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PDI Position 03-02 Revision 1 6/2/2003

As the industry progressed into a performance base qualification for ultrasonic (UT) inspections, areas that are not addressed or considered gray continue to be identified. This PDI position document specifically addresses the use of non qualified, but certified individuals such as Level I's, Trainees (Level I Limited and Trainee personnel will be referred to here on in, as Trainees), or non-PDI qualified Level II's and III's to perform the scanning during an ultrasonic examination. It is the Performance Demonstration Initiative's (PDI) position that the use of these certified individuals continues to be an acceptable practice.

PDI provides the following as justification of this position:

- 1) Article VIII-1100 (c) "Performance demonstration requirements apply to personnel who detect, record or interpret indications or size flaws in welds or components". The Level II or III individual qualifies during the manual examination. If a Level I or Trainee is used to assist the Level II or III in the field, it should be the responsibility of the Level II or III to provide direct supervision of the activities to be performed.
- 2) Article VIII-1100 (d) "The performance demonstration requirements specified in this Appendix do not apply to personnel whose involvement is limited to mounting a scanner device, marking pipe, or other situations where knowledge of ultrasonics is not important" pertains to automated examinations. For example, track setters and data collection operators are presently not required to be qualified under this appendix. Only the person performing the analysis requires qualification. This applies to manual examinations also, as the person performing analysis of the ultrasonic signals requires qualification by demonstration.
- 3) It should be at the discretion of the qualified Level II or III if they desire for a Level I or Trainee to perform the scanning of a component. The Level II or III qualified examiner should be responsible to ensure that the correct oscillation and scan speed is being performed. Questionable reflectors should be scanned and evaluated by the qualified Level II or III.
- 4) Personnel who perform the scanning for the Level II or III should have sufficient ultrasonic knowledge. For Level I's (also for non-qualified Level II's and III's), the requirement of CP-189 and/or ASME Section XI, Appendix VII should be followed. The completion (and passing of the final examination for credit) of a 40-hour course

- and 200 hours of experience qualifies the individual with sufficient ultrasonic knowledge.
- 5) The written practice utilized for training and certification of UT personnel should describe the limits for Trainees and Level I's. The ability to perform examinations with the assistance of Trainees with experience and/or training will allow personnel to work with Level II's and III's to obtain experience, that experience is noted in #4. Those written practices that allow an individual a 90-day trainee period without training or previous experience should limit those personnel to observing the inspection and non-technical Level II or III support.
- 6) PDI Generic Procedures allow for the use of "unqualified personnel" (PDI-UT-1 & 2 paragraph 3.3). "Final interpretation of collected data shall be the responsibility of the qualified Level II or III examiner". PDI leaves the issue up to each utility on the use of Level I's and Trainees.
- 7) It is PDI's position that the use of Level I's and Trainees is essential to the future of the industry. The course of action that would limit Level I's and Trainees experience to that which only allows setting track for automated exams, pipe gridding for FAC, housekeeping responsibilities, writing paperwork, and looking over the shoulders of qualified inspectors will reduce the likelihood that competent personnel will exist in the future. These personnel may become lost as unqualified Level II's until their training and field oriented experience catches up and they can successfully complete a PDI qualification.

It is the PDI position that non-qualified, but certified individual ultrasonic Level I's and Trainees continue to perform the scanning of Appendix VIII piping and components as long as the above requirements are met.