

AmerGenSM

An Exelon/British Energy Company

TMI Unit 1
1R14 Outage

ASME Code Section XI

Inservice Inspection (ISI)

Owner's Data Reports

C O N T E N T S

NO. 1

ENCLOSURE 1
Form NIS-1 Owner's Data Report

NO. 2

Attachment 1
Report on 2001 Outage 1R14 Eddy
Current
Examinations of TMI-1 OTSG Tubing

NO. 3

NIS-1 Table 1
Terms and Definitions

NO. 4

Abstract of Pressure Boundary and
Component Support Examinations

NO. 5

Abstract of Pressure Tests

NO. 6

Abstract of IWE Examinations

NO. 7

NIS-1 Table 2
Abstract of Pressure Boundary and
Component Support Corrective
Actions

NO. 8

ENCLOSURE 2
NIS-2 Reports - Documentation of
Repairs/Replacements

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets recorded at the top of this form.

FORM NIS-1 (back)

8. Examination Dates 03-07-00 to 12-06-01 9. Inspection Interval from 1991 to 2001, 2nd Interval* and, 2001 to 2011, 3rd Interval** and 2001 to 2011 1st Interval ***
10. Applicable Editions for Section XI/ Addenda
*Section XI 1986 Addenda None for Subsections IWB, IWC, IWD and IWF
**Section XI 1995 Addenda 1996 for Subsections IWB, IWC, IWD, and IWF
***Section XI 1992 Addenda 1992 for Subsections IWE, and IWL
11. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. See Table 1, for IWB, IWC, IWD, IWE, and IWF.
See Attachment 1 for Steam Generator Eddy Current.
12. Abstract of Conditions Noted. See Table 2. See Attachment 1 for Steam Generator Eddy Current.
13. Abstract of Corrective Measures Recommended and Taken. See Table 2. See Attachment 1 for Steam Generator Eddy Current.

Certificate of Authorization No. (if applicable) N/A

Expiration Date N/A

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 2/22/02 Signed AmerGen Energy Co, LLC

By R.B. Corti
ISI, Program Engineer

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of PENNSYLVANIA and employed by H.S.B I&I CO. of CT. have inspected the components described in this Owners' Data Report during the period 03-07-00 to 12-06-01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Date Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date FEB. 28, 2002

Joseph L. Hubby
Inspector's Signature

Commissions NB5478 (N)(I), PA 1887
National Board, State, Province and No.

Report on the 2001 Outage 1R14 Eddy Current Examinations of the TMI-1 OTSG Tubing

Topical Report Number: 151
(Rev 0)

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Design Verification Required?
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Summary of Change

- 0 Original report issued to document Outage 1R14 eddy current examination results reported to the NRC.

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I.

INTRODUCTION

On October 9, 2001, TMI-1 was shut down for Refueling Outage 1R14. During this refueling outage, TMI-1 performed Eddy Current (ECT) examinations of the Once Through Steam Generators (OTSGs). The scope of the examinations included tubing, sleeves and plugs. The examinations were required by TMI-1 Technical Specification 4.19 (Reference 1), Technical Specification License Amendment #237 (Reference 2), and TMI-1 engineering requirements.

During Outage 1R14 all in-service tubes were examined with a bobbin coil probe and approximately 39% of the upper tubesheet kinetic expansions were examined with a rotating probe. In OTSG-A, eddy current examinations were performed on 14,195 in-service tubes, 82 sleeves, and 157 installed plugs. In OTSG-B, eddy current examinations were performed on 15,127 in-service tubes, on 85 sleeves, and 88 installed plugs. The examinations determined that previously plugged tube B66-130 became severed and impacted adjacent tubes. This finding was the subject of Licensee Event Report (LER) Number 2001-003-00 (Reference 14) and NRC Information Notice 2002-02 (Reference 24). As part of the investigation and corrective actions for this finding 647 previously plugged tubes were examined in OTSG-A, and 223 previously plugged tubes were examined in OTSG-B.

II.

METHODSA. DATA ACQUISITION

The Eddy Current (ECT) Examinations were performed using the Zetec Miz-30 Digital Multi-Frequency Eddy Current System with Eddynet 98 Software. The data was directly recorded to hard disks located on site and then spooled to the remote analysis locations for primary and secondary analysis. The ECT raw data and analysis results were then transferred to optical disks for site storage.

Data acquisition was performed remotely using the Framatome "ROGER" in head manipulators and Zetec Model 10D probe pushers. Dual guide tubes were used to the extent practical. Examinations were performed at all four heads in order to support the required examination schedule.

The ECT examinations were performed using a variety of techniques and probes that were tailored to address the specific areas of interest being examined. The techniques used for examination were based on industry qualified techniques which were site qualified or were plant specific qualified techniques (where industry qualified techniques did not exist or were not applicable). The active and potential damage mechanisms were documented in the "TMI-1 Outage 1R14 Degradation Assessment & Condition Monitoring Checklist, Revision 0", Memorandum TMI-NOB-3, 5973-2001-009 (Reference 16). Table II-1 provides a listing of the specific Appendix H qualification applicable for each damage mechanism. Framatome Technologies report 51-5005406-01, "Qualified ET Exam Techniques for Three Mile Island 1R14" (Reference 17) provides further details on site applicability for each examination technique. The examinations were performed under TMI-1 Surveillance Procedure 1300-4B (Reference 4) and Framatome Technologies Procedure 54-ISI-400-11 (Reference 5) and are further discussed in the following sections.

**TABLE II-1
OUTAGE 1R14 TECHNIQUE QUALIFICATIONS**

Degradation Mechanism/ Technique	Basis for Qualification (ETSS #'s are Appendix H Documents)	Site-Specific Data Review Performed/ Result
TSP Wear (Bobbin Probe)	ETSS #96004.1 (FRA-ANP Document 77-5011531-00)	Yes Acceptable (1)
OD Volumetric IGA Crevice (LTS Outside Kidney Region) (Bobbin Probe)	ETSS #96009.1 ETSS #96011.1	Yes Acceptable
OD Axial IGA/SCC Freespan (Bobbin Probe)	ETSS #96008.1 (FRA-ANP Documents 77-5002925-01, 77-1258722-00)	Yes Acceptable
OD Volumetric IGA Freespan (Bobbin Probe)	ETSS #96008.1 (FRA-ANP Documents 77-5002925-01, 77-1258722-00)	Yes Acceptable
ID IGA/SCC Freespan And TS Crevice (Bobbin Probe)	GPU Document C-1101-224-E280-072	Yes Acceptable
Impingement (Bobbin Probe)	ETSS #96002.1	Yes Acceptable
TSP Wear (.115" MR Pancake Rotating Probe)	ETSS #96911.1	Yes Acceptable (1)
PWSCC/ID IGA (MR Plus Point Rotating Probe)	ETSS #20511.1 ETSS #20510.1 ETSS #96703.1 (FRA-ANP Document 51-5000345-02)	Yes Acceptable (2) (3) (4)
ODSCC (MR Plus Point Rotating Probe)	ETSS #20409.1	Yes Acceptable

**TABLE II-1
OUTAGE 1R14 TECHNIQUE QUALIFICATIONS (Cont'd)**

Degradation Mechanism/ Technique	Basis for Qualification (ETSS #'s are Appendix H Documents)	Site-Specific Data Review Performed/ Result
PWSCC (.115" MR Pancake Rotating Probe)	ETSS #96503.1	Yes Acceptable
ODSCC (.115" MR Pancake Rotating Probe)	ETSS #96401.1	Yes Acceptable
Explosive Plug PWSCC (.080" MR Pancake Rotating Probe)	ETSS #96501 (5)	Yes Acceptable
Sleeve (LF Plus Point Rotating Probe)	ETSS #96912.2 (FRA-ANP Document 77-5001580-00) (FRA-ANP Document 1241690)	Yes Acceptable
Sleeve (Bobbin)	ETSS #96008.1	Yes Acceptable

Notes:

1. The EPRI Appendix H bobbin technique is qualified for depth sizing; however, that method is not presently used in OTSG's. TSP wear depth sizing is based on rotating probe data or on the bobbin coil probe data. Reference 20 provides guidance for each technique when to be used for determining depth measurement. See Reference 21 for additional information on bobbin coil examination for TSP wear.
2. This technique is qualified for sizing by length or depth percent through-wall of circumferential PWSCC at expansion transitions.
3. This technique is qualified for sizing by length or depth percent through-wall of axial PWSCC at dents.
4. This document provides the results of studies performed for TMI-1 to determine the expected depth and length sizing errors expected for various rotating coil eddy current probe examination techniques. As a result of this study, TMI has chosen to use the mid-frequency plus point coil for depth sizing ID IGA/SCC and length sizing crack-like indications. The 0.080" high frequency pancake coil was chosen to provide axial and circumferential length dimension for ID IGA volumetric indications. Based on this report, TMI has chosen to assign a potential 32.6% TW undermeasurement to percent through-wall measurements made on ID indications with the plus point coil in the kinetically expanded region (an indication measured as >67% TW is considered 100% TW for flaw leakage evaluation). The study also concluded that axial and circumferential length measurements are expected to be conservative (i.e., measured length is greater than actual flaw length) for both crack-like and ID volumetric indications. Pulled tube exams for the 12R outage confirmed that length measurements are conservative for the ID volumetric indications.
5. This examination technique has been retired by EPRI. It is used for examination of the active explosive plugs (85 total remaining at TMI-1). The qualification for this technique is considered valid because the qualification was simply retired by EPRI because of perceived lack of industry use and not because of poor flaw detection capability.

A.1 Tube Bobbin Coil Examinations

The general examination of tubing material was performed from the inside diameter of the tube using a bobbin coil probe. This probe is the most durable and efficient probe available and, when used with the proper ECT instrumentation, allows examination speeds in excess of 40 inches per second. Examinations were performed with a probe speed that did not exceed 40" per second. The data from this probe was used to detect tube wall degradation from such mechanisms as Intergranular Attack (IGA), Intergranular Stress Corrosion Cracking (IGSCC), tube-to-tube support plate wear, and impingement. The data acquired was also used to assure all tube support plates were present at their expected locations. All bobbin coil examinations were full length unless otherwise noted. For the purpose of this report, a full-length bobbin coil examination is from the kinetic expansion transition in the upper tubesheet to the roll expansion transition in the lower tubesheet. The 0.540" diameter probe was used to examine tubes with previously identified bobbin coil ID indications while the 0.510" probe was used for initial examination of all other tubes. A 0.480" diameter bobbin coil probe was used to examine the region of three tubes that would not pass a 0.510" diameter bobbin coil probe.

Tubes with indications of suspected degradation found during the bobbin coil examinations were re-examined using an MRPC probe.

A.2 Sleeve Bobbin Coil Examinations

The unexpanded sections of sleeves were examined with a .400" bobbin coil probe to detect degradation mechanisms such as OD IGA, OD IGSCC, or tube-to-tube support plate wear. This probe was used for these examinations because of its durability and higher examination speed. The examinations were performed at a speed less than 12" per second because of the probe's tight fit in the sleeves.

A.3 Motorized Rotating Pancake Coil (MRPC) Tube Examinations

MRPC examinations of tubes were performed as diagnostic examinations following bobbin coil examinations, or for detection of specific degradation in areas where higher sensitivity and additional information were desired (e.g. kinetic expansions, lower tubesheet crevice, dented regions, and shop re-rolled tubes). The MRPC probe examinations were typically limited to specific lengths of tubes.

A.4 Plus Point Examination of Sleeves

All of the TMI-1 sleeves are 80" long Inconel 690 sleeves that are installed at the upper end of the parent tube. The expansions (including expansion transitions) of sleeves were examined using a Plus Point rotating probe. The examinations were generally performed from approximately 3 inches below the lower sleeve end to the 15th tube support plate (which includes the two lower expansions) and an area in the upper tubesheet which included the upper expansion. This technique is required for examination of the parent tube below the lower sleeve end, the lower sleeve end, and roll expansion regions only; however, all acquired data was evaluated by the data analysts. See Figure II-1 for TMI-1's sleeve configuration.

A.5 B&W Rolled Plug ECT Examinations

B&W rolled plugs were examined using a rotating pancake coil probe. The examinations were performed on the "push" or the "pull" and data was recorded as the probe was being inserted or retracted at 0.1 inches per second. The examinations were performed primarily to detect primary water stress corrosion cracking (PWSCC) in the roll transition regions. This cracking has typically been identified as axially oriented in the toe region, and circumferentially-oriented or axially-oriented in the heel region.

A.6 Explosively Welded Plug ECT Examinations

B&W explosively welded plugs were also examined using an MRPC probe. The examinations were performed on the "push" or the "pull" and data was recorded as the probe was being inserted or retracted at 0.1 inches per second. These examinations were performed primarily to detect PWSCC in the expanded regions and tapered portion of the plug. Based on experience at other plants, this cracking is expected to be axially oriented.

A.7 Westinghouse Rolled Plug ECT Examinations

Westinghouse rolled plugs were examined using a rotating Plus Point probe. The examinations were performed on the "push" or the "pull" and data was recorded as the probe was being inserted or retracted at 0.1 inches per second. The examinations were performed primarily to detect PWSCC in the roll transition regions.

B. DATA ANALYSIS PROCESS

Eddy current data analysis was performed using Exelon Procedure ER-AP-335-040, Revision 0 (Reference 8) and Exelon T&RM ER-TM-335-1005, Revision 0 (Reference 20). These documents are based on the recommendations of the EPRI PWR Steam Generator Inspection Guidelines (Reference 9) and also meet the requirements of the TMI-1 Technical Specifications (Reference 1) and the ASME Boiler and Pressure Vessel Code (Reference 10).

B.1 Data Analyst Qualifications

The data analysis process was performed by Framatome ANP (FRA-ANP) and Duke Engineering and Services (DE & S) using personnel qualified and certified to at least Level IIA in accordance with the employers' approved QA/Training programs. In addition, these personnel were recognized as Qualified Data Analysts (QDA) as defined in the EPRI PWR Steam Generator Inspection Guidelines, Appendix G. As a supplement to these qualifications, all data analyst personnel received site-specific indoctrination and training. The program included both classroom lectures and "hands on" practice, using eddy current data and experience from TMI and other B&W-designed plants. The training covered generic OTSG degradation mechanisms and examination methods, and specifically addressed the bobbin coil and rotating probe methods used at TMI.

The total site-specific indoctrination/examination process encompassed approximately 36 working hours per analyst and was conducted by a TMI-1 Authorized Level III Analyst. At the completion of the indoctrination each data analyst was required to pass a performance demonstration prior to analyzing bobbin coil or rotating probe data for detection of flaws. The test was generated by the EPRI Site Specific Performance Demonstration (SSPD) program or, for methods that are not supported by the EPRI SSPD program, a pre-designed test.

B.2 Data Analysis Sequence

The data analysis process was performed in accordance with the same procedures referenced in the above section on data analyst indoctrination and training. The process was performed in four (4) steps with at least two (2) separate data analysts evaluating the data from each examination. The data analysis process included:

1. Primary Analysis: The primary analysis included an evaluation of the ECT data and the recording of attributes identified in Appendix I over the full length of the exam. As stated previously, for bobbin coil examination of tubes, full length is the unexpanded portion of tube from the lower tubesheet roll expansion transition to the upper tubesheet kinetic expansion transition. For MRPC examinations of the upper tubesheet expansion transitions and kinetic expansions, full length included the examined region of unexpanded tubing, the expansion transition, and a pre-defined length of expanded tube above the transition. The pre-defined length was displayed to the analyst and was based on required expansion length as defined in the plant's kinetic expansion acceptance criteria. If indications were recorded in the transition or expanded region of the kinetic expansions, an additional 2.0" of expanded

region was evaluated. Some tubes required evaluation beyond the minimum required length plus 2.0" to determine the acceptability of the expansion for continued service. In these cases the analyst recorded the actual expanded region examination length as part of the reported results.

For rotating probes, such as MRPC, the analysis included evaluation of the required examination area using strip chart displays, lissajous displays, and terrain plots. The analysis also included recording the phase angle, percent through wall, voltage, circumferential extent, axial extent, indication code, and/or location of any indications in expanded or unexpanded tubing as required by References 8 and 20.

2. Secondary Analysis: This analysis was performed in the same manner as the primary analysis described above. The secondary analysis was performed by a different QDA than the QDA that performed the primary analysis.
3. Resolution Analysis: The results of both the primary and secondary analyses were reviewed by designated resolution analyst(s). This review combined the primary and secondary analyses results, resolved any discrepancies, and assigned final dimensions to any indications requiring length, width, and/or depth sizing. For this outage personnel qualified to Level III QDA performed this function. In the case of indications which were initially reported as exceeding the repair criteria by any analyst, but resolved as not requiring repair, a Level III QDA from both FRA-ANP and DE & S were required to concur that the indication did not exceed the repair criteria.
4. Designated QDA: A designated QDA reviewed the resolution analysis results. This review included reviewing all repairable indications overruled by resolution analysis, reviewing a sample of indications recorded during the analysis process, and reviewing indications as requested for reconsideration (by any primary or secondary analyst who may have disagreed with, or questioned, a resolution analysis evaluation).

B.3 Data Analysis Software

The data for examinations was evaluated using Zetec Eddytest 98 Analysis software, Version 2.20.

B.4 Recording of Indications

Eddy current indications were recorded to permit dispositioning the examination results and to facilitate monitoring the tubes during future examinations. The recorded indications fall into two basic groups, "indications from Tube Wall Degradation" (e.g., indications assigned a "VOL" code or "I" code); and "indications from Possible Damage Precursors" (e.g., indications assigned other three letter codes such as "DNT"). The specific criteria used to record the indications were dependent upon the type of probe being used. A complete list of abbreviations and definitions used to classify indications is included as Appendix I to this report.

Indications from Tube Wall Degradation

Generally indications of tube wall degradation were initially recorded during the primary and secondary analysis of the bobbin coil data. Some indications were assigned a "percent through wall" value based on the phase angle of the indications (if they were ID-initiated by bobbin coil examination) or based on flaw amplitude (if they were unchanged and previously dispositioned as tube-to-tube support plate wear that had not changed). When the indication could not be accurately assigned a through wall value using bobbin coil examination data, it was assigned a three letter code such as BVC, ADI, or NQI to indicate the presence of a possible flaw. In these cases, the indication's location, amplitude, signal phase angle and three-letter code were recorded to permit further evaluation of the tube.

Once the initial screening of bobbin coil indications was completed, supplemental examinations were performed using rotating coil probes (generally 3-coil MRPC with +Point coil, 0.115" pancake coil, and 0.080"

shielded high frequency pancake coil). The data from the rotating probe examinations was analyzed and indications were recorded using three letter codes to indicate the morphology of degradation and, in some cases, a percent through wall was assigned. In general, indications were recorded as SAI, MAI, SCI, MCI, SVI, MVI, or VOL. These codes indicate whether the indication is single (S) or multiple (M), circumferential (C) or axial (A), and whether or not a volumetric (V) condition is present. The "VOL" code signified that an indication was inside diameter initiated and volumetric in nature. Like the bobbin coil indications, these codes were recorded along with the location, amplitude, and phase angle of the signal. Additional line entries were also included for some MRPC indications to record indication circumferential extent and axial extent.

An exception to the above procedure occurred when an MRPC examination was pre-scheduled for a specific region such as the kinetic expansion region. In this case only the MRPC data was used for dispositioning the tube. (The bobbin coil is not used in the expanded region.) The actual analysis process was performed in the same manner as described above.

Indications from Possible Damage Precursors

The analysis of eddy current data may also identify indications that are not specifically attributed to tube wall degradation. These indications may be the result of irregularities in the tube wall profile (IDC), changes in the magnetic permeability (PVN), denting (DNT), or other changes in the electrical impedance of the tube not related to tube wall degradation. All recorded bobbin coil probe "IDC" and "PVN" indications were examined with an MRPC probe.

Approximately 33% of the dent indications located above the lower tubesheet, 100% of the upper tubesheet secondary face dents, and dents ≥ 16 volts by bobbin coil probe at the lower tubesheet secondary face or below and not inside the defined kidney region, were examined with an MRPC probe. Dents inside the lower tubesheet defined kidney region were examined with an MRPC probe as part of the kidney region examination sample.

Indication Locations

The locations of the ECT indications were recorded to identify their "elevation" or "axial location" in the OTSG tubes. For free span indications, the locations were generally recorded in inches above "+" the tubesheet surfaces or tube support plate centers. For indications located within or adjacent to the tube support plates, the indications are recorded as "+" or "-" from the tube support plate center. The relative location of the tubesheets and tube support plates is shown in Figure II-2.

B.5 Data Management

Two separate data management systems were used to assure indications were documented and dispositioned appropriately. The examination results were obtained from the Eddynet report files and loaded into the data management systems used during the outage. The FTI FDMS and Zetec Data Management Systems were used independently to track eddy current examination results. Final results reports from the two systems were then compared to address any inconsistencies between the two systems. The overall generator examination was considered completed when both systems produced the same results and indicated that the required examinations were complete. After completion of the 1R14 Outage the FDMS System results were used to load data into the TMI-1 data management system.

C. DISPOSITION OF RESULTS

C.1 Inside Diameter IGA

Inside diameter (ID) IGA eddy current indications in unexpanded tubing were dispositioned in accordance with the TMI-1 Technical Specifications (License Amendment No. 237). In accordance with the amendment, all ID IGA indications that were detected during the bobbin coil eddy current examinations were subsequently

examined with MRPC probes. The length and width of the indications (as discerned by MRPC extent calls) were compared to the repair limits stipulated in the Technical Specification. In addition, the MRPC examinations were used to confirm that the indications were volumetric in morphology (in order to prevent crack-like indications from remaining in service.) The surface of origin (i.e. inside surface) was also confirmed for all ID IGA indications. ID IGA indications with sufficient bobbin coil signal-to-noise ratio and bobbin voltage were also given a percent through wall estimate based on 0.540" diameter bobbin coil probe phase angle analysis.

ID IGA indications in unexpanded tubing $\geq 40\%$ through wall, or of axial and circumferential extent $>0.25"$ or $>0.52"$, respectively, were removed from service by plugging in accordance with the Technical Specifications. In addition, the remaining ID IGA indications were verified for serviceability by in-situ pressure testing selected tubes [See Sections II.D and III.C of this report] and a growth evaluation, in accordance with the Technical Specification. [See Section III.B.1]

Appendix II provides a list of tubes, sleeves, and plugs containing indications as a result of eddy current examinations. The 3-letter code "VOL" was used to delineate ID IGA indications in tubing. [Note that some of the indications listed in the Appendix were removed from service as a result of the tube plugging. The data for tubes plugged due to eddy current indications has been identified by use of **bold print**.] At the end of the 1R14 Outage 992 recorded ID IGA indications in 554 OTSG "A" tubes, and 49 recorded ID IGA indications in 33 OTSG "B" tubes, remain in service in the TMI-1 generators. These indications are located below the kinetically expanded region (below ETL+0.0 inches). The ETL (Expansion Transition Location) is the location in the upper tubesheet where the tube changes in diameter from fully expanded tubing to the expansion transition).

C.2 Kinetic Expansion Region

TMI-1's OTSG tubes have 17" or 22" long kinetic expansions within the generators' upper tubesheets. During the 1R14 Outage, approximately 38.9% of the unsleeved/unplugged tubes with 17" kinetic expansions and approximately 20.4% of the unsleeved/unplugged tubes with 22" kinetic expansions were inspected with a rotating probe (i.e. MRPC). The Outage 1R14 samples included all tubes identified as "Potential Leakage Contributors" during Outage 13R.

Analysis Process

Each tube examined with the rotating probe in the kinetic expansion region was analyzed to determine if the tube was a structural and/or leakage concern. There are many factors which were used in addressing the structural and leakage issues associated with any indication that was found. These are:

- 1) the axial and/or circumferential extent of the indication,
- 2) the estimated depth of the indication,
- 3) the proximity and type of other indications in the expansion,
- 4) the radial distance of the tube from the center of the tube bundle,
- 5) whether the kinetic expansion was 17" or 22" in length, and
- 6) the minimum required axial kinetic expansion length ($AKEL_{min}$) to ensure structural integrity in the event of a MSLB.

The minimum required axial kinetic expansion length ($AKEL_{min}$) is based on the radial distance of the tube from the center of the tube bundle and also on whether the tube has a 17-inch or a 22-inch expansion.

The determination of the structural adequacy of the tube was based on the measured axial and circumferential extents of the indications. The volumetric indications had both axial and circumferential measurements

assigned and were conservatively treated as separate axial and circumferential crack-like indications.

Some tubes had multiple indications in the kinetic expansion region. For tubes with multiple circumferential and/or volumetric indications, the circumferential extents were combined if the indications were located within 1.00" axially of one another. For tubes with multiple axial and/or volumetric indications, the axial extents were combined and then compared to the $AKEL_{min}$ to determine the structural adequacy of the tube.

The leakage calculations were based on the estimated depth of the flaws, the axial and circumferential extents of the flaws, and the radial distance of the tube from the center of the bundle. An indication was considered to be a leakage contributor only if its estimated depth was >67 percent through wall, as estimated by a plus point probe, and it was located within a certain distance above the Expansion Transition Location (ETL). This distance was based on the $AKEL_{min}$ value as well as the number of flaws and the axial extent of these flaws in the kinetic expansion. If a flaw between ETL + 0" and ETL + 0.25" was determined to be a leakage contributor, then freespan leakage values were used. For the 17" expansions, if a flaw above ETL + 0.25" was determined to be a leakage contributor, then a leakage reduction factor of 25 was applied to the freespan leakage value, (i.e., the freespan leakage values were divided by 25 to obtain the estimated leak rate.) This leakage reduction factor corrects the leakage to account for the reduction in leak rate provided by the presence of the tubesheet. The axial location at which the leakage reduction factor could be applied to flaws in 22" expansions was a function of the radial location of the tube in the tubesheet and the axial location of the indication within the expansion.

The derivation of this kinetic expansion indication evaluation was provided to the NRC in Reference 13. NRC questions on this submittal were responded to in a GPU Nuclear letter to the NRC (Reference 18).

C.3 Other Indications

All crack-like indications detected in the freespan, detected in the expansion transition, detected in the first 0.50" of expanded tubing in the upper tubesheet of the 17" kinetic expansions, or the first 5" of expanded tubing in the upper tubesheet of the 22" kinetic expansions were removed from service.

Tube-to-tube support plate wear indications were dispositioned by evaluating their through-wall extent using an Appendix H-qualified technique. There were no tube-to-tube support plate wear marks $\geq 40\%$ through wall detected during Outage 1R14.

All manufacturing/burnish mark (MBM) eddy current calls were reviewed from a historical basis before dispositioning.

TMI-1 did not have qualified techniques for evaluating the through wall extent of OD-surface initiating degradation indications other than tube-to-tube support plate wear. Thus, OD indications resulting from tube wall degradation other than tube-to-tube support plate wear (e.g. OD "groove" IGA, OD volumetric IGA) were "plugged on detection".

D. IN-SITU PRESSURE TESTING

D.1 Pressure Test Process

In-situ pressure testing was conducted during the 1R14 Outage to assess the ability of the flaws to withstand a postulated main steam line break (MSLB) event on the last day of the just-completed operating cycle. In addition, in situ testing was performed on a large sample of volumetric ID IGA flaws in order to assess this flaw population in accordance with the Technical Specifications. The tubing was subjected to differential pressure equivalent to normal operating, main steam line break, and Regulatory Guide 1.121 (Reference 11) prescribed differential pressures.

The testing was conducted using localized area hydraulic pressure tooling to pressurize a specific tube region. The localized testing is performed through a chamber created by two independent probes that lock into the tube and seal from opposite directions.

All tubes that were in situ pressure tested were subsequently plugged.

D.2 Candidate Selection

The eddy current test results were reviewed to select flaws for in situ pressure testing from a leakage and structural integrity perspective. To avoid complete reliance on depth sizing by bobbin and MRPC eddy current, other parameters such as voltage response and axial and circumferential lengths were also considered to select flaws for in situ testing.

The EPRI In Situ Guidelines (Reference 19) were used to determine which tubes required in situ pressure or leak testing. The EPRI Guidelines use sequential screening criteria. Sequential screening means that only indications which exceed a threshold value for the first screening parameter are evaluated against the second screening parameter threshold, and only indications that exceed the thresholds for the first two screening parameters are evaluated against the third screening parameter, and so on.

Tables II-2 and II-3 show the indications that were selected for in situ testing and the results of the tests. There were a total of 21 tubes with flaws that were in situ tested (9 in SGA and 12 in SGB) plus tube B65-130 was pressure tested under laboratory conditions (See Table II-4) and is further discussed in Section III.B.5. It should be noted that the majority of these tubes did not require testing under the EPRI guidelines and that all tubes screened as requiring pressure testing were pressure tested. Seven of the 21 tubes in situ pressure tested contained indications that exceeded the EPRI screening criteria. The 14 additional tubes were tested to provide a tested population of ID IGA volumetric indications in accordance with the Technical Specifications and its referenced documents (References 1 and 22), or to provide additional assurance that sufficient flaws were tested. The indications that were tested can be divided into five basic categories as follows:

OD Axial Indications

Two tubes with axial indications indicative of OD "Groove" IGA were in situ pressure tested (B98-1 and B119-2). Both of these tubes had multiple indications located in upper freespan regions. One additional tube (B133-1) had two signals detected at the 12th support plate from the Plus Point inspection. Although the indications in B133-1 were not likely due to tube wall degradation the signals were dispositioned as axial indications as a conservative measure. The +Point coil through wall estimates of tube B133-1 indications were relatively deep, so this tube was pressure tested. Section III.B.1 provides additional information about tube B133-1.

ID Circumferential Indications

A total of six tubes with ID circumferential indications were in situ pressure tested (3 in SGA and 3 in SGB). Since all of these flaws were confined within the upper tubesheet, these tests were basically for leakage purposes only.

Mechanical Wear Damage Related to Severed Tube

Four tubes were identified in SGB to have wear indications related to severed tube B66-130. Tube B66-130 was severed at the upper tubesheet of the secondary face and had subsequently impacted four adjacent tubes. Three of these adjacent tubes were in situ pressure tested (B65-129, B66-131, and B67-130). The fourth tube was harvested from the secondary side and was tested in a laboratory environment (See Table II-4 and Section III.B.5).

OD Volumetric Indication

Tube 59-72 in SGA was in situ pressure tested due to an OD volumetric indication that exceeded the depth threshold for pressure testing.

ID Volumetric Indications

Eight tubes were in situ tested due to ID volumetric indications. These tests were performed in accordance with the Management Program for the ID IGA degradation (Reference 22) as referenced in the Technical Specifications. These eight tubes contained 68 volumetric ID IGA indications. One other ID IGA indication was also tested in tube B149-1 although this was not the reason for testing this tube, therefore a total of 69 ID IGA indications were tested. (This tube was tested due to an ID circumferential indication at the kinetic expansion transition.) The main criterion that was used for selecting these tubes was the axial extent of the volumetric indications. The circumferential extents and voltages were also considered in some cases. Two tubes in SGB (B44-75 and B143-43) were selected solely based on the large quantity of indications within the tube. None of the indications in these two tubes required plugging. Based on the large number of indications, however, these two tubes were in situ pressure tested and were subsequently plugged.

Table II-2
In Situ Test List and Results: OTSG-A

TUBE AND EDDY CURRENT INFORMATION														IN-SITU TEST RESULTS					
REGION	TUBE INFORMATION			PLUS POINT DATA					BOBBIN DATA			COMMENTS	GPM @	GPM @	GPM @	GPM @	MAXIMUM PRESSURE	EXP (Inch)	
	ROW	COL	LOCATION	AX LEN	CI LEN	VOLTS	EST %	ORIENTATION	IND	VOLTS	EST %		NOP	MSLB	3NODP	6450psi			
Freestran	59	72	07S +13.67	0.10	0.10	0.13	56	OD Volumetric	NQI	0.22	58	OD IGA/SCC	0	0	0	-	4412	17	
Upper TS	53	46	ETL -1.43		0.17	3.14	97	ID Circ.	NDD			ID IGA/SCC	0	0	0	0.014	6450	17	
Upper TS	121	89	ETL -0.14		0.60	0.83	86	ID Circ.	NDD			ID IGA/SCC	0	0	0	0	6450	17	
Freestran	2	25	13S -18.12	0.14	0.12	0.18		ID Volumetric	NDD			ID IGA/SCC	0	0	0	-	4394	17	
			13S -16.64	0.19	0.16	0.30			NDD				0	0	0	-	4394		
			13S -15.26	0.13	0.11	0.11			INR	0.44			0	0	0	-	4394		
			13S -8.75	0.24	0.16	0.20			NDD				0	0	0	-	4394		
			13S -7.37	0.19	0.22	0.30			NDD				0	0	0	-	4394		
			13S -4.87	0.39	0.22	0.19			NDD				0	0	0	-	4394		
			13S -1.26	0.29	0.22	0.52			NDD				0	0	0	-	4394		
			13S +5.14	0.15	0.16	0.34			NDD				0	0	0	-	4394		
			13S +10.01	0.29	0.22	0.39			IDI	0.47	20		0	0	0	-	4394		
			13S +10.82	0.34	0.22	0.38			IDI	0.47	23		0	0	0	-	4394		
			13S +11.17	0.24	0.22	0.40			NDD				0	0	0	-	4394		
			13S +14.08	0.24	0.16	0.15			INR	0.25			0	0	0	-	4394		
			13S +14.40	0.24	0.16	0.31			NDD				0	0	0	-	4394		
Freestran	135	2	14S -2.85	0.18	0.18	0.15		ID Volumetric	BVC	0.38		ID IGA/SCC	0	0	0	-	4400	17	
			14S -2.20	0.13	0.12	0.14			IDI	0.36	17		0	0	0	-	4400		
			14S -0.24	0.13	0.12	0.10			NDD				0	0	0	-	4400		
			14S +2.42	0.13	0.17	0.23			IDI	0.45	23		0	0	0	-	4400		
			15S +11.89	0.27	0.17	0.31			IDI	0.45	17		0	0	0	-	4400		
			15S +16.70	0.13	0.12	0.20			INR	0.38			0	0	0	-	4400		
			15S +17.82	0.13	0.17	0.31			INR	0.40			0	0	0	-	4400		
			15S +19.39	0.13	0.17	0.38			INR	0.30			0	0	0	-	4400		
			15S +21.94	0.13	0.23	0.34			INR	0.51			0	0	0	-	4400		
			15S +24.78	0.09	0.12	0.35			NDD				0	0	0	-	4400		
			UTS -17.24	0.09	0.11	0.33			NDD				0	0	0	-	4400		
			UTS -13.39	0.09	0.12	0.23			INR	0.30			0	0	0	-	4400		
			UTS -11.75	0.13	0.12	0.22			NDD				0	0	0	-	4400		
			UTS -10.63	0.18	0.17	0.42			IDI	0.58	30		0	0	0	-	4400		
			UTS -9.66	0.09	0.12	0.21			NDD				0	0	0	-	4400		
Freestran	112	85	07S -9.54	0.40	0.17	0.14		ID Volumetric	IDI	0.54	17	ID IGA/SCC	0	0	0	-	4403	17	
			07S -7.93	0.27	0.12	0.18			NDD				0	0	0	-	4403		
			15S +16.18	0.13	0.17	0.19			BVC	0.23			0	0	0	-	4403		
Freestran	95	127	12S +7.70	0.16	0.15	0.22		ID Volumetric	NDD			ID IGA/SCC	0	0	0	-	4400	17	
			12S +9.92	0.11	0.15	0.25			NDD				0	0	0	-	4400		
			12S +11.56	0.11	0.15	0.43			NDD				0	0	0	-	4400		
			12S +13.19	0.32	0.25	0.36			BVC	0.26			0	0	0	-	4400		
			13S -11.87	0.11	0.15	0.18			BVC	0.30			0	0	0	-	4400		
			13S -11.41	0.11	0.15	0.37			NDD				0	0	0	-	4400		
			15S +13.52	0.15	0.17	0.40			BVC	0.36			0	0	0	-	4400		
			15S +13.67	0.20	0.17	1.35			NDD				0	0	0	-	4400		
Upper TS	72	124	ETL -2.46	0.30	0.37	1.48		ID Volumetric	NDD			ID IGA/SCC	0	0	0	-	4392	17	
Upper TS	1	6	ETL -0.06		0.34	0.75	71	ID Circ.	NDD			ID IGA/SCC	0	0	0	0	6450	17	

Table II-3
In Situ Test List and Results: OTSG-B

TUBE AND EDDY CURRENT INFORMATION													IN-SITU TEST RESULTS					EXP (Inch)
REGION	TUBE INFORMATION			PLUS POINT DATA					BOBBIN DATA			DEGRADATION MECHANISM	GPM @ NOP	GPM @ MSLB	GPM @ 3NODP	MAXIMUM PRESSURE		
	ROW	COL	LOCATION	AX LEN	CI LEN	VOLTS	EST %	ORIENTATION	IND	VOLTS	EST %							
Upper TS	80	58	ETL -0.27	0.36	0.24	1.08		ID Volumetric	NDD			ID IGA/SCC	0	0	0	4400	17	
			ETL -0.36	0.30	0.19	0.95			NDD				0	0	0	4400		
			ETL -0.51	0.36	0.29	0.83			NDD				0	0	0	4400		
Freespan	143	43	06S +6.04	0.11	0.10	0.29		ID Volumetric	INR	0.29		ID IGA/SCC	0	0	0	4400	17	
			06S +18.77	0.11	0.10	0.16			INR	0.28			0	0	0	4400		
			06S +21.45	0.16	0.10	1.02			NDD				0	0	0	4400		
			08S +14.76	0.11	0.15	0.17			INR	0.29			0	0	0	4400		
			09S -13.23	0.16	0.10	0.13			BVC	0.25			0	0	0	4400		
			09S -7.23	0.16	0.15	0.13			BVC	0.31			0	0	0	4400		
			09S +1.74	0.10	0.15	0.20			NDD				0	0	0	4400		
			10S +7.91	0.14	0.12	0.38			BVC	0.39			0	0	0	4400		
			11S -11.92	0.10	0.10	0.28			BVC	0.32			0	0	0	4400		
			11S -6.47	0.16	0.15	0.23			BVC	0.32			0	0	0	4400		
Freespan	98	1	UTS -7.05	0.43		0.10	44	OD Axial	NQI	0.11		Groove IGA	0	0	0	4400	17	
			UTS -6.19	0.39		0.09	61		NDD				0	0	0	4400		
			UTS -5.73	0.34		0.10	49		NQI	0.24			0	0	0	4400		
			UTS -4.82	0.16		0.13	52		NQI	0.21			0	0	0	4400		
			UTS -4.68	0.21		0.15	51		NQI	0.17			0	0	0	4400		
			UTS -4.16	0.32		0.17	36		NDD				0	0	0	4400		
Freespan	66	131	15S +45.55	8.30	0.43	4.87	62	OD Volumetric	NQI	0.65	81	Mechanical Wear Damage	0	0	3.2 *	4360	17	
	67	130	15S +44.85	6.51	0.38	3.69	41		NQI	0.63	67		0	0	0	4350	17	
Freespan	119	2	14S -5.37	0.35		0.29	38	OD Axial	NQI	0.44		Groove IGA	0	0	0	4400	17	
			14S -4.55	0.74		0.21	40		NDD				0	0	0	4400		
Freespan	80	31	UTS +0.26		0.26	12.50	90	ID Circ.	NQI	1.01		ID IGA/SCC	0	0	0	4350	17	
Freespan	44	75	15S +1.32	0.21	0.15	0.32		ID Volumetric	BVC	0.31		ID IGA/SCC	0	0	0	4400	17	
			15S -2.59	0.16	0.15	0.17			BVC	0.35			0	0	0	4400		
			15S -9.71	0.16	0.15	0.40			IDI	0.44	20		0	0	0	4400		
			15S -14.07	0.16	0.15	0.41			NDD				0	0	0	4400		
			14S -6.87	0.16	0.15	0.32			IDI	0.46	23		0	0	0	4400		
			14S +16.12	0.10	0.14	0.30			BVC	0.36			0	0	0	4400		
			14S +9.43	0.16	0.15	0.24			IDI	0.47	27		0	0	0	4400		
			14S +5.84	0.16	0.15	0.14			BVC	0.29			0	0	0	4400		
			14S -13.47	0.16	0.15	0.21			BVC	0.37			0	0	0	4400		
			13S +17.34	0.16	0.15	0.26			NDD				0	0	0	4400		
			13S +12.36	0.16	0.15	0.29			BVC	0.37			0	0	0	4400		
			13S +9.00	0.16	0.13	0.21			IDI	0.35	30		0	0	0	4400		
			13S -18.12	0.16	0.20	0.33			IDI	0.42	27		0	0	0	4400		
			12S +12.45	0.16	0.15	0.24			NDD				0	0	0	4400		
			09S +10.59	0.16	0.15	0.15			NDD				0	0	0	4400		
			Upper TS	149	1	ETL +0.00			0.28	0.88	81		ID Circ.	NDD				ID IGA/SCC
ETL -1.01	0.17	0.13				0.15		ID Volumetric	NDD			ID IGA/SCC	0	0	0	6500		
Freespan	65	129	UTS -0.60	2.75	0.33	1.24	38	OD Volumetric	NQI	0.55	82	Mechanical Wear Damage	0	0	0	4350	17	
TSP	133	1	12S +0.88	0.44		0.78	86	OD Axial	NDD			OD Indication	0	0	0	4400	17	
			12S -0.35	0.37		0.91	86	OD Axial	NQI	0.17	43		0	0	0	4400		
Upper TS	148	26	ETL +0.00		0.17	1.75	96	ID Circ.	NDD			ID IGA/SCC	0	0	0	6450	17	

* Tube 66-131 in OTSG-B ruptured at 4360 psig. The 3.2 gpm leak rate occurred with a measured pressure at the pump of approx. 450 psig (and a calculated differential pressure at the defect of less than 100 psig).

Table II-4
Laboratory Pressure Test List and Results: OTSG-B

TUBE AND EDDY CURRENT INFORMATION													PRESSURE TEST RESULTS					
REGION	TUBE INFORMATION			PLUS POINT DATA					BOBBIN DATA			COMMENTS	GPM @ NOP	GPM @ MSLB	GPM @ 3NOD	GPM @ 6450 psi	MAXIMUM PRESSURE	EXP (Inch)
	ROW	COL	LOCATION	AX LEN	CI LEN	VOLTS	EST %	ORIENTATION	IND	VOLTS	EST %							
Freespan	65	130	15S +45.37	6.34	0.44	5.84	92	OD Volumetric	NQI	11.44	99	Mechanical Wear Damage	0	4.88*	-	-	2979	17

* - This leakrate was measured at with a measured pressure at the pump of approx. 900 psig (and a calculated differential pressure at the defect of approximately 100 psig.)

FIGURE II-1
B&W ROLLED SLEEVE

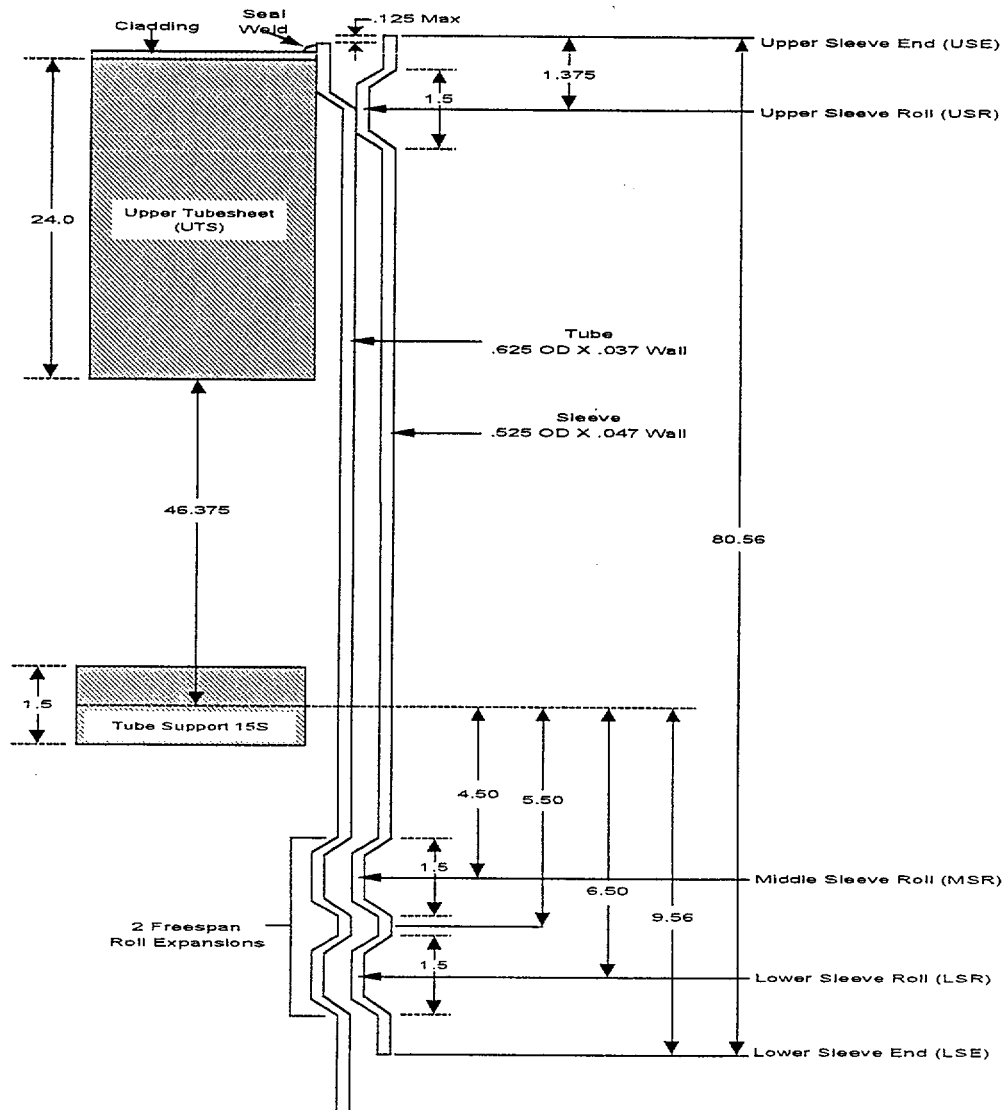
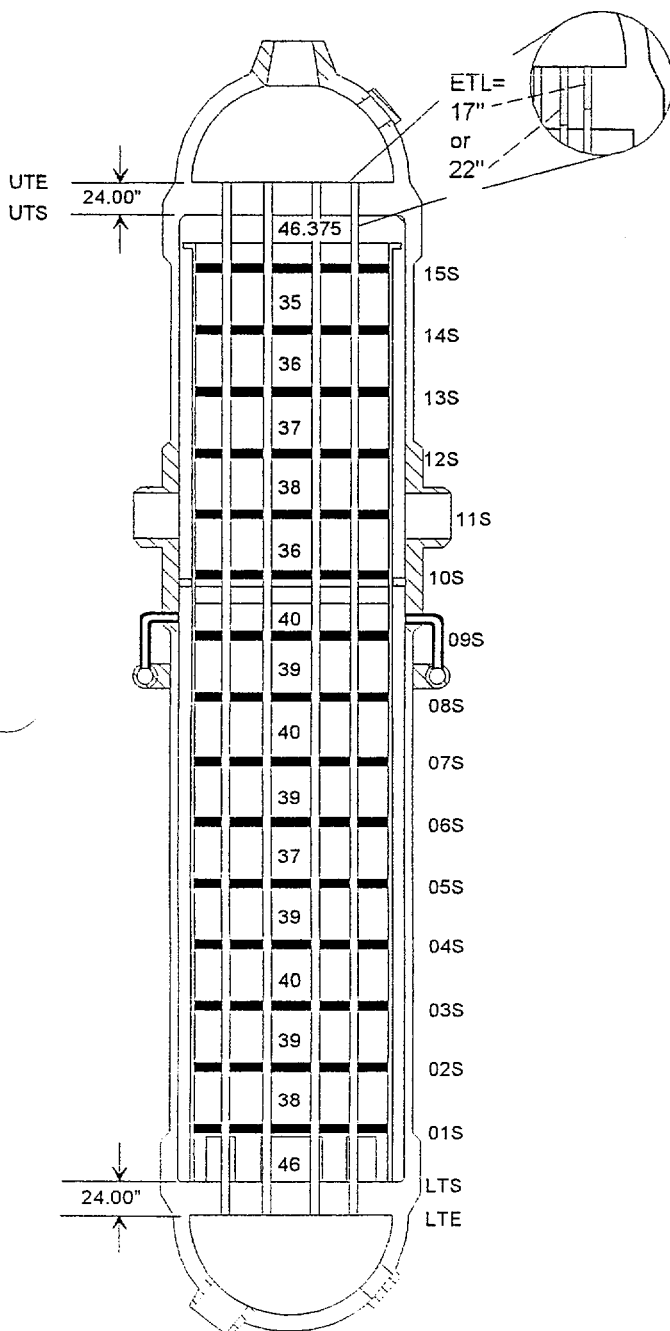


Figure II-2

TMI-1 OTSG DESIGN INFORMATIONTube Information

Number of Tubes:	15,531
Number of Rows:	151
Max Tubes/Row:	132
Tube Material:	Inconel 600
Nominal OD:	0.625 inch
Nominal ID:	0.551 inch
Nominal WT:	0.037 inch
Minimum WT:	0.034 inch
Tube Length:	673.375 inch

Tube Support Information

Number of Tube Support Plates:	15
Tube Support Material:	Carbon Steel
Tube Support Thickness:	1.50 inch
Tube Supports:	All trefoil broached except the 15 th TSP which is drilled in the periphery

Tubesheet Information

Tubesheets are carbon steel, 24 inch thick (Primary faces are 5/16" Inconel clad).

Tubes are open crevice with a minimum 1.0 inch long roll in the lower tubesheets. TMI in-service tubes have either 17 inch or 22 inch kinetic expansions in the upper tubesheet.

Sleeve Information

Sleeve Material:	Inconel 690
Nominal OD:	0.525 inch
Nominal ID:	0.431 inch
Nominal WT:	0.047 inch
Sleeve Length:	80 inch
Roll Length:	1.50 inch
Number of Rolls:	3 (1 Upper and 2 Lower)

Note-The number between the support plates in the figure at left indicates the distance between tube support plates in inches

III.

OUTAGE 1R14 EXAMINATION CATEGORIES AND RESULTS

All tubes that were in service during the prior cycle (Cycle 13) were examined with a bobbin coil probe. The kinetic expansion transition and the required length of the kinetically expanded tube above the transition were examined in approximately 39% of the in-service tubes. 870 out of service tubes were examined in order to evaluate the steam generator condition relative to failed tube B66-130. The examinations were performed for three reasons:

1. Examinations required by Plant Technical Specification 4.19
2. NRC Commitments
3. TMI-1 elective examinations

These groups were further divided into specific categories. This section defines the examination scope, purpose, selection criteria, and examination results by category.

A. SCOPE SELECTION

During Outage 1R14 TMI-1 chose to initially perform bobbin coil examinations on 100% of the in-service tubes in each OTSG. In addition to the bobbin coil examinations, approximately 39% of the tubes in each OTSG were scheduled for MRPC examination of the kinetic expansion transition and kinetically expanded region. In order to define a kinetic expansion examination results classification, TMI-1 assigned tubes to groups prior to the Outage. Sample expansion, for the kinetic expansion examinations was then based on the results of each examination group. No sample expansion was possible for the bobbin coil examinations since all of the in-service tubes were examined.

Tables III-1 through III-4 provide the examination categories, quantities, and reasons for examination. Figures III-1 through III-6 provide tubesheet plots of the kinetic expansion, lower tubesheet, and sleeve examination locations.

TABLE III-1

BOBBIN COIL TUBE EXAMINATION SCOPE *

EXAMINATION TECHNIQUE	OTSG-A TUBES EXAMINED	OTSG-B TUBES EXAMINED	REASONS FOR SELECTION
540HF	334	105	These tubes were examined with a 0.540" HF bobbin probe to more accurately evaluate ID-initiated indications observed with bobbin coil probes during Outage 13R. During Outage 1R14 tubes with recorded ID indications identified during a 0.510" bobbin examination were also subsequently examined with a 0.540" bobbin probe.
510UL	14530	15272	These are the remaining in-service tubes that were not initially examined with the 0.540" diameter bobbin coil probe. This examination quantity includes examination of 647 previously plugged tubes in OTSG-A and 223 previously plugged tubes in OTSG-B.
480UL	1	2	These are tubes that would not pass a 0.510" bobbin coil probe.
400SB	1	0	This examination was performed on a previously plugged tube to determine the location of an obstruction.

*Note: Some tubes were examined with more than one bobbin probe examination technique. Therefore, the sum of the tubes examined in the above table does not equal the total number of tubes examined.

TABLE III-2
MRPC TUBE EXAMINATIONS

EXAMINATION TECHNIQUE	OTSG-A TUBES EXAMINED	OTSG-B TUBES EXAMINED	REASONS FOR SELECTION
520HF (Kinetic Expansions)	5157	5981	These are kinetic expansion examinations of unsleeved tubes in service. The examination scope included all in-service un-sleeved tubes not examined during Outages 12R or 13R, tubes with potential leakage contributing flaws identified during Outage 13R, tubes with "crack-like" indications identified during Outage 13R, and all in-service kinetic expansions in 22" expansions that are located at a tube bundle radial location of ≤ 47.00 " or less
520HF 460HF (Lower Tubesheet Examinations)	633	830	Approximately 33% of the tubes in the lower tubesheet "kidney" region were examined with the MRPC probe. This sample also exceeded 3% of the total number of tubes in each OTSG. The kidney region generally included areas on the tubesheet array that were identified to have lower tubesheet secondary face dents during Outage 13R. Figures III-5 and III-6 provide tubesheet maps of Outage 1R14 tubes examined with MRPC probes in the lower tubesheet. The examination in the kidney region included an axial length from 12 inches below the secondary face of the lower tubesheet to 4 inches above the secondary face in 625 tubes in OTSG-A and 827 tubes in OTSG-B. The other tubes were examined because of shop post stress relief roll expansions, minor tube end repairs, or specific dents located outside the defined kidney region.
520HF 520MB Special Interest	1055	727	These examinations were performed on specific areas of a tube to further evaluate indications identified by bobbin examinations or as an Outage 1R14 Technical Specification-required examination due to Outage 13R examination results. The sample included those tubes where ID IGA indications ≥ 0.13 inches axial length or ≥ 0.26 inches circumferential length and located below the kinetic expansion were left in service following the 13R Outage. These examinations also included: <ul style="list-style-type: none"> • all indications of possible tube wall degradation, all PVN indications, and all IDC indications • 33% of all bobbin coil dents above the lower tubesheet secondary face • all upper tubesheet secondary face dents • all bobbin coil dents ≥ 16 volts located at the lower tubesheet secondary face or below and located outside the defined kidney region (approximately 33% of the defined kidney region dents were examined as part of the lower tubesheet examination scope)
520HF (Sleeve Border)	82	86	In-service non-sleeved tubes adjacent sleeved tubes were examined at the 15S tube support plate and upper tubesheet secondary face to identify any possible high cycle fatigue precursors.
520HF (Deplugged Tubes)	289	129	A sample of tubes deplugged was examined at the 15S tube support plate and upper tubesheet secondary face in order to detect possible circumferential cracking.

EXAMINATION TECHNIQUE	OTSG-A TUBES EXAMINED	OTSG-B TUBES EXAMINED	REASONS FOR SELECTION
520PI (Post In Situ Pressure Testing)	9	11	These are tubes that were examined after completion of in situ pressure testing. Twelve tubes in OTSG-B were in situ pressure tested. Tube B66-131 was not examined after in situ pressure testing because it failed the in situ pressure testing.

TABLE III-3

SLEEVE EXAMINATIONS

DATA SET	OTSG-A TUBES EXAMINED	OTSG-B TUBES EXAMINED	REASONS FOR SELECTION
400SB (Sleeve Bobbin)	83	85	The unexpanded region of sleeves was examined with this probe to detect any general degradation such as OD IGA or wear. This group included approximately 33% of the installed sleeves in each OTSG.
400PP (Sleeve +/- Point)	83	85	Approximately 3 inches of parent tube below the lower sleeve end, the lower sleeve end, and all three roll expansions (including transitions) were examined with this technique because of the higher sensitivity to degradation at these locations. This group included approximately 33% of the installed sleeves in each OTSG.

TABLE III-4
PLUG EXAMINATIONS

DATA SET	OTSG-A PLUGS EXAMINED	OTSG-B PLUGS EXAMINED	REASONS FOR SELECTION
52SEP (Lower Tubesheet Explosive Plugs)	21	8	This examination scope included approximately 33% of the in-service lower tubesheet explosive plugs.
460PP (Upper Tubesheet Westinghouse Rolled Plugs)	134	80	This examination scope included approximately 33% of the installed upper tubesheet Westinghouse rolled plugs including all in-service upper tubesheet plugs of this design that were not previously examined with eddy current.
410MB (B&W I-600 Upper Tubesheet Rolled Plugs)	2	0	This examination scope included two B&W Inconel 600 upper tubesheet rolled plugs that were initially scheduled to remain in service after the 1R14 Outage. All other plugs of this design in OTSG-A were scheduled for replacement during the 1R14 Outage. All plugs of this design in OTSG-B were previously replaced.
Visual Examination Lower Head	1336	404	This was a visual examination of all upper tubesheet in-service plugs installed prior to Outage 1R14.
Visual Examination Upper Head	1399	404	This was a visual examination of all lower tubesheet in-service plugs installed prior to Outage 1R14. The lower tubesheet of OTSG-A has 63 "thimble plugs" installed in row 76. These plugs were installed during steam generator fabrication and account for the disparity in the number of plugs examined in the upper tubesheet versus the lower tubesheet in OTSG-A.

