JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

FOR AGENCY USE ONLY

Application Number _____ **Date Determined Complete** _____
Date Received by State _____ **Date(s) Returned** _____
Date Received by Corps _____
Type of State permit needed _____ **Date of Field Review** _____
Type of Corps permit needed _____ **Agency Performed Field Review** _____

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2. PROJECT DESCRIPTION

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

UniStar Nuclear Energy, LLC, through its subsidiary, Calvert Cliffs 3 Nuclear Project, LLC (CC3), is planning expansion of the existing Calvert Cliffs Nuclear power plant facility by constructing the new Calvert Cliffs Nuclear Power Plant Unit 3 (CCNPP Unit 3) on the adjacent property. The proposed CCNPP Unit 3 will be the U.S. Evolutionary Power Reactor (EPR) design. Plant structures planned for construction include main power block buildings, cooling towers, desalination plant, intake structure and discharge structure and other associated buildings. The project will also include restoration to an existing barge dock on the property and dredging activities.

Has any portion of the project been completed? ____ Yes X No If yes, explain ____

Is this a residential subdivision or commercial development? Commercial X Yes ____ No
If yes, total number of acres on property 726 acres (Total Calvert Cliffs Property 2,070 acres)

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

A. X filling
B. X dredging
C. X excavating
D. ____ flooding or impounding water
E. ____ draining
F. X grading
G. X removing or destroying vegetation
H. X building structures

Area for item(s) checked: Wetland 510,088 (sq. ft.) Buffer (Nontidal Wetland Only) 1,343,826* (sq. ft.)
*Buffer impact calculated based on the Calvert County expanded nontidal buffer of 50-feet
Expanded Buffer (Nontidal Wetland Only) ____ (sq. ft.)
Area of stream impact 25,050 (sq. ft.)
Length of stream affected 8,350 (linear feet)

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

			Length (Ft.) 1	Width (Ft.) 2	Area Sq. Ft. 3	Maximum/Average Channelward Encroachment (feet) 4		Pond Depth 5	Volume of fill/dredge material (cubic yards) below MHW or OHW 6
A.	X	Bulkhead	270	0.021		200			17.4
B.	X	Revetment		(see	attached)				
C.		Vegetative Stabilization							
D.		Gabions							
E.		Groins							
F.		Jetties							
G.		Boat Ramp							
H.		Pier							
I.		Breakwater							
J.		Repair & Maintenance							
K.	X	Road Crossing	97	1,107	31,363				
L.	X	Utility Line	30			30			500
M.	X	Outfall Construction		(see	attached)				
N.		Small Pond							
O.		Dam							
P.		Lot Fill							
Q.	X	Building Structures	990	3,915	478,724				
R.	X	Culvert	1,630	3	4,890				
S.		Bridge							
T.		Stream Channelization							
U.		Parking Area							
Va.	X	Dredging (Maintenance)	100	220	15,200	100			10,000

Vb. X Dredging (New) 750 220 97,500 750 _____ 50,000

1. X New 2. X Maintenance 3. _____ Hydraulic 4. X Mechanical

W. _____ Other (explain) _____

d. PROJECT PURPOSE: Give brief written description of the project purpose:

The purpose of the proposed nuclear power unit, i.e., CCNPP Unit 3, is to generate additional electricity for sale. The new nuclear power unit will be designed to produce approximately 1,710 MWe of gross generation capacity or approximately 1,600 MWe of net output for sale. The construction of CCNPP Unit 3 will add electrical supply to the rapidly growing demand in the Baltimore-Washington metropolitan areas. Additional information on the purpose and need of the project can be found in Section 2.0 of the enclosed Supplemental Environmental Resource Report

3. PROJECT LOCATION:

a. LOCATION INFORMATION:

A. County: CALVERT B. City: LUSBY C. Name of waterway or closest waterway CHESAPEAKE BAY

D. State stream use class designation: II

E. Site Address or Location: 1650 CALVERT CLIFFS PARKWAY, LUSBY, MD 20657

F. Directions from nearest intersection of two state roads: Located on MD Route 2 & 4 (Louis L. Goldstein Hwy)
When headed south on Route 2 & 4, property entrance is approximately 6,000 feet north of MD Route 765 on the left.

