

July 30, 2012

MEMORANDUM TO: William F. Burton, Branch Chief
Environmental Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Ryan Whited, Branch Chief
Environmental Technical Support Branch
Division of Site Safety & Environmental Analysis
Office of New Reactors

FROM: Alicia Williamson, Project Manager */RA/*
Environmental Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: SUMMARY OF MEETING WITH SOUTH FLORIDA WATER
MANAGEMENT DISTRICT RELATED TO THE ALTERNATIVE SITES
FOR THE PROPOSED TURKEY POINT UNITS 6 AND 7
ENVIRONMENTAL REVIEW

On Wednesday, June 6, 2012 members of the U.S. Nuclear Regulatory Commission (NRC) staff met with the South Florida Water Management District (SFWMD) to discuss water availability for three of the four alternative sites chosen by Florida Power and Light (FPL) in their combined license application (COLA) for Turkey Point Units 6 & 7. The discussion focused on the Glades, Okeechobee 2, and Martin sites. These three sites are clustered around Lake Okeechobee and within the jurisdictional boundaries of the SFWMD. The list of attendees was as follows:

List of Attendees	
P. Madden	NRC
W. Burton	NRC
A. Kugler	NRC
A. Williamson	NRC
S. Trost	SFWMD
M. Elsner	SFWMD
R. Braun	SFWMD
D. Powell	SFWMD
E. Ross	SFWMD
J. Morgan	SFWMD
T. Colios	SFWMD
S. Sculley	SFWMD

The meeting started with a brief welcome and introductions by NRC and SFWMD. Next, Alicia Williamson, the environmental project manager, provided a status update on the NRC's environmental review for Turkey Point Units 6 & 7. Andrew Kugler, alternatives technical

reviewer, started technical the discussion by describing the review team's issue with the three alternative sites and how NRC reached the conclusion to stop work on the alternative sites section of the environmental impact statement (EIS) until additional information was provided by FPL as described in a letter dated, May 4, 2012. (This letter can be found on the NRC's Agencywide Documents Access Management System (ADAMS) using Accession No. ML120740390.) The discussion continued and focused on SFWMD's regulatory process for consumptive water use permits as well as their letter dated February 23, 2012 to the NRC on the water availability at the aforementioned sites. (This letter can also be accessed in ADAMS using Accession No. ML12068A433.) As an example, the SFWMD talked about a recent request from the Okeechobee Utility Authority to withdraw an additional 1 million gallons of water per day (MGD) from Lake Okeechobee for drinking water. They indicated the process was extremely difficult but eventually approved, mainly because the utility was already an existing user of lake water and had completed construction to increase the treatment capacity of the drinking water treatment plant from 4 MGD to 5 MGD. In addition, the Okeechobee Utility Authority had to show the additional 1 MGD of lake water was no longer being utilized by other users. Most public water suppliers around Lake Okeechobee have terminated their historic use of the lake and developed groundwater sources for drinking water. In addition, water rights (according to Florida law) have been terminated by other users who no longer have a demand for surface water. Water rights have also been terminated due to the SFWMD acquiring agricultural lands for water resource restoration projects. As a result, the surface water associated with these terminated water rights is available, but most of this water is needed to support the implementation of the Comprehensive Everglades Restoration Plan (CERP). At the public meeting where the Okeechobee Utility Authority's request for additional lake water was considered, representatives from the Department of the Interior (DOI) commented they supported Okeechobee Utility Authority's need, but expected the remainder of the terminated water rights to be made available for CERP.

Next, the discussion covered another contributor to the water management issues in the area, the Lake Okeechobee Regulation Schedule. The U.S. Army Corps of Engineers – Jacksonville District is in charge of managing lake levels for Lake Okeechobee. At this time, lower lake levels are being maintained due to major issues with the lake's Herbert Hoover Dike levee system. Some sections of the levee system have been repaired but funding repairs for remaining sections are subject to Congressional appropriations. The SFWMD mentioned that the repairs being implemented by the Corps of Engineers are scheduled to span two decades. SFWMD also stated, there are periods (in the wet season) when large quantities of water are released from the lake to maintain the regulated level. The discharge of these larger quantities of water can contribute to poor ecological conditions in the downstream estuaries. The water could be made available but storage, such as a reservoir, would be needed to ensure it is a steady, sustainable source.

