



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 E. LAMAR BLVD.  
ARLINGTON, TX 76011-4511

June 16, 2017

Mr. Michael R. Chisum, Vice President  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70057-0751

**SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 – NOTIFICATION OF  
INSPECTION (NRC INTEGRATED INSPECTION REPORT 05000382/2017003)  
AND REQUEST FOR INFORMATION**

Dear Mr. Chisum:

From July 24 through July 28, 2017, inspectors from the Nuclear Regulatory Commission's (NRC) Region IV office will perform the baseline biennial requalification inspection at Waterford Steam Electric Station, Unit 3, using NRC Inspection Procedure 71111.11B, "Licensed Operator Requalification Program." Experience has shown that this inspection is a resource intensive inspection both for the NRC inspectors and your staff. In order to minimize the impact to your on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into three groups. The first group (Section A of the enclosure) identifies information to be provided prior to the inspection to ensure that the inspectors are adequately prepared. The second group (Section B of the enclosure) identifies the information the inspectors will need upon arrival at the site. The third group (Section C of the enclosure) identifies the items which are necessary to close out the inspection and are usually sent a few weeks after the team has left the site. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the on-site portions of the inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Mr. R. Simpson, Training Manager. Our inspection dates are subject to change based on your updated schedule of examination activities. If there are any questions about this inspection or the material requested, please contact Clyde Osterholtz, lead inspector, at 817-200-1269 or [Clyde.Osterholtz@nrc.gov](mailto:Clyde.Osterholtz@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 3150-0018. 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.

M. Chisum

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In accordance with 10 CFR 2.390 of the NRC's "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 the NRC's Agencywide Documents Access and Management System (ADAMS). 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 Farina Acting for/***

Vincent G. Gaddy, Chief  
Operations Branch  
Division of Reactor Safety

Docket No. 50-382  
License No. NPF-38

Enclosure:  
Biennial Requalification Inspection Document  
Request

Electronic Distribution for Waterford Steam  
Electric Station

## BIENNIAL REQUALIFICATION INSPECTION DOCUMENT REQUEST

TO: Rob Simpson  
Training Manager  
504-739-6042

FROM: Clyde Osterholtz  
Senior Operations Engineer, NRC RIV  
817-200-1269

SUBJECT: INFORMATION REQUEST TO SUPPORT JULY 24, 2017 TO JULY 28, 2017,  
LICENSED OPERATOR REQUALIFICATION PROGRAM INSPECTION  
(IP 71111.11B)

**A. The following information is requested in order to support inspection preparation activities. These items are listed by section as they appear in the inspection module (i.e., 2.02, 2.04, etc.). Requested materials should be sent either electronically or hardcopy in order to arrive at the Region IV office no later than July 14, 2017.**

- Electronically To: [Clyde.Osterholtz@nrc.gov](mailto:Clyde.Osterholtz@nrc.gov)  
cc: [Kelly.Clayton@nrc.gov](mailto:Kelly.Clayton@nrc.gov)  
[Brian.Larson@nrc.gov](mailto:Brian.Larson@nrc.gov)
- Hardcopy to: U.S. Nuclear Regulatory Commission, Region IV  
1600 E. Lamar Blvd  
Arlington, TX 76011  
ATTN: Clyde Osterholtz

### **General Requests:**

- Index of the materials provided in response to this request
- List of licensed operators (LO) (senior reactor operators (SRO) and reactor operators (RO)) by crew (operating and staff)
- Training and operations department organization charts (with qualified licensed operator requalification (LOR) evaluators identified)
- Procedures that identify process for revising and maintaining LO continuing training program up to date
- List of outstanding LOR program changes
- List of plant events and industry operating experience incorporated into LOR program since last BRQ (biennial requalification)
- Audits and/or self-assessment reports addressing the licensed operator requalification training program
- Last two years of Simulator Review Committee (or equivalent) meeting minutes
- Last two years of Curriculum Review Committee (or equivalent) meeting minutes

Enclosure

02.03: Biennial Requalification Written Examination Quality

- Current and approved biennial written examination schedule
- Current requalification cycle written examination results for both SRO and RO that have already been administered up to the week prior to the inspection team arrival on-site, if any
- All written examinations that have been approved for administration up to and including the week before the inspection team is on-site, if any (These documents will need to have adequate password protection if e-mailed or double envelope protection if mailed via regular mail per NUREG-1021.)
- Current requalification cycle examination methodology (sample plan)

02.04: Annual Requalification Operating Test Quality

- Schedule for the operating tests (job performance measures (JPMs) and scenarios) to be given the week of July 24, 2017
- Operating tests (JPMs and scenarios) (password protected and provide separately via telephone at later date) to be given the week of July 24, 2017
- Current requalification cycle operating tests (SRO and RO) and results up to the week prior to the inspection team arrival on-site
- All of the previous year's NRC required annual operating tests
- Current requalification cycle operating test methodology (sample plan)
- All portions of the updated final safety analysis report that identify operator response times for time critical operator actions

02.05: Licensee Admin of Requalification Exams

- All procedures used to administer the annual operating test
- All procedures used to assess operator performance
- All procedures that describe conduct of simulator training
- All procedures used to test, operate, and maintain the simulator
- Index for referencing the above procedures

