**NRC INSPECTION MANUAL** NMSS/DFM

INSPECTION PROCEDURE 88200 APPENDIX K

INSPECTION OF SAFETY-SIGNIFICANT WELDING AT FUEL CYCLE FACILITIES

Effective Date: May 28, 2025

# 88200.K-01 INSPECTION OBJECTIVES

01.01 To determine if safety-significant welding work is being performed in accordance with regulatory requirements, the licensing basis, specifications, drawings, and work procedures.

01.02 To determine if the applicant/licensee’s system for preparing, reviewing, and maintaining records relative to safety-significant welding activities reflect work accomplishment consistent with specifications and procedures.

01.03 To determine if the as-built condition of safety-significant welding meets the specified design requirements, specifications, and drawings.

01.04 To determine if the implementation of the management measures related to work activities for safety-significant welding associated with items relied-on for safety (IROFS) is effective and to verify that deviations from requirements are appropriately resolved.

# 88200.K-02 INSPECTION REQUIREMENTS

02.01 For the safety-significant welding selected for inspection, determine whether procedures exist in the following areas, are compatible with the management measures program for IROFS, and prescribe adequate methods to meet the licensing basis and construction specifications, where applicable:

1. base material and filler metal compatibility for welding
2. welding procedures
3. welder qualifications
4. production welding
5. preheat and post weld heat treatment (PWHT)
6. examination and inspection of welds
7. configuration management

02.02 Determine whether the applicant/licensee has an established audit program (including plans, procedures, and audit schedule) for assessing the adequacy of work control functions and requirements, as applicable in their licensing basis, in the area of safety‑significant welding activities, and for ensuring that examination, inspection, and if required, test personnel associated with performing tests and inspections of safety‑significant activities are qualified and/or certified to perform their assigned work.

02.03 Ascertain whether the following safety-significant welding activities, as required by licensing commitments and applicable construction codes, are being controlled and accomplished in accordance with the requirements of the documents reviewed in Inspection Requirement 02.01, above:

1. base material and filler metal compatibility for welding.
2. welding procedures
3. welder qualifications
4. production welding
5. preheat and PWHT
6. examination and inspection of welds
7. configuration management

02.04 Review the documentation generated for the safety-significant welding, as required by the licensing basis. Determine whether the applicant/licensee/contractor system for documenting safety-significant work is functioning in accordance with requirements. Records should be complete, reviewed by quality control, engineering personnel, or designee, as required, and readily retrievable.

1. preheat and PWHT
2. construction quality control inspection
3. nonconformance/deviation record(s)
4. training/qualification records of craft, and quality inspection personnel (as required)
5. configuration management records

# 88200.K-03 INSPECTION GUIDANCE

General Guidance

Inspectors should review the facility description in the integrated safety analysis, integrated safety analysis summary, or equivalent and be familiar with the safety-significant items and services (SSIS) being constructed at the site. The purpose of these as-built inspections is to verify that the assumptions and critical attributes reviewed during the licensing review process remain valid; the design was appropriately translated to construction specifications; the licensee/applicant constructed the facility in accordance with these specifications; and any modifications performed comply with the licensee’s configuration management program and do not impact any NRC licensing decisions.

Inspectors should also be familiar with the licensee’s management measures and/or quality assurance program, if applicable, and the licensing basis associated with these measures. It is not the objective of this inspection procedure (IP) to verify the adequacy of the applicant/licensee’s management measures program, but inspectors should be prepared to identify potential gaps in the implementation of management measures for future inspections. Inspectors should complete this appendix by inspecting the attributes listed in this appendix for as-built welding work with a focus on SSIS, such as IROFS, or regulatory requirements, as applicable.

Inspectors should contact the applicant/licensee prior to the onsite inspection to help determine what samples are to be inspected. Observation during in progress activities, like construction, installation, and testing, is desirable but not required. If necessary, inspectors may select completed systems for inspection. Inspectors should not attempt to inspect all available samples but may expand if significant concerns with the applicant/licensee’s control of installation/construction arise in this functional area.

Inspectors should collect applicant/licensee procedures, specifications, and work completion records in advance. If unable to review these documents in advance of the onsite inspection, then the licensee should be notified that these documents, and any other relevant documents, should be available when the inspector(s) arrives at the site.

Inspectors should choose one or more safety-significant welding and review the areas listed in 02.01 through 02.04 to the extent practical and may use their judgment in determining which areas to concentrate on if time is limited.

