actually do modeling to better 11 understand what the CCS's influence was on the saltwater 12 interface as compared to all the other issues that 13 affect the saltwater interface in this area.

As clearly articulated in the AO, the CCS -or the consent order by DEP, there are numerous activities that influence the saltwater interface in this area. The CCS is just one of them, and it was necessary to better understand the extent of the CCS's impact as we move forward.

Q And that study is being conducted today, or
it's in the process?
A That is correct, yes, sir.

23 Q And when that -- when that analysis is done, 24 it's not as if FPL will be able to be relieved from any 25 of its obligations under the consent order, correct?

A	That	is	correct.

2	Q So if you find out there are other factors
3	that are influencing the movement of that purple mass,
4	that plume, that will be taken into account with
5	whatever DEP might do, but it's still your saltwater
6	that's gotten out those are your cows that got out
7	and you got to bring them back, right?
8	A Undeniably under the consent order, and
9	consent agreement, we are obligated to withdraw the
10	hypersaline plume back to the CCS boundaries.
11	Q Okay. So I think paragraph 20A, on the next
12	page, it we've already discussed this in detail, that
13	it's at or below 34 PSU; that's your obligation, right?
14	A That is correct.
15	Q And that's the freshening of the CCS itself
16	that's within the boundary of the CCS, that's that
17	obligation, right?
18	A Yes. This is specifically to address
19	freshening within the cooling canal system.
20	Q Okay. Isn't it true that the consent order
21	allows FPL at least two chances to fail at that
22	freshening, and if they fail, an opportunity to propose
23	and try additional measures to meet the freshening
24	target?
25	A No, I do not interpret that provision that

1	way.
2	Q Okay. Well, let's look at paragraph 20A, in
3	the second second sentence. It uses the word fails,
4	doesn't it?
5	A It does identify if the the first or the
6	first sentence or the second sentence? I am sorry.
7	Q The second one. It says: If FPL fails to
8	reach an annual average salinity of at or below
9	A Thank you.
10	Q 34 PSU, do you see that?
11	A I do now.
12	Q Okay. So you can fail, and you have got four
13	years to do this. If you fail, within 30 days of
14	failing, you get to submit a plan detailing additional
15	measures and a timeframe to achieve the target; right?
16	A That is correct.
17	Q Okay. And then it says: If FPL fails more
18	than once in a three-year period, you shall submit,
19	within 60 days, a plan containing additional measures
20	that FPL shall implement to achieve the threshold
21	salinity level; right?
22	A That is correct.
23	Q So that's two chances, right?
24	A That was two chances.
25	Q Okay. You ever play golf?

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1	A Can I get a mulligan?
2	Q Yes. You know what a mulligan is, right?
3	A I do.
4	Q So this agreement gives you two mulligans,
5	right?
б	A I guess my answer is based upon the fact that
7	in discussing these issues with FPL or excuse me,
8	with DEP, it was clear that there are going to be
9	drought conditions that we will need to address, and
10	whether or not it really is a failure if you don't
11	achieve the 34 in one year because you are in an extreme
12	drought, and there were provisions in the consent
13	agreement or excuse me, consent order that address
14	that.
15	Regardless, without getting too too much
16	into the details, undeniably, Mr. Rehwinkel, it does say
17	if you don't meet it within the four years, you get
18	another chance to try to meet it. And if you don't meet
19	it again, you continue to bring up new plans.
20	Q Okay. I put in your stack, the next document
21	is FPL's response to Interrogatory 62. If you could
22	turn that over. Do you see that?
23	CHAIRMAN BROWN: Let's go ahead and mark that
24	as Exhibit 72.
25	(Whereupon, Exhibit No. 72 was marked for
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1	identification.)
2	THE WITNESS: Appeals response staff
3	interrogatory yep.
4	MR. REHWINKEL: Okay.
5	THE WITNESS: Chairman, was it 72?
6	CHAIRMAN BROWN: Yes, sir.
7	THE WITNESS: Thank you.
8	MR. REHWINKEL: And, Madam Chairman, I am I
9	still have a ways to go. It's and there is not
10	going to be any good breaking point. Any time you
11	want to take a break is fine with me.
12	CHAIRMAN BROWN: We are not ready yet.
13	MR. REHWINKEL: I understand. I am just
14	letting you know.
15	BY MR. REHWINKEL:
16	Q So, Mr. Sole
17	CHAIRMAN BROWN: If you are ready, if you
18	would like to take a break, we can.
19	MR. REHWINKEL: Oh, I am fine.
20	CHAIRMAN BROWN: Okay.
21	BY MR. REHWINKEL:
22	Q Are you familiar with this document?
23	A I apologize.
24	Q I think you are designated to respond to it.
25	A I am familiar with this.

1 Q Okay. So if I could get you to turn to 2 Attachment 1, which is a spreadsheet. Do you see that? 3 Α I do. 4 Okay. And am I correct in reading this, in 0 5 the second row, it starts the word completion -- with 6 the word completion. Do you see that? 7 Α T do. 8 Q This is the freshening requirement, or 9 project, that's referenced in 20A of the consent order, 10 right? 11 Α That's correct. 12 Q And if I look over -- and this kind of breaks 13 down whether it's capital, or expense, or both; and you just have 8,135,181 of capital dollars for this project, 14 15 right? 16 Α That's correct. 17 Q Okay. So -- and that's a -- to the best of 18 your knowledge, that's the capital cost of the 19 freshening project? 20 Α I believe that is the capital cost of the 21 freshening project. 22 Okay. And we just talked about freshening Q 23 mulligans a second ago. You haven't factored into that 24 cost any of the cost of such -- of these mulligans, 25 right?

1	A I don't understand the question.
2	Q Okay. You haven't factored into this cost a
3	contingency based on any failure to meet the requirement
4	in the first instance, right?
5	A I understand the question.
6	No, the the cost of the freshening project
7	is the installation of wells that we will continue to
8	operate.
9	Q Okay.
10	A They do not include any work that has yet to
11	be completed, or any analysis that has yet to be
12	completed.
13	Q Okay. I mean, they are in, right?
14	A The wells have been constructed and are
15	operating as we speak today.
16	Q Okay.
17	A And providing quite a bit of good value.
18	Q So the analysis you are talking about is you
19	haven't done an analysis to see whether it will be
20	successful or not, because that's coming down the road?
21	A No, I apologize. I did not mean to assert
22	anything of the sort. The analysis that I am talking
23	about is if, for some reason, we are unsuccessful in
24	achieving an annual 34 PSU by the fourth year, there is
25	no analysis of what additional activities. The analysis
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1	that we have done does identify that it will achieve the
2	40 34 PSU by the fourth year.
3	Q Okay. And if, in fact, there are additional
4	costs to implement any additional measures to achieve
5	the costs, you will expect to achieve the
6	threshold you will expect FPL's customers to pay for
7	that, right?
8	A Mr. Rehwinkel, admittedly, it's so
9	hypothetical, I don't know how to answer that question.
10	Q All right.
11	A It depends what activities we are talking;
12	whether it's prudent. I just would hate to speculate
13	into the future.
14	Q Okay. You cannot, as you are testifying here
15	today as the most senior representative of FPL, assure
16	the Commission that you will not, in fact, need those,
17	what I have called mulligans, can you?
18	A The term assure I need to be clear that we
19	define.
20	My answer is, no, I can't establish, as a
21	matter of fact, that, undeniably, under all
22	circumstances, we will achieve 34 PSU by the end of four
23	years, or that, even subsequent to that, drought or some
24	other condition could adversely affect our ability to do
25	so.

1 What I can assure the Commission is we have 2 modeled the input of this 14 million gallons per day 3 into the cooling canal system, and based upon average 4 weather, it is anticipated to achieve the 3 -- excuse 5 me, 34 PSU annual average. 6 I am very happy to say that, even today, we 7 are down to roughly in the low 40 PSTA as compared to 60 8 this time last year. So our model continues to show 9 strong support that this is achievable, and I feel 10 confident that we will achieve it. 11 Okay, but you are not testifying about the Q 12 effectiveness of the model, right? 13 No, sir, I am not a qualified modeler. Α 14 And you are relying on that model for the Q 15 statements you just made about your confidence, right? 16 Absolutely. That is true. Α 17 Q And you would agree with me that any model is 18 only as good as the inputs to it? 19 I would agree with that. Α 20 Q Okay. So if you have got the aquifer wrong in 21 the model, then the output, or the model results may not 22 be -- they might not meet actuality, right? 23 I agree with that as well. Α 24 In fact, I asked you about can you give 0 Okay. 25 the assurances to the Commission that the freshening

1 You can't give assurances that the recovery will work. 2 well system will work as proposed either, can you? 3 Α Again, I will answer the same. Yes, I believe 4 the modeling that we have done, and the use of 5 technology that is a standard remedial technology used 6 in other scenarios provides the assurance that, yes, 7 this will be an effective solution. 8 Assurance is my term. And my definition of assurance is, yes, we provide reasonable assurance that 9 10 this will be successful. Modeling shows that it will be 11 The technology is not an experimental successful. 12 technology. This is something that's tried and true, 13 and I have seen throughout my career at DEP on 14 environmental remedial strategies of pumping, in this 15 case, pollution out of the aquifer to recover it and 16 have the aquifer restored. 17 I admit, Mr. Rehwinkel, I Guarantee? No. 18 can't quarantee anything. This is a big environment, 19 and we will continue to operate it, and we believe it 20 will be successful. 21 Paragraph 20C, I just mentioned the RWS -- if Q 22 I say RWS --23 Α Which document are we on? 24 Oh, I am back on MWS-12. 0 25 Α Thank you.

