FPL

L-2012-315
10 CFR 52.3

August 15, 2012

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Re: Florida Power & Light Company
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
Submittal of Underground Injection Control Exploratory
Well Weekly Construction Summary – #64

Reference:

1. FPL Letter to NRC, L-2009-265 dated November 24, 2009, Revised Hydrology Response to NRC Information Requests in COL Application Acceptance Review Letter

This letter provides the Underground Injection Control (UIC) weekly construction summary #64 dated July 27, 2012 submitted to the Florida Department of Environmental Protection (FDEP) as required by Permit #0293962-001-UC, and discussed in FPL's Revised Hydrology Response to NRC Information Requests in COL Application Acceptance Review Letter (Reference 1). This is the final weekly construction summary.

If you have any questions, or need additional information, please contact me at 561-691-7490.

Sincerely,

William Maher
Senior Licensing Director – New Nuclear Projects

WDM/RFB

Enclosure:

1. Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well Project; Permit #0293962-001-UC Weekly Construction Summary #64 dated July 27, 2012

cc:
PTN 6 & 7 Project Manager, AP1000 Projects Branch 1, USNRC DNRL/NRO
Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant 3 & 4

D097
NRO

Enclosure 1

Florida Power & Light Company Turkey Point Units 6 & 7
Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #64 dated July 27, 2012

WEEKLY CONSTRUCTION SUMMARY

MHC McNabb Hydrogeologic Consulting, Inc.
601 Heritage Drive, Suite 110
Jupiter, Florida 33458
Phone: 561-891-0763
Fax: 561-623-5469

July 27, 2012 MHCDEP-12-0306

Mr. Joseph May, P.G.
Florida Department of Environmental Protection
400 N. Congress Ave, Suite 200
West Palm Beach, FL 33401

RE: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #64

Dear Mr. May:

This is the sixty-fourth and final weekly construction summary for the above referenced project. The reporting period for this weekly construction summary began at 7:00 AM, Thursday, July 19, 2012 and ended at 3:00 PM, Friday, July 20, 2012. Drilling contractor daily reports were not prepared this week since there were no construction activities at the site. Consultant daily reports were prepared for this reporting period. Copies of the consultant daily construction logs are attached.

During the previous reporting period the drilling contractor continued to demobilize from the site and performed development of the lower monitor zone of DZMW-1 in preparation for background water sampling. Re-development of the upper monitor zone of DZMW-1 also began in preparation for re-sampling the upper monitor zone.

During this reporting period the drilling contractor continued to demobilize from the site, completed development of both monitor zones of DZMW-1, collected background water samples from both monitor zones for laboratory analysis, and performed a video survey of DZMW-1. Tables providing a summary of the lower monitor zone development and the upper monitor zone re-development are attached. The background water quality and video survey will be included in the DZMW-1 well completion report.

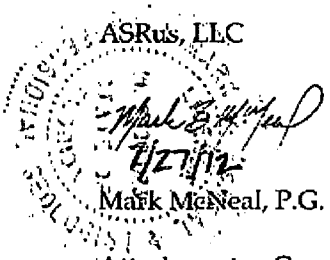
There was no packer testing, casing installation, cementing or construction related issues at EW-1 and DZMW-1 during this reporting period.

In addition, sampling of the pad monitor wells around DZMW-1 began on March 20, 2012 and has been taking place on a weekly basis since the initial samplings. The most recent set of DZMW-1 pad monitoring well sample results available are for samples collected on July 19, 2012. The final round of sampling took place on July 26, 2012 and will be reported in the

final report. Copies of the DZMW-1 pad monitor well water quality data summary sheets are attached.

Should you have any questions regarding the above weekly construction summary, please contact David McNabb at (561) 891-0763.

Sincerely,



ASRus, LLC

Mark McNeal, P.G.

Attachments: Consultant Daily Construction Log
DZMW-1 Pad Monitor Well Water Quality Data Summary Sheets
DZMW-1 Lower Monitor Zone Development Summary Sheet
DZMW-1 Upper Monitor Zone Re-Development Summary Sheet

Cc: George Heuler/FDEP-Tallahassee
Emily Richardson/SFWMD
Matthew Raffenberg/FPL
David Holtz/HCE
Joe Haberfeld/FDEP-Tallahassee
Ron Reese/USGS
David Paul/FGS
David McNabb/MHC

MHC McNabb Hydrogeologic Consulting, Inc.