## 03.01 Inspection Requirement 02.01

1. Review construction specifications related to safety-significant welding and ascertain whether the specified technical requirements conform to the commitments contained in the licensing basis. Review procedures associated with safety-significant welding activities and, as applicable, verify that they specify provisions for adequate onsite engineering direction, are appropriate and adequate related to procurement and use of materials, specify adequate control of hold points, and provide adequate controls for design changes and incorporation of design changes into as‑built drawings.
2. Review the IPs and compare with the requirements in the applicable codes and construction specifications. Evaluation should indicate whether adequate quality-related IPs are established and are based on appropriate criteria, and further, whether the results of the licensee's inspection will be transmitted to responsible quality assurance and management personnel.
3. Procedures should be reviewed to ensure that technical requirements in the licensing document are reflected in construction specifications, drawings, work instructions, and work procedures. Areas to review should include, but are not limited to, the following:
   1. Base Material and Filler Metal Compatibility for Welding. Perform the following verifications related to control and handling of welding materials:
      1. Verify that the contractor/licensee has established procedures and instructions for purchasing, receiving, storing, disbursing, and handling of welding materials including welding electrodes, filler material, consumable inserts, fluxes, and gases.
      2. Review sufficient sampling of welding material purchasing and receiving records to verify that these operations are conducted in accordance with approved procedures or instructions.
      3. Verify that welding material storage procedures, contain requirement for environmental (moisture) control, specify appropriate holding and baking temperatures and out-of-oven exposure time for each class of materials, and that actual practice follows these requirements.
      4. Verify that there are effective procedures for limiting electrode moisture pickup and maintaining identification after the welding materials are issued to the welder and that these procedures are strictly enforced.
   2. Welding Procedures
      1. Verify that the contractor/licensee has established adequate procedures or instructions for preparation, qualification approval/certification, distribution and revision of welding procedure specifications (WPSs).
      2. Select the WPS from each welding process or combination of processes used for safety-significant welding applications, as applicable, and verify conformance with procedures referenced in a, above.
      3. Verify that the WPSs (b above) define all essential variables, supplementary essential variables and nonessential variables in accordance with the applicable welding or construction code of record, as required by the license.
      4. Verify that each of the above procedures has been qualified in accordance with the applicable welding or construction code of record as required by the license, and that the supporting procedure qualification records (PQRs) are on file.
      5. Review PQRs for the above procedures and verify that each PQR lists the essential variables for the specific welding process or processes covered, and that the values or ranges of these variables are consistent with those permitted by the WPS and are within the limits of applicable welding or construction code of record as required by the license.
      6. Verify that any changes or revisions of the WPS essential variables are supported by requalification of the original WPS or a new WPS.
      7. Verify that any changes in the WPS nonessential variables are properly identified and documented either as revisions to the original or a new WPS.
   3. Welder Qualification

Verify that the contractor/licensee has established procedures for qualification of welders and welding operators in accordance with American Society of Mechanical Engineers (ASME) code, or as applicable by the construction code of record as required by the license. These procedures should include adequate provisions to preclude falsification of welders and welding operator’s qualifications.

* 1. Production Welding

No specific guidance.

* 1. Preheat and Post Weld Heat Treatment
     1. Verify that approved procedures are available for weld joint preheating when required by a WPS. These procedures should specify acceptable preheating methods and provide requirements for monitoring and recording preheat temperature before, during and, if specified, after welding until post weld stress relief.
     2. Verify that approved procedures are available for the conduct of PWHT and that the fabricator has a system capable of meeting the heating and cooling rates, metal temperature, temperature uniformity and control limits specified in the ASME code, or as applicable by the construction code of record as required by the license. The procedures should cover furnace as well as local heating if both methods are used in production.
  2. Examination and Inspection of Welds
     1. Verify that approved procedures are available for the nondestructive examination of welds when required by the fuel cycle facility (FCF) license and/or contract requirements.
     2. Verify that the fabricator's nondestructive procedures meet the requirements of the applicable welding or construction code as required by the license.
  3. Configuration Management. For the procedure review, consider the following attributes:
     1. Controls to ensure that the type and classification of welding comply with approved drawings and/or specifications and meet licensee commitments.
     2. For IROFS, determine if procedures are compatible with the management measures program, and prescribe adequate methods to meet the construction specifications.

