CCNPP3COLA PEmails

From: Quinn, Laura
Sent: Thursday, March 24, 2011 2:15 PM
To: Fetter, Allen; Flanders, Scott
Subject: FW: Calvert Cliffs Work Description (UNCLASSIFIED)
Attachments: CCNPP Draft Final Work Description 3-24-11.doc; Corps Work Description (UNCLASSIFIED)

FYI. It looks like the Corps still needs a new work description from UniStar which they requested on 3/7/2011. See attached email.
Laura

-----Original Message-----
From: Anderson, Kathy NAB [mailto:Kathy.Anderson@usace.army.mil]
Sent: Thursday, March 24, 2011 12:59 PM
To: Lutchenkov, Dimitri; Burkman, Jim
Cc: Francis, Woody NAB; Quinn, Laura
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri and Jim,

We are going through the plan pages included in the information Dimitri handed to me yesterday. Instead of us spending hours trying to figure out all of the notations and substitutions, can you please e-mail to us (and NRC) and/or hand deliver a CD with one clean set of final plans that we would use in our permit decision review.

Also, please see attached draft for the final review work description.
Confirm the changes, address the comments and add a notation for the plan sheets that cover the work described for each project element.

In the meantime, we are working on the other tasks.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District Operations Division, Regulatory Branch
(410) 962-5690
(410) 962-6001(fax)
kathy.anderson@usace.army.mil

http://www.nab.usace.army.mil/Regulatory/index.html
http://www.facebook.com/USACEBaltimore

-----Original Message-----
From: Anderson, Kathy NAB
Sent: Thursday, March 24, 2011 11:56 AM
To: 'Lutchenkov, Dimitri'; 'Burkman, Jim'
Cc: Francis, Woody NAB
Subject: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri and Jim,

In reviewing the documents you provided and the modified work description, please confirm that dredging for the fish return is now 100 cubic yards, not the 500 cubic yards that was stated in the Corps PN.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District Operations Division, Regulatory Branch
(410) 962-5690
(410) 962-6001(fax)
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http://www.nab.usace.army.mil/Regulatory/index.html
http://www.facebook.com/USACEBaltimore

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Hearing Identifier: CalvertCliffs_Unit3Cola_Public_EX
Email Number: 1737

Mail Envelope Properties (C83F2A0B5439F4498515234E2F1771105A4DC3134C)

Subject: FW: Calvert Cliffs Work Description (UNCLASSIFIED)
Sent Date: 3/24/2011 2:14:52 PM
Received Date: 3/24/2011 2:14:00 PM
From: Quinn, Laura

Created By: Laura.Quinn@nrc.gov

Recipients:
"Fetter, Allen" <Allen.Fetter@nrc.gov>
Tracking Status: None
"Flanders, Scott" <Scott.Flanders@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	2336	3/24/2011 2:14:00 PM
CCNPP Draft Final Work Description 3-24-11.doc	51270	
Corps Work Description (UNCLASSIFIED)	913813	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

DRAFT FINAL WORK DESCRIPTION FOR REVIEW

Notes:

The tracked changes provided on 23 March 2011 were incorporated into the draft description as tracked below.

The amount of dredged material quantity for disposal increased from 58,400 to 66,600 because of the decision not to use dredged material as pipe cover for the fish return and discharge pipe and also reflects increase in dredged material from restoring barge dock.

Comment [ka1]: Why did this increase – updated survey?

Total dredging:
Intake Area – 1,000 yd3 (confirmed below)
Fish Return 100 yds 3 – (updated below)
Discharge pipe – 5.500 yds3 (confirmed below)
Restoration of barge – 60,000 yds3 (confirmed below)
Total 66,000 cubic yards

Tidal impact area still 5.7 acres

The changes reflect more detailed engineering design and changes introduced since the 2008 Corps permit application.

Unistar, please explain the differences in the dimensions between the MDE and Corps plan sheets. They are noted in orange handwriting in the package, but there is not a reason for the difference. If you could add an official "note block" to the plans with a brief reason for the differences, that would be helpful.

Comment [ka2]: We understand that some are as simple as the difference in the way each agency measures from the shoreline, but please explain each issue anyway. Thanks.

CORPS OF ENGINEERS PERMIT APPLICATION

CENAB-OP-RMS (NAB-2007-08123-M01 (Calvert Cliffs 3 Nuclear Project, LLC/Unistar Nuclear Operating Services, LLC)

APPLICANT: Calvert Cliffs 3 Nuclear Project, LLC
Mr. Thomas E. Roberts
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657

Comment [ka3]: Please confirm that this is still correct.

Unistar Nuclear Operating Services, LLC
Mr. Dimitri Lutchenkov
750 E. Pratt Street, 14th Floor
Baltimore, Maryland 21202

LOCATION: In the Chesapeake Bay and unnamed tributaries to the Chesapeake Bay, forested non-tidal wetlands, Johns Creek and Goldstein Branch and their unnamed tributaries at Unistar's Calvert Cliffs site near Lusby, Calvert County, Maryland.

