ANO-2 RV Head Inspection Summary for 2R15

Inspection Plan

- Westinghouse performed the RV head inspection under their procedures with the oversight of ANO Engineering and Quality Control NDE specialists.
- The CEDM (81) inspection plan included the use of both a "demonstrated" eddy current and a UT probe which included the area 1.5 inches above the J- weld to the inspectible extent of the nozzle below the weld.
  - due to an electrical problem with the eddy current detection circuit, the ECT was not functional during a large portion of the examination.
- The incore instrument nozzles (8) were similarly inspected using a comparable UT and eddy current probe, but modified for the larger ICI nozzle diameter.
- The single vent nozzle was inspected by a smaller UT probe.
- Head penetrations were inspected from above the insulation for boric acid deposits at or around the nozzles and also the flange area (videotaped).

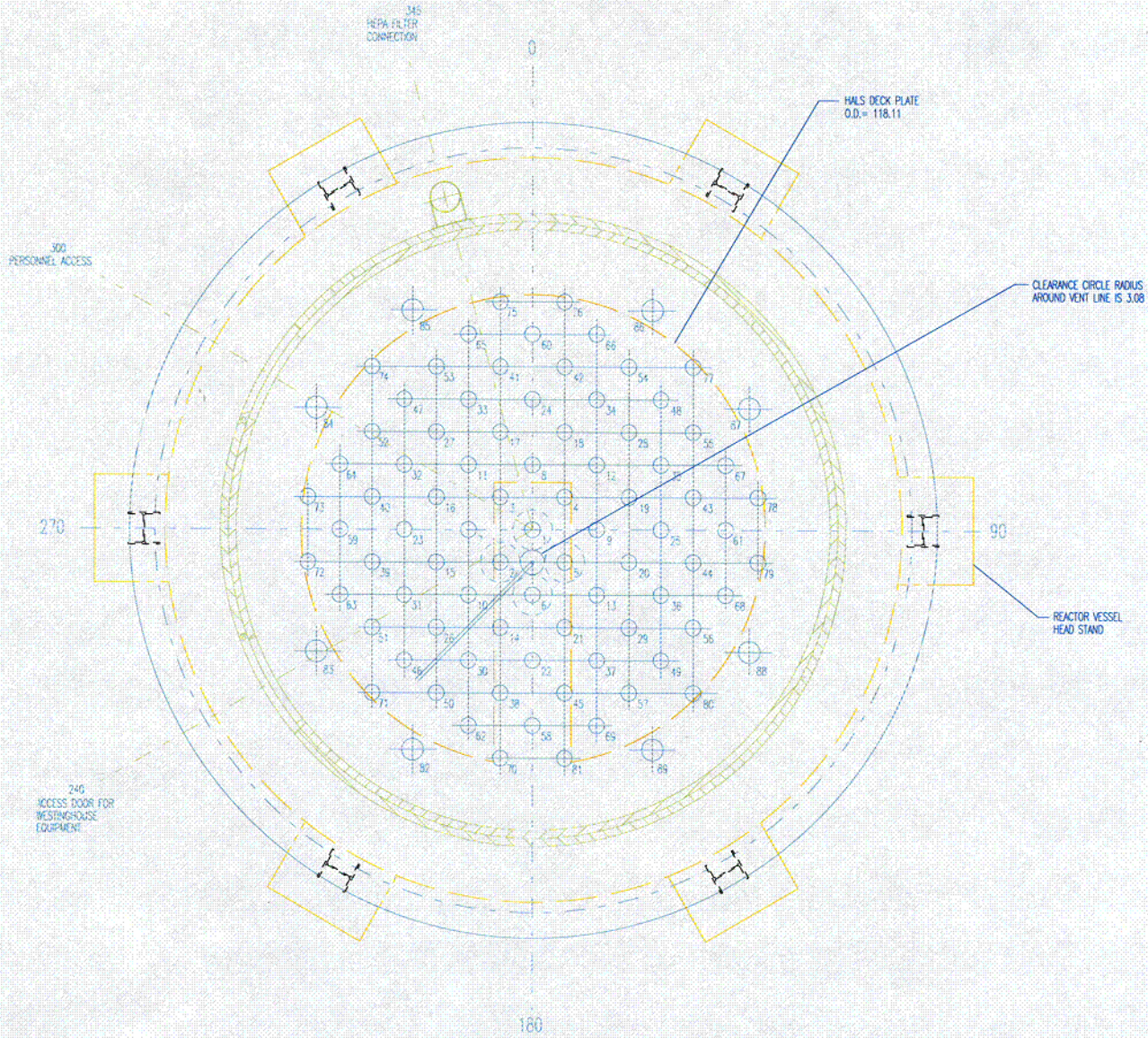
Inspection Results

