Part 21 (PAR)

Event#

52394

Rep Org: ENERCON Supplier: ENERCON

Notification Date / Time: 11/23/2016 11:56

(EST)

Event Date / Time: 09/28/2016 Last Modification: 12/13/2016

Region: 1

Docket #:

(EST)

City: KENNESAW

Agreement State:

Yes

County:

License #:

State: GA

NRC Notified by: NICK EGGEMEYER

Notifications: JAMES DWYER

R1DO

**HQ Ops Officer:** MARK ABRAMOVITZ **Emergency Class: NON EMERGENCY** 

AARON McCRAW PART 21/50.55 REACTORS R3DO EMAIL

10 CFR Section:

21.21(a)(2)

INTERIM EVAL OF DEVIATION

## PART-21 NOTIFICATION - DESIGN BASIS ERRORS USING FLO-2D SOFTWARE

The following report was received via e-mail:

"This letter serves as an Interim Report in accordance with 10 CFR 21.21 pertaining to a potential defect associated with a design basis calculation delivered to First Energy Nuclear Operating Company's Perry Nuclear Power Plant. Subsequent to delivering this calculation, FLO-2D software errors were identified which resulted in erroneous outputs that affect the local intense precipitation calculation. These errors were discovered on September 28, 2016, at which time, ENERCON generated a Corrective Action Report (CAR) to address the issue. ENERCON has initiated a reevaluation of the calculation using the latest version of the software that will correct the errors in the calculation.

"An evaluation of the reportability of this issue in accordance with 10 CFR Part 21 is not able to be completed within the 60-day evaluation period due the need to verify and validate the latest version of the software and then complete all the analysis required for updating the calculation. This evaluation is being tracked by CAR 2016-0335 and will be completed no later than February 10, 2017.

"If you have any questions or need further clarifying information, please contact Nick Eggemeyer, Corporate Quality Assurance Manager, at (770) 590-2031."

\* \* \* UPDATE AT 0910 EST ON 12/13/2016 FROM TIMOTHY CLEARY TO MARK ABRAMOVITZ \* \* \*

The following update was received via e-mail:

"This letter serves as an amendment to the 10 CFR 21.21 Interim Report filed on November 23, 2016, pertaining

to a potential defect associated with a design basis calculation delivered to First Energy Nuclear Operating Company's Perry Nuclear Power Plant. Subsequent to delivery of the calculation, a standard, periodic review of the FLO-2D Pro software supplier website indicated that a new build of this software (version 16.06.16) had been issued. It replaced the software build (version 14.08.09) that was used for the above referenced design calculation. As a result of the model revision associated with FLO-2D, it was determined that the outputs were impacted which could affect this design basis calculation. These output changes were discovered on September 28, 2016, at which time ENERCON generated a Corrective Action Report (CAR) to address the issue. ENERCON has initiated a reevaluation of the calculation using this new build of the FLO-2D Pro software.

"An evaluation of the reportability of this issue in accordance with 10 CFR Part 21 is not able to be completed within the 60-day evaluation period due the need to verify and validate the latest version of the software and then complete all the analysis required for updating the calculation. This evaluation is being tracked by CAR 2016-0335 and will be completed no later than February 10, 2017.

"If you have any questions or need further clarifying information, please contact Nick Eggemeyer, Corporate Quality Assurance Manager, at (770) 590-2031."

Notified the R1DO (Schroeder), R3DO (Cameron), and Part 21 Group (via e-mail).



Timothy P. Cleary Vice President 500 TownPark Lane Kennesaw, GA 30144 678-354-8359 Office 910-547-2800 Mobile

December 12, 2016

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

SUBJECT: Amendment to the 10 CFR 21 Interim Report Regarding Design Basis Calculation Error Using FLO-2D Software

This letter serves as an amendment to the 10 CFR 21.21 Interim Report filed on November 23, 2016, pertaining to a potential defect associated with a design basis calculation delivered to First Energy Nuclear Operating Company's Perry Nuclear Power Plant. Subsequent to delivery of the calculation, a standard, periodic review of the FLO-2D Pro software supplier website indicated that a new build of this software (version 16.06.16) had been issued. It replaced the software build (version 14.08.09) that was used for the above referenced design calculation. As a result of the model revision associated with FLO-2D, it was determined that the outputs were impacted which could affect this design basis calculation. These output changes were discovered on September 28, 2016, at which time ENERCON generated a Corrective Action Report (CAR) to address the issue. ENERCON has initiated a reevaluation of the calculation using this new build of the FLO-2D Pro software.