1	Q When I say RWS, you understand I mean what you
2	call the recovery well system, right?
3	A Yes, the RWS is the recovery well system.
4	Q Okay.
5	A Thank you.
6	Q So paragraph 20C is where the consent order
7	imposes the obligation for you to implement an RWS,
8	right?
9	A Yes.
10	Q And it has two milestones, or requirements.
11	One is that within three years, you that the RWS
12	halts the westward migration of the hypersaline water,
13	or that that plume, the purple mass there; and within
14	10 years, it retracts that purple mass back into the
15	boundary, or east of L-31; right?
16	A That is correct.
17	Q Okay. And you would agree with me that your
18	predecessor, Mr. Labauve, filed testimony on
19	September 2nd of 2016 that showed a combination of
20	expense and capital of \$55.3 million for the RWS for
21	2016 and 2017?
22	A I would have to have that in front of me to
23	confirm that.
24	Q Okay.
25	MR. REHWINKEL: Madam Chairman, can I show the
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1 witness something? I just want to show him 2 Mr. Labauve's testimony and ask him to look at it, 3 rather than --4 CHAIRMAN BROWN: Okay. 5 THE WITNESS: I have -- if you are talking about his September testimony, Mr. Rehwinkel. 6 7 BY MR. REHWINKEL: 8 Q Yes. Do you have that? 9 Α I do have the 2000, let's see, 16, 10 September --11 I just wanted you to look on pages --Q 12 Α Thank you. 13 -- five and six of that testimony and just see Q 14 if you can confirm to me --15 Α I am on page five. 16 So for 2016, can you tell me the amount Q Yes. 17 that he projects to be spent on the RWS? 18 Α Well, I said I have his testimony. Let me 19 make sure I got the right one. I am there. Ι 20 appreciate it. 21 Ask the question again, Mr. Rehwinkel. I have 22 The projection for -it. 23 MR. REHWINKEL: Actually, Madam Chairman, I 24 apologize, I don't know what I am doing here. 25 CHAIRMAN BROWN: You are looking at a tiny (850) 894-0828 Premier Reporting

1 little book, I see. 2 MR. REHWINKEL: The next exhibit is the 3 excerpt --4 THE WITNESS: Oh, that would work. 5 MR. REHWINKEL: -- so if you turn that over, 6 that would be helpful. 7 CHAIRMAN BROWN: Okay. Even better. 8 Maybe we do need a break. MR. REHWINKEL: 9 CHAIRMAN BROWN: We are going to go ahead -- I 10 don't know how you see out of that little book. 11 73, we are marking this excerpt. Is it the full 12 testimony or excerpt? 13 MR. REHWINKEL: It's an excerpt. 14 CHAIRMAN BROWN: Okay. Excerpt from testimony 15 of Labauve, as 73. 16 (Whereupon, Exhibit No. 73 was marked for 17 identification.) 18 BY MR. REHWINKEL: 19 So on page five --0 20 Α I am there. 21 -- we see for 200 -- 2016, projected O&M Q 22 costs, the second column -- or row there, it says, 23 construct Biscayne Aquifer recovery well system, \$17.45 million? 24 25 Α That's correct.

1	Q Okay. And then if we look over on page six,
2 5	second line of that table, under 2017 projected O&M
3 6	osts, \$37.98 million; do you see that?
4	A I do.
5	Q Okay. So the two of those roughly total 55.3
бп	illion?
7	A Subject to check
8	Q Okay.
9	A I will go with that.
10	Q All right. Now, I understand that those
11 r	numbers might move around as far as which period you
12 5	spend them in, and I think there is also testimony in
13 t	his docket about whether they should be expensed or
14 c	apitalized, is that fair?
15	A There is, yes, sir.
16	Q Okay, but putting aside that, the total costs
17 t	hat's shown in those two pages of Mr. Labauve's
18 t	estimony, that's roughly unchanged; is that right? Has
19 t	he cost gone up? Gone down?
20	A I have excuse me, I have in my exhibit, I
21 k	pelieve 14, the projected costs of each of these.
22	CHAIRMAN BROWN: Looks like it to me.
23	Mr. Rehwinkel.
24	MR. REHWINKEL: Yes.
25	CHAIRMAN BROWN: Do you see it?
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1 MR. REHWINKEL: Yes. 2 CHAIRMAN BROWN: Okay. 3 THE WITNESS: And generally, I think they are 4 equivalent, when you take into account the prior 5 years --6 BY MR. REHWINKEL: 7 Okav. So this -- just so we understand what Q 8 this represents. This is the total project costs for 9 2017 and 2018 --10 Well, correction --Α 11 -- and the RWS costs within that total cost --0 12 Α Exhibit 14 is the total projected costs from 13 2017 all the way through 2026. 14 Okay, but for 2017 and 2018, the amounts for Q 15 the RWS are a little bit different than what's in 16 Mr. Labauve's testimony, because you don't have the '16 17 dollars --18 Α That's correct. That's correct. 19 All right. Okay. But I apologize for the 0 20 paperwork, but essentially the \$55 million is still a 21 good number, regardless of how you slice it, right? 22 I cannot answer that question without seeing Α 23 the detail cost from 2016 in order to establish it. Do I do believe 24 I believe generally that is correct? 25 generally that is correct, but I cannot testify sitting

1 here that that is 100 percent accurate. 2 Q Okay, but you are not aware of any material 3 change in the scope or the cost of the project? 4 Α That is correct. 5 Q Okay. And just, if I ask you about this same 6 thing on rebuttal, you think you might be able to give 7 me a more accurate answer? 8 I can check the numbers and try to get back to Α 9 you on rebuttal. 10 All right. And it's -- isn't it true that you 0 11 intend to have the RWS operational in March of 2018? 12 Α Yes, that is correct. 13 Paragraph 20Cii, back -- so we are back Q Okay. 14 on the -- on the consent order --15 Exhibit 12? CHAIRMAN BROWN: 16 MR. REHWINKEL: Exhibit 12, yes. 17 THE WITNESS: 20Cii. 18 BY MR. REHWINKEL: 19 Yeah, little Roman II. 0 20 Α I am there, page nine of 27. 21 Q The last sentence there says, FPL shall Yes. 22 provide the Department with written notice of the date 23 FPL commenced operation of this remediation project. And just so I understand, you haven't given that notice 24 because you are not in the March 2018 timeframe? 25

A That is correct.

0	Okay.
z .	

1

3	A Although, we have been recovering hypersaline
4	water from underneath the cooling canal system as part
5	of the operational testing of the UIC well. So since, I
6	believe, September of 2016, we have been withdrawing
7	hypersaline water directly from the middle, almost the
8	middle of the cooling canal system. But the full
9	operation of the remedial wells, the 10 remedial wells
10	is not expected until March of 2018.
11	Q Okay. And the reason I ask is that this
12	agreement has specific milestones and yardsticks for
13	success of the RWS that are pegged to that notice that
14	you give that you are ready to go in March of '18,
15	correct?
16	A There are.
17	Q Okay. So I want to talk to you about those,
18	but first, I want to make sure I understand we just
19	looked at your Exhibit 14, and you have projections of
20	costs from '17 through 2026, correct?
21	A That's correct.
22	Q And in that projection, you have not factored
23	in any cost for modifications caused by any failure of
24	the RWS to either halt the westward movement of the
25	hypersaline plume or to retract it, correct?
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1 Α No. These costs reflect the anticipated cost 2 of implementing the consent order and consent agreement. 3 Q Okay. So isn't it true that the consent order 4 requires you to conduct five CSEM surveys like the one 5 shown on the demonstrative 14-B, or Exhibit 69, in the 6 first five years of the RWS? 7 Yes, and those costs are addressed in my Α Exhibit 14. Are we on 14, or are we back just to the 8 9 consent order? I am sorry. 10 0 Well, we are on the consent order --11 Α Okay. 12 -- but the costs that you just referenced are Q 13 for conducting the CSEM surveys, correct? 14 Α Yes. 15 Okay. 0 16 Α Those costs are addressed in my Exhibit 14. 17 Q All right. And paragraph 20 -- I have written 18 29, but I think I may have written it wrong. Page 15 of 19 27 --20 Α Thank you. 21 -- of your MWS-12. Q 22 I am there. Α 23 Paragraph 29. This A, B, C, D and E, these Q 24 are the requirements for you to do the CSEM surveys on 25 this schedule, correct?

1 Α That is correct. 2 So these are the yardsticks for measuring --0 3 these surveys, once they are done and filed, will be the 4 yardsticks for measuring success of the overall 5 remediation plan required in paragraph 20; is that 6 right? 7 Α That is correct. 8 Q Okay. So there is a baseline that you got to 9 do, when I -- there is a baseline survey that you will 10 do right before the RWS goes into service right around 11 March of 2018? 12 Α Early in 2018 we will do the baseline survey; 13 yes, sir. And that's -- that's so DEP and you, 14 Q Okay. 15 and everyone else, can see -- you can measure your 16 success, right? 17 Α Yes, sir. 18 So you do a CSEM survey 13 months after that, Q 19 or you have to file it 30 days after the anniversary, so 20 April of 2019, right? 21 Again, roughly. Α 22 Yeah. Q 23 Α I would rather not put a month in because it 24 could be March. 25 I understand. 0

1 Α Okay. Thank you. 2 But just the literal language in here is, 0 3 assuming you go in in March, you got a year to put it in 4 to operate it, and then they want to see within 30 days 5 after that what your first survey shows? 6 Α Yes. 7 And then in 2020, you have got to do Q Okay. 8 your second survey; 2021, third survey, so about 39 9 months or so after the RWS goes into service, you are 10 going to have done four surveys? 11 Α Yes. 12 Okay. And then in 2023, the five-year Q 13 anniversary of the implementation of the RWS, you will -- you will do a survey that starts a biannual 14 15 survey requirement, correct? 16 That is correct. Α 17 Q Okay. So I want to talk to you about the 18 first two -- well, actually, the second and third 19 surveys will be the yardsticks for determining success 20 or failure of the remediation efforts on the RWS in 21 halting the westward movement of the plume; right? 22 Α There are provisions in the consent order that 23 address what the expectation is based upon the results 24 of those surveys, yes. 25 And if those surveys show that the RWS 0 Okay.

1 is not working to pull that, the western edge of that 2 plume back, or to halt it -- to halt it, then you have 3 to come up, in the first time if you fail, now you 4 got -- you got retraction mulligans, right? If that 5 doesn't work, you get another chance to file something in six months to pull it back -- I mean, to stop the 6 7 westward movement, right? 8 Α I think I understand the question. And the 9 answer is, yes, I actually don't like the term mulligan, 10 because I think it mis -- truly mischaracterizes --11 I'll stop using that. 0 12 Α -- the progression of routine remedial 13 activities. 14 I will tell you that that every remediation 15 project that I have worked throughout my career, 16 undeniably there is little bits of modification here or 17 modification there to ensure that you are capturing and 18 successfully remediating. That is a routine action 19 as -- as we deal with contamination, or in this case, 20 even a hyper saline plume. 21 So, yes, we will continue to monitor the 22 There may be some efficacy of the recovery well system. 23 changes needed as we progress. It may be that instead 24 of pumping all 10 wells evenly, we really need to pump 25 six of the wells a little bit more than the four wells,

1 and that will be part of our analysis as we regress 2 through this. That is a normal technique and normal 3 technology in the world of contamination assessment and 4 remediation. 5 Does that help, Mr. Rehwinkel, just to --6 Q Yeah, I appreciate that answer. 7 So the -- but if -- if that plume, that purple 8 mass, is still going westward after the first CSEM 9 survey is filed, you have got six months to come up with 10 something different and present to the Department and 11 get their approval to put it in effect, right? 12 Α That is correct. 13 And if there aren't any additional costs for Q 14 doing that, they are not included in your projections of 15 costs in Exhibit 14 of your testimony, right? 16 That is correct. Again, there may be no cost Α 17 to address the issue as well. 18 Q And then the -- the next year, if it's still 19 not working, and the plume is still going westward, you 20 got 30 days to come up with something and present it to 21 the Department, right? 22 Α That is correct. 23 Okay. And in each of those cases, if there Q 24 are additional costs to put -- to put a new plan in place, you would expect customers to pay for those 25 (850) 894-0828 Premier Reporting

1	costs, right?
2	A I if there were prudent activities needed
3	to ensure that we protected the environment, I would
4	anticipate that the company would seek cost recovery
5	under the ECRC.
6	Q Okay. And I think we've already covered this,
7	but those costs that you would seek if that contingency
8	happened are not baked into your projections of \$176
9	million that's in Exhibit 14, right?
10	A As I have answered before, the 176,000 or
11	\$176 million projected for the 10 years is estimate of
12	the actual cost based upon what we identify needed to
13	comply with the consent agreements and consent order.
14	Q So in five years after that you put in the
15	RWS, you have another requirement, or there is another
16	yardstick that DEP will look and see whether you
17	actually have retracted that plume all the way into the
18	area east of the LW L-31?
19	A Can you show me where that is? I apologize.
20	I was trying to hunt for it and I honestly couldn't find
21	it.
22	Q So I think we go back to
23	A Help a witness out.
24	Q Let's go back to paragraph 20v, romanette v on
25	page 10 of your Exhibit 12.