Next, the discussion focused on the Kissimmee River Restoration Project. One of the proposed alternative sites would withdraw water from Pool E of the Kissimmee River, which is part of the Lake Okeechobee Service Area and subject to the Restricted Allocation Rule for the Lake Okeechobee Service Area. New projects would have to go through the process of identifying allocations that were no longer being used, such as terminated water rights, as mentioned in the Okeechobee Utility Authority example above. SFWMD said approximately \$600M has been spent restoring the Kissimmee River to its natural path and restoring floodplain habitat that also improves water quality before flowing into Lake Okeechobee. The SFWMD indicated that they likely would not support any withdrawals that would negatively impact the river.

Finally, the NRC review team asked about the possibility of using groundwater as well as alternatives to groundwater. The SFWMD described how in August 2008, it passed regulations capping groundwater usage in Central Florida to projected 2013 demands. The currently proposed alternative sites are not in the region affected by this cap on groundwater allocations, which will expire in 2013. SFWMD indicated it might be possible to get the required quantities from a deep aquifer but this could potentially affect the artesian flow (water rises to the surface via underground pressure) for the wells providing irrigation supply for nearby farmers. In addition, large pumping operations might cause more saline water to “up-cone” into the aquifer causing more problems. This would be of particular concern if the power plant blowdown is disposed of by underground injection; it could become a pumping loop and cause cross contamination. In the SFWMD letter to NRC dated February 23, 2012, alternatives to groundwater were mentioned. The SFWMD indicated they consider re-use water and saline groundwater alternative water sources. After a lengthy discussion, it was determined that because of the low population density in the rural areas proposed as alternative sites, the quantity of available re-use water is not currently sufficient to meet the needs for the plant. However, it was mentioned that a pipeline delivering reclaimed water from coastal areas may be able to provide the amounts of water needed for a plant that size. The meeting was then adjourned.

Okeechobee Utility Authority example above. SFWMD said approximately \$600M has been spent restoring the Kissimmee River to its natural path and restoring floodplain habitat that also improves water quality before flowing into Lake Okeechobee. The SFWMD indicated that they likely would not support any withdrawals that would negatively impact the river.

Finally, the NRC review team asked about the possibility of using groundwater as well as alternatives to groundwater. The SFWMD described how in August 2008, it passed regulations capping groundwater usage in Central Florida to projected 2013 demands. The currently proposed alternative sites are not in the region affected by this cap on groundwater allocations, which will expire in 2013. SFWMD indicated it might be possible to get the required quantities from a deep aquifer but this could potentially affect the artesian flow (water rises to the surface via underground pressure) for the wells providing irrigation supply for nearby farmers. In addition, large pumping operations might cause more saline water to “up-cone” into the aquifer causing more problems. This would be of particular concern if the power plant blowdown is disposed of by underground injection; it could become a pumping loop and cause cross contamination. In the SFWMD letter to NRC dated February 23, 2012, alternatives to groundwater were mentioned. The SFWMD indicated they consider re-use water and saline groundwater alternative water sources. After a lengthy discussion, it was determined that because of the low population density in the rural areas proposed as alternative sites, the quantity of available re-use water is not currently sufficient to meet the needs for the plant. However, it was mentioned that a pipeline delivering reclaimed water from coastal areas may be able to provide the amounts of water needed for a plant that size. The meeting was then adjourned.

cc: See next page

DISTRIBUTION:

PUBLIC
 EPB1 R/F
 AWilliamson, NRO
 RWeisman, OGC
 AKugler, NRO
 MComar, NRO
 MTonacci, NRO
 WBurton, NRO

PMadden, NRO
 RidsNroDnrl
 RidsNroDsea
 NRORidsNroDseaRap2
 RidsOgcMailCenter
 MClouser, USACE
megan.l.clouser@usace.army.mil
 RBryce (rw.bryce@pnnl.gov)