- All 90 head penetrations were confirmed to have pressure boundary integrity with no indications of PWSCC cracking and no through wall leaks that could cause head wastage.
- Additional NDE was performed on three CEDMs from under the head (see diagrams)
  - Nozzle 43 and 59 had J- weld reflections at the low side of the nozzles (~0°) that were further inspected by PT and found to have no surface indications found.
  - Nozzle 30 had indications in the nozzle just above the threading for the CEDM guide cone. An ECT was performed on the OD of the nozzle with no surface indications found.
- No signs of leakage were detected above the head on the insulation. Only very minor occasional boric acid staining observed (likely from historical venting).

Follow-up Actions

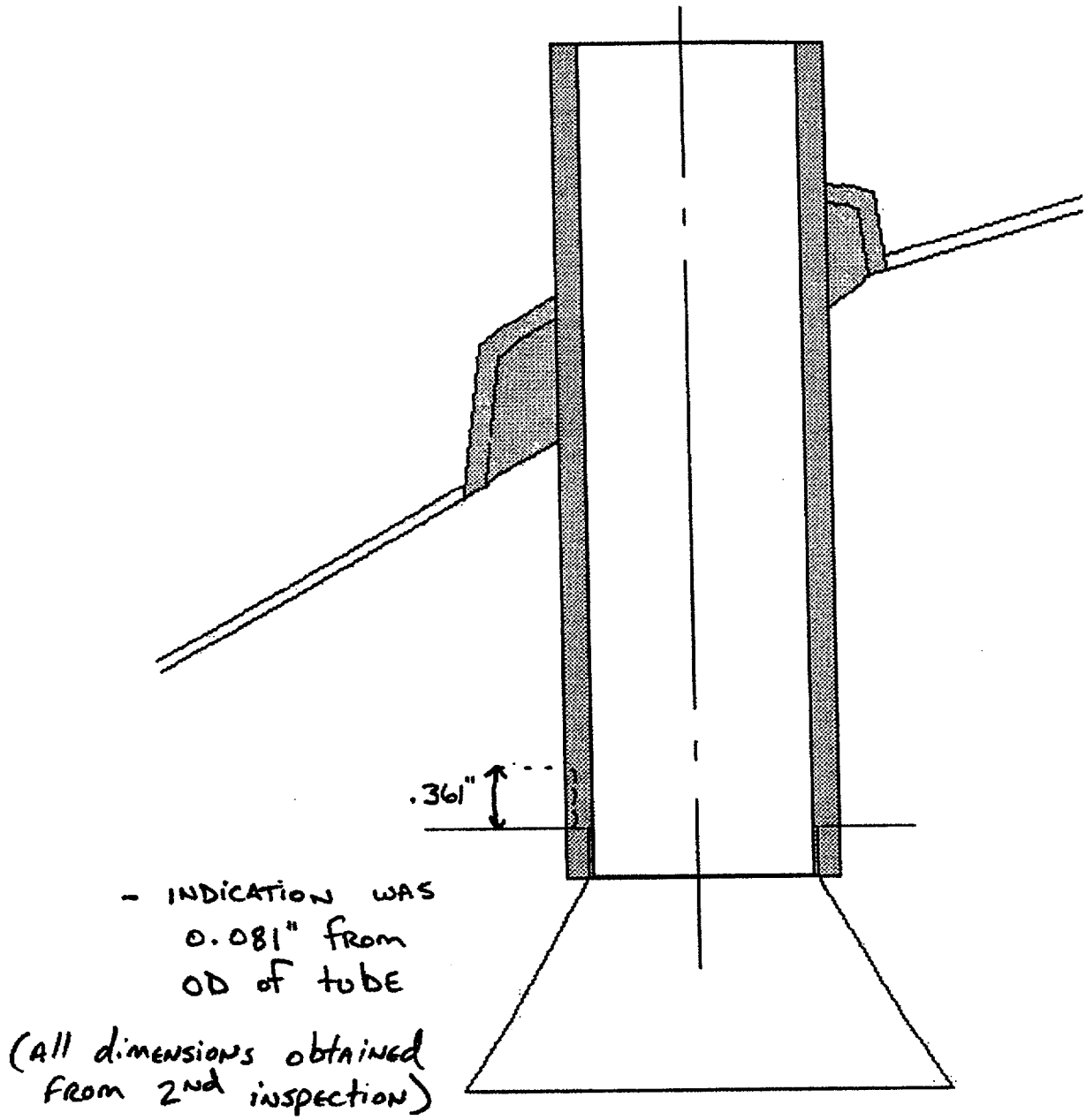
Entergy will provide an NDE demonstration report 30 days after startup from 2R15 which provides a summary of the testing performed for confirming the ability to detect flaws in the head penetration nozzles and the nozzle/weld interface.