1	A	I just found it. Thank you.
2	Q	Okay.
3	A	I appreciate that assistance.
4	Q	Sure.
5	A	Let me read this, Mr. Rehwinkel
6	Q	Please.
7	A	to answer your question.
8		I have read it. Thank you. Go ahead and ask
9 a	gain.	
10	Q	Okay. So my question to you was, you file a
11 r	eport at	the end of the fifth year and to evaluate
12 w	hether t	hat purple mass was all moved all the way
13 e	ast of t	he L-31 canal, right?
14	А	No, that's not
15	Q	You don't have to retract the no, I
16 a	pologize	. You are right. Let me let me restate the
17 q	uestion.	
18		The question is, that in five years, you are
19 t	o evalua	te whether it's
20	А	Trending towards
21	Q	you are projecting that it's going to pull
22 i	t all th	e way back in after 10 years, right?
23	А	That's correct. The anticipation is by five
24 y	ears, yo	ou will be able to assess if you are trending
25 t	oward su	access and anticipate to be successful.
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1 So I would expect that there will be a CSEM Q survey and some other analysis that you would present to 2 3 the Department to say whether you are on track to meet 4 the 10-year requirement, right? 5 Α That is correct. 6 0 That requirement would be to move all that 7 back into --8 To eventually, within 10 years --Α 9 0 Okay. 10 -- move it all back, yes. Α 11 All right. So if the report you file shows Q 12 that retraction will not occur as required, you have 13 agreed in this document, and are required under this 14 document, to provide DEP with an alternative plan for 15 complete retraction, right? 16 That is correct. That plan can be many Α 17 things. The plan can be continue to operate. The plan 18 can be increase pumping on wells seven and eight. There 19 are so many things that that plan could be. It's fairly 20 broad, Mr. Rehwinkel. 21 Q Okay. So if there were additional costs to 22 implement a plan that you would provide the Department 23 to -- an alternate plan, as referenced in the next to 24 the last sentence in 20v, you would expect the customers 25 to pay the cost of that alternate plan if there were Premier Reporting

1 additional costs, right? 2 I think I already answered that question, but Α 3 I am willing to answer it again. 4 0 Well, I am asking about retraction. Those 5 were about halting the migration. Now we are on this 6 specific one, so this is a new question. 7 Α The answer is the same. If FPL has to take 8 additional actions to ensure -- prudent actions to 9 ensure we address the environmental harm, yes, it's 10 anticipated FPL would pursue cost recovery under the 11 ECRC clause. 12 Q And any costs of an alternate plan, were there 13 to be one in the future, are not baked into your Exhibit 14 14 cost estimations; correct? 15 That is correct. Α 16 Isn't it true that the customers -- FPL 0 Okay. 17 is asking this commission to impose on FPL's customers 18 all the risk and all the cost of fixing the saltwater 19 contamination problem that is shown on Exhibit 69? 20 Α I may have missed something in there. Can you 21 ask that one more time to make sure I understand it? 22 0 Sure. 23 Thank you. Α 24 Isn't it true that FPL is asking this 0 25 commission to impose on FPL's customers all the risk and Premier Reporting

all the cost of fixing the massive saltwater
contamination problem that FPL's operation of the CCS
caused?

A No, I would word it slightly different, but it 5 may end up being close to yes as well.

6 So it is undeniably true that, as a result of 7 over 40 years of operation, FPL has operated the CCS in 8 accordance with its permits and obligations and an 9 unintended consequence has occurred. That unintended 10 consequence is the development of a hypersaline plume 11 and, candidly, a design limitation that was developed in 12 cooperation of with the water management district at the 13 time.

14 As a result of that unintended environmental 15 harm, FPL is seeking cost recovery to address that 16 environmental harm. The actions that FPL are proposing 17 to take are actions that have been reviewed and approved 18 by multiple regulatory agencies that have looked at the 19 technical veracity of the proposals, and have agreed and 20 recommended that FPL move forward with those activities. 21 As a result of those actions, FPL is pursuing cost 22 recovery to address the environmental harm. 23 Did I hear you blame at least part of the Q 24 problem on the District?

A The development and design of the cooling

canal system, the operation of the interceptor ditch
have been very prescriptive under operations of the
agreements with the then South Florida Flood Control
District originally, and subsequently operations under
the direction of the South Florida Water Management
District.

7 This has been a program that has been operated 8 and almost direct oversight by the water management 9 district. The operational criteria that FPL was 10 required to conduct in operating the interceptor ditch 11 was something that was very prescriptive, and could not 12 be changed without consultation or direction from the 13 water management district.

Q Okay. So there is nothing in the agreement you signed, whether it's the first through fifth supplemental agreements, or permit, that prohibits you from proposing changes to make your facilities work better and in a less environmentally destructive way, right?

A That is absolutely correct. There is nothing that prevented FPL from proposing changes. However, undeniably, the need to propose changes in light of that narrative agreement objective would have to be based upon some need to act. FPL would need to see some basis or direction from the District that action is required. And I know we haven't gotten into this, I will stop there, but the record is somewhat replete of that basis was not apparent to FPL nor apparent to the consultants doing the work, and finally nor apparent to the water management district since up until two thousand, roughly, eight, there has been no direction to make any changes.

Q Is it your testimony that the water management district came to you and said, here is an interceptor ditch, put this in exactly the way we said it, or did FPL have a role in designing it?

12 A Actually, it was close to the way you first 13 characterized it, is that when FPL was obligated to 14 construct the cooling canal system by the U.S. 15 Department of Justice consent decree, I believe the then 16 Flood Control District said, hey, you need to put in a 17 seepage barrier in order to control saltwater from 18 migrating into our property --

- 19
- Q Okay.

A -- because we have obligations of trying to address, meaning the Flood Control District has obligations to address saltwater intrusion. They did saltwater intrusion did say, FPL, you design it, we will review it, and then we will work and identify those requirements that are specifically identified in the

1 first supplemental agreement that we can go to and point 2 to, if you wish. 3 0 Okay. Well, the FPL did not say, we are 4 putting this in over our own objections. We are going 5 to give you an engineered interceptor ditch. We don't 6 think it's going to work, but you said to do it, so here You didn't -- that's not documented anywhere, is 7 it is. 8 it? 9 А I didn't suggest that was stated anywhere 10 either. 11 So FPL said -- they put an engineered 0 Okay. 12 solution in and said to the District, we think this will 13 work, approve it, right? 14 Again, details are -- in 1978, I can assure Α 15 you, I wasn't there. But in going through the record, 16 it is clear, if you read the first agreement with the 17 District, FPL was to design and construct, in accordance 18 with the District's review, approval and specific 19 obligations on how to operate the interceptor ditch. 20 And as a reminder, the interceptor ditch was 21 effective at addressing salt migration at the upper 22 parts of the aquifer; which, when you review some of the 23 record, it's clear that that was one of the primary 24 concerns that the District had, is keeping saltwater 25 from going to their L-31 canal and creating

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1 cross-contamination there, or keeping saltwater from 2 actually adversely impacting the flesh water wetlands 3 that are to the west of the cooling canal system. 4 CHAIRMAN BROWN: Mr. Rehwinkel. 5 MR. REHWINKEL: Yes. 6 CHAIRMAN BROWN: Now seems like a good time to 7 take a break. Let's take about a five-minute Stretch your legs, get a drink --8 break. 9 MR. REHWINKEL: Sounds good. 10 CHAIRMAN BROWN: -- and we will be back here 11 at 11:10. 12 MR. REHWINKEL: Okay. Thank you, Chairman. 13 THE WITNESS: 14 (Brief recess.) 15 CHAIRMAN BROWN: Whenever you are ready, Mr. Rehwinkel. 16 17 MR. REHWINKEL: Thank you, Madam Chairman. 18 BY MR. REHWINKEL: 19 Okay. Mr. Sole, let's turn to your 0 20 testimony -- and when I say testimony, I am only talking 21 about your direct. 22 Α Yes, sir. 23 Page four. All right, you state on lines 14 Q 24 through 17, since it was constructed more than 40 years 25 ago, FPL has operated the Turkey Point CCS in compliance (850) 894-0828 Premier Reporting

1	with all applicable permits and regulations working
2	collaboratively with federal, state and local agencies
3	to monitor any impacts from the CCS and address issues
4	as they were identified, right?
5	A Yes.
6	Q Okay. I want to focus on the first part of
7	that. That sentence is not accurate, is it?
8	A I believe it to be accurate.
9	Q Okay. I think we already established that DEP
10	has found, and you have agreed, that you violated Rule
11	62-520.400 and condition 4.1 of your CCS operating
12	permit, right?
13	A Yes.
14	Q Okay, but this says that you have operated in
15	compliance with all permits and regulations. That's
16	contrary to what DEP says, isn't it?
17	A My terminology in this sentence is to be clear
18	that FPL operated, is the effective word, we've operated
19	the facility in the requirements obligated in the
20	permits and the agreements. We conducted the activities
21	as obligated in the permits. We did not deviate from
22	the authorizations that were in the permits. And as we
23	operated the facility in compliance with the
24	requirements in each of the permits and the agreement,
25	nonetheless, water quality violation did occur.
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I don't consider that to be an operational violation. I consider that to be a consequence that occurred, although, FPL operated the facility in accordance with its agreements in collaboration with the then water management, or the water management district and DEP.

7 Q Okay. Hopefully we won't have to go back and 8 replow the ground in the consent order, and the AO, and 9 the RO, but you would agree with me that nowhere in 10 those three documents -- well, let's throw the NOV in 11 there, too -- nowhere in those four documents is there a 12 qualifier that the permit -- that the provision you 13 violated was not an operational condition, is there? 14 Actually, if you go to Exhibit 12, page five Α 15 of 27 -- page five of 27, paragraph 14, there is a 16 provision that reads: FPL has operated the CCS on 17 regulatory approvals, and the Department has not 18 previously issued FPL either a warning letter or notice 19 of violation concerning FPL's operation of the CCS. 20 If you also go to Exhibit 20, the fourth 21 supplemental agreement, on the very first page, the

whereas provision. And again, let's just be clear on the date. This is dated 15 July, 1983: Whereas, the obligations undertaken by FPL and the Central and South Florida Flood Control District in the original agreement and the supplemental agreements have been satisfactorily performed to date and construction of the cooling water system is complete.