ADAMS Accession Number: ML12205A348

NRO-002

OFFICE	PM:NRO:DNRL:E PB1	PM:NRO:DSEA:R ENV	LA:NRO:DNRL:EP B1	BC:NRO:DNRL:EP B1
NAME	AWilliamson	AKugler	ARedden	WBurton
DATE	7/27/12	7/30/12	7/25/12	7/30/12

OFFICIAL RECORD COPY

Turkey Point Mailing List
cc:

Office of the Chair
Dennis C. Moss, District 9
Stephen P. Clark Center
111 N.W. 1st St., Ste. 220
Miami, FL 33128

County Administrator
Monroe County
1100 Simonton Street
Key West, FL 33040

County Attorney
Monroe County
P.O. Box 1026
Key West, FL 33041-1026

Mayor Carlos Alvarez
Stephen P. Clark Center
111 N.W. 1st St., 29th Flr.
Miami, FL 33128

Mr. Rick Button
U.S. Environmental Protection Agency
Region 4 - NEPA Program Office
Forsyth St.
Atlanta, GA 30303

Ms. Megan Clouser
Senior Project Manager
U.S. Corps of Engineers
Regulatory Division
9900 SW 107th Ave., Suite 203
Miami, FL 33176-2785

Mr. Miles Croom
Assist. RA for Habitat Conservation
U.S. National Marine Fisheries Services
Southeast Regional Office
Sustainable Fisheries Div.
263 13th Ave. South
St. Petersburg, FL 33701

Mr. Carlos Espinosa, P.E., Director
Miami-Dade Dept. of Environmental
Resources Management
701 NW 1st Court, Ste. 400
Miami, FL 33136-3902

Mr. Paul Gagliano
U.S. Environmental Protection Agency
Region 4 - NEPA Program Office
Forsyth St.
Atlanta, GA 30303

Mr. Mike Halpin
Manager
Florida Dept. of Environmental Protection
Siting Coordination Ofc.
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Mr. David S. Hobbie
Chief Regulatory Division
U.S. Corps of Engineers
Regulatory Division
701 San Marco Blvd.
Jacksonville, FL 32207

Mr. Robert Hoffman
Supervisory Fishery Biologist
U.S. National Marine Fisheries Services
Southeast Regional Office
Protected Resources Division
263 13th Ave. South
St. Petersburg, FL 33701

Ms. Pamela Hogue, Manager
Homestead Branch Library
700 North Homestead Blvd.
Homestead, FL 33030-6212

Mr. Dan Kimball, Superintendent
U.S. National Park Service
Everglades National Park
40001 State Rd. 9336
Homestead, FL 33034-6733

Ms. Yvonne Knowles
229 No. Krome Ave., Ste. 3
Homestead, FL 33030

Mr. Steve Krupa, P.G.,
Sr. Supervising Hydrogeologist
South Florida Water Management District
Hydrogeology Section, Water Supply
3301 Gun Club Rd. West
SFWMD - POB 24680 -M.S. 4330
Palm Beach, FL 33416

Mr. Marc LaFerrier, AICP, Director
Miami-Dade Department
of Planning and Zoning
111 N.W. 1st St.
Miami, FL 33128

Mr. Mark Lewis, Superintendent
U.S. National Park Service
Biscayne National Park
9700 SW 328th St.
Homestead, FL 33033-5634

Ms. Cindy Mulkey, Engineer Specialist
Florida Dept. of Environmental Protection
Siting Coordination Ofc.
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Mr. David C. Ritz, Chair
Board of Directors
Florida Keys Aqueduct Authority
1100 Kennedy Dr.
Key West, FL 33040

Ms. Zelda Ryles, Manager
South Dade Regional Library
10750 SW 211th St.
Miami, FL 33189

Mr. Paul Souza, Field Supervisor
U.S. Interior Fish & Wildlife Services
South Florida Ecological Services Ofc.
1339 20th St.
Vero Beach, FL 32960-3559

Mr. John Williamson, Administrator
Bureau of Radiation Control
Florida Department of Health
2044 All Children's Way
Orlando, FL 32818

