ATTACHMENT 3

BALDWIN ASSOCIATES	QUALITY ASSURANCE PROCEDURE MANUAL	REVISION 2
	BQA-191 - FIELD VERIFICATION SAMPLING PLAN	PAGE 1 OF 5

REVISION DATE	DESCRIPTION	APPROVAL	DATE
2	GENERAL REVISION (revised and rewritten)	Q.A. MANAGER	5/16/84
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FORM JV-835 (4/82)

1.0 PURPOSE

This procedure provides the sample plans and methods to be used in the Baldwin Associates (BA) Field Verification Program.

2.0 SCOPE

This procedure applies to all safety related, augmented Class D, fire protection, and seismic HVAC systems, items, or components and the exposed structural steel in the auxiliary, fuel handling, containment, and control buildings per Reference 3.2.

3.0 REFERENCES

3.1	Mil Std. 105D	Sampling Procedures & Tables for Inspection by Attribute
3.2	BQA-190	Field Verification
3.3	BQA-193	Inaccessible Items
3.4	BAP-1.0	Nonconformances
3.5	BQA-194	Field Verification of Turned-over Systems
3.6	BQA-195	Field Verification Document Tracking
3.7	BQA-196	Field Verification Evaluation Program

4.0 DEFINITIONS

4.1 Attribute - Characteristic of an item, component, or unit of work which can be evaluated and determined to be conforming or nonconforming with specified criteria.

4.2 Checklist - Document used for field verification containing those attributes to be verified or inspected. Checklists shall also list for each attribute the applicable acceptance criteria or tolerances.

4.3 Field Verification - Quality Assurance program, using approved procedures and inspection checklists designed to review hardware for the purpose of determining conformance to requirements.

4.4 Lot - Collection of items from which a sample is drawn.

4.5 Nonconformances - DEficiency in characteristic which renders the quality of an item unacceptable or indeterminate.

4.6 Random - Objective process in which all items being considered have an equal chance of selection. In the Field Verification program, randomness will be achieved by the use of random numbers.

4.7 Sample Plan - The required sample size for a given lot.

4.8 Traveler - Document listing work activities to be performed and their sequence, scope, requirements, etc.

5.5 Turnover Package (TOP) - Appropriate documentation provided for a system sub-system, area, etc. that Illinois Power Company Start-up has classified as a system or partial system for turnover purposes.

5.12 Work Control Package (WCP) - Documentation which identifies work performed and the inspection and acceptance of the work (travelers, drawings, etc.).

5.0 RESPONSIBILITIES

5.1 The Baldwin Associates Manager of Quality Assurance (MQA) is responsible for the implementation and overall administration of the Field Verification Program.

5.2 The Baldwin Associates Assistant Manager of Quality Assurance (AMQA) is responsible for implementation of the Field Verification Program and for assigning qualified and certified personnel to these activities.

5.3 The Baldwin Associates Senior QA Engineer - Field Verification (SQAE) is responsible for:

5.3.1 Supervising personnel assigned to the Field Verification Program and for assigning personnel to perform specific tasks.

5.3.2 Determining lot formation, size of sample and Field Verification Procedures and Checklists to be utilized.

5.4 The Baldwin Associates Field Verification Engineer (FVE) is responsible for actual reverification, re-examinations, or reinspections using the appropriate procedures and checklists.

6.0 GENERAL

6.1 The sample plans contained in this procedure are derived from MIL-STD-105D, "Sampling Procedures and Tables for Inspection by Attributes" (Reference 3.1).

6.1.1 The plan for critical attributes shall ensure a 95% confidence that 5% or less defective attributes exist in the unexamined portion of the population under evaluation.

6.1.2 The plan for non-critical attributes shall ensure 95% confidence that 15% or less defective attributes exist in the unexamined portion of the population under evaluation.

6.2 Samples will be drawn from defined lots consisting of one or more work control packages (travelers, drawings, etc.).

NOTE: When items selected are found to be inaccessible, they will be excluded from the sample and an alternate item selected.

6.3 For items or systems that have been turned over to Illinois Power Company (IPC), Field Verification will require interface and coordination with the IPC Start-Up Coordinator in accordance with Reference 3.5.

6.4 Sampling is not permitted on lots returned to BAFV by the IPC Overinspection Program for re-examination.

7.0 PROCEDURE

7.1 Upon receipt of the preliminary Turnover Package or determination of scope of work the SQAE or his designee shall determine if sampling can be utilized based on the lot size and other criteria.

7.2 Lot size for structural steel shall be determined as follows.

7.2.1 The SQAE or his designee shall request structural drawings from the Document Control Center for the area(s)/building(s). Lot size(s) may consist of the number of structural members in each main framing elevation plus other members located within the building, but not on a main framing elevation:

NOTE: Main structural framing elements include beams, girders, columns, purlins and girts. Miscellaneous framing, gallery steel and stairways will not be included in the scope of Field Verification.

7.2.2 The lot size for structural steel in the containment building will be determined by the number of structural members in the specific quadrant, including all framing elevations.

7.3 Lot size for electrical cable tray, conduit, and supports shall consist of all elements relating to raceways and supports within a specific building/area/elevation.

7.4 If sampling is to be performed, the SQAE shall determine the required sample size for each lot from Exhibit 1.

7.5 Items to be inspected will be selected from the lot using random numbers. A number of alternates, designated by the letter "A" shall also be selected in case some of the original sample items are found to be inaccessible or unavailable for inspection. The method of selection used shall be noted on the system completion letter.

7.6 Perform field verification of selected items in accordance with References 3.2 and 3.6.

7.7 Inaccessible items shall be documented per Reference 3.3.

7.8 Document all nonconformances in accordance with Reference 3.4.

7.9 The results of the field verification efforts shall be processed and evaluated in accordance with Reference 3.7.

8.0 EXHIBITS

#1-Sample Plan

EXHIBIT #1 (pg. 1 of 1)

SAMPLE PLAN

Lot Size	Sample Size
2-50	All
51-500	50
501-1200	80
1201-3200	125
3201-10,000	200
10,000-35,000	315