P466/D3

CRITERIA FOR THE DESIGN OF SAFETY RELATED SURVEILLANCE INSTRUMENTATION IN NUCLEAR POWER GENERATING STATIONS

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Draft 3 Oct. ~~22~~, ~~1976~~

Criteria for the Design of Safety Related Surveillance Instrumentation in Nuclear Power Generating Stations.

1. SCOPE

This standard establishes minimum design criteria for permanently installed surveillance instrumentation that serves a safety related function during normal plant operation or during those time intervals when the station is shut down. Plant protective and post accident monitoring functions are not included. Instrumentation addressed in this document is that which is necessary to enable the operator to:

a. Determine that plant operating conditions are within the limits assumed for the safety analysis of the plant (for example, control rod position indicators).

b. Determine that safety system status is maintained within the limits required to ensure minimum system performance if needed. (For example, emergency core cooling accumulator pressure and level).

c. Verify that the performance of safety system equipment is acceptable during functional testing.

d. Determine safety system bypass status.

2.79 → d. (see RG 1.47)

e. Verify that routine release rates and total releases of radioactive plant effluents are within the limits established for plant operation.

2. DEFINITIONS

2.1 Safety Related Surveillance Instrumentation-Information display channels, including alarms, which provide to the station operating personnel information related to safety system status and those plant operating conditions which are subject to safety limitations, as defined in the scope of this standard. These display channels will be referred to as "surveillance" throughout this document.

2.2 Information Display Channel - An arrangement of electrical and mechanical components and/or modules from measured process variable to display device as required to sense and display conditions within the generating station.

2.3 Modules - Any assembly of interconnected components which constitutes an identifiable device, instrument, or piece of equipment. A module can be disconnected, removed as a unit, and replaced with a spare. It has definable performance characteristic which permit it to be tested as a unit. A module could be a card or other sub-assembly of a larger device, provided it meets the requirements of this definition.

2.4 Safety Systems - The collection of systems required to mitigate the consequences of design basis events.

NOTE: The safety system is the aggregate of a protection system and a protective action system. It includes the engineered safety features, the reactor trip system and the auxiliary supporting features.

2.5 Margin - The difference between the most severe service conditions and the conditions used in design to account for uncertainties in defining performance requirements during normal plant operation.

3. DESIGN BASIS

A specific surveillance system design basis shall be provided for each nuclear power generating station. The information thus provided shall be available, as needed, for making judgments on safety related system functional adequacy. The design basis shall document, as a minimum, the following:

a. The generating station process variables (for example, pressure, flow, gamma, etc.) that are required to be monitored.

b. The generating station equipment (for example, valves, switchgear) for which status is required to be monitored.

c. The minimum number and location of information display channels required to monitor adequately those items covered in 3 a. and b.

d. Operational limits and margins for those items listed in 3 a. and b.

e. The range of transient and steady state conditions of energy supply and environment (e.g. voltage, humidity, etc.) throughout which the surveillance instrumentation must perform.

f. Minimum performance requirements including the following:

1. response time.

2. accuracy

3. range

g. The type of display required for each information display channel (e.g. indicator, recorder, status light, alarm).

4. DESIGN REQUIREMENTS

4.1 General Functional Requirement - The nuclear power generating station surveillance instrumentation shall perform its function with precision and reliability. This requirement applies for the range of conditions specified in sections 3 d. and 3 e.

4.2 Failure Criterion - The surveillance instrumentation need not be designed to withstand postulated single failures which could result in the loss of the surveillance instrumentation function if such failures are detectable.

A failure can be detected by using redundant or functionally equivalent (diverse) information channels, including alarms, that are electrically independent, as explained in requirement 4.6 below. In this case a failure can be detected by comparing one channel output against the other channel output (in addition to periodic testing of these channels). Alternatively, a failure can be detected by using a single information channel whose display can be verified by supplementary means (e.g. by visual inspection of levels or valve positions or by laboratory sample analysis) or by a testing program which can be shown to provide acceptable reliability of the display information.

The choice of using either a single channel or redundant or diverse channels must be made with due consideration of the complexity and frequency of testing of a single channel and the convenience detainable by using redundant or diverse channels.

A single failure includes such events as the shorting or open-circuiting of interconnecting signal or power cables. It also includes single credible malfunctions or events that cause a number of consequential component, module, or channel failures. For example, the overheating of an amplifier module is a single failure even though several transistor failures result. Mechanical damage to a mode switch would be a single failure although several channels might become involved.

4.3 Quality of Components and Modules - Components and modules shall be of a quality that is consistent with minimum maintenance requirements and low failure rates for its intended service. This shall be achieved through the specification of requirements known to promote these characteristics such as requirements for design, manufacturing, quality control, inspection, calibration, and test, the derating of components, or the use of existing components with favorable operating history.

4.4 Equipment Qualifications - Type test data, manufacturers data, or reasonable engineering extrapolation from test data or operating history shall be available to verify that the surveillance instrumentation shall meet on a continuing basis, its performance requirements.

4.5 Channel Integrity - All surveillance instrumentation shall be designed to maintain functional capability throughout the range of conditions relating to environment and energy supply specified in Section 3e. Surveillance instrumentation need not be designed to maintain functional capability following a seismic event or other

potentially damaging event, provided that the plant can be put into a condition where the instrumentation is not required or maintenance can be performed within a time frame consistent with the need for the displayed information.

4.6 Separation Criterion - Where the requirements of Section 4.2 are met by the use of redundant or diverse information display channels, those channels that provide the same function shall be electrically independent to accomplish decoupling of the effects of electrical transients and to reduce the likelihood of interaction between channels during maintenance operations or in the event of equipment malfunction. An exception to electrical independence may be made for diverse channels if it can be shown that no single electrical fault can cause the channels to give consistent but erroneous information.

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Redundant or diverse channels need not be physically separated provided that, should damage to the channels occur, the plant can be put into a condition where they are not required or that maintenance can be performed in a time frame consistent with the need for the displayed information.

4.7 Instrumentation Channels with Multiple Functions - If the surveillance instrumentation is also used for functions outside the scope of this standard, it should meet the requirements consistent with the function most important to safety.

4.8 Derivation of System Inputs - To the extent feasible and practical, inputs to surveillance instrumentation channels shall be derived from signals that are direct measurements of the desired variables.

4.9 Power Source - Surveillance instrumentation need not be capable of operating independent of off-site power availability if the plant can be put in a condition where the instrumentation is not required following a loss of off-site power.

4.10 Capability of Sensor Checks - For those sensors which must function during a normal mode of operation, means shall be provided for checking, with a high degree of confidence, their operational availability. This may be accomplished in various ways, for example:

a. by varying and observing the response of the monitored variable; or

b. by introducing and varying, as appropriate, a substitute input to the sensor of the same nature as the measured variable; or

c. by cross-checking between redundant or diverse information channels.

4.11 Capability for Test and Calibration - Capability shall be provided for testing and calibrating the surveillance instrumentation channels. Where the required time interval between testing is less than the normal time interval between generating station shutdowns, there shall, to the maximum extent possible, be capability for testing during power operation.

4.12 Channel Bypass or Removal from Operation - The surveillance instrumentation need not be provided with redundancy to allow bypass and maintenance of one channel during power operation provided that, should maintenance be required:

a. the plant can be brought to a condition where the channel is not needed.

b. The maintenance can be performed in a time frame consistent with the need for the displayed information, or

c. other means exist for obtaining the displayed information.

4.13 Access to Means for Bypassing - The design shall permit the administrative control of the means for manually bypassing the surveillance instrumentation.

4.14 Access to Set-Point Adjustments, Calibration and Test Points - The design shall permit the administrative control of access to all set-point adjustments, equipment calibration adjustments, and test points.

4.15 Identification of Redundant Channels - If the design basis required physical separation of redundant or diverse surveillance instrumentation channels, identification shall exist to distinguish between the redundant or diverse channels. Components or modules mounted in installed assemblies that are clearly identified as being part of a surveillance instrumentation channel do not themselves require identification.

1. The intended purpose and application of this standard is not clear.

The question arises from the use of safety-related. Section 7.5 of the Standard Format and Content for Safety Analysis Reports states that safety-related display instrumentation (SRDI) "provides information to enable the operator to perform required safety function." Section 7.5 of the Standard Review Plan identifies the criteria for SRDI. These include IEEE Std 279-1971 and the other requirements for Class 1E equipment. For post-accident monitoring (a subset of SRDI) certain requirements for Class 1E (e.g., seismic qualification) have been modified. Otherwise, all SRDI must conform to 1E criteria, these include system bypass status information, permanently installed safety system functional testing instrumentation and instrumentation for monitoring safety system operability. Furthermore, in reading Section 4, it seems that the titles from IEEE Std 279-1971 have been restated and the criteria changed from positive to negative. That is the functional requirements which are not required are identified. Thus, it would appear that this standard is an indistinct attempt to establish diluted criteria for safety-related instrumentation and is directed solely at the licensing process. Little consideration is given to improving nuclear power plant reliability and/or safety. Two major changes in direction should be made. First the term safety-related should be deleted and the scope should be in line with Comment 2. Second, the standard should take an approach similar to P-603. That is it should address surveillance instrumentation systems.

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2. Section 1 - Scope

The scope should be directed towards improving plant reliability by providing better information to the operator and thus enhancing safety. A copy of the scope for the classification Beta digital computer systems standard currently being developed by ANS 4.3.3 is attached. The underlined portions regarding reliability, maintaining the plant within normal limits and enhancement of safety are particularly applicable to surveillance instrumentation. Furthermore, one application for the Beta standard is the computer based CRT display systems. Such systems could also be included in safety-related surveillance instrumentation (SRSI) systems. Therefore, some effort should be made to ensure compatibility between the standards.

3. Section 3 - Design Basis

The design basis do not include the operator/system interface requirements. This interaction is a key element in surveillance systems. The scope (and Comment 1 above) imply this. However, after the scope, this aspect is not clearly incorporated into the standard. The operator/system interface should be considered throughout. For example, the design basis should include the requirements for the operator requirements such as short term, long term, or immediate response. (Reference 1, 2 3, 4, and 5 provide some additional information). Including the operator's actions would also be in keeping with on-going work by IEEE and ANS regarding operator actions and control room design.

4. Section 4.3 - Quality of Components and Modules

This section should incorporate reliability design goals such as MTTR, MTBF, and availability. There is extensive work going on to collect and catalogue data by IEEE, EPRI, and EEI. Also most instrument manufacturers have reliability data which they use in determining manufacturing, marketing and servicing approaches. Reliability and availability goals are being incorporated into the BETA standard (Comment 2).

5. Section 4 - Design Requirements

In conjunction with Comments 1 and 2, this section should include positive statements of the design requirements. Also, the design requirements to saitsfy the operator/system interface design basis should be incorporated. For example, depending on the operator actions required, immediate response, short term response, etc., the design requirements for a given surveillance instrumentation system signal might require an annunciator, indicator, recorder, or combination of several types of diaplsy. The design requirements and bases should also require identification and justification of diverse signals.

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[1] E. W. Hagan, "Human Reliability Analysis, "Nuclear Safety, Volume 17, No. 3, May-June, 1976.

[2] Willaim G. Milam, George J. Peterman and Michael D. Sulouff, "Advanced Concepts in Control Room Planning", 16th ISA Power Instrumentation Symposium, 1973, Chicago, Illonoise.

[3] Gadi Juplan, "Power Plant Controls: Display, Computers and Man", IEEE Spectrum, Novemb , 1974.

[4] R. Dallimonti, "Human Factors in Control Center Design", Instrumentation Technology, May, 1976.

[5] Jose A. Calvo and R. T. Jones, "A More Efficient Control Room Operator Process Interface", IEEE/ASME Joint Power Generation Conference, St. Louis, Missouri, September, 1971.

SCOPE

This standard establishes minimum criteria for the design, development, and implementation of classification Beta digital computer systems for nuclear power generating stations. For the purposes of this standard, classification Beta comprises digital computer systems that are not used for, or as part of, the nuclear reactor plant safety systems but whose failure or misoperation would reduce plant availability or capacity factor. These Beta systems are used for critical applications within the nuclear power plant such that, in case of failure of the computer system, insufficient time would exist for an operator to independently perform its functions and/or evaluate its results. Proper functioning of the Beta system will provide increased assurance that the nuclear plant operation will remain within the range of normal limits, with a corresponding enhancement of safety.* The minimum requirements established by this standard are for the digital computer system hardware and programs, and include the specifications and functional requirements, design and integration, testing and ceritification, modification, and documentation of the systems.

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*Examples of such applications are: direct digital control of the reactor, operating setpoint control, operator guidance, annunciator control and alarm analysis.

COMMONWEALTH of PENNSYLVANIA

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DNPE

DEPARTMENT OF ENVIRONMENTAL RESOURCES
POST OFFICE BOX 2063
HARRISBURG, PENNSYLVANIA 17120

June 18, 1979

Mr. Bruce T. Lunden
Staff Director
President's Commission on the
Accident at Three Mile Island
2100 M Street, N.W.
Washington, D.C. 20037

Dear Mr. Lunden:

This is written in response to your May 22, 1979 letter requesting information from this office concerning our activities during the Three Mile Island accident.

