



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

June 3, 2011

EA-11-012  
EA-11-059

Mr. R. M. Krich  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street, LP 3R-C  
Chattanooga, TN 37402-2801

SUBJECT: RESPONSE TO DISPUTED NOTICE OF VIOLATION (EA-11-012)

Dear Mr. Krich:

Thank you for your reply dated March 11, 2011, to the subject Notice of Violation (Notice) issued on February 9, 2011, concerning activities conducted at your facility.

In your reply, you disputed cited violation (VIO) 05000296/2010005-03 based on the following key points: (1) Revision 2 of Licensee Event Report (LER) 50-296/2009-003 was not submitted as a corrective action for the previous non-cited violation (NCV) 05000296/2010003-03; (2) Since the precise time the turbine electronic governor-remote (EG-R) module became defective was not known, the date of discovery should be used as the event date; and (3) Prior corrective actions (e.g., maintenance and testing) taken in February 2007 to resolve the initial Unit 3 reactor core isolation cooling (RCIC) system instability conditions were immaterial. You disputed VIO 2010005-03 on the basis that you were meeting the completeness and accuracy requirements of 10 CFR 50.9 and therefore, there was no violation. After consideration of your reply, the NRC has concluded that, for the reasons presented in the enclosure to this letter, the violation occurred as stated in the Notice dated February 9, 2011. Consequently, you are still required to provide a description of your corrective actions in response to the Notice within 30 days of the date of this letter. This violation will remain open until the NRC has verified implementation of your corrective actions during a subsequent inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at [http://www.nrc.gov/reading\\_rm/adams.html](http://www.nrc.gov/reading_rm/adams.html). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

TVA

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Should you have any questions concerning this letter, please contact Mr. Eugene F. Guthrie, at (404) 997-4662.

Sincerely,

***/RA/***

Richard P. Croteau, Director  
Division of Reactor Projects

Docket No.: 50-296  
License No.: DPR-68

Enclosure: Evaluation and Conclusion

cc w/encl: (See page 3)

TVA

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Sincerely,

**/RA/**

Richard P. Croteau, Director  
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Docket No.: 50-296  
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cc w/encl: (See page 3)

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SIGNATURE	/RA/	/RA/	/RA/	/RA/	Via E-mail	/RA/	
NAME	CKontz	EGuthrie	CEvans	WJones	NColeman	RCroteau	
DATE	4/20/2011	4/19/2011	4/20/2011	4/21/2011	5/26/2011	6/ /2011	
E-MAIL COPY?	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO

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2010005-03 (REV3).DOCX

DOCUMENT NAME: G:\DRPI\RPB6\BROWNS FERRY\RESPONSE TO TVA DENIAL OF NOV

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Letter to R. M. Krich from Richard P. Croteau dated June 3, 2011

SUBJECT: RESPONSE TO DISPUTED NOTICE OF VIOLATION (EA-11-012)

Distribution w/encl:

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## EVALUATION AND CONCLUSION

Violation (VIO) 05000296/2010005-03 was identified during a routine Nuclear Regulatory Commission (NRC) inspection conducted between October 1 and December 31, 2010, at the Browns Ferry Nuclear Plant in Athens, AL. In their letter dated March 11, 2011, the licensee (Tennessee Valley Authority (TVA)) disagreed with the violation. More specifically, the licensee stated that they had not failed to meet the completeness and accuracy requirements of 10 CFR 50.9, so no violation occurred.