WORK: The applicants propose, in accordance with the attached plans, to perform site preparation activities and construct supporting facilities at the site of a proposed nominal 1,710 MW nuclear power generation station (Unit 3).

PURPOSE AND NEED: The basic project purpose for the Unistar project is to generate electricity for additional base load capacity. The overall project purpose is to construct a nuclear power plant facility to provide for additional base load electrical generating capacity to meet the growing demand for electricity in the State of Maryland.

The following work is proposed in tidal areas:

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

New Sheet Pile, Armor Removal, Armor Installation for Intake at Existing Fore-bay: To construct the new Unit 3 intake by constructing an 18-inch thick sheet pile wall extending approximately 180 linear feet from the existing shoreline to the existing baffle wall and extending approximately 90 feet channelward of the approximate mean high water (MHW) shoreline, creating an approximate 9,000 square foot wedged-shaped pool; to emplace approximately 75 linear feet of stone armor protection 205 feet channelward of the proposed wall; to remove approximately 3050 feet of existing shoreline armor protection in order to construct the proposed sheet pile wall; to remove approximately 60-feet of armor within the wedged shape pool; and to install a temporary sheet piling wall in uplands and extending out into the wedge-shaped pool approximately 30 feet channelward to facilitate dewatering, installation of the pipe and the associated trash rack. The area within the wedged shaped pool surrounded by the pipeline sheet piling will be dewatered and ~~mechanically~~ dredged by ~~hydraulic or~~ mechanical method to create an approximately 30-foot wide by 30-foot long by 25-foot deep area, resulting in approximately ~~900~~ 1,000 cubic yards of sand and gravel, which will be deposited on site at an existing upland (non-wetland), environmentally controlled area at the Lake Davies lay-down. After dredging, two 60-inch intake pipes with trash racks at the pipe openings, extending approximately 20 feet channelward of the approximate MHW shoreline, to a bottom elevation of -25 feet mean low water, will be installed. After installation of the pipes and associated trash racks, approximately 80 linear feet of shoreline armor protection extending 10 feet channelward of the approximate MHW shoreline will be emplaced within the wedged-shaped area. After this work is completed, the temporary sheet pile wall around the 60-inch intake pipes will be removed, allowing the area to flood and submerge the pipes.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Discharge Pipe: A 30-inch high density polyethylene (HDPE) discharge pipe with a three single port diffuser outfall structure approximately 550 linear feet channelward of the approximate MHW shoreline and depressed 4 feet below the bay bottom will be installed using hydraulic or mechanical dredging methods. The discharge point will be elevated 3 feet above the bay bottom. This installation will temporarily impact approximately 38,500 square feet, approximately 0.9 acres, along 550 linear feet of the bay bottom. Additionally, a 20-foot by 40-foot by 2-inch thick riprap scour pad will be installed at the diffuser outfall permanently impacting 800 square feet, 0.02 acres. Approximately 5,500 ~~7,000~~ cubic yards of existing material dredged for the pipe installation will be ~~reused as trench fill (approximately 5,800 cubic yards) with the remainder (approximately 1,200 cubic yards) being~~ deposited on site at an

existing upland (non-wetland), environmentally controlled area at the Lake Davies lay-down. The pipe will be installed with a minimum of 4 feet of clean sand/ or stone fill cover to protect it from storms and snagging by small boat anchors. Turbidity curtains are anticipated to be used during the work to contain suspended sediments.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Restoration of Barge Unloading Facility including Maintenance and New Dredging: To facilitate receipt of equipment and materials for the construction of the plant, two existing pile cap crane supports and one mooring bollard will be removed. The existing barge slip will be restored and extended to re-establish use of an approximately 1,500-foot by 1530-foot (average width), 195,000 square foot area to a bottom elevation of -16 feet mean low water, requiring approximately 650,000 cubic yards of ~~hydraulic or~~ mechanical dredging. Approximately 1,065-feet of the dredging is considered maintenance, and the remaining 435-feet is an extension beyond the original dredging limits and is required to reach the bottom elevation of -16 feet mean low water. Of the approximately 650,000 cubic yards of dredging required, 45,000 cubic yards are considered maintenance dredging, and 5,000 cubic yards are considered new dredging. Ten-year maintenance dredging is proposed.

Comment [U4]: MDE does not breakdown and considers all dredging to be new

The dredge material will be characterized prior to use. The dredge material removed from the barge slip will either be used during the plant construction as sand bedding for underground pipe installation or deposited on site at an existing upland (non-wetland) environmentally controlled disposal area. Suspended sediments resulting from this work are anticipated to be contained by a floating turbidity curtain.

