

EDASCO SERVICES INCORPORATED

WATERFORD STEAM ELECTRIC STATION - UNIT NO 3

PROCEDURE FOR:

Handling, Storing, Installing, Cadwelding and
Modification of Reinforcing Steel

PROCEDURE NUMBER:

CP-699

ISSUE SUMMARY

NOTATIONS IN THIS COLUMN INDICATE WHICH CHANGES HAVE BEEN MADE

ISSUE/DATE	PREPARED	APPROVED	REMARKS
"A" Draft 5-16-80	<i>S. Kalat</i> S. Kalat		
"A" Issue 8-12-80	<i>S. Kalat</i> S. Kalat	<i>J. Crnich</i> J. Crnich	
"B" Draft 3-10-82	<i>C. McBride</i> C. McBride		Revise 5.1, Add 6.3.6, 7.0, 7.1, Attachment CP-699-
"B" Issue 3-30-82	<i>C. McBride</i> C. McBride	<i>R. J. Milhiser</i> R. J. Milhiser	

INFORMATION ONLY

B506220012 B50222
PDR FOIA PDR
CARDEB4-455 PDR

FREEDOM OF INFORMATION
ACT REQUEST

84-455

NOTATIONS IN THIS COLUMN INDICATE WHICH CHANGES HAVE BEEN MADE

1.0 PURPOSE

1.1 To state methods used by Ebasco Services to store, handle, install, and splice reinforcing steel.

2.0 SCOPE

2.1 This procedure is applicable to the storage, handling, installation, and splicing of reinforcing steel performed by Ebasco Services.

3.0 REFERENCES

3.1 Specification LOU-1564.473, "Concrete Reinforcing Steel Furnishing, and Delivery".

3.2 Specification LOU-1564.479, "Mechanical Splicing of Concrete Reinforcing Steel - Seismic Class I."

3.3 Ebasco Procedure CP-708 - "Cadwelding and Cadwelder Qualification".

3.4 Ebasco Procedure ASP-IV-10 - "Material Receiving, Warehousing, and Control".

4.0 DEFINITIONS

4.1 None.

5.0 RESPONSIBILITIES

5.1 Construction Department is responsible for performing all activities under this procedure, except for "CADWELD MAP LOC" and sketch which shall be prepared by Field Engineering.

6.0 PROCEDURE

6.1 Unloading and Storage of Reinforcing Steel.

6.1.1 Rebar shall be unloaded from delivery trucks in accordance with standard construction practices. Methods of handling shall be such that the bars are not permanently bent out of shape.

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- 6.1.2 Rebar shall be stored outside on dunnage to allow circulation of air under the steel and prevent bars from lying on the ground or in standing water. Rebar bundles may be stacked but shall have dunnage between the layers to facilitate lifting of bundles. Bar mark and heat number tags should remain accessible on all bundles.
- 6.1.3 Reinforcing steel shall be requisitioned from the warehouse in accordance with Procedure ASP-IV-10.
- 6.1.4 Reinforcing steel accepted by Construction shall be stored on dunnage whether inside or outside the building.
- 6.2 Cadweld Material.
 - 6.2.1 Cadweld material shall be stored by the warehouse and requisitioned by the Construction Department when needed in accordance with ASP-IV-10.
 - 6.2.2 These materials shall be stored by the Construction Department in dry storage and shall be kept for short periods only. Construction shall requisition only a one to two day supply of cadweld material. Excess material shall be returned to the warehouse for storage.
- 6.3 Placement of Reinforcing Steel and Cadweld Splices.
 - 6.3.1 Reinforcing steel shall be placed in accordance with bar marks called for on drawings. Cadwelds shall be located as shown on drawings or other approved documents or as required in blockouts or repairs.
 - 6.3.2 Cadwelds shall be installed only by qualified cadwelders and in accordance with approved procedures. Qualification requirements and installation procedures are detailed in Procedure CP-708.
 - 6.3.3 Completed cadwelds shall be stamped with the assigned identification letter(s) of the operator or crew and the sequential number of the weld by that crew.

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6.3.4 Modifications to reinforcing steel requiring cutting may be by flame cutting, grinding, shearing, or sawing.

6.3.5 Prior to installation of rebar, loose mill scale, dirt, grease, or other contaminants shall be removed.

6.3.6 Cadweld location(s) shall be recorded on "CADWELD MAP LOG", form CP-699-1, and submitted to Ebasco Q.C. A sketch showing cadweld location(s) shall be attached to CP-699-1.

6.4 Fabrication of Reinforcing Steel.

6.4.1 Rebar is generally furnished by the vendor in accordance with approved bar bending schedules.

6.4.2 When additional bars are required, these may be cut and bent from stock steel received from the approved rebar vendor.

6.4.3 Rebar shall be cut to length and bent in accordance with bar bending schedules.

6.4.4 Bars shall be cold bent and shall comply with requirements in CRSI Manual of Standard Practice, 20th Edition for minimum radius of bend, bending tolerances, length tolerance, etc.

6.4.5 Bars bent to a radius as a circular bar and requiring cadweld splicing shall be bent to the specified radius from end to end. Bars which end in a short straight length will be cut to fit the correct radius if the total circular length is adequate.

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7.0 ATTACHMENTS

7.1 Cadweld Map Log (CP-699-1).

CADWELD MAP LOG

Placement/Map No. _____

Drawing No. _____

Building: _____

SLEEVE I.D.	RADIUS	AZIMUTH	N-S	E-W	ELEV.	BAR SIZE/ POSITION	REMARKS

NOTE: Inside RCB: N-S and E-W directions are from center line of RCB.
 Radius point location shall be indicated in "REMARKS" column.
 Outside RCB: N-S and E-W directions are from respective column
 line; indicated in "REMARKS" column.

Engineer _____ Date _____

Q.C. Inspector _____ Date _____