

J. A. JONES CONSTRUCTION COMPANY
 CONSTRUCTION WORK PROCEDURE
 FOR
 HANDLING, STORING, INSTALLING, CADWELDING
 AND MODIFICATION OF REINFORCING STEEL

WATERFORD SES UNIT NO. 3
 CONTRACT NO. W3-NY-4

REV.	DATE	ENGINEERING APPROVED BY	DATE	QUALITY ASSURANCE APPROVED BY	DATE	CONSTRUCTION APPROVED BY	DATE
0	10/1/75	<i>L. J. Pickett</i>	10/2/75	<i>Phillip J. Schenck</i>	10/2/75	<i>Lee J. Terry</i>	10/2/75
1	10/14/75	<i>al Paine</i>	10/14/75	<i>Phillip J. Schenck</i>	10/14/75	<i>SR 4.00</i>	10-15-75
2	10/24/75	<i>al Paine</i>	10/24/75	<i>Phillip J. Schenck</i>	10/24/75	<i>Kenf. P. Kowal</i>	10-24-75
3	11/4/75	<i>al Paine</i>	11/10/75	<i>[Signature]</i>	11/10/75	<i>Lee J. Terry</i>	10/10/75
4	11/14/75	<i>al Paine</i>	11/19/75	<i>[Signature]</i>	11/19/75	<i>Lee J. Terry</i>	11/19/75

REVIEWED
 W/ COMMENTS
 W/O COMMENTS ✓
 REJECTED
 EBASCO QUALITY ASSURANCE
 BY: *[Signature]*
 DATE: 11-24-75

FREEDOM OF INFORMATION
 ACT REQUEST
 84-455
 C/677

8506220174 850222
 PDR FOIA
 GARDEB4-455 PDR

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PROJECT TITLE: WATERFORD SES UNIT NO. 3 CONTRACT NO. W3-NY-4	
<p>1.0 <u>PURPOSE</u></p> <p>To outline methods used by J. A. Jones and Subcontractors to handle, store, install and splice reinforcing steel.</p> <p>2.0 <u>SCOPE</u></p> <p>This procedure includes the proper references to be used by J. A. Jones and Subcontractors to comply with specifications and drawings. The utilization of records necessary to provide traceability is also part of this procedure.</p> <p>3.0 <u>REFERENCES</u></p> <p>3.1 Ebasco Specification No. LOU-1564.473, "Concrete Reinforcing Steel Furnishing, Fabrication and Delivery".</p> <p>3.2 Ebasco Specification No. LOU-1564.479, "Mechanical Splicing of Concrete Reinforcing Steel - Seismic Class 1".</p> <p>3.3 J. A. Jones Work Procedure, W-WP-3, "Qualification of Welders".</p> <p>3.4 Approved Construction Drawings.</p> <p>3.5 Ebasco Procedure C 15.1.1 "Material Receiving, Warehousing and Control".</p> <p>3.6 "Supplementary Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel during the Construction Phase of Nuclear Power Plants," ANSI N45.2.5 - 1974.</p> <p>3.7 "Mechanical (Cadweld) Splices in Reinforcing Bars of Category 1 Concrete Structures," Regulatory Guide 1.10, Rev. 1, 1/2/73 (Safety Guide 10).</p> <p>3.8 J. A. Jones Procedure W-SP-1 "Special Process Procedure for Cadwelding".</p> <p>4.0 <u>RESPONSIBILITIES</u></p> <p>4.1 Ebasco Services Incorporated is responsible for supplying reinforcing steel, ERICO Cadweld Splice Kits and testing services and records necessary to support J. A. Jones and Subcontractors work activities. See References 3.1 and 3.2 above. J. A. Jones will inform Ebasco if any special graphite basins, crucible, or other splicing unit components are required.</p>	

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4.2 J. A. Jones and Subcontractors are responsible for handling, installation, splicing and modifications to reinforcing steel. Qualified personnel per reference 3.3 shall be utilized for cadweld splicing operations. Compliance with "approved for construction" drawings is mandatory.

5.0 DEFINITIONS

None

6.0 PROCEDURE

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6.1 J. A. Jones shall unload reinforcing steel and if it is found that any steel does not conform to specifications or bar bending schedule, he shall segregate nonconforming bars into Engineer's Quality Control "Hold Areas".

6.1.1 Handling of materials received from Ebasco shall be in accordance with standard construction practices.

6.1.2 Cadweld splice kits and weld filler materials shall be stored and protected by Ebasco. Withdrawal by J. A. Jones and Subcontractors will be on an "as needed" basis. Withdrawals shall be in accordance with references 3.5.

6.1.3 Storage of reinforcing steel received from Ebasco will be in accordance with reference 3.5.

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6.2 Installation of reinforcing steel and production cadweld splicing shall be performed in accordance with references 3.1, 3.2, 3.4 and 3.8. Sister Cadweld Splices shall be performed in accordance with references 3.1, 3.2 and 3.8, where and when required by J. A. Jones Quality Assurance/Verification personnel.

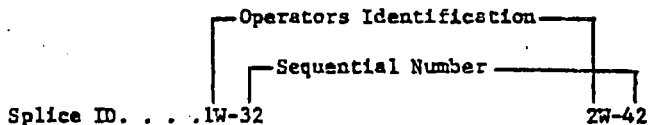
6.2.1 Ebasco shall be responsible for the testing of sister and production splices and providing J. A. Jones with copies of the results.

6.2.2 Cadweld splices shall be performed and mapped in accordance with "Approved Construction Drawings". J. A. Jones shall maintain an "as built" set of drawings showing cadweld locations and identification of individual splices.

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- 6.2.3 J. A. Jones shall prepare and maintain daily and weekly cadweld test reports for the life of the job.
- 6.2.4 Only approved construction drawings shall be used for construction.
- 6.2.5 Prior to placing of reinforcing steel all loose mill scale, dirt, grease or other contaminants shall be removed.
- 6.2.6 A symbol will be stamped on the cadweld sleeve indicating the assigned identification letter(s) of the operator or crew, the sequential number of the weld (starting from the first weld made by the crew and continuing without interruption).
For example: -



- 6.2.7 Preparation of reinforcing steel ends for cadwelding shall be in accordance with References 3.1 and 3.8.
- 6.3 Modifications to reinforcing steel requiring cutting shall be by sawing, shearing, grinding or flame cutting.
 - 6.3.1 Reforming of bars if required shall be by cold banding with consent of the Engineer.
- 6.4 Errors, omissions or other deficiencies in cut sheets and drawings are not the responsibility of J. A. Jones or Subcontractors. Discrepancies noted during review or at the time of placement shall be brought to the attention of Ebasco for resolution.

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<p>7.0 "Deleted"</p> <p>8.0 <u>FABRICATION</u></p> <p>8.1 Reinforcing steel shall be cut to length and bent to shape in accordance with approved reinforcing schedules supplied by the Engineer.</p> <p>8.2 All bars shall be bent cold and to the recommended diameters as specified in the CRSI Manual of Standard Practice, 20th Edition.</p> <p>8.3 Bars to be bent as part of circular arc and to be mechanically spliced to a circular arc bar shall be bent to the radius specified from end to end. No bars which end in a short straight length will be accepted.</p>	