## 03.02 Inspection Requirement 02.02

1. Review applicant/licensee’s established audit program (including plans, procedures, and audit schedule) for assessing the adequacy of work control functions and requirements, as applicable, in their licensing basis, in the area of safety-significant welding construction activities.
2. Review audit program to verify if examination, inspection, and if required, test personnel associated with performing tests and inspections of welding construction activities are qualified and/or certified to perform their assigned work.
3. Verify records establish that required audits, as applicable, were performed and that deficiencies identified during audits were tracked and corrected.

## 03.03 Inspection Requirement 02.03

1. Inspection of selected welding activities listed below may be accomplished by observation, record review and/or independent evaluation of in-process and/or completed work. Sample selection should be based on importance to operational safety and should include redundant components and a diversity of components and locations if practical. Before inspection of selected items, review the specifications, drawings, work procedures, management measure procedures, and work schedules applicable to the safety-significant welding activities selected for inspection.
2. Ascertain whether the following applicable safety-significant welding activities, as required by licensing commitments and applicable construction codes, are being controlled and accomplished in accordance with the requirements of the documents reviewed in 02.01, above:
   1. Base Material and Filler Metal Compatibility for Welding
      1. Verify that base metal and welding filler material combinations are appropriate for the application and conform to the applicable welding or construction code, as required by the license.
      2. Evaluate base material/filler metal combinations to determine the suitability of application.
      3. Perform the following verifications related to control and handling of welding materials:
         1. Review sufficient sampling of welding material purchasing and receiving records to verify that these operations are conducted in accordance with approved procedures or instructions.
         2. If the contractor/licensee uses a single system for welding material control, verify that this system is conservative and meets the requirements for the most restrictive application and personnel involved are knowledgeable of the system, including material designations.
         3. Verify that welding materials are clearly identified at all times in accordance with approved procedures and that identification of acceptable material is retained throughout storage handling and use until the material is actually consumed in the process.
         4. Verify that the method for disbursement of welding materials is effective and controlled in accordance with approved procedures and the unused welding materials are scrapped or recycled in accordance with special provisions which include maintaining identification and re-baking of coated electrodes when applicable.
         5. Verify by examination of representative records or direct observation that any required tests are performed on each lot of covered, flux cored or bare electrodes, rod, or wire, for each heat of consumable inserts and for each combination or bare electrodes and dry blend of flux mix to be used for welding.
   2. Welding Procedures
      1. Select WPS from each welding process or combination of processes used for safety-significant welding applications and verify conformance with procedures referenced in 02.01.
      2. Verify that all mechanical tests specified by the applicable welding or construction code of record, as required by the license (including notch toughness when applicable) have been completed and are properly documented in the PQR.
      3. Verify that the PQR has been certified by the contractor/licensee and that the mechanical test results meet or exceed the minimum requirements of the applicable welding or construction code of record as required by the license.
      4. Verify that in making procedure test plates for butt welds of heavy section materials with 80,000 psi or higher tensile strength, consideration has been given to the effect of angular, lateral and end restraints of the weldment in accordance with the applicable welding or construction code, if required.
   3. Welder Performance Qualification
      1. If practical, sample adequate number of welders taking the qualification tests and confirm by positive identification that the person welding the test weldment is indeed the person being qualified.
      2. Verify that the manufacturer has a workable system for maintaining a continuous record of the qualification status of all welders and welding operators and that this system is effectively utilized and accurate.
      3. Verify by review of a sample of qualification status records that welders and welding operators performing production welding have been and are currently qualified to weld under the respective procedures.
   4. Production Welding. Survey ongoing welding activities and select typical in-process operations representing different welding processes, procedures, and joint configurations for detailed review. Perform the following verifications:
      1. Verify that work is conducted in accordance with a "traveler" or similar document which coordinates and sequences all operations, references procedures or instructions, establishes hold points, and provides for production and construction quality control inspector signoffs, as required. This document should be available at the work location.
      2. Verify that welding procedures, detailed drawings and instructions if applicable, and weld data sheets are at the work location or readily available.
      3. Verify that the WPS assignment is in accordance with the applicable welding or construction code of record, as required by the license. This is accomplished by comparing the essential variables of the WPS with the production weld.
      4. Verify that welding technique and sequence requirements are specified.
      5. Verify that the base metals, welding filler materials, fluxes, gases, and backing materials are of the specified type and grade, have been properly inspected, tested, and identified and are traceable to test reports or certifications.
      6. Verify that weld joint geometry is as specified and that surfaces to be welded have been prepared, cleaned, and inspected in accordance with applicable procedures or instructions.
      7. Verify that parts to be welded are assembled and held in place within specified gap and alignment tolerances and verify that the alignment is within limits allowed by the applicable welding or construction code.
      8. Verify that temporary attachments such as bridging bars or fit-up clips have been attached by qualified welders, in accordance with qualified WPS.
      9. Verify that gas purging, if specified, is used in accordance with the applicable procedure and that protection is provided to shield the welding operation from adverse environmental conditions.
      10. Verify that preheat, if specified, is in accordance with applicable procedures requirements.
      11. Verify that the technique of each welder is in accordance with the welding procedure.
      12. Verify that welding electrodes are used only in the positions and with the electrical characteristics specified in the welding procedure, as applicable.
