

INT-007

Submitted October 9, 2015 (Revised October 26, 2015)

In the Matter of Florida Power & Light Company
(License Amendments for Turkey Point Nuclear Generating Units 3 and 4)
Docket Nos. 50-250-LA and 50-251-LA
ASLBP No. 15-935-02-LA-BD01
2016 Evidentiary Hearing

Citizens Allied for Safe Energy, Inc. Hearing Exhibits

CASE EXHIBIT No.	WITNESS/LOCATION	DESCRIPTION
INT-001	BACKGROUND INFORMATION (revised October 26, 2015)	THE SCIENCE OF THE TURKEY POINT WETLANDS (SPECIFIC DOCUMENTS LISTED AT INT-041 TO INT-054)
INT-002	DERM STAFF - PENDING SUBPOENA	Units 3 & 4 Uprate Implementation Water Quality Impacts DERM (SPECIFIC SLIDES LISTED AT INT-055 TO INT-075)
INT- 003 CORRECTED	DERM STAFF - PENDING SUBPOENA	CCS Maximum Quarterly Salinity, September 1973 to June 2015 DERM

CASE EXHIBIT No.	WITNESS/LOCATION	DESCRIPTION
INT-004	DERM STAFF - PENDING SUBPOENA	FDEP AO Turkey Point Dec 23, 2014 ML15035A227
INT-005	DERM STAFF - PENDING SUBPOENA	DERM FPL NOTICE OF VIOLATION TP CCS
INT-006	DERM STAFF - PENDING SUBPOENA	DERM FPL SETTLEMENT AGREEMENT TP CCS
INT-007	CASE	CASE Hearing Schedule
INT-008	ADAMS	MEMORANDUM AND ORDER Granting CASE's Petition to Intervene) March 23, 2014 ML15082A197
INT-009	ADAMS	2014 EA - TURKEY POINT NUCLEAR GENERATING UNIT NOS. 3 AND 4- ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT RELATED AT0 THE ULTIMATE HEAT SINK TEMPERATURE LIMIT (TAC NOS. MF4392 AND MF4393) July 28, 2014 ML 14209A031
INT-010	ADAMS	INITIAL SCHEDULING ORDER May 8, 2014 ML15128A369
INT-011	ADAMS	CASE Notice Of Supplemental Disclosures September 25, 2014. ML15268A358

INT-012	Full copy	EMAILS TO CASE FROM Dr. Christopher Kelble, NOAA, August 18, 2015
INT-013	Full copy	An Attack from Below: Water, Water, Everywhere: Sea Level Rise in Miami
INT-014	ADAMS	LETTER JULY 10, 2014 FPL TO NRC LAR REVISE UHS ML14196A006
INT-015	ADAMS	2012 EA -TP 3 & 4 EA AND FONSI RELATED TO PROPOSED EXTENDED POWER UPRATE (TAC NOS. ME4907 AND ME4908) ME12074A248
INT-016	Full Letter, CASE Initial Statement, at 28-30	LETTER FEBRUARY 1, 2010 - DERM TO FDEP (FPL) Application to Renew Turkey Point Industrial Wastewater
INT-017	ADAMS	FLORIDA POWER AND LIGHT COMPANY DOCKET NO. 50-251 FACILITY OPERATING LICENSE License No. DPR-41 April; 10. 1973 ML013400438
INT-018	Quote, CASE Initial Statement, at 37	DERM INTERNAL COMMUNICATION Burzycki, Gwen to Guerra, Cynthia August 29, 2014 RE: FPL Cooling Canals
INT-019	Quote, CASE Initial Statement, at 38	DERM INTERNAL COMMUNICATION Alvear, Elsa to Various, August 22, 2014 Subject: Cormorant colony closest to FPL cooling canals undergoing severe decline

