



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

July 17, 2018

Mr. G. T. Powell
Interim President, Chief Executive Officer
and Chief Nuclear Officer
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION -
NOTIFICATION OF NRC TRIENNIAL HEAT SINK PERFORMANCE
INSPECTION (05000498/2018003 AND 05000499/2018003) AND REQUEST
FOR INFORMATION

Dear Mr. Powell:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) staff will conduct a triennial heat sink performance inspection at your South Texas Project Electric Generating Station from September 10 – 14, 2018. The inspection will consist of two reactor inspectors from the NRC's Region IV office for one week. The inspection will be conducted in accordance with NRC Inspection Procedure 71111, Attachment 07, "Heat Sink Performance."

Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. Please note that the documents are requested to be provided by September 3, 2018. Also, appropriate personnel knowledgeable of heat exchangers should be available to support the inspectors at the site during the inspection.

We have discussed the schedule for this inspection activity with your staff and understand that our regulatory contact for this inspection will be Robyn Savage of your licensing organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Chris Smith, by telephone at 817-200-1095 or by e-mail at Chris.Smith@nrc.gov.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRC's "Agency Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS).

G. Powell

2

ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Thomas R. Farnholtz, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos.: 50-498 and 50-499
License Nos.: NPF-76 and NPF-80

Enclosure:
Triennial Heat Sink Performance Inspection Request for Information

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION - NOTIFICATION OF NRC
 TRIENNIAL HEAT SINK PERFORMANCE INSPECTION (05000498/2018003 AND
 05000499/2018003) AND REQUEST FOR INFORMATION – DATED JULY 17, 2018

DISTRIBUTION:

KKennedy, RA
 SMorris, DRA
 AVegel, DRP
 MShaffer, DRS
 RLantz, DRP
 JClark, DRS
 DCylkowski, RC
 NTaylor, DRP
 DProulx, DRP
 JMelfi, DRP
 ECombs, DRP
 FSanchez, DRP
 JChoate, DRP
 LReyna, DRP
 JBowen, RIV/OEDO
 VDricks, ORA
 JWeil, OCA
 LRegner, NRR
 AMoreno, RIV/CAO
 BMaier, RSLO
 GGeorge, IPAT
 EUribe, IPAT
 MHerrera, DRMA
 R4Enforcement

Electronic Distribution for the South Texas Project Electric Generating Station

ADAMS ACCESSION NUMBER: ML18197A417

X SUNSI Review

ADAMS:

Non-Publicly Available

X Non-Sensitive

Keyword:

By:

X Yes No

X Publicly Available

Sensitive

OFFICE	RI:EB1	RI:EB1	C:EB1			
NAME	CSmith	JBraisted	TFarnholtz			
SIGNATURE	/RA by Email/	/RA/	/RA/			
DATE	07/17/18	07/17/18	07/17/18			

OFFICIAL RECORD COPY

**Request for Information
Triennial Heat Sink Performance Inspection
South Texas Project Electric Generating Station**

Inspection Report: 05000498/2018003; 05000499/2018003

Inspection Dates: September 10 – 14, 2018

Inspection Procedure: IP 71111.07, Heat Sink Performance, Triennial Review

Inspectors: Chris Smith, Reactor Inspector, Lead
Jonathan Braisted, Reactor Inspector

Information Requested for the In-Office Preparation Week

The following information should be made available to the lead inspector, Chris Smith, by September 3, 2018. Please note that additional information may be requested during the onsite portion of the inspection. It is preferable to have the information provided in electronic format, although the information may also be sent to the Region IV office in hard copy to the attention of the lead inspector. Also, we request that you categorize the documents in your response with the numbered list below. If any requested documents are large and only hard copy formats are available, please inform the inspector, and provide the documentation during the first day of the onsite inspection. Additionally, requested documents such as corrective action program documents are to be for the time period from the current onsite inspection back to the previous triennial heat sink performance inspection. Requested documents such as surveillances, maintenance tasks, or thermal performance tests are to be the last three performances of those activities. If the requested documentation does not apply to the sample selection for this inspection, no response is necessary. If the information requested above will not be available or if there are questions regarding this information request, please contact the lead inspector as soon as possible.