1. Enclosed is a copy of the Bureau's response plan for Three Mile Island. The General Plan was rewritten in 1977. The Three Mile Island Annex was written in 1974. All Annexes to the Plan are written in "Draft" form since they are routinely changed to update personnel and telephone numbers. The original "Pennsylvania Plan for the Implementation of Protective Action Guides" (PAPIPAG) was written in 1973. It was completely revised in 1977. This plan is intended to address Bureau operations only.

2. This organization was contacted by the Pennsylvania Emergency Management Agency (PEMA) duty officer (Clarence Dellier) at 7:03 a.m. on March 28. The Bureau's duty officer for the month was William Dornsife, Nuclear Engineer, who was at home at the time. Mr. Dornsife was informed that TMI had contacted the PEMA duty officer at 7:01 a.m. and that a site emergency had been declared. TMI had requested that the Bureau call Unit 2 control room as per standard procedures. Mr. Dornsife first contacted Ms. Margaret Reilly, Chief, Division of Environmental Radiation, to inform her of the incident and request that she and other staff members proceed to the office immediately. At approximately 7:05 a.m. Mr. Dornsife called the TMI switchboard and was unable to be connected to the Unit 2 control room. He was contacted at home by Unit 2 control room at 7:06 a.m.

   In general, they stated that a site emergency had been declared, high radiation levels were present in the plant and that they may have had a small loss of coolant accident. The leakage was stopped and the plant was stable and being cooled normally. In addition, on-site surveys found no detectable radiation levels above background. Other information relating to plant status was obtained to assure that conditions were stable. No recommendation was made for protective actions for off-site populations. While on the phone, Mr. Dornsife remembers hearing a public address announcement to evacuate the fuel handling and auxiliary building. He was then transferred to a plant health physicist who verified out-of-plant radiation levels. The individual then said he had to go--"I'll call you back"--and hung up. Mr. Dornsife proceeded into the office as per the plan.

By that time, Ms. Reilly had contacted Thomas Gerusky, Director of the Bureau, to inform him and to request that he leave for the office. She also called Kevin Malloy, Dauphin County Emergency Management Director, to inform him of the accident and suggest that he head for his office.

Mr. Thomas Gerusky was the first to reach the office, contacted TMI at 7:25 a.m. by telephone and established an open line with Unit 2 control room. Ms. Reilly arrived momentarily and Mr. Dornsife followed within 10 minutes. A summary of the information obtained from the control room (taken from notes and recall is as follows:

> There was a site emergency at Unit 2--steam generator failure, primary to secondary leak and loop isolated. At approximately 7:30 a.m. a general emergency was declared because of a high reading of 800 R/hr in the reactor containment building. The unit had been shut down, there was some failed fuel, the high pressure injection system was initiated, some primary coolant was lost and high radiation areas in the auxiliary building.

With the dome monitor reading 800 R/hr, the procedure is to estimate off-site doses in the event of a leak in the containment building. Assuming a 0.2% leak rate and the wind out of 30°, the estimated exposure on the west side of the river was 10R/hr from a reference containment atmosphere mix. A State Police helicopter was at the site and the Bureau requested that TMI survey teams be flown across the river to establish the exposure rate.

Meanwhile, other Bureau of Radiation Protection staff were in contact with the Pennsylvania Emergency Management Agency to notify them of the reactor condition, that an evacuation of an area southwest of the plant in York County (between Goldsboro and York Haven) was a possibility and that York County should be alerted. A few minutes later it was verified that no radiation levels above background were detectable. PEMA was so notified.

Following this information, we notified other staff members and the Department administration of the accident and present conditions.

We alerted the Pennsylvania Department of Agriculture, Division of Milk Sanitation, of the event.

We had learned during the Chinese fallout episode of 1976 that telephones would be tied up, that the press would be contacting us and that communications would be a problem. We maintained the open line with the site and contacted the Department's Public Information Officer to handle press inquiries. Our regular clerical staff was experienced in responding to public inquiries and had all press calls referred to the Public Information Officer.

At approximately 9:00 a.m., Mr. Charles Meinhold, Director of Health and Safety at DOE's Brookhaven National Laboratory and head of the Federal Interagency Radiation Assistance Program Team at BNL, contacted us by telephone to state that their team was ready to assist us at our request. At that point, no off-site problems were occurring so we told them to hold until we had more information. At about 11:00 a.m. we requested assistance.

At 9:00 a.m., Mr. Dornsife was requested by the Deputy Secretary to go to Lieutenant Governor Scranton's office to brief him on the situation and to participate in a press conference at 10:00 a.m.

He contacted Gary Miller, TMI station superintendent, to be updated on what had occurred. Mr. Miller's briefing of Mr. Dornsife is reconstructed (based partly on notes and partly on memory) as follows:

> At about 0400 a turbine trip occurred at 98% power. As designed, the reactor tripped and all safeguard systems, including high pressure injection, actuated automatically when required. There was a violation of technical specifications, specifically, that the auxiliary feed system block valves were initially closed. The electromatic relief valve on the pressurizer lifted and did not reset; however, the indication in the control room (electrical signal to valve) let the operator to believe it had reclosed. The block valve downstream of the relief valve is now closed. The pressurizer may have gone solid and low pressure in the reactor coolant system probably caused flashing and steam bubbles in the system. This may have led to a temporary loss of main coolant circulation. There was a possible primary to secondary leak in the "B" steam generator which has been isolated. The boron concentration in the primary has been diluted to about 100 ppm. This may have been caused by secondary to primary feedback through the leaking steam generator when the system was pressurized. There has been a slight amount of failed fuel. The exact magnitude is not certain at this time--it may have been only some gap activity. The reactor building dome monitor was reading 600R/hr and the reactor building pressure was about 1 psig. The fence post dose was less than 1 mrem/hr. The wind is currently blowing to the west at about 1 to 2 mph and they are sending monitoring teams to Goldsboro.

At approximately 10:45 a.m. the utility notified us that radiation was being detected off-site and that exposure rates were 3 mr/hr or less. A Bureau radiation monitoring team was sent out to verify the TMI readings. Similar levels were observed.

We were concerned about the probable presence of radioiodines in the plume of radiogases from the plant. The DER Bureau of Radiation Protection (BRP) was not equipped to do mobile in-the-field airborne iodine estimates. (We did have a fixed monitor at the Observation Building which we chose to leave in place for a historical sample.) TMI field teams were out, though, making these measurements according to plan. Several of their field estimate samples were suggesting I-131 concentrations of up to tens of thousands of picocuries per cubic meter. Unconfirmed, this concentration range would suggest an eventual (days) need for protective actions against inhalation with plant deterioration and a significant impact on fresh fluid milk production and use.

Since the backgrounds at the facility had understandably increased, Mr. Dubiel, TMI health physicist, asked if we could recount the samples in our labs at Harrisburg. We agreed. The samples were transported by helicopter to the helipad at Holy Spirit Hospital and thence to the lab by BRP staff. Spectrum analysis, using GeLi detector, indicated no I-131 (sensitivity at about 10 pCi/m^3). We began to suspect the current direct exposure mode to be noble gases with little, if any, I-131. This was consistent with knowledge that the dominant source was the water on the aux building floor and the existent charcoal filters on the aux building vent.

We advised the Agriculture Department that milk sampling should begin with farm sampling of milkings of Wednesday evening (3/28) and Thursday morning (3/29). The results of the analyses of those samples showed milkborne I-131 to be in the range of tens of picocuries per liter--hardly an acute contaminating episode. The sampling of fresh milk continues.

For the remainder of the first day--ground surveys performed by teams from this Bureau, DOE, NRC and utility confirmed that the off-site levels of radioactivity were in the range of about 1-10 mrem/hr (β-γ). Occasional higher levels were observed on site, in the plume and in relatively stagnant pockets due to the meterological condition. The meterological conditions during the first few days were such that the wind speed was very low and the direction was variable. Therefore, very little dispersion was occurring and pockets of noble gases with higher than average radiation levels were not uncommon near the site.

Reports from the site and from the NRC I&E teams which had arrived first after 10:00 a.m. confirmed that the primary source of radioactive releases were noble gases which were being offgassed from reactor coolant water which had been pumped from the reactor building sump to the auxiliary building sump tank and that the sumps had overflowed onto the floor. Prior to this it had been suspected that the main source of release had been the venting of steam from the "A" steam generator directly to the atmosphere which had occurred most of the morning.

During that morning, the Peach Bottom Atomic Power Plant staff called offering assistance, as did the State of New Jersey and Pennsylvania State University.

Levels of radioactivity in the environment remained at or below 3 mr/hr throughout the next day with some occasional high reading found on site and in the plume. Helicopter surveys were being performed by the ARMS aircraft which came with the DOE teams. Levels detected in the plume right over the release stack ranged up to 3000 mr/hr (β-γ).

On Friday morning, March 30, releases from the plant increased due to venting of gases from the make-up tank. Levels as high as 20-25 mr/hr (β-γ) were observed for a short period of time just off-site. One helicopter reading of 1200 mr/hr (β-γ) was found at 600 feet, 300 feet above the reactor building and in the plume. DOE teams and Bureau teams were measuring ground level radiation levels off-site as was the NRC and the utility.

The Bureau received a call from PEMA stating that "Doc" Collins of NRC-Bethesda had called them recommending evacuation out to ten miles downwind because of the 1200 mr/hr reading. We advised PEMA that off-site readings did not indicate a need for evacuation and that the plant had stated that the venting should be over shortly.

Ms. Reilly and Mr. Dornsife contacted Mr. Collins at NRC-Bethesda to ask why the recommendation was made. He stated that the "top brass" had recommended it and he was only following orders. By that time telephone lines were tied up, and Mr. Dornsife went to PEMA headquarters while Mr. Gerusky went to the Governor's office. Ms. Reilly stayed in contact with TMI and the survey teams. Both Mr. Dornsife and Mr. Gerusky recommended against evacuation due to current conditions.

Radiation levels off-site steadily decreased to 1 mr/hr or less during the day. Some intermittent readings were higher in the immediate vicinity of the site and on-site. Levels remained at that point until they declined to background much later in the episode.

Effective March 28, 1979, the Bureau of Radiation Protection office went on a 24-hour schedule. The Bureau has a full-time Harrisburg staff of 19 including four laboratory personnel. Good working relationships had been long established with the NRC Region I office, with the DOE emergency teams and with the utility's radiation protection organization.

Following the March 30 episode, addiational EPA, HEW, DOE and NRC health physics personnel were involved in environmental radiation surveillance activity. The operation of the Bureau became one of collecting and analyzing data and making recommendations based upon the data. Assistance in operations was gained from other program personnel in the Department and the Laboratory.

The Bureau stayed on a 24-hour schedule for approximately two weeks, a 12-hour schedule for the third week, and back to normal for the remaining time. On Friday, May 30, 1979, the Bureau Nuclear Engineer was assigned to the Three Mile Island Site on a 12-hour-a-day basis to keep the Governor's Office and this Bureau informed of any activity which could cause off-site problems. Dedicated telephone lines were installed in our office with the NRC Region I trailer, NRC headquarters, DOE operations at the Harrisburg-York State Airport, and the FDA Bureau of Radiological Health. On about April 1, 1979, representatives from NRC, DOE and FDA were located in our Harrisburg office as liaison personnel to collect and relay information with their respective organizations.

Water releases were also a problem and additional monitoring was required. The Department's Bureau of Water Quality Management, the Bureau of Radiation Protection and USEPA combined resources to provide a water sampling and analysis program. A copy of that program is attached.

Activities wound down slowly until the reactor was placed in a natural circulation cooling mode. With the "crisis" over, the Bureau continues a long-term operation to monitor the environment during the recovery stage.

3. Comments

There is no doubt that there was a lack of understanding of the scope of the problem during the first days of the accident. It was known that some fuel cladding failure had occurred but the extent of core damage was not known until later. Off-site consequences were initially caused because of contaminated water being pumped from the containment to the auxiliary building and the sumps overflowing. Other releases resulted when venting of radioactive gases occurred prior to hooking up a line to return the gases to the containment building.

Based on the monitoring information that we had received throughout the accident, we felt assured that the maximum accumulated off-site dose to any individual would not have exceeded 100 mrem. This was a factor of ten below the EPA protective action guidelines upon which our plan was based and where we were prepared to take protective actions to limit further off-site cumulative dose.

After the decision was made to move the NRC headquarters staff to Middletown and to set up an adequate communications system, the problems became more solvable and calmness returned to the area. There was a serious problem in communications from the facility, to Commonwealth and Federal officials and to the general public. This was partially resolved when the decision was made to issue press statements from either the Governor's Office or NRC-Middletown.

TMG/MAR/WPD/dmm
cc: Bill Dornsife
Bruce Segal, DOE
Historian's Office
Rm. C478-GT
DOE, 20545

Att.

