United States Nuclear Regulatory Commission

Public Meeting with NEI, EPRI/MRP, and Industry to Present the

First Revised NRC Order EA-03-009

(Issued February 20, 2004)

March 2, 2004

Purpose

Describe Revisions to
NRC Order EA-03-009
(Originally issued February 11, 2003)

Why a Revision is Needed?

- Numerous Relaxation Requests (provides flexibility in implementation), and
- Addresses Previously Unforeseen Generic Inspection Limitations

History

- February 11, 2003 - Issued NRC Order EA-03-009
- February 2003 thru December 2003 - Received 24 Relaxation Requests with multiple parts

The Revised Order Updates:

- Bare Metal Visual Inspection Requirements,
- Penetration Nozzle Inspection Coverage,
- Combination of Examination Methods,
- Flaw Evaluation Reference, and
- Replaced RPV Head Inspection Requirements

Bare Metal Visual Revision

- Originally the Order required 100% coverage of the entire RPV head surface.
- The First Revised Order allows the head surface to be obscured by support structure interferences resulting in no less than 95% coverage of the head surface area.
- The support structure must be located at RPV head elevations away from the outermost RPV head penetration.

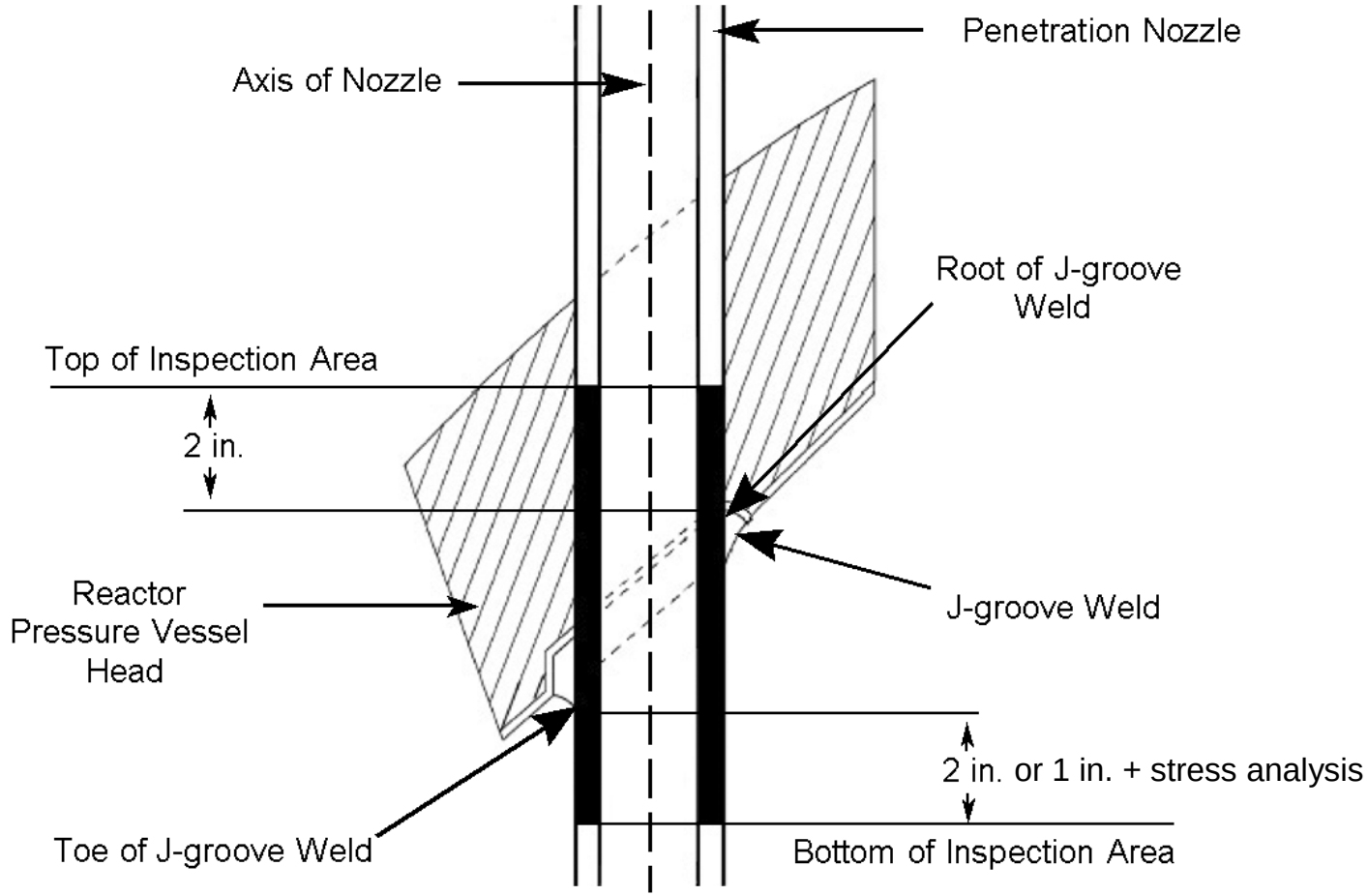
Penetration Nozzle Inspection Coverage

- Originally the Order required inspection from 2 inches above the J-groove weld to the bottom of the nozzle.

- The First Revised Order requires inspection from 2 inches above the J-groove weld to 2 inches below the J-groove weld (or the bottom of the nozzle if less); OR

- From 2 inches above the J-groove weld to 1.0 inches below the J-groove weld and including all RPV head penetration nozzle surfaces that have an operating stress (residual and normal stresses) of 20 ksi tension or greater.

RPV Head Nozzle Penetration Inspection Area



Combination of Examination Methods

- Originally the Order required either volumetric OR surface examinations be performed.
- The First Revised Order permits a combination of volumetric (ultrasonic) and surface (eddy current or dye penetrant) examinations to be performed.

Flaw Evaluation Reference

- Originally the Order referenced guidance in a letter dated November 21, 2001, from J. Strosnider, NRC, to A. Marion, Nuclear Energy Institute which addressed flaw evaluations for RPV head penetration nozzles

- The referenced guidance was updated by a letter dated April 11, 2003, from R. Barrett, NRC, to A. Marion, Nuclear Energy Institute.

- The First Revised Order updates the reference.

Replaced RPV Head Inspection Requirements

- Originally the Order did not address requirements or schedule for plants with replaced RPV heads.
- In the First Revised Order, plants with replaced heads will be categorized and treated as low susceptibility plants.

Conclusion

- The First Revised Order will continue to ensure adequate protection of public health and safety.