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TRANSMITTAL NOTICE

Transmittal Number	Controlled Copy Number	Date Issued
89-396	20	10/16/89

Assigned to: NRC/Office of Nuclear Reactor Regulation
Instructions & Licensing Department
1 White Flint North-11555 Rockville Pike
Rockville, MD 20555

Document(s): BEQAM, VOLUME II; Page vii, Rev. 77; Section 3, Rev. 11

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Change Instructions Notice (CIN)

Transmittal No. 89-396 Date: 10/12/89

Please update your copy of BEQAM, Vol. II with the attachments to this transmittal as instructed below.

REMOVE/DISCARD	INSERT
Page vii, Rev. 76	Page vii, Rev. 77
Section 3, Rev. 10	Section 3, Rev. 11

BEOAM VOLUME II

LIST OF EFFECTIVE PAGES

SECTION	PAGE NOS.	SECTION REV. NO.	DATE
	i	Title Page	07/20/83
	ii	3	07/16/87
	iii	5	07/20/83
	iv	5	07/20/83
	v	10	10/26/84
	vi	7	12/30/83
	vii	64	03/14/88
1	1-8	24	06/10/88
1	Figure II-1-1	24	06/10/88
1	Figure II-1-2	24	06/10/88
1	Figure II-1-3		DELETED
2	1-7	27	07/31/89
2	Exhibit II-2-1	27	07/31/89
3	1-2	11	10/10/89
4	1-4	20	09/25/89
4	Exhibit II-4-1	20	09/25/89
5	1 and 2	13	07/24/87
6	1-2	10	02/12/88
7	1-5	15	02/17/89
8	1 and 2	6	02/17/89
9	1 and 2	5	07/20/83
10	1 and 2	11	05/05/89
11	1 and 2	9	02/12/88
12	1-3	7	02/12/88
13	1	7	09/14/88
14	1	6	02/12/88
15	1-5	14	02/12/88
16	1-3	24	06/21/89
17	1-4	9	02/12/88
18	1-6	25	07/31/89

DESIGN CONTROL

3.1 PURPOSE

This section establishes the requirements for the control of design activities to assure that appropriate quality standards are specified and design reviews are accomplished in a planned and orderly manner.

3.2 GENERAL

3.2.1 Engineering and design activities associated with plant design changes and modifications of nuclear safety related structures, systems, and components are accomplished according to ANSI N45.2.11-1974 as amended by Regulatory Guide 1.64, Rev. 1.

3.2.2 Before implementation, plant design changes and modifications are reviewed by responsible NED, QAD (quality category Q changes and modifications only), ORC, and station personnel, and safety evaluations are performed for design changes to assure compliance with 10CFR50.59. If the Operations Review Committee (ORC) determines that an unreviewed safety item is involved, the Nuclear Safety Review and Audit Committee (NSRAC) reviews, and Nuclear Regulatory Commission (NRC) approval is required through NED prior to performing the change. Approved design changes and modifications are implemented by the the Station Organization with technical guidance provided by NED.

3.2.3 When services designated quality category Q are purchased by the NED for performance of work associated with plant design changes and modifications, QAD reviews and approves the preliminary procurement documents to assure that appropriate quality assurance program requirements are included.

3.3 DESIGN CHANGE PROCESS

3.3.1 A Plant Design Change (PDC) is used by BECo personnel to obtain authorization for and to implement plant design changes and modifications to systems, structures, and components at the station. Subsequent changes to an approved PDC package are made using Field Revision Notices (FRNs).

3.3.2 The cognizant personnel within the BECo Nuclear Organization, or approved supplier of engineering services, who are responsible for the engineering design inputs and design verifications perform their functions according to written procedures to assure the following:

3.3.2.1 Design documents are identified and controlled, and revisions thereto are reviewed, approved, collected, stored, and controlled in a systematic manner.

3.3.2.2 The individuals or groups responsible for design reviews and other design verification activities and their authority and responsibilities are identified and design interfaces are controlled.

3.3.2.3 Plant design changes and modifications are reviewed, approved, and controlled to assure compliance with 10CFR50.59.

3.3.2.4 Applicable regulatory requirements and design bases are correctly translated into specifications, drawings, written procedures, and instructions.

3.3.2.5 Appropriate standards for quality are specified in design documents and deviations and changes from such standards are controlled.

3.3.2.6 Suitable design controls are used in applying principles of reactor physics and in making seismic, stress, thermal, hydraulic, radiation, and accident analyses.

3.3.2.7 Design changes and revisions to design documents are appropriately controlled to assure compatibility of materials; accessibility for in-service inspection, maintenance, and repair; and delineation of acceptance criteria for inspections and tests.

3.3.2.8 Methods for verifying design changes, such as design reviews, alternative calculations, and qualification testing are properly chosen and followed; the most adverse design conditions are specified for test programs used to verify the adequacy of designs.

3.3.2.9 Individuals or groups responsible for design verification meet the requirements for independence prescribed in Regulatory Guide 1.64, Rev. 1.

3.3.2.10 Design documents, including drawings and specifications and approved revisions thereto, are controlled and distributed to responsible individuals in the user organization in a timely manner, to preclude inadvertent use of superseded material.

3.3.2.11 Errors and deficiencies that adversely affect safety related structures, systems, and components in the design process are documented and appropriate corrective action is taken.

3.3.2.12 Standard, off-the-shelf commercial or previously approved materials, parts, and equipment essential to the safety functions of structures, systems and components are reviewed for suitability of application.