



Nebraska Public Power District

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NLS2014020
February 26, 2014

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Subject: Extension Request - Response to March 12, 2012, Request for Information,
Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flooding
Hazard Reevaluation Report
Cooper Nuclear Station, Docket No. 50-298, DPR-46

References: See Page 5

Dear Sir or Madam:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) staff issued Reference 1 requesting information pursuant to Title 10 of the Code of Federal Regulations 50.54(f). Enclosure 2 of that letter contains specific Requested Information associated with Near-Term Task Force Recommendation 2.1 for Flooding. On May 11, 2012, the NRC issued Reference 2, which contained the NRC's prioritization plan and due dates for the submittal of Flooding Hazard Reevaluation (FHR) Reports for all sites. Cooper Nuclear Station (CNS) was identified as a Category 2 Site requiring the submittal of a FHR report by March 12, 2014.

In August 2013 (Reference 3), Nebraska Public Power District (NPPD) and Omaha Public Power District (OPPD) (hereinafter referred to as the licensees) stated they were jointly developing the FHRs for CNS and Fort Calhoun Station (FCS), respectively. This collaboration began in 2012 as discussed in the Enclosure and was advantageous to the licensees due to the proximity of the sites and the need to analyze a significant common flooding source, i.e., the Missouri River. The CNS and FCS FHRs will assess flood hazards due to flooding in streams and rivers, including potential site flooding due to failures of the U.S. Army Corps of Engineers (USACE) Missouri River Mainstem Reservoir System dams (USACE System). The licensees requested NRC assistance in obtaining USACE information for this effort so that they were not forced to rely on older publically available data to develop the HEC-RAS model and dam failure analyses. The licensees had previously noted that the inability to acquire the information from the USACE was impacting the schedule to complete the FHR.

In October 2013 (Reference 4), NPPD was informed that the USACE would perform the portion of the CNS FHR associated with the evaluation of potential site flooding due to USACE System dam failures and that the NRC would provide results of the USACE portion of the FHR to NPPD.

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Pursuant to the guidance provided in Reference 5, the purpose of this letter is to request an extension for submittal of the CNS FHR Report to 10 months after data from the USACE System Dam Failure Analysis is received. For extension requests, Reference 5 states the following information should be included: 1) the reason for the delay; 2) a proposed schedule for the submittal of a complete Hazard Reevaluation Report; and 3) the basis for the acceptability of the revised schedule.

Reason for the Delay

The reasons for the delay are as follows:

- In a December 2013 meeting (Reference 6), the licensees were advised that they would receive the USACE analysis results for flooding in streams and rivers from potential USACE System dam failures in April 2014. As discussed in Reference 6, the licensees provided their request for analysis results in the form of flow versus time hydrographs, flow distribution, and water surface elevation versus time hydrographs at locations on the Missouri River for scenarios identified in the Dam Failure Interim Staff Guidance (ISG) (Reference 7).
- Due to the large number of dams in the watersheds downstream of the USACE System, the licensees are using the guidance presented in the Dam Failure ISG for analysis of the watersheds contributing to the Missouri River downstream of the USACE System dams. This analysis cannot be completed until the data from the USACE System Dam Failure Analysis is received.
- Reference 1 states the licensee shall provide results of the plant evaluations describing the controlling flood mechanisms and its effects. This includes flood elevations and other effects considered in the flood protection for all flood causing mechanisms where other effects include dynamic wave effects, scouring, and debris transportation. Flood duration and the condition of the ultimate heat sink upon receding of the floodwaters must also be calculated. The USACE results from the HEC-RAS model are required to calculate this requested information.

Proposed Schedule for the Submittal of a Complete Hazard Reevaluation Report

In support of this extension request, the Enclosure provides the project schedule which incorporates the USACE performance of the dam failure analysis and assumes the receipt of data from the USACE System Dam Failure Analysis on May 1, 2014. The schedule in the Enclosure outlines the activities required to complete the FHR and supports the need to delay submittal of the CNS FHR report to 10 months after data from the USACE System Dam Failure Analysis is received.

The table in the Enclosure provides a summary of the changes in the approach, scope, and schedule that have occurred because of the licensees' inability to obtain USACE data and models for the Missouri River. The original approach to developing the FHR was to use the USACE System models. Significant changes from the original approach occurred in the July 2013 and December 2013 time frames which resulted in impacts to the schedule to complete the FHR.