Sincerely yours,

Thomas M. Gerusky

Thomas M. Gerusky, Director
Bureau of Radiation Protection

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JOHN H. SHARON
EDWARD B. CROSLAND
COUNSEL

December 4, 1979

George Frampton, Esquire
NRC/TMI Special Inquiry Group
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear George:

In response to the November 26, 1979, written request of R. C. Haynes, enclosed are copies of the following documents:

Three Mile Island Unit II Work Request Nos. 0027, 0028, 0037, 0039, 0172, 0173, 0249, 0282, 0335, 0204, 0436, 0468, 0478, 0489, 490, 495, 496, 500, 602, 730, 890, 956, 957, 2151 and 1296.

In addition, we are still attempting to locate Work Request Nos. 0036, 1053 and 1076.

Sincerely,

Matias F. Travieso-Diaz

JFW:rt
Enclosures
cc: Mr. Jacque Durr (w/encl.)

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GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
V	S	*	036 0 02	CM	C 02712	5	7	75	1A

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

MAIN STEAM VALVE ½" GLOBE UNDER 4A
TURBINE BLOWING BY AND HANDWHEEL MISSING
LOCATED NEAR GS STRAINER THAT BLEW
GASKET AT TURB TRIP PUT CAP ON VLV NIPPL

CAUSE OF MALFUNCTION (IF KNOWN)

VALVE LEAKING BY

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0631	CAdo	12-5-75	0691	CAdo	12-5-75

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU OP HD CD RF HS LR	NPRD FAILURE YR MO DAY	START HR MIN
0360	C0187 JN		3995134	0011 1010		

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST. CREW SIZE	EST MANHOURS
12	06	78	12	18	78		1	C0867	02	0003 00

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST. CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST. CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST. CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	03	79	12	18	78	1	0003 20			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 REMOVED INSTRUMENT CONNECTION AND INSTAL
801	A	08 LED CAP AND BACK (SEAL) WELDED CAP
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND UNIT 2

PF

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
MS	*	*	0360021	CM	C00271	12 4 78	1A

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED:

MAIN STEAM VALVE ½" GLOBE UNDER H.P. TURBINE BLOWING BY AND HANDWHEEL MISSING LOCATED NEAR GS STRAINER THAT BLEW GASKET AT THIS TRIP PUT CAP ON VLV NIPPL

CAUSE OF MALFUNCTION (IF KNOWN):

VALVE LEAKING BY

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06307	CAdo	12-5-78	06301	CAdo	12-5-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
03600	01877	JN	3798134	0	0	1	1	1	0	1	0					

CHANGE MOD REQ'D	PWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER
0	0	0	0		

ENV CODE	OUTAGE CAUSE CODE
X	

STATUS HOLD CODE

S/M APPROVAL COMMENCE WORK MO	DAY	YR
12	06	78

PRIORITY	RESP. LOCATION OR CONTRACTOR
1	C0869

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST SUPT. APPROVAL
W Trautman 12/6

Post Maintenance Testing required and Acceptance Criteria:

Cap installed at valve nipple at turbine trip test – No leakage from cap

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0027

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Turbine Shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor N/C Date _____

9. Supervisor of Maintenance approval to commence work: [signature] Date 12/6/78

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work [signature] Date 12/18/78

STE APPROVAL

Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0027

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time

12/18/78
Date

Work Reviewed - Maintenance Foreman's Signature

Fulton

14. Work completed and component alligned for testing.

[ ]
Initial if S. F. signature is not required.

C Guthrie
Shift Foreman's Signature

12-18-78
Date

15. Testing completed and component released for normal use.

STE APPROVAL N/A
Initial if S. F. signature is not required.

C Guthrie
Shift Foreman's Signature

12-18-78
Date

16. Quality Control Department review of work and testing completed (QC work only).

Surveillance Report No. | QC Department | Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Metzger
Supervisor of Maintenance Signature

1/3/78
Date

WORK AUTHORIZATION TO CATALYTIC, INC.

In accordance with the terms, conditions, and provisions of General Maintenance Contract, Met-Ed P.O. #38735, Catalytic, Inc. is hereby authorized to perform the work described on Work Request No. C0027 attached hereto and forming a part hereof.

Acceptance:

Date: 12/8/78 — Kitzman M/E WM
MET-ED By: (Print Name, Title & Initial)

Date: 12/8/78 — JUGLER, Planner RAJ
CATALYTIC, INC. By: (Print Name, Title & Initial)

cc: M. R. Dendler

WORK COMPLETED BY CATALYTIC, INC.

The attached Work Request # C-0027

JO # 01048

has been completed and hereby returned as noted below.

Remarks:

R. A. Jugler 12/22/78
Planning Department

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	POST	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
WT	P	0008	B	0360 02	CM	C00281	12	05	78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

REPLACE OR ADJUST PACKING ON WT-P-8B,
TRIED TO ADJUST WITH NO REAL SUCCESS.

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05106	N J Mowson	12-5-78	05873	A Miller	12-5-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	018718E		3991341	1	1	1	1	1	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S.T.O. APPROVAL COMMENCE WORK MO	DAY	YR
12	06	78

PRINT	PERFORM LOCATION OR CONTRACTOR
2	03624

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST
SUPT. APPROVAL
Frankum 12/6

Post Maintenance Testing required and Acceptance Criteria.

Is Upgrade Testing Required?

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

M 042636

Material Order Generation

ITEMS 8 9 | DATE MO DAY YR | USED FOR / RETURNED FROM: WT-P-88 | RE SUB | ITEMS 8 9 | DATE MO DAY YR

ISSUED FROM / RETURNED TO: | STOREROOM NAME: TM1 | STRM NO. 10 12 | ISSUED TO (INTERCHANGE) | STOREROOM NAME | STRM NO. 16 18

TXN. 13 15		TXN. 13 15	
710	Issue	740	Scrap Sale
720	Cash Sale	510	Return/Retire
730	Charge Sale	620	Interchange

WORK REQUEST NO.: C0028

ACCOUNT NUMBER | ORDER: ID 20, WORK ORDER, JOB NUMBER | ACCOUNT: ACCOUNT, VOLT, PP, SPEC CODE 45

RE SUB	STOCK SYMBOL NUMBER: MA 46, SUB, ITEM 55	QA 56	QUANTITY ISSUE/RETURN 57 63	U/I 64 65	QUANTITY REQUIRED	DESCRIPTION
1			1	SET	1 SET	Packing, GRINGS/SET
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

SIGNED: _____ APPROVED: Dalw Gamel

SD-100 2-75

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0028

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: _____ Date 12/6/78

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work _____ Date _____

SITE APPROVAL

Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

TMI-88

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0078

12. Retest met acceptance criteria Yes ☐ No ☐

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

Date

14. Work completed and component alligned for testing.

☐

Initial if S. F. signature is not required. Shift Foreman's Signature Date

15. Testing completed and component released for normal use.

STE APPROVAL

Initial if S. F. signature is not required. Shift Foreman's Signature Date

16. Quality Control Department review of work and testing completed (QC work only).

Surveillance Report No. QC Department Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

Supervisor of Maintenance Signature Date

Close WT-V302D
WT-V302F

WT-P8B
Elec. + Ext. Control Switch

Carver Pump Co.
Model 4FL
S/N 83421

1/08/79

Need Op to Clean
the Pump Area

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP TYPE (8-11)	COMP ID (12-15)	LOCATION / UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO	DAY	YR (33-38)	RECOMMENDED PRIORITY
HY	*	*	036002	CM	C00371	12	07	77	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

REPAIR LEAK AT HYDROGEN MANWAY ON GENERATOR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06386		12/7/77	06386		12/7/77

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	LM	399134	1	1	1	1	1		1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	KP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12	07	78	01	08	79		1	C08690	02	000160

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	05	12	79	01	03	79	1	000160			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 Bolts holding manway removed and coated
801	A	08 with silcone
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

ORIGINATOR – SUPERVISOR – SUPERVISOR OF MAINTENANCE – MAINTENANCE FOREMAN – JOB PERFORMER – MAINTENANCE FOREMAN – SUPERVISOR OF MAINTENANCE – CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

323.1120 MW

RECOMMENDED PRIORITY: 1

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOOP	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR
HY	*	*		036002	CM	C00371	12	7	78

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

Repair leak at hydrogen manway on generator

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06386		12/7/78	06386		12/7/78

4200

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	LN	3949134	1	1	1	1	1	1	1					

CHANGE MOD REQ'D	A W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER
0	0	0	0		

ENV CODE	OUTAGE CAUSE CODE
X	

STATUS HOLD CODE

S/M APPROVAL COMMENCE WORK MO	DAY	YR
12	07	78

PRIOR	RESP. LOCATION OR CONTRACTOR
1	C0869

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST SUPT. APPROVAL

Post Maintenance Testing required and Acceptance Criteria:

No H_2 leakage at manway

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0037

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendant/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3
QC Supervisor N/A Date _____

9. Supervisor of Maintenance approval to commence work: [signature] Date 12/7/78

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work [signature] Date 1-8-79

STF APPROVAL ☐
Initial if Shift Foreman signature is not required

NA
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0037

12. Retest met acceptance criteria Yes [/] No [ ]

13. Work Performed by date/time — Work Reviewed - Maintenance Foreman's Signature

1/3/79 (Date) — [signature]

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. — [signature] Shift Foreman's Signature — 1-8-79 Date

15. Testing completed and component released for normal use.

STE APPROVAL

[ ] Initial if S. F. signature is not required. — [signature] Shift Foreman's Signature — 1-8-79 Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ Surveillance Report No. — NA QC Department — _____ Date

17. Supervisor of Maintenance Job Ticket (Work Request) and orocedure are complete and signed off as required. Change/modification form has been signed off as required.

[signature] Supervisor of Maintenance Signature — 5-12-79 Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
C	P	001C	036002	CM	C00391	12067 8	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

CONDENSATE PUMP 1C BREAKER ON BUS 2-3 TRIPPED. MOTOR IS OKAY, APPEARS TO BE A RELAY PROBLEM

CAUSE OF MALFUNCTION (IF KNOWN)

RELAY DEPT. PROBLEM REPORT COPY ATTACHED

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06301	C Adam	12-6-78	06301	C Adam	12-6-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU OP HD CD RF	HS	LR	NPRD FAILURE YR MO DAY	START HR MIN
0360	00157JP		3998134	11111	0	11		

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO DAY YR	S/F APPROVAL COMMENCE WORK MO DAY YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
120778			1	2ORH	02	00008.0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO DAY YR	FIELD WORK COMPLETION DATE MO DAY YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	122178		2				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR MO DAY HR MIN	FAILURE NO	FAILURE STATUS
808	A			

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A B	EFFECT OF FAILURE CODES A B	FAILURE DETECTION CODE	ACTION TAKEN CODES A B	LICENSE EVENT REPORTED DATE YR MO DAY
808	A							

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
CD	P	0001C	03600	2	CM	12	06	78	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED:
CONDENSATE PUMP 1C BREAKER ON BUS 2-3 TRIPPED, MOTOR IS OKAY, APPEARS TO BE A RELAY PROBLEM

CAUSE OF MALFUNCTION (IF KNOWN):
RELAY DEPT. PROBLEM REPORT COPY ATTACHED

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06301	C Adam	12-6-78	06301	C Adam	12-6-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	JF	3998134	1	1	1	1	1	0	1	1					

CHANGE/MOD REQ'D	W P	NUC SAFETY	NP PD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
12	07	78	1	20R1

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:
a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.
Pumps will operate from proper bus

GPU TEST SUPT. APPROVAL
R.A. Toole

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

TO: R. G. BONNEVILLE

RELAY DEPARTMENT
RELAY OPERATION/PROBLEM REPORT

Forward Completed form to Shift Supervisor for his review.

Time	Date	Bus	Component	MOTOR Currents from Installed AMMETER (If Running)	WHITE CARD DATA TARGET (Which On (In Relay Window)
1546	12-6-78	2-3	CO-P-1C	N/A	EX. 50-51-83 No. 2H 50G 86

REMARKS:

1. Did Breaker Trip? Yes X No
2. Was Work Request Submitted Yes X No
3. Is problem a relay problem or is it a system or component problem. Relay / Other
4. Other info. that may aid the Relay Dept:

Elec Dept. INVESTIGATING, Megger MOTOR OK.

RACKED IN the breaker on Bus 2-3, after about 2 minutes we received a cond. pmp. overload alarm and on 86 lockout on CO-P-1C tripped on Bus 2-3 with the breaker still open. We had not tried to start CO-P-1C on 2-3. When that happened, we started CO-P-1C on bus 2-4, everything appears ok after several hours of operation.

4H
Ground Occ.
3-CO-P-1C-2

NOTE:

1. If corrective action is required, submit a work request in addition to this form.
2. ON OVERLOAD RELAYS, the "L" & "T" Toger trip the breaker. "I" alon will trip the breaker.
3. If the breaker has tripped and the 50G or 50-51-83 "I" target is present, the motor/cable should be checked by Electrical Dept. prior to attempting re-start. Megger OK.