### Specific Basis for Disputing Violation 05000296/2010005-03

The licensee took the position that the violation resulted from the inspectors' misunderstanding of the reason Revision 2 of Licensee Event Report (LER) 50-296/2009-003 was submitted, and the material applicability and accuracy of information included in the LER. The licensee cited the following reasons as their basis for disputing the violation:

1. Information regarding the corrective actions (e.g., maintenance and testing) performed in February 2007 to resolve the initial Unit 3 reactor core isolation cooling (RCIC) system instability event was not material information because it would not have any influence on NRC's consideration or conclusions. Since these actions were not based on, nor had any adverse impact on, the actual cause of the instability they had no bearing on the event or its cause and ultimate corrective actions.
2. Revision 2 of LER 50-296/2009-003 was not submitted as a corrective action for the previous 10 CFR 50.9 non-cited violation (NCV) 05000296/2010003-03, Failure to Provide Complete and Accurate Information in LER 50-296/2009-003-00.
3. Since the exact time the turbine electric governor-remote (EG-R) module became defective was not known, the discovery date should be used as the event date.

### NRC Evaluation of Licensee's Response

The NRC staff reviewed TVA's response and has concluded that VIO 05000296/2010005-03 occurred as stated in our letter dated February 9, 2011, "Browns Ferry Nuclear Plant - NRC Integrated Inspection Report 05000259/2010005, 05000260/2010005, 05000296/2010005 and Notice of Violation." The NRC's basis for this determination is as follows in the order of the above listed licensee reasons for disputing the violation:

1. The NRC previously issued NCV 05000296/2010003-03 on July 30, 2010. The NCV was based on the NRC's review of the original LER 50-296/2009-003, in which the NRC concluded that a violation of 10 CFR 50.9 had occurred due to the licensee's failure to provide complete and accurate information in all material aspects. In particular, the original LER did not accurately report the duration of Unit 3 RCIC

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inoperability, or the availability of HPCI, and did not include any discussion of the initial RCIC oscillation event on February 9, 2007. As stated in the NCV description, the original LER was materially incomplete and did not meet the reporting requirements of 10 CFR 50.73 because it did not include information regarding the initial event, the corrective actions taken, and why the corrective actions did not prevent recurrence. The licensee did not deny this NCV, and entered it into their corrective action program.

Although LER 50-296/2009-003-02 (second revision) did provide more accurate information regarding the duration of RCIC inoperability and HPCI availability, it failed to address all of the incomplete information identified as material by the NRC in the NCV. In particular, the licensee did not describe the prior corrective actions taken after the initial event and why these actions were not effective in preventing recurrence. The NRC considered this information to be material in assessing the significance and regulatory response. This omission of material information previously identified by the inspectors in NCV 05000296/2010003-03 was the basis of the subsequent VIO 05000296/2010005-03. The licensee's VIO reply letter dated March 11, 2011, indicated that TVA made a conscious decision not to include the information, because TVA determined that the information would not have any influence on the NRC's consideration or conclusions regarding the event. However, as described in inspection report 05000296/2010003, this information was determined by the NRC to be material in assessing the significance and enforcement regarding NCV 05000296/2010003-02, Unit 3 RCIC System Inoperable Beyond the Technical Specifications Allowed Outage Time.

TVA did not provide the material aspects of the incomplete information identified by NCV 05000296/2010003-03 in the LER revision 50-296/2009-003-02. The NRC found that the licensee has not reported the information that was clearly defined as material by the NRC, as described in NCV 05000296/2010003-03.

2. On August 26, 2010, TVA initiated problem evaluation report (PER) 246527 to address NCV 05000296/2010003-03. This NCV was identified by the NRC for the licensee's failure to provide complete and accurate information in the original LER 50-296/2009-003-00, dated May 24, 2010. The PER 246527 problem description, quoting from the NCV, stated that the original LER was not complete or accurate in all material aspects, specifically with respect to the duration RCIC was inoperable; unavailability of the High Pressure Coolant Injection (HPCI) system while RCIC was inoperable; and a previous Unit 3 RCIC instability event [i.e., the initial February 2007 event]. The corrective action plan for PER 246527 stated that "PER action 232668-002 is tracking LER revision to correct the identified violation."