G. Is your project located in the Chesapeake Bay Critical Area (generally within 1,000 feetof tidal waters or tidal wetlands)?:
X Yes _____ No

H. County Book Map Coordinates (Alexandria Drafting Co.); Excluding Garrett and Somerset Counties:
Map: 16 Letter: K Number: 5 (to the nearest tenth)

I. FEMA Floodplain Map Panel Number (if known): _____

J. 1. 38.42688 latitude 2. -76.44136 longitude

b. ACTIVITY LOCATION: Check one or more of the following as appropriate for the type of wetland/waterway where you are proposing an activity:

A. X Tidal Waters
B. X Tidal Wetlands
C. _____ Special Aquatic Site (e.g., mudflat, vegetated shallows)
D. X Nontidal Wetland
E. X 25-foot buffer (nontidal wetlands only)
F. _____ 100-foot buffer (nontidal wetland of special State concern)
G. X In stream channel
1. _____ Tidal 2. X Nontidal
H. X 100-year floodplain (outside stream channel)
I. X River, lake, pond
J. _____ Other (Explain)

c. LAND USE:

A. Current Use of Parcel Is: 1. _____ Agriculture: Has SCS designated project site as a prior converted cropland?
_____ Yes _____ No 2. X Wooded 3. X Marsh/Swamp 4. X Developed
5. X Other Existing nuclear power plant.

B. Present Zoning Is: 1. ____ Residential 2. X Commercial/Industrial 3. _____ Agriculture 4. _____ Marina 5. X Other
Other - Light Industrial, Farm, and Forest

C. Project complies with current zoning _____ Yes _____ No N/A – CPCN Proceeding
Project is exempt from County Zoning per Zoning Ordinance Section 1-2.02

THE FOLLOWING INFORMATION IS REQUIRED BY THE STATE (blocks 4-7):

4. REDUCTION OF IMPACTS: Explain measures taken or considered to avoid or minimize wetland losses in F. Also check Items A-E if any of these apply to your project.

A. X Reduced the area of disturbance
B. _____ Reduced size/scope of Project
C. X Relocated structures
D. X Redesigned project

E. X Other Extensive evaluation process to locate structures on property to minimize wetland impacts; balanced cut and fill to minimize areas of disturbance.

F. Explanation

A site layout for CCNPP Unit 3 was originally chosen based upon an extensive site layout study that was undertaken in preparation for the Combined License Application (COLA) to the U.S. NRC. The objective of this study was to determine a site layout that would most practicably avoid and minimize impacts to jurisdictional waters and wetlands. Following the selection of the COLA proposed alternative, the proposed impacts to wetlands and streams on the CCNPP Unit 3 site were further reduced through the relocation or reconfiguration of facility components. The resulting redesign of the site layout and relocation of structures is proposed in this application. Several primary site design features that reduce impacts to jurisdictional waters are associated with siting and required location of switchyard facilities in relation to the adjacent power block and transmission lines. See section 4.0 of the Supplemental Environmental Resource Report (SERR) for additional information (Table 4.3-1).

Describe reasons why impacts were not avoided or reduced in Q. Also check Items G-P that apply to your project.

G. ____ Cost
H. X Extensive wetlands on site
I. X Engineering/design constraints
J. X Other natural features
K. ____ Parcel size
L. X Other regulatory requirement
M. X Failure to accomplish project purpose
N. X Safety/public welfare issue
O. ____ Inadequate zoning
P. X Other Security

Q. Description Project siting was limited by design constraints, which allowed integration with the existing CCNPP Units 1 and 2. Security and exclusion zones were considered in order to meeting theproject goal. Extensive wetlands cover the site and affected wetland acreage was reduced to the extent practical by design alterations and relocation of supporting facilities. Regulatory requirements from the NRC were considered as part of the siting process. Project was sited to avoid impacts to then-known bald eagle nests, to the extent possible.