INT-020	Quote, CASE Initial Statement, at 38 to 40	DERM INTERNAL COMMUNICATION Otero, Luis to Various, May 14, 2014 Subject: Uprate monitoring issues
INT-021	Quote, CASE Initial Statement, at 41	DERM INTERNAL COMMUNICATION Otero, Luis to Various April 09, 2014 Subject: CCS surface water TKN
INT-022	Quote, CASE Initial Statement, at 41	DERM INTERNAL COMMUNICATION Grossenbacher, Craig to Pitts, Patrick April 14, 2015 Subject: FW: FPL Annual Crocodile Report
INT-023	Quote, CASE Initial Statement, at 42	DERM COMMUNICATION Otero, Luis To: 'Shaw, Jonathan' (SFWMD) June 11, 2015 Subject: RE: Turkey Point Units 3&4 Uprate Addendum - Tritium
INT-024	Quote, CASE Initial Statement, at 42,43	DERM COMMUNICATION November 26, 2014 From Lee N. Hefty, Director, DERM To: Phil Coram, FDEP
INT-025	Quote, CASE Initial Statement, at 47	EMAIL, July 16, 2015 Dr. Frank Mazzotti, Ecologist, to Mr. John Wrublik, FWS
INT-026	Quote, CASE Initial Statement, at 47	Ecology and Conservation of the American Crocodile (<i>Crocodylus acutus</i>) in Florida., 2006, Dr. Frank Mazzotti and Dr. Michael S Cherkiss

INT-027	Quote, CASE Initial Statement, at 47,48	EMAIL March 1, 2015 Mr. Michael Pearce, Senior Director at FPL wrote to Mr. Steve Scroggs, FPL's senior director for project development
INT-028	Quote, CASE Initial Statement, at 48 to 50 ADAMS Document	(TP 6 & 7) DEIS Comment Submittal from Miami-Dade County. May 22, 2015 ML15146A118
INT-029	CASE Initial Statement, at 56	LETTER AUGUST 27, 2014 FPL TO SFWMD REQUEST FOR EMERGENCY AUTHORIZATION OF TEMPORARY WATER WITHDRAWAL FROM L-31E CANAL
INT-030	CASE Initial Statement, at 56 to 58	MINUTES SFWMD GOVERNING BOARD MEETING SEPTEMBER 11, 2014
INT-031	CASE Initial Statement, at 56 to 58,	The National Environmental Policy Act of 1969, as amended, Purpose, Sec. 2 [42 USC § 4321], abridged.
INT-032	CASE Initial Statement, at 60,61	Calvert Cliffs' Coordinated Committee v. Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971), cert. denied, 404 U.S. 942 (1972)
INT-033	CASE Initial Statement, at 63 ADAMS	LETTER JULY 25, 2014 NRC STAFF TO USFWF REQUESTING CONSULTATION ON UHS TEMPERATURE INCREASE ML14206A800.

INT-034	CASE Initial Statement, at 63,64 ADAMS	Reinitiation of Section 7 Consultation for Turkey Point LAR to Increase Ultimate Heat Sink Temperature Limit. Date Released: Monday, July 28, 2014 ML14206A808
INT-035	CASE Initial Statement, at 66 ADAMS	JULY 17, 2014 Turkey Point Units 3 and 4 Docket Nos. 50-250 and 50-251 Renewed Facility Operating License Nos. DPR-31 and DPR-41 Subject: License Amendment Request No. 231, Application to Revise Ultimate Heat Sink Temperature Limit - Request for Emergency Approval ML14202A392
INT-036	CASE Initial Statement, at 67,68	EMAIL OCTOBER 25, 2015 FROM Nuclear Engineer Arnie Gunderson to CASE RE: GRID RELIABILITY
INT-037	CASE Initial Statement, at 68,69	EMAILS SEPTEMBER 1, 2015 between CASE and Mr. Tim Hoeg, NRC Senior Resident Inspector at Turkey Point regarding source of power when TP 3 & 4 were off line for uprate.
INT-038	CASE Initial Statement, AT 72,73 ADAMS	Citizens Allied for Safe Energy, Inc. Petition to Intervene and Request for a Hearing October 14, 2014 ML14290A510

INT-039	CASE Initial Statement, at 75/76 ADAMS	Environmental Review Guidance for Licensing Actions Associated with NMSS Programs Division of Waste Management Office of Nuclear Material Safety and Safeguards ML032450279
INT-040	CASE Initial Statement, at 80,81	A. Hanley v. Kleindienst, 471 F.2d 823 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973)
INT-041	IN INT-001, at 1-7	WHAT IS SALTWATER INTRUSION? Saltwater Intrusion of Coastal Aquifers in the U.S. James Spatafo
INT-042	IN INT-001, at 7	SFWMD FINAL ORDER WITHDRAWALS FROM L-31E CANAL AUGUST 14, 2015
INT-043	IN INT-001, at 7	Tara Dolan Study: A Case Study of Turkey Point Nuclear Generating Station: Perception and Power in Environmental Assessment June 18, 2012
INT-044	IN INT-001, at 8	2010 USGS Borehole geophysical logging for the Florida Power & Light Turkey Point Plant groundwater, surface water, and ecological monitoring plan
INT-045	IN INT-001, at 9 TO 16	Origins and Delineation of Saltwater Intrusion in the Biscayne Aquifer and Changes in the Distribution of Saltwater in Miami-Dade County, Florida