Basis for the Acceptability of the Revised Schedule

This extension request is justified on the following basis:

- As recognized in Reference 1, the current regulatory approach and the resultant plant capabilities provide confidence that an accident with consequences similar to the Fukushima accident is unlikely to occur in the United States, and that continued plant operation does not pose an imminent risk to public health and safety. Therefore, the duration of this extension request has no impact on safe plant operation.
- NPPD performed walkdowns at CNS (Reference 8), which verified the current licensing basis for flooding and ensured the current licensing basis was met. In accordance with the design and licensing basis, CNS is protected from design basis floods up to 906 feet mean sea level (MSL).
- The events being analyzed in the CNS FHR are beyond the plant's design and licensing basis. Therefore, the FHR results, which are based on beyond design basis events, do not constitute a current operability concern. This is consistent with the NRC's supplemental information letter dated March 1, 2013 (Reference 5).
- The events being analyzed in the CNS FHR are very low probability events, and the time frame represented by the extension request would result in an insignificant contribution to the overall risk. Section VII of Reference 9 discusses how water level is controlled in the USACE Missouri River Reservoir System. Reference 10 discusses the current status of the reservoirs stating that "...the Missouri River mainstem reservoir levels remain below normal due to the lingering effects of the 2012 drought," and that "...the upper three reservoirs, Fort Peck in eastern Montana, Garrison in North Dakota, and Oahe in South Dakota, remain 5 to 11 feet below the desired operating levels." Reference 10 further reports:

"In addition to the normal flood control capacity of 16.3 MAF, the latest reservoir forecast indicates that an additional 6 MAF of storage capacity will be available in the carryover multiple-use zone on March 1, near the start of the runoff season. That effectively increases the total flood control capacity available by more than 35 percent."

This lower water level decreases the probability that large releases would be required during the period for which the extension is requested. Further, the hydraulic pressure on the dams is less than would be present if they were at their normal water levels.

- The Individual Plan Examination of External Events (IPEEE) for CNS (Reference 11) evaluated the effects of dam failure(s). Failures of the Fort Randall and Oahe Dams were postulated. The Fort Randall failure resulted in a peak-water surface elevation of 904 feet MSL which is below the 907'6" MSL that the plant is protected to. The Oahe Dam failure resulted in a peak-water surface elevation of 922' MSL and estimated the contribution to core damage frequency as 9.0E-09/yr. The IPEEE concluded that no further actions to reduce CNS vulnerability to the Oahe Dam failure were warranted.

Based on the above determinations, NPPD has concluded that the requested extension to the scheduled submittal date for the CNS FHR does not impact safe plant operation or represent an undue risk to public health and safety. Accordingly, NPPD requests NRC approval to extend the scheduled submittal date for the CNS FHR report to 10 months after data from the USACE System Dam Failure Analysis is received.

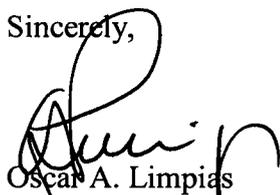
The Attachment to this letter contains the revised regulatory commitment dates for submittal of the FHR for CNS and Integrated Assessment report, if required, for CNS.

If you should you have questions, please contact David Van Der Kamp, CNS Licensing Manager, at (402) 825-2904.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 2/26/14

Sincerely,



Oscar A. Limpas
Vice President - Nuclear and
Chief Nuclear Officer

/bk

Attachment: List of Regulatory Commitments

Enclosure: OPPD and NPPD Joint Flooding Hazard Reevaluation Project

cc: Regional Administrator, w/attachment and enclosure
USNRC - Region IV

Director, w/attachment and enclosure
USNRC - Office of Nuclear Reactor Regulation

Cooper Project Manager, w/attachment and enclosure
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector, w/attachment and enclosure
USNRC - CNS