      13. Verify that shielding gas flow and composition is as specified in the WPS.
      14. Verify that shielding gas flowmeters indicate the gas type for which they are applicable and have appropriate conversion factors if a different gas or gas mixture is used for work under review.
      15. Verify that welding equipment, including power cables and gas lines, is in good condition and that ammeters and voltmeters used for automatic welding have been calibrated in accordance with applicable procedure requirements.
      16. Verify that interpass temperature is controlled in accordance with specified requirements. The interpass temperature for welding austenitic stainless steels and high nickel alloys should not exceed 350ºF, as applicable.
      17. Verify that interpass cleaning, grinding (especially starts and stops) and peening are conducted in accordance with applicable procedure.
      18. Verify that backgouging, if applicable, is performed as specified.
      19. Verify that temporary attachments, arc strikes and weld splatter are removed and inspected in accordance with specified procedures.
      20. Verify that the process control system (travelers) has provisions for weld repairs and that approved procedures or instructions are available which describe or reference acceptable methods of defect removal and weld repair.
      21. Verify by direct observation and/or record review that repairs are conducted in accordance with specified procedures. This verification should include:
          1. Review of weld repair consistent of mechanical removal of surface defects with no rewelding.
          2. Review of repair involving metal removal by chipping, grinding or machining followed by rewelding.
          3. Review of a repair involving metal removal by thermal cutting or gouging followed by rewelding.
      22. Verify that any repairs to the base metal are properly documented as required by the applicable welding/construction codes or procedures as required by the license. Verify that any repairs of modifications to ASME code-stamped components are properly documented in a special report as required by ASME code, as applicable.
      23. Identify all welders and welding operators observed during inspection of joint fit-up, welding and weld repair for qualification review.
      24. Verify, if applicable, that no peening has been done on the root and surface layer of the weld or base metal at the edges of the weld.
      25. Verify that the contractor/licensee has a periodic preventive maintenance program for welding equipment used for welding safety-significant materials.
   5. Preheat and Post Weld Heat Treatment
      1. Sample sufficient number of in-process components to verify that preheat control procedures are being followed in production welding.
      2. Verify that the preheat used in production welding is within the limits specified by the welding procedure, as applicable.
      3. Verify that approved procedures are available for the conduct of PWHT and that the fabricator has a system capable of meeting the heating and cooling rates, metal temperature, temperature uniformity and control limits specified in the applicable welding or construction code of record as required by the license. The procedures should cover furnace as well as local heating if both methods are used in production.
      4. If furnace heating is used, verify that furnace atmosphere is controlled as specified in approved procedure.
      5. Review a sufficient sampling of preheat and PWHT operations (in-process and records) to assure that the following items are satisfied, as applicable:
         1. Verify that components are instrumented to provide time-temperature recordings for the duration of the entire heat treatment (HT) cycle (both furnace and local HT).
         2. Verify that sufficient thermocouples are used to measure the anticipated hottest and coldest temperatures of the weld during holding at temperature and to measure temperature variation within any 15-foot interval of weld length during heating or cooling. This variation should not exceed 250ºF.
         3. Verify that the PWHT temperature and holding time is specified, is adhered to and is consistent with ASME code requirements, or as applicable by the construction code of record as required by the license, based on the material type and wall thickness.
         4. Verify that the maximum initial furnace temperature, heat up and cool-down rates are specified, are adhered to and are consistent with the applicable welding or construction code of record as required by the license.
         5. Verify that procedures are available for conduct of intermediate or "non-code" stress relief of in-process components if such treatments are used in component fabrication.
         6. Verify that temperature control is exercised on in-process components which are required to be maintained at preheat or other specified temperature for extended time periods while awaiting further processing.
         7. Verify that measures are taken to avoid sensitization of austenitic stainless steel and high nickel alloys during stress relief treatments. This generally involves provisions which preclude furnace stress-relieving of austenitic stainless steel components or parts and limit their exposure to sensitization temperature range (800-1500ºF).
         8. Examine cumulative stress-relief records for typical component welds and verify that the total time at temperature does not exceed that permitted by the applicable welding or construction code of record as required by the license, and based on the welding PQRs.
   6. Examination and Inspection of Welds
      1. Select welds produced by different welding processes, procedures, and combination of procedures, and verify by visual examination that the following characteristics conform to the applicable ASME code and fabricators welding procedure requirements, or as applicable by the construction code of record as required by the license:
         1. Weld surface finish and appearance. Include inside diameter of pipe welds when accessible.
         2. Transitions between components of different diameters and wall thickness.
         3. Weld reinforcement.
         4. Shape and size of fillet and socket welds.
         5. Joint configurations of permanent attachments and structural supports to clad components.
         6. Removal of temporary attachments, arc strikes and weld spatter.
         7. Finish-grinding or machining of weld surface – verify absence of wall thinning.
         8. Absence of surface defects including cracks, laps, lack of penetration, lack of fusion, porosity, slag, oxide film and undercut exceeding prescribed limits.
      2. Verify that approved procedures are available for the nondestructive examination of the weld when required by the applicable welding or construction code of record, as required by the license.
      3. Verify that the fabricator's nondestructive procedures meet the applicable welding or construction code of record, as required by the license.
      4. Verify that the fabricator's welding inspectors are certified in accordance with the requirements of the applicable welding or construction code of record, as required by the license.
      5. Verify that the fabricator's inspection of welds meets the requirements stated in the applicable welding or construction code of record, as required by the license.
   7. Configuration management.