INT-046	IN INT-001, at 17	McNeill, Donald F., 2000. A Review of Upward Migration of Effluent Related to Subsurface Injection at Miami-Dade Water and Sewer South District Plant
INT-047	IN INT-001, at 17 (LINK)	GROUND WATER ATLAS of the UNITED STATES Alabama, Florida, Georgia, South Carolina HA 730-G
INT-048	IN INT-001, at 18 - 21	Biological Assessment on the American Crocodile (<i>Crocodylus acutus</i>) Turkey Point Nuclear Generating Unit Nos. 3 and 4 Proposed License Amendment to Increase the Ultimate Heat Sink
INT-049	IN INT-001, at 21	Sources of Saltwater in the Biscayne Aquifer
INT-050	IN INT-001, at 21, 22	Turkey Point Unit 1 Eco System BY RUSS FINLEY
INT-051	IN INT-001, at 22	The National Park Service website: Biscayne Bay description
INT-052	IN INT-001, at 23 to 25	Knowledge of Groundwater Responses— A Critical Factor in Saving Florida's Threatened and Endangered Species Part I: Marine Ecological Disturbances Sydney T. Bacchus
INT-053	IN INT-001, at 26	Movement of water into and out of the CCS

iINT-054	N INT-001, at 26	How salinity descends from unprotected canals into the aquifer
INT-055	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 2	Approximate Uprate Periods Nitrogen TKN Increase in CCS Surface Water
INT-055	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 3	Nitrogen TKN Increase in CCS Surface Water (graph)
INT-056	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 4	Nitrogen Increase Likely linked to Apparent Algal Bloom in CCS - See next 3 slides showing progressive deterioration of water clarity in the CCS
INT-057	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 5	March 31, 2010 Google Earth View (of CCS)
INT-058	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 6	March 6, 2013 Google Earth View (of CCS)

INT-059	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 7	January 18, 2014 Google Earth View (of CCS)
INT-060	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 8	Contours Based On Deep Well Tritium Results From the June 2011 Quarterly Sampling (plumes from CCS)
INT-061	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 9	CCS Plume Expands to NE as Evidenced by Increasing Tritium Concentrations at TPGW-10 (graph)
INT-062	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 10	Contours Based On Deep Well Tritium Results From the March 2013 Quarterly Sampling (plumes from CCS)
INT-063	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 11	Salinity of CCS Surface Water Increasing Post Uprate as Evidenced by Increasing Specific Conductance August 25, 2010 to March 31, 2014 (graph)
INT-064	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 12	Specific Conductance for CCS Surface Water Station TPSWCCS-1B Showing Increasing Trend in Salinity August 25, 2010 to June 4, 2014 (graph)

INT-065	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 13	Salinity for CCS Surface Water Station TPSWCCS-1B Showing Increasing Trend August 25, 2010 to June 4, 2014 (graph)
INT-066	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 14	Compilation of Available CCS Surface Water Salinity Trend August 1973 to September 2014 (graph)
INT-067	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 15	Most Recent Available CCS Surface Water Salinity Trend March, 2009 to August, 2014 (graph)
INT-068	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 16	Turkey Point G-III Boundary (Aerial View) From FDEP November 16, 2009 SUBJECT: FPL Turkey Point NPDES Permit Renewal (FL0001562) Exhibit 2 - ML102740614
INT-069	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 17	TPGW-1 & TPGW-L3 Approximate Location (aerial view, monitoring wells)
INT-070	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 18	Monitoring Wells Outside G-III Boundary with Chloride Concentrations Above Seawater (graph)

INT-071	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 19	Chloride Concentrations Attributable to CCS Contribution (graph)
INT-072	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 20	CCS Surface Water Temperature Profiles August 27, 2010 to June 3, 2014 (graph)
INT-073	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 21	Apparent Higher Than Expected CCS Surface Water Temperatures Post Uprate August 27, 2010 to June 3, 2014 (graph)
INT-074	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 22	Pre and Post Uprate Temperature Profile for TPSWCCS-1B August 27, 2010 to June 2014 (graph)
INT-075	INT-002, DERM Units 3 & 4 Uprate Implementation Water Quality Impacts SLIDE 23	Model Lands Dry Season Water Level Profiles October 1 to May 15 for Years 2008 to 2013 (graph)