CNS Records, w/attachment and enclosure

NPG Distribution, w/attachment and enclosure

References

1. NRC Letter, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident," dated March 12, 2012, (Accession No. ML12073A348)
2. NRC Letter, "Prioritization of Response Due Dates for Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendations 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated May 11, 2012 (Accession No. ML12097A509)
3. NPPD Letter to NRC, "Request to Obtain United States Army Corps of Engineers Information Required to Provide Response to March 12, 2012, Request for Information, Enclosure 2, Recommendation 2.1, Flooding," dated August 22, 2013 (NLS2013082)
4. NRC Letter, "Cooper Nuclear Station - Request to Obtain U.S. Army Corps of Engineers Information to Support Development of Flood Hazard Reevaluation Response," dated October 7, 2013 (Accession No. ML13261A074)
5. NRC Letter, "Supplemental Information Related to Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident," dated March 1, 2013 (Accession No. ML13044A561)
6. NRC Letter, "Summary of December 17, 2013, Meeting Between Representatives of the Army Corps of Engineers, Nuclear Regulatory Commission, Omaha Public Power District, and Nebraska Public Power District to Discuss Flooding Analysis Associated with Fort Calhoun Station, Unit 1 and Cooper Nuclear Station (TAC Nos. MF3035 and MF3036)," dated February 10, 2014 (Accession No. ML14031A162)
7. JLD-ISG-2013-01, "Guidance for Assessment of Flooding Hazards Due to Dam Failure," Interim Staff Guidance, Revision 0, July 29, 2013 (Accession No. ML13151A153)
8. NPPD Letter to NRC, "Flooding Walkdown Report - Nebraska Public Power District's Response to Nuclear Regulatory Commission Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated November 27, 2012 (NLS2012124)
9. Missouri River Mainstem Reservoir System Master Water Control Manual, Reservoir Control Center U.S. Army Corps of Engineers, Northwestern Division - Missouri River Basin, Omaha, Nebraska, Revised March 2006
10. US Army Corps of Engineers, Missouri River Monthly Water Management Report, January 9, 2014, Release No. 20140109-001
11. NPPD Letter to NRC, "Individual Plant Examination for External Events (IPEEE) Report – 10 CFR 50.54(f)," dated October 30, 1996 (NLS960143)

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Nebraska Public Power District in this document. Any other actions discussed in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT/COMMITMENT NO.	TYPE (Check one)		SCHEDULED COMPLETION DATE
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Submit the Flooding Hazard Reevaluation Report to the NRC. NLS2012049-01 (Revision 1)	X		10 months after receipt of data from the USACE System Dam Failure Analysis
An Integrated Assessment report for CNS, if it is required, will be submitted. NLS2012049-03 (Revision 1)	X		Two years after submittal of the CNS Flooding Hazard Reevaluation Report (if required)
NPPD commits to use Interim Staff Guidance JLD-ISG-2012-05, <i>Guidance for Performing the Integrated Assessment for External Flooding, Revision 0</i> , as the approach for developing the NTTF 2.1 flooding Integrated Assessment Report for CNS if the reevaluated flooding hazard is not bounded by the current design basis flooding evaluation. NLS2013012-01 (Revision 1)	X		Two years after submittal of the CNS Flooding Hazard Reevaluation Report. (if required)
NPPD commits to use the guidance provided in NRC Letter, D.L. Skeen (NRC) to J.E. Pollock (NEI), <i>Trigger Conditions for Performing an Integrated Assessment and Due Date for Response</i> , regarding the trigger conditions and scope of any required Integrated Assessment. NLS2013012-02 (Revision 1)	X		Two years after submittal of the CNS Flooding Hazard Reevaluation Report (if required)

OPPD and NPPD Joint Flooding Hazard Reevaluation Project

Project Schedule

The Cooper Nuclear Station (CNS) Flooding Hazard Reevaluation (FHR) Report Project Schedule is provided at the end of this enclosure. The schedule provides details and dependencies for tasks that require the U. S. Army Corps of Engineers (USACE) hydrographs. The project schedule assumes that the hydrographs from the USACE analyses will be acquired in sufficient time (i.e. not later than May 1, 2014) such that they can be integrated into the vendor's HEC-RAS model as shown in task 22 of the schedule. Each of the major subsequent tasks (i.e., Tasks 25, 28 and 33) are dependent on receipt of the USACE analyses. The schedule shows that these activities will require 10 months from receipt of the USACE System Dam Failure Analysis to complete.

History

The project was initiated in June 2012 with the issuance of contracts to a single vendor by OPPD and NPPD for the development of the FHR Reports for FCS and CNS. The original schedule required to meet the March 12, 2014 submittal date had a completion date of December 2013 - January 2014 and required receipt of USACE HEC-RAS model by September 2012. The following table summarizes key events that resulted in project approach, scope and schedule changes.