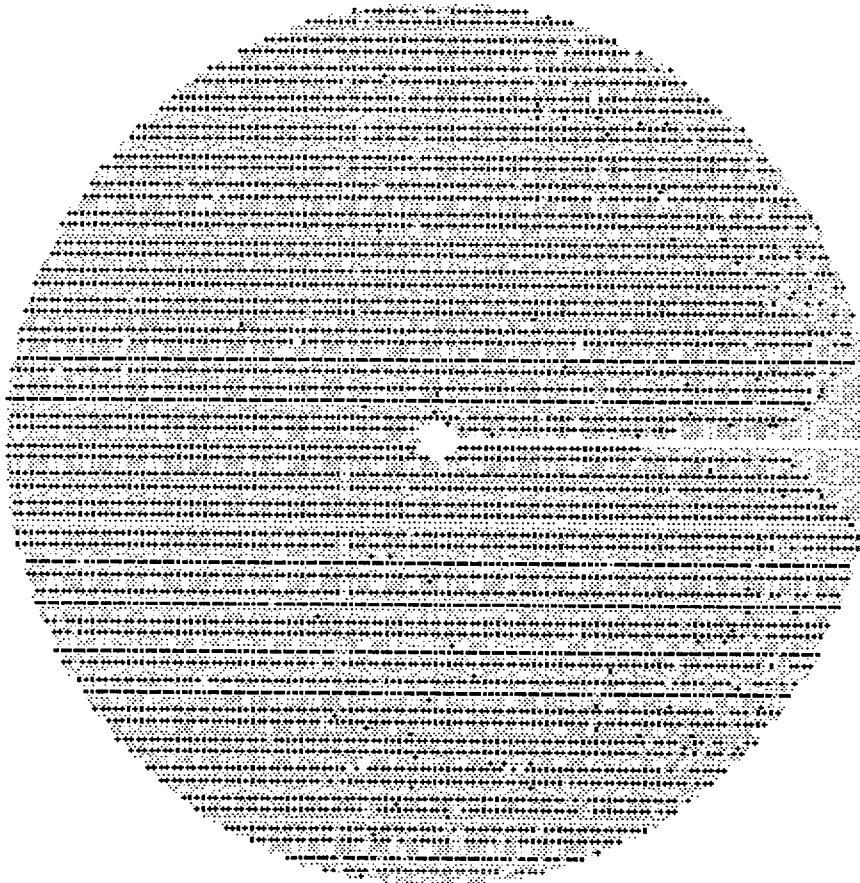
FIGURE III-1
OTSG-A
KINETIC EXPANSION EXAMINATION LOCATIONS



- Examination Location

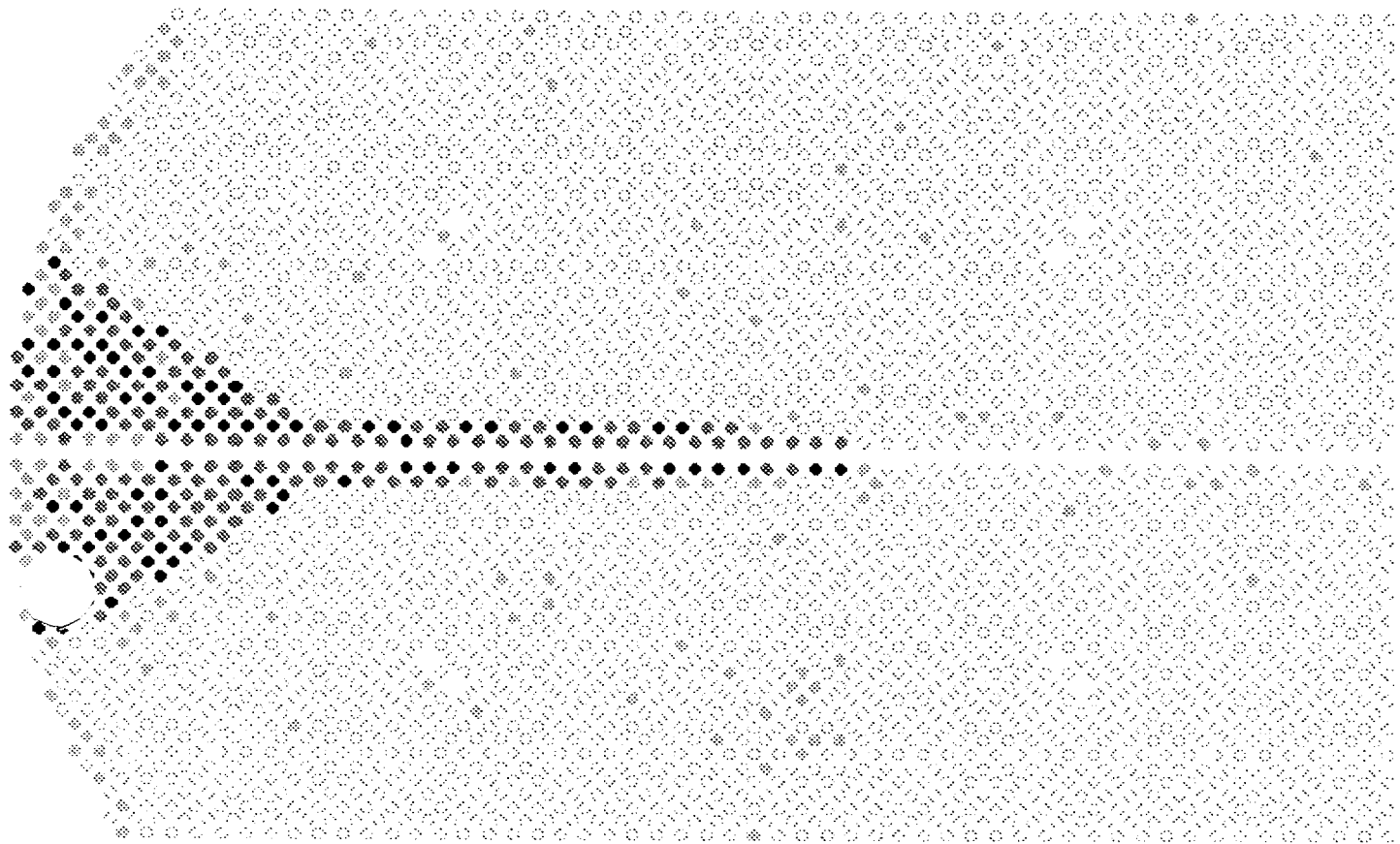
FIGURE III-2
OTSG-B

KINETIC EXPANSION EXAMINATION LOCATIONS



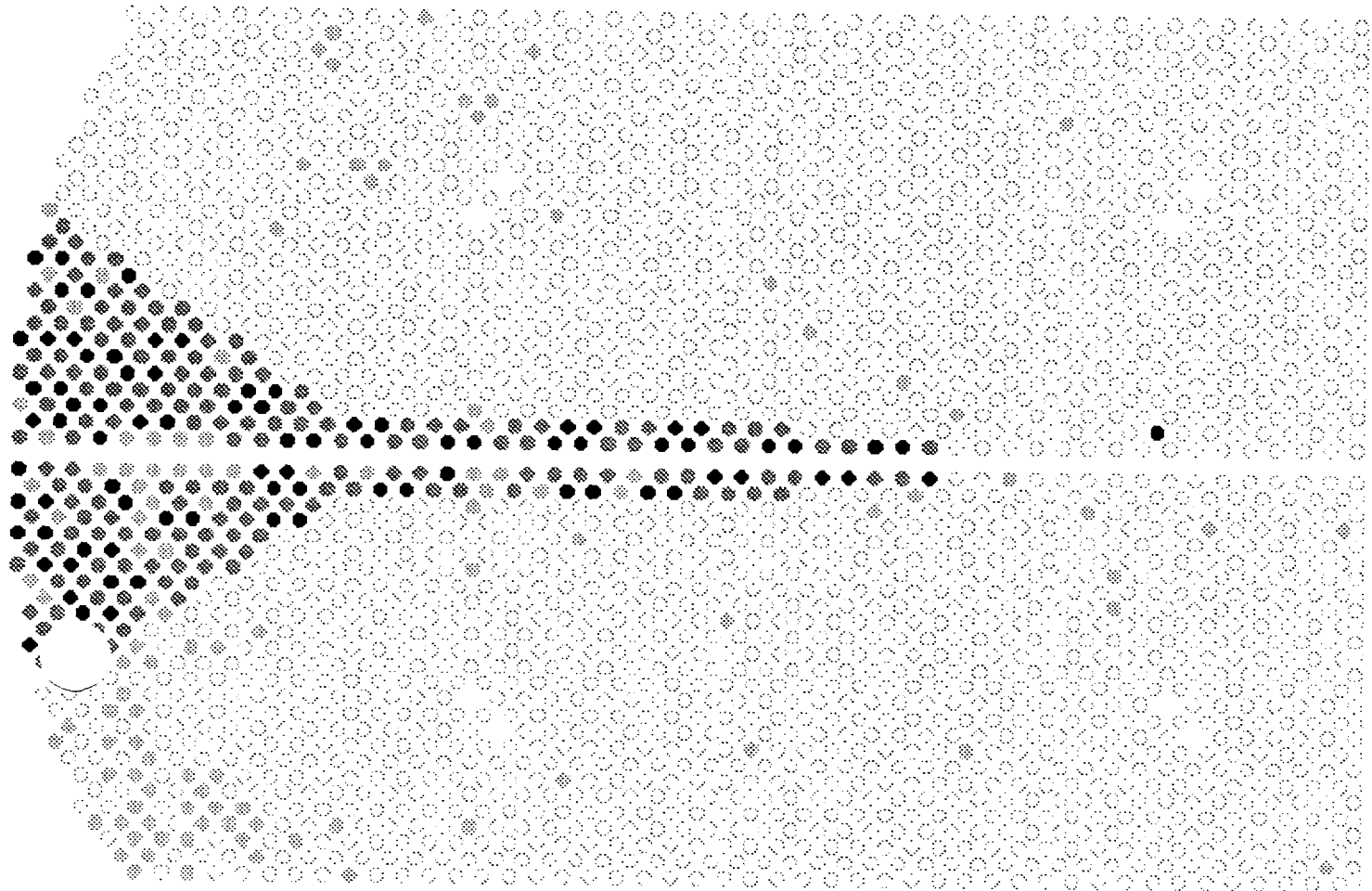
• Examination Location

FIGURE III-3
OTSG-A
SLEEVE EXAMINATION LOCATIONS



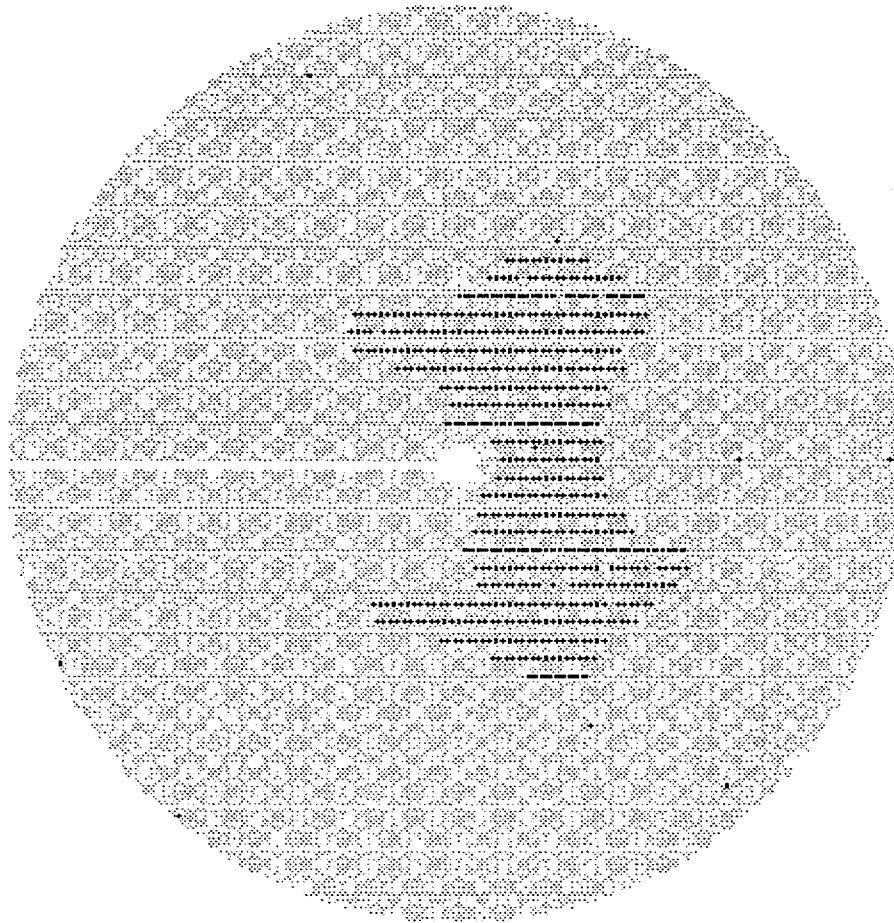
- ◆ Plugged tubes
- ◆ Sleeves not examined
- ◆ Sleeves examined

FIGURE III-4
OTSG-B
SLEEVE EXAMINATION LOCATIONS



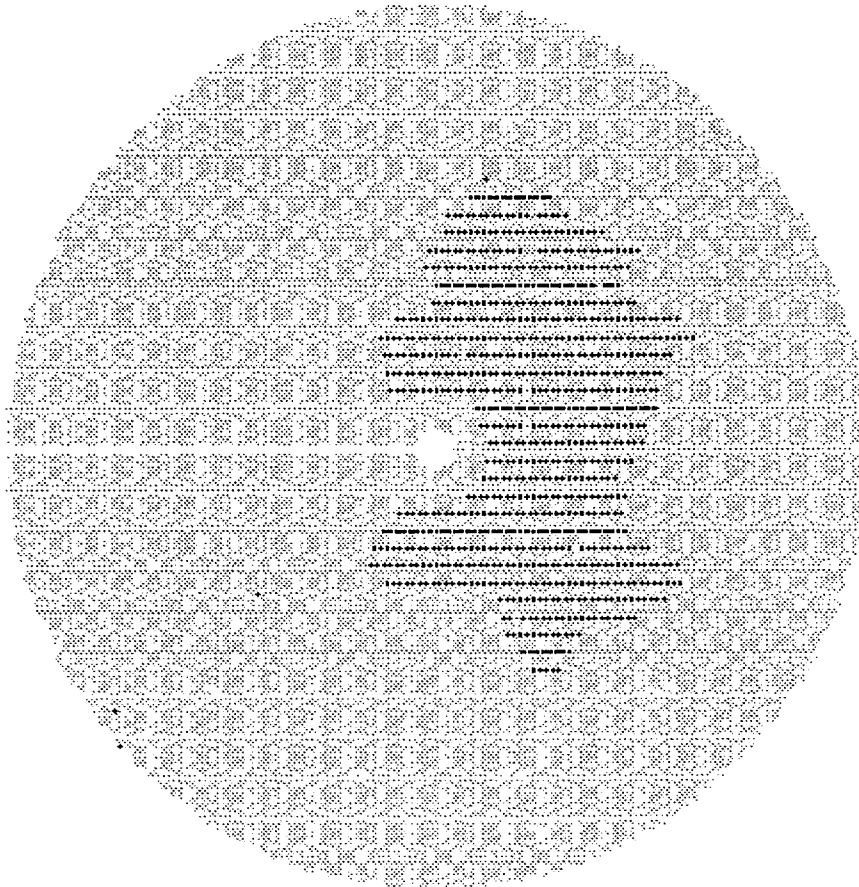
- ◆ Plugged tubes
- ◆ Sleeves not examined
- ◆ Sleeves examined

FIGURE III-5
OTSG-A
LOWER TUBESHEET EXAMINATION LOCATIONS



- Examination Location

FIGURE III-6
OTSG-B
LOWER TUBESHEET EXAMINATION LOCATIONS



- Examination Location

B. EXAMINATION RESULTS

B.1 Tube Examinations (unexpanded Region)

Appendix II of this report provides a listing of detected indications in tubes, sleeves, and plugs that were in service during Cycle 13. The examination results were reviewed to determine Technical Specification classification requirements per Technical Specification 4.19 and to determine whether other conditions were present which could be indicators of other damage. Volumetric ID IGA indications were evaluated for signs of growth as required by the Plant Technical Specifications and AmerGen Energy Report TM 01-00328 (Reference 22). No secondary side miscellaneous damage such as missing support plates was observed. It should be noted that previously plugged tube B66-130 failed at the upper tubesheet secondary face and caused significant damage to adjacent in-service tubes. The tube B66-130 condition is discussed later in this report. Since the bobbin inspection sample included 100% of the in-service tubes in each generator, the category classification is for documentation and notification purposes only and could not affect further bobbin coil inspection sample expansion criteria. The three categories are as follows:

- C-1 Less than 5% of tubes inspected are degraded and none are defective
- C-2 One or more but not greater than 1% of tubes inspected are defective or between 5-10% are degraded
- C-3 More than 10% of tubes inspected are degraded or more than 1% are defective

The results of the 1R14 bobbin inspection at TMI-1 are classified as C-2 for each steam generator based on having one or more but not greater than 1% defective tubes. For purposes of this classification, the following limits applied:

A tube was classified as defective, degraded, or imperfection in accordance with the TMI-1 Technical Specifications. Every tube with indications confirmed by MRPC was reviewed and assigned a classification. For tubes with multiple indications, the tube was classified based on the most limiting indication detected in that tube.

TRENDING OF ID INDICATIONS

During the 1R14 inspection, a new Technical Specification Amendment No. 237 (Reference 2) was implemented to address the volumetric ID IGA indications located in the non-expanded sections of tubing. In accordance with the Technical Specification, two different statistical tests must be performed on three different eddy current parameters. If all of these tests are passed, then the assumption of no growth is considered valid and can be used in the performance of the operational assessment. If any of these tests are unsuccessful, then a cycle-specific growth model must be developed and used for the operational assessment.

The three eddy current parameters that must be evaluated are the bobbin coil estimated depths, the bobbin coil voltages, and the circumferential extents from the MRPC inspection. The two tests that must be performed are the Sign Test and the Paired t-Test. For each of these tests, the growth is evaluated against a small positive change for the three eddy current parameters. (The use of small positive values reduces the possibility that random process error alone could result in mistakenly concluding that actual physical growth has occurred.) These small positive reference values are 1%TW estimated bobbin depth, 0.05 bobbin volts, and 0.01" circumferential extent.

In addition to the Sign Test and the Paired t-Test, the Extreme Value Test was used to help identify outliers in the data. The main purpose of this test is to identify indications that: 1) exhibited abnormal growth during the previous cycle of operation, or 2) may have been mis-analyzed or mis-characterized in either the current or the previous outage.

The results of the Sign Test and the Paired t-Test are shown in Table III-5. This table shows the results for both steam generators combined. As shown in the table, the Sign Test and the Paired t-Test were passed for all

three of the eddy current parameters. Per Reference 22, the data from both steam generators should be combined prior to performing the tests.

In summary, the statistical values observed for the bobbin coil voltage and through wall measurements of volumetric ID IGA are very much in line with similar evaluations performed for previous outages and continue to support a no growth conclusion.

Table III-5
Summary of ID IGA Growth from 13R to 1R14

		Combined Bobbin Est. Depth*	Combined Bobbin Volts*	Combined Circ Extent
Number of Data Points *****		145	292	828
Adjusted Average Change **		-1.5 %TW	-0.046 V	-0.018 in.
Standard Deviation		7.2 %TW	0.058 V	0.039 in.
Maximum Change (Adjusted) **		19 %TW	0.16 V	0.12 in.
Sign Test Results ***	Number of Zero or Negative Values	91	245	621
	Critical Value	62	131	389
Paired T-Test Results ****	Adjusted Average Change **	-1.5 %TW	-0.046 V	-0.018 in.
	Critical Value	1.0 %TW	0.006 V	0.002 in.

* The bobbin growth tests only include those indications which were confirmed with Plus Point and only includes the data from the 540HF probes from both outages.

** The average change and the maximum change shown in the table have already been adjusted downward by a small reference value as provided in the ID IGA Management Program. These adjustments are 1%TW, 0.05 volts, and 0.01" circumferential extent.

*** The Sign Test is passed if the number of zero or negative values is greater than the critical value.

**** The Paired t-Test is passed if the adjusted average change is less than the critical value.

***** Bobbin and MRPC indications were considered to be the same if they were less than 1" apart axially during the two outages.

LEAKAGE CALCULATION FOR VOLUMETRIC ID IGA

Reference 22 describes the method for estimating the postulated primary-to-secondary leakage for the ID IGA indications located in the non-expanded regions of the tubing. This process uses a hypergeometric distribution to determine the number of indications that must be assumed to leak. It is based on the total number of indications detected, the number of indications that have been in situ leak tested, and the number of leaking flaws within the tested population.

Per Reference 22, nineteen volumetric ID IGA indications had been successfully leak tested prior to the 1R14 outage. However, for this analysis, no credit was taken for these previous leak tests. During 1R14, a total of 69 volumetric ID IGA indications were leak tested (40 in SGA and 29 in SGB). None of the tested indications showed any signs of leakage. Per Reference 22, the in situ tests performed in one steam generator can also be applied to the other steam generator. This is because both of the steam generators share a common primary coolant system, and they were both damaged simultaneously by the sulfur intrusion into the primary system in 1981. Therefore, 69 successful in situ tests will be credited for both steam generators in the leak rate calculation.

To determine the leakage contribution for the volumetric ID IGA indications, each indication is first assigned a leakage value based on its axial extent as shown in Reference 22. Table III-6 shows the assumed leakage values as a function of the measured axial extent of the volumetric indication. After determining the leak rate for each indication, the average leak rate per indication was calculated by dividing the total leak rate by the number of detected indications in each steam generator.

Using the number of indications detected and the number of in situ tests performed as inputs to the hypergeometric distribution, the number of assumed leaking indications was adjusted until a minimum confidence level of 95% was obtained. This number of assumed leaking indications in each steam generator was then multiplied by the average leak rate for that steam generator to determine the leak rate due to volumetric ID IGA. Table III-7 provides a summary of the inputs and results of this calculation. As shown in the table, the calculated leak rates for the as-found condition of the tubes were small (<0.047 gpm for SGA; and <0.004 gpm for SGB) due to the extensive in situ leak testing, without leakage, that was performed during the 1R14 outage.

Table III-6
Predicted MSLB Leak Rate vs. Axial Extent for Volumetric ID IGA Indications

Volumetric ID IGA EC Axial Extent (in)	Assumed 100%TW Crack Length (in)	Leak Rate @ 600F (gpm)
0.09	0.03	0.0002
0.12	0.04	0.0004
0.15	0.05	0.0009
0.18	0.06	0.0013
0.21	0.07	0.0020
0.24	0.08	0.0028
0.27	0.09	0.0040
0.30	0.10	0.0054
0.33	0.11	0.0074
0.36	0.12	0.0102
0.39	0.13	0.0139
0.42	0.14	0.0186
0.45	0.15	0.0246
0.48	0.16	0.0323
0.51	0.17	0.0419
0.54	0.18	0.0539
0.57	0.19	0.0688
0.60	0.20	0.0877
0.63	0.21	0.1094
0.66	0.22	0.1368
0.69	0.23	0.1685
0.72	0.24	0.2069
0.75	0.25	0.2524

Table III-6 is based on AmerGen Energy Document ECR TM 01-00328, Revision 1 (Reference 22).

Table III-7
Leakage Results and Inputs for Volumetric ID IGA Indications

	SGA	SGB
Number of Indications Detected	1121	103
Average Calculated Leak Rate Per Indication (gpm @ 600F)	0.00100	0.00141
Number of Indications In Situ Leak Tested	69	
Number of Leaking Indications During In Situ Tests	0	
Assumed Number of Leaking Indications in Untested Population *	47	3
Confidence Level	95.3%	96.6%
Calculated Leak Rate for ID IGA in Untested Population (gpm @ 600F) **	<=0.047	<=0.004

* The assumed number of leaking indications is the maximum number of indications in the untested population that might leak (with >95% confidence) based on the tested population results.

** Leak rate is determined by multiplying the assumed number of leaking indications by the average leak rate per indication.

TRENDING OF WEAR INDICATIONS

During the 1R14 inspection, a new process was implemented where some of the wear indications were depth-sized with the bobbin coil probe. In accordance with the Analysis Guidelines (Reference 20), all of the following criteria had to be met in order for a bobbin depth to be assigned. If one or more of these five criteria were not met, then the signal was reported as NQI and an MRPC examination was performed on that location.

- 1) the bobbin estimated depth must be less than 30%TW,
- 2) the indication must be located at the 01S through 13S support plates,
- 3) the indication must have been reported as wear during the previous inspection,
- 4) the change in the phase angle from the previous inspection must be less than 10 degrees, and
- 5) the change in the voltage from the previous inspection must be less than 0.50 volts.

In the previous 13R inspection, wear indications were depth-sized with MRPC.

Table III-8 provides a summary of the growth of the wear indications based on the voltages and depth estimates from both the bobbin coil and the MRPC probes. Since bobbin depths were not reported during the 13R examination, the bobbin depths used for this growth analysis were obtained from Reference 23, a study, which looked back at the 13R examination data. As shown in the table, no significant growth of the wear indications has occurred for the operating period listed.

For the bobbin and MRPC depth estimates and the bobbin voltages, no significant differences between the two steam generators were apparent.

Table III-8
Growth of Support Plate Wear Indications

Eddy Current Parameter	Operating Period	Average Change	Maximum Growth	Standard Deviation	Indication Quantity
Bobbin Volts	13R to 1R14	-0.012V	+0.52V	0.111V	280
Bobbin % TW	13R to 1R14	-0.5% TW	+6% TW	2.6% TW	162
MRPC Volts	13R to 1R14	-0.018V	+1.25V	0.422V	108
MRPC % TW	13R to 1R14	-1.2% TW	+9% TW	4.3% TW	108

TUBE DENT SIGNALS

The growth of dent signals was calculated based on the bobbin voltages of the dents. Based on the results of this analysis, there was no significant growth of dents during the previous operating cycle.

Tables III-9 and III-10 show the voltage and voltage growth statistics based on the locations of the dents. As shown in the tables, the average growth was 0.04 volts in OTSG- A and 0.23 volts in OTSG-B. In both steam generators, the largest growth rates occurred in dents at the secondary face of the lower tubesheet. The secondary face of the lower tubesheet, however, is also the location of the largest dents. As a percentage of the dent voltage, the growth of the dents at the lower tubesheet is insignificant.

Table III-9
Dent Voltage and Voltage Growth Statistics for OTSG A

Location	Number of Dent Signals	Voltage		Growth		
		Avg	Max	Avg	Max	Std Dev
UTS – Secondary Face	124	3.12	11.31	-0.01	+0.72	0.23
LTS – Secondary Face	287	9.85	91.34	+0.36	+5.27	0.93
LTS – Below Secondary Face	391	5.26	53.9	-0.14	+4.84	0.65
Support Plates	4	3.17	4.09	-0.10	+0.35	0.32
Other Locations	51	4.19	11.32	-0.34	+1.06	0.66
All	857	6.41	91.34	+0.04	+5.27	0.76

Table III-10
Dent Voltage and Voltage Growth Statistics for OTSG B

Location	Number of Dent Signals	Voltage		Growth		
		Avg	Max	Avg	Max	Std Dev
UTS – Secondary Face	114	3.02	14.91	+0.02	+0.41	0.25
LTS – Secondary Face	1046	10.79	72.96	+0.31	+10.04	0.98
LTS – Below Secondary Face	210	5.44	11.24	-0.04	+1.71	0.53
Support Plates	3	3.72	4.48	-0.19	+0.19	0.31
Other Locations	62	3.65	15.67	+0.01	+1.99	0.55
All	1435	9.07	72.96	+0.23	+10.04	0.89

OTHER INDICATIONS

Ten tubes were evaluated as having outside diameter initiated wall degradation other than tube to tube support plate wear and were dispositioned as defective tubes. This is the same disposition practice as was implemented during Outages 12R and 13R so all indications in this category are considered newly detected degradation. Table III-11 below details information about these indications:

Table III-11
Confirmed Outside Diameter Indications

Tube	Location	Bobbin Indication	MRPC Indication	Comments
A59-72	07S +13.67"	0.22 volt NQI	SVI 0.10" circ by 0.10" axial length	OD Patch IGA
B9-62	15S -2.02"	0.97 volt NQI	SVI 0.27" circ by 0.25" axial length	OD Patch IGA
B28-42	LTS +1.62"	0.53 volt NQI	SVI 0.23" circ by 0.14" axial length	OD Patch IGA
B65-129	UTS -0.60"	0.55 volt NQI	SVI 0.33" circ by 2.75" axial length	Tube-to-tube wear due to severed tube B66-130
B65-130	15S +45.38	11.44 volt NQI and 0.56 volt NQI	SVI 0.44" circ by 6.34" axial length	Tube-to-tube wear due to severed tube B66-130
B66-131	15S +45.55	0.65 volt NQI	SVI 0.43" circ by 8.30" axial length	Tube-to-tube wear due to severed tube B66-130
B67-130	15S +44.85	0.63 volt NQI	SVI 0.38" circ by 6.51 axial length	Tube-to-tube wear due to severed tube B66-130
B98-1	UTS -5.73	Multiple NQI indications from 0.11 volts to 0.24 volts	Multiple SAI indications from 0.09" axial length to 0.43" axial length	"Groove" IGA
B119-2	14S -4.55	0.44 volt NQI indication	Two SAI indications 0.35" and 0.74" axial length	"Groove" IGA
B133-1	12S +0.88"	0.17 volt NQI indication	Two SAI indications 0.37" and 0.44" axial length	Likely deposit or shallow tube-to-tube support plate wear

The above table indicates that there were three distinct types of indications. Three tubes (A59-72, B9-62, and B28-42) had OD volumetric "Patch-Like" IGA typical of OD volumetric IGA found in other OTSG's. Two tubes (B98-1 and B119-2) had OD "Groove IGA" typical of other OTSG's and those previously observed at TMI-1. Four tubes (B65-129, B65-130, B66-131, and B67-130) were damaged by previously plugged tube B66-130. (Conditions surrounding severed plugged tube B66-130 are discussed later in Section III.B.5 of this report.)

Tube B133-1 was plugged for two eddy current indications that were classified as "SAI" at the 12th tube support plate. The indications were conservatively dispositioned as "SAI" indications because several of the Resolution Analysts were of the opinion that the ECT signals could be indicative of tube wall degradation. This was an unusual indication that was most likely due to a very shallow tube-to-tube support plate wear indication or a change in secondary side deposit condition. This conclusion is based on the following facts:

- At 300 kHz the +Point coil indication phase angle measurements suggest a high through wall flaw
- The amplitude of the indication signals do not suggest a deep flaw
- The signals observed are in the same relative phase plane as "general" tube noise observed at support plates
- There is no evidence of phase shift during entry into and exit away from the signal (commonly referred to as "walking" into and away from the flaw)
- Phase rotation of the 100 kHz signals suggest shallow through wall or possible debris

- The location of the signals are slightly off the land contacts
- Confirmation flaw signals are not evident on the 0.80" high frequency or 0.115" mid frequency pancake coil probes (high through wall flaws should be easily detectable with these probes)
- Comparison of the historical bobbin signal response indicates that there has been no significant change in the signal
- Post in situ eddy current examination results indicated no change

The Outage 1R14 Condition Monitoring and Operational Assessments considered the impact of the above-described degradation (see Section V of this report).

B.2. Kinetic Expansion Examinations

Appendix II includes indications located at ETL (Expansion Transition Location) +0.0" or above as a result of rotating probe examinations.

Structural Integrity

The results of the kinetic expansion inspection yielded six tubes that exceeded the conservative criteria for kinetic expansion structural integrity (See Tables III-15 and III-16 that list "Kinetic Expansion Indications" under "Reason For Plugging"). Four of these were in OTSG-A tubes and two of these were in OTSG-B tubes. Thirteen tubes were preventively plugged because they had circumferential indications that were located between ETL +0.0" and ETL +0.50" (ETL is the axial tube location that is identified by the transition from the expansion transition to fully expanded tubing; specifically ETL +0.0" corresponds to that point where the tube is fully in contact with the tubesheet bore.).

Approximately 39% of the in-service kinetic expansions were in the original plan to be inspected. Therefore, there was a possibility of a scope expansion to include the other tubes not examined. The tubes included in the sample were segregated into 1S (3%), 2S (6%), and 4S (12%) samples before the outage. In addition, some tubes were scheduled for monitoring of kinetic expansion indications as described in Tables III-12 and III-13, or were required to be examined by the Technical Specifications. These tubes were not part of the 1S, 2S, or 4S sample because all tubes meeting the applicable selection criteria were scheduled for examination.

Tables III-12 and III-13 show the kinetic expansion examination sample results. The "Sample Escalation Point" in the tables is the number of tubes, with defects exceeding the structural criteria, which would have resulted in expanding the inspection to 100% of the in-service tubes. As shown in the tables, six tubes had indications that exceeded the criteria for structural integrity. None of the samples reached the sample escalation point. Therefore, no increases in examination scope were necessary.

Theoretical MSLB Leakage Calculations

Based on conservative criteria used to estimate theoretical MSLB leakage, there were a total of 147 leakage-contributing indications (92 in SGA; 55 in SGB). Only 9 of these indications (5 in OTSG-A; 4 in OTSG-B) were "full" leakage contributors. The remaining leakage-contributing indications had the leakage reduction factor applied owing to their locations within the tubesheet expansions. Of the 147 leakage contributors, 111 were in tubes with 17" expansions.

All of the in-service kinetic expansions have now been inspected with Plus Point in one of the last three outages and previous leakage-contributing indications were inspected again in 1R14. In addition, the ID IGA/SCC in the kinetic expansions is not growing. Therefore, the indications from the 12R and 13R inspections that were determined to not be leakage contributors can be assumed to still be in the same condition. (It should also be noted that the ID IGA indications below the kinetic expansion are also not growing. This is supported by the Sign Test and the Paired t-Test results as discussed in Section III.B.1.)

Table III-14 summarizes the results of the theoretical leakage calculations. This table includes an "as-found" leakage value and an "as-left" leakage value for each steam generator. The as-found leakage includes all leakage contributors before plugging. The as-left leakage includes all leakage contributors that were returned to service for Cycle 14.

Table III-12
OTSG-A Kinetic Expansion Examination Results

Expansion Type	17"	17"	17"	17"/22"	
Sample	1S (3%)	2S (6%)	4S	NA *	Total
Tubes Inspected	475	940	3492	250	5157
Acceptable By Structural Acceptance Criterion	475	940	3489	249	5153
Unacceptable By Structural Acceptance Criterion	0	0	3	1	4
Sample Escalation Point (i.e., 1% of inspected population)	5	10	35	NA	NA

Table III-13
OTSG-B Kinetic Expansion Examination Results

Expansion Type	17"	17"	17"	17"/22"	
Sample	1S (3%)	2S (6%)	4S	NA *	Total
Tubes Inspected	475	940	4460	106	5981
Acceptable By Structural Acceptance Criterion	475	940	4460	104	5979
Unacceptable By Structural Acceptance Criterion	0	0	0	2	2
Sample Escalation Point (i.e., 1% of inspected population)	5	10	45	NA	NA

* The "NA" Sample category in the above tables includes tubes with previous indications (including previous leakage contributors), and tubes with 22" kinetic expansions located in the interior of the tube bundle.

Table III-14
Kinetic Expansion Theoretical Leakage Summary

	SG A		SG B	
	2 Hour Leak Volume	Duration Leak Volume	2 Hour Leak Volume	Duration Leak Volume
As-Found Leakage * (gallons @ T_{ave})	5	40	13	118
As-Left Leakage ** (gallons @ T_{ave})	4	32	6	52
Leakage Limit (gallons @ T_{ave})	3228	9960	3228	9960

* The "as-found" leakage includes all leakage contributors before plugging. All of the kinetic expansions were examined using eddy current over outages 12R, 13R, and 1R14 and all previous leakage contributors were re-inspected during 1R14. Therefore, no projection of the leakage for the un-inspected tubes is required.

** The "as-left" leakage includes all leakage contributors that were returned to service for Cycle 14.

B.3 Lower Tubesheet Examinations

No service induced degradation was identified during these examinations.

B.4. Sleeve Examinations

No service induced degradation of I-690 sleeves or of parent tubes with installed sleeves was identified during any of these examinations.

B.5. Severed Tube B66-130

During the 1R14 inspection, four neighboring tubes of tube B66-130 were found to have indications of wear in the upper span just below the upper tubesheet. The four tubes affected were B65-129, B65-130, B66-131, and B67-130. These tubes are all adjacent to plugged tube B66-130. Plus Point inspection of the affected tubes confirmed the presence of long wear indications in the upper span just below the tubesheet. The wear indications ranged from about 2.75" to about 8.3" in length.

In order to evaluate the root cause for the wear on the subject tubes, the upper tubesheet plug of tube B66-130 was removed to facilitate bobbin coil eddy current and video examinations. The bobbin coil inspection of the tube produced very noisy data that was later determined to be due to the fact that the tube was expanded significantly (i.e., "swollen" beyond nominal tube dimensions). The video inspection from the upper tube end confirmed that the tube was severed 360 degrees at the secondary face of the tubesheet. Based on the pattern of the affected tubes and subsequent visual examinations, it was confirmed that tube B66-130 was severed and had impacted the adjacent tubes listed above.

An investigation was performed to determine the root cause of the circumferential failure of tube B66-130. The investigation concluded that the circumferential failure of tube B66-130 was a combined result of the following factors.

- Internal pressurization due to mechanical plug “leak-by” caused the tube to swell during plant heat-up(s) and become restrained at both the 15th tube support plate and the secondary face of the upper tubesheet.
- The upper span region is located in a high secondary steam velocity flow and velocity profile region (i.e., a periphery tube with higher velocity). When the tube became restrained at its upper span, the tube’s damping capability was reduced resulting in susceptibility to flow induced vibration (FIV) fatigue.
- The presence of existing tube degradation (OD IGA) at the secondary face of the upper tubesheet region became an initiating location for FIV fatigue failure.

Based on the finding of a swollen and severed plugged tube during the course of the inspection, a decision was made to deplug additional tubes in both OTSGs. An extensive inspection of hundreds of deplugged tubes identified a total of 28 other tubes that were swollen as a result of the plugged tube over-pressurization effect. Of these 28 additional swollen tubes, one additional deplugged tube (A2-24), was identified with a circumferential severance that was located at the 15th TSP. Another swollen deplugged tube, B150-14, was identified with an axial burst between the 15th TSP and the upper tubesheet. Tube B66-130, however, was the only plugged tube found to have damaged its adjacent tubes.

To address the significance of the wear scars in the four adjacent in-service tubes, in situ pressure testing was performed on three of the tubes (B65-129, B66-131, and B67-130). The fourth tube, B65-130, had the deepest measured depth and was tested in a laboratory environment. Tubes B65-129 and B67-130 showed no signs of leakage at in situ test pressures up to 4350 psig (3xNOPD). Tube B66-131, however, failed at the 3xNOPD test pressure. During the final test step for B66-131, the tube held pressure at 4360 psig for approximately 1 second with no leakage. After this, the pressure dropped to approximately 450 psig (calculated to be less than 100 psig at the defect) with leakage measured at 3.2 gpm. Video inspection of this location after the test verified that the tube had failed (axial fishmouth) in the area of the wear scar.

In addition to the in situ pressure tests, a secondary-side tube harvest of the severed tube B66-130 as well as two of its neighbors (B65-130 and B66-131) was performed via the secondary-side manway. As mentioned above, tube B65-130 was pressure tested in the laboratory. As the pressure was being increased to the MSLB test pressure (2900 psig) in tube B65-130, the defect opened and the pressure dropped to zero. The maximum pressure observed in B65-130 was 2979 psig.

Corrective actions were taken during 1R14 to mitigate the occurrence of swollen tubes and the effects of swollen tubes during future operation. The investigative evaluations concluded that this failure is not a likely mechanism in the lower tube span of plugged tubes due to reduced FIV loading. The corrective actions taken to prevent recurrence of tube severance in a plugged tube and to mitigate the impacts of the plugged tube over-pressurization effect were:

- De-watered tubes prior to plugging and re-plugging.
- Stabilized the upper span region of all tubes that were plugged, or ensured that non-stabilized plugged tubes are surrounded by either stabilized plugged tubes or sleeved tubes.
- Tubes that were swollen as a result of the over-pressurization were plugged and stabilized with full-length stabilizers with the following exceptions: Severed tube B66-130 was not required to be stabilized because the upper span region of the tube was removed and all surrounding tubes were either stabilized and plugged or had the upper span removed in order to access tube B66-130 for removal. Swollen tube B150-14 could not be stabilized over its full length because of an obstruction (stuck eddy current probe) near the 7th TSP.

B.6. Plug Examinations

The eddy current examinations identified no plug pressure boundary degradation. The eddy current examinations of the upper tubesheet Westinghouse rolled plugs identified 23 plugs in OTSG-A and 19 plugs in OTSG-B that were obstructed at the plug end and would not pass the 0.460" plug probe. Only two of the obstructed plugs (A113-2 and B9-5) remain in service following the 1R14 Outage. These obstructions are believed to be caused by repair activities performed in the early 1980's. It is acceptable for these plugs to remain in service because there was no degradation identified from any of the Outage 1R14 plug eddy current examinations and the end damage is very minor in nature.

The scheduled plug visual examinations identified three upper tubesheet Westinghouse plugs (A2-11, B78-63, and B77-75) that had identified plug end damage. All three of these plugs were removed during Outage 1R14.

C. IN-SITU PRESSURE TESTING RESULTS

As shown in Tables II-2 and II-3, two of the tested locations showed leakage. Tube B66-131 was tested due to wear damage associated with severed tube B66-130. During the final test step for tube B66-131, a pressure of 4360 psig was reached and held for approximately one second with no leakage. After this, the pressure dropped to approximately 450 psig (calculated to be less than 100 psig at the defect) with leakage measured at 3.2 gpm. Video inspection of this location after the test verified that the tube had failed (axial fishmouth) in the area of the wear scar. As a result of this failure, tube B65-129 was added to the test list. Tubes B65-129 and B67-130 were both in situ pressure tested with no leakage detected. Tube B65-130, the tube with the worst mechanical wear damage based on ECT, was harvested from the secondary side and was tested in a laboratory environment. As the pressure was being increased to the MSLB test pressure (2900 psig) in tube B65-130, the defect opened and the pressure dropped to zero. The maximum pressure observed in B65-130 was 2979 psig.

One of the circumferential indications (A53-46) leaked slightly at a very high test pressure. The indication in this tube was an ID circumferential indication located at ETL -1.43". This tube has a 17 inch kinetic expansion. Therefore, the circumferential indication is located more than 5 inches into the tubesheet and is not a concern for burst. The leak rate for this tube was measured as 0.014 gpm based on a two minute hold time, but this was at an extremely high pressure of 6450 psig. This tube, as well as 4 other tubes with circumferential indications, was tested at pressures significantly above 3xNOPD in order to achieve additional axial load. This was done because the axial pull in situ probe got stuck in tube B80-31 (which was the first circumferential indication that was tested). The test in tube B80-31 was completed successfully with an applied axial load. However, the probe was found to be stuck in the tube upon completion of the test. Due to this probe getting stuck, it was decided that, for the remaining circumferential indications, the additional axial load would be achieved by over-pressurizing the tubes.

There were three tubes with circumferential indications on the original in situ test candidate list. Since the leak rate in tube A53-46 was so small, there was no likelihood of violating the NEI 97-06 performance criteria and, therefore, no requirement to test additional circumferential indications per the EPRI Guidelines. However, as a conservative measure, three additional circumferential indications were added to the test list, giving a total number of six circumferential indications tested.

The in situ pressure test results are provided in Tables II-2 and II-3 of this report.

IV. REPAIRS PERFORMED

A. TUBES PLUGGED DUE TO EDDY CURRENT RESULTS

As a result of eddy current indications evaluated during Outage 1R14 examinations twenty-seven (27) tubes in OTSG-A and thirty-one (31) tubes in OTSG-B were plugged. These tubes are listed in Tables III-15 and III-16 below:

Table III-15
OTSG-A Tubes Removed From Service For Eddy Current Indications¹

SG	Row	Tube	Reason For Plugging	Tube Qty	Comments
SGA	1	6	SCI @ ETL -0.06	1	
SGA	2	25	Multiple VOLs	2	
SGA	29	100	Kinetic Expansion Indications	3	
SGA	33	83	43% @ UTS +1.89	4	
SGA	42	89	47% @ UTS +0.69	5	
SGA	42	112	Kinetic Expansion Indications	6	
SGA	53	46	SCI @ ETL -1.43	7	
SGA	59	72	SVI @ 07S +13.67	8	
SGA	72	57	Multiple VOLs (UTS to ETL +3.6)	9	Preventative
SGA	72	124	VOL @ ETL -2.46	10	
SGA	74	53	SCI @ ETL +0.00	11	Preventative
SGA	74	60	SCI @ ETL +0.12	12	Preventative
SGA	84	130	SCI @ ETL +0.39	13	Preventative
SGA	87	129	40% @ UTS +3.54	14	
SGA	94	117	VOL @ UTS -2.31	15	
SGA	95	127	VOL @ 12S +13.19	16	
SGA	97	33	SCI @ ETL +0.64	17	22" KE; <47" Radius Location
SGA	101	51	40% @ UTS +5.83	18	
SGA	103	121	VOL @ UTS -0.90	19	
SGA	112	85	VOL @ 07S -9.54	20	
SGA	116	109	43% @ 15S +36.56	21	
SGA	121	89	SCI @ ETL -0.14	22	
SGA	135	2	VOL @ 15S +11.89	23	
SGA	136	69	VOL @ UTS -6.51	24	
SGA	146	50	VOL @ 04S -4.94	25	
SGA	149	13	Kinetic Expansion Indications	26	
SGA	149	31	Kinetic Expansion Indications	27	

¹ See Appendix I for indication three letter code definitions and Figure II-2 for location codes.

Table III-16
OTSG-B Tubes Removed From Service For Eddy Current Indications

SG	Row	Tube	Reason For Plugging	Tube Qty	Comments
SGB	9	62	SVI @ 15S -2.02	1	
SGB	12	46	40% @ UTS +0.64	2	
SGB	21	35	Kinetic Expansion Indications	3	
SGB	26	11	SCI @ ETL +0.03	4	
SGB	28	42	SVI @ LTS +1.62	5	
SGB	28	61	SCI @ ETL +0.44	6	
SGB	28	66	Obstructed w/ 540 Bobbin	7	Obstructed w/ 540 Bobbin
SGB	33	16	SCI @ ETL +0.23	8	Preventative
SGB	35	55	SCI @ ETL +0.42	9	Preventative
SGB	38	72	40% @ 12S +7.37	10	
SGB	44	75	VOL's @ 09S to 15S	11	Preventative / In Situ
SGB	55	51	VOL @ 12S -18.4	12	
SGB	65	129	SVI @ UTS -0.60	13	
SGB	65	130	SVI @ 15S +45.38	14	
SGB	66	131	SVI @ 15S +45.55	15	
SGB	67	130	SVI @ 15S +44.85	16	
SGB	73	22	SCI @ ETL +0.00	17	Preventative
SGB	78	51	SCI @ ETL +0.01	18	Preventative
SGB	78	56	VOL @ ETL -0.40	19	
SGB	80	31	SCI @ UTS +0.26	20	
SGB	80	58	VOL @ ETL -0.51	21	
SGB	83	26	SCI @ ETL +4.92	22	22" KE; <47" Radius Location
SGB	84	8	SCI @ ETL +0.31	23	Preventative
SGB	95	17	Kinetic Expansion Indications	24	
SGB	98	1	SAI @ UTS -5.73	25	
SGB	110	12	SCI @ ETL +0.46	26	
SGB	119	2	SAI @ 14S -4.55	27	
SGB	133	1	SAI @ 12S +0.88	28	
SGB	143	43	VOL's @ 06S to 11S	29	Preventative / In Situ
SGB	148	26	SCI @ ETL +0.00	30	Preventative
SGB	149	1	SCI @ ETL +0.00	31	Preventative

B. TUBES PLUGGED TO PREVENT SEVERED TUBE FAILURE

Plugged tubes that were not previously stabilized were de-plugged and stabilized in order to prevent re-occurrence of tube-to-tube wear similar to that which occurred in the tubes adjacent to plugged tube B66-130. Plugged tubes that could not be stabilized and had not had upper tube sections removed during a tube pull process were "captured" to prevent damage to adjacent in service tubes should a postulated plugged tube severance occur. These tubes were "captured" by plugging and stabilizing tubes adjacent to the non-stabilized plugged tubes. In OTSG-A 149 tubes were plugged and stabilized in order to capture tubes that were plugged but not stabilized. In OTSG-B 117 tubes were plugged and stabilized in order to capture tubes that were plugged but not stabilized. Table III-17 below provides a listing of tubes that were plugged in order to capture adjacent tubes that were plugged but not stabilized.

Table III-17
Tubes Plugged To Capture Adjacent Tubes

Count	OTSG	Row	Tube	Count	OTSG	Row	Tube
1	SGA	2	21	45	SGA	76	123
2	SGA	2	22	46	SGA	77	47
3	SGA	3	12	47	SGA	77	48
4	SGA	3	13	48	SGA	77	49
5	SGA	4	34	49	SGA	79	26
6	SGA	4	38	50	SGA	79	27
7	SGA	5	37	51	SGA	80	127
8	SGA	6	40	52	SGA	80	128
9	SGA	6	42	53	SGA	80	130
10	SGA	7	42	54	SGA	82	126
11	SGA	15	2	55	SGA	82	127
12	SGA	16	2	56	SGA	82	128
13	SGA	16	4	57	SGA	89	123
14	SGA	17	3	58	SGA	89	125
15	SGA	17	4	59	SGA	99	124
16	SGA	24	86	60	SGA	104	122
17	SGA	24	87	61	SGA	105	120
18	SGA	25	87	62	SGA	106	118
19	SGA	25	89	63	SGA	110	39
20	SGA	26	88	64	SGA	110	40
21	SGA	26	89	65	SGA	111	38
22	SGA	28	99	66	SGA	111	40
23	SGA	39	113	67	SGA	112	3
24	SGA	39	114	68	SGA	112	39
25	SGA	48	98	69	SGA	112	40
26	SGA	48	99	70	SGA	113	47
27	SGA	49	98	71	SGA	113	48
28	SGA	49	100	72	SGA	114	3
29	SGA	50	98	73	SGA	114	46
30	SGA	50	99	74	SGA	114	48
31	SGA	67	129	75	SGA	115	3
32	SGA	72	32	76	SGA	115	46
33	SGA	72	33	77	SGA	116	1
34	SGA	73	32	78	SGA	116	2
35	SGA	73	34	79	SGA	116	104
36	SGA	73	129	80	SGA	116	105
37	SGA	73	130	81	SGA	117	100
38	SGA	74	32	82	SGA	117	102
39	SGA	74	33	83	SGA	118	100
40	SGA	74	47	84	SGA	118	101
41	SGA	74	48	85	SGA	119	106
42	SGA	75	47	86	SGA	120	104
43	SGA	75	49	87	SGA	121	96
44	SGA	75	125	88	SGA	121	104
				89	SGA	121	105

Table III-17
Tubes Plugged To Capture Adjacent Tubes (Cont'd)

Count	OTSG	Row	Tube	Count	OTSG	Row	Tube
90	SGA	122	96	135	SGA	140	67
91	SGA	123	41	136	SGA	146	43
92	SGA	123	42	137	SGA	147	11
93	SGA	123	95	138	SGA	147	17
94	SGA	124	39	139	SGA	147	18
95	SGA	124	41	140	SGA	147	38
96	SGA	124	65	141	SGA	147	42
97	SGA	124	66	142	SGA	148	9
98	SGA	124	97	143	SGA	148	10
99	SGA	125	39	144	SGA	148	14
100	SGA	125	40	145	SGA	148	16
101	SGA	125	64	146	SGA	148	36
102	SGA	125	66	147	SGA	149	11
103	SGA	125	96	148	SGA	149	12
104	SGA	125	97	149	SGA	149	32
105	SGA	126	64	1	SGB	8	36
106	SGA	126	65	2	SGB	8	37
107	SGA	126	95	3	SGB	9	38
108	SGA	126	97	4	SGB	9	40
109	SGA	127	80	5	SGB	10	39
110	SGA	127	81	6	SGB	10	40
111	SGA	128	78	7	SGB	10	41
112	SGA	128	80	8	SGB	10	47
113	SGA	129	36	9	SGB	11	40
114	SGA	129	37	10	SGB	11	42
115	SGA	129	78	11	SGB	11	48
116	SGA	129	79	12	SGB	11	50
117	SGA	130	35	13	SGB	12	42
118	SGA	130	37	14	SGB	12	43
119	SGA	130	91	15	SGB	12	50
120	SGA	131	34	16	SGB	17	58
121	SGA	131	35	17	SGB	17	59
122	SGA	131	90	18	SGB	18	59
123	SGA	132	12	19	SGB	18	61
124	SGA	132	13	20	SGB	19	60
125	SGA	134	10	21	SGB	19	61
126	SGA	134	11	22	SGB	28	2
127	SGA	134	74	23	SGB	28	3
128	SGA	135	47	24	SGB	29	5
129	SGA	135	48	25	SGB	29	67
130	SGA	135	71	26	SGB	29	68
131	SGA	136	46	27	SGB	30	2
132	SGA	136	48	28	SGB	30	3
133	SGA	137	45	29	SGB	30	4
134	SGA	137	46	30	SGB	30	5

Table III-17
Tubes Plugged To Capture Adjacent Tubes (Cont'd)

Count	OTSG	Row	Tube	Count	OTSG	Row	Tube
31	SGB	30	67	75	SGB	30	67
32	SGB	30	69	76	SGB	30	69
33	SGB	31	2	77	SGB	31	2
34	SGB	31	4	78	SGB	31	4
35	SGB	31	68	79	SGB	31	68
36	SGB	31	69	80	SGB	31	69
37	SGB	32	3	81	SGB	32	3
38	SGB	35	69	82	SGB	35	69
39	SGB	35	70	83	SGB	35	70
40	SGB	36	71	84	SGB	36	71
41	SGB	36	73	85	SGB	36	73
42	SGB	37	72	86	SGB	37	72
43	SGB	37	73	87	SGB	37	73
44	SGB	41	6	88	SGB	41	6
45	SGB	42	7	89	SGB	42	7
46	SGB	43	6	90	SGB	43	6
47	SGB	43	7	91	SGB	43	7
48	SGB	43	15	92	SGB	43	15
49	SGB	43	16	93	SGB	43	16
50	SGB	44	15	94	SGB	44	15
51	SGB	44	17	95	SGB	44	17
52	SGB	45	16	96	SGB	45	16
53	SGB	45	17	97	SGB	45	17
54	SGB	66	129	98	SGB	66	129
55	SGB	67	79	99	SGB	67	79
56	SGB	67	80	100	SGB	67	80
57	SGB	67	129	101	SGB	67	129
58	SGB	68	79	102	SGB	68	79
59	SGB	68	81	103	SGB	68	81
60	SGB	69	80	104	SGB	69	80
61	SGB	69	81	105	SGB	69	81
62	SGB	73	19	106	SGB	73	19
63	SGB	75	56	107	SGB	75	56
64	SGB	75	57	108	SGB	75	57
65	SGB	75	58	109	SGB	75	58
66	SGB	77	56	110	SGB	77	56
67	SGB	77	58	111	SGB	77	58
68	SGB	78	40	112	SGB	78	40
69	SGB	78	41	113	SGB	78	41
70	SGB	79	40	114	SGB	79	40
71	SGB	79	42	115	SGB	79	42
72	SGB	79	45	116	SGB	79	45
73	SGB	79	46	117	SGB	79	46
74	SGB	80	21				

The total number of tubes plugged in OTSG-A is 1,512 (9.74% of the 15,531 tubes), and the total number of plugged tubes in OTSG-B is 552 (3.55% of the 15,531 tubes).

The 80" sleeves installed in the TMI-1 OTSG's affect primary coolant flow and alter the effective plugged percentage of tubes. Per Reference 15, 6.7 tubes with 80" sleeves installed are hydraulically equivalent to 1 plugged tube:

- The effective plugging percentage of OTSG-A, considering the 1R14 Outage tube plugging and the effect of its 248 in-service sleeves, is now 9.97%. $[(1512 + (248/6.7)) / 15531 = 0.0997]$
- The effective plugging percentage of OTSG-B, considering the 1R14 Outage tube plugging and the effect of its 253 in-service sleeves, is now 3.80%. $[(552 + (253/6.7)) / 15531 = 0.0380]$

C. PLUGGED TUBE REPAIRS

Corrective measures were completed in order to prevent future damage to tubes similar to the damage that occurred as a result of the failure in plugged tube B66-130. These corrective measures are summarized below:

- Deplugged tubes were dewatered prior to their re-plugging. This minimized the water remaining within the plugged tubes that could subsequently over-pressurize the tube.
- Plugged tubes were stabilized in their upper spans from the upper tubesheet through the 14th tube support plate, or additional tubes were plugged and stabilized to ensure that non-stabilized plugged tubes are surrounded by stabilized, plugged tubes, or sleeved tubes.
- 27 of 29 swollen tubes were stabilized with full-length stabilizers and plugged. Tube B150-14 was stabilized only in the upper tube span due to a stuck eddy current probe near the 7th TSP. Severed tube B66-130 was not stabilized because the upper span region of the tube was removed as part of the investigation, and all surrounding tubes were either stabilized and plugged or had the upper span removed in order to access tube B66-130 for removal.