ASRUS, LLC

Daily Construction Log

Date: July 19, 2012
FDEP UIC Permit #:0293962-001-UC
Project: FPL Turkey Point EW
Well No.: DZMW-1
Contractor: Layne Christensen Company
Bit Diameter: NA
Starting Depth: NA
Ending Depth: NA
Weather Day: Partly Sunny, Hot
Recorded By: David McNabb
Weather Night: NA
Activity: Demobilization and Upper and Lower Monitor Zone Background Sample Collection

CONSTRUCTION ACTIVITIES

0700 The drilling contractor continues to demobilize from the site and develop both monitor zones of DZMW-1 in preparation for background sample collection which is scheduled for late this morning. The air-development development rate of the lower zone is estimated to be approximately 30 gallon per minute (gpm). The upper monitor zone is flowing at 100 gpm. Both zones have been developed through the night.

0900 The drilling contractor continues developing both monitor zones.

0930 Stop developing both zones and set up piping for sampling collection. Totalizer reading for the upper zone is 1,068,500 gallons.

1050 Florida Spectrum Environmental Services, Inc. arrives on site to collect background sample from the upper and lower monitor zones for laboratory analysis.

1145 Background sampling of the upper and lower monitor zones of DZMW-1 has been completed. The drilling contractor will continue to air-develop the lower monitor zone in preparation for performing a final video survey of the well.

MHC McNabb Hydrogeologic Consulting, Inc.

ASRUS, LLC

Daily Construction Log

Date: July 20, 2012
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: NA
Weather Day: Cloudy, Hot
Weather Night: NA
Activity: Final Video Survey

FDEP UIC Permit #:0293962-001-UC
Well No.: DZMW-1
Bit Diameter: NA
Ending Depth: NA
Recorded By: Sally Durall

CONSTRUCTION ACTIVITIES

0845 The upper and lower monitor zones were sampled for background water quality yesterday. The drilling contractor is preparing to perform the final video survey of DZMW-1.

0900 The drilling contractor begins to trip out of the well with the drop pipe used to develop the lower monitor zone at DZMW-1.

0940 The drilling contractor begins to trip in the well with the video survey tool.

1030 The visibility is clear to the depth of 1,887 feet below pad level (bpl). The drilling contractor begins to video the open hole from the depth of 1,887 feet bpl.

1100 Stop the video at the depth of 585 feet bpl due to the turbidity is too high to obtain a quality video.

1130 The drilling contractor begins to develop water from the well to clear up the visibility.

1300 Resume performing the video survey. The water clarity is good.

1320 The final video is complete.

1500 The drilling contractor will begin completing the wellhead for DZMW-1 and continue demobilizing from the site. There will be no work performed on site during the weekend.

Project: Florida Power & Light Company
Miami-Dade County, Florida
Dual-Zone Monitor Well DZMW-1

MHC

DZMW-1 Pad Monitoring Well Water Quality Data
Northeast Pad Monitoring Well
(NE-DZMW PMW)

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
3/20/2012	0958	8.15	-1.08	73,100	33,300	52,200	30.1	Background Sampling
3/29/2012	1128	8.23	-1.16	73,000	29,600	51,400	30.1	
4/6/2012	0858	8.30	-1.23	72,200	28,800	51,200	30.1	
4/13/2012	1128	8.25	-1.18	72,300	33,900	53,100	30.2	
4/20/2012	1038	8.20	-1.13	72,000	34,700	54,500	30.1	
4/27/2012	0958	7.95	-0.88	72,100	37,300	55,100	29.8	
5/4/2012	1009	7.22	-0.15	72,400	29,900	51,100	29.8	
5/11/2012	1229	7.65	-0.58	72,300	34,700	53,000	30.0	
5/18/2012	1109	7.43	-0.36	73,500	37,600	51,100	30.3	
5/25/2012	1239	7.33	-0.26	73,900	34,300	54,100	30.1	
6/1/2012	1259	7.45	-0.38	74,000	33,300	51,300	29.9	
6/8/2012	1237	7.65	-0.58	73,600	31,700	52,100	30.3	
6/15/2012	1226	7.67	-0.60	73,800	33,300	54,500	30.4	
6/22/2012	1219	7.37	-0.30	73,300	32,100	57,200	30.2	
6/29/2012	1144	7.50	-0.43	73,800	29,600	53,700	30.2	
7/6/2012	1309	7.60	-0.53	73,400	27,700	54,400	29.2	
7/13/2012	1334	7.80	-0.73	73,300	28,800	52,000	29.9	
7/19/2012	1244	7.40	-0.33	74,400	29,500	54,800	30.3	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Top of Casing Elevation: 7.07 feet NAVD 88