02.06: Requalification Examination Security

- Submit any tracking tools that you use as a means to prevent excessive overlap on the written examinations and also meet the intent of sampling all required topics on a periodic basis
- Submit any tracking tools that you use as a means to prevent excessive overlap on the operating tests and also meet the intent of sampling all required malfunctions (including major events, instrument/component malfunctions, technical support calls, etc.) on a periodic basis
- All procedures that describe examination security, including procedures used to develop the examinations that include guidelines on overlap between examinations in current examination cycle tests and prior year examinations
- List of all condition reports since the last biennial requalification inspection related to examination security and overlap

02.07: Licensee Remedial Training Program

- List of remedial training conducted or planned since last requalification examinations (includes training provided to operators to enable passing requalification examinations and training provided to correct generic or individual weaknesses observed during previous requalification examination cycle)
- Remediation plans (lesson plans, reference materials, and attendance documentation)

02.08: Conformance with Operator License Conditions

- All procedures and program documentation for maintaining active operator licenses, tracking training attendance, and ensuring medical fitness of licensed operators
- All procedures and associated documentation that supports reactivation of any SRO/RO license (operating or staff crew) since the last biennial inspection
- List of licensed operators whose licenses were reactivated since the last BRQ inspection

02.09: Simulator Performance

- For the following cases, send the most recent transient test packages, which may be electronic or in paper single test packages and shall be complete with test procedures for each test, the acceptance criteria, and results. For each transient test, the reference chart should be included or an equivalent subject matter expert review versus the simulator results with a write-up for any differences beyond the American National Standards Institute (ANSI) 3.5 standard requirements. Based on the input that the licensee implements simulator testing standards per ANSI/ANS-3.5-2009, provide this information for the following Transient and Steady State tests:
  - Transient test 3, Simultaneous closure of all main steam isolation valves
  - Transient test 10, Slow primary system depressurization to saturated condition with pressurizer relief or safety valve stuck open (inhibit activation of high pressure emergency core cooling system)
  - Steady State tests for low power test
- All simulator management and configuration procedures if not already provided for Section 02.05 above
- Simulator Discrepancy Report (DR) **summary** list for all open DRs and for closed DRs, **summary** list for those items closed between July 27, 2015, and July 24, 2017
- Malfunction tests for loss of normal feedwater or normal feedwater system failure and loss of shutdown cooling (If these are in a scenario based training package, then the review of that package would be acceptable.)
- Primary parameters tested in order to verify core physics parameters - critical boron concentration and Moderator Temperature Coefficient (MTC) and the applicable reference graphs from the Plant physics data book (electronic or other means as available) should also be included as well as the test procedures used and the acceptance criteria with results)

- A list of simulator modification packages (completed or planned) between July 27, 2015, and July 24, 2017

02.10: Problem Identification and Resolution

- Summary report of all condition reports related to operator actions/errors in the control room
- Any revised requalification training that was based on licensed operator performance issues

**B. The following information is requested in order to support the on-site inspection activities. Requested materials should be available to the inspection team, either electronically or hardcopy, upon site arrival on July 24, 2017.**

02.02: Exam Results / 02.03 and 02.04: Written Exam and Op Test Quality

- All approved Operating Tests (JPMs and scenarios) not previously submitted
- All results up to the day the team leaves the site

02.08: Conformance with Operator License Conditions

- Access to licensed operators' records (operating and staff crews)
- Access to licensed operators' training attendance records
- Access to licensed operators' medical records

02.09: Simulator Performance

- Simulator discrepancies (DRs) from July 27, 2015, to July 24, 2017. This should include all open DR examinations and DRs that have been closed, including the documentation/justification for closure
- Acceptance test documentation, including hardware and software model revisions at the time of acceptance (as available)
- Documentation that validates current models, including the thermal-hydraulics and neutronics models, to the actual plant
- All current model deficiencies, including FSAR vs. Design differences in the simulator (any documentation on this)
- Summary list of modifications from July 27, 2015, to July 24, 2017
- Plant modifications (both hardware and software) completed on the simulator by due date from July 27, 2015, to July 24, 2017
- Simulator Differences lesson plan used in training (current to July 24, 2017)
- The complete book of all simulator annual performance test packages (usually in a single book, but may be electronic or in single test packages), complete with all transient tests, steady state tests, and malfunction tests (This should also include the test procedures for each test, the acceptance criteria, and results. For each transient test, the reference chart should be included or an equivalent subject matter expert review versus the simulator results with a write-up for any differences beyond the ANSI 3.5 standard requirements.)

- All test packages used to verify core physics parameters (such as MTC, IRW) (The applicable reference graphs from the plant physics data book (electronic or other means as available) should also be included as well as the test procedures used and the acceptance criteria with results.)
- All simulator test, configuration management, and related documents available in the room for inspectors to review (This includes training needs analysis packages, simulator review committee meeting minutes, etc.)
- Current copy of ANSI 3.5 Standard you are committed to for simulator testing

02.10: Problem Identification and Resolution

- All condition reports related to operator actions/errors in the control room

**C. Waterford Steam Electric Station is required to send the final results summary and any remaining examinations and operating tests that have not been reviewed to the NRC regional office lead inspectors for final review and comparison against the Significance Determination Tools in order to communicate the exit results for the inspection.**

M. Chisum

WATERFORD STEAM ELECTRIC STATION, UNIT 3 – NOTIFICATION OF INSPECTION  
(NRC INTEGRATED INSPECTION REPORT 05000382/2017003) AND REQUEST FOR  
INFORMATION – JUNE 16, 2017

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SUNSI Review      ADAMS:       Non-Publicly Available       Non-Sensitive      Keyword:  
By: VGG       Yes     No       Publicly Available       Sensitive      NRC-002

OFFICE	SOE:OB	C:OB				
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