Date	Event	Impact on Project Completion Date
June 2012	Request to USACE to provide HEC-RAS, HEC-HMS and other data related to the Missouri River Mainstem Reservoir System dams and the Missouri River Basin.	
August 2012	HEC-HMS and some data provided by USACE.	
September 2012	Second request sent to USACE enumerating reasons models and data requested in June 2012 are needed.	
November 2012	Vendor developed compressed schedule showing HEC-RAS model must be obtained from the USACE by end of 2012 to meet 2014 submittal date.	
December 2012	Licensees request vendor to develop method and schedule to proceed without USACE HEC-RAS model.	Completion date indeterminate because new input data needed from USACE.
December 2012	Regulatory HEC-RAS files and LiDAR data to develop HEC-RAS model from Gavins Point to Rulo, NE are obtained.	
January 2013	Vendor authorized to develop of unsteady state HEC-RAS model from Gavins Point to Rulo, NE.	
January 2013	Meeting with USACE requesting data needed to perform PMF including dam breaks using vendor developed unsteady state HEC-RAS model.	
March 2013	Formally requested data from USACE to perform PMF using vendor developed unsteady state HEC-RAS model.	Schedule assuming USACE data received by July 2013 showed FCS submittal in May 2014 and CNS October 2014.

Date	Event	Impact on Project Completion Date
April 2013	Dam Failure ISG Draft for Public Comment available. Draft ISG stated that the NRC would act as an interface between licensees and federal agencies owning/operating dams. Not all comments and questions related to this interface process were resolved, as the NRC stated that the Memoranda of Agreement between government agencies was still under development.	
May 2013	USACE response to March 2013 request indicating data would not be provided.	
May 2013	Licensees direct vendor to develop scope and schedule for development of FHR Report using publically available data without any USACE data.	
July 2013	Dam Failure ISG published, providing official guidance regarding dam failure analyses.	
July 2013	Licensees and vendor agree to scope to complete FHR using publically available data and to perform dam failure analyses in accordance with the recently-published Dam Failure ISG.	
August 2013	Vendor develops schedule for agreed to scope.	FCS and CNS FHR Reports to be completed February 2015.
August 2013	NPPD sends letter (NLS2013082) to NRC stating: "Because of the uncertainty of the schedule for the completion of the USACE model and the uncertainty that the USACE will make this model available to the licensees upon completion, we must proceed with the development of a similar model." The letter also noted that the scope increase had impacted the schedule for the FHR.	
September 2013	Contract scope change for development of FHR Report using publically available data	
September/ October 2013	NRC notifies OPPD & NPPD that USACE will be performing dam failure analysis consistent with Dam Failure ISG	
October 2013	Contract scope change for FHR Report with USACE providing results from their dam failure analyses.	Schedule developed for Scope Change considered a March 2014 receipt of USACE analysis, and CNS and FCS FHR Reports to be completed February 2015.
December 2013	Licensees told that the NRC will provide USACE System dam failure analysis in April 2014.	