Project: Florida Power & Light Company
Miami-Dade County, Florida
Dual-Zone Monitor Well DZMW-1

MHC

DZMW-1 Pad Monitoring Well Water Quality Data
Southeast Pad Monitoring Well
(SE-DZMW PMW)

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
3/20/2012	1033	8.25	-1.08	72,700	33,900	50,500	30.1	Background Sampling
3/29/2012	1303	8.33	-1.16	72,800	29,200	50,400	30.2	
4/6/2012	1028	8.30	-1.13	72,300	29,300	53,300	30.2	
4/13/2012	1303	8.32	-1.15	72,400	33,800	54,600	30.2	
4/20/2012	1213	8.28	-1.11	72,300	31,700	55,400	30.2	
4/27/2012	1133	8.10	-0.93	72,600	34,600	53,900	29.5	
5/4/2012	1141	7.40	-0.23	73,300	29,700	52,700	30.0	
5/11/2012	1403	7.67	-0.50	72,700	34,100	52,000	30.1	
5/18/2012	1240	7.58	-0.41	74,000	33,100	52,000	30.7	
5/25/2012	1415	7.43	-0.26	73,900	32,400	52,600	29.7	
6/1/2012	1119	7.50	-0.33	73,900	32,100	51,300	29.8	
6/8/2012	1408	7.72	-0.55	73,400	30,800	52,700	30.3	
6/15/2012	1058	7.70	-0.53	73,200	33,500	53,900	30.2	
6/22/2012	1350	7.48	-0.31	73,100	30,500	54,100	29.4	
6/29/2012	1320	7.74	-0.57	73,300	28,100	52,900	30.6	
7/6/2012	1440	7.70	-0.53	73,800	27,300	55,200	29.8	
7/13/2012	1300	7.80	-0.63	73,600	29,000	52,800	29.6	
7/19/2012	1351	7.52	-0.35	74,300	29,000	54,900	30.4	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Top of Casing Elevation: 7.17 feet NAVD 88

Project: Florida Power & Light Company
Miami-Dade County, Florida
Dual-Zone Monitor Well DZMW-1

MHC

DZMW-1 Pad Monitoring Well Water Quality Data
Southwest Pad Monitoring Well
(SW-DZMW PMW)

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
3/20/2012	1137	8.34	-0.97	73,300	32,900	50,300	30.1	Background Sampling
3/29/2012	1229	8.38	-1.01	73,100	29,900	50,700	30.2	
4/6/2012	0954	8.50	-1.13	72,000	28,800	52,500	29.9	
4/13/2012	1227	8.52	-1.15	72,000	32,300	54,400	29.9	
4/20/2012	1139	8.45	-1.08	72,100	31,800	53,700	29.9	
4/27/2012	1101	8.25	-0.88	72,600	31,800	55,300	29.9	
5/4/2012	1108	7.60	-0.23	73,200	30,500	52,600	29.6	
5/11/2012	1331	7.95	-0.58	71,500	35,400	53,800	29.5	
5/18/2012	1208	7.82	-0.45	73,800	32,600	51,200	29.9	
5/25/2012	1343	7.68	-0.31	73,900	33,500	53,600	29.8	
6/1/2012	1151	7.71	-0.34	74,100	30,700	51,500	29.5	
6/8/2012	1336	7.97	-0.60	73,300	30,900	53,400	29.9	
6/15/2012	1131	7.95	-0.58	73,400	32,000	53,600	29.9	
6/22/2012	1318	7.68	-0.31	73,800	30,000	56,000	29.7	
6/29/2012	1248	7.89	-0.52	73,400	29,600	53,000	29.9	
7/6/2012	1408	7.90	-0.53	73,600	27,200	54,000	29.5	
7/13/2012	1228	8.10	-0.73	73,300	28,900	53,200	29.2	
7/19/2012	1317	7.67	-0.30	74,300	29,200	54,500	30.4	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Top of Casing Elevation: 7.37 feet NAVD 88