4. START CO-P-1C ON 2-4 BUS EVERYTHING OK.

Performed By:
Aux Operator - C Adm
Date 12-6-78 Shift C

OTHERS Date 12-6-78 Time 1600

Date 12-6-78

SHIFT FOREMAN/SUPERVISOR
C Adm

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0172

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes____ No ✓

2a. Does work require an RWP Yes ✓ No____

2b. Is an approved procedure required to minimize personnel exposure. Yes____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes ✓ No____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes ✓ No____

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes ✓ No____

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes ✓ No____

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3
QC Supervisor E Daniels 12-13-78 Date 12-13-78

9. Supervisor of Maintenance approval to commence work: P Seiglitz Telecon 12-13-78 Date 12-13-78

10. Maintenance Foreman Assigned: GAMES

11. Shift Foreman's approval to commence work C Guthrie Date 12-14-78

☐ STE APPROVAL 12-14-78
Initial if Shift Foreman signature is not required

14015
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0172

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time

12-15-78
Date

Work Reviewed - Maintenance Foreman's Signature

[illegible]

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required.

[illegible]
Shift Foreman's Signature

12-14-78
Date

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required.

[illegible]
Shift Foreman's Signature

12-14-78
Date

16. Quality Control Department review of work and testing completed (QC work only).

NA
Surveillance Report No.

[illegible]
QC Department

12/19/78
Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

STE APPROVAL
CBC 12-15-78

W. [illegible]
Supervisor of Maintenance Signature

12/21/78
Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
1DL-F		004A	036	002	CM C0172	1/3/78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

We have had high DP Filter Readings since new Filter was installed 1/2/78 Float Handle 230

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
04455	Dave Wise	1/13/78	06051	CAda	6301

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU OP HD CD RF HS LR	NPRD FAILURE START YR MO DAY HR MIN
0360	00187 EG		3991344	1 1 1 1 1 0 1 1	

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	1	1	0			03627	B			

S/M APPROVAL COMMENCE WORK MO DAY YR	S/F APPROVAL COMMENCE WORK MO DAY YR	PROCEDURE NUMBER	PRTY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12 3 78	12 14 78	1410 F1 Rev. 0	2	036M	02	00008.0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS
	2	4.0

TXN CD	ACT	JOB COMPLETION DATE MO DAY YR	FIELD WORK COMPLETION DATE MO DAY YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	12 2 78	12 14 78	1	00012.0		0057929	

	RESOLUTION DESCRIPTION
07	REMOVED USED FILTER & REPLACED NEW FILTE
08	R
09	
10	

TXN CD	ACT	NPRD FAILURE END YR MO DAY HR MIN	FAILURE NO	FAILURE STATUS
808	A			

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR MO DAY
808	A										

COPY 2

DESIGNATED END USE DATA

N I II III

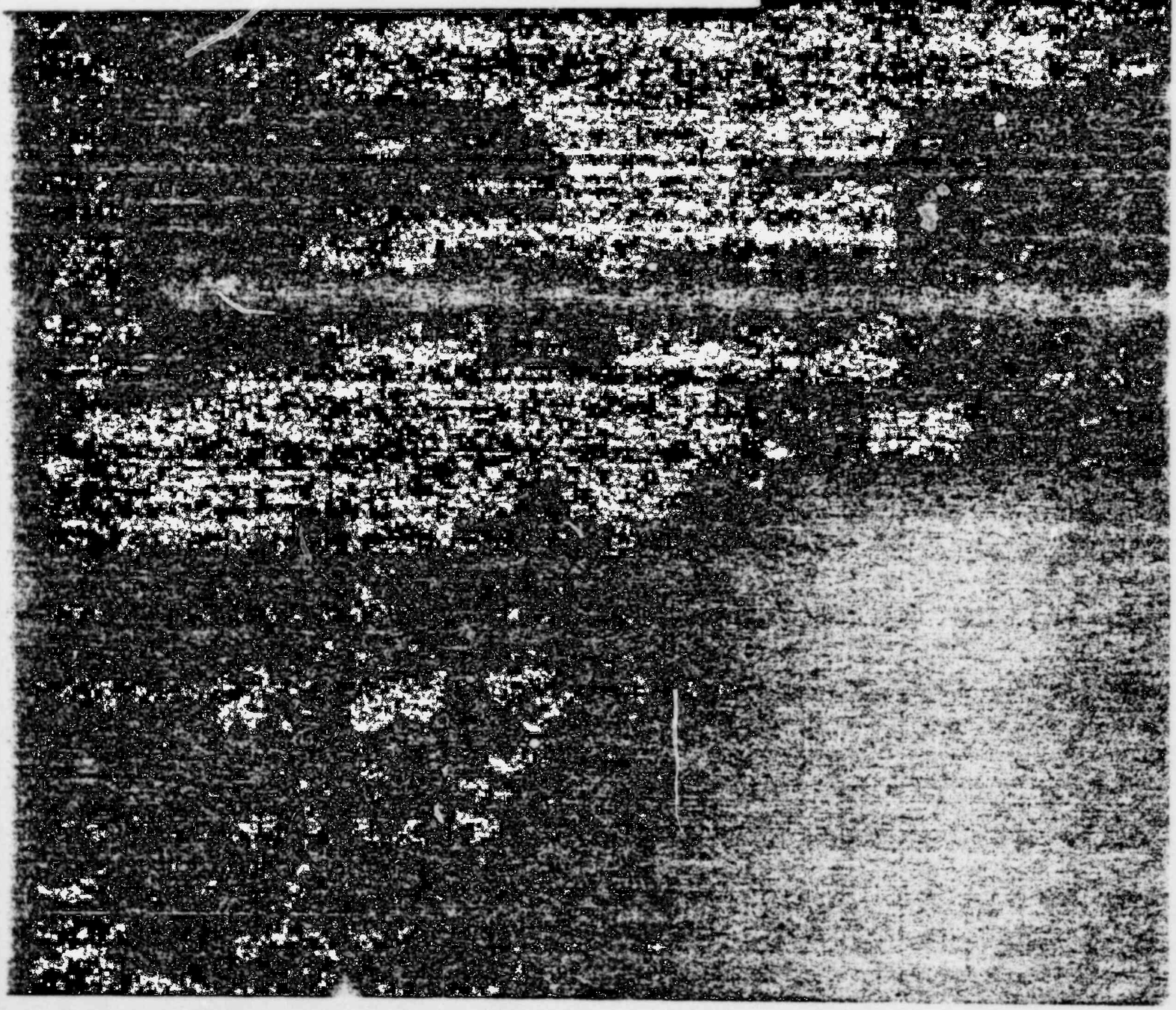
S I II III

SYSTEM APPLICATION (TAG NOS.) WDL-F-3A

B/M OR SPEC. NO. _____

COMMENTS FILTER

THIS TAG IS NOT TO BE REMOVED
UNTIL MATERIAL IS INSTALLED
IN A DESIGNATED END USE.



MET-ED

Quality Control

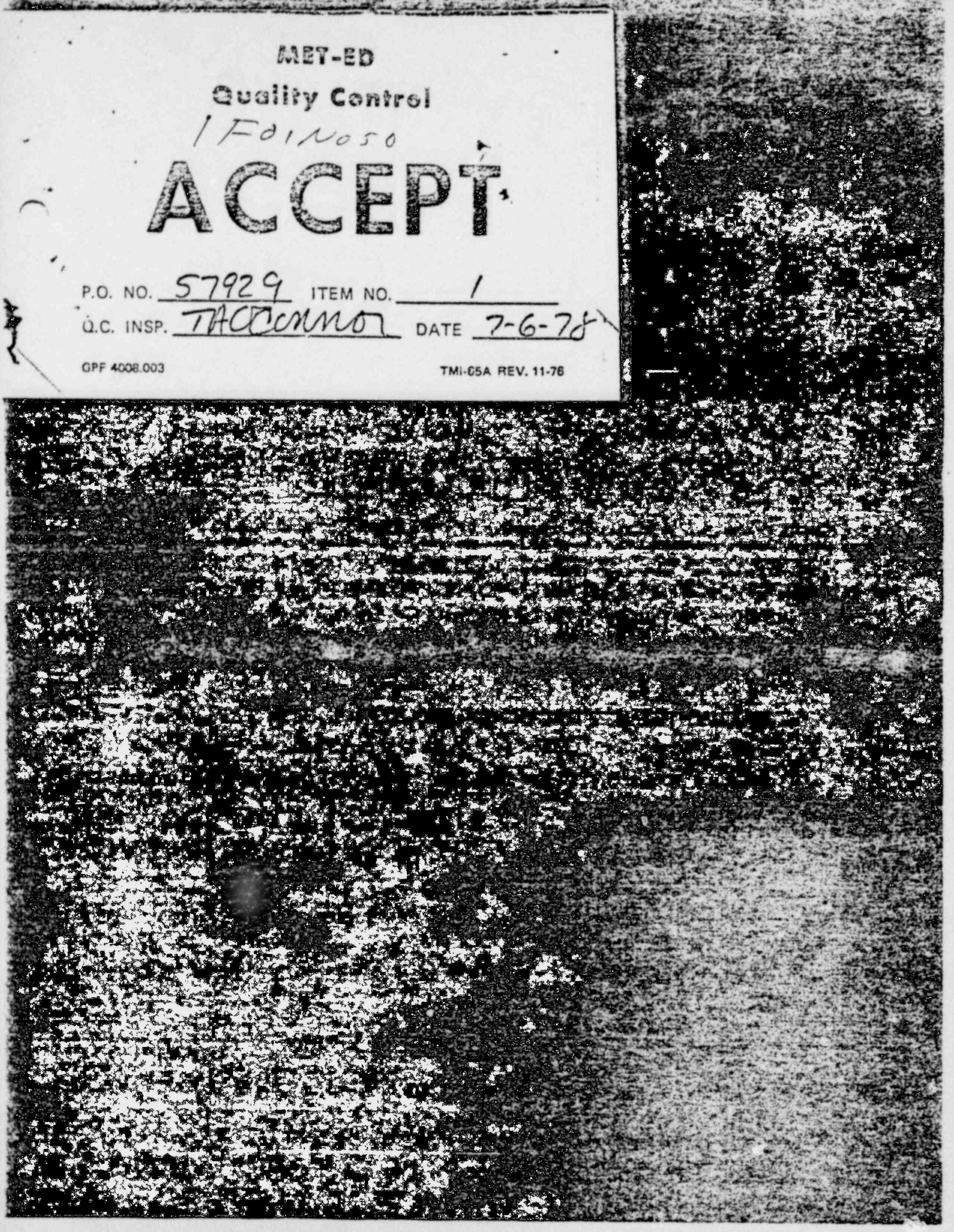
1 FOINOSO

ACCEPT

P.O. NO. 57929 ITEM NO. 1

Q.C. INSP. TACConnor DATE 7-6-78

GPF 4008.003 TMI-05A REV. 11-76



GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUB	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
WDL	F	00	04A	C360	02	CM	C0172	12	13	78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

WDC-F-4A has high DP Filter Needs Changed
Mount tank Filters 280' elev Fuel handling
bldg

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
04455	David Wilson	12/13/78	06001	CAdam	6301

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001875	EB	3998134	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	P W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	1	1	0			6		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
12	13	78	2	0360

Comply with the Provisions set forth in AP1002, AP1003 and Met Ed Safety Manual.

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST SUPT. APPROVAL
J Faulkner 12/13/78

Post Maintenance Testing required and Acceptance Criteria.

No leakage at system after new filter is installed

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
FW	P	0001	S	03	60	02	CM	C01731	12	13	77	1A

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

FW-P-1B SPEED INDICATOR NEEDS CALIBRATION
IT DOES NOT GO TO ZERO WITH THE FEED
PUMP COMPLETELY STOPPED
OOS STICKER 389

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06301	C Adams	12-13-77	06301	C Adams	12-13-77

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001878	HA	399813	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12	13	78	12	14	78		1	036N	03	000040

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	12	15	78	12	14	78	1	000040			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 CAL CONTROL ROOM INDICATOR AND LOOP CHEC
801	A	08 KED SPEED CIRCUIT.
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

12-2-35

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
FW	P	0001	0360	02	CM C0173/12/13/78		1A

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

FW-P-1B SPEED INDICATOR NEEDS CALIBRATION. IT DOES NOT GO TO ZERO WITH THE FEED PUMP COMPLETELY STOPPED

OOS STICKER 389

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06301	C Adam	12-13-78	06301	C Adam	12-13-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR MO DAY	START HR MIN
0360	C01877	HA	39981 34	1	1	1	1	1	0	1	1		

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
12	13	78	1	036N

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST SUPT. APPROVAL
J Faulkner 12/13/78

Post Maintenance Testing required and Acceptance Criteria.

