I. Title  Alternate OTSG Level Indication

2. Purpose (include purpose of SOP) To provide OTSG level indication upon loss of OTSG Level Indication (EP-15)

3. Attach procedure to this form written according to the following format:
   A. Limitations and Precautions
      1. Nuclear Safety
      2. Environmental Safety
      3. Personnel Safety
      4. Equipment Protection
   B. Prerequisites
   C. Procedure

4. Generated by [Signature] Date 4-7-79

5. Duration of SOP - Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below — whichever occurs first.
   (a) SOP will be cancelled by incorporation into existing or new permanent procedure submitted by [Signature]
   (b) SOP is not valid after [Signature] in circumstances which will result in SOP being cancelled

6. (a) Is the procedure Nuclear Safety Related?
   If "yes", complete Nuclear Safety Evaluation. (See 2 of this Form) ... Yes [ ] No [ ]
   (b) Does the procedure affect Environmental Protection?
   If "yes", complete Environmental Evaluation. (See 2 of this Form) ... Yes [ ] No [ ]
   (c) Does the procedure affect radiation exposure to personnel?
   Yes [ ] No [ ]

NOTE: If all answers are "no", the change may be approved by the Shift Supervisor. If any questions are answered "yes", the change must be approved by the Unit Superintendent.

7. Review and Approval
   Approved - Shift Supervisor [Signature] Date 4/6/79
   Reviewed - List members of PDRC contacted [Signature] Date 4/6/79
   Approved - Unit Superintendent [Signature] Date 4/6/79

8. SOP is Cancelled
   [Signature] Date 132-069

Shift Supervisor/Shift Foreman Date
1. **Limits & Precautions**

1.1 **Ensure that the Feedwater**
Catch Bypass Switches, located in the upper right hand corner of Panel 4,
are in the Bypass Position. Prior to performing any work at the
Feedwater Catch D/P Switches.

1.2 **Maintain Operative Range S.G. Level**
at 95 ± 4%.

1.3 Operators should recognize that
RCS Temp. will drop a few degrees
during OTSG Level increase.

1.4 Other operations which will
affect the required steam rate or
feedwater should not be conducted
during this evolution. RCS pressure
and temperature should be 50 PSI ± 2
and 100°F respectively above the minimum
operating limits before conducting
this evolution.

1.5 This level indication is only
valid for Levels Above the
Feedwater Nozzles 132 066

1.6 This level indication is only
valid for Feedwater Flows
Less than 2 1/2 %
10% Observe Standard H.P. Proceeding for the installation of the D/P transmitter on contaminated or possibly contaminated systems.
2. Installation

2.1 Calibrate the two 'Response Time' Test D/P Transmitters for 0-20#

2.2 Install the two D/P Transmitter in the test connections for FW-DPIS 7883-1 'A' Steam Gaunt
(FW-DPIS 7883-2 'B' Steam Gaunt

2.3 Use the spare wires in IT 1864C, 9 and 10 for 'A' and 11 + 12 for 'B' to run the signal to the Relay Room (from Rack 436 to Cab. 221).

2.4 Use twisted pair to run the signal from Cab. 221 to Cab. 149 (JCS #1)

2.5 Use the spare wires in CR 91C, 15+16 for 'A' and 17+18 for 'B' to run the signal to Panel 4 in the control room.

2.6 Run the signal from Panel 4 to a TWO Pin Brush Reader, Pin 1 A'SG (Pin 2 B'SG) AND/OR DUM.

2.7 With feed water flow established, at approximately 197 Water level just below Feed Water Nozzles 88360.
2. e  
Record the Indicted DP and the level from the operating S.G. Level Indicators.

2.9  
Increment the S.G. level to approximately 95% operating level or approximately 388 in full range.

2.10  
Use these two points and the corresponding levels to plot a graph of S.G. level vs. DP. on Enclosure 1.

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Note: Copies of Enclosure 1 must be inserted in EP 15 after completion of this SOP.

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Note 1: If quick label at the time the Bailey 0-600" BQP transmitter may be used instead of the "Response Time" D/P Transmitter as stated in 2.1.
Enclosure 1
AP vs Indicated Level