Project: Florida Power & Light Company
Miami-Dade County, Florida
Dual-Zone Monitor Well DZMW-1

MHC

DZMW-1 Pad Monitoring Well Water Quality Data
Northwest Pad Monitoring Well
(NW-DZMW PMW)

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
3/20/2012	1103	8.27	-1.08	73,600	29,500	53,100	29.9	Background Sampling
3/29/2012	1158	8.31	-1.12	73,400	30,100	48,400	30.0	
4/6/2012	0926	8.35	-1.16	72,100	29,200	51,400	29.8	
4/13/2012	1157	8.41	-1.22	72,200	34,600	55,000	30.4	
4/20/2012	1108	8.35	-1.16	72,000	31,400	55,500	29.9	
4/27/2012	1027	8.05	-0.86	72,200	32,200	53,900	29.8	
5/4/2012	1037	7.12	0.07	72,800	30,800	52,400	29.6	
5/11/2012	1258	8.45	-1.26	72,300	33,700	53,000	29.8	
5/18/2012	1137	7.30	-0.11	73,600	35,100	51,800	29.8	
5/25/2012	1309	7.10	0.09	73,400	32,200	53,300	29.7	
6/1/2012	1219	7.25	-0.06	73,800	31,900	52,700	29.6	
6/8/2012	1304	7.50	-0.31	73,400	31,500	51,800	30.0	
6/15/2012	1159	7.51	-0.32	73,700	32,500	54,800	30.1	
6/22/2012	1247	7.21	-0.02	73,800	30,500	54,200	29.7	
6/29/2012	1214	7.38	-0.19	73,600	29,300	53,400	29.8	
7/6/2012	1337	7.50	-0.31	73,100	28,600	56,500	29.7	
7/13/2012	1402	7.50	-0.31	73,100	28,100	52,300	29.2	
7/19/2012	1209	7.25	-0.06	73,300	29,200	55,300	29.9	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Top of Casing Elevation: 7.19 feet NAVD 88

Florida Power & Light Company
Turkey Point
Dual-Zone Monitor Well DZMW-1
Lower Zone Background Water Quality
(Development Field Data)