Speed indicator goes to zero when pump is stopped

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0173

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: [illegible] Date 12/13/78

10. Maintenance Foreman Assigned: [illegible]

11. Shift Foreman's approval to commence work C. Guthrie Date 12-14-78

☐ Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

TMI-88 REV. 8/78

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 173

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

Rec'd Length 1350 12/14/78 Date J P Gilbert

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. C Guthrie Shift Foreman's Signature 12-14-78 Date

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. C. Guthrie Shift Foreman's Signature 12-14-78 Date

16. Quality Control Department review of work and testing completed (QC work only).

Surveillance Report No. N/A QC Department Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Metzger Supervisor of Maintenance Signature 12/15/78 Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND — UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
ZA	302	0001	036 0002	CM	C02491	12	15	78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

RADWASTE GAS ALARM AND ALARM FOR HAVS GAS ANALYZER LOW FLOW IS IN, FLOW IS OK

RE AIR [illegible]

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0155	GUTHRIE	12-15-78	0455	Guthrie	12-15-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	001A7EA		379A134	1	1	1	1	2	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				A			00008600

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
			12	29	78		2036M		01	00086

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	29	79	01	02	79	1	00004			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 FOUND REMOTE FLASHER WIRED WRONGE WIRED
801	A	08 CORRECTLY
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

124-22

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	BOP	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
EA	3020	0D1		036 0	02	CM [redacted]	C024	9	12	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

RADWASTE GAS ALARM AND ALARM FOR HAS BEEN
GAS ANALYZER LOW FLOW IS IN, FLOW IS OK
REPAIR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05555	GUTHRIE	12-15-78	05455	[signature]	12-15-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001878EA		3994134	1	1	1	1	1	0	1	1					

ORIGINAL WORK REQ'D	K W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			A		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
12	29	78	2	036M

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER C0249

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes ✓ No_____

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shut down

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: D.E. Weaver/SRM Date 12/29/78

10. Maintenance Foreman Assigned: D. Weaver

11. Shift Foreman's approval to commence work C. Faulkner Date 12-29-78

☐ Initial if Shift Foreman signature is not required

14276
✓ [redacted]
Radiation Work Permit No.

TMI-88 REV. 8/78

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER C0249

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

Ellen Schorman 12-30-78 0605 12/12/78 Date D W Weaver

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required.

F J Schorman 1/11/79
Shift Foreman's Signature Date

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required.

F J Schorman 1/11/79
Shift Foreman's Signature Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ Surveillance Report No. N/A QC Department _____ Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Ritz 1/29/79
Supervisor of Maintenance Signature Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP. TYPE	COMP. ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
EE	7		036002	CM	C 03821	12/14/78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

Connect Electrical Services to the newly relocated Unit 2 Maint Trailers. Located on the East side of Unit 1 and 2 Corrid OR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0676	McLean	12/14/78	0636	McLean	12/14/78

0001 M
4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU OP HD CD RF HS LR	NPRD FAILURE START YR MO DAY HR MIN
0360	00187AR		39 9 81 34	1 1 1 1 1 0 1 1	

CHANGE MOD REQ'D	PWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	C				X			

S/M APPROVAL COMMENCE WORK MO DAY YR	S/F APPROVAL COMMENCE WORK MO DAY YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST. CREW SIZE	EST MANHOURS
12 14 78	01 08 79		2	CF69	02	00060

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TX. CD	ACT	JOB COMPLETION DATE MO DAY YR	FIELD WORK COMPLETION DATE MO DAY YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	042779	326791		00060			

RESOLUTION DESCRIPTION

801	A
801	A
801	A
801	A

07 INSTALLED CONDUIT & CABLE, CONNECTED AS
08 REQUIRED
09
10

TXN CD	ACT	NPRD FAILURE END YR MO DAY HR MIN	FAILURE NO.	FAILURE STATUS
808	A			

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A B	EFFECT OF FAILURE CODES A B	FAILURE DETECTION CODE	ACTION TAKEN CODES A B	LICENSE EVENT REPORTED DATE YR MO DAY
808	A							

COPY 2

C.C. 2000015

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND UNIT 2

~~399.5011~~

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUFF	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
FE	*	*		0360 02	CM	C02821	12	18	78	2

EL

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

Connect Electrical Seruices to the newly Relocated Unit 2 Maint Trailers Located on the East side of Unit 1 And 2 Corrid
OR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0636	Metzger	12/18/78	0636	Metzger	12/18/78

4200A 6721/529.9

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187AR		~~3 9 9 8 1 3 4~~	1	1	1	1	1	0	1	1				

CHANGE MOD REQ'D	P W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER
0	0	0	a		

ENV CODE	OUTAGE CAUSE CODE
X	

STATUS HOLD CODE

S/M APPROVAL COMMENCE WORK MO	DAY	YR
12	18	78

PRIORITY	RESP. LOCATION OR CONTRACTOR
2	C6F69

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria

Work completed as per description section

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0282

1. Does work represent a change or modification to an existing system or component?
If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes,
PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work: Operating or shut down

8. QC Dept. review, if required in item No. 3

QC Supervisor N/A Date _____

9. Supervisor of Maintenance approval to commence work: W. Metz Date 12/10/78

10. Maintenance Foreman Assigned: WM. DEAN

11. Shift Foreman's approval to commence work _____ Date 1-8-79

☐ Initial if Shift Foreman signature is not required

NA
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0282

12. Retest met acceptance criteria Yes [N/A] No [ ]

13. Work Performed by date/time: 3-26-79 J. SCALES — Work Reviewed - Maintenance Foreman's Signature: 3-27-79 Date — W. J. Dean

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. — Shift Foreman's Signature — 3/26/79 Date

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. — Shift Foreman's Signature — 3/26/79 Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ Surveillance Report No. — N/A QC Department — _____ Date

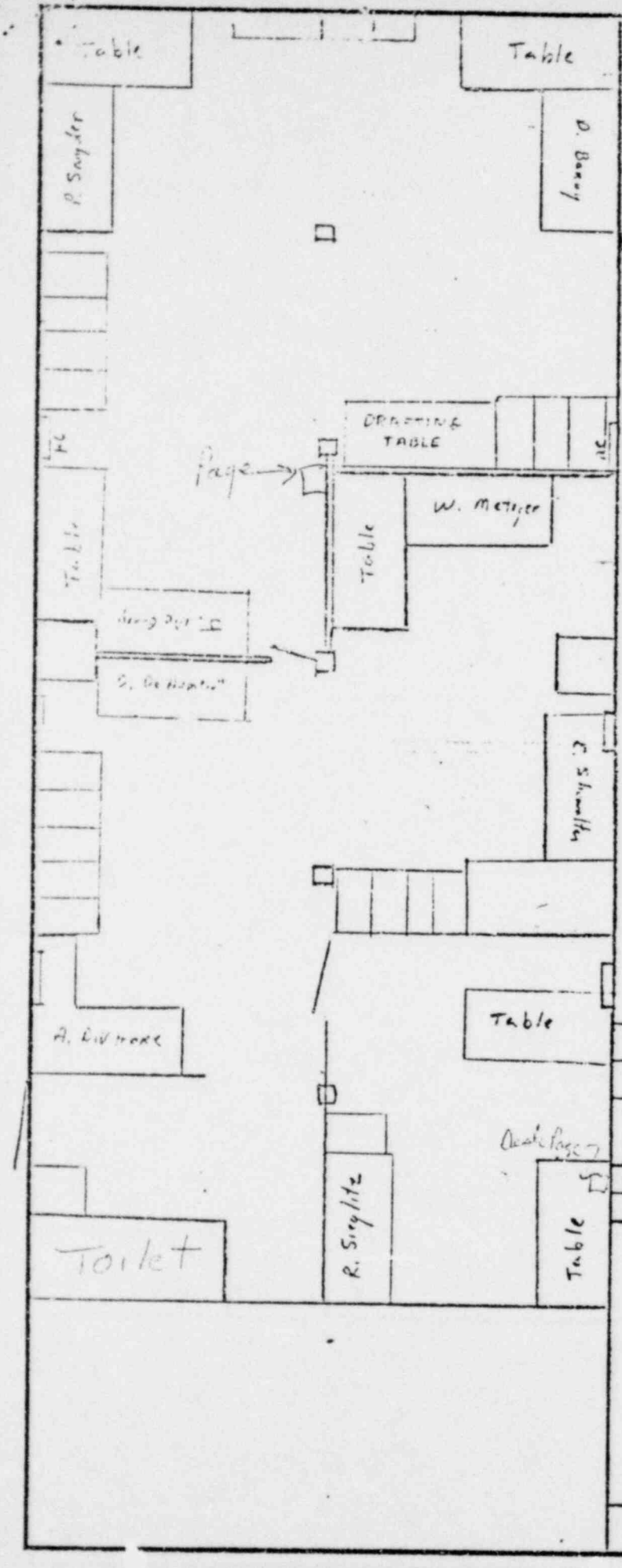
17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

Supervisor of Maintenance Signature — 4-27-79 Date

INSTALLED 300' OF 4" CONDUIT, 3-350' 250 MCM CABLE, CONNECTED TO NEW LOAD CENTER. CONNECTED FEEDERS TO TRAILERS.

INSTALLED 400' 1" CONDUIT FOR GAITRONICS AND CONNECTED TO TRAILERS, UNITS ALSO.

INSTALLED 150' 1" CONDUIT FOR TELEPHONES.



REV NO.	DATE	DESCRIPTION	ENGR.	SUP. ENG.
	12-19-78	FIRST ISSUE	CPS	

ENGINEER CPS

STATE REG. NO.

UNIT 2 MAINTENANCE TRAILER

THREE MILE ISLAND NUCLEAR STATION
UNIT NO. 2

JERSEY CENTRAL POWER & LIGHT COMPANY

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

RECOMMENDED PRIORITY: 1

COMPONENT DESIGNATION SYS (5-7)	COMP. TYPE (8-11)	COMP. ID (12-15)	LOC (16)	LOCATION / UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO	DAY	YR (33-38)
SF	IT	0441	B	036002	CM	C	12	22	78

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: EXCESSIVE LEAK

CAUSE OF MALFUNCTION (IF KNOWN):

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0512	Stantenbrink	12-22-78	0593	AMiller	12-22-78

~~4200~~ A 6721/5307

WORK ORDER NUMBER LOCATION	WORK ORDER NUMBER SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001817	MM	3998134	1	1	1	1	0	1	1						

CHANGE MOD REQ'D	PWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12	22	78					10	36M	02	000040

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	02	15	79				2B				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUP	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
SH	P	CCCIB		036002	CM	C05351	12	22	78	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: EXCESSIVE PACKING LEAK

CAUSE OF MALFUNCTION (IF KNOWN):

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05412	E Breitenbach	12/14/78	0587 3	A Miller	12-22-78

~~4200~~ A 6721/530,7

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	0C1874M		3981344	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER
0	0	0	0		

ENV CODE	OUTAGE CAUSE CODE
X	

STATUS HOLD CODE

S7M APPROVAL COMMENCE WORK MO	DAY	YR
12	22	78

PRIORITY	RESP. LOCATION OR CONTRACTOR
1	036M

Limits and Precautions:

a) Personnel — Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria. Leakage reduced to normal

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
CW	V	~~0 0 1 3 5~~	0360	02	CM C02041	12137 8	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED:
The VALVE is only partially open but the LIMIT SWITCH thinks it is FULL open
This is a large butterfly valve up on B
cooling Tower

CAUSE OF MALFUNCTION (IF KNOWN):
MISPOSITIONED LIMIT SWITCH

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0342	James R Floyd	12/13/78	0342	James R Floyd	12/13/78

~~A200~~ A6724-531.3

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR MO DAY	START HR MIN
0360	001 ~~87~~ NB		~~[illegible]~~	1	1	1	1	1	0	1	1		

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0			4206	X			

S/M APPROVAL COMMENCE WORK MO DAY YR	S/F APPROVAL COMMENCE WORK MO DAY YR	PROCEDURE NUMBER	PRIOP	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12147	02279		2036L		02	000160

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO DAY YR	FIELD WORK COMPLETION DATE MO DAY YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	032379	022879	1	000160			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 CHECK LIMITS + OPENING OF VALVE
801	A	08 ADJUST PERCENT ENABLATOR TO READ PROPERLY
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR MO DAY
808	A										

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM—
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
CW	V	~~0 0 6 7B~~ 0 3 6 0 0 2	C M		C 0 2 0 4	1 2 1 3 7 8	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

The VALVE is only partially open but the LIMIT SWITCH thinks it is FULL OPEN. This is a large butterfly valve up on B cooling Tower

CAUSE OF MALFUNCTION (IF KNOWN)

MISPOSITIONED LIMIT SWITCH

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0 3 3 4 2	James R Floyd	12/13/78	0 3 8 4 2	James R Floyd	12/13/78

~~4100~~ A6724-531.3

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR MO DAY	START HR MIN
0 3 6 0	0 0 1 8 7	N B	~~3 7 7 3 1 3 4~~	1	1	1	1	1	0	1	1		

CHANGE MOD PKG ID	A W P	NUC SAFETY	NP RC	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
1 2	1 4	7 8	2	0 3 6 4

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

GPU TEST SUPT. APPROVAL
T Jaudon 12/14

Post Maintenance Testing required and Acceptance Criteria.