For the activities observed during Inspection Requirement 02.03., verify if changes occurred during these construction activities, the applicant/licensee properly controlled and documented these changes for engineering review, approval, and subsequent incorporation into the final as-built drawings, as applicable. Verify these actions were completed in accordance with their procedures and management measures, as applicable.

## 03.04 Inspection Requirement 02.04

Review licensee and contractor requirements covering the scope of records for safety‑significant welding activities to (1) determine who prepares each quality-related record, who reviews the records for accuracy and who ensures that the recorded information meets requirements, as applicable; and (2) evaluate the information obtained above and determine whether the established record management system satisfies management measures program and licensing requirements.

1. Preheat and Post Weld Heat Treatment
   1. Review a sufficient sampling of PWHT operations (in-process and records) to assure that the stress relief HT meets the requirements stated in or as applicable by the construction code of record as required by the license.
   2. Examine cumulative stress-relief records for typical welds and verify that the total time and temperatures meet the ASME code requirements, or as applicable by the construction code of record as required by the license.
2. Construction Quality Control Inspection Records. Review and evaluate a sample of pertinent quality records. Determine whether: (1) adequate preparation, control, review, and evaluation of these records have been made; (2) they reflect that regulatory requirements have been met and (3) the system of records is functioning properly. The selection should include records of components in safety control subsystems, emergency control system, sensors, and safety parameter displays, if applicable.
3. Nonconformance/Deviation Record(s).
   1. Records include current status of these items. Nonconformance reports include the status of corrective action or resolution, (e.g., determine whether adequate corrective action is being taken when test results are not within tolerance or acceptance criteria.)
   2. For the inspection, review and evaluate a sampling of reports applicable to nonconformances or deviations. Determine whether:
      1. Records are complete and promptly reviewed by qualified personnel.
      2. Records have been routinely processed, evaluated in a timely manner and controlled through established channels, for resolution of the root-cause as well as the immediate problem.
      3. Records are properly identified and stored, indicate current status, and can be retrieved in a reasonable time.
      4. Nonconformance reports include the status of corrective action or resolution, and adequate justification is provided for use-as-is disposition.
4. Training/Qualification Records of Craft, and Quality Inspection Personnel (as required).

Records establish that quality inspection personnel, as applicable, are adequately qualified for their assigned duties and responsibilities and that craft personnel have been trained in their assigned tasks. Records are complete and current and show which activities inspectors are qualified to perform.

1. Configuration Management Records. Review and evaluate a selected sample of configuration management records, and determine whether:
   1. Records associated with design and field changes, as well as related work and IP changes, reflect that timely review and evaluation of design and field change documents have been performed by personnel who are qualified.
   2. Records of periodic inspections ensure that only the most recent approved documents, including design changes, were used in the field.
   3. Design changes are subject to adequate design control, including consideration of the impact of the change on the overall design and on as-built records.
   4. Records of nonconformance’s to design requirements include preparation of a nonconformance report even if the nonconformance is resolved through the design‑change process.

