



DATE

03/27/2009

TIME

10:45am

TELECOPIER TRANSMITTAL

TO

NAME

Paul Snead

TELEPHONE

919-546-2836

NAME AND LOCATION OF COMPANY (If other than NRC)

Progress Energy

TELECOPY NUMBER

919-546-7209

VERIFICATION NUMBER

919-546-2836

FROM

NAME

Douglas Bruner

TELEPHONE

301-415-2730

MAIL STOP

T-6D08M

TELECOPY DATA

NUMBER OF PAGES

THIS PAGE + 2 PAGES = 3 TOTAL

PRIORITY

- IMMEDIATE
 OTHER
(Specify)

SPECIAL INSTRUCTIONS

Paul,

Questions regarding chemical effluents are attached.

Thanks,

Doug

MODE = MEMORY TRANSMISSION

START=MAR-26 21:43

END=MAR-26 21:44

FILE NO.=497

STN NO.	COMM.	ABBR NO.	STATION NAME/TEL NO.	PAGES	DURATION
001	OK	5	919195467209	003/003	00:00:26

***** - ***** - *****

NRC FORM 386 (3-2005)		U.S. NUCLEAR REGULATORY COMMISSION				DATE 03/27/2009	
TELECOPIER TRANSMITTAL						TIME 10:45am	
TO							
NAME Paul Snead						TELEPHONE 919-546-2836	
NAME AND LOCATION OF COMPANY (If other than NRC) Progress Energy							
TELECOPY NUMBER 919-546-7209				VERIFICATION NUMBER 919-546-2836			
FROM							
NAME Douglas Bruner				TELEPHONE 301-415-2730		MAIL STOP T-6D08M	
TELECOPY DATA							
NUMBER OF PAGES THIS PAGE + <u>2</u> PAGES = <u>3</u> TOTAL				PRIORITY <input checked="" type="checkbox"/> IMMEDIATE <input type="checkbox"/> OTHER (Specify)			
SPECIAL INSTRUCTIONS Paul, Questions regarding chemical effluents are attached. Thanks, Doug							

Douglas Bruner

Subject: FW: Conference Details (MAR 26, 2009--01:00 PM ET--Conf# 3011038)

From: Grismala, Ralph [mailto:RGrismala@icfi.com]
Sent: Thursday, March 26, 2009 12:44 PM
To: Douglas Bruner; Bunn, Amoret L
Cc: Donald Palmrose; Smith, Michael Alan
Subject: RE: Conference Details (MAR 26, 2009--01:00 PM ET--Conf# 3011038)

Doug,

Thanks for the call update.

Here are a few additional bits of information related to the discharge effluents:

1. The algaecide listed in the CREC NPDES permit is Spectrus CT1300 which is N-alkyl(C12-40%,C14-50%,C16-10%) dimethyl benzyl ammonium chloride (not ammonium chloride as listed in the LNP ER - although the ER does say it's a quaternary amine). Is this what PEF plans to use at LNP?
2. If CREC uses the same chemicals and dosing concentrations as proposed for LNP, any existing analyses of the discharge concentrations would be directly relevant to the likely concentrations at LNP - provided the retention times are similar.

Ralph

Ralph Grismala, P.E.
ICF International
(860)599-3534 Tel
(781)676-4005 Fax
E-mail: rgrismala@icfi.com
Website: www.icfi.com

Douglas Bruner

From: Smith, Michael Alan [michael.smith@pnl.gov]
Sent: Wednesday, March 25, 2009 4:36 PM
To: Douglas Bruner
Cc: Prendergast-Kennedy, Ellen L; Wyngarden, Stephen
Subject: RE: Draft Agenda for Thursday's Teleconference - Levy and Harris - DELIBERATIVE PROCESS

Doug,

For the agenda, please consider adding the below request to have PEF clarify information regarding chemicals effluents. If PEF can have the right person on the call, I would ask Ralph Grismala and Amoret Bunn to join the call. If not tomorrow, could we work with PEF to set up a call to discuss this topic?

I will not be available to be on this call (on an airplane at the time).

Thanks,
--Michael

1. The ER lists the input quantities of chemicals to be used, but not the output (discharge) concentrations as outlined in staff review guidance in NUREG-1555. Please note that if PEF provides estimates of discharge concentrations, all of the questions except for 3 and 7 are moot.
2. The ER lists sodium hypochlorite and gives the annual quantity as a volume of liquid. What is the concentration of the sodium hypochlorite solution? If I divide the total volume of introduced sodium hypochlorite solution (CWS) by the total water intake (seawater), I get 6 ppm of solution. The ER lists the dosing concentration as 0.36 ppm of sodium hypochlorite, which implies the use of a 6% sodium hypochlorite solution. Is this correct?
3. The ER lists the algaecide as ammonium chloride, and lists the amount used as a volume of liquid. Ammonium chloride (NH_4Cl) is normally sold as a solid, often in powder form. Also, I can find no indication that ammonium chloride is commonly used as an algaecide. Does PEF mean Methyl Benzyl Ammonium Chloride, Dimethyl Benzyl Ammonium Chloride, Dodecyl Dimethyl Benzyl Ammonium Chloride or some other variant? Please clarify what chemical would be used. If a solution, what is the concentration?
4. The ER lists the dosing concentration for sulphuric acid. If I divide the total volume of introduced sulphuric acid (CWS) by the total water intake (seawater), I get 0.3 ppm of sulphuric acid, not the indicated 2.237 ppm dosing concentration. ER table 3.3-3 says the frequency of use is continuous. Please clarify.
5. The ER lists ortho-polyphosphate and gives the annual quantity as a volume of liquid. If I divide the total volume of introduced ortho-polyphosphate solution (CWS) by the total water intake (seawater), I get 5.6 ppm of solution, not the indicated 30 ppm dosing concentration. ER table 3.3-3 says the frequency of use is continuous. Please clarify. What is the concentration of the ortho-polyphosphate solution?
6. The ER lists polyacrylate and gives the annual quantity as a volume of liquid. If I divide the total volume of introduced polyacrylate solution (CWS) by the total water intake (seawater), I get 4.2 ppm of solution, not the indicated 150 ppm dosing concentration. ER table 3.3-3 says the frequency of use is continuous. Please clarify. What is the concentration of the polyacrylate solution?
7. For all chemicals listed in ER Table 3.3-3, MSDS sheets and CAS numbers would be helpful.
8. Are the same chemicals or similar chemicals (including biocides) used at CREC or other facilities? Does PEF have data of the residual concentrations of these chemicals in the discharge streams or at any other measurement points which would give some indication of their degree of consumption or breakdown?