V. CONDITION ASSESSMENTS

A. CONDITION MONITORING

Condition monitoring evaluations consider the "as found" condition of the steam generators, and the ability of the steam generators to withstand hypothetical plant transients over the course of the operating cycle prior to the outage. The 1R14 Outage examinations determined that swollen, plugged tube B66-130 became circumferentially severed and impacted four of its adjacent tubes during the prior cycle. The wear damage on these adjacent tubes was of sufficient extent that two tubes did not satisfy the plant's steam generator program requirements for leak/burst integrity at three times the plant's normal operating differential pressure (i.e., 3NODP). Thus, the tubing failed its condition monitoring requirements. A Licensee Event Report (Reference 14) was submitted as a result of this condition.

Aside from the swollen, plugged tube condition described above, the following items are also pertinent to condition monitoring evaluation:

The primary-to-secondary leakrate from the TMI-1 steam generators during the cycle preceding the 1R14 Outage was very low. During the last week of the operating cycle the calculated leakrate was less than 1.5 gallons per day.

During the outage all of the in-service tubes were inspected using eddy current probes. The eddy current test results were screened in accordance with the EPRI Guidelines to select flaws for in situ pressure testing from a leakage and structural integrity perspective. Successful testing of the screened flaws would then provide assurance that the remaining flaws would maintain structural and leakage integrity during a postulated MSLB. In-situ pressure testing was conducted during the 1R14 outage to assess the ability of the flaws found during the eddy current inspections to withstand a postulated Main Steam Line Break (MSLB) event on the last day of the just-completed operating cycle. As described in Section II the tubing was subjected to pressure loads corresponding to Normal Operating, Main Steam Line Break, and 3NODP. Tables II-2 and II-3 of this document provide detailed

information on the eddy current results for the tubes and indications selected for in-situ pressure testing. Table III-4 provides information on a tube (B65-130) that was pressure tested under laboratory conditions. Seven (7) in situ pressure tested tubes had indications exceeding the EPRI In Situ Testing Guidelines screening criteria, and a total of 21 tubes were in situ pressure tested. Based on the 1R14 in situ pressure testing and examination results, in service tubes (with the exception of B65-130, which is a tube adjacent to tube B66-130), would have maintained structural and leakage integrity during a postulated MSLB accident on the last day of the cycle preceding the outage.

As discussed in Section II.C.2, eddy current indications in the upper tubesheet kinetic expansions were *assumed to leak* during a postulated MSLB if their through wall extent (as estimated by a Plus-Point coil) was 67% TW or greater. Each of these potential "leakage contributor" indications was conservatively evaluated to determine the volume of primary-to-secondary leakage associated with that indication if an MSLB had occurred. These accident-induced leakage volumes were summed for each of the indications to predict the hypothetical leakage from all of the expansions. The resulting calculated leakage was considerably less than that allowed by the plant's FSAR. (See Table III-14.)

As discussed in Sections II.D and III.C, a large sample of volumetric ID IGA indications was in situ pressure tested, with no leaks, to demonstrate that the remaining population of volumetric ID IGA indications will leak less than a very small amount. This testing was done in accordance with the plant's Technical Specifications to evaluate theoretical leakage of the population of ID IGA indications during accident conditions.

All of the plant's in-service steam generator tubes were inspected. In-situ pressure testing was a primary tool to demonstrate the ability of the freespan tubing to withstand accident-induced loads at the end of the just-completed operating cycle. The kinetically expanded tubing was examined with MRPC probes and an assessment of the postulated leakage was conservatively developed. The degradation observed during the 1R14 Outage was evaluated in a manner consistent with NEI 97-06 and the EPRI Guidelines. The evaluations indicated that, *with the notable exception of the tubes adjacent to plugged tube B66-130*, the observed degradation did not present serious challenges to the structural margin requirements at the end of the last cycle of operation, or challenge the plant's leakage integrity limits. The degraded integrity of the tubes adjacent to plugged tube B66-130 is the subject of LER T2001-003-00 (Reference 14).

B. OPERATIONAL ASSESSMENT

As described in previous sections, in response to the plugged tube B66-130 severance issue, the TMI-1 1R14 Outage resulted in 266 tubes (149 in the "A" OTSG; 117 in the "B" OTSG) plugged in order to surround previously plugged tubes with stabilized plugged tubes. In addition, tubes (4 in the "A" OTSG; 9 in the "B" OTSG) were preventively plugged. Forty-five tubes (23 in the "A" OTSG; 22 in the "B" OTSG) were plugged as a result of the eddy current examination results.

ID-initiated indications were the predominant eddy current examination result for which TMI-1 steam generator tubes were plugged. The I.D. indications are believed to be remnants of the thiosulfate damage that occurred to the ID surfaces of the tubes in 1981. As discussed in Section III.B.1, the growth rate for ID IGA indications/flaws is believed to be zero and the ID IGA indications requiring repair were generally the result of MRPC examinations in areas not previously examined or were due to variability in the eddy current examination process.

TMI-1 has now examined all of the steam generators' in-service kinetic expansions over the last 3 outages with MRPC probes. As reported in Section III.B.2, TMI-1 compared the kinetic expansion inspection results of the last three outages and has concluded that the indications within the kinetic expansions are not growing.

An operational assessment of the 1R14 Outage inspection results was successfully performed using methods consistent with NEI 97-06 and the EPRI Guidelines. The corrective actions undertaken in response to the severed, plugged tube issue should eliminate the possibility of an in-service tube being similarly impacted during forthcoming cycles. When considering Outage 1R14 corrective actions, indications detected during Outage 1R14, and indications assumed to remain in service following the 1R14 Outage, the probability of rupture/burst of a tube under postulated TMI-1 MSLB accident loads supports full cycle operation. The operational assessment report is available at the site for NRC staff inspection, if desired.

VI. CONCLUSIONS

Based on the results of the 2001, Outage 1R14 ECT examinations, tube pulls, in situ pressure testing, and data evaluations, TMI-1 was able to reach the following conclusions:

1. Evaluation of the ID IGA indications continues to indicate no trend of ongoing degradation.
2. "Groove IGA" is an active damage mechanism at TMI-1. However, the small number of indications and growth rates continue to support full cycle operation.
3. Tube-to-tube support plate wear is not an active damage mechanism.
4. Lower tubesheet OD degradation was not detected during examination of the most susceptible regions with MRPC probes.
5. The installed Inconel 690 sleeves, and parent tubing, continued to perform without degradation.
6. OD volumetric IGA (similar to OD volumetric IGA in other OTSGs) continues to be detected at TMI-1 in small numbers and is not a tube integrity issue based on eddy current examination and in situ pressure testing results.
7. As a result of the plugged tube B66-130 severance, root cause/condition monitoring evaluation determined that OTSG-B did not meet requirements for safety margins against burst during an MSLB during the last several days of Cycle 13. (Refer to Reference 14).
8. Repairs performed during Outage 1R14 eliminated severed plugged tubes as a potential damage mechanism for adjacent in service tubes during future cycles.
9. Operational assessment evaluation determined the steam generators are acceptable for full Cycle 14 operation.

VII. REFERENCES

1. TMI-1 Technical Specification 4.19, "OTSG Tube Inservice Inspection".
 2. TMI-1 Technical Specification License Amendment No. 237, effective October 5, 2001.
 3. Letter from J. Knubel of GPU Nuclear to USNRC, "Cycle 11 Refueling (11R) Outage Once Through Steam Generator (OTSG) Tube Inspection Report with ASME Form NIS-1 Covering the 11R OTSG Inservice Inspections", 08/01/96.
 4. Three Mile Island Nuclear Station Unit No. 1 Surveillance Procedure 1300-4B, Rev. 11, "Eddy Current Examination of OTSG", 10/04/01.
 5. Framatome Technologies Procedure 54-ISI-400-11, "Multi-Frequency Eddy Current Examination of Tubing".
 6. GPU Nuclear Calculation C-1101-224-E280-072, Revision 1, "ID IGA Flaw Detection and Sizing Performance for the Bobbin Coil Eddy Current Examination Technique".
 7. Framatome Technologies Report 51-5000345-01, J. Griffith, "PWSCC and Primary Side IGA Sizing Performance of OTSG Rotating Coil Examinations", 08/04/99.
 8. Exelon Procedure ER-AP-335-040, "Analysis of OTSG Eddy Current Data", 08/08/01.
- EPRI Report TR-107569-V1R5, "PWR Steam Generator Examination Guidelines, Revision 5", September 1997.

10. ASME Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components", 1995 Edition With 1996 Addenda.
11. USNRC Regulatory Guide 1.121, "Bases for Plugging Degraded PWR Steam Generator Tubes", August 1976.
12. Framatome Technologies Report 51-5015677-00, "In-Situ Pressure Test Summary for TMI Unit 1 (October 2001)", December, 2001.
13. Letter from J. Langenbach of GPU Nuclear, "Leakage Assessment Methodology for TMI-1 OTSG Kinetic Expansion Examination, Topical Report 116", 11/26/97.
14. LER Number 2001-003-00, "Degraded OTSG Tube", dated December 14, 2001.
15. FTI Calculation #32-1234876-00, Rev 0, "TMI-1 Tube Plugging RCS Flow Prediction", July 1995.
16. "TMI-1 Outage 1R14 Degradation Assessment & Condition Monitoring Checklist, Revision 0", Memorandum TMI-NOB-3, 5973-2001-009.
17. Framatome Technologies report 51-5005406-01, "Qualified ET Exam Techniques for Three Mile Island 1R14".
18. Letter from J. Langenbach of GPU Nuclear to USNRC, "GPU Nuclear Response to NRC Requests Regarding the OTSG Kinetic Expansion Region Inspection Acceptance Criteria for 12R Examinations", 07/30/99.
19. EPRI Report TR-107620-R1, "In-Situ Pressure Test Guidelines: Revision 1"
20. Exelon T&RM ER-TM-335-1005, "Analysis of OTSG Eddy Current Data At TMI"
21. Framatome ANP Report 77-5011531-00, "Bobbin Coil OTSG Wear Depth Sizing"
22. AmerGen Energy Document ECR TM 01-00328, Revision 1, "Management Program for Volumetric Inside Diameter Intergranular Attack (ID IGA) in Once Through Steam Generators", October 2001
23. Framatome ANP Report 51-5011828-00, "TMI - Sizing Wear With Bobbin Data"
24. NRC Information Notice 2002-02, "Recent Experience With Plugged Steam Generator Tubes".

ANALYSIS CHARACTERIZATION AND REPORTING CODES

<i>Code</i>	<i>Definition</i>
ADI	Absolute Drift Indication -- reported when the analyst interprets an absolute bobbin signal as anomalous and requiring further disposition that cannot be properly reported with a differential channel.
AOD	Axial OD Anomaly -- an axial indication observed during the MRPC examinations of plugs which is outer diameter initiated and, based on the formation of the signal, does not appear to be degradation of the plug.
ARC	ARC Length -- signifies a circumferential length measurement has been recorded. Denotes that the measurement in the volt field is the circumferential length measurement of an indication in inches and the measurement in the DEG field is the circumferential extent measurement of an indication in degrees. Requires activation of two measurement features in the CScan user selects window.
BLG	Bulge -- an indication that the diameter of the tubing has been altered in a bulge-like fashion (increase in tubing diameter).
BNF	Bobbin Not Found -- used to disposition a bobbin examination for an indication noted with a rotating exam which is not present (NDD) in the bobbin data.
BNR	Bobbin Not Reportable -- used to disposition a bobbin examination for an indication noted with a rotating exam when the indication is present but not reportable in the bobbin data.
BVC	Below Voltage Criteria -- an indication evaluated with the bobbin probe to be ID originated and less than 0.4 volt (based on 4 volt normalization) and less than 3:1 signal-to-noise ratio and is therefore not applicable for the assignment of a %TW depth measurement.
CLP	Clip Plot Measure -- denotes that the measurement in the UTIL1 field is the circumferential length measurement of an indication in inches and the measurement in the UTIL2 field is the axial length measurement of an indication in inches.
COD	Circumferential OD Anomaly -- a circumferential indication observed during the MRPC examinations of plugs which is outer diameter initiated and, based on the formation of the signal, does not appear to be degradation of the plug.
DDI	Distorted Dent Indication-A dent indication that displays abnormal formation with possible tube wall degradation present.
DRS	Distorted Roll Signal -- a sleeve roll which displays distortion not associated with degradation. An example of this may be a roll with one transition displaying a sharp entrance or exit similar to probe "snap", but which cannot be removed through successive examination using push or pull techniques.
FC	Final Calibration -- a code used in a calibration report line entry to signify that the associated data in that entry relates to the final or ending calibration for that particular calibration group of examination data.
FCL	Final Calibration Late -- a code used in a calibration report line entry to signify that the associated data in that entry relates to the final or ending calibration and that the calibration was recorded late (in excess of four hours from the initial calibration time).
GMD	Geometric Discontinuity -- an indication which represents a change in material geometry with no associated degradation.
HR	Historical Review -- a code used in the UTIL1 field to document compliance with a requirement to review historical examination data for a particular indication.
IC	Initial Calibration -- a code used in a calibration report line entry to signify that the associated data in that entry relates to the initial or beginning calibration.
IDC	ID Chatter -- caused by manufacturing process (pilgering). Characterized by long areas of horizontal signal motion.
ID OK	Tube Identification OK -- a code used in the UTIL1 field to document compliance with a requirement to review current examination data for duplicate tube encodes. In this case, a duplicate tube encode exists in the same examination technique signifying the tube was examined more than once and it is desired to verify and document the accuracy of the examinations.

ANALYSIS CHARACTERIZATION AND REPORTING CODES (Cont'd)

<i>Code</i>	<i>Definition</i>
INF	Indication Not Found -- this designator is used only if a previously identified indication is not recurring. In this case, a tubing number check shall be performed and tubesheet signature shall be reviewed to verify that the correct tube is being examined.
INR	Indication Not Reportable -- an indication that has been previously reported but does not meet current reporting criteria.
IRR	Irregular Roll -- a sleeve roll which displays irregularity not associated with degradation. An example of this may be a roll with a tapered expansion, a much smaller or larger expansion than normal, a very short expansion, or a case where the two lower expansions overlap resulting in what appears to be one long roll.
LEN	Length Measure -- denotes that the measurement in the Volts field is the axial length measurement of an indication in inches.
LPI	Loose Part Indication -- used to identify tube wall degradation that is believed to be a result of contact with a loose part. The loose part may or may not be present. Adjacent tubes shall be checked to determine if other tubes have been affected by the loose part.
MAI	Multiple Axial Indication -- an MRPC call determined from indication morphology
MBM	Machine Burnish Mark (or Manufacturing Buff Mark) -- an indication believed to be produced from a condition resulting from final hand polishing or grinding operations during manufacture to remove imperfections on the tube's outer surface. An indication must have repeatable history to be considered an MBM (MRPC examinations only).
MCI	Multiple Circumferential Indication -- an MRPC call determined from indication morphology
MMI	Mixed Mode Indication -- an MRPC call determined from indication morphology. This code shall only be used if the indication morphology reflects a situation which would lead the analyst to believe that an axial and circumferential indication have linked in some fashion (for example a T or L shaped crack-like indication).
MVI	Multiple Volumetric Indication -- an MRPC call determined from indication morphology
NDD	No Detectable Degradation -- designator used for an examination that indicates that the region inspected is free of detectable degradation. The actual entry of the code is not required.
NDF	No Degradation Found -- designator used for a rotating examination to disposition an area of interest that another technique has flagged as needing to be inspected, but when inspected with the rotating technique no degradation was identified. The actual entry of the code is required along with the location identified by the implementing examination and the actual extent from the rotating technique.
NEX	No Expansion -- no roll or expansion where one should be.
NFC	No Final Calibration -- designator used to identify that the calibration run at the end of a calibration group was not performed.
NQI	Non-Quantifiable Indication -- an ET signal identified by the bobbin analyst as possibly containing an indication; however, due to noise, lack of multi-frequency channel correlation, or other signal peculiarities, the analyst cannot sufficiently interpret the signal to draw any conclusion. This is an interim disposition.
NSY	Noisy Tube -- An area of the tube that is too noisy to properly evaluate examination data (MRPC examinations only).
OBS	Obstructed Tube -- used only if the acquisition operator has identified the tube as being unable to pass the probe due to a restriction or blockage.
PBA	Prior Bobbin Analysis -- code assigned to a specific data record to provide a means of clearing the record through data management without re-reporting indications already reported during a previous bobbin coil scan of the same area.
PEA	Plug End Anomaly -- indications located completely outside the plug pressure boundary. For rolled plugs, this area includes only the heel transition and outboard end of the plug.

ANALYSIS CHARACTERIZATION AND REPORTING CODES (Cont'd)

<i>Code</i>	<i>Definition</i>
PID	Positive Identification -- this designates that at least one confirming ET inspection has been performed on the area of interest with the results indicating that the initial and confirming analysis results are in concurrence. Analysts will use the exact location from the indication of interest when reporting the PID.
PLG	Plugged -- permanent plug installed in a tube.
PLP	Possible Loose Part -- shall be reported when ET provides evidence of a possible loose part adjacent to or in the vicinity of a tube. Adjacent tubes shall be checked to determine if there is a PLP signal or any indication of wall loss from the loose part.
PRA	Prior Rotating Analysis -- code assigned to a specific data record to provide a means of clearing the record through data management without re-reporting indications already reported during a previous rotating probe scan of the same area.
PVN	Permeability -- shall be reported only if suspected of masking an indication or as otherwise required by a specific ETSS requirement
RAS	Retest Axial Speed -- used to signify that the axial speed for the examination exceeded the ETSS requirements
RBD	Retest Bad Data -- Self explanatory
RCL	Retest Clarification -- used to signify the result is inconclusive and an additional exam is required.
RDR	Retest Digitization Rate -- used to signify that the digitization rate for the examination in the area of interest did not comply with the minimum requirements of the applicable ETSS.
REC	Retest Encoding Channel -- used to signify that the encoding channel displayed bad data and the encoder was required to be present by the applicable ETSS.
RIC	Retest Incomplete -- Data-self explanatory
RMB	Retest with a magnetically -- biased probe
RNC	Retest -- tube number check
ROB	Retest -- obstructed
RPC	Retest -- MRPC exam required
RPD	Retest Positive -- Identification-self explanatory
RPN	Retest Parasitic -- Noise-self explanatory
RPP	Retest Pancake -- Pluspoint Exam Desired-A retest code entered by the lead analyst to signify additional required diagnostic testing.
RPS	Retest Presence of Signals -- used to signify that a retest is required because signals were missing from required channels
RPW	Retest Probe Wear -- used to signify that a retest is required because final calibrations for the calibration group indicated the probe wear requirements were exceeded.
RRN	Retest Rotational Noise -- self explanatory
RRS	Retest Rotation Speed -- used to signify a retest is required because the MRPC examination rotational speed did not comply with applicable ETSS requirements
RSC	Retest Saturated Channel -- used to signify a retest is required because required analysis channels displayed saturated data in the area of interest.
RSD	Retest Signal Dropout -- used to signify a retest is required because required analysis channels displayed data dropout in the area of interest.
RSN	Retest Signal-to-Noise -- used to signify a retest is required because there was insufficient signal to noise in the required analysis channels in the area of interest.
SAI	Single Axial Indication -- an MRPC call determined from indication morphology
SCI	Single Circumferential Indication -- an MRPC call determined from indication morphology
SLG	Sludge -- designator used to annotate sludge elevation

ANALYSIS CHARACTERIZATION AND REPORTING CODES (Cont'd)

<i>Code</i>	<i>Definition</i>
SLV	Sleeve Indication -- all indications observed in the sleeve material shall be identified with this code in UTIL1 field.
SSA	Secondary Side Anomaly -- an indication believed to be produced from foreign material on the secondary side, which is not a loose part (MRPC examinations only).
SVI	Single Volumetric Indication -- an MRPC call determined from indication morphology
TSD	Tube Support Plate Damaged -- tube support plate appears to be significantly eroded/damaged.
TSM	Tube Support Plate Missing -- no tube support plate signal is present at the expected location.
TUB	Parent Tubing Indication -- any indication in the parent tube material in the sleeved region shall be identified with this code in UTIL1 field.
VOL	Volumetric Indication -- an MRPC indication that is not crack-like yet has some discernible volume to it and displays signals of inside diameter initiation. For example, an ID IGA indication in the tube freespan.
WAR	Wear Call -- used in UTIL1 Field for rotating examinations. Indications will be labeled WAR only after the criteria for disposition of indications at TSPs is met.

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

This appendix contains all recordable indications for tubes in service prior to the 1R14 Outage. Tubes plugged based on eddy current examination results are highlighted by bold print. Indications of volumetric ID IGA are recorded with a code of "VOL". Axial and circumferential length for both ID and OD volumetric indications are recorded with a code of "CLP". Circumferential length for circumferential indications are recorded with a code of "ARC" and axial length for axial indications are recorded with a code of "LEN". "TWD" highlights a percent through wall dimension record. (Note: Three-letter code "MBM" was truncated to "MB" in printing this table.)

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset			Axial	Circ	Dataset
1	6	55	520HF	0.75 30	ID 71	SCI	ETL	-0.06			KEXP_+Pt
1	6	55	520HF	0.00 63	0	ARC	ETL	-0.06		0.34	KEXP_+Pt
1	6	95	520HF	1.18 30	0	PID	ETL	-0.06			KEXP_+Pt
1	6	140	520PI	0.00 102	0	ARC	ETL	0.00		0.55	PostIn_+Pt
1	6	140	520PI	1.56 31	ID 76	SCI	ETL	0.00			PostIn_+Pt
1	6	29	510UL	4.25 178	0	DNT	LTE	10.99			510_Bobbi
2	5	30	510UL	2.46 172	0	INR	LTE	11.11			510_Bobbi
2	11	8	460PP	0.00 0	0	OBS	UTE	0.00			Plug_MRP
2	14	113	540HF	0.28 9	0	BVC	15S	40.91			540_Bobbi
2	14	113	540HF	4.26 177	0	DNT	LTE	10.22			540_Bobbi
2	14	160	520HF	0.00 0	0	NDF	UTS	-5.46			R13DCLP+
2	14	160	520HF	0.00 0	0	NDF	UTS	-5.29			R13DCLP+
2	15	113	540HF	0.31 2	0	INR	15S	37.00			540_Bobbi
2	21	29	510UL	6.12 174	0	DNT	LTE	11.08			510_Bobbi
2	22	168	510UL	0.58 5	ID 17	TWD	14S	22.24			540_Bobbi
2	22	168	510UL	0.39 5	0	BVC	14S	29.57			540_Bobbi
2	22	117	540HF	0.30 11	0	BVC	14S	33.27			540_Bobbi
2	22	168	510UL	0.33 6	0	BVC	14S	33.33			540_Bobbi
2	22	160	520HF	0.00 0	0	CLP	15S	-13.84	0.24	0.22	R13DCLP+
2	22	160	520HF	0.23 4	0	VOL	15S	-13.84			R13DCLP+
2	22	160	520HF	0.00 0	0	NDF	15S	-12.86			R13DCLP+
2	22	160	520HF	0.30 18	0	VOL	15S	-5.96			R13DCLP+
2	22	160	520HF	0.00 0	0	CLP	15S	-5.96	0.24	0.22	R13DCLP+
2	22	160	520HF	0.00 0	0	CLP	15S	-1.85	0.14	0.16	Spec_Int
2	22	160	520HF	0.31 17	0	VOL	15S	-1.85			Spec_Int
2	22	168	510UL	8.40 176	0	DNT	LTE	10.86			540_Bobbi
2	22	117	540HF	0.00 0	0	ROB	LTS	-6.94			Sludge
2	22	117	540HF	0.00 0	0	ROB	LTS	-6.94			540_Bobbi
2	25	138	520PI	0.00 0	0	CLP	12S	20.05	0.23	0.14	PostIn_+Pt
2	25	138	520PI	0.30 19	0	VOL	12S	20.05			PostIn_+Pt
2	25	138	520PI	0.00 0	0	CLP	12S	20.99	0.18	0.18	PostIn_+Pt
2	25	138	520PI	0.64 36	0	VOL	12S	20.99			PostIn_+Pt
2	25	113	540HF	0.44 359	0	INR	12S	21.10			540_Bobbi
2	25	113	540HF	0.24 4	0	INR	12S	22.99			540_Bobbi
2	25	113	540HF	0.33 9	0	INR	12S	25.82			540_Bobbi
2	25	138	520PI	0.30 32	0	VOL	12S	28.72			PostIn_+Pt

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/		Percent	Code	Location		Axial	Circ	Dataset	
			Degrees				TSP - Offset					
2	25	138	520PI	0.00	0	0	CLP	12S	28.72	0.25	0.17	PostIn_+Pt
2	25	138	520PI	0.00	0	0	CLP	12S	29.99	0.24	0.16	PostIn_+Pt
2	25	138	520PI	0.36	9	0	VOL	12S	29.99			PostIn_+Pt
2	25	138	520PI	0.27	29	0	VOL	12S	32.30			PostIn_+Pt
2	25	138	520PI	0.00	0	0	CLP	12S	32.30	0.25	0.18	PostIn_+Pt
2	25	138	520PI	0.48	19	0	VOL	12S	35.72			PostIn_+Pt
2	25	138	520PI	0.00	0	0	CLP	12S	35.72	0.22	0.18	PostIn_+Pt
2	25	160	520HF	0.18	23	0	VOL	13S	-18.12			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-18.12	0.14	0.12	R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-16.64	0.19	0.16	R13DCLP+
2	25	160	520HF	0.30	23	0	VOL	13S	-16.64			R13DCLP+
2	25	160	520HF	0.11	22	0	VOL	13S	-15.26			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-15.26	0.13	0.11	R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-8.75	0.24	0.16	R13DCLP+
2	25	160	520HF	0.20	20	0	VOL	13S	-8.75			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-7.37	0.19	0.22	R13DCLP+
2	25	160	520HF	0.30	9	0	VOL	13S	-7.37			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-4.87	0.39	0.22	R13DCLP+
2	25	160	520HF	0.19	16	0	VOL	13S	-4.87			R13DCLP+
2	25	160	520HF	0.52	25	0	VOL	13S	-1.26			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	-1.26	0.29	0.22	R13DCLP+
2	25	138	520PI	0.00	0	0	CLP	13S	4.73	0.14	0.12	PostIn_+Pt
2	25	138	520PI	0.45	8	0	VOL	13S	4.73			PostIn_+Pt
2	25	160	520HF	0.34	21	0	VOL	13S	5.14			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	5.14	0.15	0.16	R13DCLP+
2	25	138	520PI	0.83	32	0	VOL	13S	9.15			PostIn_+Pt
2	25	138	520PI	0.00	0	0	CLP	13S	9.15	0.18	0.17	PostIn_+Pt
2	25	113	540HF	0.47	6	ID	20	TWD	13S	9.18		540_Bobbi
2	25	138	520PI	0.00	0	0	CLP	13S	9.82	0.18	0.18	PostIn_+Pt
2	25	138	520PI	0.34	22	0	VOL	13S	9.82			PostIn_+Pt
2	25	160	520HF	0.39	15	0	VOL	13S	10.01			R13DCLP+
2	25	134	520HF	0.77	11	0	PID	13S	10.01			R13DCLP+
2	25	160	520HF	0.00	0	0	RPD	13S	10.01			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	10.01	0.29	0.22	R13DCLP+
2	25	113	540HF	0.47	7	ID	23	TWD	13S	10.18		540_Bobbi
2	25	138	520PI	0.84	32	0	VOL	13S	10.18			PostIn_+Pt
2	25	138	520PI	0.00	0	0	CLP	13S	10.18	0.22	0.18	PostIn_+Pt
2	25	160	520HF	0.38	15	0	VOL	13S	10.82			R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	10.82	0.34	0.22	R13DCLP+
2	25	160	520HF	0.00	0	0	CLP	13S	11.17	0.24	0.22	R13DCLP+
2	25	160	520HF	0.40	17	0	VOL	13S	11.17			R13DCLP+
2	25	113	540HF	0.25	14	0	INR	13S	12.95			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

	Tube#	Cal	Probe	Volt /		Origin/ Percent	Code	Location		Axial	Circ	Dataset	
				Degrees				TSP -	Offset				
2	25	138	520PI	0.38	24		0	VOL	13S	13.15			PostIn_+Pt
2	25	138	520PI	0.00	0		0	CLP	13S	13.15	0.18	0.18	PostIn_+Pt
2	25	138	520PI	0.38	24		0	VOL	13S	13.41			PostIn_+Pt
2	25	138	520PI	0.00	0		0	CLP	13S	13.41	0.22	0.18	PostIn_+Pt
2	25	160	520HF	0.00	0		0	CLP	13S	14.08	0.24	0.16	R13DCLP+
2	25	160	520HF	0.15	18		0	VOL	13S	14.08			R13DCLP+
2	25	160	520HF	0.00	0		0	CLP	13S	14.40	0.24	0.16	R13DCLP+
2	25	160	520HF	0.31	20		0	VOL	13S	14.40			R13DCLP+
2	27	73	510UL	5.32	176		0	DNT	LTE	10.91			510_Bobbi
3	5	67	510UL	6.39	175		0	DNT	LTE	10.65			510_Bobbi
3	7	67	510UL	4.45	174		0	DNT	LTE	11.10			510_Bobbi
3	13	29	510UL	0.29	54	OD	5	TWD	05S	-0.74			510_Bobbi
3	14	30	510UL	1.91	170		0	INR	LTE	9.00			510_Bobbi
3	15	29	510UL	3.28	175		0	DNT	LTE	10.97			510_Bobbi
3	16	29	510UL	2.74	172		0	DNT	LTE	10.90			510_Bobbi
3	17	113	540HF	0.39	8		0	BVC	15S	32.64			540_Bobbi
3	17	160	520HF	0.31	12		0	VOL	UTS	-14.69			Spec_Int
3	17	160	520HF	0.00	0		0	CLP	UTS	-14.69	0.19	0.16	Spec_Int
3	17	113	540HF	0.38	6		0	BVC	UTS	0.37			540_Bobbi
3	17	160	520HF	0.00	0		0	CLP	UTS	0.42	0.14	0.17	R13DCLP+
3	17	160	520HF	0.26	13		0	VOL	UTS	0.42			R13DCLP+
3	17	160	520HF	0.00	0		0	CLP	UTS	0.49	0.14	0.12	R13DCLP+
3	17	160	520HF	0.28	18		0	VOL	UTS	0.49			R13DCLP+
3	27	29	510UL	2.72	171		0	DNT	LTE	10.42			510_Bobbi
3	32	8	460PP	0.18	88		0	AOD	UTE	-1.84			Plug_MRP
4	8	67	510UL	0.19	127		0	INR	LTE	17.90			510_Bobbi
4	14	30	510UL	0.17	68		0	NQI	08S	0.69			510_Bobbi
4	14	160	520HF	0.38	98	OD	6	TWD	08S	0.83			Spec_Int
4	14	55	520HF	0.00	0		0	CLP	ETL	-2.08	0.11	0.15	KEXP_+Pt
4	14	55	520HF	0.22	25		0	VOL	ETL	-2.08			KEXP_+Pt
4	19	29	510UL	0.08	80		1	TWD	13S	0.32			510_Bobbi
4	20	55	520HF	0.45	23		0	VOL	ETL	-0.45			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location			Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset					
4	20	55	520HF	0.00	0	0	CLP	ETL	-0.45		0.10	0.15	KEXP_+Pt
4	20	55	520HF	0.64	25	ID	51	VOL	ETL	0.86			KEXP_+Pt
4	20	55	520HF	0.00	0	0	CLP	ETL	0.86		0.15	0.20	KEXP_+Pt
4	29	113	540HF	0.72	9	ID	30	TWD	15S	27.32			540_Bobbi
4	29	113	540HF	0.26	11	0	BVC	15S	35.97				540_Bobbi
4	29	133	520HF	0.76	15	0	VOL	UTS	-19.56				R13DCLP+
4	29	133	520HF	0.00	0	0	CLP	UTS	-19.56		0.25	0.21	R13DCLP+
4	29	160	520HF	0.00	0	0	RIC	UTS	-19.06				R13DCLP+
4	29	160	520HF	1.80	16	0	VOL	UTS	-11.13				Spec_Int
4	29	160	520HF	0.00	0	0	CLP	UTS	-11.13		0.14	0.17	Spec_Int
4	29	160	520HF	0.00	0	0	NDF	UTS	-10.41				Spec_Int
4	32	56	520HF	0.78	23	ID	43	VOL	ETL	0.02			KEXP_+Pt
4	32	56	520HF	0.00	0	0	CLP	ETL	0.02		0.16	0.18	KEXP_+Pt
4	32	56	520HF	0.45	19	ID	30	VOL	ETL	1.02			KEXP_+Pt
4	32	56	520HF	0.00	0	0	CLP	ETL	1.02		0.21	0.23	KEXP_+Pt
4	34	133	520HF	0.25	13	0	VOL	15S	2.11				R13DCLP+
4	34	133	520HF	0.00	0	0	CLP	15S	2.11		0.10	0.11	R13DCLP+
4	34	133	520HF	0.00	0	0	CLP	15S	8.05		0.15	0.16	R13DCLP+
4	34	133	520HF	0.23	15	0	VOL	15S	8.05				R13DCLP+
4	34	110	540HF	0.35	6	0	BVC	15S	10.32				540_Bobbi
4	34	133	520HF	0.00	0	0	CLP	15S	10.45		0.10	0.16	R13DCLP+
4	34	133	520HF	0.19	15	0	VOL	15S	10.45				R13DCLP+
4	34	133	520HF	0.00	0	0	NDF	15S	11.41				R13DCLP+
4	34	110	540HF	0.41	5	ID	17	TWD	15S	23.52			540_Bobbi
4	34	110	540HF	2.71	177	0	DNT	LTE	10.50				540_Bobbi
4	34	113	520HF	0.00	0	0	RIC	UTS	-36.06				R13DCLP+
4	34	113	520HF	0.33	13	0	VOL	UTS	-22.78				Spec_Int
4	34	113	520HF	0.00	0	0	CLP	UTS	-22.78		0.14	0.17	Spec_Int
4	38	110	540HF	0.30	10	0	BVC	12S	11.31				540_Bobbi
4	38	123	520HF	0.00	0	0	CLP	12S	11.41		0.15	0.11	R13DCLP+
4	38	123	520HF	0.37	26	0	VOL	12S	11.41				R13DCLP+
5	3	147	540HF	0.67	6	ID	20	TWD	15S	44.00			540_Bobbi
5	3	147	540HF	1.14	9	ID	30	TWD	15S	44.55			540_Bobbi
5	3	133	520HF	0.29	15	0	VOL	UTS	-45.01				R13DCLP+
5	3	133	520HF	0.00	0	0	CLP	UTS	-45.01		0.14	0.16	R13DCLP+
5	3	133	520HF	0.00	0	0	CLP	UTS	-41.57		0.15	0.15	R13DCLP+
5	3	133	520HF	0.33	21	0	VOL	UTS	-41.57				R13DCLP+
5	3	133	520HF	0.00	0	0	CLP	UTS	-40.74		0.10	0.10	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
5	3	133	520HF	0.26 11	0	VOL	UTS -40.74			R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -33.04	0.20	0.10	R13DCLP+
5	3	133	520HF	0.25 12	0	VOL	UTS -33.04			R13DCLP+
5	3	133	520HF	0.21 18	0	VOL	UTS -30.41			R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -30.41	0.20	0.15	R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -27.25	0.20	0.15	R13DCLP+
5	3	133	520HF	0.92 20	0	VOL	UTS -27.25			R13DCLP+
5	3	133	520HF	0.37 26	0	VOL	UTS -27.02			R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -27.02	0.20	0.20	R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -2.29	0.15	0.15	R13DCLP+
5	3	133	520HF	0.61 15	0	VOL	UTS -2.29			R13DCLP+
5	3	133	520HF	0.00 0	0	CLP	UTS -1.74	0.15	0.15	R13DCLP+
5	3	133	520HF	0.76 17	0	VOL	UTS -1.74			R13DCLP+
5	5	113	540HF	0.24 93	0	NQI	12S 27.03			540_Bobbi
5	5	115	520HF	0.00 0	0	NDF	13S -9.97			Spec_Int
5	5	113	540HF	0.48 6	ID 20	TWD	15S 34.23			540_Bobbi
5	5	113	540HF	2.73 176	0	DNT	LTE 10.72			540_Bobbi
5	5	115	520HF	0.00 0	0	CLP	UTS -12.12	0.09	0.11	Spec_Int
5	5	115	520HF	0.43 19	0	VOL	UTS -12.12			Spec_Int
5	6	67	510UL	3.11 175	0	DNT	LTE 10.78			510_Bobbi
5	22	8	460PP	0.00 0	0	OBS	UTE 0.00			Plug_MRP
5	35	12	460PP	0.00 0	0	OBS	UTE 0.00			Plug_MRP
5	42	76	510UL	0.43 89	0	INR	LTE 11.86			510_Bobbi
6	5	68	510UL	2.74 175	0	DNT	LTE 10.72			510_Bobbi
6	12	51	520HF	0.56 19	0	VOL	ETL -1.03			KEXP_+Pt
6	12	51	520HF	0.00 0	0	CLP	ETL -1.03	0.17	0.19	KEXP_+Pt
6	15	115	520HF	0.99 0	ID 14	TWD	08S 0.55			Spec_Int
6	15	67	510UL	0.72 75	0	NQI	08S 0.68			510_Bobbi
6	20	29	510UL	0.28 118	0	INR	10S 7.42			510_Bobbi
6	30	29	510UL	0.25 69	0	NQI	LTE 9.50			510_Bobbi
6	30	29	510UL	0.21 82	0	NQI	LTE 14.04			510_Bobbi
6	30	160	520HF	0.00 0	0	NDF	LTS -14.50			Spec_Int
6	30	160	520HF	0.00 0	0	NDF	LTS -9.96			Spec_Int
6	32	29	510UL	2.76 186	0	DNT	03S 16.73			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
6	33	30	510UL	0.28	75		0	NQI 05S	0.69			510_Bobbi
6	33	160	520HF	0.53	74	OD	8	TWD 05S	0.75			Spec_Int
6	47	133	520HF	0.00	0		0	CLP 15S	21.28	0.15	0.22	R13DCLP+
6	47	133	520HF	0.18	33		0	VOL 15S	21.28			R13DCLP+
6	47	133	520HF	0.17	28		0	VOL 15S	24.88			R13DCLP+
6	47	133	520HF	0.00	0		0	CLP 15S	24.88	0.15	0.16	R13DCLP+
6	47	110	540HF	0.31	7		0	BVC 15S	40.11			540_Bobbi
6	47	133	520HF	0.26	9		0	VOL UTS	-20.57			R13DCLP+
6	47	133	520HF	0.00	0		0	CLP UTS	-20.57	0.14	0.16	R13DCLP+
6	47	113	520HF	0.38	3		0	VOL UTS	-12.41			R13DCLP+
6	47	113	520HF	0.00	0		0	CLP UTS	-12.41	0.19	0.17	R13DCLP+
6	47	133	520HF	0.93	26		0	VOL UTS	-8.43			R13DCLP+
6	47	133	520HF	0.00	0		0	CLP UTS	-8.43	0.15	0.16	R13DCLP+
6	47	113	520HF	0.00	0		0	CLP UTS	-7.00	0.09	0.17	Spec_Int
6	47	113	520HF	0.57	18		0	VOL UTS	-7.00			Spec_Int
6	48	110	540HF	0.30	67		0	NQI 14S	-0.86			540_Bobbi
6	48	113	520HF	0.48	118	OD	9	TWD 14S	-0.81			Spec_Int
6	48	79	520HF	0.14	31		0	INR ETL	-4.03			KEXP_+Pt
6	48	79	520HF	0.00	0		0	CLP ETL	-3.24	0.06	0.10	KEXP_+Pt
6	48	79	520HF	0.31	21		0	VOL ETL	-3.24			KEXP_+Pt
6	48	79	520HF	0.16	7		0	VOL ETL	-2.70			KEXP_+Pt
6	48	79	520HF	0.00	0		0	CLP ETL	-2.70	0.17	0.10	KEXP_+Pt
6	48	79	520HF	0.00	0		0	CLP ETL	-1.73	0.15	0.14	KEXP_+Pt
6	48	79	520HF	0.34	19		0	VOL ETL	-1.73			KEXP_+Pt
6	48	110	540HF	0.67	8	ID	27	TWD UTS	0.35			540_Bobbi
6	48	113	520HF	0.00	0		0	CLP UTS	0.53	0.14	0.17	Spec_Int
6	48	113	520HF	1.09	27		0	VOL UTS	0.53			Spec_Int
6	48	113	520HF	0.29	15		0	PRA UTS	4.45			Spec_Int
6	48	113	520HF	0.18	23		0	PRA UTS	5.81			Spec_Int
7	1	68	510UL	0.98	114		0	INR LTE	9.62			510_Bobbi
7	2	115	520HF	0.34	20		0	VOL 04S	6.08			Spec_Int
7	2	115	520HF	0.00	0		0	CLP 04S	6.08	0.09	0.11	Spec_Int
7	2	113	540HF	0.26	8		0	BVC 04S	6.83			540_Bobbi
7	2	115	520HF	0.00	0		0	CLP 04S	6.97	0.09	0.11	Spec_Int
7	2	115	520HF	0.28	19		0	VOL 04S	6.97			Spec_Int
7	2	115	520HF	0.00	0		0	CLP 09S	9.81	0.14	0.11	Spec_Int
7	2	115	520HF	0.50	14		0	VOL 09S	9.81			Spec_Int
7	2	113	540HF	0.30	9		0	BVC 09S	10.13			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP -	Offset			
7	2 113	540HF	0.18	95		0 INR	LTE	19.86			540_Bobbi
7	4 164	520HF	0.20	16		0 VOL	UTS	-14.91			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-14.91	0.14	0.11	R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-14.21	0.14	0.16	R13DCLP+
7	4 164	520HF	0.14	14		0 VOL	UTS	-14.21			R13DCLP+
7	4 164	520HF	0.38	23		0 VOL	UTS	-13.62			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-13.62	0.14	0.11	R13DCLP+
7	4 164	520HF	0.18	47		0 INR	UTS	-12.81			R13DCLP+
7	4 164	520HF	0.12	17		0 VOL	UTS	-8.08			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-8.08	0.09	0.11	R13DCLP+
7	4 164	520HF	0.22	18		0 VOL	UTS	-1.89			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-1.89	0.18	0.16	R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	-0.64	0.14	0.16	R13DCLP+
7	4 164	520HF	0.34	14		0 VOL	UTS	-0.64			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	0.27	0.09	0.11	R13DCLP+
7	4 164	520HF	0.14	25		0 VOL	UTS	0.27			R13DCLP+
7	4 164	520HF	0.34	18		0 VOL	UTS	0.87			R13DCLP+
7	4 164	520HF	0.00	0		0 CLP	UTS	0.87	0.09	0.16	R13DCLP+
7	36 30	510UL	1.92	183		0 INR	14S	17.71			510_Bobbi
7	44 70	520HF	0.37	29		0 VOL	ETL	-0.09			KEXP_+Pt
7	44 70	520HF	0.00	0		0 CLP	ETL	-0.09	0.10	0.16	KEXP_+Pt
7	44 123	520HF	0.22	13		0 VOL	UTS	-3.11			R13DCLP+
7	44 123	520HF	0.00	0		0 CLP	UTS	-3.11	0.10	0.11	R13DCLP+
7	44 123	520HF	0.43	23		0 VOL	UTS	1.28			R13DCLP+
7	44 123	520HF	0.00	0		0 CLP	UTS	1.28	0.10	0.11	R13DCLP+
7	44 123	520HF	0.38	23		0 VOL	UTS	2.07			R13DCLP+
7	44 123	520HF	0.00	0		0 CLP	UTS	2.07	0.10	0.16	R13DCLP+
7	44 123	520HF	0.41	18		0 VOL	UTS	3.08			R13DCLP+
7	44 123	520HF	0.00	0		0 CLP	UTS	3.08	0.15	0.11	R13DCLP+
7	51 73	510UL	2.86	176		0 DNT	LTE	10.30			510_Bobbi
8	2 113	540HF	0.53	3		0 INR	12S	16.11			540_Bobbi
8	2 113	540HF	0.44	3		0 INR	12S	18.96			540_Bobbi
8	2 113	540HF	0.66	7	ID	23 TWD	12S	29.01			540_Bobbi
8	2 113	540HF	0.76	7	ID	23 TWD	12S	33.38			540_Bobbi
8	2 164	520HF	0.00	0		0 RIC	13S	-18.07			R13DCLP+
8	2 133	520HF	0.51	17		0 VOL	13S	-17.07			R13DCLP+
8	2 133	520HF	0.00	0		0 CLP	13S	-17.07	0.14	0.16	R13DCLP+
8	2 164	520HF	0.64	20		0 VOL	13S	-12.43			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

	Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
8	2	164	520HF	0.00	0	0 CLP	13S -12.43	0.18	0.22	R13DCLP+
8	2	164	520HF	0.00	0	0 CLP	13S -7.99	0.09	0.11	R13DCLP+
8	2	164	520HF	0.11	11	0 VOL	13S -7.99			R13DCLP+
8	2	164	520HF	0.36	9	0 VOL	13S -3.62			Spec_Int
8	2	164	520HF	0.00	0	0 CLP	13S -3.62	0.13	0.17	Spec_Int
8	15	50	520HF	0.77	15	0 VOL	ETL -0.78			KEXP_+Pt
8	15	50	520HF	0.00	0	0 CLP	ETL -0.78	0.17	0.15	KEXP_+Pt
8	20	29	510UL	2.65	176	0 DNT	LTE 10.41			510_Bobbi
8	24	29	510UL	2.09	185	0 INR	01S 28.86			510_Bobbi
8	25	30	510UL	0.35	102	OD 11	TWD 08S 0.65			510_Bobbi
8	44	12	460PP	0.00	0	0 OBS	UTE 0.00			Plug_MRP
8	54	73	510UL	3.78	173	0 DNT	LTE 10.98			510_Bobbi
9	3	113	540HF	0.31	14	0 INR	14S 2.27			540_Bobbi
9	6	113	540HF	0.37	348	0 INR	15S 21.55			540_Bobbi
9	25	30	510UL	2.49	177	0 INR	LTE 10.29			510_Bobbi
9	26	29	510UL	0.55	103	0 INR	03S 11.74			510_Bobbi
9	26	29	510UL	3.58	178	0 DNT	LTE 10.39			510_Bobbi
9	57	69	520HF	0.00	0	0 CLP	ETL -1.65	0.11	0.14	KEXP_+Pt
9	57	69	520HF	0.30	18	0 VOL	ETL -1.65			KEXP_+Pt
9	57	69	520HF	0.00	0	0 CLP	ETL 1.93	0.22	0.33	KEXP_+Pt
9	57	69	520HF	0.54	27	ID 58	VOL ETL 1.93			KEXP_+Pt
9	57	69	520HF	0.34	19	ID 30	VOL ETL 2.50			KEXP_+Pt
9	57	69	520HF	0.00	0	0 CLP	ETL 2.50	0.11	0.19	KEXP_+Pt
10	22	64	510UL	3.18	176	0 DNT	LTE 10.18			510_Bobbi
10	28	29	510UL	3.41	177	0 DNT	LTE 10.09			510_Bobbi
10	63	73	510UL	4.39	176	0 DNT	LTE 10.02			510_Bobbi
11	1	64	510UL	0.16	50	0 NQI	08S 0.64			510_Bobbi
11	1	115	520HF	0.50	0	ID 7	TWD 08S 0.70			Spec_Int
11	5	50	520HF	0.64	19	ID 30	VOL ETL 2.77			KEXP_+Pt
11	5	50	520HF	0.00	0	0 CLP	ETL 2.77	0.11	0.15	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
11	7	50	520HF	0.41 17	ID 25	VOL ETL 1.75			KEXP_+Pt
11	7	50	520HF	0.00 0	0 CLP	ETL 1.75	0.20	0.17	KEXP_+Pt
11	7	50	520HF	0.00 0	0 CLP	ETL 2.50	0.11	0.15	KEXP_+Pt
11	7	50	520HF	0.36 16	ID 29	VOL ETL 2.50			KEXP_+Pt
11	21	115	520HF	0.42 0	ID 5	TWD 08S 0.61			Spec_Int
11	21	63	510UL	0.30 59	0 NQI	08S 0.66			510_Bobbi
11	24	64	510UL	0.42 91	OD 12	TWD 08S -0.84			510_Bobbi
11	24	64	510UL	3.11 171	0 DNT	LTE 9.91			510_Bobbi
11	25	50	520HF	0.22 17	ID 25	VOL ETL 2.72			KEXP_+Pt
11	25	50	520HF	0.00 0	0 CLP	ETL 2.72	0.11	0.15	KEXP_+Pt
11	25	63	510UL	4.47 178	0 DNT	LTE 10.10			510_Bobbi
11	28	30	510UL	3.40 171	0 DNT	LTE 10.27			510_Bobbi
11	29	29	510UL	0.60 56	0 INR	12S 8.78			510_Bobbi
11	29	29	510UL	3.75 174	0 DNT	LTE 10.42			510_Bobbi
11	45	29	510UL	0.39 96	0 NQI	LTE 13.83			510_Bobbi
11	45	160	520HF	0.00 0	0 NDF	LTS -10.17			Spec_Int
11	60	76	510UL	6.60 175	0 DNT	LTE 8.68			510_Bobbi
11	61	73	510UL	6.10 178	0 DNT	LTE 8.18			510_Bobbi
12	51	73	510UL	1.32 5	ID 17	TWD 12S 11.67			510_Bobbi
12	51	110	540HF	1.27 4	0 INR	12S 11.67			540_BobEx
12	51	113	520HF	0.00 0	0 RIC	12S 26.69			Spec_Int
12	51	110	540HF	0.41 8	ID 27	TWD 12S 26.69			540_BobEx
12	51	113	520HF	0.00 0	0 NDF	13S -10.31			Spec_Int
12	52	76	510UL	0.17 87	0 NQI	03S 21.26			510_Bobbi
12	52	113	520HF	0.00 0	0 NDF	04S -18.74			Spec_Int
12	61	73	510UL	5.09 177	0 DNT	LTE 10.85			510_Bobbi
12	63	73	510UL	6.27 178	0 DNT	LTE 8.69			510_Bobbi
12	68	76	510UL	6.48 174	0 DNT	LTE 11.06			510_Bobbi
12	71	73	510UL	0.12 97	0 NQI	01S 10.27			510_Bobbi
12	71	113	520HF	0.00 0	0 NDF	01S 10.27			Spec_Int
13	1	117	540HF	0.49 4	0 INR	11S 35.68			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#		Cal	Probe	Volt /		Origin/	Location			Axial	Circ	Dataset	
				Degrees	Percent		Code	TSP - Offset					
13	1	117	540HF	0.77	7	ID	23	TWD	13S	22.29			540_Bobbi
13	1	117	540HF	0.52	9	ID	30	TWD	13S	23.19			540_Bobbi
13	1	121	520HF	0.90	28		0	VOL	14S	-13.67			R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-13.67	0.14	0.17	R13DCLP+
13	1	121	520HF	0.91	22		0	VOL	14S	-12.75			R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-12.75	0.14	0.17	R13DCLP+
13	1	121	520HF	0.61	22		0	VOL	14S	-8.96			R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-8.96	0.09	0.17	R13DCLP+
13	1	121	520HF	0.35	25		0	VOL	14S	-5.61			R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-5.61	0.09	0.17	R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-3.08	0.09	0.11	R13DCLP+
13	1	121	520HF	0.44	16		0	VOL	14S	-3.08			R13DCLP+
13	1	121	520HF	0.00	0		0	CLP	14S	-1.45	0.09	0.11	R13DCLP+
13	1	121	520HF	0.19	6		0	VOL	14S	-1.45			R13DCLP+
13	38	29	510UL	0.73	84		0	INR	LTS	0.02			510_Bobbi
13	42	29	510UL	0.16	59		0	NQI	09S	0.17			510_Bobbi
13	42	160	520HF	0.23	282	OD	4	TWD	09S	0.29			Spec_Int
13	60	12	460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
13	64	73	510UL	6.38	175		0	DNT	LTE	8.11			510_Bobbi
13	64	73	510UL	5.51	176		0	DNT	LTE	10.55			510_Bobbi
13	67	70	520HF	0.11	2		0	INR	ETL	-2.55			KEXP_+Pt
13	67	70	520HF	1.21	30	ID	71	VOL	ETL	2.38			KEXP_+Pt
13	67	70	520HF	0.00	0		0	CLP	ETL	2.38	0.12	0.17	KEXP_+Pt
14	3	64	510UL	4.29	170		0	DNT	LTE	10.84			510_Bobbi
14	5	64	510UL	2.43	179		0	INR	LTS	38.32			510_Bobbi
14	17	46	520HF	0.00	0		0	CLP	ETL	-1.84	0.12	0.14	KEXP_+Pt
14	17	46	520HF	0.18	24		0	VOL	ETL	-1.84			KEXP_+Pt
14	21	46	520HF	0.64	23	ID	43	VOL	ETL	0.60			KEXP_+Pt
14	21	46	520HF	0.00	0		0	CLP	ETL	0.60	0.17	0.19	KEXP_+Pt
14	32	56	520HF	0.51	21	ID	36	VOL	ETL	0.43			KEXP_+Pt
14	32	56	520HF	0.00	0		0	CLP	ETL	0.43	0.11	0.10	KEXP_+Pt
14	36	56	520HF	0.49	24	ID	47	VOL	ETL	1.46			KEXP_+Pt
14	36	56	520HF	0.00	90		0	CLP	ETL	1.46	0.17	0.15	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
14 37 55		520HF	0.33 18	ID 27	VOL	ETL 0.23			KEXP_+Pt
14 37 55		520HF	0.00 0	0	CLP	ETL 0.23	0.25	0.17	KEXP_+Pt
14 59 73		510UL	0.19 100	0	NQI	05S -0.77			510_Bobbi
14 59 113		520HF	0.57 128	OD 11	TWD	05S -0.69			Spec_Int
14 63 73		510UL	5.45 176	0	DNT	LTE 11.05			510_Bobbi
14 64 76		510UL	6.85 175	0	DNT	LTE 10.97			510_Bobbi
15 25 64		510UL	0.14 45	0	INR	12S 13.65			510_Bobbi
15 28 63		510UL	0.56 107	0	INR	LTE 8.31			510_Bobbi
15 41 113		540HF	0.65 85	OD 13	TWD	05S 0.62			540_Bobbi
15 51 79		520HF	0.21 21	0	VOL	ETL -2.60			R13DCLP+
15 51 79		520HF	0.00 0	0	CLP	ETL -2.60	0.11	0.10	R13DCLP+
15 67 73		510UL	0.59 77	0	NQI	LTE 2.90			510_Bobbi
15 67 113		520HF	0.00 0	0	NDF	LTE 2.90			Spec_Int
15 67 73		510UL	6.15 174	0	DNT	LTE 10.86			510_Bobbi
15 68 76		510UL	6.00 176	0	DNT	LTE 11.10			510_Bobbi
15 77 110		540HF	0.28 8	0	BVC	12S 16.87			540_Bobbi
15 77 113		520HF	0.00 0	0	NDF	12S 16.87			Spec_Int
15 77 110		540HF	0.42 7	ID 23	TWD	12S 18.57			540_Bobbi
15 77 110		540HF	0.42 8	ID 27	TWD	12S 24.27			540_Bobbi
15 77 110		540HF	0.37 10	0	BVC	12S 27.52			540_Bobbi
15 77 110		540HF	0.48 7	ID 23	TWD	12S 30.53			540_Bobbi
15 77 113		520HF	0.00 0	0	NDF	13S -18.43			Spec_Int
15 77 113		520HF	0.00 0	0	CLP	13S -12.76	0.09	0.11	Spec_Int
15 77 113		520HF	0.38 7	0	VOL	13S -12.76			Spec_Int
15 77 113		520HF	0.00 0	0	NDF	13S -9.48			R13DCLP+
15 77 113		520HF	0.00 0	0	CLP	13S -6.47	0.14	0.17	Spec_Int
15 77 113		520HF	0.35 22	0	VOL	13S -6.47			Spec_Int
16 2 117		540HF	0.47 1	0	INR	15S 42.13			540_Bobbi
16 5 42		520HF	0.53 21	0	VOL	ETL -0.20			KEXP_+Pt
16 5 42		520HF	0.00 0	0	CLP	ETL -0.20	0.20	0.17	KEXP_+Pt
16 17 63		510UL	0.80 82	0	ADI	08S 19.28			510_Bobbi
16 17 115		520HF	0.00 0	0	NDF	08S 19.28			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt/ Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
16 19 16		460PP	0.00 0	0	OBS	UTE 0.00			Plug_MRP
16 41 30		510UL	0.15 64	0	INR	07S 16.59			510_Bobbi
16 81 73		510UL	0.18 88	OD 5	TWD	13S 0.13			510_Bobbi
17 26 63		510UL	0.61 174	0	INR	08S 29.51			510_Bobbi
17 26 133		520HF	0.00 0	0	NDF	09S -9.33			R13DCLP+
17 32 63		510UL	0.58 70	0	INR	LTE 3.48			510_Bobbi
17 35 55		520HF	0.31 9	0	VOL	ETL -0.79			KEXP_+Pt
17 35 55		520HF	0.00 0	0	CLP	ETL -0.79	0.11	0.12	KEXP_+Pt
17 35 55		520HF	0.27 10	ID 9	VOL	ETL 0.77			KEXP_+Pt
17 35 55		520HF	0.00 0	0	CLP	ETL 0.77	0.17	0.10	KEXP_+Pt
17 36 29		510UL	0.23 106	OD 4	TWD	09S -0.76			510_Bobbi
17 40 79		520HF	0.00 0	0	CLP	ETL -1.62	0.11	0.09	R13DCLP+
17 40 79		520HF	0.38 35	0	VOL	ETL -1.62			R13DCLP+
17 42 29		510UL	0.19 106	0	INR	LTE 20.90			510_Bobbi
17 44 29		510UL	0.32 82	0	NQI	LTE 20.97			510_Bobbi
17 44 160		520HF	0.00 0	0	NDF	LTS -3.03			Spec_Int
17 48 29		510UL	0.54 92	0	NQI	LTE 9.94			510_Bobbi
17 48 160		520HF	0.00 0	0	NDF	LTS -14.06			Spec_Int
17 56 12		460PP	0.00 0	0	OBS	UTE 0.00			Plug_MRP
17 60 79		520HF	0.41 2	0	VOL	ETL -1.42			R13DCLP+
17 60 79		520HF	0.00 0	0	CLP	ETL -1.42	0.17	0.14	R13DCLP+
17 69 73		510UL	0.85 96	0	NQI	LTE 3.48			510_Bobbi
17 69 73		510UL	6.44 176	0	DNT	LTE 10.80			510_Bobbi
17 69 113		520HF	0.00 0	0	NDF	LTS -20.52			Spec_Int
17 72 113		520HF	0.32 107	OD 6	TWD	08S 0.67			Spec_Int
17 72 76		510UL	0.21 75	0	NQI	08S 0.68			510_Bobbi
17 81 70		520HF	0.00 0	0	CLP	ETL -0.50	0.18	0.18	KEXP_+Pt
17 81 70		520HF	0.77 23	0	VOL	ETL -0.50			KEXP_+Pt
17 81 70		520HF	0.73 21	ID 36	VOL	ETL 0.18			KEXP_+Pt
17 81 70		520HF	0.00 0	0	CLP	ETL 0.18	0.18	0.27	KEXP_+Pt
17 81 70		520HF	1.25 27	ID 58	VOL	ETL 3.15			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
17 81 70		520HF	0.00	0		0	CLP	ETL	3.15	0.41	0.47	KEXP_+Pt
17 81 70		520HF	1.00	20	ID	20	VOL	ETL	3.20			KEXP_+Pt
17 81 70		520HF	0.00	0		0	CLP	ETL	3.20	0.15	0.16	KEXP_+Pt
17 82 110		540HF	0.35	8		0	BVC	15S	5.49			540_Bobbi
17 82 113		520HF	0.22	10		0	VOL	15S	5.71			Spec_Int
17 82 113		520HF	0.00	0		0	CLP	15S	5.71	0.14	0.17	Spec_Int
18 1 110		520HF	0.00	0		0	CLP	04S	4.72	0.09	0.11	Spec_Int
18 1 110		520HF	0.38	15		0	VOL	04S	4.72			Spec_Int
18 1 117		540HF	0.42	11	ID	37	TWD	04S	5.20			540_Bobbi
18 1 110		520HF	0.00	0		0	CLP	04S	5.34	0.14	0.17	Spec_Int
18 1 110		520HF	0.58	16		0	VOL	04S	5.34			Spec_Int
18 2 3		510UL	0.20	84		0	INR	13S	-0.80			510_Bobbi
18 3 121		520HF	0.19	12		0	VOL	15S	18.76			R13DCLP+
18 3 121		520HF	0.00	0		0	CLP	15S	18.76	0.09	0.11	R13DCLP+
18 3 121		520HF	0.16	24		0	VOL	15S	23.57			R13DCLP+
18 3 121		520HF	0.00	0		0	CLP	15S	23.57	0.09	0.11	R13DCLP+
18 3 121		520HF	0.00	0		0	NDF	15S	24.77			R13DCLP+
18 3 117		540HF	0.37	10	ID	33	TWD	15S	24.77			540_Bobbi
18 3 121		520HF	0.00	0		0	CLP	UTS	-21.90	0.14	0.16	R13DCLP+
18 3 121		520HF	0.74	30		0	VOL	UTS	-21.90			R13DCLP+
18 4 42		520HF	0.41	24	ID	47	SCI	ETL	0.63			KEXP_+Pt
18 4 42		520HF	0.00	27		0	ARC	ETL	0.63		0.15	KEXP_+Pt
18 10 63		510UL	0.19	90		0	NQI	13S	-0.84			510_Bobbi
18 10 115		520HF	0.42	0	ID	6	TWD	13S	-0.78			Spec_Int
18 31 45		520HF	0.49	20		0	VOL	ETL	-0.16			KEXP_+Pt
18 31 45		520HF	0.00	0		0	CLP	ETL	-0.16	0.11	0.12	KEXP_+Pt
18 50 55		520HF	0.00	0		0	CLP	ETL	0.30	0.17	0.20	KEXP_+Pt
18 50 55		520HF	0.58	22	ID	40	VOL	ETL	0.30			KEXP_+Pt
18 60 70		520HF	0.28	18		0	VOL	ETL	-0.42			KEXP_+Pt
18 60 70		520HF	0.00	0		0	CLP	ETL	-0.42	0.18	0.14	KEXP_+Pt
18 60 70		520HF	0.52	31	ID	76	VOL	ETL	1.45			KEXP_+Pt
18 60 70		520HF	0.00	0		0	CLP	ETL	1.45	0.18	0.18	KEXP_+Pt
18 60 70		520HF	0.80	25	ID	51	VOL	ETL	3.51			KEXP_+Pt
18 60 70		520HF	0.00	0		0	CLP	ETL	3.51	0.18	0.18	KEXP_+Pt
18 74 113		520HF	0.61	118	OD	11	TWD	08S	0.46			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
18 74 76		510UL	0.23	59		0	NQI	08S	0.66			510_Bobbi
18 79 73		510UL	0.39	83	OD	10	TWD	08S	0.59			510_Bobbi
19 1 117		540HF	0.33	10	ID	33	TWD	05S	31.90			540_Bobbi
19 1 121		520HF	0.49	27		0	VOL	06S	-5.05			R13DCLP+
19 1 121		520HF	0.00	0		0	CLP	06S	-5.05	0.14	0.17	R13DCLP+
19 82 12		460PP	0.60	132		0	COD	UTE	-1.76			Plug_MRP
19 83 73		510UL	2.60	173		0	DNT	LTE	10.96			510_Bobbi
19 84 113		520HF	0.00	0		0	NDF	10S	0.38			Spec_Int
19 84 73		510UL	0.14	86		0	NQI	10S	0.38			510_Bobbi
19 85 70		520HF	0.00	0		0	CLP	ETL	1.48	0.11	0.14	KEXP_+Pt
19 85 70		520HF	0.69	24	ID	47	VOL	ETL	1.48			KEXP_+Pt
19 85 70		520HF	0.00	0		0	CLP	ETL	1.88	0.17	0.19	KEXP_+Pt
19 85 70		520HF	0.53	17	ID	25	VOL	ETL	1.88			KEXP_+Pt
19 85 70		520HF	5.98	45	OD	96	SCI	ETL	2.94			KEXP_+Pt
19 85 70		520HF	0.00	40		0	ARC	ETL	2.94		0.22	KEXP_+Pt
20 1 117		540HF	0.41	6	ID	20	TWD	05S	32.05			540_Bobbi
20 1 133		520HF	1.02	19		0	VOL	06S	-5.03			R13DCLP+
20 1 133		520HF	0.00	0		0	CLP	06S	-5.03	0.21	0.16	R13DCLP+
20 1 121		520HF	0.61	22		0	VOL	08S	-4.84			R13DCLP+
20 1 121		520HF	0.00	0		0	CLP	08S	-4.84	0.14	0.17	R13DCLP+
20 9 42		520HF	0.16	16		0	VOL	ETL	-0.73			KEXP_+Pt
20 9 42		520HF	0.00	0		0	CLP	ETL	-0.73	0.06	0.10	KEXP_+Pt
20 9 42		520HF	0.00	0		0	CLP	ETL	0.10	0.11	0.10	KEXP_+Pt
20 9 42		520HF	0.22	12	ID	13	VOL	ETL	0.10			KEXP_+Pt
20 9 42		520HF	0.32	17	ID	25	VOL	ETL	2.30			KEXP_+Pt
20 9 42		520HF	0.00	0		0	CLP	ETL	2.30	0.11	0.15	KEXP_+Pt
20 9 42		520HF	0.00	0		0	CLP	ETL	2.96	0.11	0.15	KEXP_+Pt
20 9 42		520HF	0.38	14	ID	17	VOL	ETL	2.96			KEXP_+Pt
20 33 115		520HF	0.00	0		0	NDF	14S	14.18			Spec_Int
20 33 113		540HF	0.60	5	ID	17	TWD	14S	14.18			540_Bobbi
20 41 113		540HF	0.24	358		0	INR	09S	12.70			540_Bobbi
20 41 160		520HF	0.00	0		0	NDF	11S	15.30			Spec_Int
20 41 113		540HF	0.34	12		0	BVC	11S	15.30			540_Bobbi
20 51 56		520HF	0.00	0		0	CLP	ETL	0.05	0.11	0.15	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
20 51 56		520HF	0.31 24	ID 47	VOL	ETL 0.05			KEXP_+Pt
20 51 56		520HF	0.29 16	ID 22	VOL	ETL 0.24			KEXP_+Pt
20 51 56		520HF	0.00 0	0	CLP	ETL 0.24	0.11	0.15	KEXP_+Pt
20 56 110		540HF	0.41 6	ID 20	TWD	15S 33.68			540_Bobbi
20 56 123		520HF	0.27 15	0	VOL	UTS -13.21			R13DCLP+
20 56 123		520HF	0.00 0	0	CLP	UTS -13.21	0.19	0.16	R13DCLP+
20 57 70		520HF	0.32 23	0	VOL	ETL -1.42			KEXP_+Pt
20 57 70		520HF	0.00 0	0	CLP	ETL -1.42	0.17	0.14	KEXP_+Pt
20 62 69		520HF	0.00 0	0	CLP	ETL 2.34	0.11	0.14	KEXP_+Pt
20 62 69		520HF	0.23 24	ID 47	VOL	ETL 2.34			KEXP_+Pt
20 63 78		510UL	0.44 98	0	INR	13S 5.93			510_Bobbi
20 70 12		460PP	0.61 128	0	AOD	UTE -0.19			Plug_MRP
20 75 73		510UL	0.09 134	0	INR	07S -0.23			510_Bobbi
20 83 73		520HF	0.00 0	0	CLP	ETL 2.02	0.16	0.23	KEXP_+Pt
20 83 73		520HF	0.59 22	ID 40	VOL	ETL 2.02			KEXP_+Pt
22 1 4		510UL	2.36 173	0	INR	LTE 11.05			510_Bobbi
22 2 110		520HF	0.00 0	0	NDF	15S 6.78			Spec_Int
22 2 4		510UL	0.16 69	0	NQI	15S 6.78			510_Bobbi
22 29 79		520HF	0.23 19	0	VOL	ETL -1.10			R13DCLP+
22 29 79		520HF	0.00 0	0	CLP	ETL -1.10	0.12	0.09	R13DCLP+
22 35 113		540HF	0.26 5	0	INR	14S 16.62			540_Bobbi
22 35 113		540HF	0.89 6	ID 20	TWD	15S 33.76			540_Bobbi
22 35 79		520HF	0.00 0	0	CLP	ETL -3.50	0.12	0.14	R13DCLP+
22 35 79		520HF	0.38 26	0	VOL	ETL -3.50			R13DCLP+
22 35 79		520HF	0.00 0	0	RIC	UTS -14.95			R13DCLP+
22 35 79		520HF	0.00 0	0	RIC	UTS -13.66			R13DCLP+
22 35 133		520HF	0.50 15	0	VOL	UTS -12.93			R13DCLP+
22 35 133		520HF	0.00 0	0	CLP	UTS -12.93	0.10	0.11	R13DCLP+
22 35 79		520HF	0.00 0	0	RIC	UTS -12.86			R13DCLP+
22 35 133		520HF	0.00 0	0	CLP	UTS -5.14	0.15	0.11	R13DCLP+
22 35 133		520HF	0.24 22	0	VOL	UTS -5.14			R13DCLP+
22 35 79		520HF	0.12 20	0	VOL	UTS -5.02			R13DCLP+
22 35 79		520HF	0.00 0	0	CLP	UTS -5.02	0.11	0.09	R13DCLP+
22 35 133		520HF	0.49 16	0	VOL	UTS 3.99			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt/ Degrees		Origin/ Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
22 35 133		520HF	0.00	0		0	CLP	UTS	3.99	0.10	0.16	R13DCLP+
22 35 113		540HF	0.42	9	ID	30	TWD	UTS	4.02			540_Bobbi
22 46 35		510UL	0.31	56	OD	6	TWD	08S	0.70			510_Bobbi
22 50 55		520HF	0.38	21		0	VOL	ETL	-1.55			KEXP_+Pt
22 50 55		520HF	0.00	0		0	CLP	ETL	-1.55	0.22	0.18	KEXP_+Pt
22 50 55		520HF	0.52	26		0	VOL	ETL	-0.09			KEXP_+Pt
22 50 55		520HF	0.00	0		0	CLP	ETL	-0.09	0.11	0.24	KEXP_+Pt
22 52 35		510UL	3.33	15		0	INR	LTE	1.77			510_Bobbi
22 70 78		510UL	0.18	100		0	INR	UTS	0.33			510_Bobbi
22 77 12		460PP	0.70	122		0	AOD	UTE	-0.26			Plug_MRP
22 88 78		510UL	3.41	172		0	DNT	LTE	10.80			510_Bobbi
22 88 78		510UL	0.19	91		0	NQI	LTE	15.23			510_Bobbi
22 88 113		520HF	0.00	0		0	NDF	LTS	-8.77			Spec_Int
22 90 105		510UL	0.19	105		0	NQI	14S	33.19			510_Bobbi
22 90 156		520HF	0.00	0		0	NDF	15S	-1.81			Spec_Int
22 90 105		510UL	2.94	179		0	DNT	LTE	11.46			510_Bobbi
23 9 4		510UL	0.15	105		0	INR	LTE	17.00			510_Bobbi
23 15 45		520HF	0.62	23	ID	40	SCI	ETL	0.96			KEXP_+Pt
23 15 45		520HF	0.00	27		0	ARC	ETL	0.96		0.14	KEXP_+Pt
23 18 64		510UL	2.46	178		0	INR	07S	15.14			510_Bobbi
23 25 63		510UL	2.30	185		0	INR	LTS	6.51			510_Bobbi
23 26 113		540HF	0.42	6	ID	20	TWD	15S	32.28			540_Bobbi
23 26 133		520HF	0.42	6		0	VOL	UTS	-13.60			R13DCLP+
23 26 133		520HF	0.00	0		0	CLP	UTS	-13.60	0.14	0.16	R13DCLP+
23 33 45		520HF	0.52	22		0	VOL	ETL	-1.00			KEXP_+Pt
23 33 45		520HF	0.00	0		0	CLP	ETL	-1.00	0.11	0.14	KEXP_+Pt
23 38 46		520HF	0.59	26	ID	54	VOL	ETL	2.02			KEXP_+Pt
23 38 46		520HF	0.00	0		0	CLP	ETL	2.02	0.11	0.19	KEXP_+Pt
23 38 46		520HF	0.00	0		0	CLP	ETL	2.71	0.11	0.14	KEXP_+Pt
23 38 46		520HF	0.37	18	ID	18	VOL	ETL	2.71			KEXP_+Pt
23 45 55		520HF	0.41	22	ID	40	VOL	ETL	2.55			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
23 45 55		520HF	0.00 0	0	CLP	ETL 2.55	0.11	0.15	KEXP_+Pt
23 47 55		520HF	0.00 0	0	CLP	ETL 0.13	0.17	0.15	KEXP_+Pt
23 47 55		520HF	0.38 15	ID 20	VOL	ETL 0.13			KEXP_+Pt
23 62 68		520HF	0.17 5	0	VOL	ETL -1.49			KEXP_+Pt
23 62 68		520HF	0.00 0	0	CLP	ETL -1.49	0.17	0.14	KEXP_+Pt
23 62 68		520HF	0.36 39	0	VOL	ETL -0.09			KEXP_+Pt
23 62 68		520HF	0.00 0	0	CLP	ETL -0.09	0.17	0.14	KEXP_+Pt
23 62 68		520HF	0.40 20	ID 33	VOL	ETL 0.26			KEXP_+Pt
23 62 68		520HF	0.00 0	0	CLP	ETL 0.26	0.17	0.14	KEXP_+Pt
23 63 69		520HF	0.31 31	0	VOL	ETL -0.10			KEXP_+Pt
23 63 69		520HF	0.00 0	0	CLP	ETL -0.10	0.17	0.26	KEXP_+Pt
23 68 70		520HF	0.52 23	ID 43	VOL	ETL 1.38			KEXP_+Pt
23 68 70		520HF	0.00 0	0	CLP	ETL 1.38	0.17	0.19	KEXP_+Pt
23 90 73		520HF	0.34 24	ID 47	VOL	ETL 0.45			KEXP_+Pt
23 90 73		520HF	0.00 0	0	CLP	ETL 0.45	0.21	0.18	KEXP_+Pt
23 90 73		520HF	0.44 21	ID 36	VOL	ETL 3.41			KEXP_+Pt
23 90 73		520HF	0.00 0	0	CLP	ETL 3.41	0.21	0.18	KEXP_+Pt
23 90 105		510UL	4.00 171	0	DNT	LTE 12.20			510_Bobbi
24 2 3		510UL	3.59 174	0	DNT	LTE 10.76			510_Bobbi
24 11 4		510UL	3.07 185	0	DNT	01S 5.70			510_Bobbi
24 11 110		520HF	0.00 0	0	NDF	01S 5.70			Spec_Int
24 50 36		510UL	0.47 91	0	NQI	LTE 20.63			510_Bobbi
24 50 160		520HF	0.00 0	0	NDF	LTS -3.37			Spec_Int
24 52 36		510UL	0.37 88	0	NQI	LTE 12.91			510_Bobbi
24 52 160		520HF	0.00 0	0	NDF	LTS -11.09			Spec_Int
24 56 55		520HF	0.41 24	0	VOL	ETL -0.80			KEXP_+Pt
24 56 55		520HF	0.00 0	0	CLP	ETL -0.80	0.17	0.19	KEXP_+Pt
24 56 55		520HF	0.61 15	ID 20	VOL	ETL 2.08			KEXP_+Pt
24 56 55		520HF	0.00 0	0	CLP	ETL 2.08	0.17	0.19	KEXP_+Pt
24 63 68		520HF	0.52 21	ID 36	VOL	ETL 0.01			KEXP_+Pt
24 63 68		520HF	0.00 0	0	CLP	ETL 0.01	0.11	0.14	KEXP_+Pt
24 66 77		510UL	0.20 99	0	INR	LTE 10.42			510_Bobbi
24 66 77		510UL	0.14 104	0	INR	LTE 20.11			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
24 76 79		520HF	0.26	14	0	VOL	ETL -3.28			R13DCLP+
24 76 79		520HF	0.00	0	0	CLP	ETL -3.28	0.12	0.14	R13DCLP+
24 76 68		520HF	0.17	31	0	VOL	ETL -0.62			KEXP_+Pt
24 76 68		520HF	0.00	0	0	CLP	ETL -0.62	0.11	0.14	KEXP_+Pt
24 76 79		520HF	0.34	19	0	PRA	ETL -0.57			R13DCLP+
24 76 68		520HF	1.42	30	ID 71	VOL	ETL 1.56			KEXP_+Pt
24 76 68		520HF	0.00	0	0	CLP	ETL 1.56	0.17	0.19	KEXP_+Pt
24 76 79		520HF	0.00	0	0	CLP	ETL 1.79	0.23	0.24	KEXP_+Pt
24 76 79		520HF	1.28	31	ID 76	VOL	ETL 1.79			KEXP_+Pt
24 77 79		520HF	0.00	0	0	CLP	ETL -1.24	0.18	0.18	R13DCLP+
24 77 79		520HF	0.28	38	0	VOL	ETL -1.24			R13DCLP+
24 78 68		520HF	0.41	12	0	VOL	ETL -0.60			KEXP_+Pt
24 78 68		520HF	0.00	0	0	CLP	ETL -0.60	0.17	0.14	KEXP_+Pt
24 78 68		520HF	0.00	0	0	CLP	ETL -0.10	0.17	0.14	KEXP_+Pt
24 78 68		520HF	0.44	35	0	VOL	ETL -0.10			KEXP_+Pt
24 78 68		520HF	0.20	21	ID 36	VOL	ETL 1.36			KEXP_+Pt
24 78 68		520HF	0.00	0	0	CLP	ETL 1.36	0.11	0.14	KEXP_+Pt
24 89 78		510UL	3.84	172	0	DNT	LTE 10.66			510_Bobbi
24 90 105		510UL	4.19	173	0	DNT	LTE 10.79			510_Bobbi
24 92 105		510UL	0.28	94	0	NQI	15S 1.10			510_Bobbi
24 92 156		520HF	0.78	69	0	MB	15S 1.21			Spec_Int
24 92 105		510UL	3.66	170	0	DNT	LTE 11.60			510_Bobbi
25 1 4		510UL	0.38	5	ID 17	TWD	12S 3.29			510_Bobbi
25 1 117		540HF	0.38	2	0	INR	12S 3.31			540_BobEx
25 1 4		510UL	1.04	42	0	INR	13S -0.75			510_Bobbi
25 1 117		540HF	0.27	59	0	NQI	13S -0.75			540_BobEx
25 1 110		520HF	0.00	0	0	NDF	13S -0.75			Spec_Int
25 3 3		510UL	0.13	92	0	INR	02S -0.75			510_Bobbi
25 14 3		510UL	0.42	40	0	INR	LTE 19.50			510_Bobbi
25 23 59		510UL	0.14	36	0	INR	13S 33.66			510_Bobbi
25 41 36		510UL	0.09	58	0	INR	10S 19.91			510_Bobbi
25 41 55		520HF	0.00	0	0	CLP	ETL -0.06	0.17	0.19	KEXP_+Pt
25 41 55		520HF	0.26	29	0	VOL	ETL -0.06			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#			Cal	Probe	Volt /		Origin /	Code		Location	Axial	Circ	Dataset
					Degrees	Percent			TSP - Offset				
25	42	55		520HF	0.49	14	ID	17	VOL	ETL	0.39		KEXP_+Pt
25	42	55		520HF	0.00	0		0	CLP	ETL	0.39	0.14	KEXP_+Pt
25	42	55		520HF	0.33	15	ID	20	VOL	ETL	1.19		KEXP_+Pt
25	42	55		520HF	0.00	0		0	CLP	ETL	1.19	0.17	KEXP_+Pt
25	48	56		520HF	0.51	13	ID	15	VOL	ETL	1.89		KEXP_+Pt
25	48	56		520HF	0.00	0		0	CLP	ETL	1.89	0.17	KEXP_+Pt
25	64	68		520HF	0.16	28	ID	63	VOL	ETL	2.85		KEXP_+Pt
25	64	68		520HF	0.00	0		0	CLP	ETL	2.85	0.17	KEXP_+Pt
25	64	68		520HF	0.00	0		0	CLP	ETL	4.30	0.17	KEXP_+Pt
25	64	68		520HF	0.48	26	ID	54	VOL	ETL	4.30		KEXP_+Pt
25	65	67		520HF	0.22	26	ID	54	VOL	ETL	1.24		KEXP_+Pt
25	65	67		520HF	0.00	0		0	CLP	ETL	1.24	0.11	KEXP_+Pt
25	70	68		520HF	0.00	0		0	CLP	ETL	-0.96	0.14	KEXP_+Pt
25	70	68		520HF	0.19	8		0	VOL	ETL	-0.96		KEXP_+Pt
25	70	68		520HF	0.31	21	ID	36	VOL	ETL	0.92		KEXP_+Pt
25	70	68		520HF	0.00	0		0	CLP	ETL	0.92	0.11	KEXP_+Pt
25	70	68		520HF	1.17	31	ID	76	VOL	ETL	1.81		KEXP_+Pt
25	70	68		520HF	0.00	90		0	CLP	ETL	1.81	0.17	KEXP_+Pt
25	70	68		520HF	0.00	0		0	CLP	ETL	2.86	0.17	KEXP_+Pt
25	70	68		520HF	1.66	33	ID	86	VOL	ETL	2.86		KEXP_+Pt
25	71	67		520HF	0.33	26	ID	54	SCI	ETL	1.07		KEXP_+Pt
25	71	67		520HF	0.00	34		0	ARC	ETL	1.07	0.18	KEXP_+Pt
25	71	67		520HF	1.02	25	ID	51	MCI	ETL	4.28		KEXP_+Pt
25	71	67		520HF	0.00	30		0	ARC	ETL	4.28	0.16	KEXP_+Pt
25	79	77		510UL	0.52	90		0	INR	LTE	11.00		510_Bobbi
25	87	77		510UL	0.16	85		0	INR	15S	14.24		510_Bobbi
25	89	77		510UL	0.32	120		0	INR	10S	5.14		510_Bobbi
25	94	105		510UL	4.69	176		0	DNT	LTE	11.24		510_Bobbi
26	5	4		510UL	0.26	92		0	INR	LTE	18.95		510_Bobbi
26	6	3		510UL	0.19	113		0	INR	10S	7.97		510_Bobbi
26	9	4		510UL	0.11	72		0	NQI	08S	36.74		510_Bobbi
26	9	110		520HF	0.00	0		0	NDF	09S	-2.26		Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#			Cal	Probe	Volt /		Origin /	Code	Location		Axial	Circ	Dataset
					Degrees	Percent			TSP -	Offset			
26	38	45		520HF	0.48	29	0	VOL	ETL	-0.23			KEXP_+Pt
26	38	45		520HF	0.00	0	0	CLP	ETL	-0.23	0.14	0.14	KEXP_+Pt
26	92	79		520HF	0.36	29	0	VOL	ETL	-1.12			R13DCLP+
26	92	79		520HF	0.00	0	0	CLP	ETL	-1.12	0.24	0.18	R13DCLP+
26	96	167		520HF	0.00	0	0	NDF	15S	1.28			Spec_Int
26	96	108		540HF	0.18	97	0	NQI	15S	1.28			540_Bobbi
26	96	156		520HF	0.00	0	0	NDF	15S	1.28			Spec_Int
26	96	108		540HF	0.30	6	0	BVC	15S	19.40			540_Bobbi
26	96	167		520HF	0.00	0	0	NDF	15S	19.53			R13DCLP+
26	96	108		540HF	0.25	11	0	BVC	15S	35.06			540_Bobbi
26	96	108		540HF	5.24	176	0	DNT	LTE	11.12			540_Bobbi
26	96	167		520HF	0.00	0	0	NDF	UTS	-10.93			R13DCLP+
27	2	79		520HF	0.38	18	0	VOL	ETL	-1.69			R13DCLP+
27	2	79		520HF	0.00	0	0	CLP	ETL	-1.69	0.18	0.23	R13DCLP+
27	6	110		520HF	0.00	0	0	NDF	05S	11.72			Spec_Int
27	6	4		510UL	0.20	98	0	NQI	05S	11.72			510_Bobbi
27	6	4		510UL	0.15	111	0	NQI	09S	33.13			510_Bobbi
27	6	110		520HF	0.00	0	0	NDF	10S	-6.87			Spec_Int
27	23	58		510UL	0.63	97	0	INR	LTE	8.01			510_Bobbi
27	42	55		520HF	0.00	0	0	CLP	ETL	-0.19	0.15	0.15	KEXP_+Pt
27	42	55		520HF	0.71	27	0	VOL	ETL	-0.19			KEXP_+Pt
27	42	55		520HF	0.33	26	ID 54	VOL	ETL	0.81			KEXP_+Pt
27	42	55		520HF	0.00	0	0	CLP	ETL	0.81	0.20	0.17	KEXP_+Pt
27	45	8		460PP	0.00	0	0	OBS	UTE	0.00			Plug_MRP
27	47	55		520HF	0.00	0	0	CLP	ETL	-0.68	0.17	0.19	KEXP_+Pt
27	47	55		520HF	0.61	16	0	VOL	ETL	-0.68			KEXP_+Pt
27	47	55		520HF	0.42	16	ID 22	VOL	ETL	0.71			KEXP_+Pt
27	47	55		520HF	0.00	0	0	CLP	ETL	0.71	0.20	0.12	KEXP_+Pt
27	47	55		520HF	0.00	0	0	CLP	ETL	3.88	0.15	0.15	KEXP_+Pt
27	47	55		520HF	0.38	12	ID 13	VOL	ETL	3.88			KEXP_+Pt
27	52	79		520HF	0.00	0	0	CLP	ETL	-2.82	0.11	0.14	R13DCLP+
27	52	79		520HF	0.10	4	0	VOL	ETL	-2.82			R13DCLP+
27	52	79		520HF	0.13	19	0	VOL	ETL	-1.96			R13DCLP+
27	52	79		520HF	0.00	0	0	CLP	ETL	-1.96	0.11	0.14	R13DCLP+
27	52	79		520HF	0.19	4	0	VOL	ETL	-1.84			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#			Cal	Probe	Volt /		Origin/	Location			Axial	Circ	Dataset	
				Degrees		Percent	Code	TSP - Offset						
27	52	79		520HF	0.00	0		0	CLP	ETL	-1.84	0.17	0.14	R13DCLP+
27	52	79		520HF	0.53	32	ID	86	VOL	ETL	0.66			R13DCLP+
27	52	79		520HF	0.00	0		0	CLP	ETL	0.66	0.12	0.18	R13DCLP+
27	52	79		520HF	0.47	174		0	INR	ETL	4.40			R13DCLP+
27	55	79		520HF	0.26	18		0	VOL	ETL	-1.93			R13DCLP+
27	55	79		520HF	0.00	0		0	CLP	ETL	-1.93	0.11	0.19	R13DCLP+
27	71	79		520HF	0.00	0		0	CLP	ETL	-2.63	0.18	0.18	R13DCLP+
27	71	79		520HF	0.72	34		0	VOL	ETL	-2.63			R13DCLP+
27	71	79		520HF	0.00	0		0	CLP	ETL	-2.01	0.12	0.18	R13DCLP+
27	71	79		520HF	0.15	23		0	VOL	ETL	-2.01			R13DCLP+
27	79	79		520HF	0.30	14		0	VOL	ETL	-6.50			R13DCLP+
27	79	79		520HF	0.00	0		0	CLP	ETL	-6.50	0.12	0.14	R13DCLP+
27	79	79		520HF	0.00	0		0	CLP	ETL	-4.49	0.12	0.14	R13DCLP+
27	79	79		520HF	0.18	24		0	VOL	ETL	-4.49			R13DCLP+
27	79	79		520HF	0.00	0		0	CLP	UTS	-0.83	0.12	0.14	R13DCLP+
27	79	79		520HF	0.37	20		0	VOL	UTS	-0.83			R13DCLP+
27	96	108		540HF	0.49	5	ID	17	TWD	15S	37.44			540_Bobbi
27	96	108		540HF	3.12	175		0	DNT	LTE	10.66			540_Bobbi
27	96	108		540HF	0.92	63		0	INR	LTE	21.81			540_Bobbi
27	96	156		520HF	0.00	0		0	CLP	UTS	-9.73	0.15	0.12	Spec_Int
27	96	156		520HF	0.41	20		0	VOL	UTS	-9.73			Spec_Int
27	96	156		520HF	0.13	7		0	VOL	UTS	-8.73			Spec_Int
27	96	156		520HF	0.00	0		0	CLP	UTS	-8.73	0.10	0.12	Spec_Int
27	97	105		510UL	0.21	119		0	INR	10S	-0.28			510_Bobbi
27	97	105		510UL	3.82	171		0	DNT	LTE	10.57			510_Bobbi
28	6	4		510UL	0.15	104		0	NQI	10S	11.35			510_Bobbi
28	6	110		520HF	0.00	0		0	NDF	10S	11.35			Spec_Int
28	32	50		520HF	0.00	0		0	CLP	ETL	-2.25	0.17	0.15	KEXP_+Pt
28	32	50		520HF	0.25	10		0	VOL	ETL	-2.25			KEXP_+Pt
28	33	51		520HF	0.32	26	ID	54	VOL	ETL	2.48			KEXP_+Pt
28	33	51		520HF	0.00	0		0	CLP	ETL	2.48	0.12	0.14	KEXP_+Pt
28	52	160		520HF	0.00	0		0	NDF	06S	10.76			Spec_Int
28	52	37		510UL	3.42	186		0	DNT	06S	10.76			510_Bobbi
28	55	56		520HF	0.26	6		0	VOL	ETL	-2.57			KEXP_+Pt
28	55	56		520HF	0.00	0		0	CLP	ETL	-2.57	0.17	0.15	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset			Axial	Circ	Dataset
28 55 56		520HF	0.30	8	0	VOL	ETL	-0.06			KEXP_+Pt
28 55 56		520HF	0.00	0	0	CLP	ETL	-0.06	0.11	0.10	KEXP_+Pt
28 55 56		520HF	0.53	18	ID 27	VOL	ETL	0.82			KEXP_+Pt
28 55 56		520HF	0.00	0	0	CLP	ETL	0.82	0.11	0.15	KEXP_+Pt
28 55 56		520HF	0.35	24	ID 47	VOL	ETL	3.59			KEXP_+Pt
28 55 56		520HF	0.00	0	0	CLP	ETL	3.59	0.11	0.15	KEXP_+Pt
28 55 56		520HF	0.27	16	ID 22	VOL	ETL	4.85			KEXP_+Pt
28 55 56		520HF	0.00	0	0	CLP	ETL	4.85	0.11	0.10	KEXP_+Pt
28 73 68		520HF	0.24	16	ID 22	VOL	ETL	1.41			KEXP_+Pt
28 73 68		520HF	0.00	0	0	CLP	ETL	1.41	0.23	0.18	KEXP_+Pt
28 77 68		520HF	0.00	0	0	CLP	ETL	0.06	0.17	0.21	KEXP_+Pt
28 77 68		520HF	0.44	27	ID 58	VOL	ETL	0.06			KEXP_+Pt
28 80 67		520HF	0.00	0	0	CLP	ETL	2.65	0.16	0.18	KEXP_+Pt
28 80 67		520HF	0.25	14	ID 17	VOL	ETL	2.65			KEXP_+Pt
28 81 81		510UL	0.37	88	OD 7	TWD	09S	-0.84			510_Bobbi
28 92 79		520HF	0.00	0	0	CLP	ETL	-1.25	0.05	0.19	R13DCLP+
28 92 79		520HF	0.37	25	0	VOL	ETL	-1.25			R13DCLP+
28 93 105		510UL	0.40	131	0	INR	10S	12.03			510_Bobbi
28 97 106		510UL	0.42	120	0	INR	15S	-0.15			510_Bobbi
28 99 105		510UL	2.92	174	0	DNT	LTE	10.60			510_Bobbi
29 8 42		520HF	0.06	229	0	INR	ETL	-0.18			KEXP_+Pt
29 36 50		520HF	0.19	27	0	VOL	ETL	-0.73			KEXP_+Pt
29 36 50		520HF	0.00	0	0	CLP	ETL	-0.73	0.11	0.15	KEXP_+Pt
29 36 50		520HF	0.70	20	ID 33	VOL	ETL	0.79			KEXP_+Pt
29 36 50		520HF	0.00	0	0	CLP	ETL	0.79	0.11	0.15	KEXP_+Pt
29 38 59		510UL	0.40	64	0	NQI	08S	0.66			510_Bobbi
29 38 115		520HF	1.58	0	ID 17	TWD	08S	0.82			Spec_Int
29 64 81		510UL	0.17	106	0	INR	LTE	11.69			510_Bobbi
29 80 79		520HF	0.29	26	0	VOL	ETL	-2.60			R13DCLP+
29 80 79		520HF	0.00	0	0	CLP	ETL	-2.60	0.18	0.14	R13DCLP+
29 80 79		520HF	0.24	23	ID 22	VOL	ETL	2.41			R13DCLP+
29 80 79		520HF	0.00	0	0	CLP	ETL	2.41	0.12	0.14	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
29 87 81		510UL	0.30	55	0	NQI ETL -0.97			510_Bobbi
29 87 113		520HF	0.00	0	0	NDF ETL -0.97			Spec_Int
29 94 81		510UL	2.23	175	0	INR LTE 9.80			510_Bobbi
29 100 73		520HF	0.38	17	ID 25	VOL ETL 0.57			KEXP_Pt
29 100 73		520HF	0.00	0	0	CLP ETL 0.57	0.21	0.14	KEXP_Pt
29 100 73		520HF	2.31	43	OD 97	SCI ETL 0.78			KEXP_Pt
29 100 73		520HF	0.00	57	0	ARC ETL 0.78		0.31	KEXP_Pt
29 100 130		520HF	3.21	50	0	PID ETL 0.99			KEXP_Pt
29 100 73		520HF	10.89	41	OD 98	SCI ETL 0.99			KEXP_Pt
29 100 73		520HF	0.00	48	0	ARC ETL 0.99		0.26	KEXP_Pt
29 100 73		520HF	0.00	0	0	RPD ETL 0.99			KEXP_Pt
29 101 105		510UL	3.09	168	0	DNT LTE 10.88			510_Bobbi
30 6 3		510UL	0.18	94	0	INR LTE 7.58			510_Bobbi
30 23 113		540HF	0.33	10	0	BVC 15S 13.06			540_Bobbi
30 23 115		520HF	0.15	5	0	VOL 15S 13.12			Spec_Int
30 23 115		520HF	0.00	0	0	CLP 15S 13.12	0.09	0.11	Spec_Int
30 23 113		540HF	0.31	10	0	BVC 15S 34.54			540_Bobbi
30 23 113		540HF	0.31	11	0	BVC 15S 40.19			540_Bobbi
30 23 115		520HF	0.00	0	0	NDF UTS -11.84			Spec_Int
30 23 115		520HF	0.00	0	0	NDF UTS -6.19			Spec_Int
30 36 115		520HF	0.00	0	0	NDF 03S 8.18			Spec_Int
30 36 58		510UL	2.67	178	0	DNT 03S 8.18			510_Bobbi
30 36 58		510UL	0.14	119	0	INR 14S 31.98			510_Bobbi
30 49 37		510UL	1.28	86	0	ADI 15S 28.68			510_Bobbi
30 49 160		520HF	0.00	0	0	NDF UTS -18.12			Spec_Int
30 58 37		510UL	1.45	85	0	ADI 15S 8.12			510_Bobbi
30 58 160		520HF	0.00	0	0	NDF 15S 8.12			Spec_Int
30 94 81		510UL	3.62	173	0	DNT LTE 10.31			510_Bobbi
30 98 105		510UL	0.14	78	0	NQI 10S -0.38			510_Bobbi
30 98 156		520HF	0.30	106	OD 10	TWD 10S -0.29			Spec_Int
30 102 12		460PP	0.38	136	0	COD UTE -1.84			Plug_MRP
31 1 117		540HF	0.27	358	0	INR 04S 12.49			540_Bobbi
31 1 121		520HF	0.51	13	0	VOL 08S 6.62			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
31 1 121		520HF	0.00	0	0 CLP	08S 6.62	0.14	0.11	R13DCLP+
31 1 117		540HF	0.36	15	0 BVC	08S 6.69			540_Bobbi
31 40 58		510UL	0.42	84	0 NQI	08S 0.65			510_Bobbi
31 40 115		520HF	0.52	0 ID	6 TWD	08S 0.69			Spec_Int
31 66 79		520HF	0.34	28	0 VOL	ETL -3.47			R13DCLP+
31 66 79		520HF	0.00	0	0 CLP	ETL -3.47	0.12	0.14	R13DCLP+
31 66 79		520HF	0.08	24	0 PRA	ETL -0.21			R13DCLP+
31 66 68		520HF	0.66	40	0 VOL	ETL -0.08			KEXP_+Pt
31 66 68		520HF	0.00	0	0 CLP	ETL -0.08	0.17	0.19	KEXP_+Pt
31 75 79		520HF	0.18	63	0 INR	ETL -1.28			R13DCLP+
31 95 95		510UL	3.31	180	0 DNT	LTE 10.24			510_Bobbi
31 103 73		520HF	0.00	0	0 CLP	ETL 1.78	0.21	0.14	KEXP_+Pt
31 103 73		520HF	0.71	20 ID	33 VOL	ETL 1.78			KEXP_+Pt
31 103 73		520HF	3.32	41 OD	98 SCI	ETL 2.74			KEXP_+Pt
31 103 73		520HF	0.00	78	0 ARC	ETL 2.74		0.42	KEXP_+Pt
31 103 73		520HF	1.56	23 ID	43 VOL	ETL 3.84			KEXP_+Pt
31 103 73		520HF	0.00	0	0 CLP	ETL 3.84	0.16	0.19	KEXP_+Pt
31 103 106		510UL	3.12	172	0 DNT	LTE 11.80			510_Bobbi
32 4 42		520HF	0.49	24 ID	47 VOL	ETL 1.08			KEXP_+Pt
32 4 42		520HF	0.00	0	0 CLP	ETL 1.08	0.12	0.14	KEXP_+Pt
32 50 56		520HF	0.44	20	0 VOL	ETL -0.11			KEXP_+Pt
32 50 56		520HF	0.00	0	0 CLP	ETL -0.11	0.11	0.10	KEXP_+Pt
32 60 56		520HF	0.27	11	0 VOL	ETL -1.43			KEXP_+Pt
32 60 56		520HF	0.00	0	0 CLP	ETL -1.43	0.11	0.19	KEXP_+Pt
32 81 110		540HF	0.81	9 ID	30 TWD	15S 35.42			540_Bobbi
32 81 110		540HF	0.60	6 ID	20 TWD	15S 35.77			540_Bobbi
32 81 123		520HF	0.95	22	0 VOL	UTS -11.30			R13DCLP+
32 81 123		520HF	0.00	0	0 CLP	UTS -11.30	0.15	0.16	R13DCLP+
32 81 123		520HF	0.00	0	0 CLP	UTS -10.48	0.15	0.16	R13DCLP+
32 81 123		520HF	0.35	16	0 VOL	UTS -10.48			R13DCLP+
32 81 123		520HF	0.41	19	0 VOL	UTS -3.42			R13DCLP+
32 81 123		520HF	0.00	0	0 CLP	UTS -3.42	0.19	0.16	R13DCLP+
32 82 67		520HF	0.38	18 ID	27 VOL	ETL 2.34			KEXP_+Pt
32 82 67		520HF	0.00	0	0 CLP	ETL 2.34	0.16	0.18	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

			Volt / Origin/				Location					
Tube#	Cal	Probe	Degrees	Percent		Code	TSP - Offset		Axial	Circ	Dataset	
32 94 68		520HF	0.72	20		0	VOL ETL -0.09				KEXP_+Pt	
32 94 68		520HF	0.00	0		0	CLP ETL -0.09		0.17	0.18	KEXP_+Pt	
32 94 68		520HF	0.40	20		0	VOL ETL -0.08				KEXP_+Pt	
32 94 68		520HF	0.00	0		0	CLP ETL -0.08		0.11	0.14	KEXP_+Pt	
32 95 67		520HF	0.25	18		0	VOL ETL -1.37				KEXP_+Pt	
32 95 67		520HF	0.00	0		0	CLP ETL -1.37		0.11	0.14	KEXP_+Pt	
32 95 67		520HF	0.33	22	ID	40	VOL ETL 3.85				KEXP_+Pt	
32 95 67		520HF	0.00	0		0	CLP ETL 3.85		0.16	0.14	KEXP_+Pt	
32 96 73		520HF	0.31	16	ID	22	VOL ETL 0.07				KEXP_+Pt	
32 96 73		520HF	0.00	0		0	CLP ETL 0.07		0.21	0.19	KEXP_+Pt	
32 96 73		520HF	0.00	0		0	CLP ETL 1.97		0.16	0.12	KEXP_+Pt	
32 96 73		520HF	0.29	23	ID	43	VOL ETL 1.97				KEXP_+Pt	
32 97 18		520HF	8.39	47	OD	96	SCI ETL 4.96				KEXP_+Pt	
32 97 18		520HF	0.00	45		0	ARC ETL 4.96			0.24	KEXP_+Pt	
32 104 73		520HF	0.97	10	ID	9	VOL ETL 1.49				KEXP_+Pt	
32 104 73		520HF	0.00	0		0	CLP ETL 1.49		0.27	0.23	KEXP_+Pt	
32 104 105		510UL	3.91	171		0	DNT LTE 10.97				510_Bobbi	
33 7 4		510UL	0.49	101		0	INR LTE 11.86				510_Bobbi	
33 9 42		520HF	0.44	21		0	VOL ETL -0.17				KEXP_+Pt	
33 9 42		520HF	0.00	0		0	CLP ETL -0.17		0.11	0.15	KEXP_+Pt	
33 9 42		520HF	0.00	0		0	CLP ETL 0.88		0.11	0.15	KEXP_+Pt	
33 9 42		520HF	0.56	23	ID	43	VOL ETL 0.88				KEXP_+Pt	
33 20 59		510UL	0.17	122		0	INR 13S -0.03				510_Bobbi	
33 52 38		510UL	0.26	130		0	INR 14S 33.40				510_Bobbi	
33 67 68		520HF	0.47	18	ID	27	VOL ETL 0.03				KEXP_+Pt	
33 67 68		520HF	0.00	0		0	CLP ETL 0.03		0.19	0.18	KEXP_+Pt	
33 67 68		520HF	0.00	0		0	CLP ETL 2.14		0.17	0.14	KEXP_+Pt	
33 67 68		520HF	0.19	9	ID	8	VOL ETL 2.14				KEXP_+Pt	
33 67 68		520HF	0.00	0		0	CLP ETL 2.93		0.11	0.14	KEXP_+Pt	
33 67 68		520HF	0.23	24	ID	47	VOL ETL 2.93				KEXP_+Pt	
33 67 68		520HF	0.85	25	ID	51	VOL ETL 3.34				KEXP_+Pt	
33 67 68		520HF	0.00	0		0	CLP ETL 3.34		0.17	0.19	KEXP_+Pt	
33 70 79		520HF	0.00	0		0	CLP ETL -2.34		0.12	0.14	R13DCLP+	
33 70 79		520HF	0.34	31		0	VOL ETL -2.34				R13DCLP+	

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
33 83 110		540HF	0.37	10	0 BVC	15S	45.10			540_Bobbi
33 83 123		520HF	0.00	0	0 CLP	UTS	-11.98	0.15	0.16	R13DCLP+
33 83 123		520HF	0.26	19	0 VOL	UTS	-11.98			R13DCLP+
33 83 123		520HF	0.16	17	0 VOL	UTS	-1.33			R13DCLP+
33 83 123		520HF	0.00	0	0 CLP	UTS	-1.33	0.15	0.16	R13DCLP+
33 83 110		540HF	0.60	13	ID 43	TWD	UTS			540_Bobbi
33 83 123		520HF	0.46	14	0 VOL	UTS	1.96			R13DCLP+
33 83 123		520HF	0.00	0	0 CLP	UTS	1.96	0.15	0.16	R13DCLP+
33 83 123		520HF	0.00	0	0 CLP	UTS	3.64	0.15	0.16	R13DCLP+
33 83 123		520HF	0.12	30	0 VOL	UTS	3.64			R13DCLP+
33 90 68		520HF	0.40	34	0 VOL	ETL	-1.76			KEXP_+Pt
33 90 68		520HF	0.00	0	0 CLP	ETL	-1.76	0.17	0.14	KEXP_+Pt
33 90 68		520HF	0.00	0	0 CLP	ETL	1.53	0.11	0.14	KEXP_+Pt
33 90 68		520HF	0.67	20	ID 33	VOL	ETL			KEXP_+Pt
33 90 68		520HF	0.35	14	0 INR	ETL	2.72			KEXP_+Pt
33 92 68		520HF	0.21	1	0 INR	ETL	-1.16			KEXP_+Pt
33 92 68		520HF	0.00	90	0 CLP	ETL	0.54	0.11	0.14	KEXP_+Pt
33 92 68		520HF	0.29	33	ID 86	VOL	ETL			KEXP_+Pt
33 92 68		520HF	0.24	25	ID 51	VOL	ETL			KEXP_+Pt
33 92 68		520HF	0.00	0	0 CLP	ETL	1.30	0.11	0.14	KEXP_+Pt
33 92 68		520HF	0.74	20	ID 33	VOL	ETL			KEXP_+Pt
33 92 68		520HF	0.00	0	0 CLP	ETL	3.26	0.11	0.14	KEXP_+Pt
33 92 68		520HF	0.32	31	ID 76	VOL	ETL			KEXP_+Pt
33 92 68		520HF	0.00	0	0 CLP	ETL	3.97	0.11	0.14	KEXP_+Pt
33 97 108		540HF	0.31	3	0 INR	15S	10.28			540_Bobbi
33 97 108		540HF	0.22	10	0 BVC	15S	26.47			540_Bobbi
33 97 108		540HF	0.35	16	0 BVC	15S	36.63			540_Bobbi
33 97 156		520HF	0.11	3	0 VOL	UTS	-21.65			Spec_Int
33 97 156		520HF	0.00	0	0 CLP	UTS	-21.65	0.15	0.12	Spec_Int
33 97 156		520HF	0.10	16	0 VOL	UTS	-20.70			Spec_Int
33 97 156		520HF	0.00	0	0 CLP	UTS	-20.70	0.10	0.12	Spec_Int
33 97 156		520HF	0.43	20	0 VOL	UTS	-10.61			Spec_Int
33 97 156		520HF	0.00	0	0 CLP	UTS	-10.61	0.10	0.12	Spec_Int
33 97 156		520HF	0.25	17	0 VOL	UTS	-7.01			Spec_Int
33 97 156		520HF	0.00	0	0 CLP	UTS	-7.01	0.10	0.12	Spec_Int
33 97 156		520HF	0.00	0	0 CLP	UTS	-6.44	0.15	0.12	Spec_Int
33 97 156		520HF	0.17	10	0 VOL	UTS	-6.44			Spec_Int
33 99 73		520HF	1.42	30	ID 71	VOL	ETL			KEXP_+Pt
33 99 73		520HF	0.00	0	0 CLP	ETL	2.19	0.16	0.09	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
33 102 108		540HF	0.50	4		0 INR	15S 5.89				540_Bobbi
33 104 106		510UL	0.31	118		0 NQI	15S 4.80				510_Bobbi
33 104 156		520HF	0.00	0		0 NDF	15S 4.80				Spec_Int
34 3 121		520HF	0.46	21		0 VOL	ETL -2.52				R13DCLP+
34 3 121		520HF	0.00	0		0 CLP	ETL -2.52	0.10	0.11		R13DCLP+
34 3 121		520HF	0.54	24		0 VOL	ETL -2.41				R13DCLP+
34 3 121		520HF	0.00	0		0 CLP	ETL -2.41	0.10	0.11		R13DCLP+
34 3 121		520HF	0.00	0		0 CLP	UTS 1.82	0.14	0.16		R13DCLP+
34 3 121		520HF	1.03	29		0 VOL	UTS 1.82				R13DCLP+
34 3 117		540HF	0.46	8	ID 27	TWD	UTS 1.89				540_Bobbi
34 3 117		540HF	0.35	10		0 BVC	UTS 3.76				540_Bobbi
34 3 121		520HF	0.26	18		0 VOL	UTS 3.82				R13DCLP+
34 3 121		520HF	0.00	0		0 CLP	UTS 3.82	0.10	0.11		R13DCLP+
34 3 121		520HF	0.00	0		0 CLP	UTS 4.90	0.14	0.16		R13DCLP+
34 3 121		520HF	0.42	21		0 VOL	UTS 4.90				R13DCLP+
34 5 3		510UL	5.86	176		0 DNT	LTE 10.92				510_Bobbi
34 6 4		510UL	6.04	174		0 DNT	LTE 10.92				510_Bobbi
34 21 58		510UL	0.16	39		0 INR	12S -0.38				510_Bobbi
34 25 115		520HF	0.96	0	ID 11	TWD	06S 0.63				Spec_Int
34 25 58		510UL	0.45	43		0 NQI	06S 0.63				510_Bobbi
34 25 58		510UL	0.18	155		0 INR	11S 30.95				510_Bobbi
34 38 51		520HF	0.56	22	ID 40	VOL	ETL 2.16				KEXP_+Pt
34 38 51		520HF	0.00	0		0 CLP	ETL 2.16	0.12	0.14		KEXP_+Pt
34 53 55		520HF	1.12	24	ID 47	VOL	ETL 2.93				KEXP_+Pt
34 53 55		520HF	0.00	0		0 CLP	ETL 2.93	0.17	0.25		KEXP_+Pt
34 62 56		520HF	0.55	21	ID 36	VOL	ETL 0.50				KEXP_+Pt
34 62 56		520HF	0.00	0		0 CLP	ETL 0.50	0.11	0.15		KEXP_+Pt
34 64 56		520HF	0.93	29	ID 67	VOL	ETL 2.03				KEXP_+Pt
34 64 56		520HF	0.00	0		0 CLP	ETL 2.03	0.12	0.14		KEXP_+Pt
34 76 68		520HF	0.24	26	ID 54	VOL	ETL 0.54				KEXP_+Pt
34 76 68		520HF	0.00	0		0 CLP	ETL 0.54	0.34	0.18		KEXP_+Pt
34 76 68		520HF	0.19	23	ID 43	VOL	ETL 0.92				KEXP_+Pt
34 76 68		520HF	0.00	0		0 CLP	ETL 0.92	0.17	0.18		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
34 103 73		520HF	1.21 23	ID 43	VOL	ETL 0.52			KEXP_+Pt
34 103 73		520HF	0.00 0		CLP	ETL 0.52	0.21	0.19	KEXP_+Pt
35 5 3		510UL	5.78 176		0 DNT	LTE 10.79			510_Bobbi
35 7 4		510UL	6.60 176		0 DNT	LTE 10.70			510_Bobbi
35 26 58		510UL	0.19 19		0 INR	14S 21.63			510_Bobbi
35 27 79		520HF	0.61 30		0 VOL	ETL -1.38			R13DCLP+
35 27 79		520HF	0.00 0		0 CLP	ETL -1.38	0.12	0.18	R13DCLP+
35 27 79		520HF	0.71 28	ID 63	VOL	ETL 1.37			R13DCLP+
35 27 79		520HF	0.00 0		0 CLP	ETL 1.37	0.12	0.18	R13DCLP+
35 27 79		520HF	0.55 29	ID 67	VOL	ETL 3.36			R13DCLP+
35 27 79		520HF	0.00 0		0 CLP	ETL 3.36	0.12	0.09	R13DCLP+
35 27 79		520HF	0.38 20	ID 33	VOL	ETL 4.91			R13DCLP+
35 27 79		520HF	0.00 0		0 CLP	ETL 4.91	0.12	0.09	R13DCLP+
35 27 79		520HF	0.36 21	ID 36	VOL	ETL 5.00			R13DCLP+
35 27 79		520HF	0.00 0		0 CLP	ETL 5.00	0.18	0.18	R13DCLP+
35 32 58		510UL	0.16 114		0 INR	02S 19.22			510_Bobbi
35 42 115		520HF	0.00 0		0 NDF	01S 14.65			Spec_Int
35 42 59		510UL	1.34 23		0 ADI	01S 14.65			510_Bobbi
35 48 38		510UL	1.31 88		0 INR	01S 30.20			510_Bobbi
35 55 38		510UL	3.29 181		0 DNT	02S 11.52			510_Bobbi
35 55 133		520HF	0.00 0		0 NDF	03S -27.48			Spec_Int
35 104 105		510UL	0.52 112		0 INR	11S 0.16			510_Bobbi
35 104 105		510UL	2.46 172		0 INR	LTE 10.81			510_Bobbi
36 7 3		510UL	5.47 177		0 DNT	LTE 11.11			510_Bobbi
36 8 4		510UL	6.38 174		0 DNT	LTE 10.75			510_Bobbi
36 27 58		510UL	3.19 182		0 DNT	LTS 40.90			510_Bobbi
36 88 96		510UL	0.64 110		0 INR	LTE 4.87			510_Bobbi
36 96 110		540HF	0.43 6	ID 20	TWD	15S 29.79			540_Bobbi
36 96 123		520HF	0.09 38		0 VOL	UTS -16.57			R13DCLP+
36 96 123		520HF	0.00 0		0 CLP	UTS -16.57	0.14	0.17	R13DCLP+
36 103 156		520HF	0.00 0		0 NDF	01S -11.02			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
36 103 106		510UL	0.44 63	0	NQI	LTS 34.98			510_Bobbi
36 106 108		540HF	0.55 8	ID 27	TWD	15S 34.41			540_Bobbi
36 106 156		520HF	0.28 8	0	VOL	UTS -12.19			Spec_Int
36 106 156		520HF	0.00 0	0	CLP	UTS -12.19	0.15	0.11	Spec_Int
36 106 156		520HF	0.00 0	0	CLP	UTS -2.16	0.15	0.17	Spec_Int
36 106 156		520HF	0.37 21	0	VOL	UTS -2.16			Spec_Int
36 109 105		510UL	2.84 176	0	DNT	LTE 10.47			510_Bobbi
36 110 156		520HF	0.65 79	OD 20	TWD	12S 0.66			Spec_Int
36 110 105		510UL	0.87 99	0	NQI	12S 0.66			510_Bobbi
36 111 106		510UL	3.64 175	0	DNT	LTE 11.82			510_Bobbi
37 1 4		510UL	8.28 176	0	DNT	LTE 10.68			510_Bobbi
37 12 3		510UL	0.19 103	0	NQI	08S -0.49			510_Bobbi
37 12 110		520HF	0.65 106	OD 7	TWD	08S -0.47			Spec_Int
37 27 113		540HF	0.34 4	0	INR	07S 30.63			540_Bobbi
37 27 113		540HF	0.34 9	0	BVC	13S 20.97			540_Bobbi
37 27 115		520HF	0.00 0	0	NDF	14S -15.03			Spec_Int
37 27 115		520HF	0.29 18	0	VOL	14S -6.39			Spec_Int
37 27 115		520HF	0.00 0	0	CLP	14S -6.39	0.09	0.11	Spec_Int
37 28 50		520HF	0.29 12	0	VOL	ETL -2.00			KEXP_+Pt
37 28 50		520HF	0.00 0	0	CLP	ETL -2.00	0.11	0.15	KEXP_+Pt
37 31 50		520HF	0.00 0	0	CLP	ETL 0.02	0.17	0.10	KEXP_+Pt
37 31 50		520HF	0.37 19	ID 30	VOL	ETL 0.02			KEXP_+Pt
37 31 50		520HF	0.23 12	ID 13	VOL	ETL 0.74			KEXP_+Pt
37 31 50		520HF	0.00 0	0	CLP	ETL 0.74	0.11	0.10	KEXP_+Pt
37 40 58		510UL	0.83 83	0	INR	02S 20.99			510_Bobbi
37 40 58		510UL	0.56 77	0	INR	06S 12.86			510_Bobbi
37 40 58		510UL	3.06 81	0	ADI	06S 22.94			510_Bobbi
37 40 115		520HF	0.00 0	0	NDF	07S -16.06			Spec_Int
37 40 51		520HF	0.00 0	0	CLP	ETL 0.75	0.12	0.19	KEXP_+Pt
37 40 51		520HF	0.42 16	ID 22	VOL	ETL 0.75			KEXP_+Pt
37 40 51		520HF	0.24 16	ID 22	VOL	ETL 2.59			KEXP_+Pt
37 40 51		520HF	0.00 0	0	CLP	ETL 2.59	0.12	0.14	KEXP_+Pt
37 45 50		520HF	0.24 14	0	VOL	ETL -0.74			KEXP_+Pt
37 45 50		520HF	0.00 0	0	CLP	ETL -0.74	0.11	0.15	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location			Axial	Circ	Dataset
			Degrees	Percent				TSP	- Offset				
37 56 56		520HF	1.31	31		0	VOL	ETL	-0.71				KEXP_+Pt
37 56 56		520HF	0.00	90		0	CLP	ETL	-0.71	0.06	0.20		KEXP_+Pt
37 56 56		520HF	0.70	19	ID	30	VOL	ETL	2.78				KEXP_+Pt
37 56 56		520HF	0.00	90		0	CLP	ETL	2.78	0.06	0.10		KEXP_+Pt
37 67 55		520HF	0.00	0		0	CLP	ETL	0.05	0.17	0.15		KEXP_+Pt
37 67 55		520HF	0.44	28	ID	63	VOL	ETL	0.05				KEXP_+Pt
37 100 105		510UL	0.15	79		0	INR	LTE	12.65				510_Bobbi
37 107 106		510UL	0.28	110	OD	5	TWD	11S	-0.59				510_Bobbi
37 109 159		540HF	0.15	89		0	NQI	10S	25.90				540_Bobbi
37 109 135		520HF	0.00	0		0	NDF	11S	-10.10				Spec_Int
37 109 159		540HF	0.29	3		0	INR	15S	35.10				540_Bobbi
37 109 159		540HF	0.48	7		0	INR	15S	39.11				540_Bobbi
37 109 73		520HF	0.00	0		0	CLP	ETL	-0.63	0.16	0.19		KEXP_+Pt
37 109 73		520HF	0.52	17		0	VOL	ETL	-0.63				KEXP_+Pt
37 109 73		520HF	0.52	14		0	VOL	ETL	-0.09				KEXP_+Pt
37 109 73		520HF	0.00	0		0	CLP	ETL	-0.09	0.16	0.23		KEXP_+Pt
37 109 73		520HF	0.89	20	ID	33	VOL	ETL	0.01				KEXP_+Pt
37 109 73		520HF	0.00	0		0	CLP	ETL	0.01	0.11	0.19		KEXP_+Pt
37 109 159		540HF	4.17	173		0	DNT	LTE	10.80				540_Bobbi
37 109 167		520HF	0.00	0		0	CLP	UTS	-11.64	0.14	0.16		R13DCLP+
37 109 167		520HF	0.24	11		0	VOL	UTS	-11.64				R13DCLP+
37 109 167		520HF	0.30	17		0	VOL	UTS	-9.00				R13DCLP+
37 109 167		520HF	0.00	0		0	CLP	UTS	-9.00	0.14	0.16		R13DCLP+
37 109 167		520HF	0.00	0		0	CLP	UTS	-7.45	0.14	0.22		R13DCLP+
37 109 167		520HF	0.76	22		0	VOL	UTS	-7.45				R13DCLP+
37 109 167		520HF	0.24	13		0	VOL	UTS	-0.37				KEXP_+Pt
37 109 167		520HF	0.00	0		0	CLP	UTS	-0.37	0.18	0.16		KEXP_+Pt
37 110 156		520HF	0.00	0		0	NDF	15S	-0.13				Spec_Int
37 110 108		540HF	0.22	101		0	NQI	15S	-0.13				540_Bobbi
37 110 108		540HF	0.42	3		0	INR	15S	32.67				540_Bobbi
37 110 108		540HF	0.24	7		0	BVC	15S	35.26				540_Bobbi
37 110 108		540HF	4.38	174		0	DNT	LTE	11.17				540_Bobbi
37 110 156		520HF	0.24	10		0	VOL	UTS	-14.77				R13DCLP+
37 110 156		520HF	0.00	0		0	CLP	UTS	-14.77	0.15	0.17		R13DCLP+
37 110 156		520HF	0.17	19		0	VOL	UTS	-11.88				Spec_Int
37 110 156		520HF	0.00	0		0	CLP	UTS	-11.88	0.20	0.11		Spec_Int
37 110 156		520HF	0.00	0		0	CLP	UTS	-5.07	0.10	0.17		Spec_Int
37 110 156		520HF	0.19	22		0	VOL	UTS	-5.07				Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset	
			Degrees	Percent			TSP -	Offset				
37 110 156		520HF	0.00	0	0	CLP	UTS	-0.88	0.08	0.10	Spec_Int	
37 110 156		520HF	0.10	19	0	VOL	UTS	-0.88			Spec_Int	
37 110 156		520HF	0.15	22	0	VOL	UTS	-0.38			Spec_Int	
37 110 156		520HF	0.00	0	0	CLP	UTS	-0.38	0.10	0.12	Spec_Int	
37 110 108		540HF	0.24	16	0	BVC	UTS	2.42			540_Bobbi	
37 110 156		520HF	0.00	0	0	CLP	UTS	2.64	0.15	0.17	Spec_Int	
37 110 156		520HF	0.31	17	0	VOL	UTS	2.64			Spec_Int	
38 6 3		510UL	0.21	92	OD	4	TWD	09S	0.49		510_Bobbi	
38 10 3		510UL	2.60	186		0	DNT	LTS	9.56		510_Bobbi	
38 34 59		510UL	0.14	62	OD	4	TWD	10S	0.68		510_Bobbi	
38 81 67		520HF	0.00	0	0	CLP	ETL	0.10	0.16	0.14	KEXP_+Pt	
38 81 67		520HF	1.16	20	ID	33	VOL	ETL	0.10		KEXP_+Pt	
38 88 67		520HF	0.36	23		0	VOL	ETL	-0.96		KEXP_+Pt	
38 88 67		520HF	0.00	0		0	CLP	ETL	-0.96	0.16	0.14	KEXP_+Pt
38 88 67		520HF	0.28	13	ID	15	VOL	ETL	0.42		KEXP_+Pt	
38 88 67		520HF	0.00	0		0	CLP	ETL	0.42	0.16	0.19	KEXP_+Pt
38 105 156		520HF	0.64	76	OD	10	TWD	09S	0.14		Spec_Int	
38 105 105		510UL	0.22	83		0	NQI	09S	0.17		510_Bobbi	
38 114 12		460PP	1.47	138		0	COD	UTE	-1.75		Plug_MRP	
39 4 3		510UL	0.25	87		0	NQI	10S	-0.75		510_Bobbi	
39 4 110		520HF	0.00	0		0	NDF	10S	-0.75		Spec_Int	
39 14 3		510UL	0.15	78		0	INR	UTS	0.66		510_Bobbi	
39 24 59		510UL	0.56	108		0	INR	LTE	6.16		510_Bobbi	
39 29 50		520HF	0.00	0		0	CLP	ETL	-0.40	0.11	0.15	KEXP_+Pt
39 29 50		520HF	0.37	19		0	VOL	ETL	-0.40		KEXP_+Pt	
39 40 50		520HF	0.50	13	ID	15	VOL	ETL	0.01		KEXP_+Pt	
39 40 50		520HF	0.00	0		0	CLP	ETL	0.01	0.11	0.12	KEXP_+Pt
39 46 115		520HF	0.00	0		0	NDF	08S	5.76		Spec_Int	
39 46 59		510UL	1.13	81		0	ADI	08S	5.76		510_Bobbi	
39 50 37		510UL	2.58	181		0	DNT	13S	21.09		510_Bobbi	
39 57 56		520HF	0.78	24	ID	47	VOL	ETL	1.85		KEXP_+Pt	