The following heat exchangers/heat sinks have been selected for inspection:

- Spent Fuel Pool Heat Exchanger 1A (3R211NHX101A)
- Reactor Containment Fan 11B Cooler Cooling Coil (2V141VHX003)
- Electrical Auxiliary Building Main Air Handling Unit Cooling Coil (3V112VHX010B)
- Ultimate Heat Sink

I. For the selected heat exchangers that are directly cooled by the service water system, as applicable:

1. Method and results of heat exchanger performance testing (last 3 results)
2. Method and results of heat exchanger inspection and cleaning (last 3 results)
3. Procedures for heat exchanger operation
4. Relevant updated final safety analysis report and technical specification pages
5. Relevant heat transfer calculations

Enclosure

6. Tube plugging maps, tube plugging criteria, and allowable tube plugging
7. Evaluations of water hammer in susceptible heat exchangers
8. Results from periodic flow testing or flow balancing (last 3 results)
9. Eddy current test reports and visual inspection records (last 3 results)
10. List (with descriptions) of corrective action program documents (last 3 years)
11. Heat exchanger data sheets, program manual, and design basis documents
12. Actions or commitments to NRC Generic Letter 89-13

II. For the selected heat exchangers that are directly cooled by a closed loop cooling water system, as applicable:

1. Procedures for heat exchanger operation
2. Relevant updated final safety analysis report and technical specification pages
3. Relevant heat transfer calculations
4. Evaluations of water hammer in susceptible heat exchangers
5. Chemical treatment program for corrosion control
6. Results from periodic flow testing or flow balancing (last 3 results)
7. Tube plugging maps, tube plugging criteria, and allowable tube plugging
8. Eddy current test reports and visual inspection records (last 3 results)
9. List (with descriptions) of corrective action program documents (last 3 years)
10. Heat exchanger data sheets and design basis documents
11. Actions or commitments to NRC Generic Letter 89-13

III. For the selected heat sink samples, as applicable:

1. Results of inspections for seepage, settlement, rip rap protection, movement, sediment intrusion, etc. (last 3 results)
2. Third party dam inspections (last 3 results)
3. Calculation(s) of sufficient reservoir capacity
4. List (with descriptions) of corrective action program documents (last 3 years)

Service water system (SWS) and UHS:

1. List (with descriptions) of design changes involving the SWS and the UHS (last 3 years)
2. Procedures for a loss of SWS or UHS
3. Relevant updated final safety analysis report and technical specification pages
4. Methods and results of macrofouling treatment and control (last 3 results)
5. Methods and results of biocide treatment and control (last 3 results)
6. Methods and results of chemistry monitoring (last 3 results)
7. Evaluation(s) of strong-pump weak-pump interaction in susceptible system designs
8. Results from periodic flow testing or flow balancing (last 3 results)
9. Design basis leakage rate assumptions
10. Results of monitoring of safety- to nonsafety-related portions (i.e., leakage of interface valves) of the SWS (last 3 results)
11. List (with descriptions) of corrective action program documents, including thru-wall pipe leaks (last 3 years)
12. Results of ultrasonic tests and visual inspections of SWS piping (last 3 results)
13. Results of buried or inaccessible pipe testing, inspection, or monitoring program (last 3 results)
14. For closed cooling water systems, trend data from make-up systems (last 3 results)
15. Results from program used to detect protective coating failure, corrosion, and erosion (last 3 results)
16. Results of safety-related traveling screen and strainer performance tests (last 3 results)
17. Results of service water pump bay silt accumulation monitoring (last 3 results)
18. Results of service water pump bay level instrumentation calibrations (last 3 results)
19. Design basis documents
20. Actions or commitments to NRC Generic Letter 89-13

Inspector Contact Information:

Mailing Address:
U.S. NRC, Region IV
Attn: Chris Smith
1600 East Lamar Blvd.
Arlington, TX 76011-4511

Chris Smith, Lead
Reactor Inspector
817-200-1095
Chris.Smith@nrc.gov

Jonathan Braisted
Reactor Inspector
817-200-1194
Jonathan.Braisted@nrc.gov