There is -- there is clear identification that 4 5 FPL has been operating the facility in compliance and in 6 consultation and coordination and collaboration with 7 these agencies throughout its period. And, yes -- just 8 to be clear so that we don't have to go through it --9 and, yes, in 2016 a violation was identified that was a 10 violation of the minimum criteria, a water quality 11 standard, a narrative standard, that identified there 12 has been harm.

Q Okay. I am sitting here on October 26th,
 2017, so whatever happened in 1983 has nothing do with
 today, right?

16 A I fully disagree with -- all of this is based 17 upon the historical activities of the operation of the 18 cooling canal system, whether FPL --

19 But when someone says you have done and you 0 20 have been -- you have done a good job up until 1983, 21 that doesn't mean you did a good job for the next 30 22 years, 34 years, does it? 23 I apologize, I misconstrued your question. Α 24 Okay. 0 25 Α I didn't know that you meant this meant

1 specifically the 1983, not what I stated in the consent 2 I apologize. order. 3 Q Okay. Now, you were DEP Secretary, and you 4 probably adjudicated or presided over some kind of an 5 enforcement action where somebody, in one fail swoop, 6 dumped hazardous chemicals into a body of water. It 7 wasn't over a period of time. It was just one time, 8 right? There have been situations that I can recall 9 Α 10 generally, yes. 11 This isn't one of those. This is something 0 12 that happened over 45 years, right; this -- the purple 13 plume here, right? 14 Yes, It is something that transpired over Α 15 numerous years. And candidly, I liken it to leaking 16 underground storage tanks, and where a facility owner registers their underground storage tank, operates their 17 18 underground storage tank in accordance with all the 19 rules and requirements, has the cathodic protection, 20 does what they are supposed to do, but nonetheless a 21 leak occurs. And while they have monitored for that 22 like, that monitoring did not catch that leak until many 23 years later. In some cases, it has been decades later. 24 The issue isn't whether the facility owned or 25 operated or complied with its permits. They complied

1 with their permits. The issue is, even as a result of 2 that compliance, environmental harm occurred; and as a 3 result, the facility owner does address the 4 environmental harm. But there is not fines, or adverse 5 impacts associated with their operation. There is not 6 violations that they didn't comply with the regulatory 7 compliance with their permits. 8 And it's important to bring this into context, 9 because there are also violations where facility owners 10 knowingly don't do what they are required to do in their 11 permits, and as a result, there is harm. And those are 12 looked at differently by the Department, if you review 13 the enforcement manual of the Agency. 14 So, Mr. Sole, I think my original question was Q 15 the word operational was not a qualifier of any permit condition that was the subject of the notice of 16 violation, or the consent order, the AO or the RO, your 17 18 answer is yes or no? 19 I didn't understand what the question was Α 20 there. I apologize --

20 Cherce. I appropriate 21 Q Okay, so I asked you --22 A -- can you ask it more specifically? 23 Q -- isn't it true that nowhere in the four 24 documents, the NOV, the RO, the AO and the CO, is the 25 word operational used by the Department to qualify the

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1 permit conditions that they found and you agreed that 2 you violated -- permit condition? 3 Α Again, I thought what I read under the consent 4 order identified that, yes, DEP acknowledged FPL's 5 operated the CCS under the regulatory approvals --6 Q Okay. 7 -- so -- so my answer stays the same, Mr. Α 8 Rehwinkel. 9 0 Okay. That says that the permit conditions 10 are oper-- are not operational? 4.4 of your NPDES, 11 this -- you are saying this says that's a nonoperational 12 condition? 13 I am apparently lost in what you are asking. Α Can you -- one more time, just --14 15 DEP hasn't said that you violated a permit 0 16 condition that they considered to be not operational, 17 have they? 18 I am unaware of DEP making that specific Α No. 19 statement. 20 0 Okay. And then the statement on page five, 21 FPL has operated the CCS under regulatory approvals, 22 that doesn't say that you operated within the conditions 23 of your permit, does it? 24 Α I believe that is absolutely inferred, and it 25 clearly goes on to read, the Department has not Premier Reporting

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1 previously issued FPL either a warning letter or a 2 notice of violation concerning FPL's operation of the 3 CCS. 4 0 Have you ever driven from Tallahassee to 5 Orlando and gone over the speed limit? 6 Α I have. 7 And did you ever do it without getting caught? Q 8 Α I have. 9 Okay, because you didn't get caught doesn't 0 10 mean you didn't go over the speed limit. I will agree, 11 for the record, I have gone over the speed limit before, 12 too. That doesn't mean you didn't go over the speed 13 limit, does it? 14 Α I didn't assert anything other. 15 0 Okay. And --16 But, Mr. Rehwinkel, let's also be clear, the Α 17 condition in the NPDES permit that they are referring to 18 is a condition that candidly didn't need to be in the 19 The permit didn't authorize FPL to violate the permit. 20 minimum criteria. That is a -- just a standard permit 21 condition that says, you have to abide by all the rules 22 of the Department. And while there are specific 23 provisions in the NPDES permit that FPL did comply with, 24 it is that one conditional -- and I use the word 25 conditional not in the term, I am talking about in the

physical condition -- the one physical condition that
 was undeniably a violation of the Department's.

Q So you are not saying here today to the Commission that you are asking to recover 200 million, or 176, whatever the number is, over the next 10 years, or last year plus the next 10 years because of some sort of nuisance or meaningless rule violation, are you?

A Absolutely not. I am trying to be very clear 9 that throughout the 40 years operation, that FPL has 10 worked collaboratively with the regulators, has complied 11 with the permit's requirements, and unfortunately an 12 unintended consequence of that operation has resulted in 13 a hypersaline plume which is a violation of the minimum 14 criteria under Florida law.

Q You would agree with me that nowhere in the RO, the AO, the CO or the NOV does DEP describe the violation of the permit as unintended?

A No, I disagree. I think, as we pointed out previously in the administrative order, it speaks to the operation of the interceptor ditch, and identifying that the interceptor ditch was effective at controlling saltwater migration, but was unsuccessful in doing so beneath.

24 So my -- my inference to that is there was a 25 clear design, engineering design to control -- control

1 that saltwater migration, at the same time there was an 2 apparent design limitation that resulted in allowing 3 saltwater to migrate underneath the interceptor ditch, 4 although, being successful at the top. My 5 interpretation of that, Mr. Rehwinkel, is that is an 6 inference that it's an unintended consequence. Okay, but my question is they don't describe 7 0 8 it as unintended in any -- in any way, they don't use 9 that word, unintended do they? 10 They do not, nor do they use the term Α 11 purposeful or as a result of negligence. 12 Q Okay. Just -- let's look at MWS-3, page 10 of 13 25. 14 Α MWS-3. Yes, I am there. 15 I think down at the bottom there, we 0 Okay. see the Roman numeral IV and the one? 16 17 Α I do. 18 Q This is the permit condition that they Okay. 19 said you violated and you agreed and the consent order 20 that you did violate, right? 21 That is correct. This -- that is correct. Α 22 And but for the violation of this provision, 0 23 you wouldn't be in violation of Section 403.161(1)(b), 24 which is that you are not allowed to violate your permit 25 conditions, right?

1 I want to think through the conditions Α Yes. 2 of certification and the provisions, but we wouldn't 3 be -- we would be continuing to work under the 4 conditions of certification under paragraph nine and 10. 5 So, yes --6 Q Okay. 7 -- there would not be a violation had we done Α 8 everything that we continue to do. 9 0 Okay. Mr. Sole, you would agree with me that 10 the Florida Public Service Commission did not make a 11 decision about the reasonableness, prudence or the 12 recoverability of the CCS remediation costs that were 13 submitted in 2016 for recovery in 2017, wouldn't you? 14 I believe that that item was -- I don't know Α 15 if the right term is deferred or --16 That's why we are here today, right? Q 17 Α Yes, sir. 18 Okay. All right. Now, am I misunderstanding, Q 19 or is it true that FPL is asserting that the remediation 20 required as a result of the violations of law that led to the administrative order, the NOV and the consent 21 22 order are already part of a program that the Commission 23 has approved as a monitoring program? 24 Α That is correct. This is part of the Turkey 25 Point Cooling Canal Monitoring Plan project.

Q Okay. And just because you slapped the label of monitoring on what is clearly a corrective remedial project costing at least \$176 million, or even maybe more over the next zero years, you contend that that fits what has already been approved by the Commission as monitoring?

7 A Absolutely. If you go to the testimony of 8 Mr. Labauve in 2009 -- and I believe I have a copy 9 here -- it clearly articulates that, as part of the 10 conditions of certification, the anticipated projection 11 is this, what we call additional monitoring, could lead 12 to the need to address and deal with corrective actions.

Later on in 2013, Mr. Labauve testified in front of this body, identifying the notice that was provided by the water management district in April of 2013, and also identified some of the corrective actions that FPL was beginning to perform.

18 Later on in 2015, Mr. Labauve similarly 19 testified and provided to the Commission information 20 relating to the actions that FPL were taking as part of 21 addressing the requirements in the administrative order, 22 which included, not only the freshening activities that 23 were being pursued, but also some of the sediment 24 removal activities that have been addressed actually in 25 the consent order.

1 So these are things that, from the very beginning of Project 42, or the Turkey Point Cooling 2 3 Canal Monitoring Plan project, were clearly articulated 4 to the Commission that it could progress from advanced 5 monitoring to abatement and mitigation; and the FPL has 6 been very up front in keeping the Commission up-to-date 7 as we progress through this project. 8 CHAIRMAN BROWN: I have a question for 9 counsel. Any of those testimonies that the witness 10 has just listed, he went through 2009 Labauve 11 testimony and onward, is any of that in evidence in 12 this proceeding? 13 MS. CANO: Statements to the effect that he 14 just made are included in his prefiled testimony. 15 The actual --CHAIRMAN BROWN: 16 The actual testimony themselves --MS. CANO: 17 MR. REHWINKEL: The 2016 testimony is an 18 exhibit. 19 MS. CANO: Thank you. But he referenced a 2009. 20 CHAIRMAN BROWN: 21 MR. REHWINKEL: '09 and '13, I was just going 22 to ask, Madam Chairman -- and I would be happy to 23 discuss this with the company and the other parties 24 on whatever break we take -- is it may make 25 sense -- I mean, this docket is an ongoing

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1 roll-over docket. We generally don't incorporate 2 in the record today the record of past, but it may 3 make sense for us to consider the Commission taking 4 official recognition of certain of the transcripts 5 of those two proceedings at least --6 CHAIRMAN BROWN: Since the witness seems to be 7 relying on that. 8 Yes, but we can talk about it, MR. REHWINKEL: 9 but I -- I -- I mean, I am not afraid of doing 10 I kind of know what's in there. that. I would be 11 happy to -- for the Commission to take the 12 transcript for those two proceedings and 13 incorporate them in the record here if that's not 14 objectionable to the rest of the parties and staff. 15 Ms. Cano? CHAIRMAN BROWN: 16 MS. CANO: No objection. 17 CHAIRMAN BROWN: Okay. Any of the parties 18 have any comments on it? 19 I have a question. MR. MURPHY: Is this testimony and this need for remediation reflected 20 21 in an order that we could just take recognition of 22 without going into the transcripts? 23 MR. REHWINKEL: Well, the problem is is there 24 has been representations about what the Commission 25 was told, and not everything the Commission is told