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
39 57 56		520HF	0.00 0	0	CLP	ETL 1.85	0.11	0.15	KEXP_+Pt
39 68 55		520HF	0.00 0	0	CLP	ETL 2.61	0.17	0.20	KEXP_+Pt
39 68 55		520HF	0.62 17	ID 25	VOL	ETL 2.61			KEXP_+Pt
39 68 55		520HF	0.75 24	ID 47	VOL	ETL 4.78			KEXP_+Pt
39 68 55		520HF	0.00 0	0	CLP	ETL 4.78	0.22	0.25	KEXP_+Pt
39 73 67		520HF	0.24 32	ID 81	VOL	ETL 2.49			KEXP_+Pt
39 73 67		520HF	0.00 0	0	CLP	ETL 2.49	0.16	0.18	KEXP_+Pt
39 73 67		520HF	0.34 19	ID 30	VOL	ETL 3.56			KEXP_+Pt
39 73 67		520HF	0.00 0	0	CLP	ETL 3.56	0.16	0.14	KEXP_+Pt
39 73 67		520HF	0.64 15	ID 20	VOL	ETL 4.53			KEXP_+Pt
39 73 67		520HF	0.00 0	0	CLP	ETL 4.53	0.16	0.18	KEXP_+Pt
39 73 67		520HF	0.25 13	ID 15	VOL	ETL 5.15			KEXP_+Pt
39 73 67		520HF	0.00 0	0	CLP	ETL 5.15	0.14	0.14	KEXP_+Pt
39 89 67		520HF	0.28 22	ID 40	VOL	ETL 0.00			KEXP_+Pt
39 89 67		520HF	0.00 0	0	CLP	ETL 0.00	0.11	0.12	KEXP_+Pt
39 89 67		520HF	0.31 22	ID 40	VOL	ETL 2.50			KEXP_+Pt
39 89 67		520HF	0.00 0	0	CLP	ETL 2.50	0.12	0.19	KEXP_+Pt
39 101 108		540HF	0.47 7	ID 23	TWD	15S 34.58			540_Bobbi
39 101 156		520HF	0.00 0	0	CLP	UTS -13.71	0.15	0.11	Spec_Int
39 101 156		520HF	0.19 20	0	VOL	UTS -13.71			Spec_Int
39 101 156		520HF	0.28 12	0	VOL	UTS -12.50			Spec_Int
39 101 156		520HF	0.00 0	0	CLP	UTS -12.50	0.15	0.11	Spec_Int
39 107 156		520HF	0.00 0	0	NDF	10S -0.17			Spec_Int
39 107 106		510UL	0.08 67	0	NQI	10S -0.17			510_Bobbi
39 110 108		540HF	0.45 9	ID 30	TWD	15S 39.68			540_Bobbi
39 110 108		540HF	0.23 5	0	BVC	15S 41.74			540_Bobbi
39 110 73		520HF	0.88 26	ID 54	VOL	ETL 1.28			KEXP_+Pt
39 110 73		520HF	0.00 0	0	CLP	ETL 1.28	0.11	0.19	KEXP_+Pt
39 110 73		520HF	0.00 0	0	CLP	ETL 4.22	0.16	0.14	KEXP_+Pt
39 110 73		520HF	0.40 5	ID 3	VOL	ETL 4.22			KEXP_+Pt
39 110 108		540HF	3.51 175	0	DNT	LTE 10.87			540_Bobbi
39 110 156		520HF	0.00 0	0	CLP	UTS -7.33	0.20	0.17	Spec_Int
39 110 156		520HF	0.74 26	0	VOL	UTS -7.33			Spec_Int
39 110 156		520HF	0.16 19	0	VOL	UTS -5.19			Spec_Int
39 110 156		520HF	0.00 0	0	CLP	UTS -5.19	0.15	0.11	Spec_Int
39 110 156		520HF	0.23 38	0	VOL	UTS -4.57			Spec_Int
39 110 156		520HF	0.00 0	0	CLP	UTS -4.57	0.10	0.11	Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin / Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
39 110 156		520HF	0.00	0	0 CLP	UTS -3.56	0.15	0.11	Spec_Int
39 110 156		520HF	0.19	15	0 VOL	UTS -3.56			Spec_Int
39 110 156		520HF	0.18	16	0 VOL	UTS -0.75			R13DCLP+
39 110 156		520HF	0.00	0	0 CLP	UTS -0.75	0.15	0.11	R13DCLP+
39 110 156		520HF	0.00	0	0 CLP	UTS 0.00	0.15	0.17	R13DCLP+
39 110 156		520HF	0.39	12	0 VOL	UTS 0.00			R13DCLP+
39 110 156		520HF	0.26	20	0 VOL	UTS 1.36			R13DCLP+
39 110 156		520HF	0.00	0	0 CLP	UTS 1.36	0.10	0.17	R13DCLP+
39 113 105		510UL	0.15	60	0 INR	14S 30.87			510_Bobbi
39 113 105		510UL	0.25	89	0 INR	15S 0.97			510_Bobbi
39 113 105		510UL	5.43	175	0 DNT	LTE 10.70			510_Bobbi
39 114 106		510UL	4.82	174	0 DNT	LTE 11.12			510_Bobbi
40 15 3		510UL	0.28	94	0 INR	LTE 10.07			510_Bobbi
40 31 52		510UL	0.57	86	0 NQI	LTE 5.58			510_Bobbi
40 31 115		520HF	0.00	0	0 NDF	LTS -18.42			Spec_Int
40 44 115		520HF	0.00	0	0 NDF	01S -22.48			Spec_Int
40 44 53		510UL	0.18	90	0 NQI	LTS 23.89			510_Bobbi
40 49 50		520HF	0.98	23	0 VOL	ETL -0.49			KEXP_+Pt
40 49 50		520HF	0.00	0	0 CLP	ETL -0.49	0.11	0.15	KEXP_+Pt
40 50 41		510UL	2.96	185	0 DNT	03S 16.84			510_Bobbi
40 50 133		520HF	0.00	0	0 NDF	04S -23.16			Spec_Int
40 74 90		510UL	0.75	85	0 ADI	08S 29.00			510_Bobbi
40 74 113		520HF	0.00	0	0 NDF	09S -10.00			Spec_Int
40 106 105		510UL	0.46	99	0 INR	LTE 20.22			510_Bobbi
41 14 33		520HF	0.00	0	0 CLP	ETL -0.31	0.15	0.24	KEXP_+Pt
41 14 33		520HF	0.61	22	0 VOL	ETL -0.31			KEXP_+Pt
41 15 3		510UL	0.22	104	0 INR	LTE 10.68			510_Bobbi
41 15 3		510UL	0.13	87	0 INR	LTE 14.95			510_Bobbi
41 16 110		520HF	0.00	0	0 NDF	14S 2.87			Spec_Int
41 16 117		540HF	0.17	92	0 NQI	14S 2.87			540_Bobbi
41 17 33		520HF	0.13	67	0 INR	ETL -2.06			KEXP_+Pt
41 17 33		520HF	0.23	359	0 INR	ETL -0.20			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
41 18 3		510UL	0.18	130		0 INR	LTE 6.27				510_Bobbi
41 23 33		520HF	0.49	31		0 VOL	ETL -0.27				KEXP_+Pt
41 23 33		520HF	0.00	0		0 CLP	ETL -0.27	0.10	0.15		KEXP_+Pt
41 23 33		520HF	0.46	27	ID	55 VOL	ETL 0.20				KEXP_+Pt
41 23 33		520HF	0.00	0		0 CLP	ETL 0.20	0.10	0.15		KEXP_+Pt
41 24 50		520HF	0.15	10		0 VOL	ETL -2.85				KEXP_+Pt
41 24 50		520HF	0.00	0		0 CLP	ETL -2.85	0.17	0.10		KEXP_+Pt
41 24 50		520HF	0.27	20	ID	33 VOL	ETL 0.49				KEXP_+Pt
41 24 50		520HF	0.00	0		0 CLP	ETL 0.49	0.17	0.15		KEXP_+Pt
41 24 50		520HF	0.48	18	ID	27 VOL	ETL 2.70				KEXP_+Pt
41 24 50		520HF	0.00	0		0 CLP	ETL 2.70	0.17	0.15		KEXP_+Pt
41 24 50		520HF	0.00	0		0 CLP	ETL 3.75	0.11	0.15		KEXP_+Pt
41 24 50		520HF	0.19	20	ID	33 VOL	ETL 3.75				KEXP_+Pt
41 50 42		510UL	2.89	184		0 DNT	01S 23.40				510_Bobbi
41 60 55		520HF	0.19	7		0 VOL	ETL -0.84				KEXP_+Pt
41 60 55		520HF	0.00	0		0 CLP	ETL -0.84	0.17	0.15		KEXP_+Pt
41 60 55		520HF	0.54	24	ID	47 VOL	ETL 0.72				KEXP_+Pt
41 60 55		520HF	0.00	0		0 CLP	ETL 0.72	0.22	0.20		KEXP_+Pt
41 60 55		520HF	0.00	0		0 CLP	ETL 4.16	0.17	0.15		KEXP_+Pt
41 60 55		520HF	0.42	24	ID	47 VOL	ETL 4.16				KEXP_+Pt
41 67 41		510UL	2.42	188		0 INR	03S 17.40				510_Bobbi
41 67 41		510UL	2.57	187		0 DNT	06S 2.90				510_Bobbi
41 67 41		510UL	3.68	185		0 DNT	LTE 9.60				510_Bobbi
41 81 79		520HF	0.16	12		0 VOL	ETL -2.41				R13DCLP+
41 81 79		520HF	0.00	0		0 CLP	ETL -2.41	0.12	0.14		R13DCLP+
41 94 110		540HF	0.49	5	ID	17 TWD	15S 15.98				540_Bobbi
41 94 123		520HF	0.30	9		0 VOL	15S 16.11				R13DCLP+
41 94 123		520HF	0.00	0		0 CLP	15S 16.11	0.14	0.17		R13DCLP+
41 105 156		520HF	0.00	0		0 NDF	01S -34.88	10.89			Spec_Int
41 105 105		510UL	6.62	182		0 IDC	LTS 11.12	56.89			510_Bobbi
41 106 106		510UL	0.22	78		0 NQI	08S -0.82				510_Bobbi
41 106 156		520HF	0.40	63	OD	13 TWD	08S -0.82				Spec_Int
41 109 79		520HF	0.00	0		0 CLP	ETL -3.39	0.12	0.09		R13DCLP+
41 109 79		520HF	0.18	35		0 VOL	ETL -3.39				R13DCLP+
41 109 79		520HF	0.42	26	ID	54 VOL	ETL 1.64				R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
41 109 79		520HF	0.00	0		0	CLP	ETL	1.64	0.12	0.14	R13DCLP+
41 109 79		520HF	0.42	15	ID	20	VOL	ETL	1.99			R13DCLP+
41 109 79		520HF	0.00	0		0	CLP	ETL	1.99	0.12	0.14	R13DCLP+
41 109 79		520HF	1.40	33	ID	86	VOL	ETL	2.59			R13DCLP+
41 109 79		520HF	0.00	0		0	CLP	ETL	2.59	0.18	0.23	R13DCLP+
41 112 12		460PP	0.23	121		0	COD	UTE	-0.49			Plug_MRP
42 18 4		510UL	0.78	95		0	NQI	LTE	8.11			510_Bobbi
42 18 110		520HF	0.00	0		0	NDF	LTS	-15.89			Spec_Int
42 25 50		520HF	0.00	0		0	CLP	ETL	1.34	0.11	0.15	KEXP_+Pt
42 25 50		520HF	0.31	9	ID	8	VOL	ETL	1.34			KEXP_+Pt
42 29 50		520HF	0.30	25	ID	51	VOL	ETL	0.02			KEXP_+Pt
42 29 50		520HF	0.00	0		0	CLP	ETL	0.02	0.17	0.15	KEXP_+Pt
42 52 41		510UL	1.10	103		0	INR	01S	34.48			510_Bobbi
42 52 41		510UL	2.06	97		0	INR	02S	35.64			510_Bobbi
42 67 56		520HF	0.38	18	ID	27	VOL	ETL	0.25			KEXP_+Pt
42 67 56		520HF	0.00	0		0	CLP	ETL	0.25	0.11	0.10	KEXP_+Pt
42 67 56		520HF	0.26	16	ID	22	VOL	ETL	0.60			KEXP_+Pt
42 67 56		520HF	0.00	0		0	CLP	ETL	0.60	0.06	0.10	KEXP_+Pt
42 67 56		520HF	0.28	16	ID	22	VOL	ETL	3.57			KEXP_+Pt
42 67 56		520HF	0.00	0		0	CLP	ETL	3.57	0.17	0.10	KEXP_+Pt
42 68 55		520HF	0.00	0		0	RIC	ETL	0.56			KEXP_+Pt
42 69 95		520HF	0.85	19	ID	30	VOL	ETL	3.00			KEXP_+Pt
42 69 95		520HF	0.00	0		0	CLP	ETL	3.00	0.10	0.15	KEXP_+Pt
42 73 110		540HF	0.44	10	ID	33	TWD	15S	41.44			540_Bobbi
42 73 68		520HF	0.00	0		0	CLP	ETL	-0.36	0.11	0.14	KEXP_+Pt
42 73 68		520HF	0.20	31		0	VOL	ETL	-0.36			KEXP_+Pt
42 73 68		520HF	0.00	0		0	CLP	ETL	1.14	0.17	0.14	KEXP_+Pt
42 73 68		520HF	0.34	20	ID	33	VOL	ETL	1.14			KEXP_+Pt
42 73 68		520HF	0.46	18	ID	27	VOL	ETL	1.40			KEXP_+Pt
42 73 68		520HF	0.00	0		0	CLP	ETL	1.40	0.11	0.14	KEXP_+Pt
42 73 113		520HF	0.44	17		0	VOL	UTS	-5.25			Spec_Int
42 73 113		520HF	0.00	0		0	CLP	UTS	-5.25	0.14	0.17	Spec_Int
42 73 113		520HF	0.27	17		0	VOL	UTS	-0.52			Spec_Int
42 73 113		520HF	0.00	0		0	CLP	UTS	-0.52	0.09	0.11	Spec_Int
42 73 113		520HF	0.00	0		0	CLP	UTS	3.50	0.19	0.11	Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
42 73 113		520HF	0.39	15		0 VOL	UTS 3.50				Spec_Int
42 73 113		520HF	0.24	8		0 VOL	UTS 4.62				Spec_Int
42 73 113		520HF	0.00	0		0 CLP	UTS 4.62	0.09	0.06		Spec_Int
42 74 67		520HF	0.00	0		0 CLP	ETL 1.67	0.16	0.18		KEXP_+Pt
42 74 67		520HF	0.37	16	ID 22	VOL	ETL 1.67				KEXP_+Pt
42 74 67		520HF	0.36	13	ID 15	VOL	ETL 1.96				KEXP_+Pt
42 74 67		520HF	0.00	0		0 CLP	ETL 1.96	0.16	0.16		KEXP_+Pt
42 74 67		520HF	0.51	15	ID 20	VOL	ETL 2.67				KEXP_+Pt
42 74 67		520HF	0.00	0		0 CLP	ETL 2.67	0.22	0.23		KEXP_+Pt
42 76 89		510UL	5.42	183		0 IDC	LTS 0.00	25.11			510_Bobbi
42 76 113		520HF	0.00	0		0 NDF	LTS 0.00	25.11			Spec_Int
42 89 68		520HF	0.00	0		0 CLP	ETL 2.64	0.11	0.18		KEXP_+Pt
42 89 68		520HF	0.71	28	ID 63	VOL	ETL 2.64				KEXP_+Pt
42 89 68		520HF	0.48	27	ID 58	VOL	ETL 5.09				KEXP_+Pt
42 89 68		520HF	0.00	0		0 CLP	ETL 5.09	0.17	0.14		KEXP_+Pt
42 89 90		510UL	0.25	18	ID 60	TWD	UTS 0.60				510_Bobbi
42 89 113		520HF	0.00	0		0 CLP	UTS 0.69	0.14	0.22		Spec_Int
42 89 180		540HF	0.30	14	ID 47	TWD	UTS 0.69				540_BobEx
42 89 113		520HF	0.56	21		0 VOL	UTS 0.69				Spec_Int
42 89 90		510UL	0.22	91		0 NQI	UTS 0.83				510_Bobbi
42 89 113		520HF	0.00	0		0 NDF	UTS 0.90				Spec_Int
42 89 180		540HF	0.14	77		0 NQI	UTS 0.90				540_BobEx
42 101 73		520HF	0.00	0		0 CLP	ETL -1.49	0.16	0.18		KEXP_+Pt
42 101 73		520HF	1.30	28		0 VOL	ETL -1.49				KEXP_+Pt
42 108 108		540HF	0.29	20		0 BVC	15S 19.44				540_Bobbi
42 108 167		520HF	1.60	27		0 VOL	15S 20.04				R13DCLP+
42 108 167		520HF	0.00	0		0 CLP	15S 20.04	0.14	0.22		R13DCLP+
42 108 167		520HF	0.00	0		0 CLP	15S 27.02	0.09	0.16		R13DCLP+
42 108 167		520HF	0.36	22		0 VOL	15S 27.02				R13DCLP+
42 108 167		520HF	0.00	0		0 CLP	15S 30.08	0.14	0.11		R13DCLP+
42 108 167		520HF	0.22	11		0 VOL	15S 30.08				R13DCLP+
42 109 74		520HF	0.35	21	ID 36	VOL	ETL 1.32				KEXP_+Pt
42 109 74		520HF	0.00	0		0 CLP	ETL 1.32	0.12	0.14		KEXP_+Pt
42 109 74		520HF	0.56	22	ID 40	VOL	ETL 2.72				KEXP_+Pt
42 109 74		520HF	0.00	0		0 CLP	ETL 2.72	0.12	0.14		KEXP_+Pt
42 110 73		520HF	0.36	17		0 VOL	ETL -3.33				KEXP_+Pt
42 110 73		520HF	0.00	0		0 CLP	ETL -3.33	0.16	0.14		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset			Axial	Circ	Dataset
42 111 74		520HF	0.58	21	ID 36	VOL	ETL	1.16			KEXP_+Pt
42 111 74		520HF	0.00	0	0	CLP	ETL	1.16	0.06	0.09	KEXP_+Pt
42 112 73		520HF	0.00	0	0	CLP	ETL	-1.32	0.21	0.19	KEXP_+Pt
42 112 73		520HF	0.41	18	0	VOL	ETL	-1.32			KEXP_+Pt
42 112 73		520HF	0.00	0	0	CLP	ETL	1.01	0.21	0.19	KEXP_+Pt
42 112 73		520HF	0.44	15	ID 20	VOL	ETL	1.01			KEXP_+Pt
42 112 73		520HF	0.00	0	0	CLP	ETL	1.38	0.32	0.28	KEXP_+Pt
42 112 73		520HF	2.50	30	ID 71	VOL	ETL	1.38			KEXP_+Pt
42 112 73		520HF	0.00	0	0	RPD	ETL	1.38			KEXP_+Pt
42 112 130		520HF	2.87	26	0	PID	ETL	1.82			KEXP_+Pt
42 112 73		520HF	0.00	0	0	CLP	ETL	1.82	0.16	0.19	KEXP_+Pt
42 112 73		520HF	0.41	19	ID 30	VOL	ETL	1.82			KEXP_+Pt
42 112 73		520HF	0.27	22	ID 40	VOL	ETL	3.93			KEXP_+Pt
42 112 73		520HF	0.00	0	0	CLP	ETL	3.93	0.21	0.14	KEXP_+Pt
42 114 108		540HF	0.28	146	0	INR	13S	-0.79			540_Bobbi
42 114 156		520HF	0.48	105	OD 8	TWD	13S	-0.72			Spec_Int
42 114 156		520HF	0.28	99	OD 4	TWD	13S	0.61			Spec_Int
42 114 108		540HF	0.43	129	0	NQI	13S	0.67			540_Bobbi
42 114 108		540HF	0.31	140	0	INR	15S	0.64			540_Bobbi
42 114 108		540HF	0.33	14	0	BVC	15S	34.62			540_Bobbi
42 114 108		540HF	4.64	176	0	DNT	LTE	11.12			540_Bobbi
42 114 156		520HF	0.00	0	0	RIC	UTS	-18.62			R13DCLP+
42 114 167		520HF	0.34	21	0	VOL	UTS	-18.62			R13DCLP+
42 114 167		520HF	0.00	0	0	CLP	UTS	-18.62	0.14	0.17	R13DCLP+
42 114 156		520HF	0.00	0	0	CLP	UTS	-15.25	0.15	0.11	R13DCLP+
42 114 156		520HF	0.20	21	0	VOL	UTS	-15.25			R13DCLP+
42 114 156		520HF	0.39	20	0	VOL	UTS	-12.57			Spec_Int
42 114 156		520HF	0.00	0	0	CLP	UTS	-12.57	0.15	0.17	Spec_Int
42 114 156		520HF	0.22	15	0	VOL	UTS	-3.10			Spec_Int
42 114 156		520HF	0.00	0	0	CLP	UTS	-3.10	0.15	0.17	Spec_Int
43 6 4		510UL	0.16	105	0	NQI	07S	18.24			510_Bobbi
43 6 110		520HF	0.00	0	0	NDF	07S	18.24			Spec_Int
43 6 4		510UL	0.17	80	0	NQI	13S	33.08			510_Bobbi
43 6 110		520HF	0.00	0	0	NDF	14S	-2.92			Spec_Int
43 27 53		510UL	1.71	95	0	INR	12S	35.12			510_Bobbi
43 36 52		510UL	1.44	168	0	INR	LTE	2.59			510_Bobbi
43 76 79		520HF	0.12	6	0	VOL	ETL	-2.19			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location			Axial	Circ	Dataset
			Degrees	Percent				TSP -	Offset				
43 76 79		520HF	0.00	0		0	CLP	ETL	-2.19		0.18	0.14	R13DCLP+
43 82 110		540HF	0.43	9	ID	30	TWD	07S	37.61				540_Bobbi
43 82 113		520HF	0.00	0		0	NDF	08S	-2.39				Spec_Int
43 98 89		510UL	0.34	81	OD	6	TWD	03S	0.63				510_Bobbi
43 107 108		540HF	0.45	3		0	INR	15S	37.09				540_Bobbi
43 111 156		520HF	0.00	0		0	NDF	10S	7.40				Spec_Int
43 111 108		540HF	0.41	87		0	ADI	10S	7.40				540_Bobbi
43 111 108		540HF	0.30	11		0	BVC	15S	43.95				540_Bobbi
43 111 167		520HF	0.00	0		0	CLP	ETL	1.28	0.09	0.11		R13DCLP+
43 111 167		520HF	0.31	12	ID	16	VOL	ETL	1.28				R13DCLP+
43 111 167		520HF	0.00	0		0	NDF	UTS	-6.74				R13DCLP+
43 111 167		520HF	0.17	12		0	VOL	UTS	-5.19				R13DCLP+
43 111 167		520HF	0.00	0		0	CLP	UTS	-5.19	0.14	0.16		R13DCLP+
43 111 167		520HF	0.59	21		0	VOL	UTS	-2.67				R13DCLP+
43 111 167		520HF	0.00	0		0	CLP	UTS	-2.67	0.19	0.16		R13DCLP+
43 113 106		510UL	2.68	176		0	DNT	LTE	10.81				510_Bobbi
43 116 105		510UL	4.11	179		0	DNT	LTE	10.17				510_Bobbi
44 3 8		510UL	0.28	93		0	NQI	LTE	3.12				510_Bobbi
44 3 110		520HF	0.00	0		0	NDF	LTE	3.12				Spec_Int
44 3 8		510UL	0.36	98		0	INR	LTE	8.56				510_Bobbi
44 19 34		520HF	0.21	35		0	INR	ETL	-1.59				KEXP_+Pt
44 19 83		520HF	0.19	12		0	PRA	ETL	-1.15				KEXP_+Pt
44 19 34		520HF	0.00	0		0	CLP	ETL	-1.01	0.17	0.19		KEXP_+Pt
44 19 34		520HF	0.27	22		0	VOL	ETL	-1.01				KEXP_+Pt
44 32 52		510UL	1.12	70		0	INR	03S	15.74				510_Bobbi
44 91 90		510UL	0.22	87		0	INR	LTE	4.72				510_Bobbi
44 106 156		520HF	0.23	96	OD	7	TWD	04S	0.70				Spec_Int
44 106 106		510UL	0.20	67		0	NQI	04S	0.70				510_Bobbi
44 112 156		520HF	0.00	0		0	NDF	10S	7.89				Spec_Int
44 112 106		510UL	0.34	115		0	NQI	10S	7.89				510_Bobbi
44 114 106		510UL	2.95	174		0	DNT	LTE	11.03				510_Bobbi
44 119 106		510UL	3.29	174		0	DNT	LTE	11.29				510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
45 2 8		510UL	0.16	79	0 INR	10S	-0.80			510_Bobbi
45 25 79		520HF	0.15	1	0 VOL	ETL	-2.52			R13DCLP+
45 25 79		520HF	0.00	0	0 CLP	ETL	-2.52	0.12	0.14	R13DCLP+
45 25 79		520HF	0.21	15	0 INR	ETL	-0.52			R13DCLP+
45 28 53		510UL	4.60	181	0 DNT	12S	28.77			510_Bobbi
45 33 50		520HF	0.14	35	0 VOL	ETL	-0.36			KEXP_+Pt
45 33 50		520HF	0.00	0	0 CLP	ETL	-0.36	0.11	0.15	KEXP_+Pt
45 81 79		520HF	0.31	18	0 VOL	ETL	-0.82			R13DCLP+
45 81 79		520HF	0.00	0	0 CLP	ETL	-0.82	0.12	0.14	R13DCLP+
45 108 73		520HF	0.00	0	0 CLP	ETL	0.13	0.16	0.19	KEXP_+Pt
45 108 73		520HF	1.01	27	ID 58	VOL	ETL	0.13		KEXP_+Pt
45 108 73		520HF	0.00	0	0 CLP	ETL	1.43	0.16	0.19	KEXP_+Pt
45 108 73		520HF	0.82	25	ID 51	VOL	ETL	1.43		KEXP_+Pt
45 108 73		520HF	0.51	45	OD 96	VOL	ETL	2.63		KEXP_+Pt
45 108 73		520HF	0.00	0	0 CLP	ETL	2.63	0.11	0.14	KEXP_+Pt
45 113 108		540HF	0.34	7	0 BVC	15S	36.34			540_Bobbi
45 113 167		520HF	0.00	0	0 CLP	UTS	-12.51	0.14	0.16	R13DCLP+
45 113 167		520HF	0.23	12	0 VOL	UTS	-12.51			R13DCLP+
45 113 167		520HF	0.42	14	0 VOL	UTS	-10.35			R13DCLP+
45 113 167		520HF	0.00	0	0 CLP	UTS	-10.35	0.14	0.16	R13DCLP+
45 117 105		510UL	4.32	175	0 DNT	LTE	10.74			510_Bobbi
46 19 7		510UL	0.56	102	0 NQI	LTE	8.29			510_Bobbi
46 19 110		520HF	0.00	0	0 NDF	LTS	-15.71			Spec_Int
46 19 110		520HF	0.00	0	0 NDF	LTS	15.89			Spec_Int
46 19 7		510UL	0.21	121	0 NQI	LTS	15.89			510_Bobbi
46 20 8		510UL	0.42	107	0 INR	LTE	7.53			510_Bobbi
46 20 8		510UL	0.47	100	0 INR	LTE	7.86			510_Bobbi
46 27 50		520HF	0.00	0	0 CLP	ETL	0.52	0.11	0.10	KEXP_+Pt
46 27 50		520HF	0.45	15	ID 20	VOL	ETL	0.52		KEXP_+Pt
46 27 50		520HF	0.49	19	ID 30	VOL	ETL	0.81		KEXP_+Pt
46 27 50		520HF	0.00	0	0 CLP	ETL	0.81	0.14	0.17	KEXP_+Pt
46 27 50		520HF	0.29	16	ID 22	VOL	ETL	1.20		KEXP_+Pt
46 27 50		520HF	0.00	0	0 CLP	ETL	1.20	0.11	0.10	KEXP_+Pt
46 27 50		520HF	0.36	24	ID 47	VOL	ETL	1.51		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location			Axial	Circ	Dataset
			Degrees	Percent				TSP -	Offset				
46 27 50		520HF	0.00	0		0	CLP	ETL	1.51		0.17	0.15	KEXP_+Pt
46 52 41		510UL	3.94	185		0	DNT	06S	9.09				510_Bobbi
46 59 56		520HF	0.72	24	ID	47	VOL	ETL	0.08				KEXP_+Pt
46 59 56		520HF	0.00	0		0	CLP	ETL	0.08	0.05	0.20		KEXP_+Pt
46 61 42		510UL	0.84	86		0	ADI	02S	33.85				510_Bobbi
46 61 160		520HF	0.00	0		0	NDF	03S	-5.15				Spec_Int
46 71 85		510UL	0.22	105		0	INR	UTS	1.77				510_Bobbi
46 72 67		520HF	0.43	28	ID	63	SCI	ETL	2.63				KEXP_+Pt
46 72 67		520HF	0.00	30		0	ARC	ETL	2.63		0.16		KEXP_+Pt
46 72 67		520HF	0.54	15	ID	20	VOL	ETL	3.55				KEXP_+Pt
46 72 67		520HF	0.00	0		0	CLP	ETL	3.55	0.16	0.18		KEXP_+Pt
46 72 67		520HF	0.33	11	ID	11	VOL	ETL	4.39				KEXP_+Pt
46 72 67		520HF	0.00	0		0	CLP	ETL	4.39	0.20	0.18		KEXP_+Pt
46 72 67		520HF	0.00	0		0	CLP	ETL	4.75	0.20	0.18		KEXP_+Pt
46 72 67		520HF	0.38	17	ID	25	VOL	ETL	4.75				KEXP_+Pt
46 80 67		520HF	0.59	23	ID	43	SCI	ETL	0.75				KEXP_+Pt
46 80 67		520HF	0.00	34		0	ARC	ETL	0.75		0.18		KEXP_+Pt
46 80 67		520HF	0.00	0		0	CLP	ETL	1.91	0.16	0.14		KEXP_+Pt
46 80 67		520HF	0.46	15	ID	20	VOL	ETL	1.91				KEXP_+Pt
46 87 68		520HF	0.36	20	ID	33	VOL	ETL	2.69				KEXP_+Pt
46 87 68		520HF	0.00	0		0	CLP	ETL	2.69	0.12	0.09		KEXP_+Pt
46 87 68		520HF	0.47	30	ID	71	VOL	ETL	3.26				KEXP_+Pt
46 87 68		520HF	0.00	0		0	CLP	ETL	3.26	0.12	0.18		KEXP_+Pt
46 88 110		540HF	0.47	10	ID	33	TWD	15S	30.21				540_Bobbi
46 88 123		520HF	0.36	13		0	VOL	UTS	-16.62				R13DCLP+
46 88 123		520HF	0.00	0		0	CLP	UTS	-16.62	0.15	0.22		R13DCLP+
46 89 68		520HF	0.35	17	ID	25	VOL	ETL	2.19				KEXP_+Pt
46 89 68		520HF	0.00	0		0	CLP	ETL	2.19	0.17	0.14		KEXP_+Pt
46 104 73		520HF	0.35	19	ID	30	VOL	ETL	2.31				KEXP_+Pt
46 104 73		520HF	0.00	0		0	CLP	ETL	2.31	0.11	0.14		KEXP_+Pt
46 104 73		520HF	0.33	14	ID	17	VOL	ETL	2.97				KEXP_+Pt
46 104 73		520HF	0.00	0		0	CLP	ETL	2.97	0.11	0.14		KEXP_+Pt
46 106 131		540HF	0.42	4		0	INR	15S	33.38				540_BobEx
46 106 106		510UL	0.59	6	ID	20	TWD	15S	33.76				510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
46 114 106		510UL	3.77	176	0 DNT	LTE	10.91			510_Bobbi
47 13 79		520HF	0.08	146	0 INR	ETL	-1.27			R13DCLP+
47 15 33		520HF	0.16	38	0 VOL	ETL	-0.40			KEXP_+Pt
47 15 33		520HF	0.00	0	0 CLP	ETL	-0.40	0.10	0.15	KEXP_+Pt
47 39 50		520HF	0.00	0	0 CLP	ETL	-0.71	0.11	0.10	KEXP_+Pt
47 39 50		520HF	0.24	7	0 VOL	ETL	-0.71			KEXP_+Pt
47 63 113		540HF	0.79	7	ID 23	TWD 03S	27.62			540_Bobbi
47 63 160		520HF	0.00	0	0 NDF	04S	-12.38			Spec_Int
47 81 86		510UL	6.38	183	0 DNT	15S	2.76			510_Bobbi
47 84 110		540HF	0.41	8	ID 27	TWD 15S	39.41			540_Bobbi
47 84 113		520HF	0.34	14	0 VOL	UTS	-6.70			Spec_Int
47 84 113		520HF	0.00	0	0 CLP	UTS	-6.70	0.09	0.17	Spec_Int
47 89 67		520HF	0.00	0	0 CLP	ETL	1.99	0.18	0.16	KEXP_+Pt
47 89 67		520HF	0.36	13	ID 15	VOL ETL	1.99			KEXP_+Pt
47 117 105		510UL	3.11	168	0 DNT	LTE	10.86			510_Bobbi
47 121 105		510UL	3.31	171	0 DNT	LTE	10.95			510_Bobbi
48 20 33		520HF	0.82	25	0 VOL	ETL	-0.18			KEXP_+Pt
48 20 33		520HF	0.00	0	0 CLP	ETL	-0.18	0.10	0.19	KEXP_+Pt
48 28 50		520HF	0.20	17	0 VOL	ETL	-1.39			KEXP_+Pt
48 28 50		520HF	0.00	0	0 CLP	ETL	-1.39	0.11	0.10	KEXP_+Pt
48 28 50		520HF	0.33	16	0 VOL	ETL	-0.27			KEXP_+Pt
48 28 50		520HF	0.00	0	0 CLP	ETL	-0.27	0.11	0.10	KEXP_+Pt
48 47 50		520HF	0.39	13	0 VOL	ETL	-0.45			KEXP_+Pt
48 47 50		520HF	0.00	0	0 CLP	ETL	-0.45	0.11	0.15	KEXP_+Pt
48 56 42		510UL	0.57	87	0 ADI	14S	20.02			510_Bobbi
48 56 160		520HF	0.00	0	0 NDF	15S	-14.98			Spec_Int
48 58 56		520HF	0.28	19	ID 30	VOL ETL	0.10			KEXP_+Pt
48 58 56		520HF	0.00	0	0 CLP	ETL	0.10	0.17	0.10	KEXP_+Pt
48 60 56		520HF	0.33	21	0 VOL	ETL	-5.76			KEXP_+Pt
48 60 56		520HF	0.00	0	0 CLP	ETL	-5.76	0.11	0.10	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
48 65 55		520HF	0.00	0		0	CLP	ETL	0.78	0.17	0.19	KEXP_+Pt
48 65 55		520HF	0.41	18	ID	27	VOL	ETL	0.78			KEXP_+Pt
48 66 42		510UL	0.71	92		0	NQI	LTE	3.36			510_Bobbi
48 66 133		520HF	0.00	0		0	NDF	LTE	3.36			Spec_Int
48 66 160		520HF	0.00	0		0	RIC	LTS	-20.64			Spec_Int
48 78 67		520HF	0.00	0		0	CLP	ETL	3.03	0.22	0.18	KEXP_+Pt
48 78 67		520HF	0.22	14	ID	17	VOL	ETL	3.03			KEXP_+Pt
48 85 134		520HF	0.00	0		0	NDF	LTS	2.91			LTS_+Pt
48 85 86		510UL	0.68	67		0	NQI	LTS	2.91			510_Bobbi
48 92 67		520HF	0.00	0		0	CLP	ETL	2.82	0.16	0.18	KEXP_+Pt
48 92 67		520HF	0.40	16	ID	22	VOL	ETL	2.82			KEXP_+Pt
48 118 108		540HF	0.40	6	ID	20	TWD	14S	29.54			540_Bobbi
48 118 108		540HF	0.26	6		0	BVC	14S	30.46			540_Bobbi
48 118 156		520HF	0.00	0		0	RIC	15S	-12.30			R13DCLP+
48 118 167		520HF	0.32	11		0	VOL	15S	-12.30			R13DCLP+
48 118 167		520HF	0.00	0		0	CLP	15S	-12.30	0.14	0.11	R13DCLP+
48 118 156		520HF	0.38	18		0	VOL	15S	-5.84			Spec_Int
48 118 156		520HF	0.00	0		0	CLP	15S	-5.84	0.15	0.11	Spec_Int
48 118 156		520HF	0.23	24		0	VOL	15S	-4.98			Spec_Int
48 118 156		520HF	0.00	0		0	CLP	15S	-4.98	0.10	0.17	Spec_Int
48 118 156		520HF	0.00	0		0	CLP	15S	-1.21			Spec_Int
48 118 156		520HF	0.34	15		0	VOL	15S	-1.21	0.15	0.11	Spec_Int
48 118 156		520HF	0.00	0		0	CLP	15S	4.54			Spec_Int
48 118 156		520HF	0.16	10		0	VOL	15S	4.54			Spec_Int
48 119 106		510UL	4.34	174		0	DNT	LTE	10.83			510_Bobbi
48 121 106		510UL	0.12	90		0	NQI	12S	0.36			510_Bobbi
48 121 156		520HF	0.00	0		0	NDF	12S	0.36			Spec_Int
48 121 106		510UL	3.11	173		0	DNT	LTE	10.22			510_Bobbi
48 123 14		460PP	0.15	136		0	AOD	UTE	-0.16			Plug_MRP
49 1 8		510UL	0.47	96		0	NQI	LTE	14.17			510_Bobbi
49 1 110		520HF	0.00	0		0	NDF	LTS	-9.83			Spec_Int
49 23 117		540HF	0.36	7		0	BVC	15S	42.55			540_Bobbi
49 23 121		520HF	0.00	0		0	CLP	UTS	-3.77	0.14	0.11	R13DCLP+
49 23 121		520HF	0.31	10		0	VOL	UTS	-3.77			R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/		Code	Location		Axial	Circ	Dataset		
			Degrees	Percent		TSP - Offset						
49	73	160	520HF	0.00	0	0	CLP	UTS	3.66	0.14	0.17	R13DCLP+
49	73	160	520HF	0.26	9	0	VOL	UTS	3.66			R13DCLP+
49	73	113	540HF	0.73	11	ID 37	TWD	UTS	5.00			540_Bobbi
49	73	160	520HF	0.00	0	0	CLP	UTS	5.65	0.14	0.22	R13DCLP+
49	73	160	520HF	1.49	30	0	VOL	UTS	5.65			R13DCLP+
49	73	160	520HF	0.00	0	0	CLP	UTS	6.41	0.14	0.22	R13DCLP+
49	73	160	520HF	0.41	19	0	VOL	UTS	6.41			R13DCLP+
49	82	110	540HF	0.24	10	0	INR	15S	39.84			540_Bobbi
49	82	110	540HF	0.20	7	0	INR	15S	41.42			540_Bobbi
49	82	110	540HF	0.17	15	0	INR	15S	42.33			540_Bobbi
49	82	123	520HF	0.00	0	0	CLP	UTS	-6.74	0.19	0.11	R13DCLP+
49	82	123	520HF	0.28	10	0	VOL	UTS	-6.74			R13DCLP+
49	82	123	520HF	0.00	0	0	CLP	UTS	-5.15	0.10	0.11	R13DCLP+
49	82	123	520HF	0.04	29	0	VOL	UTS	-5.15			R13DCLP+
49	82	123	520HF	0.00	0	0	CLP	UTS	-0.07	0.19	0.16	R13DCLP+
49	82	123	520HF	0.36	20	0	VOL	UTS	-0.07			R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	7.38	0.09	0.11	R13DCLP+
50	1	121	520HF	0.12	7	0	VOL	14S	7.38			R13DCLP+
50	1	121	520HF	0.18	18	0	VOL	14S	8.98			R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	8.98	0.14	0.11	R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	9.48	0.14	0.17	R13DCLP+
50	1	121	520HF	0.11	10	0	VOL	14S	9.48			R13DCLP+
50	1	121	520HF	0.36	11	0	VOL	14S	9.83			R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	9.83	0.09	0.11	R13DCLP+
50	1	117	540HF	0.55	5	ID 17	TWD	14S	10.12			540_Bobbi
50	1	121	520HF	0.00	0	0	CLP	14S	10.25	0.09	0.11	R13DCLP+
50	1	121	520HF	0.39	15	0	VOL	14S	10.25			R13DCLP+
50	1	121	520HF	0.23	21	0	VOL	14S	10.56			R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	10.56	0.14	0.11	R13DCLP+
50	1	121	520HF	0.17	12	0	VOL	14S	15.01			R13DCLP+
50	1	121	520HF	0.00	0	0	CLP	14S	15.01	0.19	0.17	R13DCLP+
50	15	33	520HF	0.28	25	0	VOL	ETL	-0.94			KEXP_+Pt
50	15	33	520HF	0.00	0	0	CLP	ETL	-0.94	0.10	0.19	KEXP_+Pt
50	15	33	520HF	0.00	0	0	CLP	ETL	-0.10	0.10	0.14	KEXP_+Pt
50	15	33	520HF	0.22	30	0	VOL	ETL	-0.10			KEXP_+Pt
50	18	79	520HF	0.00	0	0	CLP	ETL	-2.45	0.11	0.18	R13DCLP+
50	18	79	520HF	0.26	17	0	VOL	ETL	-2.45			R13DCLP+
50	18	79	520HF	0.44	28	0	VOL	ETL	-1.25			R13DCLP+
50	18	79	520HF	0.00	0	0	CLP	ETL	-1.25	0.16	0.18	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
50 21 79		520HF	0.15	18		0 VOL	ETL -1.88				R13DCLP+
50 21 79		520HF	0.00	0		0 CLP	ETL -1.88	0.11	0.14		R13DCLP+
50 21 79		520HF	0.42	23	ID 43	0 VOL	ETL 0.98				R13DCLP+
50 21 79		520HF	0.00	0		0 CLP	ETL 0.98	0.11	0.14		R13DCLP+
50 21 79		520HF	0.12	7	ID 5	0 VOL	ETL 3.09				R13DCLP+
50 21 79		520HF	0.00	0		0 CLP	ETL 3.09	0.11	0.14		R13DCLP+
50 25 8		510UL	4.49	177		0 DNT	UTS 4.44				510_Bobbi
50 36 52		510UL	0.19	115		0 NQI	04S 22.59				510_Bobbi
50 36 114		520HF	0.00	0		0 NDF	05S -16.41				Spec_Int
50 36 52		510UL	0.14	152		0 INR	LTE 2.39				510_Bobbi
50 41 50		520HF	0.28	27		0 VOL	ETL -0.23				KEXP_+Pt
50 41 50		520HF	0.00	0		0 CLP	ETL -0.23	0.15	0.15		KEXP_+Pt
50 60 79		520HF	0.62	26		0 VOL	ETL -1.22				R13DCLP+
50 60 79		520HF	0.00	90		0 CLP	ETL -1.22	0.11	0.19		R13DCLP+
50 75 85		510UL	10.90	183		0 DNT	09S 7.30				510_Bobbi
50 75 85		510UL	11.32	183		0 DNT	11S 33.21				510_Bobbi
50 76 79		520HF	0.53	22		0 VOL	ETL -2.28				R13DCLP+
50 76 79		520HF	0.00	0		0 CLP	ETL -2.28	0.18	0.18		R13DCLP+
50 101 110		540HF	0.64	4		0 INR	15S 15.46				540_BobEx
50 101 85		510UL	0.60	5	ID 17	0 TWD	15S 15.46				510_Bobbi
50 102 110		540HF	0.64	5	ID 17	0 TWD	15S 16.32				540_Bobbi
50 102 123		520HF	0.48	21		0 VOL	15S 16.62				R13DCLP+
50 102 123		520HF	0.00	0		0 CLP	15S 16.62	0.09	0.17		R13DCLP+
50 119 79		520HF	0.26	22		0 VOL	ETL -1.91				R13DCLP+
50 119 79		520HF	0.00	0		0 CLP	ETL -1.91	0.24	0.23		R13DCLP+
50 119 79		520HF	0.85	27		0 VOL	ETL -1.58				R13DCLP+
50 119 79		520HF	0.00	0		0 CLP	ETL -1.58	0.18	0.18		R13DCLP+
50 119 105		510UL	2.96	172		0 DNT	LTE 11.03				510_Bobbi
50 123 14		460PP	0.10	107		0 AOD	UTE -0.20				Plug_MRP
51 2 110		520HF	1.08	23		0 VOL	15S -0.53				R13DCLP+
51 2 110		520HF	0.00	0		0 CLP	15S -0.53	0.19	0.22		R13DCLP+
51 2 110		520HF	0.00	0		0 CLP	15S 2.87	0.14	0.17		R13DCLP+
51 2 110		520HF	0.50	20		0 VOL	15S 2.87				R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset			Axial	Circ	Dataset
51	2	117	540HF	0.40	10	ID	33	TWD	15S	2.93	540_Bobbi
51	2	110	520HF	0.59	24		0	VOL	15S	3.13	R13DCLP+
51	2	117	540HF	0.39	4		0	INR	15S	3.13	540_Bobbi
51	2	110	520HF	0.00	0		0	CLP	15S	3.13	R13DCLP+
51	2	117	540HF	0.33	12		0	BVC	15S	20.10	540_Bobbi
51	2	110	520HF	0.56	19		0	VOL	15S	20.31	Spec_Int
51	2	110	520HF	0.00	0		0	CLP	15S	20.31	Spec_Int
51	2	110	520HF	0.00	0		0	RIC	15S	29.78	R13DCLP+
51	2	110	520HF	0.00	0		0	RIC	15S	39.90	R13DCLP+
51	2	117	540HF	0.38	3		0	INR	15S	39.93	540_Bobbi
51	2	121	520HF	0.43	28		0	VOL	UTS	-17.15	R13DCLP+
51	2	121	520HF	0.00	0		0	CLP	UTS	-17.15	R13DCLP+
51	2	121	520HF	0.00	0		0	CLP	UTS	-6.85	R13DCLP+
51	2	121	520HF	0.46	15		0	VOL	UTS	-6.85	R13DCLP+
51	16	34	520HF	0.49	24		0	VOL	ETL	-0.26	KEXP_+Pt
51	16	34	520HF	0.00	0		0	CLP	ETL	-0.26	KEXP_+Pt
51	19	8	510UL	0.44	97		0	INR	LTE	10.15	510_Bobbi
51	19	8	510UL	0.54	104		0	INR	LTE	13.85	510_Bobbi
51	19	8	510UL	0.23	119		0	INR	LTE	16.22	510_Bobbi
51	23	8	510UL	0.54	7	ID	23	TWD	10S	14.22	510_Bobbi
51	23	117	540HF	0.54	2		0	INR	10S	14.22	540_BobEx
51	45	51	520HF	0.37	10	ID	10	VOL	ETL	2.65	KEXP_+Pt
51	45	51	520HF	0.00	0		0	CLP	ETL	2.65	KEXP_+Pt
51	48	114	520HF	0.00	0		0	NDF	02S	8.80	Spec_Int
51	48	53	510UL	0.68	88		0	ADI	02S	8.80	510_Bobbi
51	58	42	510UL	0.19	57		0	NQI	05S	0.61	510_Bobbi
51	58	160	520HF	0.31	75	OD	5	TWD	05S	0.81	Spec_Int
51	61	56	520HF	0.24	40		0	VOL	ETL	-0.12	KEXP_+Pt
51	61	56	520HF	0.00	0		0	CLP	ETL	-0.12	KEXP_+Pt
51	65	56	520HF	0.50	22	ID	40	VOL	ETL	1.13	KEXP_+Pt
51	65	56	520HF	0.00	0		0	CLP	ETL	1.13	KEXP_+Pt
51	68	55	520HF	0.00	0		0	CLP	ETL	3.04	KEXP_+Pt
51	68	55	520HF	0.52	19	ID	30	VOL	ETL	3.04	KEXP_+Pt
51	68	55	520HF	0.36	26	ID	54	VOL	ETL	3.94	KEXP_+Pt
51	68	55	520HF	0.00	0		0	CLP	ETL	3.94	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
51 73 56		520HF	1.06	28	ID	63	VOL	ETL	0.12			KEXP_+Pt
51 73 56		520HF	0.00	0		0	CLP	ETL	0.12	0.17	0.19	KEXP_+Pt
51 78 68		520HF	0.41	20	ID	33	VOL	ETL	1.91			KEXP_+Pt
51 78 68		520HF	0.00	0		0	CLP	ETL	1.91	0.18	0.14	KEXP_+Pt
51 84 68		520HF	0.44	21	ID	36	VOL	ETL	2.69			KEXP_+Pt
51 84 68		520HF	0.00	0		0	CLP	ETL	2.69	0.12	0.18	KEXP_+Pt
51 84 68		520HF	0.47	22	ID	40	VOL	ETL	3.80			KEXP_+Pt
51 84 68		520HF	0.00	90		0	CLP	ETL	3.80	0.18	0.18	KEXP_+Pt
51 84 68		520HF	0.73	33	ID	86	VOL	ETL	4.04			KEXP_+Pt
51 84 68		520HF	0.00	0		0	CLP	ETL	4.04	0.18	0.23	KEXP_+Pt
51 92 110		540HF	0.26	5		0	BVC	13S	27.20			540_Bobbi
51 92 110		540HF	0.33	7		0	BVC	13S	32.54			540_Bobbi
51 92 113		520HF	0.00	0		0	NDF	14S	-8.80			Spec_Int
51 92 113		520HF	0.00	0		0	NDF	14S	-3.46			Spec_Int
51 92 113		520HF	0.00	0		0	NDF	14S	5.68			Spec_Int
51 92 110		540HF	0.19	7		0	BVC	14S	5.68			540_Bobbi
51 109 74		520HF	0.74	29	ID	67	VOL	ETL	2.72			KEXP_+Pt
51 109 74		520HF	0.00	0		0	CLP	ETL	2.72	0.12	0.14	KEXP_+Pt
51 110 12		460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
51 112 12		460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
51 115 106		510UL	2.33	172		0	INR	LTE	10.41			510_Bobbi
52 12 8		510UL	0.24	94		0	INR	LTE	9.31			510_Bobbi
52 17 33		520HF	0.21	19	ID	32	VOL	ETL	0.72			KEXP_+Pt
52 17 33		520HF	0.00	0		0	CLP	ETL	0.72	0.15	0.15	KEXP_+Pt
52 48 52		510UL	0.86	177		0	INR	08S	30.82			510_Bobbi
52 65 79		520HF	0.79	23		0	PID	ETL	-2.41			KEXP_+Pt
52 65 55		520HF	0.88	20		0	VOL	ETL	-2.41			KEXP_+Pt
52 65 55		520HF	0.00	0		0	CLP	ETL	-2.41	0.22	0.20	KEXP_+Pt
52 65 55		520HF	0.00	0		0	CLP	ETL	-1.13	0.17	0.20	KEXP_+Pt
52 65 55		520HF	0.48	10		0	VOL	ETL	-1.13			KEXP_+Pt
52 65 55		520HF	0.45	19		0	VOL	ETL	-0.54			KEXP_+Pt
52 65 55		520HF	0.00	0		0	CLP	ETL	-0.54	0.17	0.20	KEXP_+Pt
52 95 59		520HF	0.61	21	ID	36	VOL	ETL	0.00			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
52 95 59		520IIF	0.00	0		0 CLP	ETL 0.00		0.22	0.18	KEXP_+Pt
52 101 86		510UL	2.73	185		0 DNT	LTE 16.45				510_Bobbi
52 110 73		520HF	1.03	22		0 VOL	ETL -2.98				KEXP_+Pt
52 110 73		520HF	0.00	0		0 CLP	ETL -2.98	0.11	0.19		KEXP_+Pt
52 110 73		520HF	1.72	31	ID	76 SCI	ETL 2.71				KEXP_+Pt
52 110 73		520HF	0.00	39		0 ARC	ETL 2.71		0.21		KEXP_+Pt
52 111 108		540HF	0.47	4		0 INR	15S 20.71				540_Bobbi
52 118 79		520HF	0.27	12		0 VOL	ETL -1.14				R13DCLP+
52 118 79		520HF	0.00	0		0 CLP	ETL -1.14	0.18	0.23		R13DCLP+
52 123 156		520HF	0.00	0		0 NDF	12S -0.19				Spec_Int
52 123 105		510UL	0.10	77		0 NQI	12S -0.19				510_Bobbi
53 15 34		520HF	0.00	0		0 CLP	ETL 2.63	0.12	0.14		KEXP_+Pt
53 15 34		520HF	0.15	15	ID	20 VOL	ETL 2.63				KEXP_+Pt
53 17 34		520HF	0.25	25	ID	51 VOL	ETL 2.95				KEXP_+Pt
53 17 34		520HF	0.00	0		0 CLP	ETL 2.95	0.18	0.18		KEXP_+Pt
53 25 34		520HF	0.38	30		0 VOL	ETL -0.28				KEXP_+Pt
53 25 34		520HF	0.00	0		0 CLP	ETL -0.28	0.12	0.14		KEXP_+Pt
53 29 51		520HF	0.48	19	ID	30 VOL	ETL 2.09				KEXP_+Pt
53 29 51		520HF	0.00	0		0 CLP	ETL 2.09	0.11	0.14		KEXP_+Pt
53 29 51		520HF	0.00	0		0 CLP	ETL 2.94	0.17	0.14		KEXP_+Pt
53 29 51		520HF	0.36	13	ID	15 VOL	ETL 2.94				KEXP_+Pt
53 46 138		520PI	0.82	22		0 VOL	ETL -3.92				PostIn_+Pt
53 46 138		520PI	0.00	0		0 CLP	ETL -3.92	0.14	0.17		PostIn_+Pt
53 46 138		520PI	3.52	41	OD	98 SCI	ETL -1.49				PostIn_+Pt
53 46 138		520PI	0.00	38		0 ARC	ETL -1.49		0.20		PostIn_+Pt
53 46 51		520HF	0.00	31		0 ARC	ETL -1.43		0.17		KEXP_+Pt
53 46 51		520HF	3.14	44	OD	97 SCI	ETL -1.43				KEXP_+Pt
53 46 123		520HF	2.68	43		0 PID	ETL -1.43				KEXP_+Pt
53 51 50		520HF	0.00	0		0 CLP	ETL -0.30	0.14	0.15		KEXP_+Pt
53 51 50		520HF	0.18	34		0 VOL	ETL -0.30				KEXP_+Pt
53 51 50		520HF	0.33	14	ID	17 VOL	ETL 1.89				KEXP_+Pt
53 51 50		520HF	0.00	0		0 CLP	ETL 1.89	0.17	0.10		KEXP_+Pt
53 62 56		520HF	0.00	90		0 CLP	ETL -1.02	0.17	0.15		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
53 62 56		520HF	0.40 18		0 VOL	ETL -1.02			KEXP_+Pt
53 62 56		520HF	0.31 22	ID 40	0 VOL	ETL 1.91			KEXP_+Pt
53 62 56		520HF	0.00 0		0 CLP	ETL 1.91	0.17	0.15	KEXP_+Pt
53 70 41		510UL	4.95 170		0 DNT	LTS -0.06			510_Bobbi
53 71 42		510UL	11.20 169		0 DNT	LTS 0.00			510_Bobbi
53 72 41		510UL	5.70 171		0 DNT	LTS -0.08			510_Bobbi
53 88 85		510UL	0.10 83		0 INR	LTS 3.15			510_Bobbi
53 92 59		520HF	0.19 31	ID 76	0 VOL	ETL 2.12			KEXP_+Pt
53 92 59		520HF	0.00 0		0 CLP	ETL 2.12	0.16	0.18	KEXP_+Pt
53 92 59		520HF	0.19 25	ID 51	0 VOL	ETL 3.70			KEXP_+Pt
53 92 59		520HF	0.00 0		0 CLP	ETL 3.70	0.16	0.18	KEXP_+Pt
53 123 108		540HF	3.24 176		0 DNT	LTE 9.63			540_Bobbi
53 123 167		520HF	0.17 29		0 VOL	UTS -18.25			R13DCLP+
53 123 167		520HF	0.00 0		0 CLP	UTS -18.25	0.09	0.16	R13DCLP+
54 4 7		510UL	0.29 111	OD 6	0 TWD	10S -0.78			510_Bobbi
54 4 7		510UL	0.38 82		0 NQI	LTE 8.81			510_Bobbi
54 4 110		520HF	0.00 0		0 RIC	LTE 8.81			Spec_Int
54 4 121		520HF	0.00 0		0 NDF	LTE 8.81			Spec_Int
54 7 8		510UL	0.22 83		0 NQI	09S -0.45			510_Bobbi
54 7 110		520HF	1.25 103	OD 12	0 TWD	09S -0.38			Spec_Int
54 34 50		520HF	0.38 25		0 VOL	ETL -0.03			KEXP_+Pt
54 34 50		520HF	0.00 0		0 CLP	ETL -0.03	0.11	0.10	KEXP_+Pt
54 34 50		520HF	1.10 30	ID 71	0 VOL	ETL 4.39			KEXP_+Pt
54 34 50		520HF	0.00 0		0 CLP	ETL 4.39	0.11	0.15	KEXP_+Pt
54 55 41		510UL	4.06 178		0 DNT	LTS -0.13			510_Bobbi
54 56 42		510UL	10.56 174		0 DNT	LTS 0.00			510_Bobbi
54 57 41		510UL	9.15 174		0 DNT	LTS -0.08			510_Bobbi
54 65 41		510UL	3.21 180		0 DNT	LTS -0.10			510_Bobbi
54 65 41		510UL	0.79 99		0 NQI	LTS 1.05			510_Bobbi
54 65 144		520HF	0.00 0		0 NDF	LTS 1.05			LTS_+Pt
54 66 42		510UL	3.70 176		0 DNT	LTS 0.00			510_Bobbi
54 66 144		520HF	0.00 0		0 NDF	LTS 1.10			LTS_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
54 66 42		510UL	0.92 125		0 NQI	LTS 1.10			510_Bobbi
54 71 41		510UL	4.92 166		0 DNT	LTS 0.02			510_Bobbi
54 72 42		510UL	7.18 167		0 DNT	LTS 0.00			510_Bobbi
54 73 41		510UL	4.71 170		0 DNT	LTS 0.00			510_Bobbi
54 88 59		520HF	0.32 168		0 INR	ETL -0.42			KEXP_+Pt
54 104 113		520HF	0.76 148	OD 14	TWD 09S	0.63			Spec_Int
54 104 85		510UL	0.33 68		0 NQI	09S 0.73			510_Bobbi
55 1 8		510UL	0.67 105		0 INR	LTE 19.79			510_Bobbi
55 13 8		510UL	0.25 75		0 NQI	LTE 9.22			510_Bobbi
55 13 110		520HF	0.00 0		0 NDF	LTS -14.78			Spec_Int
55 19 8		510UL	2.10 177		0 INR	LTE 4.87			510_Bobbi
55 21 33		520HF	0.00 35		0 ARC	ETL 1.12		0.19	KEXP_+Pt
55 21 33		520HF	0.64 20	ID 35	SCI	ETL 1.12			KEXP_+Pt
55 34 77		520HF	0.00 0		0 CLP	ETL 0.28	0.05	0.14	KEXP_+Pt
55 34 77		520HF	0.30 19	ID 30	VOL	ETL 0.28			KEXP_+Pt
55 34 77		520HF	0.00 0		0 CLP	ETL 0.67	0.13	0.17	KEXP_+Pt
55 34 77		520HF	0.18 3		1 VOL	ETL 0.67			KEXP_+Pt
55 54 47		510UL	5.87 175		0 DNT	LTS -0.08			510_Bobbi
55 55 42		510UL	20.32 172		0 DNT	LTS 0.00			510_Bobbi
55 56 41		510UL	25.40 173		0 DNT	LTS -0.02			510_Bobbi
55 57 42		510UL	14.11 172		0 DNT	LTS 0.00			510_Bobbi
55 58 41		510UL	4.82 175		0 DNT	LTS -0.06			510_Bobbi
55 65 42		510UL	3.78 176		0 DNT	LTS 0.00			510_Bobbi
55 66 41		510UL	3.35 180		0 DNT	LTS -0.15			510_Bobbi
55 69 79		520HF	0.11 9		0 VOL	ETL -1.05			R13DCLP+
55 69 79		520HF	0.00 0		0 CLP	ETL -1.05	0.11	0.14	R13DCLP+
55 73 42		510UL	4.67 167		0 DNT	LTS 0.00			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
55 74 41		510UL	3.75	162	0 DNT	LTS	-0.02			510_Bobbi
55 111 104		510UL	0.22	74	0 INR	LTE	20.24			510_Bobbi
55 120 108		540HF	0.24	7	0 BVC	15S	33.77			540_Bobbi
55 120 108		540HF	0.18	12	0 BVC	15S	39.73			540_Bobbi
55 120 167		520HF	0.21	30	ID 67	VOL ETL	0.50			Spec_Int
55 120 167		520HF	0.00	0	0 CLP	ETL	0.50	0.09	0.16	Spec_Int
55 120 167		520HF	0.32	25	ID 50	VOL ETL	1.47			Spec_Int
55 120 167		520HF	0.00	0	0 CLP	ETL	1.47	0.09	0.17	Spec_Int
55 120 156		520HF	0.00	0	0 CLP	UTS	-12.94	0.15	0.17	R13DCLP+
55 120 156		520HF	0.25	23	0 VOL	UTS	-12.94			R13DCLP+
55 120 167		520HF	0.27	6	0 VOL	UTS	-12.39			R13DCLP+
55 120 167		520HF	0.00	0	0 CLP	UTS	-12.39	0.09	0.17	R13DCLP+
55 120 156		520HF	0.00	0	0 NDF	UTS	-11.77			R13DCLP+
55 120 156		520HF	0.10	23	0 VOL	UTS	-10.53			R13DCLP+
55 120 156		520HF	0.00	0	0 CLP	UTS	-10.53	0.15	0.17	R13DCLP+
55 120 156		520HF	0.15	9	0 VOL	UTS	-7.21			Spec_Int
55 120 156		520HF	0.00	0	0 CLP	UTS	-7.21	0.10	0.11	Spec_Int
55 120 167		520HF	0.00	0	0 NDF	UTS	-6.65			Spec_Int
55 120 167		520HF	0.56	22	0 PRA	UTS	4.37			Spec_Int
55 120 156		520HF	0.64	23	0 VOL	UTS	4.54			Spec_Int
55 120 156		520HF	0.00	0	0 CLP	UTS	4.54	0.15	0.17	Spec_Int
55 123 106		510UL	3.64	176	0 DNT	LTE	9.46			510_Bobbi
55 124 108		540HF	0.26	4	0 INR	14S	25.80			540_Bobbi
55 124 108		540HF	0.78	7	ID 23	TWD 15S	14.36			540_Bobbi
55 124 156		520HF	0.00	0	0 CLP	15S	15.34	0.15	0.17	Spec_Int
55 124 156		520HF	0.53	18	0 VOL	15S	15.34			Spec_Int
55 124 108		540HF	2.66	173	0 DNT	LTE	10.99			540_Bobbi
56 1 117		540HF	0.28	6	0 BVC	02S	30.42			540_Bobbi
56 1 121		520HF	0.70	24	0 VOL	03S	-8.63			R13DCLP+
56 1 121		520HF	0.00	0	0 CLP	03S	-8.63	0.19	0.22	R13DCLP+
56 1 117		540HF	0.32	6	0 BVC	07S	24.49			540_Bobbi
56 1 110		520HF	0.00	0	0 CLP	07S	24.59	0.09	0.11	Spec_Int
56 1 110		520HF	0.29	24	0 VOL	07S	24.59			Spec_Int
56 1 121		520HF	0.13	28	0 VOL	08S	-16.12			Spec_Int
56 1 121		520HF	0.00	0	0 CLP	08S	-16.12	0.09	0.11	Spec_Int
56 1 121		520HF	0.30	21	0 PRA	08S	-15.18			Spec_Int
56 1 121		520HF	0.00	0	0 CLP	08S	-14.51	0.09	0.11	Spec_Int
56 1 121		520HF	0.24	15	0 VOL	08S	-14.51			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
56	1	121	520HF	0.19 29	0	VOL	08S -14.00			Spec_Int
56	1	121	520HF	0.00 0	0	CLP	08S -14.00	0.05	0.06	Spec_Int
56	1	121	520HF	0.00 0	0	CLP	08S -12.25	0.09	0.11	R13DCLP+
56	1	121	520HF	0.21 23	0	VOL	08S -12.25			R13DCLP+
56	1	121	520HF	0.00 0	0	CLP	08S -9.18	0.14	0.17	R13DCLP+
56	1	121	520HF	0.25 17	0	VOL	08S -9.18			R13DCLP+
56	1	117	540HF	0.39 1	0	INR	08S 3.06			540_Bobbi
56	1	117	540HF	0.39 4	0	INR	08S 14.59			540_Bobbi
56	1	117	540HF	0.36 15	0	BVC	08S 36.18			540_Bobbi
56	1	117	540HF	0.16 16	0	BVC	08S 37.39			540_Bobbi
56	1	121	520HF	0.00 0	0	NDF	09S -2.82			R13DCLP+
56	1	121	520HF	0.00 0	0	CLP	09S -1.52	0.05	0.05	R13DCLP+
56	1	121	520HF	0.36 25	0	VOL	09S -1.52			R13DCLP+
56	1	117	540HF	0.36 0	0	INR	09S 7.62			540_Bobbi
56	13	117	540HF	0.48 359	0	INR	04S 14.50			540_Bobbi
56	13	117	540HF	0.50 2	0	INR	04S 20.69			540_Bobbi
56	13	117	540HF	1.24 2	0	INR	04S 26.70			540_Bobbi
56	14	33	520HF	0.65 19	0	VOL	ETL -0.01			KEXP_+Pt
56	14	33	520HF	0.00 0	0	CLP	ETL -0.01	0.16	0.14	KEXP_+Pt
56	16	7	510UL	2.08 185	0	INR	03S 26.64			510_Bobbi
56	22	33	520HF	0.40 22	ID 40	VOL	ETL 2.84			KEXP_+Pt
56	22	33	520HF	0.00 0	0	CLP	ETL 2.84	0.15	0.19	KEXP_+Pt
56	23	34	520HF	0.39 21	ID 36	VOL	ETL 1.70			KEXP_+Pt
56	23	34	520HF	0.00 0	0	CLP	ETL 1.70	0.12	0.14	KEXP_+Pt
56	30	50	520HF	0.30 17	0	VOL	ETL -1.12			KEXP_+Pt
56	30	50	520HF	0.00 0	0	CLP	ETL -1.12	0.11	0.10	KEXP_+Pt
56	32	50	520HF	0.00 0	0	CLP	ETL 2.29	0.17	0.15	KEXP_+Pt
56	32	50	520HF	0.25 15	ID 20	VOL	ETL 2.29			KEXP_+Pt
56	48	51	520HF	0.96 27	ID 58	VOL	ETL 1.14			KEXP_+Pt
56	48	51	520HF	0.00 0	0	CLP	ETL 1.14	0.12	0.18	KEXP_+Pt
56	54	47	510UL	1.28 192	0	INR	LTS -0.10			510_Bobbi
56	55	41	510UL	14.20 174	0	DNT	LTS -0.06			510_Bobbi
56	56	42	510UL	17.08 172	0	DNT	LTS 0.00			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications. With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
56 57 41		510UL	18.53	174	0 DNT	LTS	0.00			510_Bobbi
56 58 42		510UL	16.30	172	0 DNT	LTS	0.00			510_Bobbi
56 59 41		510UL	7.23	175	0 DNT	LTS	-0.04			510_Bobbi
56 60 160		520HF	0.00	0	0 NDF	LTS	1.56			Spec_Int
56 60 42		510UL	0.68	94	0 NQI	LTS	1.56			510_Bobbi
56 62 160		520HF	0.00	0	0 NDF	LTS	1.55			Spec_Int
56 62 42		510UL	0.81	90	0 NQI	LTS	1.55			510_Bobbi
56 66 42		510UL	0.13	107	0 INR	LTE	19.46			510_Bobbi
56 66 42		510UL	4.43	175	0 DNT	LTS	-0.06			510_Bobbi
56 67 55		520HF	0.40	9	ID 8	VOL ETL	1.43			KEXP_+Pt
56 67 55		520HF	0.00	0	0 CLP	ETL	1.43	0.17	0.15	KEXP_+Pt
56 67 55		520HF	0.00	0	0 CLP	ETL	2.47	0.22	0.15	KEXP_+Pt
56 67 55		520HF	0.25	9	ID 8	VOL ETL	2.47			KEXP_+Pt
56 67 41		510UL	3.35	175	0 DNT	LTS	-0.21			510_Bobbi
56 68 113		540HF	1.06	5	ID 17	TWD 15S	36.51			540_Bobbi
56 68 113		540HF	2.47	177	0 INR	LTS	-0.14			540_Bobbi
56 68 160		520HF	0.00	0	0 CLP	UTS	-10.89	0.24	0.27	R13DCLP+
56 68 160		520HF	0.36	19	0 VOL	UTS	-10.89			R13DCLP+
56 68 160		520HF	0.00	0	0 NDF	UTS	-9.87			R13DCLP+
56 70 56		520HF	0.23	18	0 VOL	ETL	-0.15			KEXP_+Pt
56 70 56		520HF	0.00	0	0 CLP	ETL	-0.15	0.11	0.10	KEXP_+Pt
56 71 55		520HF	0.27	16	0 VOL	ETL	-1.28			KEXP_+Pt
56 71 55		520HF	0.00	0	0 CLP	ETL	-1.28	0.17	0.15	KEXP_+Pt
56 71 55		520HF	0.69	24	ID 47	VOL ETL	2.09			KEXP_+Pt
56 71 55		520HF	0.00	0	0 CLP	ETL	2.09	0.17	0.19	KEXP_+Pt
56 71 69		510UL	4.53	164	0 DNT	LTS	0.00			510_Bobbi
56 72 69		510UL	6.93	166	0 DNT	LTS	0.00			510_Bobbi
56 73 69		510UL	3.30	158	0 DNT	LTS	-0.98			510_Bobbi
56 75 69		510UL	2.93	157	0 DNT	LTS	0.02			510_Bobbi
56 76 85		510UL	3.87	166	0 DNT	LTS	0.02			510_Bobbi
56 77 59		520HF	0.40	16	ID 22	VOL ETL	2.15			KEXP_+Pt
56 77 59		520HF	0.00	0	0 CLP	ETL	2.15	0.16	0.18	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/				Location			Axial	Circ	Dataset
			Degrees	Percent	Code	TSP - Offset						
56 77 59		520HF	0.00	0		0	CLP	ETL	2.60	0.11	0.14	KEXP_+Pt
56 77 59		520HF	0.39	15	ID	20	VOL	ETL	2.60			KEXP_+Pt
56 77 59		520HF	0.28	16	ID	22	VOL	ETL	3.08			KEXP_+Pt
56 77 59		520HF	0.00	0		0	CLP	ETL	3.08	0.16	0.14	KEXP_+Pt
56 77 59		520HF	0.32	24	ID	47	VOL	ETL	3.60			KEXP_+Pt
56 77 59		520HF	0.00	0		0	CLP	ETL	3.60	0.16	0.14	KEXP_+Pt
56 77 86		510UL	6.16	167		0	DNT	LTS	0.00			510_Bobbi
56 83 59		520HF	0.21	15	ID	20	VOL	ETL	1.23			KEXP_+Pt
56 83 59		520HF	0.00	0		0	CLP	ETL	1.23	0.16	0.19	KEXP_+Pt
56 83 59		520HF	0.00	0		0	CLP	ETL	2.28	0.10	0.19	KEXP_+Pt
56 83 59		520HF	0.28	18	ID	27	VOL	ETL	2.28			KEXP_+Pt
56 91 86		510UL	0.20	85		0	NQI	02S	35.18			510_Bobbi
56 91 113		520HF	0.00	0		0	NDF	03S	-3.82			Spec_Int
56 93 110		540HF	0.26	15		0	BVC	15S	39.29			540_Bobbi
56 93 123		520HF	0.00	0		0	CLP	UTS	-7.51	0.15	0.16	R13DCLP+
56 93 123		520HF	0.27	13		0	VOL	UTS	-7.51			R13DCLP+
56 116 73		520HF	0.32	20		0	VOL	ETL	-0.30			KEXP_+Pt
56 116 73		520HF	0.00	0		0	CLP	ETL	-0.30	0.17	0.14	KEXP_+Pt
56 117 74		520HF	0.95	31	ID	76	SCI	ETL	0.68			KEXP_+Pt
56 117 74		520HF	0.00	30		0	ARC	ETL	0.68		0.16	KEXP_+Pt
56 121 108		540HF	0.24	4		0	INR	15S	25.36			540_Bobbi
56 121 102		520HF	0.00	0		0	CLP	ETL	-5.15	0.12	0.12	KEXP_+Pt
56 121 102		520HF	0.44	22		0	VOL	ETL	-5.15			KEXP_+Pt
56 121 74		520HF	0.00	0		0	RIC	ETL	-4.56			KEXP_+Pt
56 121 108		540HF	0.36	138		0	INR	UTS	2.84			540_Bobbi
56 123 74		520HF	0.00	0		0	CLP	ETL	2.10	0.12	0.18	KEXP_+Pt
56 123 74		520HF	1.32	33	ID	86	VOL	ETL	2.10			KEXP_+Pt
56 124 73		520HF	0.00	0		0	CLP	ETL	-0.42	0.16	0.19	KEXP_+Pt
56 124 73		520HF	0.55	13		0	VOL	ETL	-0.42			KEXP_+Pt
57 55 47		510UL	2.37	186		0	INR	LTS	-0.19			510_Bobbi
57 56 42		510UL	8.13	175		0	DNT	LTS	0.00			510_Bobbi
57 57 41		510UL	9.97	172		0	DNT	LTS	-0.06			510_Bobbi
57 58 42		510UL	6.28	174		0	DNT	LTS	0.00			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
57 59 55		520HF	1.17	28	ID 63	VOL ETL	1.00			KEXP_+Pt
57 59 55		520HF	0.00	0	0	CLP ETL	1.00	0.22	0.25	KEXP_+Pt
57 59 55		520HF	0.22	16	ID 22	VOL ETL	2.14			KEXP_+Pt
57 59 55		520HF	0.00	0	0	CLP ETL	2.14	0.22	0.15	KEXP_+Pt
57 59 55		520HF	0.47	18	ID 27	VOL ETL	5.36			KEXP_+Pt
57 59 55		520HF	0.00	0	0	CLP ETL	5.36	0.15	0.15	KEXP_+Pt
57 59 41		510UL	8.67	175	0	DNT LTS	-0.34			510_Bobbi
57 60 56		520HF	0.00	0	0	CLP ETL	-0.38	0.17	0.20	KEXP_+Pt
57 60 56		520HF	1.08	23	0	VOL ETL	-0.38			KEXP_+Pt
57 60 42		510UL	6.33	173	0	DNT LTS	0.00			510_Bobbi
57 63 113		540HF	0.77	9	ID 30	TWD 15S	36.95			540_Bobbi
57 63 160		520HF	0.31	14	0	VOL UTS	-14.18			Spec_Int
57 63 160		520HF	0.00	0	0	CLP UTS	-14.18	0.15	0.16	Spec_Int
57 63 160		520HF	0.00	0	0	CLP UTS	-10.30	0.19	0.22	Spec_Int
57 63 160		520HF	0.70	25	0	VOL UTS	-10.30			Spec_Int
57 65 113		540HF	0.47	6	ID 20	TWD 15S	37.63			540_Bobbi
57 65 113		540HF	0.21	9	0	BVC 15S	42.31			540_Bobbi
57 65 113		540HF	0.27	10	0	BVC 15S	43.74			540_Bobbi
57 65 133		520HF	0.68	17	0	VOL UTS	-8.87			R13DCLP+
57 65 133		520HF	0.00	0	0	CLP UTS	-8.87	0.15	0.15	R13DCLP+
57 65 160		520HF	0.00	0	0	RIC UTS	-8.74			R13DCLP+
57 65 160		520HF	0.27	19	0	VOL UTS	-6.49			Spec_Int
57 65 160		520HF	0.00	0	0	CLP UTS	-6.49	0.14	0.16	Spec_Int
57 65 160		520HF	0.00	0	0	CLP UTS	-4.36	0.14	0.16	Spec_Int
57 65 160		520HF	0.22	17	0	VOL UTS	-4.36			Spec_Int
57 65 160		520HF	0.00	0	0	CLP UTS	-2.85	0.14	0.16	Spec_Int
57 65 160		520HF	0.34	21	0	VOL UTS	-2.85			Spec_Int
57 66 42		510UL	3.40	177	0	DNT LTS	0.00			510_Bobbi
57 67 41		510UL	0.18	85	0	NQI 05S	29.01			510_Bobbi
57 67 160		520HF	0.00	0	0	NDF 06S	-7.99			Spec_Int
57 68 160		520HF	0.00	0	0	NDF 15S	12.94			Spec_Int
57 68 41		510UL	0.17	83	0	NQI 15S	12.94			510_Bobbi
57 70 55		520HF	0.33	19	ID 19	VOL ETL	0.09			KEXP_+Pt
57 70 55		520HF	0.00	0	0	CLP ETL	0.09	0.19	0.17	KEXP_+Pt
57 70 55		520HF	0.00	0	0	CLP ETL	0.67	0.19	0.17	KEXP_+Pt
57 70 55		520HF	0.76	27	ID 58	VOL ETL	0.67			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
57 71 56		520HF	0.50	26		0 VOL	ETL -0.02				KEXP_+Pt
57 71 56		520HF	0.00	0		0 CLP	ETL -0.02	0.12	0.18		KEXP_+Pt
57 71 56		520HF	0.42	16	ID	22 VOL	ETL 1.69				KEXP_+Pt
57 71 56		520HF	0.00	90		0 CLP	ETL 1.69	0.12	0.09		KEXP_+Pt
57 71 56		520HF	0.31	18	ID	27 VOL	ETL 2.42				KEXP_+Pt
57 71 56		520HF	0.00	90		0 CLP	ETL 2.42	0.12	0.14		KEXP_+Pt
57 71 56		520HF	0.20	12	ID	13 VOL	ETL 3.24				KEXP_+Pt
57 71 56		520HF	0.00	0		0 CLP	ETL 3.24	0.12	0.09		KEXP_+Pt
57 71 56		520HF	0.00	0		0 CLP	ETL 4.41	0.12	0.14		KEXP_+Pt
57 71 56		520HF	1.17	26	ID	54 VOL	ETL 4.41				KEXP_+Pt
57 71 56		520HF	0.00	90		0 CLP	ETL 5.30	0.24	0.18		KEXP_+Pt
57 71 56		520HF	0.43	18	ID	27 VOL	ETL 5.30				KEXP_+Pt
57 71 69		510UL	6.58	165		0 DNT	LTS 0.00				510_Bobbi
57 72 69		510UL	12.31	169		0 DNT	LTS 0.00				510_Bobbi
57 73 69		510UL	7.89	167		0 DNT	LTS 0.00				510_Bobbi
57 74 69		510UL	7.30	165		0 DNT	LTS 0.00				510_Bobbi
57 75 69		510UL	0.25	83		0 NQI	04S 0.71				510_Bobbi
57 75 160		520HF	0.53	109	OD	8 TWD	04S 0.78				Spec_Int
57 77 86		510UL	7.74	167		0 DNT	LTS 0.00				510_Bobbi
57 78 113		520HF	0.00	0		0 NDF	02S 4.17				Spec_Int
57 78 85		510UL	1.48	81		0 ADI	02S 4.17				510_Bobbi
57 78 85		510UL	5.08	167		0 DNT	LTS -0.04				510_Bobbi
57 82 123		520HF	0.21	17		0 VOL	15S 5.28				R13DCLP+
57 82 123		520HF	0.00	0		0 CLP	15S 5.28	0.19	0.17		R13DCLP+
57 92 110		540HF	0.22	7		0 BVC	15S 40.44				540_Bobbi
57 92 113		520HF	0.44	21		0 VOL	UTS -5.87				Spec_Int
57 92 113		520HF	0.00	0		0 CLP	UTS -5.87	0.09	0.17		Spec_Int
57 94 79		520HF	0.43	22		0 VOL	ETL -1.02				R13DCLP+
57 94 79		520HF	0.00	0		0 CLP	ETL -1.02	0.18	0.14		R13DCLP+
57 94 79		520HF	0.48	25	ID	27 VOL	ETL 3.31				R13DCLP+
57 94 79		520HF	0.00	0		0 CLP	ETL 3.31	0.12	0.14		R13DCLP+
57 94 79		520HF	0.38	14	ID	22 VOL	ETL 3.71				R13DCLP+
57 94 79		520HF	0.00	0		0 CLP	ETL 3.71	0.18	0.14		R13DCLP+
57 115 73		520HF	0.00	0		0 CLP	ETL -0.42	0.16	0.14		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
57 115 73		520HF	0.33 6		0 VOL	ETL -0.42			KEXP_+Pt
57 118 104		510UL	2.06 176		0 INR	LTE 16.32			510_Bobbi
57 126 104		510UL	3.90 174		0 DNT	LTE 8.61			510_Bobbi
57 126 104		510UL	4.57 174		0 DNT	LTE 10.77			510_Bobbi
58 13 15		510UL	2.67 184		0 DNT	12S 12.89			510_Bobbi
58 25 117		540HF	0.41 5	ID 17	TWD	15S 43.55			540_Bobbi
58 25 110		520HF	0.35 18		0 VOL	UTS -2.89			Spec_Int
58 25 110		520HF	0.00 0		0 CLP	UTS -2.89	0.09	0.17	Spec_Int
58 50 50		520HF	0.00 0		0 CLP	ETL -0.50	0.17	0.17	KEXP_+Pt
58 50 50		520HF	0.49 27		0 VOL	ETL -0.50			KEXP_+Pt
58 54 114		520HF	0.00 0		0 NDF	01S -4.16			Spec_Int
58 54 48		510UL	1.21 88		0 ADI	LTS 41.84			510_Bobbi
58 57 4		510UL	5.90 174		0 DNT	LTS -0.45			510_Bobbi
58 58 3		510UL	4.03 174		0 DNT	LTS -0.09			510_Bobbi
58 59 4		510UL	2.35 186		0 INR	LTS -0.19			510_Bobbi
58 60 3		510UL	3.86 178		0 DNT	LTS -0.25			510_Bobbi
58 61 4		510UL	4.39 176		0 DNT	LTS -0.31			510_Bobbi
58 62 3		510UL	4.60 174		0 DNT	LTS -0.11			510_Bobbi
58 63 4		510UL	2.90 176		0 DNT	LTS -0.25			510_Bobbi
58 66 3		510UL	3.40 162		0 DNT	LTS -0.21			510_Bobbi
58 72 3		510UL	5.87 166		0 DNT	LTS 0.15			510_Bobbi
58 73 4		510UL	11.45 165		0 DNT	LTS 0.09			510_Bobbi
58 74 3		510UL	10.15 169		0 DNT	LTS 0.09			510_Bobbi
58 75 4		510UL	9.52 162		0 DNT	LTS 0.06			510_Bobbi
58 78 81		510UL	3.77 155		0 DNT	LTS 0.04			510_Bobbi
58 79 59		520HF	0.00 0		0 CLP	ETL -0.16	0.16	0.19	KEXP_+Pt
58 79 59		520HF	0.23 9		0 VOL	ETL -0.16			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
58 79 81		510UL	3.97	167	0 DNT	LTS	0.00			510_Bobbi
58 80 81		510UL	0.28	31	0 INR	13S	12.05			510_Bobbi
58 89 79		520HF	0.23	8	0 VOL	ETL	-2.65			R13DCLP+
58 89 79		520HF	0.00	0	0 CLP	ETL	-2.65	0.18	0.14	R13DCLP+
58 94 110		540HF	0.33	12	0 BVC	15S	44.00			540_Bobbi
58 94 123		520HF	0.44	20	0 VOL	UTS	-2.27			R13DCLP+
58 94 123		520HF	0.00	0	0 CLP	UTS	-2.27	0.14	0.17	R13DCLP+
58 97 85		510UL	2.67	186	0 DNT	10S	25.51			510_Bobbi
58 99 85		510UL	1.09	81	0 ADI	11S	28.11			510_Bobbi
58 99 113		520HF	0.00	0	0 NDF	12S	-9.89			Spec_Int
58 105 133		520HF	0.24	9	0 VOL	ETL	-2.81			R13DCLP+
58 105 133		520HF	0.00	0	0 CLP	ETL	-2.81	0.16	0.15	R13DCLP+
58 105 133		520HF	0.39	18	ID 18	VOL ETL	0.44			R13DCLP+
58 105 133		520HF	0.00	0	0 CLP	ETL	0.44	0.11	0.15	R13DCLP+
58 105 110		540HF	0.30	11	0 BVC	UTS	3.62			540_Bobbi
58 113 103		510UL	0.24	85	OD 6	TWD 08S	-0.74			510_Bobbi
58 117 108		540HF	0.28	15	0 BVC	15S	40.55			540_Bobbi
58 117 79		520HF	0.00	0	0 CLP	ETL	-5.42	0.12	0.09	R13DCLP+
58 117 79		520HF	0.16	8	0 VOL	ETL	-5.42			R13DCLP+
58 117 79		520HF	0.54	26	0 VOL	ETL	-4.36			R13DCLP+
58 117 79		520HF	0.00	0	0 CLP	ETL	-4.36	0.12	0.18	R13DCLP+
58 117 79		520HF	0.00	0	0 RIC	UTS	-6.19			R13DCLP+
58 117 167		520HF	0.37	17	0 VOL	UTS	-6.02			R13DCLP+
58 117 167		520HF	0.00	0	0 CLP	UTS	-6.02	0.14	0.17	R13DCLP+
58 117 167		520HF	0.00	0	0 CLP	UTS	3.25	0.14	0.17	R13DCLP+
58 117 167		520HF	0.54	23	0 VOL	UTS	3.25			R13DCLP+
58 120 108		540HF	0.26	16	0 BVC	15S	39.92			540_Bobbi
58 120 167		520HF	0.20	8	ID 14	VOL ETL	1.01			R13DCLP+
58 120 167		520HF	0.00	0	0 CLP	ETL	1.01	0.14	0.11	R13DCLP+
58 120 167		520HF	0.24	13	0 VOL	UTS	-6.76			R13DCLP+
58 120 167		520HF	0.00	0	0 CLP	UTS	-6.76	0.09	0.16	R13DCLP+
58 125 103		510UL	3.21	173	0 DNT	LTE	10.73			510_Bobbi
59 22 79		520HF	0.16	18	0 VOL	ETL	-2.06			R13DCLP+
59 22 79		520HF	0.00	0	0 CLP	ETL	-2.06	0.11	0.14	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
59 22 79		520HF	0.39	24	ID 47	VOL ETL 3.07			R13DCLP+
59 22 79		520HF	0.00	0	0 CLP	ETL 3.07	0.11	0.14	R13DCLP+
59 55 3		510UL	0.95	92	0 NQI	LTS 1.11			510_Bobbi
59 55 25		520HF	0.00	0	0 NDF	LTS 1.11			Spec_Int
59 58 4		510UL	2.97	176	0 DNT	LTS -0.51			510_Bobbi
59 59 3		510UL	3.73	174	0 DNT	LTS -0.09			510_Bobbi
59 60 4		510UL	4.32	173	0 DNT	LTS -0.13			510_Bobbi
59 70 4		510UL	5.70	160	0 DNT	LTS 0.00			510_Bobbi
59 71 3		510UL	13.57	169	0 DNT	LTS 0.31			510_Bobbi
59 72 138		520PI	0.16	64	OD 69	SVI 07S 13.45			PostIn_+Pt
59 72 138		520PI	0.00	0	0 CLP	07S 13.45	0.13	0.12	PostIn_+Pt
59 72 25		520HF	0.00	0	0 CLP	07S 13.67	0.10	0.10	Spec_Int
59 72 25		520HF	0.13	73	OD 56	SVI 07S 13.67			Spec_Int
59 72 3		510UL	0.22	74	0 NQI	07S 13.70			510_Bobbi
59 72 3		510UL	18.82	170	0 DNT	LTS 0.11			510_Bobbi
59 73 3		510UL	8.91	165	0 DNT	LTS -0.06			510_Bobbi
59 77 12		460PP	0.00	0	0 OBS	UTE 0.00			Plug_MRP
59 83 113		520HF	0.00	0	0 NDF	LTS 4.49	43.96		Spec_Int
59 83 81		510UL	8.10	183	0 IDC	LTS 4.49	43.96		510_Bobbi
59 119 103		510UL	0.26	97	0 NQI	LTE 20.77			510_Bobbi
59 119 156		520HF	0.00	0	0 NDF	LTS -3.23			Spec_Int
60 3 20		510UL	0.19	82	0 INR	15S -0.43			510_Bobbi
60 8 33		520HF	0.33	19	ID 32	VOL ETL 0.57			KEXP_+Pt
60 8 33		520HF	0.00	0	0 CLP	ETL 0.57	0.10	0.15	KEXP_+Pt
60 14 33		520HF	0.65	9	ID 11	VOL ETL 1.18			KEXP_+Pt
60 14 33		520HF	0.00	0	0 CLP	ETL 1.18	0.10	0.14	KEXP_+Pt
60 19 33		520HF	0.38	21	ID 37	VOL ETL 0.64			KEXP_+Pt
60 19 33		520HF	0.00	0	0 CLP	ETL 0.64	0.16	0.14	KEXP_+Pt
60 19 33		520HF	0.00	0	0 CLP	ETL 4.04	0.10	0.14	KEXP_+Pt
60 19 33		520HF	0.51	23	ID 43	VOL ETL 4.04			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
60 30 51		520HF	0.30	18	ID	27	VOL	ETL	1.37			KEXP_+Pt
60 30 51		520HF	0.00	0		0	CLP	ETL	1.37	0.11	0.14	KEXP_+Pt
60 31 119		510UL	0.30	97		0	INR	LTE	4.97			510_Bobbi
60 53 51		520HF	0.00	0		0	CLP	ETL	-0.12	0.12	0.19	KEXP_+Pt
60 53 51		520HF	0.58	28		0	VOL	ETL	-0.12			KEXP_+Pt
60 57 5		510UL	0.87	84		0	NQI	LTS	0.66			510_Bobbi
60 57 125		520HF	0.00	0		0	NDF	LTS	0.66			LTS_+Pt
60 59 21		520HF	0.62	27	ID	58	VOL	ETL	0.71			KEXP_+Pt
60 59 21		520HF	0.00	0		0	CLP	ETL	0.71	0.11	0.17	KEXP_+Pt
60 59 21		520HF	0.31	15	ID	20	VOL	ETL	1.99			KEXP_+Pt
60 59 21		520HF	0.00	0		0	CLP	ETL	1.99	0.11	0.17	KEXP_+Pt
60 59 21		520HF	0.00	0		0	CLP	ETL	3.72	0.11	0.22	KEXP_+Pt
60 59 21		520HF	0.42	21	ID	36	VOL	ETL	3.72			KEXP_+Pt
60 60 6		510UL	2.50	177		0	DNT	LTS	0.00			510_Bobbi
60 61 5		510UL	2.90	172		0	DNT	LTS	0.09			510_Bobbi
60 62 6		510UL	2.52	175		0	DNT	LTS	0.00			510_Bobbi
60 63 21		520HF	0.00	0		0	CLP	ETL	0.29	0.16	0.11	KEXP_+Pt
60 63 129		520HF	0.51	17		0	PID	ETL	0.29			KEXP_+Pt
60 63 116		520HF	0.00	0		0	RPD	ETL	0.29			KEXP_+Pt
60 63 21		520HF	0.39	26	ID	54	VOL	ETL	0.29			KEXP_+Pt
60 65 7		540HF	0.45	6	ID	20	TWD	15S	37.28			540_Bobbi
60 65 25		520HF	0.00	0		0	CLP	15S	37.77	0.10	0.19	Spec_Int
60 65 25		520HF	0.53	21		0	VOL	15S	37.77			Spec_Int
60 66 6		510UL	2.78	177		0	DNT	LTS	0.04			510_Bobbi
60 71 4		510UL	0.23	88		0	NQI	LTS	1.72			510_Bobbi
60 71 125		520HF	0.00	0		0	NDF	LTS	1.72			LTS_+Pt
60 72 20		520HF	0.34	25	ID	51	VOL	ETL	0.56			KEXP_+Pt
60 72 20		520HF	0.00	0		0	CLP	ETL	0.56	0.10	0.11	KEXP_+Pt
60 73 4		510UL	6.07	158		0	DNT	LTS	0.00			510_Bobbi
60 74 3		510UL	12.49	169		0	DNT	LTS	0.00			510_Bobbi
60 75 4		510UL	18.91	169		0	DNT	LTS	0.11			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
60 76 3		510UL	8.85	164	0 DNT	LTS	0.20			510_Bobbi
60 78 59		520HF	0.00	0	0 CLP	ETL	2.68	0.15	0.19	KEXP_+Pt
60 78 59		520HF	0.42	13	ID 15	VOL ETL	2.68			KEXP_+Pt
60 79 131		540HF	0.27	13	0 BVC	15S	31.08			540_Bobbi
60 79 123		520HF	0.00	0	0 CLP	UTS	-15.57	0.14	0.17	R13DCLP+
60 79 123		520HF	0.11	15	0 VOL	UTS	-15.57			R13DCLP+
60 80 59		520HF	0.00	0	0 CLP	ETL	2.05	0.16	0.19	KEXP_+Pt
60 80 59		520HF	0.47	20	ID 33	VOL ETL	2.05			KEXP_+Pt
60 81 81		510UL	8.83	173	0 DNT	12S	6.48			510_Bobbi
60 86 81		510UL	0.70	8	ID 27	TWD 14S	9.64			510_Bobbi
60 86 110		540HF	0.98	1	0 INR	14S	9.64			540_BobEx
60 121 103		510UL	3.76	161	0 DNT	13S	31.01			510_Bobbi
60 121 156		520HF	0.00	0	0 NDF	14S	-4.99			Spec_Int
60 121 73		520HF	0.00	0	0 CLP	ETL	-1.36	0.17	0.14	KEXP_+Pt
60 121 73		520HF	0.24	14	0 VOL	ETL	-1.36			KEXP_+Pt
60 121 73		520HF	0.50	20	ID 33	VOL ETL	0.48			KEXP_+Pt
60 121 73		520HF	0.00	0	0 CLP	ETL	0.48	0.10	0.14	KEXP_+Pt
60 121 73		520HF	0.00	0	0 CLP	ETL	2.46	0.16	0.19	KEXP_+Pt
60 121 73		520HF	0.96	21	ID 36	VOL ETL	2.46			KEXP_+Pt
60 123 73		520HF	0.28	19	0 VOL	ETL	-4.17			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	-4.17	0.16	0.14	KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	-2.97	0.10	0.14	KEXP_+Pt
60 123 73		520HF	0.50	25	0 VOL	ETL	-2.97			KEXP_+Pt
60 123 73		520HF	0.48	22	0 VOL	ETL	-0.65			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	-0.65	0.16	0.19	KEXP_+Pt
60 123 73		520HF	0.34	3	1 VOL	ETL	0.89			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	0.89	0.10	0.14	KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	1.14	0.10	0.14	KEXP_+Pt
60 123 73		520HF	0.28	8	ID 6	VOL ETL	1.14			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	1.80	0.16	0.19	KEXP_+Pt
60 123 73		520HF	0.83	25	ID 51	VOL ETL	1.80			KEXP_+Pt
60 123 73		520HF	0.10	25	ID 51	VOL ETL	2.13			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	2.13	0.10	0.09	KEXP_+Pt
60 123 73		520HF	0.36	12	ID 13	VOL ETL	3.82			KEXP_+Pt
60 123 73		520HF	0.00	0	0 CLP	ETL	3.82	0.10	0.14	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
60 125 108		540HF	0.46	7 ID 23	TWD	15S 25.48			540_Bobbi
60 125 108		540HF	0.68	6 ID 20	TWD	15S 26.02			540_Bobbi
60 125 167		520HF	0.00	0	CLP	UTS -20.87	0.14	0.22	R13DCLP+
60 125 167		520HF	0.73	24	VOL	UTS -20.87			R13DCLP+
60 125 167		520HF	0.00	0	CLP	UTS -20.59	0.14	0.16	R13DCLP+
60 125 167		520HF	0.72	24	VOL	UTS -20.59			R13DCLP+
60 125 167		520HF	0.29	16	VOL	UTS -19.92			R13DCLP+
60 125 167		520HF	0.00	0	CLP	UTS -19.92	0.23	0.16	R13DCLP+
60 128 108		540HF	0.34	5	BVC	15S 39.92			540_Bobbi
60 128 73		520HF	0.00	0	CLP	ETL -0.41	0.10	0.10	KEXP_+Pt
60 128 73		520HF	0.32	19	VOL	ETL -0.41			KEXP_+Pt
60 128 167		520HF	0.00	0	CLP	UTS -6.81	0.14	0.17	R13DCLP+
60 128 167		520HF	0.38	15	VOL	UTS -6.81			R13DCLP+
61 8 20		510UL	5.92	173	DNT	LTE 11.17			510_Bobbi
61 9 20		510UL	6.11	173	DNT	LTE 11.01			510_Bobbi
61 9 20		510UL	4.68	2	INR	LTE 19.82	68.00		510_Bobbi
61 18 33		520HF	0.50	14 ID 21	VOL	ETL 0.57			KEXP_+Pt
61 18 33		520HF	0.00	0	CLP	ETL 0.57	0.11	0.19	KEXP_+Pt
61 50 119		510UL	0.22	82	NQI	02S 35.89			510_Bobbi
61 50 114		520HF	0.00	0	NDF	03S -3.11			Spec_Int
61 53 119		510UL	2.62	174	DNT	01S 35.66			510_Bobbi
61 53 114		520HF	0.00	0	NDF	02S -2.34			Spec_Int
61 61 20		520HF	0.00	34	ARC	ETL 3.01		0.18	KEXP_+Pt
61 61 20		520HF	1.65	34 ID 91	SCI	ETL 3.01			KEXP_+Pt
61 64 5		510UL	2.87	169	DNT	LTS -0.04			510_Bobbi
61 72 5		510UL	3.21	165	DNT	LTS 0.00			510_Bobbi
61 73 6		510UL	8.94	163	DNT	LTS 0.00			510_Bobbi
61 74 5		510UL	11.31	168	DNT	LTS 0.15			510_Bobbi
61 75 81		510UL	4.58	162	DNT	LTS 0.00			510_Bobbi
61 79 110		540HF	0.40	7 ID 23	TWD	15S 37.49			540_Bobbi
61 79 113		520HF	0.25	9	VOL	UTS -8.98			Spec_Int
61 79 113		520HF	0.00	0	CLP	UTS -8.98	0.14	0.17	Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
61 82 79		520HF	0.51 232	0	INR	ETL -1.06			R13DCLP+
61 90 79		520HF	0.24 21	0	VOL	ETL -2.68			R13DCLP+
61 90 79		520HF	0.00 0	0	CLP	ETL -2.68	0.18	0.14	R13DCLP+
61 103 96		510UL	1.07 89	0	ADI	07S 3.69			510_Bobbi
61 103 113		520HF	0.00 0	0	NDF	07S 3.69			Spec_Int
61 121 103		510UL	0.23 110	0	NQI	10S 10.41			510_Bobbi
61 121 156		520HF	0.00 0	0	NDF	10S 10.41			Spec_Int
61 124 73		520HF	0.36 38	0	INR	ETL -0.29			KEXP_+Pt
62 5 8		460PP	0.58 121	0	AOD	UTE -0.56			Plug_MRP
62 7 21		510UL	5.74 177	0	DNT	LTE 11.46			510_Bobbi
62 9 21		510UL	5.96 177	0	DNT	LTE 11.24			510_Bobbi
62 20 22		510UL	3.64 174	0	DNT	06S 28.48			510_Bobbi
62 28 33		520HF	0.00 0	0	CLP	ETL -1.52	0.16	0.19	KEXP_+Pt
62 28 33		520HF	0.36 9	0	VOL	ETL -1.52			KEXP_+Pt
62 30 119		510UL	3.26 173	0	DNT	01S 14.52			510_Bobbi
62 30 169		520HF	0.00 0	0	NDF	01S 14.52			Spec_Int
62 30 51		520HF	0.76 33	ID 86	VOL	ETL 0.01			KEXP_+Pt
62 30 51		520HF	0.00 0	0	CLP	ETL 0.01	0.11	0.19	KEXP_+Pt
62 44 51		520HF	0.74 25	ID 51	VOL	ETL 3.09			KEXP_+Pt
62 44 51		520HF	0.00 0	0	CLP	ETL 3.09	0.12	0.14	KEXP_+Pt
62 44 51		520HF	0.00 0	0	CLP	ETL 3.85	0.12	0.14	KEXP_+Pt
62 44 51		520HF	0.31 16	ID 22	VOL	ETL 3.85			KEXP_+Pt
62 44 51		520HF	0.93 28	ID 63	VOL	ETL 4.34			KEXP_+Pt
62 44 51		520HF	0.00 0	0	CLP	ETL 4.34	0.12	0.14	KEXP_+Pt
62 44 51		520HF	0.00 0	0	CLP	ETL 5.06	0.12	0.14	KEXP_+Pt
62 44 51		520HF	0.58 16	ID 22	VOL	ETL 5.06			KEXP_+Pt
62 46 119		510UL	0.22 60	0	NQI	06S 0.67			510_Bobbi
62 46 114		520HF	0.83 109	OD 12	TWD	06S 0.84			Spec_Int
62 47 50		520HF	0.32 9	ID 8	VOL	ETL 1.45			KEXP_+Pt
62 47 50		520HF	0.00 0	0	CLP	ETL 1.45	0.20	0.17	KEXP_+Pt
62 47 50		520HF	0.00 0	0	CLP	ETL 2.04	0.20	0.17	KEXP_+Pt
62 47 50		520HF	0.32 11	ID 11	VOL	ETL 2.04			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP - Offset				
62 52 51		520HF	0.49	23	ID	43	VOL	ETL	0.60			KEXP_+Pt
62 52 51		520HF	0.00	0		0	CLP	ETL	0.60	0.11	0.14	KEXP_+Pt
62 53 50		520HF	0.13	16		0	VOL	ETL	-2.82			KEXP_+Pt
62 53 50		520HF	0.00	0		0	CLP	ETL	-2.82	0.11	0.10	KEXP_+Pt
62 53 50		520HF	0.16	29		0	VOL	ETL	-2.69			KEXP_+Pt
62 53 50		520HF	0.00	0		0	CLP	ETL	-2.69	0.17	0.10	KEXP_+Pt
62 53 50		520HF	0.00	0		0	RPP	ETL	-1.00	7.40		Spec_Int
62 53 50		520HF	0.00	0		0	CLP	ETL	0.03	0.17	0.15	Spec_Int
62 53 50		520HF	0.36	26	ID	54	VOL	ETL	0.03			Spec_Int
62 53 130		520HF	0.78	29		0	PID	ETL	1.22			KEXP_+Pt
62 53 50		520HF	0.00	0		0	CLP	ETL	1.22	0.11	0.15	Spec_Int
62 53 50		520HF	0.85	21	ID	36	VOL	ETL	1.22			Spec_Int
62 53 50		520HF	0.00	0		0	RPD	ETL	1.22			Spec_Int
62 53 50		520HF	0.48	16	ID	22	VOL	ETL	2.03			Spec_Int
62 53 50		520HF	0.00	0		0	CLP	ETL	2.03	0.11	0.15	Spec_Int
62 53 50		520HF	0.48	21	ID	36	VOL	ETL	2.79			Spec_Int
62 53 50		520HF	0.00	0		0	CLP	ETL	2.79	0.17	0.10	Spec_Int
62 53 50		520HF	0.00	0		0	CLP	ETL	3.71	0.11	0.10	Spec_Int
62 53 50		520HF	0.18	23	ID	43	VOL	ETL	3.71			Spec_Int
62 53 50		520HF	0.00	0		0	CLP	ETL	4.51	0.11	0.15	Spec_Int
62 53 50		520HF	0.40	21	ID	36	VOL	ETL	4.51			Spec_Int
62 53 130		520HF	1.37	31	ID	76	VOL	ETL	6.64			KEXP_+Pt
62 53 130		520HF	0.00	0		0	CLP	ETL	6.64	0.10	0.17	KEXP_+Pt
62 59 21		520HF	0.27	17	ID	25	VOL	ETL	0.77			KEXP_+Pt
62 59 21		520HF	0.00	0		0	CLP	ETL	0.77	0.12	0.15	KEXP_+Pt
62 59 21		520HF	0.65	25	ID	51	VOL	ETL	0.85			KEXP_+Pt
62 59 21		520HF	0.00	0		0	CLP	ETL	0.85	0.12	0.15	KEXP_+Pt
62 64 21		520HF	0.00	0		0	CLP	ETL	-0.10	0.16	0.11	KEXP_+Pt
62 64 21		520HF	0.44	26		0	VOL	ETL	-0.10			KEXP_+Pt
62 64 21		520HF	0.24	19	ID	30	VOL	ETL	3.78			KEXP_+Pt
62 64 21		520HF	0.00	0		0	CLP	ETL	3.78	0.12	0.10	KEXP_+Pt
62 65 5		510UL	3.66	174		0	DNT	LTS	-0.17			510_Bobbi
62 69 21		520HF	0.50	25	ID	51	VOL	ETL	0.98			KEXP_+Pt
62 69 21		520HF	0.00	0		0	CLP	ETL	0.98	0.12	0.15	KEXP_+Pt
62 69 21		520HF	0.14	18	ID	27	VOL	ETL	1.65			KEXP_+Pt
62 69 21		520HF	0.00	0		0	CLP	ETL	1.65	0.12	0.15	KEXP_+Pt
62 69 21		520HF	0.14	20	ID	33	VOL	ETL	1.68			KEXP_+Pt
62 69 21		520HF	0.00	0		0	CLP	ETL	1.68	0.12	0.10	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#			Cal	Probe	Volt / Origin/ Degrees Percent			Location TSP - Offset			Axial	Circ	Dataset	
								Code						
62	69	21		520HF	0.22	20	ID	33	VOL	ETL	4.01			KEXP_+Pt
62	69	21		520HF	0.00	0		0	CLP	ETL	4.01	0.12	0.10	KEXP_+Pt
62	75	21		520HF	0.00	0		0	CLP	ETL	0.91	0.06	0.10	KEXP_+Pt
62	75	21		520HF	0.22	17	ID	25	VOL	ETL	0.91			KEXP_+Pt
62	75	21		520HF	0.00	0		0	CLP	ETL	1.91	0.12	0.15	KEXP_+Pt
62	75	21		520HF	0.40	19	ID	30	VOL	ETL	1.91			KEXP_+Pt
62	75	21		520HF	0.41	21	ID	36	VOL	ETL	4.14			KEXP_+Pt
62	75	21		520HF	0.00	0		0	CLP	ETL	4.14	0.12	0.20	KEXP_+Pt
62	75	5		510UL	4.02	165		0	DNT	LTS	0.00			510_Bobbi
62	76	5		510UL	2.99	165		0	DNT	LTS	-0.11			510_Bobbi
62	79	59		520HF	0.00	0		0	CLP	ETL	-0.05	0.16	0.13	KEXP_+Pt
62	79	59		520HF	0.12	30		0	VOL	ETL	-0.05			KEXP_+Pt
62	81	96		510UL	2.29	182		0	INR	LTS	0.00			510_Bobbi
62	82	95		510UL	2.34	178		0	INR	LTS	0.00			510_Bobbi
62	84	95		510UL	0.76	44		0	INR	LTS	2.04			510_Bobbi
62	86	12		460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
62	114	108		540HF	1.32	2		0	INR	02S	14.97			540_Bobbi
62	123	73		520HF	0.36	24	ID	47	VOL	ETL	0.85			KEXP_+Pt
62	123	73		520HF	0.00	0		0	CLP	ETL	0.85	0.10	0.14	KEXP_+Pt
63	1	16		460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
63	2	128		510UL	0.64	112	OD	16	TWD	11S	-0.28			510_Bobbi
63	8	21		510UL	6.63	177		0	DNT	LTE	11.24			510_Bobbi
63	9	21		510UL	5.89	176		0	DNT	LTE	11.17			510_Bobbi
63	17	79		520HF	0.28	14		0	VOL	ETL	-1.24			R13DCLP+
63	17	79		520HF	0.00	0		0	CLP	ETL	-1.24	0.16	0.18	R13DCLP+
63	17	79		520HF	0.31	15	ID	20	VOL	ETL	2.01			R13DCLP+
63	17	79		520HF	0.00	0		0	CLP	ETL	2.01	0.11	0.14	R13DCLP+
63	19	110		520HF	0.00	0		0	NDF	08S	17.29			Spec_Int
63	19	21		510UL	0.16	87		0	NQI	08S	17.29			510_Bobbi
63	39	77		520HF	0.40	21		0	VOL	ETL	-0.37			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
63 39 77		520HF	0.00	90	0 CLP	ETL -0.37	0.10	0.09	KEXP_+Pt
63 56 47		510UL	0.83	98	0 INR	04S 35.64			510_Bobbi
63 56 47		510UL	0.92	101	0 INR	05S 8.66			510_Bobbi
63 61 6		510UL	0.31	93	OD 7	TWD 08S -0.70			510_Bobbi
63 73 6		510UL	1.70	81	0 INR	13S 26.50			510_Bobbi
63 76 126		520HF	0.00	0	0 NDF	LTS 2.83			LTS_+Pt
63 76 5		510UL	0.50	92	0 NQI	LTS 2.83			510_Bobbi
63 79 95		510UL	0.19	75	0 INR	LTS 2.57			510_Bobbi
63 80 96		510UL	0.32	108	0 INR	LTS 2.64			510_Bobbi
63 82 96		510UL	2.29	179	0 INR	LTS -0.24			510_Bobbi
63 83 95		510UL	2.16	179	0 INR	LTS 0.00			510_Bobbi
63 87 95		510UL	0.00	0	0 INF	LTS 0.04			510_Bobbi
63 109 156		520HF	0.00	0	0 NDF	LTS 16.58	18.47		Spec_Int
63 109 104		510UL	5.54	359	0 IDC	LTS 16.58	18.47		510_Bobbi
63 126 108		540HF	0.55	8	ID 27	TWD 15S 22.99			540_Bobbi
63 126 108		540HF	2.90	171	0 DNT	LTE 8.68			540_Bobbi
63 126 167		520HF	0.72	18	0 VOL	UTS -23.01			R13DCLP+
63 126 167		520HF	0.00	0	0 CLP	UTS -23.01	0.18	0.22	R13DCLP+
64 16 33		520HF	0.19	8	ID 9	VOL ETL 1.76			KEXP_+Pt
64 16 33		520HF	0.00	0	0 CLP	ETL 1.76	0.16	0.19	KEXP_+Pt
64 16 33		520HF	0.19	10	ID 13	VOL ETL 3.33			KEXP_+Pt
64 16 33		520HF	0.00	0	0 CLP	ETL 3.33	0.16	0.19	KEXP_+Pt
64 18 33		520HF	0.28	27	0 VOL	ETL -0.92			KEXP_+Pt
64 18 33		520HF	0.00	0	0 CLP	ETL -0.92	0.15	0.19	KEXP_+Pt
64 30 21		510UL	2.65	174	0 DNT	09S 8.14			510_Bobbi
64 30 110		520HF	0.00	0	0 NDF	09S 8.14			Spec_Int
64 60 23		520HF	0.22	26	0 VOL	ETL -1.91			KEXP_+Pt
64 60 23		520HF	0.00	0	0 CLP	ETL -1.91	0.14	0.16	KEXP_+Pt
64 60 23		520HF	1.32	29	ID 67	SCI ETL 1.22			KEXP_+Pt
64 60 23		520HF	0.00	35	0 ARC	ETL 1.22		0.19	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP -	Offset			
64 62 5		510UL	0.74	50		0 NQI	LTS	-0.30			510_Bobbi
64 62 25		520HF	0.00	0		0 NDF	LTS	-0.30			Spec_Int
64 66 25		520HF	0.21	33		0 VOL	15S	39.71			Spec_Int
64 66 25		520HF	0.00	0		0 CLP	15S	39.71	0.15	0.20	Spec_Int
64 66 7		540HF	0.37	7		0 BVC	15S	39.73			540_Bobbi
64 66 7		540HF	0.27	83		0 NQI	LTS	-0.44			540_Bobbi
64 66 25		520HF	0.00	0		0 NDF	LTS	-0.44			Spec_Int
64 74 23		520HF	0.00	0		0 CLP	ETL	-2.80	0.18	0.27	R13DCLP+
64 74 23		520HF	1.20	29		0 VOL	ETL	-2.80			R13DCLP+
64 74 57		520HF	1.36	14		0 PID	ETL	-2.80			R13DCLP+
64 74 23		520HF	0.30	9	ID	8 VOL	ETL	0.00			R13DCLP+
64 74 23		520HF	0.00	0		0 CLP	ETL	0.00	0.06	0.11	R13DCLP+
64 85 60		520HF	0.74	30	ID	71 VOL	ETL	0.23			KEXP_+Pt
64 85 60		520HF	0.00	0		0 CLP	ETL	0.23	0.12	0.14	KEXP_+Pt
64 85 60		520HF	0.00	0		0 CLP	ETL	1.75	0.29	0.19	KEXP_+Pt
64 85 60		520HF	0.51	16	ID	22 VOL	ETL	1.75			KEXP_+Pt
64 85 60		520HF	0.44	13	ID	15 VOL	ETL	2.85			KEXP_+Pt
64 85 60		520HF	0.00	0		0 CLP	ETL	2.85	0.12	0.14	KEXP_+Pt
64 85 60		520HF	0.61	28	ID	63 VOL	ETL	4.92			KEXP_+Pt
64 85 60		520HF	0.00	0		0 CLP	ETL	4.92	0.12	0.14	KEXP_+Pt
64 96 95		510UL	0.23	94		0 NQI	LTE	12.31			510_Bobbi
64 96 113		520HF	0.00	0		0 NDF	LTS	-11.69			Spec_Int
64 123 103		510UL	0.24	82		0 INR	10S	-0.34			510_Bobbi
64 127 103		510UL	0.60	123		0 INR	15S	-0.51			510_Bobbi
64 127 103		510UL	2.85	172		0 DNT	LTE	11.01			510_Bobbi
64 129 108		540HF	0.61	7	ID	23 TWD	UTS	-0.48			540_Bobbi
64 129 135		520HF	0.78	15		0 VOL	UTS	-0.39			R13DCLP+
64 129 135		520HF	0.00	0		0 CLP	UTS	-0.39	0.15	0.16	R13DCLP+
64 129 167		520HF	0.00	0		0 RIC	UTS	-0.38			R13DCLP+
65 2 153		520HF	0.00	0		0 NDF	13S	0.51			Spec_Int
65 2 128		510UL	0.17	79		0 NQI	13S	0.51			510_Bobbi
65 3 12		460PP	0.47	143		0 AOD	UTE	-0.58			Plug_MRP
65 20 25		510UL	0.53	37		0 INR	LTE	11.55			510_Bobbi
65 24 33		520HF	0.00	0		0 CLP	ETL	0.70	0.15	0.19	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#			Cal	Probe	Volt / Origin/ Degrees Percent			Code	Location TSP - Offset		Axial	Circ	Dataset
65	24	33		520HF	0.36	12	ID 17	VOL	ETL	0.70			KEXP_+Pt
65	49	78		520HF	0.47	18	ID 27	VOL	ETL	1.70			KEXP_+Pt
65	49	78		520HF	0.00	0	0	CLP	ETL	1.70	0.12	0.14	KEXP_+Pt
65	64	23		520HF	0.23	16	0	VOL	ETL	-0.52			KEXP_+Pt
65	64	23		520HF	0.00	0	0	CLP	ETL	-0.52	0.11	0.11	KEXP_+Pt
65	64	5		510UL	2.52	170	0	DNT	LTS	0.02			510_Bobbi
65	65	6		510UL	0.32	120	0	INR	UTS	0.42			510_Bobbi
65	67	6		510UL	3.03	158	0	DNT	LTS	0.11			510_Bobbi
65	68	5		510UL	3.38	168	0	DNT	LTS	-0.09			510_Bobbi
65	69	6		510UL	6.68	164	0	DNT	LTS	0.00			510_Bobbi
65	70	5		510UL	6.44	168	0	DNT	LTS	-0.02			510_Bobbi
65	81	60		520HF	0.00	0	0	CLP	ETL	2.02	0.23	0.18	KEXP_+Pt
65	81	60		520HF	0.34	19	ID 30	VOL	ETL	2.02			KEXP_+Pt
65	82	96		510UL	0.64	47	0	INR	LTS	2.49			510_Bobbi
65	83	95		510UL	2.16	182	0	INR	LTS	0.00			510_Bobbi
65	86	113		520HF	0.00	0	0	NDF	LTS	1.96			Spec_Int
65	86	96		510UL	0.44	115	0	NQI	LTS	1.96			510_Bobbi
65	93	60		520HF	0.47	15	ID 20	VOL	ETL	0.29			KEXP_+Pt
65	93	60		520HF	0.00	0	0	CLP	ETL	0.29	0.18	0.18	KEXP_+Pt
65	93	60		520HF	1.06	31	ID 76	VOL	ETL	4.27			KEXP_+Pt
65	93	60		520HF	0.00	0	0	CLP	ETL	4.27	0.12	0.18	KEXP_+Pt
65	94	131		540HF	0.39	6	0	BVC	15S	35.79			540_Bobbi
65	94	131		540HF	0.19	4	0	INR	15S	43.15			540_Bobbi
65	94	131		540HF	0.16	12	0	BVC	15S	44.72			540_Bobbi
65	94	123		520HF	0.25	14	0	VOL	UTS	-11.13			R13DCLP+
65	94	123		520HF	0.00	0	0	CLP	UTS	-11.13	0.15	0.16	R13DCLP+
65	94	123		520HF	0.20	12	0	VOL	UTS	-9.67			R13DCLP+
65	94	123		520HF	0.00	0	0	CLP	UTS	-9.67	0.10	0.16	R13DCLP+
65	94	123		520HF	0.00	0	0	CLP	UTS	-3.49	0.10	0.16	R13DCLP+
65	94	123		520HF	0.13	14	0	VOL	UTS	-3.49			R13DCLP+
65	94	123		520HF	0.30	26	0	VOL	UTS	-1.76			R13DCLP+
65	94	123		520HF	0.00	0	0	CLP	UTS	-1.76	0.10	0.16	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
65 100 96		510UL	0.18	110	0 INR	LTS 5.80			510_Bobbi
65 104 59		520HF	0.13	7	0 VOL	ETL -1.08			KEXP_+Pt
65 104 59		520HF	0.00	0	0 CLP	ETL -1.08	0.16	0.19	KEXP_+Pt
65 123 104		510UL	0.09	107	0 INR	LTE 14.47			510_Bobbi
65 127 104		510UL	1.35	166	0 INR	LTE 9.13			510_Bobbi
65 130 104		510UL	2.66	176	0 DNT	15S -0.69			510_Bobbi
65 130 104		510UL	5.49	173	0 DNT	LTE 10.78			510_Bobbi
66 12 25		510UL	0.34	89	0 INR	LTE 14.99			510_Bobbi
66 16 79		520HF	0.00	0	0 CLP	ETL -6.41	0.11	0.18	R13DCLP+
66 16 79		520HF	0.70	28	0 VOL	ETL -6.41			R13DCLP+
66 16 79		520HF	0.12	11	0 VOL	ETL -5.06			R13DCLP+
66 16 79		520HF	0.00	0	0 CLP	ETL -5.06	0.11	0.18	R13DCLP+
66 16 79		520HF	0.21	15	0 VOL	ETL -1.88			R13DCLP+
66 16 79		520HF	0.00	0	0 CLP	ETL -1.88	0.11	0.18	R13DCLP+
66 16 79		520HF	0.00	0	0 CLP	UTS -3.32	0.11	0.09	R13DCLP+
66 16 79		520HF	0.09	16	0 VOL	UTS -3.32			R13DCLP+
66 20 79		520HF	0.19	21	0 VOL	ETL -0.92			R13DCLP+
66 20 79		520HF	0.00	0	0 CLP	ETL -0.92	0.11	0.14	R13DCLP+
66 20 79		520HF	0.00	0	0 CLP	ETL 3.16	0.16	0.18	R13DCLP+
66 20 79		520HF	0.57	27	ID 58 VOL	ETL 3.16			R13DCLP+
66 20 79		520HF	0.00	0	0 CLP	ETL 3.46	0.16	0.14	R13DCLP+
66 20 79		520HF	0.48	24	ID 47 VOL	ETL 3.46			R13DCLP+
66 20 79		520HF	1.34	34	ID 91 SCI	ETL 4.20			R13DCLP+
66 20 79		520HF	0.00	34	0 ARC	ETL 4.20		0.18	R13DCLP+
66 26 33		520HF	0.32	39	0 VOL	ETL -0.09			KEXP_+Pt
66 26 33		520HF	0.00	0	0 CLP	ETL -0.09	0.16	0.19	KEXP_+Pt
66 61 6		510UL	2.84	185	0 DNT	05S 24.14			510_Bobbi
66 61 25		520HF	0.00	0	0 NDF	05S 24.14			Spec_Int
66 61 25		520HF	0.00	0	0 NDF	05S 30.24			Spec_Int
66 61 6		510UL	2.82	184	0 DNT	05S 30.24			510_Bobbi
66 64 23		520HF	0.00	0	0 CLP	ETL -0.42	0.14	0.11	KEXP_+Pt
66 64 23		520HF	0.21	22	0 VOL	ETL -0.42			KEXP_+Pt
66 66 5		510UL	5.24	180	0 DNT	LTE 17.34			510_Bobbi
66 66 5		510UL	2.96	178	0 DNT	LTE 18.91			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
66 67 6		510UL	6.31	160	0 DNT	LTS 0.00			510_Bobbi
66 68 5		510UL	8.41	168	0 DNT	LTS -0.02			510_Bobbi
66 69 6		510UL	12.09	166	0 DNT	LTS 0.00			510_Bobbi
66 70 5		510UL	20.07	170	0 DNT	LTS 0.09			510_Bobbi
66 71 6		510UL	12.25	165	0 DNT	LTS 0.00			510_Bobbi
66 72 5		510UL	6.07	166	0 DNT	LTS 0.07			510_Bobbi
66 73 6		510UL	3.32	171	0 DNT	LTS 0.00			510_Bobbi
66 82 79		520HF	0.00	0	0 CLP	ETL -2.91	0.12	0.18	R13DCLP+
66 82 79		520HF	0.18	25	0 VOL	ETL -2.91			R13DCLP+
66 83 134		520HF	0.00	0	0 NDF	LTS -0.39			LTS_+Pt
66 83 96		510UL	0.65	72	0 NQI	LTS -0.39			510_Bobbi
66 83 96		510UL	2.33	181	0 INR	LTS -0.16			510_Bobbi
66 84 95		510UL	2.93	185	0 DNT	LTS -0.17			510_Bobbi
66 85 96		510UL	4.15	168	0 DNT	LTS -0.06			510_Bobbi
66 86 95		510UL	7.37	169	0 DNT	LTS -0.04			510_Bobbi
66 86 134		520HF	0.00	0	0 NDF	LTS 2.03			LTS_+Pt
66 86 95		510UL	0.59	99	0 NQI	LTS 2.03			510_Bobbi
66 98 95		510UL	0.20	95	0 INR	LTE 9.08			510_Bobbi
66 126 104		510UL	2.59	167	0 DNT	LTE 11.06			510_Bobbi
66 127 108		540HF	0.52	11 ID	37 TWD	15S 44.88			540_Bobbi
66 127 108		540HF	3.56	176	0 DNT	LTE 10.75			540_Bobbi
66 127 167		520HF	0.00	0	0 CLP	UTS -1.52	0.14	0.16	R13DCLP+
66 127 167		520HF	0.82	19	0 VOL	UTS -1.52			R13DCLP+
67 2 128		510UL	0.08	78	0 INR	11S 0.00			510_Bobbi
67 2 128		510UL	5.50	173	0 DNT	LTE 10.54			510_Bobbi
67 7 110		520HF	0.00	0	0 NDF	15S 16.74			Spec_Int
67 7 26		510UL	0.33	105	0 NQI	15S 16.74			510_Bobbi
67 26 25		510UL	0.39	111	0 INR	LTE 15.51			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
67 44 77		520HF	0.35 21	ID 36	VOL	ETL 0.72			KEXP_+Pt
67 44 77		520HF	0.00 0	0	CLP	ETL 0.72	0.11	0.14	KEXP_+Pt
67 50 77		520HF	0.25 16	ID 22	VOL	ETL 1.22			KEXP_+Pt
67 50 77		520HF	0.00 0	0	CLP	ETL 1.22	0.11	0.14	KEXP_+Pt
67 58 23		520HF	0.00 0	0	CLP	ETL -0.41	0.14	0.16	KEXP_+Pt
67 58 23		520HF	0.54 25	0	VOL	ETL -0.41			KEXP_+Pt
67 63 21		520HF	0.00 0	0	CLP	ETL 1.71	0.12	0.10	KEXP_+Pt
67 63 21		520HF	0.32 17	ID 25	VOL	ETL 1.71			KEXP_+Pt
67 67 5		510UL	4.11 167	0	DNT	LTS 0.00			510_Bobbi
67 68 6		510UL	4.66 165	0	DNT	LTS 0.02			510_Bobbi
67 69 5		510UL	0.24 92	0	NQI	LTE 16.85			510_Bobbi
67 69 28		520HF	0.00 0	0	NDF	LTS -7.15			Spec_Int
67 69 5		510UL	15.32 170	0	DNT	LTS 0.00			510_Bobbi
67 71 6		510UL	24.71 167	0	DNT	LTS 0.13			510_Bobbi
67 72 5		510UL	7.41 167	0	DNT	LTS -0.04			510_Bobbi
67 82 96		510UL	0.37 135	0	INR	LTS 2.60			510_Bobbi
67 84 99		510UL	2.50 171	0	DNT	LTS -0.17			510_Bobbi
67 85 98		510UL	10.34 166	0	DNT	LTS -0.02			510_Bobbi
67 86 99		510UL	5.65 168	0	DNT	LTS -0.08			510_Bobbi
67 90 131		540HF	1.02 6	ID 20	TWD	11S 14.17			540_Bobbi
67 90 113		520HF	0.00 0	0	NDF	11S 14.17			Spec_Int
67 93 131		540HF	0.32 6	0	BVC	15S 35.71			540_Bobbi
67 93 123		520HF	0.16 6	0	VOL	UTS -12.51			R13DCLP+
67 93 123		520HF	0.00 0	0	CLP	UTS -12.51	0.15	0.16	R13DCLP+
67 93 123		520HF	0.29 20	0	VOL	UTS -11.19			R13DCLP+
67 93 123		520HF	0.00 0	0	CLP	UTS -11.19	0.10	0.16	R13DCLP+
67 93 123		520HF	0.00 0	0	CLP	UTS -10.57	0.10	0.16	R13DCLP+
67 93 123		520HF	0.33 14	0	VOL	UTS -10.57			R13DCLP+
67 105 59		520HF	0.11 34	ID 91	VOL	ETL 2.23			KEXP_+Pt
67 105 59		520HF	0.00 0	0	CLP	ETL 2.23	0.11	0.17	KEXP_+Pt
67 105 59		520HF	0.00 0	0	CLP	ETL 2.95	0.17	0.17	KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /		Code	Location		Axial	Circ	Dataset
			Degrees	Percent				TSP -	Offset			
67 105 59		520HF	0.19	12	ID	13	VOL	ETL	2.95			KEXP_+Pt
67 126 103		510UL	5.11	172		0	DNT	LTE	11.03			510_Bobbi
67 129 103		510UL	2.20	82		0	ADI	14S	30.92			510_Bobbi
67 129 156		520HF	0.00	0		0	NDF	15S	-4.08			Spec_Int
67 129 103		510UL	3.72	170		0	DNT	LTE	10.71			510_Bobbi
67 130 110		540HF	4.09	174		0	DNT	15S	-0.65			540_Bobbi
67 130 167		520HF	0.00	0		0	NDF	15S	-0.65			Spec_Int
67 130 110		540HF	0.60	7	ID	23	TWD	UTS	0.89			540_Bobbi
67 130 167		520HF	0.00	0		0	CLP	UTS	0.91	0.18	0.16	R13DCLP+
67 130 167		520HF	0.31	12		0	VOL	UTS	0.91			R13DCLP+
67 130 167		520HF	0.55	19		0	VOL	UTS	4.24			R13DCLP+
67 130 167		520HF	0.00	0		0	CLP	UTS	4.24	0.14	0.16	R13DCLP+
68 1 128		510UL	8.59	175		0	DNT	LTE	10.61			510_Bobbi
68 2 128		510UL	6.75	173		0	DNT	LTE	11.01			510_Bobbi
68 11 26		510UL	0.15	82		0	NQI	15S	9.75			510_Bobbi
68 11 110		520HF	0.00	0		0	NDF	15S	9.75			Spec_Int
68 21 26		510UL	0.66	110		0	INR	LTE	18.71			510_Bobbi
68 64 8		460PP	0.00	0		0	OBS	UTE	0.00			Plug_MRP
68 66 173		520HF	0.00	0		0	NDF	LTE	0.56	20.63		Spec_Int
68 66 58		520HF	0.00	0		0	RIC	LTE	0.56	20.63		Spec_Int
68 66 24		510UL	53.90	181		0	DNT	LTE	0.56	20.63		510_Bobbi
68 66 24		510UL	51.14	178		0	DNT	LTS	-0.97			510_Bobbi
68 66 24		510UL	91.34	177		0	DNT	LTS	0.59			510_Bobbi
68 71 6		510UL	11.76	166		0	DNT	LTS	0.19			510_Bobbi
68 72 5		510UL	0.15	107		0	INR	13S	8.71			510_Bobbi
68 72 5		510UL	11.08	167		0	DNT	LTS	0.11			510_Bobbi
68 73 6		510UL	5.79	163		0	DNT	LTS	-0.04			510_Bobbi
68 80 98		510UL	1.29	98		0	INR	13S	16.30			510_Bobbi
68 81 99		510UL	0.82	86		0	ADI	01S	22.95			510_Bobbi
68 81 113		520HF	0.00	0		0	NDF	02S	-15.05			Spec_Int
68 85 59		520HF	1.76	35	NT	96	SCI	ETL	2.03			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications. With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
68 85 59		520HF	0.00	48		0 ARC	ETL 2.03			0.26	KEXP_+Pt
68 85 59		520HF	0.14	33		0 INR	ETL 2.68				KEXP_+Pt
68 85 59		520HF	0.00	0		0 CLP	ETL 2.74	0.17	0.17		KEXP_+Pt
68 85 59		520HF	0.92	24	ID 47	VOL	ETL 2.74				KEXP_+Pt
68 85 59		520HF	1.20	20	ID 33	VOL	ETL 3.55				KEXP_+Pt
68 85 59		520HF	0.00	0		0 CLP	ETL 3.55	0.17	0.22		KEXP_+Pt
68 85 59		520HF	0.76	7	ID 5	VOL	ETL 3.90				KEXP_+Pt
68 85 59		520HF	0.00	0		0 CLP	ETL 3.90	0.17	0.17		KEXP_+Pt
68 85 59		520HF	0.45	28	ID 63	VOL	ETL 4.82				KEXP_+Pt
68 85 59		520HF	0.00	0		0 CLP	ETL 4.82	0.17	0.17		KEXP_+Pt
68 86 98		510UL	3.98	163		0 DNT	LTS -0.06				510_Bobbi
68 124 104		510UL	2.67	175		0 DNT	LTE 10.18				510_Bobbi
68 127 103		510UL	5.76	174		0 DNT	LTE 10.88				510_Bobbi
69 11 26		510UL	0.06	85		0 INR	11S -0.25				510_Bobbi
69 17 26		510UL	3.15	186		0 DNT	LTS 25.41				510_Bobbi
69 20 33		520HF	0.57	35		0 VOL	ETL -0.08				KEXP_+Pt
69 20 33		520HF	0.00	0		0 CLP	ETL -0.08	0.16	0.10		KEXP_+Pt
69 44 79		520HF	0.00	0		0 CLP	ETL -4.72	0.12	0.14		R13DCLP+
69 44 79		520HF	0.38	25		0 VOL	ETL -4.72				R13DCLP+
69 44 79		520HF	0.56	235		0 INR	ETL -2.07				R13DCLP+
69 44 77		520HF	0.20	7		0 VOL	ETL -1.76				R13DCLP+
69 44 77		520HF	0.00	0		0 CLP	ETL -1.76	0.11	0.14		R13DCLP+
69 44 79		520HF	0.09	4		0 PRA	ETL -1.60				R13DCLP+
69 44 77		520HF	0.24	15		0 VOL	ETL -0.10				KEXP_+Pt
69 44 77		520HF	0.00	0		0 CLP	ETL -0.10	0.16	0.19		KEXP_+Pt
69 44 79		520HF	0.23	32		0 PRA	ETL -0.05				R13DCLP+
69 44 77		520HF	0.41	35		0 INR	ETL 2.06				KEXP_+Pt
69 53 79		520HF	0.29	10		0 VOL	ETL -2.27				R13DCLP+
69 53 79		520HF	0.00	0		0 CLP	ETL -2.27	0.12	0.19		R13DCLP+
69 68 6		510UL	0.23	106		0 NQI	LTS 6.60				510_Bobbi
69 68 25		520HF	0.00	0		0 NDF	LTS 6.60				Spec_Int
69 71 25		520HF	0.00	0		0 NDF	13S 4.73				Spec_Int
69 71 5		510UL	0.20	111		0 NQI	13S 4.73				510_Bobbi
69 73 5		510UL	4.25	170		0 DNT	LTS 0.04				510_Bobbi