5. LETTER OF EXEMPTION: If you are applying for a letter of exemption for activities in nontidal wetlands and/or their buffers, explain why the project qualifies:

A. ____ No significant plant or wildlife value and wetland impact
1. ____ Less than 5,000 square feet
2. ____ In an isolated nontidal wetland less than 1 acre in size
B. ____ Repair existing structure/fill
C. ____ Mitigation Project
D. ____ Utility Line
1. ____ Overhead
2. ____ Underground
E. Other (explain)

F. X Check here if you are **not** applying for a letter of exemption.

IF YOU ARE APPLYING FOR A LETTER OF EXEMPTION, PROCEED TO BLOCK 11

6. ALTERNATIVE SITE ANALYSIS: Explain why other sites that were considered for this project were rejected in M. Also check any items in D-L if they apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. ____ 1 site
B. X 2 - 4 sites
C. ____ 5 or more sites

Alternative sites were rejected/not considered for the following reason(s):

D. ____ Cost
E. ____ Lack of availability
F. X Failure to meet project purpose
G. ____ Located outside general/market area
H. X Greater wetlands impact
I. ____ Water dependency
J. ____ Inadequate zoning
K. X Engineering/design constraints
L. ____ Other

M. Explanation:

The CCNPP Unit 3 has been sited adjacent to the existing Units 1 and 2 to reduce overall impacts. Some onsite alternatives were eliminated based on engineering, design, and construction constraints as well as their potential to have greater environmental impacts. The alternatives analysis for this project is provided as Section 4.0 of the attached SERR.

7. **PUBLIC NEED:** Describe the public need or benefits that the project will provide in F. Also check Items in A-E that apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X Economic
B. ____ Safety
C. X Health/welfare
D. ____ Does not provide public benefits
E. ____ Other ____

F. Description Project will meet demonstrated future need for additional base-load electric capacity in the rapidly growing Baltimore-Washington metropolitan region that includes the State of Maryland. Project will also provide significant economic benefits to Calvert County and the State of Maryland See Sections 2.1 and 2.2 of the SERR for additional information on the purpose and need for the proposed project.

8. **OTHER APPROVALS NEEDED/GRANTED:**

A. Agency	B. Date Sought	C. Decision 1. Granted	2. Denied	D. Decision Date	E. Other Status
MPSC/CPCN	11/2007				
MDE - Coastal Zone Consistency Determination	5/2008				
MDE - Water Quality Certification	5/2008				
Critical Area Approval – CPCN	5/2008				
Calvert County Grading Permit	TBD				

9. **MITIGATION PLAN:** Please provide the following information:

a. Description of a monetary compensation proposal, if applicable (for **state requirements** only). Attach another sheet if necessary.

No monetary compensation is being considered for the proposed project. On-site and in-kind mitigation has been proposed and is described in Section 7 of the attached SERR.

b. Give a brief description of the proposed mitigation project.

The mitigation strategy chosen for the CCNPP Unit 3 project includes on-site and in-kind mitigation. This strategy, or global mitigation action, would include a combination of onsite wetland enhancement and creation as well as onsite stream restoration and enhancement. Wetland creation activities will provide approximately 0.9 acre of open water habitat, 1.3 acres of freshwater marsh habitat, and 7.2 acres of bottomland hardwood forest. Wetland enhancement activities will provide approximately 18.1 acres of wetland enhancement (see attached SERR, Figure 7.2-1). See Section 7.2 of the SERR for additional wetland mitigation information. Stream restoration activities will provide approximately 6,283 linear feet of restored stream channels. Stream enhancement activities will provide approximately 4,146 linear feet of enhanced stream channels (see attached SERR Figure 7.2-1). See SERR Section 7.3 for additional stream mitigation information.

c. Describe why you selected your proposed mitigation site, including what other areas were considered and why they were rejected.

The mitigation areas were chosen after a mitigation site selection process was conducted. This process initially identified four general global mitigation strategies: (1) onsite and in kind; (2) onsite and not in kind; (3) offsite and in kind; and (4) offsite and not in kind. The mitigation strategy chosen was onsite and in kind mitigation. This strategy, or mitigation action, would replace nontidal wetland acreage and functional losses more effectively than the other three options evaluated. The proposed wetland and stream impacts occur within the same hydrologic units as the proposed mitigation actions. The geographic relationship between the areas of nontidal wetland and stream losses and the proposed mitigation areas provide an opportunity to mitigate impacts at an upper watershed level (see SERR Figure 7.2-1). The mitigation areas are located adjacent to, or within one quarter mile of proposed impact areas. The watershed approach used in the design of the compensatory mitigation plan is consistent with ongoing natural resource activities that have been implemented at CCNPP over the years and USACE mitigation guidance. See SERR Section 7.2.1 for additional information.

d. Describe how the mitigation site will be protected in the future.