ID	Task Name	Duration	Start	Finish	2013												2014												2015								
					S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M		
1	COOPER FLOODING HAZARD REVIEW REPORT	659 days	Sat 9/1/12	Thu 3/12/15	[Gantt bar spanning from Sat 9/1/12 to Thu 3/12/15]																																
2	COOPER LIP	130 days	Sat 9/1/12	Thu 2/28/13	[Gantt bar spanning from Sat 9/1/12 to Thu 2/28/13]																																
3	COOPER MISSOURI RIVER PMF and GEOMORPHIC ANALYSES EXCLUSIVE OF DAM FAILURES	453 days	Tue 10/9/12	Thu 7/3/14	[Gantt bar spanning from Tue 10/9/12 to Thu 7/3/14]																																
4	PMF Flood Water Surface Analysis using HEC-RAS Steady Flow Model	164 days	Tue 6/11/13	Fri 1/24/14	[Gantt bar spanning from Tue 6/11/13 to Fri 1/24/14]																																
5	Probable Maximum Precipitation Analysis	273 days	Tue 10/9/12	Thu 10/24/13	[Gantt bar spanning from Tue 10/9/12 to Thu 10/24/13]																																
6	Probable Maximum Flood (PMF) Analysis Using HEC-HMS	218 days	Wed 5/1/13	Fri 2/28/14	[Gantt bar spanning from Wed 5/1/13 to Fri 2/28/14]																																
7	PMF Flood Routing Analysis using HEC-RAS Unsteady Flow Model	151 days	Fri 8/9/13	Fri 3/7/14	[Gantt bar spanning from Fri 8/9/13 to Fri 3/7/14]																																
8	PMF Water Surface and Site-Specific Erosion-Sedimentation-Debris Analysis using TUFLOW 2D Hydraulic Model	139 days	Tue 9/3/13	Fri 3/14/14	[Gantt bar spanning from Tue 9/3/13 to Fri 3/14/14]																																
9	Model Development, Calibration, Validation, and Execution	54 days	Tue 9/3/13	Fri 11/15/13	[Gantt bar spanning from Tue 9/3/13 to Fri 11/15/13]																																
10	Evaluate Site Specific erosion/sedimentation/debris for PMF hazard (Detailed Hydraulic Analysis)	26 days	Mon 11/18/13	Mon 12/23/13	[Gantt bar spanning from Mon 11/18/13 to Mon 12/23/13]																																
11	Report Preparation, QA Review, Client Review and Approval	59 days	Tue 12/24/13	Fri 3/14/14	[Gantt bar spanning from Tue 12/24/13 to Fri 3/14/14]																																
12	PMF Wind-wave Run-up and Hydrostatic and Hydrodynamic Forces Analysis	52 days	Mon 2/17/14	Tue 4/29/14	[Gantt bar spanning from Mon 2/17/14 to Tue 4/29/14]																																
13	Evaluate wind setup and wind-wave run-up for PMF hazard, for each CNS safety-related SSC, utilizing guidance from the Coastal Engineering Manual (CEM)	6 days	Mon 2/17/14	Mon 2/24/14	[Gantt bar spanning from Mon 2/17/14 to Mon 2/24/14]																																
14	Evaluate hydrostatic and hydrodynamic forces for the PMF hazard on each CNS safety related SSC utilizing guidance from the CEM	10 days	Tue 2/25/14	Mon 3/10/14	[Gantt bar spanning from Tue 2/25/14 to Mon 3/10/14]																																
15	Report Preparation, QA Review, Client Review and Approval	36 days	Tue 3/11/14	Tue 4/29/14	[Gantt bar spanning from Tue 3/11/14 to Tue 4/29/14]																																
16	Calculation Overall Report	48 days	Tue 4/29/14	Thu 7/3/14	[Gantt bar spanning from Tue 4/29/14 to Thu 7/3/14]																																
17	COOPER MISSOURI RIVER DAM FAILURE ANALYSIS	349 days	Mon 7/15/13	Thu 11/13/14	[Gantt bar spanning from Mon 7/15/13 to Thu 11/13/14]																																
18	Dam Failure Consequences for Non-System Missouri River Basin Dams	271 days	Mon 7/15/13	Mon 7/28/14	[Gantt bar spanning from Mon 7/15/13 to Mon 7/28/14]																																
19	Dam Inventory/Screening	141 days	Mon 7/15/13	Mon 1/27/14	[Gantt bar spanning from Mon 7/15/13 to Mon 1/27/14]																																
20	Apply the ISG's Simplified Modeling Approach Method 4 – Hydrologic Model Method:	76 days	Mon 1/27/14	Mon 5/12/14	[Gantt bar spanning from Mon 1/27/14 to Mon 5/12/14]																																
21	Develop non-critical dam failure hydrographs at the mouths of the tributaries using existing HEC-HMS Model and route to CNS using existing HEC-RAS Unsteady Model	17 days	Mon 1/27/14	Tue 2/18/14	[Gantt bar spanning from Mon 1/27/14 to Tue 2/18/14]																																