1 ends up in an order. And whatever has been -- the 2 Commission is told is accepted is as sworn 3 testimony I am willing to rely on it for whatever 4 value it is. The orders don't necessarily 5 translate to what's testified to. 6 CHAIRMAN BROWN: But all you want to do is 7 take recognition of the transcripts from the 8 proceedings. 9 MR. REHWINKEL: So I could -- I could use them 10 in a brief, if need be. 11 CHAIRMAN BROWN: Counsel. 12 MS. CANO: Yeah, no objection. Just to be 13 clear, that would be the 2009, 2013 and 2015 14 prefiled testimony of Randy Labauve? 15 Well, I was thinking more MR. REHWINKEL: 16 along the lines -- I don't know if they were 17 contested in any way, if there was 18 cross-examination, I suspect there might not have 19 So if it's -- if there is not contested been. 20 hearing, I would be happy with just the prefiled 21 testimony itself. 22 MS. CANO: I believe that to be the case, but, 23 yes, the prefiled would be in the transcript, so 24 the transcript is fine. 25 MR. MOYLE: Can we -- can you defer ruling on

1 I would like a little time to maybe talk and this? 2 think about it. 3 MR. REHWINKEL: I would be happy to talk about 4 it. 5 CHAIRMAN BROWN: We will talk, maybe after 6 lunch. 7 MR. MOYLE: Because it's highly unusual to 8 take three hearings, where you had live witnesses 9 or testimony and like, and dump them in, and --10 CHAIRMAN BROWN: Mr. Sole seems to be relying 11 on it, so I think that this is something -- a 12 reasonable request. 13 We will -- we will take this up of a lunch, 14 though, so you will have to time to confer with the 15 parties. 16 MR. MOYLE: But we have relied on Bram 17 Canter's, you know, probably a two-week hearing as 18 well. 19 CHAIRMAN BROWN: This -- I am talking about 20 this right now. 21 MR. REHWINKEL: Okay. 22 We will talk about it CHAIRMAN BROWN: Okay. 23 after lunch. 24 Mr. Rehwinkel, you can continue. 25 MR. REHWINKEL: Thank you, Madam Chairman. (850) 894-0828 Premier Reporting

1 BY MR. REHWINKEL: 2 Mr. Sole, just to be clear, it's true, isn't 0 3 it, that FPL never told the Commission until 2017 that 4 they were violating the law by the operation of their 5 CCS, did they? 6 Α I don't know exactly when FPL advised the 7 Commission of the findings of DEP, which occurred 8 sometime in 2016; whether that occurred prior to 2017 or 9 not, I don't -- I just don't know. 10 Okay. Well, Mr. -- and there is an exhibit 0 11 that's -- that's already in. I think you are going to 12 sponsor or you sponsored Mr. Sole's 2000 --13 Mr. Labauve's 2000 -- September 2nd, 2016 testimony. 14 I am familiar with that. Α 15 And I believe we had an agreement to 0 Okay. 16 include that in the -- in the record, am I --17 I believe that's correct --Α 18 Q Yes. 19 Α -- counsel. 20 And in that testimony, there is no mention Q 21 of -- of the 2016 consent order, is there? 22 Mr. Rehwinkel, which Randy Labauve MS. CANO: 23 2016 testimony are you referring to? 24 MR. REHWINKEL: September 2nd. 25 MS. CANO: Thank you.

1 MR. REHWINKEL: If counsel wants to point him 2 to somewhere. 3 THE WITNESS: I believe there is. 4 BY MR. REHWINKEL: 5 Q Does it say that you violated the --6 Α You asked if there was any mention of the 7 consent order. 8 Q Okay. 9 Α So, yes, there is reference to the consent 10 order. 11 Does FPL say in the testimony that they were 0 12 in compliance with all permits and regulations, or do 13 they say we were found to have violated the law? And 14 that's the September 2nd testimony. 15 Let me withdraw the question and just ask it 16 this way: In any event, whatever is in that September 2nd testimony is before the Commission today, 17 18 because that was deferred, right? 19 I believe that to be true. Α 20 Q Okay. So whatever that says with regard to whether you did or didn't violate the law, that's really 21 22 before the Commission now? 23 I struggle with where the question is --Α 24 Okay. 0 25 -- and what it is, candidly. Α

1 Well, here's the question: In 2009, when this Q 2 Project 42 was approved by the Commission, you didn't 3 tell the Commission that you were violating rule 4 62-520.400, or permit condition 4.1 of the NPDES, did 5 you? 6 Α No, because at that time, there was no 7 established violation. 8 Q Now, that plume right there didn't Okay. 9 happen in the last two or three years, did it? That 10 happened over 45 years, right? 11 That is correct. Α 12 Okay. Q And at the same time, even in 2005, at an 13 Α 14 administrative hearing, DEP acknowledged that they did 15 not see a violation; admittedly, a judge decided 16 otherwise. 17 Q Okay. And you have agreed with the findings 18 of that judge, and the secretary that found the findings 19 of that judge to be correct, right? 20 Α We did not challenge the final ruling --21 Q But you --22 -- we desired to move forward and get on with Α 23 remediation. 24 But you agreed to it in the consent order, 0 25 too, right?

A We signed the consent order. There is nothing that asserts we agree or disagreed. We signed the consent order to move forward with remediation.

4 0 Okay, but you agreed you didn't sign it with 5 your fingers crossed behind your back, right? I mean, 6 you were the Secretary of DEP, right? And when you went 7 out and enforced the laws of the State of Florida and 8 you got a consent order for someone, you expected them 9 to take it seriously; and if they agreed with the 10 consent order, you relied on that, right?

11 Α Absolutely, but I think, again, context is 12 needed here. The issues in front of us are -- are 13 complex because we are dealing with saltwater in a 14 saltwater environment. We are dealing with not whether 15 or not FPL's cooling canal system is adding saltwater to 16 the groundwater, because it was, and, in fact, it was The question at hand is whether or not the 17 expected to. 18 operation of the cooling canal system was resulting in 19 an adverse impact to adjacent waters. That is the 20 specific criteria which needed to be identified to 21 discern whether there was a violation.

At 2013, when the water management district identified the need to do consultation, it wasn't based upon there is a violation, it was based upon, hey, we think there is harm potentially occurring, and as a result, let's consult and identify what we can do to
 address that harm.

3 There wasn't a specific threshold analysis of 4 whether the G-II aquifer had been adversely impacted or 5 not. It was potentially it had, but the data was maybe 6 not there. Regardless, FPL felt in full agreement that, 7 based on the CCS's operation, yes, hypersaline plume did Yes, an action needed to be hypersaline plume to 8 occur. 9 ensure there was not harm.

10 The extent that there has been a G-II/G-III 11 aquifer move is, I still think, not clear because there 12 are so many other influences associated with saltwater 13 intrusion that are out there. There is influences 14 associated with the canals. If you look at the 15 saltwater intrusion line associated with these maps --16 and if I can get up just to give a sense. This is not 17 the best picture.

18 You can see saltwater intrusion in this green 19 significantly occurring up a canal, completely unrelated 20 to the operation of the CCS. It's actually as a result 21 of flood control structures that allow saltwater to come 22 up --23 Could you go back to the mic, CHAIRMAN BROWN: 24 please? 25 So at the southern end of THE WITNESS: Yes.

1 the cooling canal system, you can see a wedge of 2 saltwater intrusion occurring, and you can see it 3 somewhat on the bottom part of that graphic where 4 saltwater intrusion has come up a canal, a flood 5 control structure, and allowed saltwater, during 6 high tides and low water conditions, to intrude 7 into the land and create a groundwater/saltwater 8 That's unrelated to the CCS. plume.

9 So the guestion as we monitored over these 10 many years is to what extent is the movement and 11 salinity as a result of the operation of the CCS or 12 the operation of these other influences? When you 13 look through the data, so much of what we call the 14 saltwater interface, that difference between the 15 saline water and potable water -- I will just use 16 that term -- that pulses depending upon weather 17 conditions. If you are in a drought, it tends to 18 go west because of low water conditions. In rainy 19 seasons, it goes back towards the coast, because 20 the freshwater head pushes it.

There is so many things influencing saltwater interface, so the complexity of this issue is something that has caused FLP to be cautious in saying, yes, all of that is from us. The simplicity of the issue is, yes, there is

1 a hypersaline plume. We believe the hypersaline 2 plume is as a result of the operation of the 3 cooling system; and as a result, FPL is committed 4 to working with both DEP and Miami-Dade to address, 5 abate, remediate those conditions. 6 BY MR. REHWINKEL: 7 Okay. Well, thank you for you the tutorial, 0 8 but you are not a hydrogeologist, are you? 9 Α I am not a hydrogeologist. 10 0 Okay. 11 I have reviewed many hydrogeologic papers in Α 12 my past, as well as individual remedial strategies, as 13 well as Everglades restoration hydrogeology to 14 understand the influence of groundwater migration, the 15 influence of saltwater intrusion, and these are things 16 that I have experience in. 17 0 I understand. So let's go back to 2009, when 18 this Project 42 was hatched, or when you brought it to 19 the Commission. 20 At that time, you never told the Florida 21 Public Service Commission that you were going to some 22 day enter into a consent order in 2016, or a consent 23 agreement in 2015, requiring you to remedy illegal 24 discharges of hypersaline water into the aquifer, did 25 you?

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1 Α No. But again, I think it's also important, 2 again, to remember the context of the 2009 Turkey Point 3 Cooling Canal Monitoring Plan. It was based upon 4 conditions of certification of the uprate project. And 5 in the conditions of certification, it was very clear 6 that not only were we obligated to do this monitoring, but that if that monitoring identified a problem, that 7 8 we would be obligated to take corrective actions. 9 And that was the genesis of this entire 10 It was not just monitoring. And that has been project. 11 clear in the testimony that that was provided by Randy 12 Labauve in 2009, and based upon the updates that we 13 talked about previously. 14 MR. BUTLER: Madam Chairman. 15 CHAIRMAN BROWN: Yes. 16 MR. BUTLER: While Mr. Rehwinkel is looking 17 through his papers, I just want to make the record 18 clear on something. There was some references 19 earlier to Mr. Labauve's September 2, 2016, 20 testimony, last year's docket. I was involved and 21 handled the case for FPL in that proceeding, so I 22 remember it pretty clearly. 23 The 2000 -- or the September 2, 2016 24 testimony, it was really an update that was occasioned by the fact that between the estimated 25

1 actual testimony in early August and September, FPL 2 had entered into the August amendment, or addendum, to the Dade County consent agreement. 3 So it was 4 really just updating it. 5 We filed, on August 4, 2016, estimated actual 6 testimony of Mr. Labauve, and Exhibit RRL-8 to that 7 was the June 2016 FDEP consent order. So --8 CHAIRMAN BROWN: Is that already in the 9 record? 10 It's not in the record here. MR. BUTLER: The 11 implication was, I thought, that, although there 12 was reference to it in this September testimony, we 13 hadn't actually provided the consent order in 2016. 14 I just wanted to make it clear that, as Exhibit 15 RRL-8 to Mr. Labauve's August 4, 2016, testimony, 16 we did include it as an exhibit. 17 I thought I withdrew that line MR. REHWINKEL: 18 of questions, but I appreciate the clarification. 19 Thank you. 20 BY MR. REHWINKEL: And again, in 2009, the Commission did not 21 Q 22 have the opportunity to take into account any future 23 entering into a consent order or consent agreement, 24 right? 25 Α Yes. There was no specific identification of

1 what actions, if any, FPL would be obligated to take in 2 2009. 3 0 And in 2009, the Commission never approved any remedial or corrective activities as part of its 4 5 approval of cost recovery included in a monitoring plan 6 known as Project 42, did they? 7 Α I don't know. And I -- I base that on this, 8 Mr. Rehwinkel: In 2009, again, Mr. Labauve clearly 9 provided testimony that this project could progress from 10 monitoring to corrective actions. I don't know the 11 specific order that was granted by the Commission, and 12 whether it specifically said what you just suggested, 13 but I know that FPL made the Commission aware that this 14 project could progress from monitoring to corrective 15 action. 16 Okay. Well, isn't it true that what you did 0 is in 2009, you came to the Commission and said, approve 17 18 this monitoring program, and now in 2016 and '17, you 19 are saying to the Commission, you approved a monitoring 20 program, now it's got 176 or \$200 million of current and 21 future costs, you already approved it, case closed; 22 isn't that what you are saying? 23 Α Absolutely not. And, in fact, now I feel like 24 I must read the testimony provided in 2009, because this 25 is what was presented to the Commission.