The wetland and stream mitigation areas will be protected into perpetuity through establishment of a legally-binding deed restriction. These deed restrictions will generally follow the standard USACE model for such instruments. Long-term management and maintenance of the mitigation sites will be partially assured through the placement of the protection mechanism on the mitigation areas. Ownership of the mitigation areas will likely reside with CCNPP, Inc., CC3 or their respective assigns, until such a time as the property is sold or donated to a public agency or private conservation organization. See SERR Sections 7.2.5.3 through 7.2.5.4 and Sections 7.3.4.3 through 7.3.4.4 for additional information.

10. HAVE ADJACENT PROPERTY OWNERS BEEN NOTIFIED?: A. _____ Yes B. __X__ No

Provide names and mailing addresses below (Use separate sheet, if necessary): Notification of adjacent property owners is in process. See attached Adjacent Boundaries Property Data Chart (Attachment 1).

a. _____ b. _____ c. _____

11. HISTORIC PROPERTIES: Is your project located in the vicinity of historic properties? (For example: structures over 50 years old, archeological sites, shell mounds, Indian or Colonial artifacts). Provide any supplemental information in Section 13.

A. __X__ Yes B. _____ No C. _____ Unknown

Phase 1 and subsequent Phase 2 Cultural Resources investigations have been completed and further investigations are ongoing. Coordination with the State Historic Preservation Office (SHPO) is ongoing. All impacts to cultural resources will be completed only after approval from the SHPO. See section 9.0 of the attached SERR for specific information on cultural resources and consultation with the SHPO.

12. ADDITIONAL INFORMATION: Use this space for detailed responses to any of the previous items. Attach another sheet if necessary:

The Supplemental Environmental Resource Report contains additional information on threatened and endangered species (Section 8), essential fish habitat (Section 10) and cultural resources (Section 9).

Check box if data is enclosed for any one or more of the following (see checklist for required information):

A. _____ Soil borings	D. _____ Field surveys	G. __X__ Site plan
B. _____ Wetland data sheets	E. __X__ Alternate site analysis	H. __X__ Avoidance and minimization analysis
C. _____ Photographs	F. _____ Market analysis	

I. __X__ Other (explain) The wetland data sheets and accompanying photographs have previously been submitted to MDE, USACE – Baltimore District, and Critical Areas Commission for the Chesapeake and Atlantic Coastal Bays as part of the Final Wetland Delineation Report dated May 2007. For additional copies of this report please contact Mr. Jim Burkman of Constellation at 410-787-5130. The SERR includes an alternate site analysis and avoidance and minimization analysis as part of Section 4.0 Alternatives Analysis and Appendix A. The site plan is Figure 6.1-1 of the SERR. Also attached to this application are 29 figures which depict the location of tidal and nontidal wetland impacts.

CERTIFICATION:

I hereby designate and authorize the agent named above to act on my behalf in the processing of this application and to furnish any information that is requested. I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief. I understand that any of the agencies involved in authorizing the proposed works may request information in addition to that set forth herein as may be deemed appropriate in considering this proposal. I certify that all Waters of the United States have been identified and delineated on site, and that all jurisdictional wetlands have been delineated in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization. I also certify that the proposed works are consistent with Maryland's Coastal Zone Management Plan. I understand that none of the information contained in the application form is confidential and that I may request that additional required information be considered confidential under applicable laws. I further understand that failure of the landowner to sign the application will result in the application being deemed incomplete.

CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC * by:

LANDOWNER MUST SIGN: E P Jamar DATE: 5/16/2008

*Title to the property will be transferred to Co-Applicant, Calvert Cliffs 3 Nuclear Project, LLC, in June, 2008.

B. Revetment

(a) Armor Protection Intake Wedge

L - 75'
W - 112'
A – n/a
MCE - 312'
V – 5858 cu yds

(b) Removal and Replacement In Kind

L - 45'
W - 10'
A – n/a
MCE – 0
V – n/a

M. Outfall Construction

(a) Discharge Pipe

L - 550'
W - 4'
A – 14,410 sq ft
MCE - 550'
V – 7,500 cu yds

(b) Stream Outfall

L – 20'
W - 40'
A – 480 sq ft
MCE - 20'
V – 27 cu yds

(c) Fish Return Outfall

L - 30'
W -1.5'
A – n/a
MCE - 30'
V – .7 cu yds