22	Acquire USACE System Dam Failure Hydrographs	0 days	Thu 5/1/14	Thu 5/1/14	[Gantt bar spanning from Thu 5/1/14 to Thu 5/1/14]																																
23	Route the USACE dam failure hydrograph and the non-critical dam failure hydrographs using HDR HEC-RAS Unsteady Model	8 days	Thu 5/1/14	Mon 5/12/14	[Gantt bar spanning from Thu 5/1/14 to Mon 5/12/14]																																
24	Report Preparation, QA Review, Client Review and Approval	55 days	Tue 5/13/14	Mon 7/28/14	[Gantt bar spanning from Tue 5/13/14 to Mon 7/28/14]																																
25	Evaluate Cooper Erosion-Sedimentation-Debris Effects for the Dam Failure Flood Analysis	39 days	Thu 7/10/14	Tue 9/2/14	[Gantt bar spanning from Thu 7/10/14 to Tue 9/2/14]																																
26	Determine Site Specific erosion/sedimentation/debris impacts for the dam failure flood hazard using 1 D Unsteady HEC-RAS results	6 days	Thu 7/10/14	Thu 7/17/14	[Gantt bar spanning from Thu 7/10/14 to Thu 7/17/14]																																
27	Report Preparation, QA Review, Client Review and Approval	34 days	Thu 7/17/14	Tue 9/2/14	[Gantt bar spanning from Thu 7/17/14 to Tue 9/2/14]																																
28	Evaluate Wind setup and Wind-wave Run-up, and Hydrostatic and Hydrodynamic Forces on Safety-Related SSCs for Dam Failure Flood Hazard	48 days	Thu 7/3/14	Mon 9/8/14	[Gantt bar spanning from Thu 7/3/14 to Mon 9/8/14]																																
29	Evaluate wind setup and wind-wave run-up for Dam Failure Flood hazard, for each CNS safety-related SSC, utilizing guidance from the Coastal Engineering Manual (CEM)	7 days	Thu 7/3/14	Fri 7/11/14	[Gantt bar spanning from Thu 7/3/14 to Fri 7/11/14]																																
30	Evaluate hydrostatic and hydrodynamic forces related to dam failure flood hazard on CNS safety related structures	5 days	Mon 7/14/14	Fri 7/18/14	[Gantt bar spanning from Mon 7/14/14 to Fri 7/18/14]																																
31	Report Preparation, QA Review, Client Review and Approval	36 days	Mon 7/21/14	Mon 9/8/14	[Gantt bar spanning from Mon 7/21/14 to Mon 9/8/14]																																
32	Calculation Overall Report	48 days	Tue 9/9/14	Thu 11/13/14	[Gantt bar spanning from Tue 9/9/14 to Thu 11/13/14]																																
33	COOPER MISSOURI RIVER CHANNEL GEOMORPHIC (CHANNEL MIGRATION) ASSESSMENT	69 days	Thu 5/1/14	Tue 8/5/14	[Gantt bar spanning from Thu 5/1/14 to Tue 8/5/14]																																
34	Determine potential geomorphic changes to Cooper site under dominate flood hazard conditions	13 days	Thu 5/1/14	Mon 5/19/14	[Gantt bar spanning from Thu 5/1/14 to Mon 5/19/14]																																
35	Determine potential geomorphic changes impacts to CNS safety-related SSCs	21 days	Tue 5/20/14	Tue 6/17/14	[Gantt bar spanning from Tue 5/20/14 to Tue 6/17/14]																																
36	Report Preparation, QA Review, Client Review and Approval	35 days	Wed 6/18/14	Tue 8/5/14	[Gantt bar spanning from Wed 6/18/14 to Tue 8/5/14]																																
37	FLOODING HAZARD REEVALUATION REPORT	85 days	Fri 10/17/14	Thu 2/12/15	[Gantt bar spanning from Fri 10/17/14 to Thu 2/12/15]																																
38	Vendor Preparation	52 days	Fri 10/17/14	Mon 12/29/14	[Gantt bar spanning from Fri 10/17/14 to Mon 12/29/14]																																
39	Vendor Review and Approval	11 days	Tue 12/30/14	Tue 1/13/15	[Gantt bar spanning from Tue 12/30/14 to Tue 1/13/15]																																
40	Licensee technical review and comment resolution	12 days	Wed 1/14/15	Thu 1/29/15	[Gantt bar spanning from Wed 1/14/15 to Thu 1/29/15]																																
41	Licensee Owner Acceptance	10 days	Fri 1/30/15	Thu 2/12/15	[Gantt bar spanning from Fri 1/30/15 to Thu 2/12/15]																																
42	Licensee NRC submittal review	20 days	Fri 2/13/15	Thu 3/12/15	[Gantt bar spanning from Fri 2/13/15 to Thu 3/12/15]																																
43	NRC Submittal	0 days	Thu 3/12/15	Thu 3/12/15	[Gantt bar spanning from Thu 3/12/15 to Thu 3/12/15]																																