Attachment

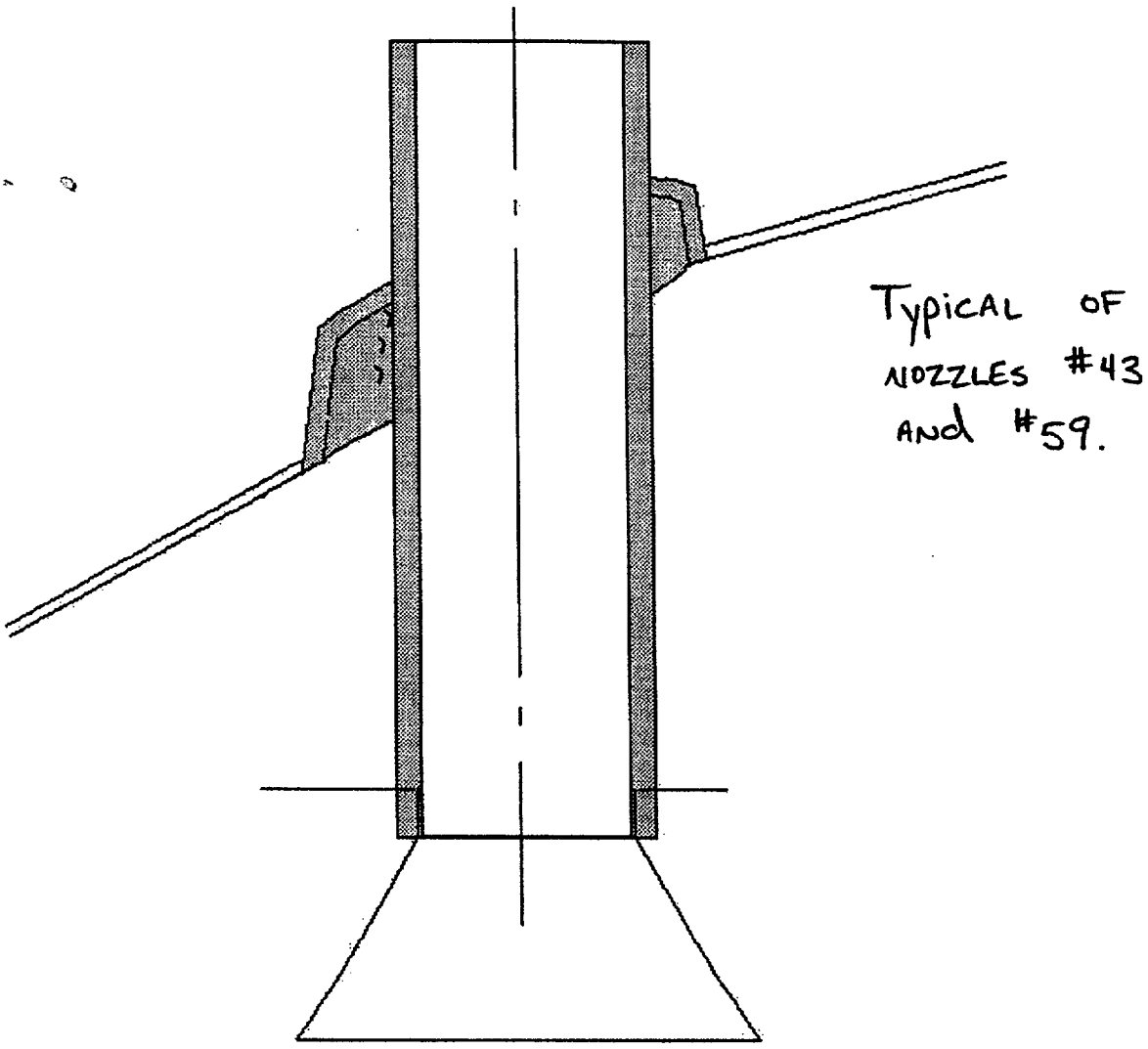


ANO-2 PV Head Plan View

C01



Elevation View of UT Reflectors on Nozzle 30



Elevation View of UT Reflectors on ANO-2 Nozzles 43 and 59