PER 232668 was initiated on June 3, 2010, in response to discussions with the NRC resident inspectors and staff. The PER 232668 problem description stated that LER 50-296/2009-003-00 would be supplemented to address: 1) Past operability of the Unit 3 RCIC pump; 2) Corrective actions for the contributing factors; and 3) Information to address NRC questions discussed in a March 25, 2010, phone call. Corrective action 232668-001, was closed based on issuance of the first LER revision (LER 50-296/2009-003-01). Corrective action 232668-002 (as referenced

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by PER 246527) was subsequently closed based on issuance of the second LER revision (LER 50-296/2009-003-02). By reference, corrective action 232668-002 was intended to include appropriate details outlined in the PER problem description including "revision to correct the identified violation" as described in PER 246527.

Based on the descriptions and correction action plans for PERs 232668 and 246527, the NRC concluded that issuance of revision 2 of LER 50-296/2009-003 was the specific action taken to close PER action 232668-002 and was intended to address NCV 05000296/2010003-03. Additionally, your letter dated March 11, 2011, states "Revision 2 was submitted to satisfy the commitment in Revision 1 to the LER to supplement the LER, and to address the pertinent elements identified in the Non-Cited Violation."

The purpose for submitting the revision to this LER is immaterial to the validity of the violation cited.

3. The condition that required reporting, as described in the title of the LER, was "Reactor Core Isolation Cooling System Inoperable Longer than Allowed by the Technical Specifications", therefore, the exact timing of when and how the electric governor-remote (EG-R) module became defective before installation in the RCIC system (i.e., missing buffer piston and spring) was not a relevant factor when determining the Event Date for reportability, inoperability, or significance of the degraded Unit 3 RCIC system. Instead, the precise date of the installation of the defective EG-R into the RCIC system was key for determining when the RCIC system became inoperable. This date was determined to be March 14, 2006, as documented in TVA letter dated March 11, 2011. However, the RCIC system period of inoperability did not begin until March 22, 2006, as documented in the cover letter to LER 50-296/2009-003-01 when Unit 3 exceeded 150 psig in Mode 2 causing Technical Specification Limiting Condition of Operation (LCO) 3.5.3 to become applicable. Therefore, the event date can be clearly defined as the first time (March 22, 2006) the Unit 3 RCIC TS LCO 3.5.3 became applicable while Unit 3 RCIC was actually inoperable due to the defective EG-R. This was correctly documented as the Event Date in Block 5 of the first LER revision (LER 50-296/2009-003-01).

Both the date of installation and the date the RCIC pump was first considered inoperable were also documented in the second LER revision (LER 50-296/2009-003-02). However, the Event Date in Block 5 was changed from 03/22/2006 to 08/26/2009.

The guidance of Item 5 of Section 5.2.7, of NUREG-1022, Event Reporting Guidelines 10 CFR 50.72 and 50.73, does state that the time of discovery should be used when the event date cannot be clearly defined. As described in the NUREG-1022 example from TVA's letter dated March 11, 2011, a design deficiency, where the date of the introduction of the design flaw was not known, then the date of discovery would be appropriate to use for reporting. However, this guidance does not apply to this situation, since the event date (i.e. the first day when the Unit 3 RCIC TS LCO 3.5.3 became applicable while Unit 3 RCIC was actually inoperable due to a defective EGR) has been clearly established.

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Therefore, the NRC determined that the licensee had not reported information (i.e. the correct event date) the NRC considered to be material in assessing the significance and regulatory response to the event in LER 050-296/2009-003-02.

#### NRC Conclusion

Licensee event reports are required to provide complete and accurate information to allow the NRC to accurately evaluate the event significance and determine appropriate regulatory response. Information including event date, period of inoperability, system availability, and previous events, including effectiveness of prior corrective actions, may have significant implication for public health and safety or common defense and security. Without this information, LERs do not meet the completeness and accuracy requirements of 10 CFR 50.9.

The NRC disagrees with the licensee's position, and maintains that TVA failed to meet the requirements of 10 CFR 50.9 by not ensuring LER 50-296/2009-003 and the supplemental revision 2 issued by TVA were complete and accurate.

For the above reasons, the NRC concludes that the violation occurred as stated in the Notice.