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MD2835 To: 319-851-7364 From: 301-415-1222

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Please contact if items are not clear.

1. RAI (1.1) Update Information Relative to SRP 14.2.1

By application dated February 27. 2004, as supplemented by letters dated August 9, 2004 and January 7, 2005, the Nuclear Management Company, LLC (NMC) requested an amendment for the Duane Arnold Energy Center (DAEC) that would remove license condition 2.C.(2)(b). Due to the nature of plant modifications for the DAEC extended power uprate (EPU) project, the NMC letter dated January 7, 2005, requested that the NRC issue separate license amendments, one for each of the two large transient tests (LTTs) associated with the license condition. On March 17, 2005, the NRC issued Amendment No. 257 for the DAEC that modified license condition 2.C.(2)(b) to remove the requirement to perform the main steam isolation valve closure (MSIVC) test.

To address the NMC request for the removal of the remaining license condition that would require the performance of a generator load rejection test at 15 percent above the pre-EPU power level of 1658 MWt (i.e., 1906 MWt), the staff requests additional information to complete a safety evaluation

Standard Review Plan (SRP) 14.2.1, "Generic Guidelines for Extended Power Uprate Testing Program," provides general guidelines for reviewing proposed EPU power ascension testing programs. This review provides assurance that the proposed testing programs adequately demonstrates that plant structures, systems, and components (SSCs) important to safety that are affected by the proposed power uprate will perform satisfactorily in service at the proposed uprated power level.

The staff requests the following supplemental information, as necessary, to fully update the letters dated August 9, and January 7:

(a.) Update the discussion of the comparison of the proposed EPU test program to the initial plant test program.

(b.) Update the discussion of the modifications performed to achieve the EPU and the power ascension test considerations for plant modifications.

(c.) Update the discussion on the justification for eliminating EPU power ascension test. The discussion would include:

(i.) Relative power uprate operating experience;

(ii.) Introduction of new thermal-hydraulic phenomena or identified system interactions;

THIS TEXT IS RAI SUBMITTAL PROVIDED FROM EQVA (PRESCOTT) ON 1/9/07 TO LPL3-1 VIA MEMORANDUM AND SENT AS DRAFT FOR CLARIFICATION REVIEW TO DAEC ON 1/17/07 TO FAX 319-851-7364 BY KARL FEINTUCH, PM Karl Feintuch

(iii.) Facility conformance to limitations associated with computer modeling and analytical methods;

(iv.) Plant operator familiarization with facility operation and trial use of operating and emergency operating procedures;

(v.) Reductions in the margin of safety;

(vi.) Guidance contained in vendor topical reports; and

(vii.) Risk implications.

(d.) Update the discussion related to evaluation of the adequacy of proposed testing plans.

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waiting for another insert

(END OF FAX TO DAEC)

RECORD OF PHONE CONVERSATION PERTAINING TO SECOND RAI INPUT:
ON 1/24/07 RAI SUBMITTAL FROM SBWB (BUDZYNSKI) CONTAINED IN MEMORANDUM TO LPL3-1 DATED 1/22/07 (3 RAI ITEMS IN A WORD TABLE) WERE READ TO DAEC (BROWNING) FOR CLARIFICATION. BROWNING PROVIDED ADAMS REFERENCES FOR WATCH PLANT DOCUMENTS USED IN PREPARING APPLICATION:

LER-2000-004-00 (DATED 8/4/2000) ML003727090
LER-2001-002-00 (DATED 5/21/2001) ML011490225

WORD TABLE FOLLOWS ON PAGE 3 - (IT WAS FAXED WITH PAGE 4)
PAGE 4 IS A CLARIFICATION OF RAI NUMBER 2.0 with the following added parameters:

- Number of Fuel Assemblies
- Steam Line Length, ft.

MD 2835 DRAFT From SBWB

REQUESTS FOR ADDITIONAL INFORMATION (RAIs)
DAEC LICENSE AMENDMENT REQUEST (LAR) – REMOVE CONDITION FOR MAIN GENERATOR LOAD REJECT TEST- 2.C.(2)(b)

RAI Number	Reviewer	Question Summary	Full Text
1.0	Budzynski, J	Main Generator Load Reject at Hatch Units at EPU conditions	The Hatch generator load reject events, at EPU conditions, have been referenced several times in your justification for relief of performing the LTT. Please provide the event data for these two events including the post-scram event evaluation and the applicable transient analysis for comparison of the actual plant response to the analytical results.
2.0	Budzynski, J	Comparison data between DAEC and Hatch	In several of your documents for justification for removal of the generator load reject test from EPU testing, DAEC has been compared as similar to Hatch in several respects including MARK I containment. Please provide additional plant comparison data of both DAEC and Hatch including at least the following: rated thermal power (MWT), power density (MW/assembly), SRV capacity (% of steam flow), turbine bypass capacity (% of steam flow), turbine closure time (sec), main steam valve closure time (sec), scram insertion time (sec), and turbine control valve stroke (full or partial).
3.0	Budzynski, J	Generator load reject initial startup test results and other GLR events at DAEC	Please provide the generator load reject test results from the initial plant startup test program. Also, please provide the event data for each generator load reject event experienced at DAEC during the life of the plant.

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To: 319-851-7364 From 301.415-1222 page 4
1/25/07 MD2835 SBWB RAI ITEMS (DRAFT)
CLARIFICATION OF ITEM 2.0 REQUESTED INFORMATION

RATED THERMAL POWER, MWt	x	y	
Parameter	**DAEC**	**Ref plant name**	**Comment** (Typical/shown)
Power Density, MW/assembly	x	y	Equivalent
Number of Fuel Assemblies	x	y	DAEC has n % less fuel and correspondingly lower steam flow than ref plt
Steam Line Length, ft.	x	y	DAEC has n% smaller length, though the stem flow is correspondingly less than ref plt
Safety and Relief Capacity, % of Steam	x	y	Equivalent
Bypass capacity, % of Steam	x	y	DAEC has n% greater capacity resulting in milder pressure rise following a turbine/generator trip.
Turbine Valve Closure Time, sec.	<= x	<= y	Equivalent
Main Steam Valve Closure Time, sec.	<= x	<= y	Equivalent
SCRAM Insertion Time, sec.	<= x	<= y	Equivalent
Turbine Valve STROKE (full or partial)	x	y	

F41 - pages 1 and 2 are the fax pages sent earlier as 2006-01-17-1437 pages 3 and 4 were sent 1/25/07