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1 What are the next steps after the data is 2 gathered and the reports are written was the question --3 MR. MOYLE: This is improper. I mean, we are 4 here and the live evidence you are hearing, you 5 can't just read testimony from two years ago and 6 try to, you know, jam that into the record here. We've had filing deadlines for testimony and all 7 8 It just is improper. Objection. that. 9 MS. CANO: This isn't new evidence. In Mr. 10 Sole's prefiled testimony, he refers to what was 11 filed in 2009 and '13 and '15, so it's been out 12 there since prefiled. 13 MR. MOYLE: It's not an exhibit, I mean, it's 14 not an exhibit --15 Objection overruled --CHAIRMAN BROWN: 16 MR. MOYLE: -- published on it --17 CHAIRMAN BROWN: He may read it. 18 BY MR. REHWINKEL: 19 Where are you reading from? 0 20 Α I am on page 12 of Randy Labauve's 2009 21 testimony submitted to the Commission, August 3rd, 2009, 22 in Docket 090007, page 12. 23 What are the next steps after the data is 24 gathered and reports are written? If the FDEP in 25 consultation with the South Florida Water Management Premier Reporting

1 District and DERM determines that the pre and post 2 uprate monitoring data is insufficient to evaluate 3 changes as a result of this project, paragraph number 4 two, indicates harm or potential harm to the Waters of the State, including ecological resources; number three, 5 6 exceeds the State or County water quality standards; or number four, is inconsistent with the goals and 7 8 objectives of the SERC Biscayne Bay Coastal Wetlands 9 Project, then additional measures may be required to 10 evaluate or abate such impacts. The potential 11 additional measures that might be required that include 12 but are not limited to the development and application 13 of a 3D -- three dimensional coupled surface and 14 groundwater model density dependent to further assess 15 impacts of the uprate project on ground and surface Such model shall be calibrated and verified 16 waters. 17 using the data collection.

18 Bullet number two: Mitigation measures to 19 offset such impacts of the uprate project necessary to 20 comply with state and local water quality standards, which may include methods and features to reduce and 21 22 mitigate salinity increases in groundwater, including 23 the use of highly treated reuse water for recharge of 24 the Biscayne Aquifer or wetlands rehydration. 25 Bullet number three: Operational changes in

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1 the cooling canal system to reduce any such impacts 2 and/or, bullet number four, other measures to abate 3 impacts as may be described in the revised plan. 4 0 Okay. Thank you for reading that. 5 This is referring to impacts of the uprate 6 project on the groundwater, correct? It is very highly This is not about the 45 years of 7 specific testimony. 8 what caused that. 9 Α No, I completely disagree. I acknowledge that 10 in one sentence it says uprate, but when you go to the 11 context of the entire -- entirety of the testimony, this 12 is about the monitoring project itself, and which was 13 based upon the conditions of certification, which 14 include, not only any impacts associated with the 15 uprate, but historical impacts. Well, in bullet three, it refers to the uprate 16 0 17 In bullet two, it refers to such impacts of project. 18 the uprate project. In bullet three, it talks about 19 reducing any such impacts. This is all about the uprate 20 project, and any incremental impacts on the -- on the 21 aquifer, right? 22 Α Mr. Rehwinkel, I candidly disagree. The 23 entire project was based upon the Turkey Point Cooling 24 Canal Monitoring itself, inclusive of both the 25 historical operations educational well as the uprate. Premier Reporting

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1 CHAIRMAN BROWN: So now we are getting to a 2 point where it would be very helpful to actually 3 see that testimony before us today since we are 4 going down this --

5 MR. REHWINKEL: I have no problem with it 6 coming in because I think it makes opposite case, 7 so I would be happy for the Commission to see it, 8 Madam Chairman.

9 CHAIRMAN BROWN: I assume that you are going 10 to have more questions on this line, so it's a 11 little bit shy -- 10 minutes shy of lunch. I would 12 like to get a copy of that testimony for the 13 Commissioners to have, as well as the court 14 reporter, before you -- unless you want to continue 15 with a different line of questions.

16 MR. REHWINKEL: No. I have -- I want to talk 17 about the -- the next document is not the top 18 document or the one under the top document that 19 I -- and it's the 2009 order, I think. Is that 20 what it says on --21 This says Section 403.161. THE WITNESS: 22 I apologize, I didn't ask him MR. REHWINKEL: 23 about the rules. 24 May I approach the witness? 25 CHAIRMAN BROWN: Yes. Of course.

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1 THE WITNESS: Okay. This one, too? 2 Yeah. MR. REHWINKEL: So, here --3 THE WITNESS: Thank you. 4 MR. REHWINKEL: I want to go down in the stack 5 to the -- I have the rule, the statute, I have a 6 dictionary definition that I don't want to talk 7 about just yet, and 2009 order, 090759. 8 CHAIRMAN BROWN: Where do you want to start? 9 The 2009 order? 10 MR. REHWINKEL: Yes, ma'am. 11 CHAIRMAN BROWN: Okay. We are going to mark 12 that just for -- as an exhibit for ease of 13 discussion, as Exhibit 74. 14 (Whereupon, Exhibit No. 74 was marked for 15 identification.) 16 MR. REHWINKEL: Okay. 17 CHAIRMAN BROWN: Again, that's the 2009 order. 18 MR. REHWINKEL: Thank you. 19 BY MR. REHWINKEL: 20 Q All right. Mr. Sole, do you have that order? 21 Α I do. 22 I assume you are familiar with this order? Q 23 Α I am not familiar with the order specifically. 24 This order, would you agree, is the 0 Okay. 25 genesis of Project 42 and the plan?

1	A I do agree with that.
2	Q Okay. And would you agree that if I could
3	get you to look on page 10.
4	A Thank you. I am there.
5	Q Okay. So page 10 through 13 appear to me,
6	items E and F, to be discussing what is called the
7	TP-CCM Project?
8	A Agreed.
9	Q Okay. And perhaps, when we take a lunch
10	break, you can look for the word corrective in here, but
11	my representation to you is it's not in this four pages
12	with reference to the TP-CCMP. Do you have any contrary
13	information?
14	A I would have to read it again. I know I said
15	I was unfamiliar. Now looking at it, I have seen this
16	document.
17	Q Okay, but you can't point me to where the word
18	corrective is in here, can you?
19	A I would have to go through the entire document
20	to verify, but not at this time.
21	Q Okay. And if I get you to turn to page 13.
22	A Do you want me to verify whether I can or
23	can't point to the word corrective, because I am still
24	reading this?
25	Q Oh, yeah, please please read and see if you

1 can find it, and then I will ask you another question. 2 CHAIRMAN BROWN: For what it's worth, my 3 lawyer eyes can't find it. 4 THE WITNESS: All right, I am good. All 5 right, let's move on. 6 CHAIRMAN BROWN: Mr. Rehwinkel, you want to 7 proceed with -- on page 13? 8 BY MR. REHWINKEL: 9 0 Okay. So you can't point me to the word 10 corrective? 11 That's correct. Α 12 Q Okay. All right. So on page 13 -- well, 13 actually, let's go to page 12 and look and start -- read 14 the sentence that starts at the bottom of 12, in light 15 of these --16 Well, I kept reading, so let me go back to the Α 17 first question, sorry. 18 If you go to page 12 in this document, it 19 actually incorporates, I think, some of the testimony of 20 Mr. Labauve at the time, and in the indented portion, 21 which is in the middle of page 12, while the word 22 corrective is not used, a term that I think is used 23 somewhat interchangeably is, and it basically read 24 similar to what I read you in Mr. Labauve's testimony. 25 At the end of that, it talks about the

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1 potential additional measures that might be required 2 include, again, the development and application of a 3 three-dimensional coupled surface and groundwater model 4 to further assess the impacts of the uprate project on 5 ground and surface waters; mitigation measures to offset such impacts of the uprate projects -- project necessary 6 7 to comply with state and local water quality standards. 8 In this case, mitigation measures to me would -- would 9 be used interchangeably with the term corrective.

Q Okay, but they quote Mr. Labauve's testimony here when they talk about the model, and then that inset there near the end of it, they reference the model to further assess impacts of the uprate project on ground and surface waters, and mitigation measures to offset such impacts of the uprate project necessary to comply with state and local water quality standards; correct?

17 A Correct. And the conditions of certification 18 that we are talking about are of the uprate project, and 19 include the activities that address historical impacts.

If you go to Conditions ix and x, the uprate project, which this is based upon, is inclusive of evaluating historical and current impacts.

Q Okay, but this -- this language is limited to the uprate project as far as impacts and mitigation, correct? A No. I am testifying again that this project is addressing the Conditions of Certification ix and x, which we are calling the uprate project. Conditions ix and x address the need to evaluate historic and current impacts as well.

6 So when we use the term uprate project, it is 7 the requirements in our Conditions ix and x, which is 8 inclusive of the obligation under the conditions of 9 certification to evaluate existing and historical 10 impacts.

11 And I can -- let me go to the conditions of 12 certification just to make sure we are clear. In 13 Exhibit -- Exhibit 5, MWS-5, if you go to page 25 of 40, 14 that is the beginning of Condition of Certification x, 15 the romanette numeral x. This is the provisions that 16 require FPL to not only do additional monitoring, but 17 also obligated to take corrective action.