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
69 85 99		510UL	3.09	177	0 DNT	LTS -0.17			510_Bobbi
69 87 99		510UL	4.08	164	0 DNT	LTS -0.08			510_Bobbi
69 107 59		520HF	0.26	16	0 VOL	ETL -0.22			KEXP_+Pt
69 107 59		520HF	0.00	0	0 CLP	ETL -0.22	0.13	0.15	KEXP_+Pt
69 124 12		460PP	0.00	0	0 OBS	UTE 0.00			Plug_MRP
70 1 128		510UL	0.72	88	0 NQI	14S -0.29			510_Bobbi
70 1 153		520HF	0.92	110	OD 19	TWD 14S -0.24			Spec_Int
70 6 128		510UL	0.10	113	0 INR	11S -0.11			510_Bobbi
70 8 128		510UL	0.14	34	0 INR	08S -0.82			510_Bobbi
70 23 33		520HF	0.43	17	0 VOL	ETL -0.12			KEXP_+Pt
70 23 33		520HF	0.00	0	0 CLP	ETL -0.12	0.10	0.14	KEXP_+Pt
70 25 26		510UL	2.05	180	0 INR	09S 28.94			510_Bobbi
70 25 33		520HF	0.51	19	ID 32	VOL ETL 2.97			KEXP_+Pt
70 25 33		520HF	0.00	0	0 CLP	ETL 2.97	0.10	0.15	KEXP_+Pt
70 28 25		510UL	0.43	73	0 ADI	08S 33.14			510_Bobbi
70 28 110		520HF	0.00	0	0 NDF	09S -5.86			Spec_Int
70 30 33		520HF	0.00	0	0 CLP	ETL 0.00	0.15	0.15	KEXP_+Pt
70 30 33		520HF	0.62	22	ID 40	VOL ETL 0.00			KEXP_+Pt
70 34 118		510UL	0.56	78	OD 17	TWD 09S 0.75			510_Bobbi
70 46 77		520HF	0.00	0	0 CLP	ETL 2.02	0.05	0.14	KEXP_+Pt
70 46 77		520HF	0.19	12	ID 13	VOL ETL 2.02			KEXP_+Pt
70 46 77		520HF	0.17	25	ID 51	VOL ETL 3.31			KEXP_+Pt
70 46 77		520HF	0.00	0	0 CLP	ETL 3.31	0.10	0.14	KEXP_+Pt
70 48 77		520HF	0.32	4	0 VOL	ETL -1.45			KEXP_+Pt
70 48 77		520HF	0.00	0	0 CLP	ETL -1.45	0.11	0.14	KEXP_+Pt
70 48 77		520HF	0.37	6	0 VOL	ETL -0.94			KEXP_+Pt
70 48 77		520HF	0.00	0	0 CLP	ETL -0.94	0.11	0.14	KEXP_+Pt
70 48 77		520HF	0.00	0	0 CLP	ETL -0.33	0.16	0.14	KEXP_+Pt
70 48 77		520HF	0.44	13	0 VOL	ETL -0.33			KEXP_+Pt
70 57 25		520HF	0.00	0	0 NDF	UTS 1.06			Spec_Int
70 57 4		510UL	0.16	81	0 NQI	UTS 1.06			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/		Location			Axial	Circ	Dataset
			Degrees	Percent	Code	TSP - Offset						
70 59 23		520HF	0.25	17	ID	25	VOL	ETL	1.03			KEXP_+Pt
70 59 23		520HF	0.00	0		0	CLP	ETL	1.03	0.11	0.11	KEXP_+Pt
70 59 23		520HF	0.24	21	ID	36	VOL	ETL	3.01			KEXP_+Pt
70 59 23		520HF	0.00	0		0	CLP	ETL	3.01	0.14	0.16	KEXP_+Pt
70 66 3		510UL	0.35	82	OD	10	TWD	12S	-0.77			510_Bobbi
70 66 23		520HF	0.30	17	ID	25	VOL	ETL	1.37			KEXP_+Pt
70 66 23		520HF	0.00	0		0	CLP	ETL	1.37	0.09	0.11	KEXP_+Pt
70 70 21		520HF	0.00	0		0	CLP	ETL	-0.60	0.12	0.10	KEXP_+Pt
70 70 21		520HF	0.25	17		0	VOL	ETL	-0.60			KEXP_+Pt
70 76 21		520HF	0.00	0		0	CLP	ETL	0.17	0.12	0.10	KEXP_+Pt
70 76 21		520HF	0.17	28	ID	63	VOL	ETL	0.17			KEXP_+Pt
70 76 21		520HF	0.17	10	ID	9	VOL	ETL	0.32			KEXP_+Pt
70 76 21		520HF	0.00	0		0	CLP	ETL	0.32	0.12	0.10	KEXP_+Pt
70 76 21		520HF	0.21	15	ID	20	VOL	ETL	2.77			KEXP_+Pt
70 76 21		520HF	0.00	0		0	CLP	ETL	2.77	0.18	0.10	KEXP_+Pt
70 76 21		520HF	0.31	15	ID	20	VOL	ETL	4.01			KEXP_+Pt
70 76 21		520HF	0.00	0		0	CLP	ETL	4.01	0.12	0.15	KEXP_+Pt
70 78 59		520HF	0.29	9	ID	8	VOL	ETL	2.42			KEXP_+Pt
70 78 59		520HF	0.00	0		0	CLP	ETL	2.42	0.19	0.22	KEXP_+Pt
70 78 59		520HF	0.34	9	ID	8	VOL	ETL	3.60			KEXP_+Pt
70 78 59		520HF	0.00	0		0	CLP	ETL	3.60	0.19	0.17	KEXP_+Pt
70 78 59		520HF	0.00	0		0	CLP	ETL	4.96	0.25	0.17	KEXP_+Pt
70 78 59		520HF	0.28	20	ID	33	VOL	ETL	4.96			KEXP_+Pt
70 79 113		520HF	0.00	0		0	NDF	01S	-2.49			Spec_Int
70 79 98		510UL	0.36	107		0	NQI	LTS	43.51			510_Bobbi
70 81 59		520HF	0.00	0		0	CLP	ETL	-0.75	0.13	0.13	KEXP_+Pt
70 81 59		520HF	0.13	15		0	VOL	ETL	-0.75			KEXP_+Pt
70 81 59		520HF	0.00	0		0	CLP	ETL	0.16	0.13	0.17	KEXP_+Pt
70 81 59		520HF	0.21	29	ID	67	VOL	ETL	0.16			KEXP_+Pt
70 81 59		520HF	0.29	11	ID	11	VOL	ETL	4.92			KEXP_+Pt
70 81 59		520HF	0.00	0		0	CLP	ETL	4.92	0.13	0.17	KEXP_+Pt
70 81 98		510UL	0.15	78		0	INR	LTS	43.31			510_Bobbi
70 84 98		510UL	0.65	87		0	NQI	LTS	2.77			510_Bobbi
70 84 113		520HF	0.00	0		0	NDF	LTS	2.77			Spec_Int
70 85 99		510UL	2.92	178		0	DNT	LTS	-0.10			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
70 86 98		510UL	3.17 166		0 DNT	LTS -0.10			510_Bobbi
70 87 99		510UL	4.31 167		0 DNT	LTS -0.02			510_Bobbi
70 88 110		540HF	0.27 10		0 BVC	15S 37.31			540_Bobbi
70 88 110		540HF	0.28 8		0 BVC	15S 39.96			540_Bobbi
70 88 123		520HF	0.16 12		0 VOL	UTS -9.32			R13DCLP+
70 88 123		520HF	0.00 0		0 CLP	UTS -9.32	0.15	0.16	R13DCLP+
70 88 123		520HF	0.21 12		0 VOL	UTS -6.63			R13DCLP+
70 88 123		520HF	0.00 0		0 CLP	UTS -6.63	0.19	0.16	R13DCLP+
70 90 59		520HF	0.22 16	ID 22	VOL	ETL 2.00			KEXP_+Pt
70 90 59		520HF	0.00 0		0 CLP	ETL 2.00	0.19	0.17	KEXP_+Pt
70 90 59		520HF	0.21 17	ID 25	VOL	ETL 5.07			KEXP_+Pt
70 90 59		520HF	0.00 0		0 CLP	ETL 5.07	0.19	0.17	KEXP_+Pt
70 96 59		520HF	0.00 0		0 CLP	ETL 1.96	0.13	0.17	KEXP_+Pt
70 96 59		520HF	0.21 23	ID 43	VOL	ETL 1.96			KEXP_+Pt
70 96 59		520HF	0.00 0		0 CLP	ETL 4.54	0.13	0.17	KEXP_+Pt
70 96 59		520HF	0.13 21	ID 36	VOL	ETL 4.54			KEXP_+Pt
70 96 59		520HF	0.24 18	ID 27	VOL	ETL 4.92			KEXP_+Pt
70 96 59		520HF	0.00 0		0 CLP	ETL 4.92	0.19	0.17	KEXP_+Pt
70 105 99		510UL	0.28 78		0 NQI	06S -0.74			510_Bobbi
70 105 113		520HF	0.45 51	OD 9	TWD	06S -0.68			Spec_Int
70 106 59		520HF	0.00 0		0 CLP	ETL 2.75	0.13	0.17	KEXP_+Pt
70 106 59		520HF	0.23 19	ID 30	VOL	ETL 2.75			KEXP_+Pt
70 124 73		520HF	0.00 0		0 CLP	ETL -1.98	0.20	0.15	KEXP_+Pt
70 124 73		520HF	0.41 30		0 VOL	ETL -1.98			KEXP_+Pt
70 124 104		510UL	4.54 171		0 DNT	LTE 9.43			510_Bobbi
71 1 128		510UL	9.65 174		0 DNT	LTE 10.24			510_Bobbi
71 2 128		510UL	8.83 173		0 DNT	LTE 9.91			510_Bobbi
71 2 128		510UL	3.36 173		0 DNT	LTE 12.11			510_Bobbi
71 7 128		510UL	0.12 100		0 INR	11S 0.39			510_Bobbi
71 8 126		400SB	0.00 0		0 ROB	14S 21.57			Slv_Bob
71 15 26		510UL	0.23 75		0 NQI	05S -0.82			510_Bobbi
71 15 110		520HF	0.43 85	OD 4	TWD	05S -0.72			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
71 27 26		510UL	0.23 120	OD 5	TWD	10S -0.84			510_Bobbi
71 28 25		510UL	0.27 91	OD 5	TWD	11S 0.70			510_Bobbi
71 44 77		520HF	0.00 0		CLP	ETL -1.54	0.10	0.24	KEXP_+Pt
71 44 77		520HF	0.22 16		VOL	ETL -1.54			KEXP_+Pt
71 44 77		520HF	0.23 12		VOL	ETL -1.02			KEXP_+Pt
71 44 77		520HF	0.00 0		CLP	ETL -1.02	0.10	0.14	KEXP_+Pt
71 44 77		520HF	0.00 0		CLP	ETL -0.13	0.13	0.17	KEXP_+Pt
71 44 77		520HF	0.18 15		VOL	ETL -0.13			KEXP_+Pt
71 48 114		520HF	0.78 108	OD 11	TWD	09S -0.82			Spec_Int
71 48 118		510UL	0.29 78		NQI	09S -0.78			510_Bobbi
71 70 25		520HF	0.76 50	OD 10	TWD	15S 0.70			Spec_Int
71 70 3		510UL	0.16 70		NQI	15S 0.73			510_Bobbi
71 78 59		520HF	0.23 34	ID 91	VOL	ETL 0.02			KEXP_+Pt
71 78 59		520HF	0.00 0		CLP	ETL 0.02	0.16	0.13	KEXP_+Pt
71 79 98		510UL	0.26 100		INR	LTS 43.34			510_Bobbi
71 80 12		460PP	0.00 0		OBS	UTE 0.00			Plug_MRP
71 81 98		510UL	0.17 155		INR	LTS 42.72			510_Bobbi
71 82 99		510UL	0.36 80		INR	LTS 2.85			510_Bobbi
71 84 113		520HF	0.00 0		NDF	13S -0.91			Spec_Int
71 84 99		510UL	0.44 141		NQI	13S -0.91			510_Bobbi
71 84 99		510UL	0.44 92		NQI	LTS 2.32			510_Bobbi
71 84 113		520HF	0.00 0		NDF	LTS 2.32			Spec_Int
71 86 99		510UL	5.08 162		DNT	LTS -0.04			510_Bobbi
71 108 103		510UL	2.44 185		INR	LTS 7.61			510_Bobbi
71 123 18		520HF	1.02 33		VOL	ETL -0.20			KEXP_+Pt
71 123 18		520HF	0.00 0		CLP	ETL -0.20	0.11	0.22	KEXP_+Pt
71 123 18		520HF	6.12 53	OD 93	SCI	ETL 5.39			KEXP_+Pt
71 123 18		520HF	0.00 40		ARC	ETL 5.39		0.22	KEXP_+Pt
71 125 104		510UL	0.91 84		ADI	13S 23.87			510_Bobbi
71 125 156		520HF	0.79 104		MB	14S -12.46			Spec_Int
71 125 104		510UL	6.67 173		DNT	LTE 11.09			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
72 2 128		510UL	2.68	173		0 DNT	LTE 9.71				510_Bobbi
72 2 128		510UL	5.64	173		0 DNT	LTE 10.50				510_Bobbi
72 3 128		510UL	0.40	92		0 NQI	LTE 13.59				510_Bobbi
72 3 153		520HF	0.00	0		0 NDF	LTS -10.41				Spec_Int
72 11 128		510UL	0.23	110	OD	6 TWD	09S -0.41				510_Bobbi
72 19 26		510UL	0.16	85		0 INR	UTS 0.63				510_Bobbi
72 29 117		540HF	0.51	73		0 INR	11S 22.68				540_Bobbi
72 29 79		520HF	0.46	28		0 VOL	ETL -1.10				R13DCLP+
72 29 79		520HF	0.00	0		0 CLP	ETL -1.10	0.05	0.14		R13DCLP+
72 31 77		520HF	0.00	0		0 CLP	ETL -0.75	0.10	0.10		KEXP_+Pt
72 31 77		520HF	0.66	24		0 VOL	ETL -0.75				KEXP_+Pt
72 31 77		520HF	0.00	0		0 CLP	ETL 0.48	0.10	0.10		KEXP_+Pt
72 31 77		520HF	0.24	23	ID	43 VOL	ETL 0.48				KEXP_+Pt
72 31 77		520HF	0.93	23	ID	43 VOL	ETL 0.87				KEXP_+Pt
72 31 77		520HF	0.00	0		0 CLP	ETL 0.87	0.10	0.14		KEXP_+Pt
72 32 118		510UL	5.10	174		0 DNT	LTE 10.82				510_Bobbi
72 33 118		510UL	7.01	176		0 DNT	LTE 10.76				510_Bobbi
72 44 118		510UL	2.10	176		0 INR	UTS -0.04				510_Bobbi
72 48 118		510UL	2.39	176		0 INR	UTS 0.00				510_Bobbi
72 54 79		520HF	0.55	27		0 VOL	ETL -6.75				R13DCLP+
72 54 79		520HF	0.00	0		0 CLP	ETL -6.75	0.23	0.23		R13DCLP+
72 54 79		520HF	0.41	25		0 VOL	ETL -2.30				KEXP_+Pt
72 54 79		520HF	0.00	0		0 CLP	ETL -2.30	0.12	0.14		KEXP_+Pt
72 54 77		520HF	0.65	28		0 VOL	ETL -0.23				KEXP_+Pt
72 54 77		520HF	0.00	0		0 CLP	ETL -0.23	0.11	0.14		KEXP_+Pt
72 54 79		520HF	0.51	32		0 PRA	ETL -0.01				KEXP_+Pt
72 54 77		520HF	0.39	26	ID	54 VOL	ETL 1.31				KEXP_+Pt
72 54 77		520HF	0.00	0		0 CLP	ETL 1.31	0.11	0.14		KEXP_+Pt
72 54 79		520HF	0.17	26		0 PRA	ETL 1.33				KEXP_+Pt
72 57 23		520HF	0.00	0		0 CLP	ETL -6.79	0.14	0.11		R13DCLP+
72 57 23		520HF	0.18	24		0 VOL	ETL -6.79				R13DCLP+
72 57 23		520HF	0.37	25		0 VOL	ETL -6.58				R13DCLP+
72 57 23		520HF	0.00	0		0 CLP	ETL -6.58	0.14	0.16		R13DCLP+
72 57 23		520HF	0.10	16		0 INR	ETL -5.73				R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
72 57 23		520HF	0.40	15	0	VOL ETL -5.15			R13DCLP+
72 57 23		520HF	0.00	0	0	CLP ETL -5.15	0.14	0.16	R13DCLP+
72 57 23		520HF	0.00	0	0	CLP ETL -4.15	0.14	0.22	R13DCLP+
72 57 23		520HF	0.74	21	0	VOL ETL -4.15			R13DCLP+
72 57 23		520HF	0.25	26	0	VOL ETL -2.50			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL -2.50	0.09	0.11	Spec_Int
72 57 23		520HF	0.35	16	0	VOL ETL -2.25			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL -2.25	0.09	0.16	Spec_Int
72 57 23		520HF	0.25	39	0	VOL ETL -1.75			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL -1.75	0.14	0.16	Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL -1.30	0.09	0.16	Spec_Int
72 57 23		520HF	0.38	27	0	VOL ETL -1.30			Spec_Int
72 57 23		520HF	0.27	18	ID 27	VOL ETL 0.69			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL 0.69	0.09	0.16	Spec_Int
72 57 23		520HF	0.39	20	ID 33	VOL ETL 1.60			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL 1.60	0.14	0.16	Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL 3.10	0.14	0.22	Spec_Int
72 57 23		520HF	0.83	26	ID 54	VOL ETL 3.10			Spec_Int
72 57 23		520HF	0.00	0	0	CLP ETL 3.60	0.14	0.16	Spec_Int
72 57 23		520HF	0.44	19	ID 30	VOL ETL 3.60			Spec_Int
72 57 23		520HF	0.12	58	0	INR UTS -0.14			R13DCLP+
72 57 7		540HF	0.41	7	ID 23	TWD UTS 2.97			540_Bobbi
72 65 3		510UL	0.20	89	0	NQI 14S -0.82			510_Bobbi
72 65 25		520HF	0.00	0	0	NDF 14S -0.82			Spec_Int
72 81 98		510UL	6.65	167	0	DNT LTS -0.06			510_Bobbi
72 82 99		510UL	7.29	166	0	DNT LTS -0.04			510_Bobbi
72 83 113		520HF	0.20	17	0	VOL ETL -2.23			Spec_Int
72 83 113		520HF	0.00	0	0	CLP ETL -2.23	0.14	0.17	Spec_Int
72 83 110		540HF	0.23	9	0	BVC UTS 4.80			540_Bobbi
72 86 133		520HF	0.54	24	0	VOL ETL -3.27			R13DCLP+
72 86 133		520HF	0.00	0	0	CLP ETL -3.27	0.16	0.15	R13DCLP+
72 86 133		520HF	0.00	0	0	NDF ETL -1.89			R13DCLP+
72 86 110		540HF	2.99	170	0	DNT LTS -0.08			540_Bobbi
72 86 110		540HF	0.50	9	ID 30	TWD UTS 3.92			540_Bobbi
72 109 103		510UL	1.04	78	0	ADI 02S 24.09			510_Bobbi
72 109 156		520HF	0.00	0	0	NDF 03S -14.91			Spec_Int
72 124 79		520HF	0.00	0	0	CLP ETL -2.46	0.30	0.37	R13DCLP+