## 03.05 Additional Guidance

Note: Personnel Interviews. Informal interviews with field-craft and inspection personnel may be randomly conducted to determine how well employees know the requirements of their work activity. Ascertain whether a sufficient number of adequately qualified quality control inspection personnel, if required, are at the construction site, commensurate with the work in progress, and adequately performing their assigned duties through the established organizational structure.

General Guidance.

1. Review of Welding Specification and Procedures. The inspector may perform the following reviews:
   1. Identify contractors or fabricators performing safety-significant welding at the site.
   2. Identify which welding processes are used at the site and perform a review of all welding procedures used in production welding in accordance with the applicable paragraphs of this procedure.
   3. Determine whether the welding procedures being used meet all of the relevant provisions of the applicable welding or construction code of record, as required by the license. Establish whether the use of these procedures will result in the production of sound welds suitable for the intended application.
2. Work Observations. The inspector may select for work observation a sample of welds composed of a combination of systems and welding contractors associated with the work. The selected welds should also represent a good cross section of the production activities in terms of welding processes used (shielded metal arc (SMA), tungsten inert gas (TIG), etc.) and materials to be welded (stainless steel, carbon steel, etc.). Considerations such as physical location, difficulties to weld and limited accessibility should be also incorporated in the sample selection.
3. Record Review. The inspector may review relevant documentation related to randomly selected welds for each welding process used at the site (e.g., SMA, TIG, metal inert gas, etc.). Same considerations as those stated in b above are applicable. It is preferable that the welds identified for record review are not the same welds identified for work observation. However, certain circumstances may necessitate the use of some of the welds sampled in b above (e.g., a contractor/licensee has completed only three welds to date and all three welds need to be included in the sample to provide meaningful statistical representation).

# 88200.K-04 RESOURCE ESTIMATE

This appendix is intended to provide inspection requirements and guidance applicable to a wide variety of potential construction projects at both existing and new FCFs. These projects may vary greatly in scope, complexity, and potential risk to public health and safety. Recommended inspection scope and hours for a specific new FCF will be documented in the principal inspection plan (PIP) for that facility developed in accordance with Inspection Manual Chapter (IMC) 2694, “Fuel Cycle Facility Construction and Pre-Operational Readiness Review Inspection Program.”

Additionally, this IP can be used to provide additional inspection guidance for plant modification inspections at existing facilities but is not required to be implemented for these projects. Use of this appendix, or sections of this appendix, for modifications at existing FCFs, would be done on a case-by-case basis, in accordance with IMC 2600, Appendix B, “NRC Core Inspection Requirements.”

# 88200.K-05 PROCEDURE COMPLETION

This IP is complete when the applicable appendices or applicable appendix sections are completed for the facility, as determined by the PIP. Inspectors are not expected to complete every activity in the appendices of this IP. Instead, inspectors should prioritize inspection activities based on 1) importance of the activity to safety, 2) availability of the onsite activity at the time of the inspection, and 3) available inspection resources. This appendix does not need to be completed if there are no SSIS covered by this appendix at a FCF.

# 88200.K-06 REFERENCES

Refer to licensing basis requirements for applicable codes and standards for each fuel facility.

ASME Boiler and Pressure Vessel Code

American Welding Society (AWS), AWS D1.1, “Structural Welding Code – Steel”

AWS D1.6, “Structural Welding Code – Stainless Steel”

Regulatory Guide (RG) 1.31, “Control of Ferrite Content in Stainless Steel Weld Metal”

RG 1.44, “Control of the Use of Sensitized Stainless Steel”

RG 1.50, “Control of Preheat Temperature for Welding of Low-Alloy Steel”

RG 1.71, “Welder Qualification for Areas of Limited Accessibility”

END

List of Attachments:  
1. Revision History Table

Attachment 1: Revision History for IP 88200 Appendix K

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| --- | --- | --- | --- | --- |
| Commitment Tracking Number | Accession Number  Issue Date  Change Notice | Description of Change | Description of Training Required and Completion Date | Comment Resolution and Closed Feedback Form Accession Number  (Pre-Decisional Non-Public Information) |
|  | ML24232A169  05/28/25  CN 25-014 | Initial issuance. Discipline-specific appendix developed to provide technical inspection guidance for new construction and major modifications activities for fuel facilities with varying technologies, size, licensing requirements, etc. | N/A | N/A |