As a part of the restoration, a new 18-inch thick sheet pile wall will be installed along the shore line in front of the existing bulkhead which was built as a part of the original design. The bulkhead will consist of a new sheet pile wall driven immediately in front of the existing remaining bulkhead. This bulkhead will be approximately 90 feet in length starting from the barge slip extending south to an existing outfall culvert. On the landward side of the new sheet pile bulkhead, a concrete apron will be placed along with a gravel apron to allow equipment to be off-loaded from barges with wheeled mounted transporters.

Near shore maintenance dredging will require removal of silt/sediment which has mounded up over the past 30 years and will include restoration of an existing culvert outfall. Due to silt/sediment build up over the years, the discharge from this outfall meanders in a north-south direction prior to discharging into the barge slip area. The restoration activities in this area will include the emplacement of a 40-foot by 40-foot by 2-foot deep riprap apron extending approximately 340 feet channelward of the approximate MHW shoreline directly in front the existing outfall, allowing the discharge to flow directly in the bay as originally designed. The existing water depths range from approximately 0.00 feet to -16.0 mean low water within the proposed work area.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Unit 3 Fish Return: A fish return system will be provided as a part of the intake design. To construct the proposed fish return outfall, an 18-inch diameter HDPE pipe will be installed in a mechanically excavated trench. The pipe will be installed 4.0 feet below the bay bottom and will emerge from the bay bottom 40 feet channelward of the approximate MHW shoreline. The outfall location will be protected with a 10-

foot by 10-foot by 2-foot thick riprap apron extending approximately 458 feet channelward of the approximate MHW shoreline. To install the pipe, approximately 40 linear feet of the existing shoreline revetment will be removed, and approximately 500 100 cubic yards of material will be dredged within the work area. The dredged material will be returned to the trenchdeposited on site at an existing upland (non wetland), environmentally controlled area at the Lake Davies lay-down and after the pipe is placed clean sand or stone fill will be emplaced., and t The existing shoreline revetment will be restored to its original design after pipe installation. Turbidity curtains are anticipated during the work to contain suspended sediments.
The following work is proposed in non-tidal areas:

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Power Block: To clear and grade for construction of a power block, including reactor, turbine and associated structures, permanently impacting 2,470 square feet (0.06 acres) along 617 linear feet of stream bed.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Lay-down Areas: To clear and grade for construction of five construction lay-down areas in various locations, permanently impacting 95,832 square feet (2.20 acres) of non-tidal forested wetlands; 52,708 square feet (1.21 acres) of emergent wetlands; 114,563 square feet (2.63 acres) of open water; and 1,535 square feet (0.04 acres) along 384 linear feet of stream bed.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Cooling Tower: To clear and grade for construction of a cooling tower, permanently impacting 32,670 square feet (0.75 acres) of non-tidal forested wetlands and 5,780 square feet (0.13 acres) along 1,445 linear feet of stream bed.

Switchyard: To clear and grade for construction of a switchyard, permanently impacting 179,903 square feet (4.13 acres) of non-tidal forested wetlands and 16,710 square feet (0.38 acres) along 4,178 linear feet of stream bed.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Construction Access Road: To clear and grade for construction of the Unit 3 construction access road which will require three separate road crossings: 1) to construct 200 linear feet of 30-inch diameter reinforced concrete pipe (RCP) and emplace a 15-foot by 15-foot riprap scour pad; 2) to construct 100 linear feet of 36-inch diameter RCP and emplace a 15-foot by 15-foot riprap scour pad; and 3) to construct 520 linear feet of two 54-inch diameter RCP and emplace a 40-foot by 40-foot riprap scour pad. The invert of each pipe will be depressed to match the slope and invert of the stream or wetland being crossed. This road work will permanently impact 31,363 square feet (0.72-acre) area of non-tidal forested wetlands and 4,336 square feet (0.10 acres) along 1,084 linear feet of stream bed.

AS SHOWN ON PLAN SHEETS _____
REASONS FOR MDE/CORPS PLAN DIFFERENCE: _____

Heavy Haul Road: To clear and grade for construction of a heavy haul road leading from the barge slip to the construction site, permanently impacting 2,570 square feet (0.06 acres) along 642 linear feet of stream bed.

The total proposed project would permanently impact 343,253 square feet (7.88 acres) of forested non-tidal wetlands; 52,707 square feet (1.21 acres) of emergent non-tidal wetlands; 114,563 square feet (2.63 acres) of non-tidal open water; 33,400 square feet (0.77 acres) along 8,350 linear feet stream bed portions; and 248,000 square feet (5.7 acres) of tidal open waters (approximately 138,500 square feet (3.2 acres) of the tidal open water impacts are maintenance dredging; approximately 109,000 square feet (2.5 acres) is new dredging; approximately 52,500 square feet (1.2 acres) of the new dredging will be backfilled). This work includes a total of 3,485 square feet (0.08-acre area) of isolated forested wetland impact that is not subject to Corps jurisdiction.

Woody Francis
Kathy Anderson
U.S. Army Corps of Engineers, Baltimore District