Limit switch is adjusted to allow valve to fully open & close

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—
JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0204

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work Operating or shutdown

8. QC Dept. review, if required in item No. 3
QC Supervisor N/A Date N/A

9. Supervisor of Maintenance approval to commence work: W. Metz Date 12/14/78

10. Maintenance Foreman Assigned: C. Riggin Rg 60

11. Shift Foreman's approval to commence work C Guthrie Date 2/28/79

☐ Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0204

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

John Watters 2-28-79 (Date) [signature]

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required.

C Guthrie (Shift Foreman's Signature) 2-28-79 (Date)

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required.

C Guthrie (Shift Foreman's Signature) 2-28-79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

_____ (Surveillance Report No.) N/A (QC Department) _____ (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

[signature] (Supervisor of Maintenance Signature) 3/23/79 (Date)

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0436

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes ____ No ✓

2a. Does work require an RWP Yes ✓ No ____

2b. Is an approved procedure required to minimize personnel exposure. Yes ____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes ✓ M No ____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes ✓ No ____

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ Unit Superintendent _____ Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes ____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes ____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ Unit Superintendent/Supervisor of Operations _____ Date

7. Plant status or prerequisite conditions required for work. Shutdown

8. QC Dept. review, if required in item No. 3
QC Supervisor W. Shoemaker by telecon Date 12-29-78

9. Supervisor of Maintenance approval to commence work: B Watts 0440 for D. Shovlin Date 12-29-78

10. Maintenance Foreman Assigned: B Watts page 62

11. Shift Foreman's approval to commence work C Adler Date 12-29-78

☐ Initial if Shift Foreman signature is not required

NA
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER C-0436

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

WAGNER 12-29-78
HUNTER 1100

12-29-78 (Date) [signature]

14. Work completed and component alligned for testing.

[ ]

Initial if S. F. signature is not required.

C Ada (Shift Foreman's Signature) 12.29.78 (Date)

15. Testing completed and component released for normal use.

[ ]

Initial if S. F. signature is not required.

C Ada (Shift Foreman's Signature) 12.29.78 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

MR 628 (Surveillance Report No.) Eklund (QC Department) 1/3/79 (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Mehy (Supervisor of Maintenance Signature) 1/5/79 (Date)

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP TYPE (8-11)	COMP ID (12-15)	ID (16)	LOCATION /UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO (33-34)	DAY (35-36)	YR (37-38)	RECOMMENDED PRIORITY
CV		0001		036002	CM	C04361	12	28	78	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

LIMIT SWITCH CONTACT 6 ON RC-V1 SHOULD BE CLOSED WHEN VALVE IS CLOSED. WHEN THE VALVE IS CLOSED, THIS CONTACT DOES NOT CLOSE.

CAUSE OF MALFUNCTION (IF KNOWN)

ROTOR FOR CONTACT 6 IS OUT OF ADJUSTMENT

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06850	J. D. Stanton	12-28-78	06550	J. D. Stanton	12-28-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001877 CA		399413	0	0	1	1	1	0	0	0				

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	1	1	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12	29	78	12	29	78	1420-Y10 REV-0	1	0364	02	00160

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	05	79	12	29	78	1	00040			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 VALVE CYCLED PROPERLY THE PROBLEM WAS FO
801	A	08 UND TO BE AN OPEN LINK AT THE PATCH PANE
801	A	09 L. CLOSED LINK, CIRCUIT NOW FUNCTIONS AS
801	A	10 PER DESIGN

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP. ID.	SUBCOMP	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
RC	V	0001		03600 2	CM	C0436	12	28	78	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED:

LIMIT SWITCH CONTACT 6 ON RC-V1 SHOULD BE CLOSED WHEN VALVE IS CLOSED. WHEN THE VALVE IS CLOSED, THIS CONTACT DOES NOT CLOSE.

CAUSE OF MALFUNCTION (IF KNOWN):

ROTOR FOR CONTACT 6 IS OUT OF ADJUSTMENT

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06850	J. D. Newton	12-28-78	06550	J. D. Newton	12-28-78

4200

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	CA	3998134	00	1	10	00									

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	1	1	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
12	29	78		1036L

Comply with the Provisions set forth in AP1002, AP1003 and Met Ed Safety Manual.

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria:

As per sect. 7.0 in procedure 1420-Y-10

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

728

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP. TYPE (8-11)	COMP. ID (12-15)	LOCATION / UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO	DAY	YR (33-38)	RECOMMENDED PRIORITY
AB	E	0001A	036002	CM	C04681	23	17	8	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

RB NORMAL COOLING UNIT 'A' HAS CONTINUOUS LOW PAN TEMP ALARM. VERIFIED HTR EKR CLOSED & SOLAY PUMPS ON. LOCAL TEMP MEASURE WAS 59° F. REPAIR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0555	J.L. GUTHRIE	12/31/77	0555	GUTHRIE	12/31/78

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	001877	FA	5305	1	1	1	1	1	0	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	27	90	10	04	79		1	036A	02	0012.0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS
	2	12.0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR (39-44)	FIELD WORK COMPLETION DATE MO	DAY	YR (45-50)	SIGN OFF REASON CODE (51-52)	TOTAL ACTUAL MANHOURS (53-58)	PURCHASE REQUISITION NUMBER (59-66)	PURCHASE ORDER NUMBER (67-73)	MATERIAL ORDER NUMBER (74-80)
807	A	01	05	79	01	04	79	1	0012.0			

9

TXN CD	ACT	RESOLUTION DESCRIPTION (39-80)
801	A	07 RESET AND CAL. PAN TEMP SWITCHES
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR (39)	MO	DAY	HR	MIN (46-48)	FAILURE NO (49)	FAILURE STATUS (50)
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR-DATA ENTRY-SUPERVISOR OF MAINTENANCE CM COORDINATOR-DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE (39-40)	NPRD FAIL MODE (41-42)	CAUSE OF FAILURE CODES A (43-50)	B	EFFECT OF FAILURE CODES A (51-55)	B	FAILURE DETECTION CODE (56-57)	ACTION TAKEN CODES A (58-65)	B	LICENSE EVENT REPORTED DATE YR (66)	MO	DAY (67-71)
808	A												

COPY 2

128-

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOOP	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
RB	Z	0001A		036002	CM	C0468	12	31	78	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

RB NORMAL COOLING UNIT "A" HAS CONTINUOUS LOW PAN TEMP. ALARM. VERIFIED HTR BKR CLOSED & SPRAY PUMPS ON. LOCAL TEMP. MEASURE WAS 59° F. REPAIR

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05455	GUTHRIE	12/31/78	07555	GUTHRIE	12/31/78

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001878	FA	5305	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
01	02	79	1	036N

Limits and Precautions:

a) Personnel — Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria. UNIT WORKS PROPERLY

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0468

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes _____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes _____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Op ov S/D

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: E. Shewalter Date 1/2/79

10. Maintenance Foreman Assigned: G. Lbert

11. Shift Foreman's approval to commence work A Miller Date 1-4-79

[ ]
Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0468

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time — Work Reviewed - Maintenance Foreman's Signature

Riggenback/St Clair 1430 — 1-4-79 (Date) — J F Gilbert

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. — A Miller (Shift Foreman's Signature) — 1-4-79 (Date)

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. — A Miller (Shift Foreman's Signature) — 1-4-79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

____ (Surveillance Report No.) — N/A (QC Department) — ____ (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Metzger (Supervisor of Maintenance Signature) — 1/5/79 (Date)

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0478

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes _____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes ✓ No _____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

✳ _____ 1/3/79
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3
QC Supervisor WAS Ed Lanish Date 1/9/79

9. Supervisor of Maintenance approval to commence work: E. Showalter Date 1/10/79

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work M. Ranalli Date 1/15/79

[ ]
Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

TMI-88 REV. 8/78

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER _____

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

1/26/79
Date

14. Work completed and component alligned for testing.

[ ]

Initial if S. F. signature is not required.

F. Scheumann 1/26/79
Shift Foreman's Signature Date

15. Testing completed and component released for normal use.

[ ]

Initial if S. F. signature is not required.

F. Scheumann 1/26/79
Shift Foreman's Signature Date

16. Quality Control Department review of work and testing completed (QC work only).

N/A E. Adams 4/18/79
Surveillance Report No. QC Department Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

R. C. Frantzen 4/20/79
Supervisor of Maintenance Signature Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5–7)	COMP. TYPE (8–11)	COMP. ID. (12–15)	LOCATION / UNIT (17–22)	JOB TYPE (23–24)	JOB TICKET NUMBER (25–32)	REQUEST DATE MO / DAY / YR (33–38)	RECOMMENDED PRIORITY
ZA		1900 FI	036002	CM	C07812317		2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

CONTROL ROOM PANEL 19 ALARM E-1 SHOULD NOT BE IN. INVESTIGATE.

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0216	M. L. Pollard	12/31/78	0601	C Adam	12-31-78

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU OP HD CD RF HS LR	NPRD FAILURE YR MO DAY	START HR MIN
0360	01578Z		53016	1 1 1 1 1 0 1 1		

CHANGE MOD REQ'D	H W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			100

S/M APPROVAL COMMENCE WORK MO / DAY / YR	S/F APPROVAL COMMENCE WORK MO / DAY / YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST. CREW SIZE	EST. MANHOURS
01 10 79	01 15 79	1430-Y21 Rev-1	2	20J1	01	00006.0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO / DAY / YR	FIELD WORK COMPLETION DATE MO / DAY / YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	04 20 79	03 31 79	6	00006.0			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 Repaired by Lab. ECM Department.
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR / MO / DAY / HR / MIN	FAILURE NO	FAILURE STATUS
808	A			

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR · DATA ENTRY · SUPERVISOR OF MAINTENANCE CM COORDINATOR · DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A / B	EFFECT OF FAILURE CODES A / B	FAILURE DETECTION CODE	ACTION TAKEN CODES A / B	LICENSE EVENT REPORTED DATE YR / MO / DAY
808	A							

COPY 2

1302-6

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUB	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
ZA		L400	FI	0360	02	CM C0478	12	31	78	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

CONTROL ROOM PANEL 19 ALARM E-I SHOULD NOT BE IN. INVESTIGATE

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0414	M. P. Dino	12/31/78	0670	C Ado	12-31-78

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	GZ	5306	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
01	10	79	2	2 0 J 1

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria: Mounting as per sect. 6.11 in procedure 1430-Y-21

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP. TYPE	COMP. ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
T	P	0 1 7	036002	CM	C 0 4 0 3	01	02	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

WTP-19-2 AND 3 DO NOT START AUTOMATICALLY AND WHEN STARTED MANUALLY THEY ARE VERY NOISY THEY SOUND LIKE THEY ARE NOT PUMPING

CAUSE OF MALFUNCTION (IF KNOWN)

SUMP HAD RESIN IN IT LAST WEEK AND WAS CLEANED OUT BUT PUMPS PROBABLY HAVE SOME

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05749	Donald A. Berry	1-2-79	05749	Donald A. Berry	1-2-79

A1721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00178HE		5307	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	N.C. SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST. CREW SIZE	EST MANHOURS
01	03	79					2	03	N	

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	25	79				2A				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

128-10

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOOP	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
WT	P	0019		036 0002	CM	C04880	01	02	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

WTP-19-A AND B DO NOT START AUTOMATICALLY, AND WHEN STARTED MANUALLY THEY ARE VERY NOISY THEY SOUND LIKE THEY ARE NOT PUMPING

CAUSE OF MALFUNCTION (IF KNOWN)

SUMP HAD RESIN IN IT LAST WEEK AND WAS CLEANED OUT BUT PUMPS PROBABLY HAVE SOME

ORIGINATOR'S EMP. NO	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO	SUPERVISOR'S SIGNATURE	DATE
05749	Donald A. Berry	1-2-79	05749	Donald A. Berry	1-2-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HU	SD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	HE	5307	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP PD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
01	03	79	2	036N

Cancel

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

Pumps operate as designed

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP. TYPE (8-11)	COMP. ID (12-15)	(16)	LOCATION / UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO	DAY	YR (33-38)	RECOMMENDED PRIORITY
CD	A	A		036002	CM	C04901	01	27	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

ACID CONCENTRATION INDICATION FOR DMLIST
ER RESINFEATION IS NOT FUNCTION PROPERLY
EITHER THE RECORDER IS OUT OF CALIB OR
THE PROBE IS BAD

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05749	Donald A. Berry	1/2/79	05749	Donald A. Berry	1/2/79

A0721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001474E		537	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP PD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			000050

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	03	79	01	03	79		1	036N	01	00040

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	25	79	01	12	79	1	0001	00		

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 REPLACED FRAYED CORD FOR #2 PEN AND RECA
801	A	08 LIBRATED RECORDER. PUT BACK IN SERVICE
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO.	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

128:12

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUFF	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
CO	*	*		C360 02	CM	C0490	01	02	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

ACID CONCENTRATION INDICATION FOR POLISHER REGENERATION IS NOT FUNCTION PROPERLY EITHER THE RECORDER IS OUT OF CALIB OR THE PROBE IS BAD