18 If you go to page 26 of 40, which is later on 19 in condition x, paragraph D, FDEP, in consultation with 20 South Florida Water Management District and DERM, 21 determines that pre and post uprate monitoring data is 22 insufficient to evaluate changes as a result of this 23 project -- and I need to go on -- or is inconsistent 24 with the goals of objectives of SERC Biscayne Bay, then 25 additional measures, including enhanced monitoring or

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1 modeling, shall be required to evaluate such impacts. 2 Additional measures include, but are not limited to --3 and this is where Mr. Labauve's testimony lifts that 4 language directly out of the conditions of 5 certification. 6 It includes operational changes in the cooling 7 canal system to reduce any such impacts, other measures 8 to abate impacts as may be described in the revised 9 plan. 10 This is, again, referring to this project, 0 11 meaning the uprate project. That's what paragraph 12 (d)(1) and (2) is referring to is the uprate project, 13 correct? 14 That is correct. Α 15 Now, the Public Service Commission in 0 Okay. 16 this order, on page 12, specifically refers to impacts of the uprate project in a couple of places, right? 17 18 We've agreed with that, right? 19 I am still wanting to clarify the conditions Α of certification, if you can give me a moment. 20 21 Okay. Q 22 I apologize, Mr. Rehwinkel. Α 23 If you go to paragraph A, it specifically references the obligations under the fifth supplemental 24 25 And that's where the detailed requirements agreement. (850) 894-0828 Premier Reporting

1 to evaluate historical plan. 2 So the fifth supplemental agreement is adopted 3 under these conditions of certification, I think your 4 familiar with. And when you go to the fifth 5 supplemental agreement, it talks about the need to 6 evaluate the historical requirements. 7 So show me where in section X, or 10, that it 0 8 says it's adopted? 9 Α I am in A. In addition, the monitoring plan 10 sets forth the consolidated condition no later FPL shall 11 execute this supplemental-12 Q I think you need to slow down for the court 13 reporter. 14 Okay, I apologize. The first sentence. Α 15 Yeah, I see that. I don't see where -- where 0 16 this is bootstrapped into the requirements that are in D, that it takes everything there and it pulls them 17 18 forward and it makes it all part of everything in the 19 world that you are required to do with CCS is embedded 20 in (d)(1) and (2), (3) and (4). This doesn't say that, 21 does it? 22 Α I believe it does, because I believe it 23 clarifies that -- includes the assessment of potential impacts surface to groundwater, including wetlands as 24 25 needed in the vicinity of the cooling canal system.

1 Aren't we sitting here today trying to look at Q 2 the plain language -- this is sort of Mr. Moyle's 3 point -- the plain language of this 2009 order, it 4 doesn't have all of this Monday morning quarterbacking 5 of let's reinterpret what the order says by referencing 6 these other things. This order doesn't talk about 7 Conditions ix and x, does it? 8 Α I would have to go back through it. I believe 9 that was the whole premise of Turkey Point Cooling Canal 10 Monitoring Plan project. 11 It doesn't talk about it in -- in the pages 12 0 12 and 13. 13 Α I don't understand the question. Let's start 14 over. 15 Q Let's -- let's -- let me take you to Okay. 16 page 13. 17 Α Okay. 18 All right, and C of the paragraph at the top, Q 19 It is uncertain at this point when the says: 20 incremental O&M activities of the project will cease due 21 to the nature of the project scope, which includes 22 further assessment of the impacts of the uprate project 23 and the implementation of mitigation measures to offset 24 such impacts, it is not necessary to move substantial 25 amounts of O&M costs into base rates since it is

1 uncertain when such incremental O&M costs will cease 2 being incurred. Did I read that right? 3 Α Yes. 4 0 That refers to the uprate project in 5 mitigating the impacts of that project, doesn't it? 6 Α It just says the project in the first 7 beginning, O&M -- O&M activities of the project will cease due to the nature of the project scope, which 8 9 includes further assessment of the impacts of the uprate 10 So I guess I -- in just sitting here and project. 11 reading this, I am not sure I agree with you. 12 Q Okay. Well, I guess the Commission can 13 interpret its own order. 14 Absolutely. Α 15 And then we look at the last sentence in this 0 16 first full paragraph that says: The eligibility of ECR recovery for any similar project will depend on 17 18 individual circumstances and shall, therefore, be 19 considered on a case-by-case basis. Do you see that? 20 Α I do. 21 Q That's what we are here about today, is --22 right? 23 Α I believe so. 24 So this says that the Commission is not 0 Okay. 25 going to consider the future expenditures as being

1 already approved under the Project 42 that they approved 2 back in 2009, does it? 3 Α I refrain from trying to interpret what the 4 Commission's intent was here. 5 Q Okay, fair enough. 6 Let's go to page 22 of your July 2017 7 testimony, lines 11 through 13. 8 Α I am there. Lines 11 through 13? 9 0 Yes, sir. This is about that million five --10 Α Yes, sir. 11 -- escrow payment. Q 12 This -- these dollars are part of the cost --13 or request for cost recovery in the ECRC, are they not? 14 Α Yes, they are. 15 Is there anything in the consent order that 0 16 says these costs have to be spent to mitigate saltwater 17 intrusion caused by FPL? 18 It says -- well, let me refer to the Α No. 19 consent order, but it generally says to deal with 20 saltwater intrusion in the area or vicinity, I believe 21 is the exact term, of the cooling canal system. 22 So these funds which you are asking the Q 23 Commission for the customers to provide will be used to help with saltwater intrusion just generally in the area 24 25 of southeast Dade County?

1 It's -- it's normal, unfortunately, when Α Yes. 2 harm has occurred, as has been the case here, that 3 mitigation be identified to address the need to mitigate 4 for that, which has already occurred. 5 The DEP's position was that, in light of the 6 timeframe that the hypersaline plume has occurred prior 7 to us taking corrective action, mitigation was 8 appropriate to reduce the adverse impacts, or address 9 the adverse impacts. 10 Well, I -- I guess -- so this doesn't -- this 0 11 doesn't address the harm caused by the hypersaline 12 plume, does it? 13 Define address, because I believe DEP would Α say, yes, it does. It addresses the mitigative 14 15 requirements for the harm caused by the CCS. It's no 16 different than if we were asking to seek cost recovery 17 for a new project where there were wetland impacts, we 18 had to mitigate for those impacts, and part of the 19 capital of that project would be inclusive of those 20 mitigation costs. 21 Well, I guess I misunderstand a previous Q 22 I was asking if FPL had to be the cause of that answer. saltwater intrusion for the dollars to be spent out of 23 24 this million five? 25 Α And I apologize, my answer is the same, no.

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1 Let me read it so I don't --2 Yeah, that's --Q 3 Α -- go through too much memory. 4 I think it's page 12 -- or page 13 of your 0 5 MWS-12. 6 Α Thank you. 7 Q Oh, wait. I am sorry. 8 Okay, I was close. It was the finance Α 9 projects in the Turkey Point region that support 10 mitigation of saltwater intrusion. So my answer is the 11 same. 12 Q So if there was a saltwater intrusion project 13 that was caused by somebody else, and DEP said, we need to -- we need to fix that problem, or address it 14 15 somehow, they could dip into this escrow fund and use it to mitigate that project if it had nothing -- even if it 16 had nothing to do with FPL, right? 17 18 Α That's correct. It's my analogy -- again, I 19 Maybe I did a bad job on the analogy. will try again. 20 If you -- in doing a new project, as an 21 example, if you impact wetlands, there is often an 22 obligation -- or there is an obligation to mitigate that 23 That mitigation isn't necessarily in the same impact. It can be mitigation at a mitigation bank 24 location. 25 that's in the same vicinity, but not the exact same

1 location.

2	The same holds true here, in my opinion, Mr.
3	Rehwinkel, is that FPL has been obligated to help
4	mitigate for the impacts of the hypersaline plume, and
5	that mitigation is for us to provide \$1.5 million into
6	an escrow account for DEP to conduct actions that
7	mitigate saltwater intrusion in the region. Very
8	similar analysis to a simple wetland mitigation, in my
9	opinion.
10	Q Okay, but when the Agency, or the Department
11	gets mitigation for harm that's caused, that's because
12	there's been harm caused, isn't it part of the what
13	makes the consent order happen, isn't it something
14	that's really in lieu of a fine or administrative
15	penalty?
16	A Absolutely not.
17	Q All right. What would the benefit that the
18	customers receive from that mitigation that you are
19	that they are paying for with their million five?
20	A I think the benefit would be merely the plain
21	reading of the intent of the DEP, is to reduce saltwater
22	intrusion in the region.
23	Q Okay. So it's kind of a societal benefit?
24	A My answer is the same.
25	Q Thanks.

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1 There is also a requirement All right. 2 that -- and if I could get you to look at -- I forget 3 what exhibit number we gave Interrogatory 62. 4 CHAIRMAN BROWN: We gave it -- 62 -- 72. 5 MR. REHWINKEL: 72, yes. 6 BY MR. REHWINKEL: 7 If you could look at that, please, Mr. Sole. Q 8 And again, I want to take you to that Attachment 1. 9 Α Okay, I am there. 10 A little over halfway down, there is a line 0 11 Execution of an agreement with the SFWMD to that says: 12 convey FPL property interests. Do you see that? 13 Α I do. 14 And it's called 100 percent mitigation, Q 15 right -- I am sorry, it's classified as mitigation in 16 this column? 17 Α It is. 18 There are no dollars associated with this. Q IS 19 that because there will be no cost to FPL, or you just 20 don't know what it is right now? 21 Α It's because it's anticipated to be just a 22 routine commercial transaction with the water management 23 district. They will have to acquire the property at the 24 value that the property is, and the monies that are 25 received by FPL will actually go back to the, I think Premier Reporting

1 the benefit of the customers. It will be an incurred 2 revenue. 3 Q What if -- well, let's look at that. 4 You are required, under the agreement, to 5 convey that property -- let's see. Let's look again at 6 page 12 of MS -- MWS-12. 7 Α I am there. 8 And I am looking at paragraph 23(b), do you Q 9 see that? 10 Α I am -- or I see that, yes. 11 Okay. So it requires FPL to, within one year Q 12 of the agreement, which I guess would have been by June 13 of 2017 --14 Α Correct. 15 0 -- to convey to the District FPL property 16 interest in essential properties within the Biscayne Bay Coastal Wetlands Project to facilitate the Comprehensive 17 18 Everglades Restoration Plan in exchange to for a payment 19 based on a jointly approved appraisal process or other 20 mutually agreeable considerations? 21 Α Correct. 22 And I guess Attachment A, back at the back of 0 23 this agreement on page 26 is -- shows the property 24 that's to be conveyed? 25 Α Yes, it does.