Mr. John Wrublik
Fish & Wildlife Biologist
U.S. Interior Fish & Wildlife Services
South Florida Ecological Services Ofc.
1339 20th St.
Vero Beach, FL 32960-3559

E-mail

walexander@camacol.org (William Alexander)
valeriejamor@gmail.com (Valerie Amor)
Sarah_bellmund@nps.gov (Sarah Bellmund)
mlbrown@kodiakconsultants.com (M.L. Brown)
camacho20@comcast.net (Jeffrey Camacho)
dcaraza@comcast.net (Devin Caraza)
orlando.cruz@tylin.com (Orland R. Cruz)
dennisdaley@bellsouth.net (Dennis Daley)
remonster@gmail.com (Victor del Cid)
bdiggs@m-dcc.org (Bill Diggs)
Lmn13@bellsouth.net (Laura Dinuzzo)
mfinlan@chamberinaction.com (Mary Finlan)
paulgannett@yahoo.com (Paul Gannett)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
tgenove@sfwmd.gov (Tom Genovese)
sgibbs@keysnews.com (Steve Gibbs)
jgolden@sfwmd.gov (Jim Golden)
GrossC@miamidade.gov (Craig Grossenbacher)
richard@evergladeslaw.org (Richard Grosso)
umdave@bellsouth.net (Pave C. Guzman)
hallork@miamidade.gov (Katie Halloran)
khamilton@sfrpc.com (Karen Hamilton)
picbywal@atlanticbb.net (Walter Harris)
albert@smallco.net (Albert Harum-Alvaez)
HeftyL@miamidade.gov (Lee Hefty)
chenderson@tylin.com (Colin Henderson)
ethepburn@gmail.com (Liz Hepburn)
Fred_Herling@nps.gov (Fred Herling)
chrish@miamidade.gov (Chris Himmel)
rholmes@sfwmd.gov (Ruth Holmes)
richardhorton@bellsouth.net (Richard M. Horton)
thutton@bellsouth.net (Tom Hutton)
nljnhj@bellsouth.net (Nelda Jacques)
mjohnson@flcrc.org (Michael L. Johnson)
alliance4cleanfl@aol.com (Bob Krasowski)
lkrimsky@ufl.edu (Lisa Krimsky)
nancy88@bellsouth.net (Nancy Lee)
mayorlerner@gmail.com (Mayor Cindy Lerner)
Mark_lewis@nps.gov (Mark Lewis)
rogelito84@comcast.net (Rogelio Madan)
kmalave@flcrc.org (Kevin Malave)
tom@balseracommunications.com (Tom Martinelli)
mccras@miamidade.gov (Sean McCrackine)
mchugh44317@bellsouth.net (John McHugh)
mcsweeny@bellsouth.net (C. McSweeny)
amencio@miamigov.com (Alina Mencio)
hmirable@cityofsouthmiami.net (Hector Mirable, Ph.D.)
dpmoses@bellsouth.net (Dottie Moses)
AnneMullins@semtribe.com (Anne Mullins)

paul@edcsouthdade.com (Paul Neidhart)
mikenelson@live.com (Mike Nelson)
billn@fcan.org (Bill Newton)
peter@ferre2010.com (Peter S. Padowitz)
richie@medalliontrees.com (Richie Perlman)
pybas@att.net (Don Pybas)
thomasrodriguez@gmail.com (Thomas Rodriguez)
megryan561@gmail.com (Meg Ryan)
southfloridawild@yahoo.com (Matthew Schwartz)
marashl@hotmail.com (Mara Shlackman)
seventhgeneration@fastmail.com (Steve Showen)
capstan@bellsouth.net (Stan Smilan)
ironman54912@yahoo.com (Richard Snelson)
district8@miamidade.gov (Katy Sorenson)
msoria.vw@gmail.com (Laura J. Soria)
unita@miamidade.gov (Unita Sustave)
CTepper@semtribe.com (Craig Tepper)
dicktownsend@att.net (Dick Townsend)
tvageline@cityofsouthmiami.net (Thomas Vageline)
twalker@fkaa.com (Tom Walker)
Ben_West@nps.gov (Ben West)