#### ANCHOR DARLING DOUBLE DISC GATE VALVE INDUSTRY RESOLUTION PLAN

### 8-4-2017 UPDATE

### Summary of Resolution Plan

NEI developed and is managing this plan to coordinate industry response, actions, and communications to address the resolution of the Anchor Darling DDGV issue. Industry-coordinated actions for assessing the population of installed valves susceptible to the identified condition, communicating industry guidance for identifying and resolving susceptible valves, gaining commitments from stations with valves requiring responsive actions, and investigating similar conditions for other valve types are key elements of the plan. The plan will include interaction with the NRC to achieve the following:

- Gain a greater understanding of the coordinated industry actions being taken to respond to this issue
- Communicate results of industry scope and the graded approach being taken
- Understand the specific commitment strategy for the industry in response to the Anchor Darling Part 21
- Participate in periodic communications and status updates of actions being taken across the industry
- Revise or augment the resolution plan to reflect new or changes in information

### **Proposed Actions and Due Dates**

	ACTION	RESPONSIBLE PARTY	DUE DATE
1.	Issue revised Anchor Darling Double Disc	Flowserve	<b>Completed</b> (July 11, 2017)
	Gate Valve Part 21		
2.	Coordinate electronic access to NRC to	BWROG	<b>Completed</b> (July 26, 2017)
	review BWROG Anchor Darling valve		
	guidance document		
3.	Develop a plan for the analysis of	NEI	Completed (August 4, 2017)
	industry Anchor Darling valve		See additional details below
	information and communication of		
	results		
4.	Develop industry commitment response	NEI	Completed (August 4, 2017)
	strategy and communicate to NRC		See additional details below
5.	Develop the basis for the update of	Industry	<b>Completed</b> (July 26, 2017)
	technical guidance in the BWROG		
	document		
6.	Issue revision to the BWROG Anchor	BWROG	August 31, 2017
	Darling valve guidance document		
7.	Distribute BWROG guidance document	BWROG	August 31, 2017
	to the PWROG		
8.	Investigate the potential for similar	Industry	October 2017
	conditions for other valve types or		
	manufacturers		
9.	Determine the need to resurvey the	NEI/Industry	<b>Completed</b> (July 26, 2017)
	industry to assess change in scope or		See additional details below
	actions resulting from application of the		
	updated BWROG guidance		
10.	BWROG approve docketing the industry	BWROG	August 31, 2017
	guidance document		See additional details below

Action #3: Develop a plan for the analysis of industry Anchor Darling valve information and communication of results.

1. Perform initial survey of all AD DDGVs installed in stations and collect the supplied information into a common data base.

**STATUS: Complete.** All stations responded to an NEI request for specific valve information related to key Anchor Darling valve attributes.

2. Develop methodology for the analysis of valve information that will be used to determine the population of valves potentially susceptible to the identified condition. This includes risk ranking, safety function, size, wedge pin analysis results, etc.

## **STATUS: Complete**

- **3.** Perform initial analysis of the data to determine the population of valves that are "high significance". This population is defined as having a safety-related classification, have an active safety function to OPEN, or OPEN and CLOSE, have an "UNSAT" wedge pin analysis as defined by the current industry guidance document, and have not yet been repaired in accordance with current industry guidance. Communicate the results of the initial valve population survey to the NRC. **Target Date: August 25, 2017.**
- 4. Perform evaluation of the valve population using the new industry guidance. Target Date: November 30, 2017
- Provide to the NRC the results of the evaluations from the updated industry guidance. Target Date: December 31, 2017

## Action #4: Develop industry commitment response strategy and communicate to NRC.

- For stations with identified high significance Anchor Darling valves, NEI will recommend that the station communicate to the NRC the following information: the list of high significance valves for their station, the risk ranking for the associated valves and a repair schedule for each valve by **August 31, 2017.** For consistent reporting of results, NEI will provide a standard letter template to applicable stations.
- 2. Each station will be requested to reevaluate their Anchor Darling DDGVs against the revised guidance developed in accordance with Action 6 above to identify any valves with active safety functions that meet the susceptibility criteria and have not yet been repaired in accordance with the new industry guidance. NEI will recommend completion of this evaluation by **November 30, 2017.** Each utility will also be requested to report completion of this evaluation to NRC and NEI, along with a listing of any susceptible valves not yet repaired, the risk ranking for the associated valves and a repair schedule for each valve by **December 31, 2017.**

ACTION 9#: The industry has determined the need to complete another survey once the revised industry guidance has been used to reevaluate susceptibility at each utility.

### Status: Complete

# ACTION #10: Docket Industry Guidance "Recommendations to Resolve Flowserve 10CFR Part 21 Notification Affecting Anchor Darling Double Disc Gate Valve Wedge Pin Failures"

The industry, through cooperation with the BWROG, is working to approve submittal of the industry guidance to the NRC, with an understanding that portions may be marked as proprietary. **Target date: August 31, 2017**