1.0 Purpose

The purpose of this specification is to define NRG requirements for purchasing welding filler metals.

2.0 Scope

This specification shall apply to welding filler metals purchased for any NRG owned or operated facility.

3.0 Definitions

3.1 ANSI – American National Standards Institute

3.2 ASME – American Society of Mechanical Engineers

3.3 AWS – American Welding Society

3.4 NRG – NRG Energy Inc.

3.5 Manufacturer – The organization making the welding filler metal

3.6 Supplier – The organization providing the welding filler metal

4.0 References

4.1 ANSI/AWS A5.01, “Procurement Guidelines for Consumables - Welding and Allied Processes - Flux and Gas Shielded Electrical Welding Processes”

4.2 ASME Boiler & Pressure Vessel Code, Section II, Part C, “Specifications for Welding Rods, Electrodes, and Filler Metals”

4.3 AWS Filler Metal Specifications

The latest edition of the above codes and specifications shall apply. In the event of conflicts between this specification and the references cited

above, the Supplier shall immediately notify NRG, who will make the final judgment and interpretation.

5.0 Responsibility

5.1 The Supplier shall be responsible for fulfilling the requirements as set forth in this specification. Exceptions to and deviations from this specification shall be clearly delineated in the Supplier's bid for disposition by NRG.

5.2 The Supplier shall provide a typical deposit analysis report for each filler metal supplied.

5.3 The filler metal Manufacturer shall have a Quality Assurance Program as outlined in ANSI/AWS A5.01.

5.4 NRG Supply Chain Department shall specify the following in the purchase order:

5.4.1 ASME/AWS specification number (e.g., SFA 5.1)
5.4.2 Classification (e.g., E-7018)
5.4.3 Size (e.g., 3/32")

6.0 Material

6.1 Welding filler metals shall comply with all the applicable requirements of Reference 4.2.

6.2 All filler metal shall be identified with an ASME/AWS specification number, classification, and size.

6.3 Austenitic stainless steel filler metals shall have 5% to 15% ferrite, except for E-310 and ER-310.

7.0 Marking and Packaging

7.1 All bare electrodes shall be flagged, stamped, or stenciled at both ends with the AWS classification.

7.2 Low hydrogen covered electrodes shall be packaged in hermetically sealed containers.

7.3 Containers shall be marked with the ASME specification and classification designation in addition to markings required by Reference 4.2.

7.4 All sealed containers for filler metal and bare electrodes shall be clearly identified with the manufacture's name and product trade name.

8.0 Documentation

The Supplier's final documentation package shall include the following:

8.1 Typical Deposit Analysis