

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

September 4, 2018

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Manager Nuclear and Regulatory Affairs

RA 18-0093

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

- Reference:
- 1) Letter dated August 4, 2017, "Anchor Darling Double Disc Gate Valve Industry Resolution Plan Update (Project 689)," from G. A. Krueger, NEI, to J. Lubinski, USNRC
  - 2) Letter dated October 26, 2017, "NSIAC Concurrence on Anchor Darling Double Disc Gate Valve Industry Response Actions (Project 689)," from J. E. Pollock, NEI, to B. E. Holian, USNRC
  - 3) Letter RA 17-0144, dated December 20, 2017, from C. R. Hafenstine, WCNOG, to USNRC

Subject: Docket No. 50-482: Correction to Wolf Creek Submittal of Anchor Darling Double Disc Gate Valve Information and Status

To Whom It May Concern:

In Reference 1, the Nuclear Energy Institute (NEI) provided the Nuclear Regulatory Commission (NRC) a resolution plan for the U.S. nuclear industry to address the known Anchor Darling Double Disc Gate Valves (DDGV) issues. Reference 2 indicated each utility will provide a listing of their Anchor Darling DDGV population with active safety functions along with relevant valve information, including the results of susceptibility evaluations, repair status, and a repair schedule for each susceptible valve not yet repaired. Reference 3 was intended to provide that information for Wolf Creek Generating Station (WCGS). Subsequent to that submittal, Wolf Creek Nuclear Operating Corporation (WCNOG) discovered that some valve data was incorrect. The attachment to this letter contains the correct Anchor Darling DDGV information and status.

*ADD  
NRR*

It is important to note that while some data submitted was incorrect, all Anchor Darling DDGVs subject to Flowserve's Part 21 Notice in service at WCGS have had all repairs completed. As such, this letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4204.

Sincerely,



Cynthia R. Hafenstine

CRH/rtt

Attachment: Corrected Wolf Creek Generation Station Anchor Darling DDGV Information and Status

cc: K. M. Kennedy (NRC), w/a  
B. K. Singal (NRC), w/a  
N. H. Taylor (NRC), w/a  
Senior Resident Inspector (NRC), w/a

**Corrected Wolf Creek Generating Station Anchor Darling DDGV Information and Status**

Plant Name	Unit	Valve ID	System	Valve Functional Description	Valve Size (inches)	Active Safety Function  (Open, Close, Both)	Are multiple design basis post-accident strokes required?  (Yes/No)	Expert Panel Risk Ranking  (High, Medium, Low)	Result of susceptibility evaluation  (Susceptible or Not Susceptible)	Is the susceptibility evaluation in general conformance with TP16-1-112R4? <sup>(A)</sup>  (Yes/No)	Does the susceptibility evaluation rely on thread friction? If yes, was the COF greater than 0.10?  (No), (Yes, >0.10), (Yes, ≤0.10)	Was an initial stem-rotation check performed? If yes, include rotation criteria  (No), (Yes, ≤10 deg.), (Yes, ≤5 deg.)	Was the diagnostic test data reviewed for failure precursors described in TP16-1-112R4?  (Yes/ No)	Valve repair status  (Repaired or Not Repaired)
Wolf Creek	1	EGHV0058	Component Cooling Water	CCW TO RCS ISO VLV <CTMT ISO>	12	Close	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>
Wolf Creek	1	EGHV0059	Component Cooling Water	CCW RETURN FROM RCS ISO VLV <CTMT ISO>	12	Close	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>
Wolf Creek	1	EGHV0060	Component Cooling Water	CCW RETURN FROM RCS ISO VLV <CTMT ISO>	12	Close	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>
Wolf Creek	1	EGHV0127	Component Cooling Water	CCW TO RCS HV-58 & HV-71 BYPASS ISO VLV <CTMT ISO>	12	Close (Passive)	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>
Wolf Creek	1	EGHV0130	Component Cooling Water	RCS CCW RETURN HV-60 BYPASS ISO VLV <CTMT ISO>	12	Close (Passive)	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>
Wolf Creek	1	EGHV0131	Component Cooling Water	RCS CCW RETURN HV-59 BYPASS ISO VLV <CTMT ISO>	12	Close (Passive)	No	Low	Susceptible <sup>(3)</sup>	No <sup>(4)</sup>	No	No	Yes	Repaired <sup>(1)(2)</sup>

<sup>(A)</sup> Applied Wedge Pin Torque must bound anticipated design basis operating torque requirements and current maximum total torque.

<sup>(1)</sup> The repair included torquing the stem/wedge connection to at least 520 ft-lbs which is >125% of any tested or expected actuator torque value.

<sup>(2)</sup> The maximum allowable stem torque is 695 ft-lbs for the installed 2-piece stems, per Flowserve.

<sup>(3)</sup> All valves applicable to Flowserve's Part 21 were conservatively considered susceptible in accordance with WCNO's corrective action process.

<sup>(4)</sup> The resolution concluded and implemented from WCNO's corrective action process predated access to the BWROG guidance, TP16-1-112R4, which WCNO subsequently reviewed and found the initial determination to be bounding.