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COMANCHE PEAK REVIEW TEAM
POPULATION ITEMS LIST

POPULATION NAME: SMALL BORE PIPING CONFIGURATION

PREPARED BY: Marissa Saraceni
RESPONSIBLE QA/QC SUPPORT ENGINEER

DATE: AUGUST 14, 1985
REV: 0

The Population Items List consists of all safety related Brown & Root isometric drawings, both large and small bore piping.

POPULATIONS LIST SOURCE:

The population items list (attached) was established using input from:

1. Document Control Center - Title Report (DCC-TTL.RPT) dated 6/19/85.
2. Unit 1 and 2 subsystem listing for isometrics requiring ASME III N-5 code stamping (copies attached) received by CPRT in June, 1985.
3. Unit 1 ASME III N-5 Data Report Index (see Attachment A for index issue dates). Completed indexes do not exist for Unit 2 as ASME III N-5 Data Reports are not yet complete.

BASIS FOR ACCEPTING THE LIST:

The population list includes isometric drawings for all ASME III piping. Since no computerized list of isometrics existed which contained only ASME III safety related piping it was necessary to generate the population list based on those documents listed under the "Population List Source".

The sources which were used in developing the population items list are considered to be sufficient to provide assurance of a complete population list. The following is a brief description of each source.

1. The Document Control Center-Title Report (DCC-TTL.RPT) list all piping isometric drawings and is a sort, using a DCC code for isometrics, taken from the CPSES computerized data base. Data entry into the data base is taken directly from drawings or documents, not from a pre-prepared list of information. Although the DCC-TTL.RPT is not stamped "CONTROLLED" data entry is operationally controlled in that each operator who inputs to the CPSES Data Base is assigned a unique "PASSWORD" which is required for entry into the system. This password restricts the user to specific program(s) versus general access to the data base. The assignment of this password is the responsibility of the computer operators while maintenance of the data base is the responsibility of Document Control. Data entry into the CPSES data base is done

APPROVED BY: Joseph J. DeMoss FOR J.M. Schaaf
QA/QC LEAD DISCIPLINE ENGINEER
DATE: 8/19/85

APPROVED BY: Albert A. Potters
QA/QC REINSPECTION ENGINEERING SUPERVISOR
DATE: 8/22/85

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RESPONSIBLE QA/QC SUPPORT ENGINEER

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shortly after the isometric drawing is issued out of design. Although a specific B&R procedure does not exist, passwords are assigned using the method outlined in the computer manual. In addition, a weekly lecture is given where passwords are distributed and their use and restrictions explained. This lecture is generic in nature and therefore covers subjects other than piping isometric.

2. The Unit 1 and 2 subsystem list is a list of isometric drawings for systems which require ASME III N-5 code stamping. The subsystem listing is developed by the B&R Technical Services/Pipe Support Group (TS/PS) and is intended to satisfy the requirements of IOM number CPP-13721, dated 9-19-83; specifically to assist the QA and As-Built Groups in the definition of ASME subsystem boundaries. This group reviews the isometrics listed in DCC-TTL.RPT against piping flow diagrams to determine the need for ASME III N-5 stamping. Since the list of drawings to be reviewed is developed from the DCC-TTL.RPT it can not be considered a totally independent source.

3. The ASME III N-5 Data Report Indexes for Unit 1 were developed by a B&R QA/QC Team. These indexes tabulate the information in the ASME III required N-5 data report. Each index is put together based on a review of actual piping system data packages and is therefore independent of the subsystem list and the DCC-TTL.RPT. These indexes include, but are not limited to, items such as piping isometric drawing numbers, support numbers, welds, valves, piping attachments, etc. This is not a controlled report but since it is used in conjunction with a report required to satisfy ASME III code requirements, it is a viable source for input to the Population List.

The following steps were taken in generating the Population List:

1. The subsystem list was used as the base document in generating the population list. All line items in the subsystem list were checked against the DCC-TTL.RPT. This review is sufficient to establish that the isometric drawing numbers are in fact valid numbers.

2. All isometrics listed in the DCC-TTL.RPT which were not on the subsystem list were checked to establish if the isometric included any ASME III pipe. This check was made by an actual review of the isometric drawing. If the isometric included ASME III pipe, it was added to the subsystem list.

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RESPONSIBLE QA/QC SUPPORT ENGINEER

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3. All Unit 1 ASME III N-5 Data Report Indexes, which lists all applicable isometrics requiring ASME III N-5 code stamping, were compared with the subsystem list and the DCC-TTL.RPT to further establish validity of the basic subsystem list. Any piping isometric listed on the data report index and not on the subsystem list or DCC-TTL.RPT was checked and added to the subsystem list if required.

4. The final population list was established by removing any redundant isometric from the subsystem listing and deleting all reference to a subsystem list.

Based on the review outlined in items 1 through 4 above, it is concluded that the documents used provide a viable source for the final population list and that the list includes all safety-related B&R isometrics for Unit 1 and 2 and common to both units.

From the Population List for Small Bore Piping Configuration items will be randomly selected prior to verification of installation complete and QC acceptance. Only those considered "QC Accepted" will be used in the sample. The following is the basis for "QC Accepted":

1. All B&R pipe to pipe, pipe to fitting, and pipe to component welds have been visually accepted by QC as documented by QC signature on the Brown & Root, Inc. (B&R) weld data card.

2. All B&R pipe branch to run pipe welds have been visually accepted by QC as documented by QC signature on the B&R weld data card.

3. Completion and acceptance of the Construction Operation Traveler by QC as documented by QC signature for permanent bolting on the traveler.

The total number of items in the Population List that are installation complete and QA accepted will be between 2000 and 3000 isometrics.

Items selected which are not "QC Accepted" will be removed from the selected sample list and a new sample item chosen from the previously established population. In addition, any large bore piping isometrics chosen from the population will be rejected as a valid sample and a new sample item selected.

BASIS FOR ACCEPTING ANY ADDITIONAL ITEMS:

No other items are accepted

ATTACHMENT A

UNIT 1 ASME III N-5 DATA REPORT
INDEX ISSUE DATE

System Description	System Designation	Index* Issue Date
Auxiliary Feedwater	AF	10-12-84
Boron Recycle	BR	10-12-84
Compressed Air	CA	10-11-84
Compressed Air, Inst.	CI	10-11-84
Component Cooling Water	CC	10-11-84
Chilled Water	CH	10-11-84
Chemical and Volume Control	CS	10-11-84
Containment Spray	CT	10-11-84
Demin. and Reactor M/U Water	DD	10-11-84
Diesel Gen. Fuel Oil	DO	10-11-84
Fire Protection	FP	10-11-84
Stm. Gen. Feedwater	FW	10-11-84
Waste Process, Gas	GH	10-11-84
Hydrogen Air (Analyzer	HA	10-11--84
Main Steam	MS	10-11-84
Process Sampline	PS	10-11-84
Reactor Coolant	RC	10-11-84
Residual Heat Removal	RH	10-11-84
Radiation Monitoring	RM	10-11-84
Spent Fuel Pool Cooling and Cleanup	SF	10-11-84
Safety Injection	SI	10-11-84
Station Service Water	SW	10-11-84
Heating and Ventilation	VA	10-11-84
Vents and Drains	VD	10-11-84
Waste Processing, Liquid	WP	10-11-84

* Date represents actual computer printout run date.

POPULATION ITEMS LIST

LARGE BORE PIPE CONFIGURATION

AND

SMALL BORE PIPE CONFIGURATION