Date	Time	Turbidity (NTUs)	Specific Conductance (µmhos/cm)	T (°C)	pH (S.U.)	DO (mg/L)	Purge Rate (gpm)	Estimated Purged Volume (gallons)	Comments
06/30/12	7:50						~6		Begin air-lift development. 1 well volume is approximately 2,525 gallons.
	11:00	NM	35,150	26.8	7.91	NM	~20		
	19:00						9		Begin pump development
07/01/12	7:00	109	42,710	22.9	7.24	NM	9	12,960	
	9:00	111	43,110	25.2	7.25	NM	9		
	11:00	19.68	44,030	25.3	7.28	NM	12		Drawdown is approximately 25 feet.
	13:00	25.6	43,330	25.2	6.48	2.52	12	17,280	
	15:00	66.7	43,780	25.1	7.22	3.45	12		
	17:00	62.3	43,820	25.7	7.32	3.16	12	20,160	
	19:00	45.6	43,870	24.0	7.14	2.85			
	21:00	63.9	43,520	23.8	7.22	1.35			
	23:00	43.6	43,790	23.8	7.16	1.24			
07/02/12	1:00	40.3	43,890	23.8	7.22	1.36			
	3:00	37.4	43,850	24.0	7.21	1.73			
	5:00	31.1	43,590	24.0	7.25	1.93			
	7:00	38.5	44,060	24.2	7.17	2.94	12	28,800	
	9:00							32,400	Stop development while demob of rig.
07/06/12	11:00	8.43					~30		Resume air-lift development.
	12:30	6	43,810	28.9	7.26	4.78	30		
	14:00	129	43,430	28.5	7.31	5.28	30		
	16:00	611	43,780	28.8	7.46	NM	30		
	18:00	115	43,220	29.0	7.34	NM	30		
	18:30							45,100	Stop development.
07/09/12	12:00								Resume air-lift development.
	12:30	5.03	43,750	27.6	7.17	NM	30		
	14:00	30.8	43,680	28.2	7.50	NM	30		
	16:00	109	43,770	28.3	7.95	NM	30		
	18:00	58.4	43,970	28.1	7.83	NM	30	57,700	
	19:15								Stop development.
07/10/12	7:40								Resume air-lift development.
	8:00	32.9	43,580	28.3	7.16	NM	30		
	10:30	459	43,720	28.2	8.03	NM	30		
	12:45	52.6	43,450	26.9	7.44	NM	30	66,700	
	16:00	50.3	43,780	25.8	7.87	NM	30		
	18:30	86	43,310	26.2	7.89	NM			Stop development.
07/11/12	8:15	74	43,020	25.9	7.44	4.67			Resume air-lift development. LCC is surging the zone by running the air compressor for ~10 minutes and then allowing a ~15 minutes of recovery, repeat throughout the shift.
	10:00	37.8	43,760	25.6	7.38	4.54	30		
	12:00	592	43,150	25.9	7.34	5.23	30		
	14:00	429	43,230	29.3	7.25	4.38			
	16:40	77.2	43,440	26.3	7.57	4.74			
	18:00	238	42,960	26.8	7.79	4.19	23		
	19:00	952	43,280	25.8	7.13	4.70		77,500	Stop development.
07/12/12	7:40								Resume air-lift development. LCC will continue surging the zone.

Florida Power & Light Company
Turkey Point
Dual-Zone Monitor Well DZMW-1
Lower Zone Background Water Quality
(Development Field Data)

Date	Time	Turbidity (NTUs)	Specific Conductance (µmhos/cm)	T (°C)	pH (S.U.)	DO (mg/L)	Purge Rate (gpm)	Estimated Purged Volume (gallons)	Comments
	9:00								Stop development while air compressor is used for a demob task.
	12:15								Resume air-lift development. LCC will continue surging the zone.
	13:15	58.7	43,330	26.9	7.86		30		
	16:00	500	43,450	27.8	7.72				
	17:00	839	43,360	29.6	7.55				
	18:00	696	43,450	27.6	7.79				
	19:00							88,300	Stop development.
07/13/12	7:10								Resume air-lift development.
	11:00	460	42,940	29.5	7.81	4.35	30		
	19:00							109,900	Stop development.
07/16/12	7:00						30		Resume air-lift development.
	19:00							131,500	Stop development.
07/17/12	7:00						30		Resume air-lift development.
	19:00							153,100	Stop development.
07/18/12	7:00								Resume air-lift development.
	11:30	38.9	41,880	27.3	7.65	4.92	30		
	12:30	30.4	42,410	27.5	7.68	4.35			
	14:30	14.53	42,550	27.7	7.71	4.27			
	15:30	7.36	42,100	27.7	7.64	4.14			
	16:30	8.47	42,430	27.4	7.70	4.22			
	17:30	6.38	42,200	27.6	7.65	4.41			
	18:30	11.74	42,730	27.7	7.71	4.33			
	22:00	19.75	42,110	27.8	7.47	4.84			
	23:00	14.52	42,440	27.8	7.49	4.53		180,100	
07/19/12	0:00	12.88	42,210	27.7	7.38	4.72			
	1:00	12.49	42,160	27.7	7.30	5.35	30		
	2:00	12.67	41,930	27.6	7.81	4.87			
	3:00	12.9	42,300	27.8	7.74	5.68			
	4:00	13.52	42,420	27.8	7.80	4.99			
	5:00	14.48	42,160	28.0	7.79	4.82			
	6:00	12.32	42,640	27.7	7.81	5.10			
	7:00	14.22	42,140	27.8	7.89	5.03	30	194,500	

µmhos/cm = micromhos per centimeter
°C = degrees Celsius
NTU = Nephelometric Turbidity Unit
S.U. = Standard Unit
mg/L = milligrams per Liter
NM = Not measured