An evaluation of the reportability of this issue in accordance with 10 CFR Part 21 is not able to be completed within the 60-day evaluation period due the need to verify and validate the latest version of the software and then complete all the analysis required for updating the calculation. This evaluation is being tracked by CAR 2016-0335 and will be completed no later than February 10, 2017.

If you have any questions or need further clarifying information, please contact Nick Eggemeyer, Corporate Quality Assurance Manager, at (770) 590-2031.

Respectfully,

Timothy P. Cleary Vice President,

Cc: John D. Richardson, President
Robert H. Bryan, Chief Operating Officer
Jim J. Gannon, Chief Nuclear Officer
Nick C. Eggemeyer, Corporate QA Manager

## Hoc, HOO X

From:

Nick Eggemeyer <neggemeyer@enercon.com>

Sent:

Tuesday, December 13, 2016 8:55 AM

To:

Hoc, HOO X

Subject:

[External\_Sender] Amendment to 10 CFR Part 21 Interim Report Made On November

23, 2016

**Attachments:** 

Amended 10 CFR 21 Interim Report - Perry Nuclear Plant Calculation Issue

Approved.pdf

Importance:

High

To: NRC Operations Center

Attached find an amendment to the 10 CFR Part 21 Interim Report made to the NRC on November 23, 2016 regarding a design basis calculation error for the Perry Nuclear Plant using FLO-2D software. This amendment provides clarifying information relative to the software used for this calculation.

Regards,

Nick Öggemeyer

**Corporate Quality Assurance Manager** 

500 TownPark Lane Kennesaw, GA 30144 Office: 770.590.2031

Cell: 678.800.3630



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Please consider the environment before printing this e-mail



Timothy P. Cleary Vice President 500 TownPark Lane Kennesaw, GA 30144 678-354-8359 Office 910-547-2800 Mobile

November 23, 2016

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

SUBJECT: 10 CFR 21 Interim Report Regarding Design Basis Calculation Error Using

FLO-2D Software

This letter serves as an Interim Report in accordance with 10 CFR 21.21 pertaining to a potential defect associated with a design basis calculation delivered to First Energy Nuclear Operating Company's Perry Nuclear Power Plant. Subsequent to delivering this calculation, FLO-2D software errors were identified which resulted in erroneous outputs that affect the local intense precipitation calculation. These errors were discovered on September 28, 2016, at which time ENERCON generated a Corrective Action Report (CAR) to address the issue. ENERCON has initiated a reevaluation of the calculation using the latest version of the software that will correct the errors in the calculation.

An evaluation of the reportability of this issue in accordance with 10 CFR Part 21 is not able to be completed within the 60-day evaluation period due the need to verify and validate the latest version of the software and then complete all the analysis required for updating the calculation. This evaluation is being tracked by CAR 2016-0335 and will be completed no later than February 10, 2017.

If you have any questions or need further clarifying information, please contact Nick Eggemeyer, Corporate Quality Assurance Manager, at (770) 590-2031.

Respectfully,

Timothy P. Cleary Vice President

Cc: John D. Richardson, President
Robert H. Bryan, Chief Operating Officer
Jim J. Gannon, Chief Nuclear Officer
Nick C. Eggemeyer, Corporate QA Manager

## Hoc, HOO X

From:

Nick Eggemeyer < neggemeyer@enercon.com>

Sent:

Wednesday, November 23, 2016 11:56 AM

To:

Hoc, HOO X

**Subject:** 

[External\_Sender] 10 CFR Part 21 Interim Report

Attachments:

10CFR Part 21 Interim Report - Perry Nuclear Plant Calculation Error.pdf

To: NRC Operations Center

Attached find a 10 CFR Part 21 Interim Report regarding a design basis calculation error using FLO-2D software.

Please acknowledge receipt of this email.

Best regards,

Nuk Oggeneyer

**Corporate Quality Assurance Manager** 

500 TownPark Lane Kennesaw, GA 30144 Office: 770.590.2031

Cell: 678.800.3630



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