PMTurkeyCOLPEm Resource

From: Labiosa, Rochelle G [Rochelle.Labiosa@pnl.gov]
Sent: Monday, October 18, 2010 6:44 PM
To: BMG@miamidade.gov
Cc: Kugler, Andrew; Bryce, Robert W; TurkeyCOL Resource
Subject: Meeting notes from our discussion on 9/27
Attachments: Conference call with Miami Dade WSD 1009229_101810.docx

Dear Ms. Goldenberg:

Thanks again for discussing issues related to using reuse water as cooling water for the proposed Turkey Point Nuclear Plant expansion with our team. The discussion was very insightful, and we have a much better understanding of the potential for reuse water usage at the site. As we discussed on the call, we are attaching our notes from that meeting, and we are hoping that you can give us concurrence on the notes to indicate that topics were captured accurately. Please add comments and corrections, as needed, in track changes, and we will incorporate your corrections and respond to comments. Also please note that there are some requested/discussed documents listed in the notes; some have already been emailed to us, but please note that all have been listed for completion.

Thanks again for your feedback. We appreciate your participation in this process.

All the best,
Rochelle

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Phone/Conference Call Record

Project/Plant: Turkey Point Units 6 & 7

Date/time: September 29, 2010

Time: 8:00 PDT

Attendees:

NRC Team

Andy Kugler	Environmental Project Manager
Mohammad Haque	Hydrologist

PNNL Team

Bob Bryce	Team Lead for Environmental Review
Rochelle Labiosa	Hydrologist
Paul Thorne	Hydrologist
Lance Vail	Hydrologist

Miami Dade Water and Sewer Department
Bertha Goldenberg

Call title/subject: Turkey Point Reclaimed Water Usage
Purpose of call: MDWASD meeting with NRC to discuss availability of reclaimed water for use by Turkey Point Units 6 and 7.

Call notes:

Andy provided an overview of our review process for the application. He stated that we have been reviewing the application and listening to stakeholders and have come up with some questions related to reuse water. Rochelle led the discussion through the questions provided to Ms. Goldenberg and the team.

Agenda:

1) Reclaimed water usage by FPL – what is the status of the legal arrangements for the requested 90 mgd cited in the ER and support documents?

A Joint Participation Agreement (JPA) has been approved by the County on July 20, 2010 – so there is a legal agreement between MDWSD and FPL to develop the project. The project is to build a pipeline between the South Plant and the Turkey Point site. At some point they will have

to enter into an operating agreement for how much FPL will pay and how much water will be delivered.

The agreement signed on July 20 included a sample agreement for the operating agreement. Once FPL has all permits they need, the negotiations will begin for the operating agreement. The JPA states that FPL will design the pipeline and MD will pay for labor and materials.

MDWSD is committing to deliver up to 90MGD. FPL's application indicates units 6 and 7 will use 75 MGD and Unit 5 will use 14 mgd. They also show other uses of reclaimed water. The amount is in the JPA – as they negotiate more details the amount could change.

2) What is the nature of competition/requests by other projects (e.g., CERP)? How likely is it that MDWASD reclaimed water can meet the demand of all parties requesting water (now and into the future)?

The operational agreement with FPL – 40 years with an agreement to extend 40 years, so 80 years total.

The South Treatment Plant is rated to 112.5 MGD average and 285 MGD peak. The county is currently constructing a treatment plant to perform high level disinfection (285 mgd) to reach quality needed by FPL. That plant is scheduled to be operating by 2014.

So far MDWSD is committed to 90 mgd to FPL and 27 mgd for an aquifer recharge project. They are also constructing pilot project to see if they can use reclaimed water for wetlands rehydration (the project is under construction and should be running at the end of the month). If it works out and all parties agree then this will have to be wrapped back into CERP- MD cannot pay for whole project and will need it to go through CERP and the Corps for approval and funding.

An important step for wetlands rehydration is to demonstrate nutrient removal. They are testing treatment combinations of RO, UV, etc.

The Biscayne Bay Coastal Wetlands project requires less than 5 ppb phosphorous – it is hard to know if this is feasible – once they evaluate feasibility then they will take the next steps:

- Pass toxicity testing
- Assess Ecological Impacts

They are also planning new treatment plant in the west – planning to send out RFP for design early next year. That plant will have several functions. The district needs it to meet their water use permit. The higher level of treatment is needed so they can recharge aquifer with reclaimed water so that they can withdraw more water from the aquifer.

Ocean outfalls must cease use by 2025 so flows currently going to North and Central treatment plants will be sent to new West plant – treatment will be higher than the high level disinfection planned for the South district water reclamation. Aquifer recharge is the goal of the plant, with standards set by DERM. The West plant will include – microfiltration, ro, uv and other treatment to meet quality needed for recharge drinking water aquifer. Need to meet ammonium

concentration of 5 mg/l and 20 ppb phosphorous on an annual basis – most of the time they can get lower than that.

They are about to wrap up the basis of design report, which would be the best report to refer to with regard to these plans. The report will be available in a month or two.

Competition for reclaimed water is:
Coastal Wetland Project (if pilot can meet requirements and funding is available to implement)
GW Recharge Project
MDWSD has committed to bringing more raw sewage water to South district and build more treatment capability to support these needs.
2 options -

- They need to consider how much will they divert to West district plant for groundwater injection
- If coastal wetlands recharge is feasible they will move more water to south.

They will have to construct more treatment capability in the south.

They have been asked for 75 mgd for coastal wetlands restoration.

The 1995 plan for CERP talked about using 131 MGD for wetlands restoration – because that was limit of South plant at that time.

Rochelle question: The West County Plant would not supply FPL – it will get the water from the south plant correct?

Ms. Goldenberg response: They looked at feasibility of taking treated water from the West plant to FPL and it is not cost effective.

Lance: Where do you dispose of your sludge and could FPL dispose of their sludge at the same place

At south district plant they are currently doing composting, for others haulers take sludge to land fill or use land application in south Florida. Another option would be to install driers and create pellets for land application fertilizer. Many counties are banning sludge for land application

3) Of groups requesting water, which plants will supply the water (FPL specifically cites the South MD plant, also site of the new HLD installation; can/will other plants also supply water with HLD)?

Addressed above

4) What measurements for emerging pollutants of concern (EPOC) are available for the treated wastewater that is currently discharged – is it possible to provide monitoring data for EPOC, if collected?

MD does not do this on a routine basis. They did analyze some samples secondary effluents from of the South district plant and did some sampling at South district pilot plant. Ms. Goldenberg will supply publicly available data that is not available on the web; if on the web, will send URLs. There is also and SFWMD report that summarizes some of the south district data.

5) How are/were the legal arrangements handled for reclaimed water at FPL's West County Plant? 20 MGD are required to run the plant, and they are switching to reclaimed water in 2011.

Not with MDWSD - it is with Martin County so different supplier. Ms. Goldenberg will send contact list for the other counties to check in.

Biscayne Bay Coastal Wetlands project has webpage (last updated Nov 2009). Ms. Goldenberg has sent the link. Ms. Goldenberg also will send Rochelle newer documents related to this project/URLs that are available.

Ms. Goldenberg will send exhibit 29 and 30 of permit to Rochelle that lists all water reuse projects.