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset
72 124 138		520PI	0.00	0	0 CLP	ETL	-2.46	0.25	0.31	PostIn_+Pt
72 124 138		520PI	1.89	29	0 VOL	ETL	-2.46			PostIn_+Pt
72 124 128		520HF	1.39	28	0 PID	ETL	-2.46			R13DCLP+
72 124 79		520HF	1.48	30	0 VOL	ETL	-2.46			R13DCLP+
72 125 103		510UL	4.99	172	0 DNT	LTE	10.47			510_Bobbi
72 126 104		510UL	0.48	170	0 INR	LTE	8.81			510_Bobbi
72 126 104		510UL	6.07	171	0 DNT	LTE	10.38			510_Bobbi
72 128 103		510UL	5.99	174	0 DNT	LTE	10.47			510_Bobbi
72 129 104		510UL	2.56	171	0 DNT	LTE	10.87			510_Bobbi
72 130 156		520HF	0.21	16	0 VOL	12S	9.05			Spec_Int
72 130 156		520HF	0.00	0	0 CLP	12S	9.05	0.15	0.17	Spec_Int
72 130 110		540HF	0.22	5	0 BVC	12S	10.67			540_Bobbi
72 130 156		520HF	0.19	3	0 VOL	12S	10.72			Spec_Int
72 130 156		520HF	0.00	0	0 CLP	12S	10.72	0.10	0.11	Spec_Int
72 130 110		540HF	0.27	10	0 BVC	12S	16.30			540_Bobbi
72 130 156		520HF	0.00	0	0 CLP	12S	16.53	0.15	0.11	Spec_Int
72 130 156		520HF	0.38	15	0 VOL	12S	16.53			Spec_Int
72 130 110		540HF	0.18	4	0 INR	12S	19.50			540_Bobbi
72 130 156		520HF	0.19	16	0 VOL	12S	19.74			R13DCLP+
72 130 156		520HF	0.00	0	0 CLP	12S	19.74	0.15	0.17	R13DCLP+
72 130 110		540HF	0.21	13	0 BVC	12S	22.52			540_Bobbi
72 130 156		520HF	0.00	0	0 RIC	12S	22.75			R13DCLP+
72 130 110		540HF	0.25	7	0 BVC	12S	33.77			540_Bobbi
72 130 156		520HF	0.00	0	0 RIC	12S	33.77			R13DCLP+
72 130 135		520HF	0.00	0	0 CLP	13S	-14.28	0.10	0.11	R13DCLP+
72 130 135		520HF	0.20	13	0 VOL	13S	-14.28			R13DCLP+
72 130 167		520HF	0.00	0	0 RIC	13S	-13.76			R13DCLP+
72 130 167		520HF	0.00	0	0 NDF	13S	-6.91			R13DCLP+
72 130 167		520HF	0.09	22	0 VOL	13S	-3.45			R13DCLP+
72 130 167		520HF	0.00	0	0 CLP	13S	-3.45	0.14	0.16	R13DCLP+
73 1 128		510UL	4.26	174	0 DNT	LTE	10.43			510_Bobbi
73 2 128		510UL	5.10	173	0 DNT	LTE	10.49			510_Bobbi
73 11 128		510UL	0.11	96	0 INR	09S	-0.39			510_Bobbi
73 18 25		510UL	0.26	125	0 INR	01S	36.62			510_Bobbi
73 19 148		520HF	0.61	22	0 VOL	ETL	-6.86			SlvBdr_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
73 19 148		520HF	0.00 90	0	CLP	ETL -6.86	0.09	0.18	SlvBdr_+Pt
73 19 148		520HF	0.00 90	0	CLP	ETL -6.62	0.09	0.18	SlvBdr_+Pt
73 19 148		520HF	0.56 23	0	VOL	ETL -6.62			SlvBdr_+Pt
73 21 26		510UL	0.30 107	0	INR	UTS 0.36			510_Bobbi
73 23 121		520HF	0.33 13	ID 15	VOL	ETL 1.90			R13DCLP+
73 23 121		520HF	0.00 0	0	CLP	ETL 1.90	0.09	0.11	R13DCLP+
73 25 26		510UL	0.13 140	0	INR	11S -0.79			510_Bobbi
73 26 25		510UL	0.11 112	0	INR	11S -0.81			510_Bobbi
73 26 121		520HF	0.28 16	ID 28	VOL	ETL 1.12			R13DCLP+
73 26 121		520HF	0.00 0	0	CLP	ETL 1.12	0.09	0.11	R13DCLP+
73 26 121		520HF	0.25 18	ID 29	VOL	ETL 2.19			R13DCLP+
73 26 121		520HF	0.00 0	0	CLP	ETL 2.19	0.09	0.11	R13DCLP+
73 26 121		520HF	0.19 19	ID 30	VOL	ETL 5.14			R13DCLP+
73 26 121		520HF	0.00 0	0	CLP	ETL 5.14	0.05	0.06	R13DCLP+
73 29 79		520HF	0.00 0	0	CLP	ETL -1.82	0.16	0.18	SlvBdr_+Pt
73 29 79		520HF	0.29 27	0	VOL	ETL -1.82			SlvBdr_+Pt
73 30 25		510UL	0.15 77	0	INR	10S -0.85			510_Bobbi
73 30 25		510UL	0.12 81	0	INR	11S -0.83			510_Bobbi
73 31 33		520HF	1.07 28	ID 58	VOL	ETL 2.72			KEXP_+Pt
73 31 33		520HF	0.00 0	0	CLP	ETL 2.72	0.15	0.19	KEXP_+Pt
73 31 33		520HF	0.00 41	0	ARC	ETL 4.89		0.22	KEXP_+Pt
73 31 33		520HF	1.91 32	ID 71	SCI	ETL 4.89			KEXP_+Pt
73 32 77		520HF	0.23 8	ID 6	VOL	ETL 1.26			KEXP_+Pt
73 32 77		520HF	0.00 0	0	CLP	ETL 1.26	0.10	0.10	KEXP_+Pt
73 32 118		510UL	4.95 174	0	DNT	LTE 10.62			510_Bobbi
73 34 118		510UL	6.88 176	0	DNT	LTE 10.54			510_Bobbi
73 36 77		520HF	0.50 10	0	VOL	ETL -0.37			KEXP_+Pt
73 36 77		520HF	0.00 0	0	CLP	ETL -0.37	0.10	0.10	KEXP_+Pt
73 38 118		510UL	0.31 77	OD 10	TWD	08S -0.76			510_Bobbi
73 45 118		510UL	2.73 172	0	DNT	UTS -0.17			510_Bobbi
73 45 114		520HF	0.00 0	0	NDF	UTS -0.17			Spec_Int
73 46 114		520HF	0.00 0	0	NDF	UTS 0.08			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP -	Offset			
73 46 118		510UL	2.62	170		0 DNT	UTS	0.09			510_Bobbi
73 51 118		510UL	0.14	87		0 INR	09S	-0.77			510_Bobbi
73 53 114		520HF	0.00	0		0 NDF	UTS	0.02			Spec_Int
73 53 118		510UL	2.65	167		0 DNT	UTS	0.02			510_Bobbi
73 55 114		520HF	0.51	85	OD	8 TWD	08S	-0.75			Spec_Int
73 55 118		510UL	0.50	80		0 NQI	08S	-0.74			510_Bobbi
73 57 118		510UL	2.92	170		0 DNT	UTS	0.10			510_Bobbi
73 57 114		520HF	0.00	0		0 NDF	UTS	0.10			Spec_Int
73 59 25		520HF	0.00	0		0 NDF	UTS	0.18			Spec_Int
73 59 3		510UL	2.77	170		0 DNT	UTS	0.18			510_Bobbi
73 64 4		510UL	0.14	109		0 NQI	13S	0.15			510_Bobbi
73 64 25		520HF	0.00	0		0 NDF	13S	0.15			Spec_Int
73 66 23		520HF	0.22	17		0 VOL	ETL	-3.59			R13DCLP+
73 66 23		520HF	0.00	0		0 CLP	ETL	-3.59	0.09	0.11	R13DCLP+
73 66 23		520HF	0.44	21	ID	36 VOL	ETL	0.69			R13DCLP+
73 66 23		520HF	0.00	0		0 CLP	ETL	0.69	0.09	0.12	R13DCLP+
73 76 98		510UL	2.64	175		0 DNT	LTS	0.00			510_Bobbi
73 79 99		510UL	2.91	175		0 DNT	LTS	-0.17			510_Bobbi
73 80 98		510UL	10.19	162		0 DNT	LTS	-0.04			510_Bobbi
73 81 99		510UL	18.77	169		0 DNT	LTS	0.00			510_Bobbi
73 82 98		510UL	6.54	166		0 DNT	LTS	0.02			510_Bobbi
73 82 98		510UL	0.42	113		0 INR	LTS	2.81			510_Bobbi
73 85 99		510UL	5.04	163		0 DNT	LTS	-0.10			510_Bobbi
73 89 113		520HF	0.00	0		0 NDF	08S	12.17			Spec_Int
73 89 99		510UL	0.19	85		0 NQI	08S	12.17			510_Bobbi
73 116 104		510UL	4.01	176		0 DNT	09S	15.23			510_Bobbi
73 121 103		510UL	4.29	174		0 DNT	LTE	11.19			510_Bobbi
73 128 167		520HF	0.22	13		0 VOL	15S	13.56			R13DCLP+
73 128 167		520HF	0.00	0		0 CLP	15S	13.56	0.14	0.16	R13DCLP+
73 128 110		540HF	0.39	3		0 INR	15S	13.59			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
73 129 103		510UL	3.37	172	0	DNT LTE 11.52			510_Bobbi
73 130 104		510UL	0.44	112	0	NQI 14S 32.17			510_Bobbi
73 130 156		520HF	0.00	0	0	NDF 15S -2.83			Spec_Int
73 130 104		510UL	2.79	170	0	DNT LTE 11.15			510_Bobbi
74 1 128		510UL	3.75	171	0	DNT LTE 10.71			510_Bobbi
74 32 118		510UL	5.39	175	0	DNT LTE 10.66			510_Bobbi
74 33 77		520HF	1.08	20	0	VOL ETL -0.04			KEXP_+Pt
74 33 77		520HF	0.00	0	0	CLP ETL -0.04	0.15	0.24	KEXP_+Pt
74 33 77		520HF	0.52	20	ID 33	VOL ETL 0.52			KEXP_+Pt
74 33 77		520HF	0.00	0	0	CLP ETL 0.52	0.15	0.24	KEXP_+Pt
74 33 118		510UL	9.42	174	0	DNT LTE 10.32			510_Bobbi
74 33 118		510UL	2.89	169	0	DNT UTS -0.08			510_Bobbi
74 33 148		520HF	0.00	0	0	NDF UTS -0.08			SlvBdr_+Pt
74 34 118		510UL	2.68	168	0	DNT UTS -0.06			510_Bobbi
74 34 148		520HF	0.00	0	0	NDF UTS -0.06			SlvBdr_+Pt
74 35 77		520HF	0.19	40	0	VOL ETL -0.81			KEXP_+Pt
74 35 77		520HF	0.00	0	0	CLP ETL -0.81	0.13	0.14	KEXP_+Pt
74 35 77		520HF	0.00	0	0	CLP ETL -0.05	0.10	0.14	KEXP_+Pt
74 35 77		520HF	0.49	22	0	VOL ETL -0.05			KEXP_+Pt
74 35 77		520HF	3.10	36	NT 100	VOL ETL 4.05			KEXP_+Pt
74 35 77		520HF	0.00	0	0	CLP ETL 4.05	0.10	0.19	KEXP_+Pt
74 35 118		510UL	3.15	167	0	DNT UTS -0.02			510_Bobbi
74 36 78		520HF	0.00	0	0	CLP ETL -0.36	0.12	0.13	KEXP_+Pt
74 36 78		520HF	0.56	27	0	VOL ETL -0.36			KEXP_+Pt
74 36 78		520HF	1.02	31	ID 76	VOL ETL 0.04			KEXP_+Pt
74 36 78		520HF	0.00	0	0	CLP ETL 0.04	0.18	0.13	KEXP_+Pt
74 36 78		520HF	0.37	31	ID 76	VOL ETL 1.80			KEXP_+Pt
74 36 78		520HF	0.00	0	0	CLP ETL 1.80	0.12	0.22	KEXP_+Pt
74 36 78		520HF	0.00	0	0	CLP ETL 2.12	0.12	0.15	KEXP_+Pt
74 36 78		520HF	0.57	20	ID 33	VOL ETL 2.12			KEXP_+Pt
74 36 78		520HF	0.70	23	ID 43	VOL ETL 2.22			KEXP_+Pt
74 36 78		520HF	0.00	0	0	CLP ETL 2.22	0.18	0.18	KEXP_+Pt
74 36 78		520HF	1.26	33	ID 86	VOL ETL 3.53			KEXP_+Pt
74 36 78		520HF	0.00	0	0	CLP ETL 3.53	0.18	0.27	KEXP_+Pt
74 36 114		520HF	0.00	0	0	NDF UTS -0.04			Spec_Int
74 36 118		510UL	3.10	167	0	DNT UTS -0.04			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A
Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
74 37 114		520HF	0.00	0		0 NDF	UTS -0.06				Spec_Int
74 37 118		510UL	3.13	172		0 DNT	UTS -0.06				510_Bobbi
74 38 78		520HF	0.23	15	ID	20 VOL	ETL 0.85				KEXP_+Pt
74 38 78		520HF	0.00	0		0 CLP	ETL 0.85	0.12	0.14		KEXP_+Pt
74 39 77		520HF	0.00	0		0 CLP	ETL 1.77	0.10	0.19		KEXP_+Pt
74 39 77		520HF	1.48	26	ID	54 VOL	ETL 1.77				KEXP_+Pt
74 39 77		520HF	1.20	24	ID	47 VOL	ETL 4.79				KEXP_+Pt
74 39 77		520HF	0.00	0		0 CLP	ETL 4.79	0.10	0.19		KEXP_+Pt
74 39 114		520HF	0.00	0		0 NDF	UTS -0.06				Spec_Int
74 39 118		510UL	3.00	170		0 DNT	UTS -0.06				510_Bobbi
74 40 118		510UL	2.74	170		0 DNT	UTS -0.04				510_Bobbi
74 40 114		520HF	0.00	0		0 NDF	UTS -0.04				Spec_Int
74 41 114		520HF	0.00	0		0 NDF	UTS -0.02				Spec_Int
74 41 118		510UL	2.74	172		0 DNT	UTS -0.02				510_Bobbi
74 42 114		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
74 42 118		510UL	2.61	176		0 DNT	UTS 0.00				510_Bobbi
74 43 118		510UL	2.79	172		0 DNT	UTS -0.08				510_Bobbi
74 43 114		520HF	0.00	0		0 NDF	UTS -0.08				Spec_Int
74 44 78		520HF	0.23	27		0 VOL	ETL -0.44				KEXP_+Pt
74 44 78		520HF	0.00	0		0 CLP	ETL -0.44	0.12	0.14		KEXP_+Pt
74 44 118		510UL	3.21	171		0 DNT	UTS 0.00				510_Bobbi
74 44 114		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
74 45 77		520HF	0.00	0		0 CLP	ETL -0.89	0.10	0.10		KEXP_+Pt
74 45 77		520HF	0.20	9		0 VOL	ETL -0.89				KEXP_+Pt
74 45 77		520HF	0.00	0		0 CLP	ETL -0.09	0.13	0.17		KEXP_+Pt
74 45 77		520HF	0.44	21		0 VOL	ETL -0.09				KEXP_+Pt
74 45 77		520HF	0.00	0		0 CLP	ETL 0.95	0.10	0.14		KEXP_+Pt
74 45 77		520HF	0.32	10	ID	9 VOL	ETL 0.95				KEXP_+Pt
74 45 114		520HF	0.00	0		0 NDF	UTS -0.04				Spec_Int
74 45 118		510UL	2.81	170		0 DNT	UTS -0.04				510_Bobbi
74 46 118		510UL	2.52	173		0 DNT	UTS 0.39				510_Bobbi
74 46 114		520HF	0.00	0		0 NDF	UTS 0.39				Spec_Int
74 47 118		510UL	5.21	175		0 DNT	LTE 10.85				510_Bobbi
74 47 118		510UL	2.60	175		0 DNT	UTS -0.06				510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
74 47 114		520HF	0.00	0		0 NDF	UTS -0.06				Spec_Int
74 48 118		510UL	6.15	176		0 DNT	LTE 10.94				510_Bobbi
74 48 114		520HF	0.00	0		0 NDF	UTS -0.04				Spec_Int
74 48 118		510UL	3.23	172		0 DNT	UTS -0.04				510_Bobbi
74 49 118		510UL	2.49	177		0 INR	UTS 0.00				510_Bobbi
74 50 113		540HF	0.35	357		0 INR	15S 45.51				540_Bobbi
74 50 78		520HF	2.62	41	OD	98 SCI	ETL 1.06				KEXP_+Pt
74 50 78		520HF	0.00	40		0 ARC	ETL 1.06			0.21	KEXP_+Pt
74 50 114		520HF	0.00	0		0 CLP	UTS -0.93	0.09	0.17		Spec_Int
74 50 114		520HF	0.60	25		0 VOL	UTS -0.93				Spec_Int
74 50 113		540HF	2.99	173		0 DNT	UTS 0.03				540_Bobbi
74 50 114		520HF	0.00	0		0 NDF	UTS 0.03				Spec_Int
74 51 77		520HF	0.45	15	ID	20 VOL	ETL 0.87				KEXP_+Pt
74 51 77		520HF	0.00	90		0 CLP	ETL 0.87	0.10	0.19		KEXP_+Pt
74 51 77		520HF	0.43	15	ID	20 VOL	ETL 1.97				KEXP_+Pt
74 51 77		520HF	0.00	90		0 CLP	ETL 1.97	0.10	0.09		KEXP_+Pt
74 51 114		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
74 51 118		510UL	3.21	171		0 DNT	UTS 0.06				510_Bobbi
74 52 114		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
74 52 118		510UL	3.42	171		0 DNT	UTS 0.00				510_Bobbi
74 53 77		520HF	0.39	18	ID	27 SCI	ETL 0.00				KEXP_+Pt
74 53 77		520HF	0.00	26		0 ARC	ETL 0.00			0.14	KEXP_+Pt
74 53 77		520HF	0.00	0		0 RPD	ETL 0.00				KEXP_+Pt
74 53 130		520HF	0.48	15		0 PID	ETL 0.00				KEXP_+Pt
74 53 118		510UL	2.67	173		0 DNT	UTS 0.00				510_Bobbi
74 53 114		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
74 54 78		520HF	0.00	0		0 CLP	ETL -4.00	0.12	0.19		R13DCLP+
74 54 78		520HF	1.25	28		0 VOL	ETL -4.00				R13DCLP+
74 54 164		520HF	1.40	32		0 PID	ETL -4.00				R13DCLP+
74 54 78		520HF	1.09	26		0 VOL	ETL -0.40				KEXP_+Pt
74 54 78		520HF	0.00	0		0 CLP	ETL -0.40	0.12	0.24		KEXP_+Pt
74 54 78		520HF	0.33	17	ID	25 VOL	ETL 1.65				KEXP_+Pt
74 54 78		520HF	0.00	0		0 CLP	ETL 1.65	0.12	0.19		KEXP_+Pt
74 54 78		520HF	0.00	0		0 CLP	ETL 2.33	0.12	0.14		KEXP_+Pt
74 54 78		520HF	0.30	20	ID	33 VOL	ETL 2.33				KEXP_+Pt
74 54 78		520HF	0.41	17	ID	25 VOL	ETL 3.70				KEXP_+Pt
74 54 78		520HF	0.00	0		0 CLP	ETL 3.70	0.17	0.19		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
74 54 78		520HF	0.56 35	NT 96	VOL	ETL 4.90			KEXP_+Pt
74 54 78		520HF	0.00 0	0	CLP	ETL 4.90	0.12	0.14	KEXP_+Pt
74 54 78		520HF	0.00 0	0	CLP	ETL 5.36	0.17	0.19	KEXP_+Pt
74 54 78		520HF	0.62 21	ID 36	VOL	ETL 5.36			KEXP_+Pt
74 54 113		540HF	2.99 173	0	DNT	UTS 0.00			540_Bobbi
74 54 133		520HF	0.71 10	0	VOL	UTS 0.25			R13DCLP+
74 54 133		520HF	0.00 0	0	CLP	UTS 0.25	0.25	0.11	R13DCLP+
74 54 113		540HF	0.47 10	0	INR	UTS 2.72			540_Bobbi
74 55 113		540HF	2.52 176	0	DNT	UTS 0.03			540_Bobbi
74 55 114		520HF	0.00 0	0	RBD	UTS 0.05			Spec_Int
74 55 177		520HF	0.66 24	0	VOL	UTS 0.07			Spec_Int
74 55 177		520HF	0.00 0	0	CLP	UTS 0.07	0.13	0.11	Spec_Int
74 55 114		520HF	0.31 22	0	VOL	UTS 1.41			Spec_Int
74 55 114		520HF	0.00 0	0	CLP	UTS 1.41	0.14	0.17	Spec_Int
74 56 118		510UL	3.26 172	0	DNT	UTS 0.04			510_Bobbi
74 56 114		520HF	0.00 0	0	NDF	UTS 0.04			Spec_Int
74 57 25		520HF	0.00 0	0	NDF	UTS 0.04			Spec_Int
74 57 4		510UL	2.84 175	0	DNT	UTS 0.04			510_Bobbi
74 58 3		510UL	2.87 171	0	DNT	UTS 0.09			510_Bobbi
74 58 25		520HF	0.00 0	0	NDF	UTS 0.09			Spec_Int
74 59 23		520HF	0.00 0	0	CLP	ETL 0.59	0.13	0.17	KEXP_+Pt
74 59 23		520HF	0.45 17	ID 25	VOL	ETL 0.59			KEXP_+Pt
74 59 23		520HF	0.70 23	ID 43	SCI	ETL 2.61			KEXP_+Pt
74 59 23		520HF	0.00 36	0	ARC	ETL 2.61		0.19	KEXP_+Pt
74 59 23		520HF	0.00 0	0	CLP	ETL 3.57	0.09	0.14	KEXP_+Pt
74 59 23		520HF	0.35 20	ID 33	VOL	ETL 3.57			KEXP_+Pt
74 59 23		520HF	0.00 31	0	ARC	ETL 3.66		0.17	KEXP_+Pt
74 59 23		520HF	0.85 24	ID 47	SCI	ETL 3.66			KEXP_+Pt
74 59 4		510UL	2.79 177	0	DNT	UTS 0.06			510_Bobbi
74 59 25		520HF	0.00 0	0	NDF	UTS 0.06			Spec_Int
74 60 23		520HF	0.00 36	0	ARC	ETL 0.12		0.19	KEXP_+Pt
74 60 160		520HF	0.00 0	0	RIC	ETL 0.12			Spec_Int
74 60 173		520HF	0.51 29	0	PID	ETL 0.12			KEXP_+Pt
74 60 23		520HF	0.00 0	0	RPD	ETL 0.12			KEXP_+Pt
74 60 23		520HF	0.53 36	NT 100	SCI	ETL 0.12			KEXP_+Pt
74 60 23		520HF	0.00 31	0	ARC	ETL 1.07		0.17	KEXP_+Pt
74 60 23		520HF	0.56 29	ID 67	SCI	ETL 1.07			KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
74 60 23		520HF	0.51	27	ID 58	SCI ETL 2.49			KEXP_+Pt
74 60 23		520HF	0.00	31	0	ARC ETL 2.49		0.17	KEXP_+Pt
74 60 23		520HF	0.43	29	ID 67	SCI ETL 3.12			KEXP_+Pt
74 60 23		520HF	0.00	26	0	ARC ETL 3.12		0.14	KEXP_+Pt
74 60 25		520HF	0.00	0	0	NDF UTS 0.02			Spec_Int
74 60 3		510UL	2.93	173	0	DNT UTS 0.02			510_Bobbi
74 61 4		510UL	3.13	174	0	DNT UTS 0.06			510_Bobbi
74 61 25		520HF	0.00	0	0	NDF UTS 0.06			Spec_Int
74 62 23		520HF	0.89	29	ID 67	VOL ETL 0.33			KEXP_+Pt
74 62 23		520HF	0.00	0	0	CLP ETL 0.33	0.10	0.22	KEXP_+Pt
74 69 3		510UL	3.91	162	0	DNT LTS -0.38			510_Bobbi
74 70 4		510UL	3.03	170	0	DNT LTS -0.08			510_Bobbi
74 71 3		510UL	2.80	172	0	DNT LTS -0.45			510_Bobbi
74 75 101		510UL	9.95	168	0	DNT LTS -0.02			510_Bobbi
74 76 101		510UL	27.37	170	0	DNT LTS 0.04			510_Bobbi
74 77 102		510UL	15.49	167	0	DNT LTS -0.02			510_Bobbi
74 78 59		520HF	0.40	18	ID 18	VOL ETL 2.65			KEXP_+Pt
74 78 59		520HF	0.00	0	0	CLP ETL 2.65	0.19	0.21	KEXP_+Pt
74 78 59		520HF	0.62	23	ID 43	VOL ETL 3.01			KEXP_+Pt
74 78 59		520HF	0.00	0	0	CLP ETL 3.01	0.19	0.21	KEXP_+Pt
74 78 101		510UL	5.75	165	0	DNT LTS 0.04			510_Bobbi
74 81 102		510UL	4.14	165	0	DNT LTS -0.04			510_Bobbi
74 86 59		520HF	0.29	20	ID 33	VOL ETL 0.25			KEXP_+Pt
74 86 59		520HF	0.00	0	0	CLP ETL 0.25	0.19	0.17	KEXP_+Pt
74 99 59		520HF	0.18	12	ID 13	VOL ETL 2.30			KEXP_+Pt
74 99 59		520HF	0.00	0	0	CLP ETL 2.30	0.13	0.13	KEXP_+Pt
74 113 103		510UL	1.66	77	0	ADI 09S 12.04			510_Bobbi
74 113 156		520HF	0.00	0	0	NDF 09S 12.04			Spec_Int
74 116 104		510UL	5.18	173	0	DNT LTE 10.77			510_Bobbi
74 119 103		510UL	4.89	172	0	DNT LTE 9.48			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
74 123 103		510UL	2.24	177	0	INR LTE 9.87			510_Bobbi
74 123 103		510UL	3.85	173	0	DNT LTE 10.73			510_Bobbi
75 18 128		510UL	0.12	62	0	NQI 14S -0.76			510_Bobbi
75 18 153		520HF	0.00	0	0	NDF 14S -0.76			Spec_Int
75 20 128		510UL	0.15	156	0	INR 14S 12.93			510_Bobbi
75 33 128		510UL	0.13	89	0	NQI 05S -0.81			510_Bobbi
75 33 171		520HF	1.05	87	OD 20	TWD 05S -0.75			Spec_Int
75 34 128		510UL	0.24	129	OD 7	TWD 05S -0.78			510_Bobbi
75 36 148		520HF	0.00	0	0	NDF UTS -0.06			SlvBdr_+Pt
75 36 118		510UL	2.50	173	0	DNT UTS -0.06			510_Bobbi
75 37 114		520HF	0.00	0	0	NDF UTS -0.61			Spec_Int
75 37 118		510UL	3.15	168	0	DNT UTS -0.61			510_Bobbi
75 38 114		520HF	0.00	0	0	NDF UTS 0.12			Spec_Int
75 38 48		510UL	3.21	176	0	DNT UTS 0.12			510_Bobbi
75 38 114		520HF	0.20	33	0	VOL UTS 3.80			Spec_Int
75 38 114		520HF	0.00	0	0	CLP UTS 3.80	0.13	0.18	Spec_Int
75 39 47		510UL	2.78	175	0	DNT UTS 0.00			510_Bobbi
75 39 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 40 48		510UL	3.26	174	0	DNT UTS 0.04			510_Bobbi
75 40 114		520HF	0.00	0	0	NDF UTS 0.04			Spec_Int
75 41 47		510UL	0.29	107	0	NQI 05S -0.78			510_Bobbi
75 41 114		520HF	0.83	97	OD 12	TWD 05S -0.72			Spec_Int
75 41 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 41 47		510UL	3.07	174	0	DNT UTS 0.00			510_Bobbi
75 42 48		510UL	2.78	175	0	DNT UTS 0.00			510_Bobbi
75 42 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 43 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 43 47		510UL	3.01	173	0	DNT UTS 0.00			510_Bobbi
75 44 114		520HF	0.00	0	0	NDF UTS -0.02			Spec_Int
75 44 48		510UL	3.04	176	0	DNT UTS -0.02			510_Bobbi
75 45 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 45 47		510UL	3.06	176	0	DNT UTS 0.00			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
75 46 48		510UL	0.28	71	0	NQI 05S -0.77			510_Bobbi
75 46 114		520HF	0.98	104	OD 13	TWD 05S -0.70			Spec_Int
75 46 114		520HF	0.00	0	0	NDF UTS 0.02			Spec_Int
75 46 48		510UL	2.94	174	0	DNT UTS 0.02			510_Bobbi
75 47 47		510UL	5.23	177	0	DNT LTE 10.45			510_Bobbi
75 47 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 47 47		510UL	2.79	175	0	DNT UTS 0.00			510_Bobbi
75 49 47		510UL	7.08	176	0	DNT LTE 10.51			510_Bobbi
75 49 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 49 47		510UL	3.46	172	0	DNT UTS 0.00			510_Bobbi
75 51 47		510UL	3.92	170	0	DNT UTS 0.00			510_Bobbi
75 51 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 52 114		520HF	0.00	0	0	NDF UTS 0.04			Spec_Int
75 52 48		510UL	3.77	176	0	DNT UTS 0.04			510_Bobbi
75 53 47		510UL	3.48	174	0	DNT UTS 0.00			510_Bobbi
75 53 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 54 48		510UL	3.35	177	0	DNT UTS 0.05			510_Bobbi
75 54 114		520HF	0.00	0	0	NDF UTS 0.05			Spec_Int
75 55 47		510UL	3.15	176	0	DNT UTS 0.00			510_Bobbi
75 55 114		520HF	0.00	0	0	NDF UTS 0.00			Spec_Int
75 56 48		510UL	0.30	58	0	NQI 05S -0.80			510_Bobbi
75 56 114		520HF	1.06	100	OD 14	TWD 05S -0.70			Spec_Int
75 56 114		520HF	0.00	0	0	NDF UTS -0.80			Spec_Int
75 56 48		510UL	3.30	177	0	DNT UTS 0.00			510_Bobbi
75 57 47		510UL	3.71	175	0	DNT UTS -0.02			510_Bobbi
75 57 114		520HF	0.00	0	0	NDF UTS -0.02			Spec_Int
75 58 4		510UL	3.81	173	0	DNT UTS 0.06			510_Bobbi
75 58 25		520HF	0.00	0	0	NDF UTS 0.06			Spec_Int
75 59 3		510UL	3.07	176	0	DNT UTS 0.09			510_Bobbi
75 59 25		520HF	0.00	0	0	NDF UTS 0.09			Spec_Int
75 60 25		520HF	0.00	0	0	NDF UTS 0.08			Spec_Int
75 60 4		510UL	3.62	179	0	DNT UTS 0.08			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
75 61 25		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
75 61 3		510UL	3.57	176	0	DNT	UTS	0.00			510_Bobbi
75 62 4		510UL	0.09	80	0	NQI	LTS	2.42			510_Bobbi
75 62 25		520HF	0.00	0	0	NDF	LTS	2.42			Spec_Int
75 62 25		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
75 62 4		510UL	4.87	174	0	DNT	UTS	-0.02			510_Bobbi
75 63 25		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
75 63 3		510UL	3.53	178	0	DNT	UTS	0.00			510_Bobbi
75 69 3		510UL	6.29	170	0	DNT	LTS	0.07			510_Bobbi
75 70 4		510UL	15.89	166	0	DNT	LTS	0.00			510_Bobbi
75 71 3		510UL	3.24	168	0	DNT	LTS	-0.28			510_Bobbi
75 75 102		510UL	4.46	171	0	DNT	LTS	-0.08			510_Bobbi
75 76 101		510UL	17.15	170	0	DNT	LTS	0.00			510_Bobbi
75 77 59		520HF	0.00	0	0	CLP	ETL	2.53	0.20	0.17	KEXP_+Pt
75 77 59		520HF	0.71	25	ID 51	VOL	ETL	2.53			KEXP_+Pt
75 77 59		520HF	0.36	13	ID 15	VOL	ETL	2.98			KEXP_+Pt
75 77 59		520HF	0.00	0	0	CLP	ETL	2.98	0.13	0.13	KEXP_+Pt
75 77 102		510UL	18.32	169	0	DNT	LTS	0.04			510_Bobbi
75 78 101		510UL	7.10	167	0	DNT	LTS	-0.04			510_Bobbi
75 79 102		510UL	0.82	93	0	INR	01S	18.65			510_Bobbi
75 79 102		510UL	4.80	164	0	DNT	LTS	-0.02			510_Bobbi
75 81 110		540HF	0.57	9	ID 30	TWD	15S	35.49			540_Bobbi
75 81 123		520HF	0.38	19	0	VOL	UTS	-11.28			R13DCLP+
75 81 123		520HF	0.00	0	0	CLP	UTS	-11.28	0.15	0.16	R13DCLP+
75 101 113		520HF	0.00	0	0	NDF	11S	4.18			Spec_Int
75 101 102		510UL	5.90	179	0	DNT	11S	4.18			510_Bobbi
75 112 104		510UL	0.60	94	0	INR	14S	18.51			510_Bobbi
75 117 103		510UL	0.31	72	0	NQI	10S	0.29			510_Bobbi
75 117 156		520HF	0.00	0	0	NDF	10S	0.29			Spec_Int
75 117 103		510UL	4.88	175	0	DNT	LTE	11.21			510_Bobbi
75 118 104		510UL	2.74	171	0	DNT	LTE	8.36			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
75 118 104		510UL	0.93	176		0 INR	LTE 9.48				510_Bobbi
75 118 104		510UL	5.65	172		0 DNT	LTE 10.44				510_Bobbi
75 122 110		540HF	0.59	9	ID 30	TWD 15S	44.92				540_Bobbi
75 122 110		540HF	3.01	178		0 DNT	LTE 9.82				540_Bobbi
75 122 156		520HF	0.00	0		0 CLP	UTS -1.71	0.15	0.23		Spec_Int
75 122 156		520HF	0.60	29		0 VOL	UTS -1.71				Spec_Int
75 122 156		520HF	0.63	21		0 VOL	UTS -1.56				Spec_Int
75 122 156		520HF	0.00	0		0 CLP	UTS -1.56	0.20	0.17		Spec_Int
75 123 110		540HF	0.35	10		0 BVC	15S 20.77				540_Bobbi
75 123 167		520HF	0.29	21		0 VOL	15S 21.23				R13DCLP+
75 123 167		520HF	0.00	0		0 CLP	15S 21.23	0.14	0.11		R13DCLP+
75 123 167		520HF	0.18	9		0 VOL	15S 22.66				R13DCLP+
75 123 167		520HF	0.00	0		0 CLP	15S 22.66	0.14	0.16		R13DCLP+
75 123 110		540HF	0.79	6	ID 20	TWD 15S	24.25				540_Bobbi
75 123 167		520HF	0.00	0		0 CLP	15S 25.16	0.14	0.16		Spec_Int
75 123 167		520HF	0.52	19		0 VOL	15S 25.16				Spec_Int
75 123 110		540HF	4.00	174		0 DNT	15S 32.25				540_Bobbi
75 123 156		520HF	0.00	0		0 CLP	UTS -27.16	0.15	0.12		R13DCLP+
75 123 156		520HF	0.35	11		0 VOL	UTS -27.16				R13DCLP+
75 123 156		520HF	0.00	0		0 CLP	UTS -25.63	0.15	0.12		R13DCLP+
75 123 156		520HF	0.28	11		0 VOL	UTS -25.63				R13DCLP+
75 123 156		520HF	0.00	0		0 NDF	UTS -24.44				R13DCLP+
75 123 156		520HF	0.00	0		0 CLP	UTS -23.16	0.15	0.17		Spec_Int
75 123 156		520HF	0.59	8		0 VOL	UTS -23.16				Spec_Int
75 123 156		520HF	0.00	0		0 NDF	UTS -22.12				Spec_Int
75 124 104		510UL	0.00	0		0 ROB	LTE 0.00				510_Bobbi
75 124 84		510UL	0.00	0		0 ROB	LTS -17.20				Sludge
75 124 84		510UL	0.00	0		0 ROB	LTS -17.20				510_Bobbi
75 124 94		510UL	0.00	0		0 ROB	LTS -15.61				510_Bobbi
75 124 94		510UL	0.00	0		0 ROB	LTS -15.00				Sludge
75 125 104		510UL	6.09	175		0 DNT	LTE 11.11				510_Bobbi
76 68 1		510UL	5.13	163		0 DNT	LTS 0.00				510_Bobbi
76 69 2		510UL	23.45	168		0 DNT	LTS -0.71				510_Bobbi
76 70 1		510UL	10.93	168		0 DNT	LTS 0.00				510_Bobbi
76 76 33		510UL	6.35	165		0 DNT	LTS 0.00				510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
76 77 34		510UL	3.35 163	0	DNT	LTS 0.02			510_Bobbi
76 81 34		510UL	2.61 160	0	DNT	LTS 0.00			510_Bobbi
76 82 33		510UL	3.04 165	0	DNT	LTS 0.00			510_Bobbi
76 90 153		520HF	0.00 0	0	NDF	15S 5.57			Spec_Int
76 90 39		510UL	0.11 83	0	NQI	15S 5.57			510_Bobbi
76 90 153		520HF	0.00 0	0	NDF	15S 16.80			Spec_Int
76 90 39		510UL	0.21 109	0	NQI	15S 16.80			510_Bobbi
76 100 39		510UL	0.29 111	0	NQI	08S 22.98			510_Bobbi
76 100 153		520HF	0.00 0	0	NDF	09S -16.02			Spec_Int
76 108 1		510UL	0.21 84	0	NQI	LTE 11.44			510_Bobbi
76 108 154		520HF	0.00 0	0	NDF	LTS -12.66			Spec_Int
76 116 1		510UL	5.16 171	0	DNT	LTE 10.66			510_Bobbi
76 123 2		510UL	4.52 174	0	DNT	LTE 11.00			510_Bobbi
77 32 128		510UL	6.09 174	0	DNT	LTE 6.60			510_Bobbi
77 33 128		510UL	7.03 175	0	DNT	LTE 6.28			510_Bobbi
77 37 109		540HF	0.60 106	OD 17	TWD	07S -0.81			540_Bobbi
77 37 38		520HF	0.00 0	0	CLP	ETL 1.16	0.09	0.12	KEXP_+Pt
77 37 38		520HF	0.15 12	ID 13	VOL	ETL 1.16			KEXP_+Pt
77 37 38		520HF	0.00 0	0	CLP	ETL 3.12	0.13	0.18	KEXP_+Pt
77 37 38		520HF	0.53 20	ID 33	VOL	ETL 3.12			KEXP_+Pt
77 37 38		520HF	0.38 15	ID 20	VOL	ETL 3.55			KEXP_+Pt
77 37 38		520HF	0.00 0	0	CLP	ETL 3.55	0.13	0.18	KEXP_+Pt
77 37 38		520HF	0.00 0	0	CLP	ETL 4.86	0.13	0.18	KEXP_+Pt
77 37 38		520HF	0.51 25	ID 51	VOL	ETL 4.86			KEXP_+Pt
77 37 150		520HF	0.00 0	0	NDF	UTS 0.00			Spec_Int
77 37 109		540HF	2.75 177	0	DNT	UTS 0.00			540_Bobbi
77 38 55		510UL	2.35 177	0	INR	UTS 0.00			510_Bobbi
77 40 122		520HF	0.00 0	0	NDF	UTS -0.04			Spec_Int
77 40 54		510UL	2.60 181	0	DNT	UTS -0.04			510_Bobbi
77 41 55		510UL	2.56 176	0	DNT	UTS 0.00			510_Bobbi
77 41 122		520HF	0.00 0	0	NDF	UTS 0.00			Spec_Int
77 43 55		510UL	2.64 178	0	DNT	UTS 0.04			510_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin /	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
77 43 122		520HF	0.00	0		0 NDF	UTS 0.04				Spec_Int
77 44 86		520HF	0.27	16		0 VOL	ETL -0.90				KEXP_+Pt
77 44 86		520HF	0.00	0		0 CLP	ETL -0.90	0.19	0.17		KEXP_+Pt
77 44 122		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 44 97		510UL	3.20	175		0 DNT	UTS 0.02				510_Bobbi
77 44 122		520HF	0.33	18		0 PRA	UTS 6.38				Spec_Int
77 45 97		510UL	3.08	174		0 DNT	UTS 0.06				510_Bobbi
77 45 150		520HF	0.00	0		0 NDF	UTS 0.06				Spec_Int
77 47 90		520HF	0.00	0		0 CLP	ETL -6.88	0.14	0.17		R13DCLP+
77 47 90		520HF	0.58	31		0 VOL	ETL -6.88				R13DCLP+
77 47 90		520HF	0.00	0		0 CLP	ETL -6.51	0.14	0.17		R13DCLP+
77 47 90		520HF	1.07	24		0 VOL	ETL -6.51				R13DCLP+
77 47 90		520HF	0.40	24		0 VOL	ETL -6.06				R13DCLP+
77 47 90		520HF	0.00	0		0 CLP	ETL -6.06	0.14	0.17		R13DCLP+
77 47 97		510UL	3.34	176		0 DNT	UTS 0.06				510_Bobbi
77 48 86		520HF	0.33	28		0 VOL	ETL -0.43				KEXP_+Pt
77 48 86		520HF	0.00	0		0 CLP	ETL -0.43	0.10	0.17		KEXP_+Pt
77 48 122		520HF	0.00	0		0 NDF	UTS 0.04				Spec_Int
77 48 97		510UL	2.61	175		0 DNT	UTS 0.04				510_Bobbi
77 49 150		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 49 97		510UL	2.80	175		0 DNT	UTS 0.02				510_Bobbi
77 50 86		520HF	0.00	0		0 CLP	ETL 0.05	0.14	0.17		KEXP_+Pt
77 50 86		520HF	0.54	27	ID	58 VOL	ETL 0.05				KEXP_+Pt
77 50 97		510UL	2.99	174		0 DNT	UTS 0.02				510_Bobbi
77 50 150		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 51 122		520HF	0.00	0		0 NDF	UTS 0.06				Spec_Int
77 51 97		510UL	4.24	172		0 DNT	UTS 0.06				510_Bobbi
77 53 97		510UL	3.85	174		0 DNT	UTS 0.02				510_Bobbi
77 53 122		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 54 86		520HF	0.41	24		0 VOL	ETL -0.12				KEXP_+Pt
77 54 86		520HF	0.00	0		0 CLP	ETL -0.12	0.14	0.17		KEXP_+Pt
77 54 86		520HF	1.06	31	ID	76 VOL	ETL 0.42				KEXP_+Pt
77 54 86		520HF	0.00	0		0 CLP	ETL 0.42	0.19	0.17		KEXP_+Pt
77 54 86		520HF	0.61	21	ID	36 VOL	ETL 1.07				KEXP_+Pt
77 54 86		520HF	0.00	0		0 CLP	ETL 1.07	0.14	0.17		KEXP_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
77 54 86		520HF	0.00	0		0 CLP	ETL 2.32	0.19	0.23		KEXP_+Pt
77 54 86		520HF	1.76	33	ID	86 VOL	ETL 2.32				KEXP_+Pt
77 54 97		510UL	4.58	170		0 DNT	UTS 0.04				510_Bobbi
77 54 122		520HF	0.00	0		0 NDF	UTS 0.04				Spec_Int
77 55 97		510UL	3.40	172		0 DNT	UTS 0.02				510_Bobbi
77 55 150		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 56 90		520HF	0.00	0		0 CLP	ETL -2.38	0.14	0.11		R13DCLP+
77 56 90		520HF	0.81	32		0 VOL	ETL -2.38				R13DCLP+
77 56 90		520HF	0.00	0		0 CLP	ETL -1.26	0.14	0.17		R13DCLP+
77 56 90		520HF	0.72	20		0 VOL	ETL -1.26				R13DCLP+
77 56 90		520HF	0.41	20	ID	33 VOL	ETL 0.40				R13DCLP+
77 56 90		520HF	0.00	0		0 CLP	ETL 0.40	0.14	0.11		R13DCLP+
77 56 90		520HF	0.37	11	ID	11 VOL	ETL 3.73				R13DCLP+
77 56 90		520HF	0.00	0		0 CLP	ETL 3.73	0.14	0.11		R13DCLP+
77 56 90		520HF	0.00	0		0 CLP	ETL 5.00	0.19	0.17		R13DCLP+
77 56 90		520HF	0.41	20	ID	33 VOL	ETL 5.00				R13DCLP+
77 56 90		520HF	0.00	0		0 CLP	ETL 5.37	0.24	0.17		R13DCLP+
77 56 90		520HF	0.52	11	ID	11 VOL	ETL 5.37				R13DCLP+
77 56 90		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
77 56 125		540HF	3.58	171		0 DNT	UTS 0.00				540_Bobbi
77 56 125		540HF	0.41	6	ID	20 TWD	UTS 5.99				540_Bobbi
77 57 97		510UL	3.93	173		0 DNT	UTS 0.02				510_Bobbi
77 57 122		520HF	0.00	0		0 NDF	UTS 0.02				Spec_Int
77 58 28		520HF	0.00	0		0 NDF	UTS 0.08				Spec_Int
77 58 1		510UL	3.17	179		0 DNT	UTS 0.08				510_Bobbi
77 59 28		520HF	0.00	0		0 NDF	UTS 0.06				Spec_Int
77 59 1		510UL	3.60	179		0 DNT	UTS 0.06				510_Bobbi
77 60 28		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
77 60 2		510UL	3.31	178		0 DNT	UTS 0.00				510_Bobbi
77 61 28		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
77 61 7		540HF	3.08	180		0 DNT	UTS 0.00				540_Bobbi
77 62 1		510UL	3.63	177		0 DNT	UTS 0.00				510_Bobbi
77 62 28		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
77 63 28		520HF	0.00	0		0 NDF	UTS 0.00				Spec_Int
77 63 7		540HF	3.53	176		0 DNT	UTS 0.00				540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP - Offset				
77 67 27		520HF	0.23	33		0 VOL	ETL -0.10				KEXP_+Pt
77 67 27		520HF	0.00	0		0 CLP	ETL -0.10	0.10	0.17		KEXP_+Pt
77 68 1		510UL	2.71	164		0 DNT	LTS 0.00				510_Bobbi
77 69 2		510UL	26.56	168		0 DNT	LTS 0.06				510_Bobbi
77 70 1		510UL	21.27	169		0 DNT	LTS 0.00				510_Bobbi
77 71 2		510UL	4.77	170		0 DNT	LTS 0.08				510_Bobbi
77 73 61		520HF	0.27	18	ID 27	0 VOL	ETL 0.24				KEXP_+Pt
77 73 61		520HF	0.00	0		0 CLP	ETL 0.24	0.15	0.12		KEXP_+Pt
77 73 61		520HF	0.00	0		0 CLP	ETL 0.72	0.10	0.17		KEXP_+Pt
77 73 61		520HF	1.55	33	ID 86	0 VOL	ETL 0.72				KEXP_+Pt
77 73 61		520HF	0.65	28	ID 63	0 VOL	ETL 1.54				KEXP_+Pt
77 73 61		520HF	0.00	0		0 CLP	ETL 1.54	0.10	0.17		KEXP_+Pt
77 73 61		520HF	0.47	20	ID 33	0 VOL	ETL 4.26				KEXP_+Pt
77 73 61		520HF	0.00	0		0 CLP	ETL 4.26	0.10	0.12		KEXP_+Pt
77 74 62		520HF	0.00	0		0 CLP	ETL -0.54	0.13	0.18		KEXP_+Pt
77 74 62		520HF	0.26	16		0 VOL	ETL -0.54				KEXP_+Pt
77 74 62		520HF	0.25	16	ID 25	0 VOL	ETL 0.76				KEXP_+Pt
77 74 62		520HF	0.00	0		0 CLP	ETL 0.76	0.13	0.18		KEXP_+Pt
77 74 62		520HF	0.00	0		0 CLP	ETL 2.43	0.13	0.18		KEXP_+Pt
77 74 62		520HF	0.14	12	ID 17	0 VOL	ETL 2.43				KEXP_+Pt
77 96 61		520HF	0.00	0		0 CLP	ETL -0.85	0.15	0.12		KEXP_+Pt
77 96 61		520HF	0.46	19		0 VOL	ETL -0.85				KEXP_+Pt
77 96 61		520HF	0.23	19	ID 30	0 VOL	ETL 1.83				KEXP_+Pt
77 96 61		520HF	0.00	0		0 CLP	ETL 1.83	0.15	0.17		KEXP_+Pt
77 96 114		540HF	0.63	10	ID 33	0 TWD	UTS 6.31				540_Bobbi
77 117 154		520HF	0.00	0		0 NDF	10S 0.50				Spec_Int
77 117 2		510UL	0.30	108		0 NQI	10S 0.50				510_Bobbi
77 117 2		510UL	5.19	172		0 DNT	LTE 10.51				510_Bobbi
77 119 1		510UL	7.43	175		0 DNT	LTE 10.25				510_Bobbi
77 121 2		510UL	2.36	168		0 INR	LTE 9.60				510_Bobbi
77 121 2		510UL	0.43	98		0 NQI	LTE 14.00				510_Bobbi
77 121 154		520HF	0.00	0		0 NDF	LTS -10.00				Spec_Int
77 122 159		540HF	0.65	7	ID 23	0 TWD	13S 34.59				540_Bobbi
77 122 135		520HF	0.00	0		0 NDF	14S -1.41				Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset			Axial	Circ	Dataset
77 122 159		540HF	6.00	176	0	DNT	LTE	10.20			540_Bobbi
77 123 1		510UL	7.33	171	0	DNT	LTE	10.73			510_Bobbi
77 124 92		520HF	0.00	0	0	CLP	UTS	-0.63	0.22	0.23	R13DCLP+
77 124 92		520HF	2.08	27	0	VOL	UTS	-0.63			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	8.58	0.10	0.15	R13DCLP+
77 126 166		520HF	0.16	9	0	VOL	15S	8.58			R13DCLP+
77 126 166		520HF	0.25	7	0	VOL	15S	10.21			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	10.21	0.21	0.15	R13DCLP+
77 126 166		520HF	0.11	7	0	VOL	15S	15.50			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	15.50	0.10	0.10	R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	18.06	0.10	0.15	R13DCLP+
77 126 166		520HF	0.20	12	0	VOL	15S	18.06			R13DCLP+
77 126 166		520HF	0.54	20	0	VOL	15S	18.39			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	18.39	0.10	0.20	R13DCLP+
77 126 166		520HF	0.13	15	0	VOL	15S	24.01			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	24.01	0.10	0.15	R13DCLP+
77 126 166		520HF	0.10	21	0	VOL	15S	26.97			R13DCLP+
77 126 166		520HF	0.00	0	0	CLP	15S	26.97	0.10	0.15	R13DCLP+
78 2 91		510UL	5.01	174	0	DNT	LTE	10.44			510_Bobbi
78 4 91		510UL	0.20	78	0	NQI	11S	-0.82			510_Bobbi
78 4 154		520HF	0.00	0	0	NDF	11S	-0.82			Spec_Int
78 30 87		510UL	3.24	169	0	DNT	UTS	0.00			510_Bobbi
78 33 37		520HF	0.00	0	0	CLP	ETL	2.88	0.15	0.17	KEXP_+Pt
78 33 37		520HF	0.13	25	ID 49	VOL	ETL	2.88			KEXP_+Pt
78 33 37		520HF	0.00	43	0	ARC	ETL	3.17		0.23	KEXP_+Pt
78 33 37		520HF	1.93	34	ID 78	SCI	ETL	3.17			KEXP_+Pt
78 33 37		520HF	0.25	19	ID 32	VOL	ETL	4.54			KEXP_+Pt
78 33 37		520HF	0.00	0	0	CLP	ETL	4.54	0.10	0.17	KEXP_+Pt
78 33 37		520HF	0.17	20	ID 35	VOL	ETL	5.17			KEXP_+Pt
78 33 37		520HF	0.00	0	0	CLP	ETL	5.17	0.15	0.17	KEXP_+Pt
78 33 97		510UL	7.42	178	0	DNT	LTE	6.98			510_Bobbi
78 33 97		510UL	2.90	173	0	DNT	UTS	0.02			510_Bobbi
78 34 97		510UL	0.27	82	OD 6	TWD	10S	-0.84			510_Bobbi
78 34 97		510UL	3.28	167	0	DNT	UTS	-0.02			510_Bobbi
78 35 109		540HF	3.25	173	0	DNT	UTS	0.02			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/	Code	Location		Axial	Circ	Dataset
			Degrees	Percent			TSP -	Offset			
78 37 122		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 37 97		510UL	2.88	168	0	DNT	UTS	0.00			510_Bobbi
78 39 122		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
78 39 97		510UL	2.98	166	0	DNT	UTS	-0.02			510_Bobbi
78 40 150		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 40 97		510UL	2.97	168	0	DNT	UTS	0.00			510_Bobbi
78 41 122		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
78 41 97		510UL	2.77	168	0	DNT	UTS	-0.02			510_Bobbi
78 42 97		510UL	2.74	169	0	DNT	UTS	-0.02			510_Bobbi
78 42 122		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
78 43 122		510UL	2.80	174	0	DNT	UTS	0.02			510_Bobbi
78 43 122		520HF	0.00	0	0	NDF	UTS	0.02			Spec_Int
78 44 122		520HF	0.00	0	0	NDF	UTS	-0.04			Spec_Int
78 44 97		510UL	2.64	172	0	DNT	UTS	-0.04			510_Bobbi
78 45 122		520HF	0.00	0	0	NDF	UTS	0.02			Spec_Int
78 45 97		510UL	3.03	173	0	DNT	UTS	0.02			510_Bobbi
78 46 122		520HF	0.00	0	0	RPP	ETL	-1.00	5.40		Spec_Int
78 46 132		520HF	0.00	0	0	RBD	ETL	-1.00	5.40		Spec_Int
78 46 176		520HF	0.43	21	ID 36	VOL	ETL	0.52			Spec_Int
78 46 176		520HF	0.00	0	0	CLP	ETL	0.52	0.13	0.11	Spec_Int
78 46 176		520HF	0.00	0	0	CLP	ETL	1.05	0.13	0.17	Spec_Int
78 46 176		520HF	0.67	24	ID 47	VOL	ETL	1.05			Spec_Int
78 46 176		520HF	0.17	25	ID 89	VOL	ETL	1.78			Spec_Int
78 46 176		520HF	0.00	0	0	CLP	ETL	1.78	0.13	0.11	Spec_Int
78 46 176		520HF	0.23	16	ID 22	VOL	ETL	3.54			Spec_Int
78 46 176		520HF	0.00	0	0	CLP	ETL	3.54	0.13	0.11	Spec_Int
78 46 176		520HF	0.26	22	ID 40	VOL	ETL	5.39			Spec_Int
78 46 176		520HF	0.00	0	0	CLP	ETL	5.39	0.13	0.17	Spec_Int
78 46 97		510UL	2.95	171	0	DNT	UTS	0.00			510_Bobbi
78 46 122		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 47 122		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 47 97		510UL	3.22	170	0	DNT	UTS	0.00			510_Bobbi
78 47 122		520HF	0.00	0	0	CLP	UTS	3.12	0.09	0.11	Spec_Int
78 47 122		520HF	0.43	20	0	VOL	UTS	3.12			Spec_Int
78 47 122		520HF	0.34	30	0	VOL	UTS	6.41			Spec_Int