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05749	Donald A Berry	1/2/79	05749	Donald A. Berry	1/2/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	HE	5307	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
01	03	79	1	036N

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

Functions as designed

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0490

1. Does work represent a change or modification to an existing system or component?
If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes _____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes _____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: W. Metzger Date 4/3/79

10. Maintenance Foreman Assigned: Bennett

11. Shift Foreman's approval to commence work [illegible] Date 4/3/79

☐ Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

TMI-88 REV. 8/78

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0490

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

GILBERT 1/12/79 (Date) [signature]

14. Work completed and component alligned for testing.

[ ]

Initial if S. F. signature is not required. [signature] (Shift Foreman's Signature) 1/15/79 (Date)

15. Testing completed and component released for normal use.

[ ]

Initial if S. F. signature is not required. [signature] (Shift Foreman's Signature) 1/15/79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

_____ (Surveillance Report No.) N/A (QC Department) _____ (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

[signature] (Supervisor of Maintenance Signature) 1/25/79 (Date)

CR-7373
WT-F~~7217~~
DEEKMAN INSTRUMATIC

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP. TYPE	COMP. ID.	SUFF	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
OH	V	0008		036002	CM	C04950104	1	4	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

PROVIDE ALARM ON PNL 8 WHEN BWST LEVEL IS LOW OR ES TEST SWITCH IS IN TEST POSITION PER ECM S-5970 REV 4

CAUSE OF MALFUNCTION (IF KNOWN)

TO GIVE CRO BETTER INDICATION OF STATUS FOR OH-V-8A/B INTERLOCK WITH BWST LEVEL

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06638	James R. Parles	1/4/79	06638	James R. Parles	1/4/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR		NPRD FAILURE YR	MO	DAY	START HR	MIN
03600	0187	CE	5302	1	1	1	1	1	0	1	1						

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
1	0	1	0		0034 0		X	

: K Tony

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
03	27	79	2	036L

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria: WIRING COMPLETED AND FONCTIONS AS PER DESIGN OF ECM S-5970 REV 4

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0495

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021. C/M No. 2-0310 — Yes ✓ No ____

2a. Does work require an RWP — Yes ____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. — Yes ____ No ✓

3a. Is work on a QC component as defined in GP 1008. — Yes ✓ E No ____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. — Yes ✓ No ____

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

Unit Superintendent ____ Date ____

5a. Is the system on the Environmental Impact list in AP 1026 — Yes ____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact — Yes ____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

Unit Superintendent/Supervisor of Operations ____ Date ____

7. Plant status or prerequisite conditions required for work operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor [illegible] Eckenrod Date 3/12/79

9. Supervisor of Maintenance approval to commence work: E. Showalter Date 3/12/79

10. Maintenance Foreman Assigned: Byrnes (page 68)

11. Shift Foreman's approval to commence work C Ruthrauff Date 3/26/79

☐ Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER C-0495

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

WAGNER 3-27-79 (Date) B J R

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. C Guthrie (Shift Foreman's Signature) 3/27/79 (Date)

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. C Guthrie (Shift Foreman's Signature) 3/27/79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

N/A (Surveillance Report No.) QC R Jones (QC Department) 5/1/79 (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

R C Frantzman (Supervisor of Maintenance Signature) 5/4/79 (Date)

WR C-0495

WORK REQUEST PROCEDURE

TMI Nuclear Station

Maintenance Procedure Format and Approval

Unit No. 2

This form outlines the format and acts as a cover sheet for a maintenance procedure. Due to the limited size of the form, additional pages may be attached as required. Work Request procedure AP 1016 Section 6 should be used as a guide in preparing the maintenance procedure.

1. Procedure Title & No.:

ADD ALARM ON PNL 8 FOR DH-V-8A/B IN TEST POSITION WHEN BUST LEVEL IS LOW AS PER ECM-5976 REV 4 FQ 2679

2. Purpose:

PROVIDE GUIDANCE FOR ABOVE

3. Description of system or component to be worked on.

DH-V-8A/B TEST SWITCH

4. References:

ATTACHED FQ 2679
ECM 5-5970 R4

5. Special Tools, and Materials required.

NONE

6. Detailed Procedure (attach additional pages as required)

SEE ATTACHED

Supervisor of Maintenance recommends approval B.W. Cuttler for D. Shovlin Date 2-20-79

* PORC RECOMMENDS APPROVAL

Unit No. 1 Chairman [illegible] Date _____ Unit No. 2 Chairman R.P. Jarret Date 3/5/79

* UNIT SUPERINTENDENT APPROVAL

Unit No. 1 [illegible] Date _____ Unit No. 2 J.B. Fyler Date 3/6/79

* Standing Procedure _____ _____
Supervisor of QC Date

*Note: These approvals required only on Nuclear Safety Related/Radiation work permit jobs.

TMI-94 2-78

WR# C-0495

6.0 Procedure

6.1 Obtain Shift Supervisor/Shift Foreman permission to begin work.

6.2 Tag or isolate as necessary to provide personnel and equipment safety.

6.3 Terminate spare wire of cable MA-259C in compt. 9AF/MCC-2-11EA & Cont. Pnl 8 (TB-C-11)

6.4 Terminate 2 spare wires of cable MB-279C in compt. 11AF/MCC 2-21EA & Cont. Pnl. 8 (TB-C)

6.5 Add jumpers between compts 2DR & 9AF of MCC 2-11EA and between compts. 4BR & 11AF of MCC 2-21EA.

6.6 In control pnl 8 remove jumper between TB-CA-13 & CA-14 and add jumper between TB-CA-13 & TB-C-12.

6.7 Add window in Pnl 8 alarm window B17 engraved "BWST LEVEL LOW OR ES TEST SW. ACTUATED"

6.8 Prove logic of alarm circuit and notify Shift Supervisor/Shift Foreman that the new alarm circuit has been added as per FQ 2679 and ECM 5-5970 R4.

6.9 Remove tags if necessary.

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5–7)	COMP. TYPE (8–11)	COMP. ID. (12–15)	LOCATION / UNIT (17–22)	JOB TYPE (23–24)	JOB TICKET NUMBER (25–32)	REQUEST DATE MO	DAY	YR (33–38)	RECOMMENDED PRIORITY
SR	U	0003	036002	CM	C04[illegible]	01	03	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: REPLACE LUBE WATER STRAINER CARTRIDGES - SUSPECTED CLOGGED

CAUSE OF MALFUNCTION (IF KNOWN): VERY DIRTY RIVER WATER

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0SA73	A Miller	1-3-79	0S873	A Miller	1-3-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	001[illegible]		5307	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			1 0 0 0 1 8 0

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	04	79	01	08	79		1	036M	02	0 0 0 0 8 0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR (39–44)	FIELD WORK COMPLETION DATE MO	DAY	YR (45–50)	SIGN OFF REASON CODE (51–52)	TOTAL ACTUAL MANHOURS (53–58)	PURCHASE REQUISITION NUMBER (59–66)	PURCHASE ORDER NUMBER (67–73)	MATERIAL ORDER NUMBER (74–80)
807	A	01	10	79	01	08	79	1	000040			

TXN CD	ACT	RESOLUTION DESCRIPTION (39–80)
801	A	07 CHANGED FILTERS
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR (39)	MO	DAY	HR	MIN (40–48)	FAILURE NO (49)	FAILURE STATUS (50)
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR C/F MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR-DATA ENTRY-SUPERVISOR OF MAINTENANCE CM COORDINATOR-DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE (39–40)	NPRD FAIL MODE (41–42)	CAUSE OF FAILURE CODES A (43)	B (44–50)	EFFECT OF FAILURE CODES A (51)	B (52–55)	FAILURE DETECTION CODE (56–57)	ACTION TAKEN CODES A (58)	B (59–65)	LICENSE EVENT REPORTED DATE YR (66)	MO	DAY (67–71)
808	A												

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOOP	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
SR	U	0003		036002	CM	C04961	01	03	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: REPLACE LUBE WATER STRAINER CARTRIDGES - SUSPECTED CLOGGED

CAUSE OF MALFUNCTION (IF KNOWN): VERY DIRTY RIVER WATER

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05873	A Miller	1-3-79	05873	A Miller	1-3-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
03600	01873	HM	5307	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
01	04	79	1	036M

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

Strainer cleaned - DP is within limits

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0496

1. Does work represent a change or modification to an existing system or component?
If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes _____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes _____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor N/A Date _____

9. Supervisor of Maintenance approval to commence work: [signature] Date 1/4/79

10. Maintenance Foreman Assigned: A W Conrad _____

11. Shift Foreman's approval to commence work [signature] Date 1-8-79

[ ]
Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0490

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time

1-8-79
Date

Work Reviewed - Maintenance Foreman's Signature

D W Cook

14. Work completed and component alligned for testing.

[ ]

Initial if S. F. signature is not required.

A McCabe
Shift Foreman's Signature

1-8-79
Date

15. Testing completed and component released for normal use.

[ ]

Initial if S. F. signature is not required.

A McCabe
Shift Foreman's Signature

1-8-79
Date

16. Quality Control Department review of work and testing completed (QC work only).

Surveillance Report No.

N/A
QC Department

Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

E. Shomaker
Supervisor of Maintenance Signature

1/10/79
Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP TYPE (8-11)	COMP ID (12-15)	(16)	LOCATION /UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO (33-34)	DAY (35-36)	YR (37-38)	RECOMMENDED PRIORITY
EF	*	*		036002	CM	C0508	01047	9		2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

THE EF-P-1 COOLING WATER LINE DOWNSTREAM OF EF-V26 NEEDS TO BE PAINTED.

CAUSE OF MALFUNCTION (IF KNOWN)

PIPE IS RUSTING. LINE WAS NEVER PAINTED AFTER INSTALLATION.

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06281	J E Morck	1/3/79	06281	J E Morck	1/3/79

AG721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR			NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001878	HK	53017	1	1	1	1	1	0	1	1							

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
C	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	04	79					203	KV		

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD (1-3)	ACT (4)	JOB COMPLETION DATE MO (39-40)	DAY (41-42)	YR (43-44)	FIELD WORK COMPLETION DATE MO (45-46)	DAY (47-48)	YR (49-50)	SIGN OFF REASON CODE (51-52)	TOTAL ACTUAL MANHOURS (53-58)	PURCHASE REQUISITION NUMBER (59-66)	PURCHASE ORDER NUMBER (67-73)	MATERIAL ORDER NUMBER (74-80)
807	A							2				

TXN CD (1-3)	ACT (4)	RESOLUTION DESCRIPTION (39-80)
801	A	07
801	A	08
801	A	09
801	A	10

TXN CD (1-3)	ACT (4)	NPRD FAILURE END YR (39-40)	MO (41-42)	DAY (43-44)	HR (45-46)	MIN (47-48)	FAILURE NO (49)	FAILURE STATUS (50)
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD (1-3)	ACT (4)	NPRD FAIL TYPE (39-40)	NPRD FAIL MODE (41-42)	CAUSE OF FAILURE CODES A (43-44)	B (45-50)	EFFECT OF FAILURE CODES A (51-54)	B (55)	FAILURE DETECTION CODE (56-57)	ACTION TAKEN CODES A (58-64)	B (65)	LICENSE EVENT REPORTED DATE YR (66-68)	MO (69-70)	DAY (71)
808	A												

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO DAY YR	RECOMMENDED PRIORITY
EF	*	*	0360020	CM	C05000	010479	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

THE EF-P-1 COOLING WATER LINE DOWNSTREAM OF EF-V26 NEEDS TO BE PAINTED.

CAUSE OF MALFUNCTION (IF KNOWN)

PIPE IS RUSTING. LINE WAS NEVER PAINTED AFTER INSTALLATION.