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1	Q So everything that's sort of in the forest
2	green there, that's the property?
3	A That's correct.
4	Q And so did that conveyance occur?
5	A It has not.
6	Q And why not?
7	A The agreement has occurred in accordance with
8	the timelines as identified here. An agreement with the
9	water management district has been entered into to
10	convey. Still waiting on appraisals, making sure we get
11	a fair deal for our customers.
12	Q Waiting on what?
13	A Appraisals.
14	Q Appraisals, okay.
15	Well, it says: Other mutually agreeable
16	consideration. You don't actually have to sell it at
17	market value. You could sell it convey it below
18	market value, couldn't you?
19	A I don't know. I don't think so, but I don't
20	know.
21	Q Is there anything in this agreement that says
22	you have to? It just says you have to agree with the
23	District on the on the price, right?
24	A I understand I understand. In accordance
25	with this agreement, that is correct. In accordance
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1 with FPL's standard practices, no, we don't just give 2 property away. So I do not believe we could do 3 something other than that which is commercially 4 appropriate and viable. 5 Q Okay, but if you sold it at a loss, the 6 customers would eat that loss, wouldn't they? 7 If you sold it at a loss, the customers would Α 8 eat that loss, yes. 9 0 All right. We just don't have any details on 10 that. Would that be -- I mean, is -- is -- I am looking 11 at interrogatory -- or Exhibit 72, and this item is on 12 this page, but are there any costs that are in for cost 13 recovery now that are related to this item? 14 Α No. 15 So the Commission would see that at a 0 Okay. 16 future time? 17 Α There are no anticipated costs associated with 18 this, so I don't understand the question. 19 Okay. Q 20 MR. REHWINKEL: Madam Chairman, I think those 21 are all the questions I have on his direct. 22 CHAIRMAN BROWN: Thank you. All right. 23 Thank you, Mr. Sole. MR. REHWINKEL: 24 Thank you, Mr. Rehwinkel. THE WITNESS: 25 CHAIRMAN BROWN: Thank you, Mr. Rehwinkel.

1 We are going to go for about 10 more minutes, 2 so if we proceed, we will go with -- we will start 3 with FIPUG. 4 MR. MOYLE: Thank you. Thank you, and I will 5 try to -- I shouldn't even say this. I was going 6 to say I will try to do my -- my questioning in 10 7 or 15 minutes. 8 CHAIRMAN BROWN: You should say that. That's 9 great. 10 MR. MOYLE: I got to manage expectations, 11 right? 12 EXAMINATION 13 BY MR. MOYLE: 14 Mr. Sole --Q 15 Yes, sir. Α 16 -- good morning. Q 17 Α Good morning -- afternoon. 18 How many -- how many -- how many notice of Q 19 violations or similar documents have been issued to FPL 20 since you have been with the company by Florida 21 regulatory bodies? 22 I don't know the number exactly, Mr. Moyle. Α 23 The short answer is, not many. I can think of a couple 24 of notices recently during the storm from Miami-Dade. 25 By the way, when the transformers are damaged as a Premier Reporting

1 result of a hurricane, they do leak; and, yes, we clean 2 But we received a couple of notices from them up. 3 Miami-Dade, but that's -- that's all that I can recall. All right. And in the DEP hierarchy of 4 0 5 actions that can be taken, there is a step before a 6 notice of violation, I guess it's called a warning 7 letter; is that right? 8 Α In some circumstances a warning letter is 9 prudent when there is little information discerned. 10 Obviously, here in this case, we went through over a 11 year long administrative hearing, or a process that 12 concluded within roughly a year where a significant 13 amount of data and information had been exchanged. 14 Yeah. And I was curious, in response to Mr. Q 15 Rehwinkel a few times you said, well, you were 16 consulting with the regulatory agencies. Your definition of consulting, I guess, would include adverse 17 18 administrative litigation? 19 Well, in this case, there was not adverse Α 20 administrative litigation against DEP. DEP and FPL, in 21 this case, were actually on the same side as parties 22 defending the administrative order. There were third 23 parties that were objecting to the administrative order. 24 And that's what resulted in Bram -- Bram 0 25 Canter's recommended order and the final order that (850) 894-0828 Premier Reporting

1 we've been discussing? 2 That is what resulted in the recommended Α 3 order, and then a final order which rejected many of 4 Judge Canter's positions but did accept a few. 5 Q Yeah. And -- and just so we can kind of get 6 grounded here today, I mean, my understanding of what we 7 are here about is whether these costs should be 8 recovered or not, is that -- is that fair? 9 Α That is my understanding. Yes, sir. 10 And I would -- I was going to say, not 0 11 dissimilar to, like, the Power Plant Siting Act process, 12 which I think you have familiarity with. The Commission 13 has a role, in that process, to determine need, not to 14 get into all of the environmental details; correct? 15 I believe that, generally, the Commission's Α 16 role is -- is to identify whether the costs were incurred prudently, and based upon the requirements 17 18 under law of the ECRC clause. 19 And a lot of the discussion you had with Mr. 0 20 Rehwinkel, you are -- we are not relitigating a whole 21 bunch of environmental things that were before Bram --22 Judge Canter and that Secretary Steverson entered an 23 order on, are we? 24 I do not believe we are relitigating any of Α 25 those issues.

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1 Q This was discussed by way of background, 2 correct? 3 Α Yes, sir. 4 Okay. And you are not disputing that there 0 5 has been found against FPL a violation of a minimum 6 standard, correct? 7 I am not -- or a minimum criteria --Α 8 Q Minimum criteria. 9 Α -- just to be clear. 10 All right. And -- and you drew a distinction 0 11 with respect to a narrative violation as, I think 12 compared to, maybe a qualitative violation; is that 13 right? 14 Or actually a narrative violation as compared Α 15 to a quantitative violation, where there is a clear 16 numerical threshold, I did. 17 Q Okay. I got that --18 That's all right. I do it all the time. Α 19 -- transposed. 0 20 But there is not -- I mean, they are both 21 violations, correct? 22 Α That is correct. 23 And a lot of DEP violations, I mean, for Q 24 permitting, you have to establish reasonable assurance, 25 which is somewhat of a narrative type judgment call that Premier Reporting

1 gets made; correct? 2 Α I agree with that. 3 0 Yeah. The -- the -- the chart up there, the 4 one with the purple plume that Mr. Rehwinkel has been 5 referencing. 6 Α Yes, sir. 7 The distinct line there, that's the boundary 0 8 line that's to the right, is that right, that doesn't 9 have purple on it, is that FPL's property? And if you 10 need to take a look, I am just trying to understand, are 11 we talking about a westward migration? And on the 12 diagram, there is a lot of green to the right. What is 13 that green? 14 I believe that's the property west of the L-31 Α 15 Oh, I mean, I said -- no, the green is east of canal. 16 the L-31 canal. I apologize. 17 And -- and what is the -- what is the Q Okay. 18 environmental problem with the hypersaline? Big 19 picture, why is the hypersaline --20 Α I think I understand the question. 21 -- a problem? Q 22 So additional salinity in an existing Α 23 saltwater intruded environment is not an environment 24 problem. The -- the issue occurs when that actually 25 begins to create additional salinity into an aquifer

that was not salt intruded. And over time, that is the findings of DEP and, as you pointed out, Judge Canter, that the cooling canal system has resulted in moving the G-II/G-III boundary, the -- that delineation of freshwater versus saltwater.

6 And it's not so much that it's moving west in 7 a east/west fashion. I think the question is, is it 8 moving vertically? Because there is a freshwater lens 9 entire -- across this entire area immediately to the 10 west of the CCS, it's freshwater at the top of the 11 aquifer, but is there some pushing up of the G-II/G-III 12 aquifer? Are we seeing some increases in salinity 13 where, at one time, there wasn't salinity?

14 And that's the harm that's being addressed. 15 It's primarily a harm of, you know, are there receptors? 16 Is anybody drinking water? Are there wells in this And candidly, there are not going to be wells in 17 area? 18 an area where the underlying aguifer is already 19 saltwater intruded because you would just start bringing 20 that saltwater up. But it is a resource of -- of the 21 state, and as a result, that is the specific harm. 22 And you had mentioned in one of your earlier 0

answers that, you just said it again there, I guess, that there is saltwater, it's not potable water even further west from the purple, correct?

1 And that was documented -- or Α That's correct. 2 based upon data collect in 1972, 1973, even before the 3 cooling canal system occurred. 4 0 So with respect -- are you under any 5 litigation or in discussions with property owners that 6 are to the, you know, the west of you? Is that part of 7 this calculus that is -- is prompting this action? 8 Α We are under no litigation at this time with 9 any other property owners, to my knowledge. 10 But those property owners were involved in 0 litigation administratively, is that right? 11 12 Α Oh, that's a different question. 13 Yes, property owners, along with Miami-Dade, 14 along with, I believe, Tropical Audubon, originally 15 contested the -- or challenged the administrative order 16 that was issued in December of 2015, and that's the 17 original legal dispute that occurred. 18 Q Have any of the property owners reached Okay. 19 any settlements with FPL with respect to the saltwater 20 damage that is affecting their properties? 21 Α As part of the settlement with Yes. 22 Miami-Dade County, FPL entered into a consent agreement. And as a result of executing that settlement -- or 23 24 excuse me, as a result of executing the consent 25 agreement, they withdrew their objections to the

administrative order. 1

	administrative order.				
2	Q Has any money traded hands with respect to				
3	consideration? I mean, if I were a property owner and				
4	somebody next to me was putting salt on my property, I				
5	would probably want some compensation. Has that				
6	occurred, or				
7	A We did pay Miami-Dade, I believe and I				
8	would have to go look at the consent agreement a				
9	processing fee. It's not money in relationship that you				
10	are speaking to, Mr. Moyle.				
11	Q Okay. No private no private landowners				
12	have been paid compensation?				
13	A We did participate with one private landowner.				
14	I think the terms of that settlement agreement are not				
15	subject to disclosure.				
16	Q Are you asking that this commission approve				
17	the payment of those monies?				
18	A I didn't say there was any payment of money,				
19	but the terms of any settlement are not associated with				
20	this proceeding. We are not requesting recovery of				
21	dollars for anything associated with a private				
22	settlement.				
23	Q Okay. So just to be clear, I mean, the monies				
24	you are seeking this commission to approve relate to the				
25	obligations that you have undertaken that are set forth				
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1 in the consent order and the consent agreement, correct? 2 That is correct. Α 3 Q Okay. And I appreciate your candor with 4 respect to not ducking with respect to the violation, 5 and that -- that it occurred as a result of the -- of 6 the violation that DEP found and the notice of violation 7 and the documents you walked through with Mr. Rehwinkel, 8 correct? 9 Α That is correct. 10 0 Okay. 11 That's all I have. MR. MOYLE: 12 CHAIRMAN BROWN: Thank you, Mr. Moyle. 13 Mr. Cavros, just checking how many minutes do 14 you foresee cross? 15 MR. CAVROS: I think we can -- probably about 16 45. 17 CHAIRMAN BROWN: Okay. This is a good time, 18 then, to take a lunch break. 19 MR. CAVROS: Okay. 20 CHAIRMAN BROWN: During that time, if you 21 will, discuss the 2009 testimony, that would be 22 helpful when we get back. 23 Have a great lunch. We will be back here at 24 1:30. 25 Thank you. We are in recess.

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3	COUNTY OF LEON)
4	
5	I, DEBRA KRICK, Court Reporter, do hereby
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8	IT IS FURTHER CERTIFIED that I
9	stenographically reported the said proceedings; that the
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11	and that this transcript constitutes a true
12	transcription of my notes of said proceedings.
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17	financially interested in the action.
18	DATED this 31st day of October, 2017.
19	
20	Debbie R Kruci
21	Deblie & Trice
22	DEBRA R. KRICK
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24	EXPIRES JULY 27, 2020
25	