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Origin/ Degrees Percent		Code	Location TSP - Offset		Axial	Circ	Dataset	
78 47 122		520HF	0.00	0	0	CLP	UTS	6.41	0.09	0.11	Spec_Int
78 48 122		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 48 97		510UL	3.05	170	0	DNT	UTS	0.00			510_Bobbi
78 51 122		520HF	0.00	0	0	NDF	UTS	0.02			Spec_Int
78 51 97		510UL	3.83	167	0	DNT	UTS	0.02			510_Bobbi
78 52 97		510UL	2.56	174	0	DNT	UTS	-0.04			510_Bobbi
78 52 122		520HF	0.00	0	0	NDF	UTS	-0.04			Spec_Int
78 53 150		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
78 53 97		510UL	3.47	170	0	DNT	UTS	-0.02			510_Bobbi
78 54 97		510UL	3.39	172	0	DNT	UTS	-0.02			510_Bobbi
78 54 150		520HF	0.00	0	0	NDF	UTS	-0.02			Spec_Int
78 55 122		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 55 97		510UL	3.22	170	0	DNT	UTS	0.00			510_Bobbi
78 57 28		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 57 1		510UL	3.20	176	0	DNT	UTS	0.00			510_Bobbi
78 58 31		520HF	0.36	33	0	VOL	ETL	-1.83			R13DCLP+
78 58 31		520HF	0.00	0	0	CLP	ETL	-1.83	0.18	0.19	R13DCLP+
78 58 31		520HF	0.23	23	ID 43	VOL	ETL	1.32			R13DCLP+
78 58 31		520HF	0.00	0	0	CLP	ETL	1.32	0.18	0.14	R13DCLP+
78 58 31		520HF	0.47	19	0	INR	ETL	5.01			R13DCLP+
78 58 7		540HF	2.65	176	0	DNT	UTS	0.00			540_Bobbi
78 58 28		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 58 7		540HF	0.48	4	0	INR	UTS	5.41			540_Bobbi
78 58 28		520HF	0.00	0	0	RIC	UTS	5.58			R13DCLP+
78 60 28		520HF	0.00	0	0	NDF	UTS	0.00			Spec_Int
78 60 1		510UL	2.89	172	0	DNT	UTS	0.00			510_Bobbi
78 61 28		520HF	0.00	0	0	NDF	UTS	0.06			Spec_Int
78 61 2		510UL	2.70	175	0	DNT	UTS	0.06			510_Bobbi
78 64 41		520HF	0.00	0	0	NDF	05S	-0.67			Spec_Int
78 64 1		510UL	0.22	78	0	NQI	05S	-0.67			510_Bobbi
78 64 28		520HF	0.00	0	0	RIC	05S	-0.67			Spec_Int
78 68 7		540HF	0.61	3	0	INR	04S	28.28			540_Bobbi

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt / Degrees	Origin/ Percent	Code	Location TSP - Offset	Axial	Circ	Dataset
78 69 1		510UL	18.01 169		0 DNT	LTS 0.00			510_Bobbi
78 70 2		510UL	16.38 168		0 DNT	LTS 0.08			510_Bobbi
78 71 1		510UL	8.71 168		0 DNT	LTS 0.00			510_Bobbi
78 90 124		520HF	0.63 16	ID 25	VOL	ETL 0.48			R13DCLP+
78 90 124		520HF	0.00 0		0 CLP	ETL 0.48	0.14	0.17	R13DCLP+
78 90 114		540HF	0.45 4		0 INR	UTS 5.20			540_Bobbi
78 90 124		520HF	0.63 4		0 VOL	UTS 5.26			R13DCLP+
78 90 124		520HF	0.00 0		0 CLP	UTS 5.26	0.18	0.17	R13DCLP+
78 92 61		520HF	0.00 0		0 CLP	ETL -0.21	0.10	0.12	KEXP_+Pt
78 92 61		520HF	0.54 21		0 VOL	ETL -0.21			KEXP_+Pt
78 117 1		510UL	0.26 96		0 NQI	LTE 7.00			510_Bobbi
78 117 154		520HF	0.00 0		0 NDF	LTS -17.00			Spec_Int
78 118 2		510UL	5.78 174		0 DNT	LTE 10.66			510_Bobbi
78 119 1		510UL	7.60 174		0 DNT	LTE 10.29			510_Bobbi
78 121 1		510UL	3.12 172		0 DNT	LTE 8.70			510_Bobbi
78 122 2		510UL	5.93 173		0 DNT	LTE 10.63			510_Bobbi
78 125 1		510UL	0.24 137	OD 2	TWD	11S 0.57			510_Bobbi
78 125 1		510UL	0.33 102		0 INR	15S -0.07			510_Bobbi
78 125 1		510UL	3.66 174		0 DNT	LTE 9.72			510_Bobbi
79 2 91		510UL	6.41 173		0 DNT	LTE 5.40			510_Bobbi
79 2 91		510UL	4.07 172		0 DNT	LTE 10.15			510_Bobbi
79 20 30		520HF	0.00 0		0 CLP	ETL -0.72	0.09	0.18	KEXP_+Pt
79 20 30		520HF	0.23 17		0 VOL	ETL -0.72			KEXP_+Pt
79 20 30		520HF	0.00 0		0 CLP	ETL 2.36	0.09	0.18	KEXP_+Pt
79 20 30		520HF	0.37 24	ID 47	VOL	ETL 2.36			KEXP_+Pt
79 20 107		540HF	0.31 16		0 BVC	UTS 5.11			540_Bobbi
79 20 155		520HF	0.00 0		0 CLP	UTS 5.60	0.14	0.16	SlvBdr_+Pt
79 20 155		520HF	0.37 24		0 VOL	UTS 5.60			SlvBdr_+Pt
79 20 155		520HF	0.22 21		0 PRA	UTS 6.28			SlvBdr_+Pt
79 20 107		540HF	0.32 11		0 BVC	UTS 6.42			540_Bobbi
79 22 87		510UL	2.26 174		0 INR	LTE 10.44			510_Bobbi
79 23 152		520HF	0.15 18		0 VOL	UTS 0.66			SlvBdr_+Pt

Recordable Indications

Component: TMI-OTSG-A

Site: Three Mile Island

All Indications, With Length and Width

Outage: 1R14

Tube#	Cal	Probe	Volt /		Origin/ Percent	Code	Location		Axial	Circ	Dataset
			Degrees				TSP -	Offset			
79 23 152		520HF	0.00	90		0 CLP	UTS	0.66	0.19	0.10	SlvBdr_+Pt
79 24 90		520HF	0.30	20		0 VOL	ETL	-5.38			KEXP_+Pt
79 24 90		520HF	0.00	0		0 CLP	ETL	-5.38	0.19	0.17	KEXP_+Pt
79 24 30		520HF	0.00	0		0 CLP	ETL	3.18	0.13	0.18	KEXP_+Pt
79 24 30		520HF	0.27	15	ID	20 VOL	ETL	3.18			KEXP_+Pt
79 24 30		520HF	0.00	0		0 CLP	ETL	4.53	0.09	0.18	KEXP_+Pt
79 24 30		520HF	0.49	15	ID	20 VOL	ETL	4.53			KEXP_+Pt
79 24 107		540HF	0.36	7		0 BVC	UTS	1.97			540_Bobbi
79 24 152		520HF	0.47	19		0 VOL	UTS	2.14			SlvBdr_+Pt
79 24 152		520HF	0.00	0		0 CLP	UTS	2.14	0.14	0.21	SlvBdr_+Pt
79 25 29		520HF	0.00	0		0 CLP	ETL	0.18	0.10	0.17	KEXP_+Pt
79 25 29		520HF	0.36	17	ID	25 VOL	ETL	0.18			KEXP_+Pt
79 25 29		520HF	0.00	0		0 CLP	ETL	3.70	0.10	0.11	KEXP_+Pt
79 25 29		520HF	0.19	13	ID	15 VOL	ETL	3.70			KEXP_+Pt
79 25 29		520HF	0.16	19	ID	30 VOL	ETL	5.07			KEXP_+Pt
79 25 29		520HF	0.00	0		0 CLP	ETL	5.07	0.10	0.11	KEXP_+Pt
79 25 87		510UL	2.68	168		0 DNT	UTS	0.00			510_Bobbi
79 26 90		520HF	0.00	0		0 CLP	ETL	-2.30	0.14	0.17	Spec_Int
79 26 90		520HF	1.15	30		0 VOL	ETL	-2.30			Spec_Int
79 26 107		540HF	0.41	10	ID	33 TWD	UTS	4.85			540_Bobbi
79 26 152		520HF	0.95	22		0 VOL	UTS	5.21			SlvBdr_+Pt
79 26 152		520HF	0.00	0		0 CLP	UTS	5.21	0.14	0.15	SlvBdr_+Pt
79 27 88		510UL	2.51	172		0 DNT	UTS	0.02			510_Bobbi
79 28 87		510UL	2.48	169		0 INR	UTS	0.00			510_Bobbi
79 29 29		520HF	0.00	0		0 CLP	ETL	2.79	0.10	0.17	KEXP_+Pt
79 29 29		520HF	0.96	29	ID	67 VOL	ETL	2.79			KEXP_+Pt
79 29 152		520HF	0.00	0		0 CLP	UTS	0.65	0.14	0.15	SlvBdr_+Pt
79 29 152		520HF	0.33	10		0 VOL	UTS	0.65			SlvBdr_+Pt
79 29 152		520HF	0.46	18		0 VOL	UTS	3.06			SlvBdr_+Pt
79 29 152		520HF	0.00	0		0 CLP	UTS	3.06	0.14	0.15	SlvBdr_+Pt
79 30 87		510UL	2.36	169		0 INR	UTS	0.00			510_Bobbi
79 32 150		520HF	0.60	116	OD	7 TWD	13S	-0.72			Spec_Int
79 32 97		510UL	0.22	80		0 NQI	13S	-0.72			510_Bobbi
79 32 97		510UL	7.37	177		0 DNT	LTE	7.14			510_Bobbi
79 32 97		510UL	3.28	169		0 DNT	UTS	0.00			510_Bobbi
79 32 122		520HF	0.00	0		0 NDF	UTS	0.00			Spec_Int