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06281	J E Morck	1/3/79	06281	J E Morck	1/3/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR MO DAY	START HR MIN
03600	01874		5321	1	1	1	1	0	1	1		

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR ITY	RESP LOCATION OR CONTRACTOR
01	04	79		2036V

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

Line painted

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 01002

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes _____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No _____

3a. Is work on a QC component as defined in GP 1008. M Yes ✓ No _____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

J B Fogan — Unit Superintendent — Date 1/11/79

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No _____

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ Unit Superintendent/Supervisor of Operations — Date _____

7. Plant status or prerequisite conditions required for work. Oper STD

8. QC Dept. review, if required in item No. 3
QC Supervisor E Daniels Date 1/16/79

9. Supervisor of Maintenance approval to commence work: W. Metzger Date 1/17/79

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work C. Griffith Date 1-20-79

[ ] Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 1602

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

WYNN 01/22/79 (Date) M K Bennett

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. C Guthrie (Shift Foreman's Signature) 1-22-79 (Date)

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. C Guthrie (Shift Foreman's Signature) 1-22-79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

NR (Surveillance Report No.) WLS P Islamic (QC Department) 1/25/79 (Date)

17. Supervisor of Maintenance Job Ticket (Work Req est) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Mutz (Supervisor of Maintenance Signature) 1/26/79 (Date)

GENERATION CORRECTIVE MAINTENANCE SYSTEM

JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID		LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
CH	A	3117		036002	CM	C	06	02	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

COMPUTER POINT 3117 IS IN ALARM CONDITION INDICATING A LOW VACUUM TRIP ON FW-P-1 A
THIS CONDITION DOES NOT EXIST IN REALITY. B

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0178	[signature]	1-8-79	0630 1	[signature]	1-8-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	CC187G		5306	1	1	1	1	1	0	1	1					

CHANGE MOD MOD	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			000020

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PIDYR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	17	79	01	20	79	1430-Y-21 Rev. 1	2036	N	01	000020

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	26	79	01	22	79	1	000040			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 CALIBRATED FW-PS-3769-2. ALARM STATUS WA
801	A	08 S backwards. REVERSED ALARM STATUS LOGIC
801	A	09 POINT DISPLAYS CORRECTLY.
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOS PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR-DATA ENTRY-SUPERVISOR OF MAINTENANCE CM COORDINATOR-DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

1320

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
CH	A	317	036 0 02	CM	C06020	01	08	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

COMPUTER POINT 317 IS IN ALARM CONDITIO
N INDICATING A LOW VACUUM TRIP ON FW-P-1
B THIS CONDITION DOES NOT EXIST

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0639	M L Cooper	1-8-79	0630 1	C Gadau	1-8-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00157627		53061	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	PWP	NUC SAFETY	NPPD	REG AGENCY CODE	CHG/MOD NUMBER
0	0	0	0		

ENV CODE	OUTAGE CAUSE CODE
X	

STATUS HOLD CODE

S/M APPROVAL COMMENCE WORK MO	DAY	YR
01	17	79

PRIOR	RESP. LOCATION OR CONTRACTOR
2	036 M

Limits and Precautions:

a) Personnel

Comply with the Precautions
[illegible] and
Mat Ad Safety Manual

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria. points displays correctly
and as per sect. 6.11 in procedure 1430-Y-21

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
H	C	DCSKJ	036002	CM	C07300	1	15	79	

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

SPARE SOLENOID WILL NOT START IN MANUAL

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO	SUPERVISOR'S SIGNATURE	DATE
0573	Roman L. Gaerny	1-15-79	0573	A Mosher	1-15-79

AC721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR		NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	C0177	F2	53055	1	1	1	1	1	0	1	1						

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			00000120

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	16	79	01	27	79		2	03CL	01	000100

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	01	24	79	01	28	79	1	000180			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 REPLACED BURNT OUT SOLENOID COIL ON NR-V
801	A	08 - 233J
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

TXN CD	ACT	ID FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUF	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
AH	C	0058	J	03600 / 2	CM	C07300	1	15	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

SPOT COOLER WILL NOT START IN AUTO OR MANUAL

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06793	James R Barry	1/15/79	05873	A McKee	1-15-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR		NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	F2	5305	1	1	1	1	1	0	1	1						

SPECIAL MOD REQ'D	QA	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
01	16	79	2	036L

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

Operates as designed

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0730

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: W. Metzger Date 1/26/79

10. Maintenance Foreman Assigned: C. Rupp 62

11. Shift Foreman's approval to commence work F. J. Schumann Date 1/27/79

☐ Initial if Shift Foreman signature is not required

NA
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0730

12. Retest met acceptance criteria Yes [L] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

Bryhart 1-28-79 Date [illegible]

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required.

F J Scherman Shift Foreman's Signature 1/28/79 Date

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required.

F J Scherman Shift Foreman's Signature 1/28/79 Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ Surveillance Report No. N/A QC Department _____ Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

W. Metz Supervisor of Maintenance Signature 1/29/79 Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
AS	PT	3500	036002	CM	C0890	01	23	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

AS-PIC-3500 INDICATES >60PSIG WITH PT SENSING LINE VENTED. PT OUTPUT DROPS TO 0 WITH IA SECURED.

CAUSE OF MALFUNCTION (IF KNOWN)

PRESS. OVERRANGED ?

ORIGINATOR'S EMP. NO	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO	SUPERVISOR'S SIGNATURE	DATE
06225	E. Showalter	1/23/79	06225	EDS	1/23/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187JN		5308	1	1	1	1	0	1	1						

CHANGE MOD REQ'D	B W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	1	0	0				X			000008 0

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
01	23	79	01	24	79		1	036N	01	00008 0

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT
807	A

JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
01	26	79	01	24	79	1	0000 80			

TXN CD	ACT
801	A
801	A
801	A
801	A

RESOLUTION DESCRIPTION

07 FOUND SPAN OF OUTPUT EXTREMELY HIGH BLEW
08 OUT NOZZLE & FLAPPER ASSY, RECALIBRATED
09 UNIT LOOP CHECKED TO TIC CONTROLLER, GOOD
10

TXN CD	ACT
808	A

NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT
808	A

NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY

COPY 2

134.24

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUB	LOCATION /UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
AS	PT	3500		036002	CM	C0890	01	23	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

AS-PIC-3500 INDICATES >60PSIG WITH PT SENSING LINE VENTED. PT OUTPUT DROPS TO 0 WITH IA SECURED.

CAUSE OF MALFUNCTION (IF KNOWN)

PRESS. OVERRANGED ?

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06225	E. Showalter	1/23/79	06225	EDS	1/23/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187	JN	5308	1	1	1	1	0	1	1						

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
C	1	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
01	23	79	1	036N

Limits and Precautions:

a) Personnel

b) Equipment

Comply with the Provisions set forth in AP1002, AP1003 and ~~Not~~ Ed Safety Manual.

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria. PT operates properly

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0890

1. Does work represent a change or modification to an existing system or component?
If yes, an approved change modification is required per AP 1021.
C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP Yes ✓ No _____

2b. Is an approved procedure required to minimize personnel exposure. Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes _____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes _____ No _____

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes _____ No _____

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. Op or S/D

8. QC Dept. review, if required in item No. 3

QC Supervisor _____ Date _____

9. Supervisor of Maintenance approval to commence work: E. Shewalter Date 1/23/79

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work F J Scheuman Date 1/24/79

☐ Initial if Shift Foreman signature is not required

N/A
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER 0890

12. Retest met acceptance criteria Yes [✓] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

R. SCHLEHR – 1800 1/24/79 (Date) [signature]

14. Work completed and component alligned for testing.

[ ]

Initial if S. F. signature is not required.

[signature] 1-25 79
Shift Foreman's Signature Date

15. Testing completed and component released for normal use.

[ ]

Initial if S. F. signature is not required.

[signature] 1-25-79
Shift Foreman's Signature Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ Surveillance Report No. N/A QC Department _____ Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

[signature] 1/26/79
Supervisor of Maintenance Signature Date

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5-7)	COMP TYPE (8-11)	COMP ID (12-15)	(16)	LOCATION / UNIT (17-22)	JOB TYPE (23-24)	JOB TICKET NUMBER (25-32)	REQUEST DATE MO	DAY	YR (33-38)	RECOMMENDED PRIORITY
SW	V	0020		036002	CM	C09570	12	7	9	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

VALVE DID NOT OPEN TO SUPPLY BACK UP LUBE WATER SOURCE

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
01800	Curtis Conrad	1/29/79	05478	K R Hart	1/29/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001579		53607	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
	3	0	0				X			40

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
12	6	79					2	3	02	20

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	02	13	79				2A				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 SEE WR 936
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

COPY 2

136-34

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUFFIX	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
SW	V	0020		0360	02	CM	C09570	12	74	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

VALVE DID NOT OPEN TO SUPPLY BACK UP LUBE WATER SOURCE

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0800	Victor A Cresswell	1/29/79	0598	K R Hoyt	1/29/79

AG721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HC	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001578	H	5307	1	1	1	1	1	0	1	1					

OUTAGE MOD REQ'D	R W P	NUC SAFETY	FD RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIORITY	RESP. LOCATION OR CONTRACTOR
02	06	79	2	03KN

Cancel

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environ

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

(ISI) Procedure 2303-M33 applies after repairs

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

136-2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUB	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
RCS	*	*		036 0 02	CM	C0956	01	30	79	1

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

TERMINATE SPARE FIELD WIRES IN RTD HEAD FOR FOLLOWING RTD'S: RC1SA-TE1; TE2; TE3; RC1SB-TE1; TE2; TE3

CAUSE OF MALFUNCTION (IF KNOWN)

RTD'S ARE PRESENTLY USING 3 WIRE CONFIGURATION. CHANGE TO 4 WIRE CONFIGURATION.

ORIGINATOR'S EMP. NO	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO	SUPERVISOR'S SIGNATURE	DATE
06638	James E. Parks	1/30/79	06035	James E Parks	1/30/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HO	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
036	00187	CM	5302	1	0	1	1	1	0	0	0				

CHANGE MOD REQ'D	W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	1	1	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
01	30	79		1036N

Comply with the Provisions set forth in AP1002, AP1003 and Met Ed Safety Manual.

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria: Mounted IAW sect. 6.11 in procedure 1430-Y-21

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)

REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 0956

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021.
   C/M No. _____ Yes _____ No ✓

2a. Does work require an RWP — Yes ✓ No _____

2b. Is an approved procedure required to minimize personnel exposure. — Yes _____ No ✓

3a. Is work on a QC component as defined in GP 1008. — Yes ✓ No _____

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. — Yes ✓ No _____

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____ _____
Unit Superintendent — Date

5a. Is the system on the Environmental Impact list in AP 026 — Yes _____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact — Yes _____ No ✓

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations — Date

7. Plant status or prerequisite conditions required for work. Operating or shutdown

8. QC Dept. review, if required in item No. 3
   QC Supervisor L Dennis Date 1/30/79

9. Supervisor of Maintenance approval to commence work: W Kelly Date 1/30/79

10. Maintenance Foreman Assigned: _____

11. Shift Foreman's approval to commence work _____ Date _____

☐ Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

TMI-88 REV 8/79

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER _____

12. Retest met acceptance criteria Yes ☐ No ☐

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

_____
Date

14. Work completed and component alligned for testing.

☐

Initial if S. F. signature is not required. _____ _____
Shift Foreman's Signature Date

15. Testing completed and component released for normal use.

☐

Initial if S. F. signature is not required. _____ _____
Shift Foreman's Signature Date

16. Quality Control Department review of work and testing completed (QC work only).

_____ _____ _____
Surveillance Report No. QC Department Date

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

_____ _____
Supervisor of Maintenance Signature Date

1430-Y-21
Revision 1
04/12/78

WORK REQUEST PROCEDURE

TMI Nuclear Station

Maintenance Procedure Format and Approval

CONTROLLED COPY
Supv. Maint
Unit 2

Unit No. Station

This form outlines the format and acts as a cover sheet for a maintenance procedure. Due to the limited size of the form, additional pages may be attached as required. Work Request procedure AP 1016 Section 6 should be used as a guide in preparing the maintenance procedure.

1. Procedure Title & No.: 1430-Y-21

   Quality Control Mounting Procedure for (Unit II) Instruments and Controls

2. Purpose: Insure instruments and controls that are not required to function during or after a seismic event must maintain its mechanical integrity in order to prevent discharge of radioactive material and/or jeopardize the overall performance capability of systems required to safely shutdown the reactor plant and maintain it in a shutdown condition.

3. Description of system or component to be worked on. Instruments, controls, linkages, tubing, instrument isolation valves, wires, and etc., used to sense and/or initiate a system response.

4. References:

   4.1 Equipment Classification List.
   4.2 AP 1003

5. Special Tools, and Materials required.

   5.1 Tools as necessary depending on individual job. It could include scales, scribes, tubing wrenches, and regular hand tools.

6. Detailed Procedure (attach additional pages as required)

   See Attached

Supervisor of Maintenance recommends approval Jim Shirley Date 3-31-78

* PORC RECOMMENDS APPROVAL

Unit No. 1 Chairman NA Date ____ Unit No. 2 Chairman J.J. Colbert Date 4/4/78

* UNIT SUPERINTENDENT APPROVAL

Unit No. 1 NA Date ____ Unit No. 2 J.J. Seelinger Date 4/5/78

* Standing Procedure W. W. Cotter
Supervisor of QC

4-12-78
Date

*Note: These approvals required only on Nuclear Safety Related/Radiation work permit jobs.

TMI-94 2-78

6.0 PROCEDURE

NOTE: This procedure may be used in conjunction with other detailed work procedures.

6.1 Inform the Shift Foreman that you will be commencing work. Insure he is aware of what instrument, indication or system you may be affecting.

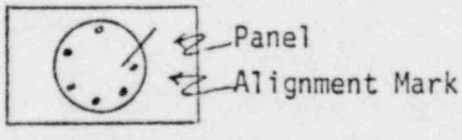
6.2 Mounting - Applicable if the equipment must be moved.

NOTE: For the purposes of this procedure an instrument is defined as a measuring device for determining the present value of a quantity under observation i.e., it must have a readout.

6.2.1 Inspect the mounting of the device. If it appears to have been improperly mounted or modified consult the applicable mounting print.

6.2.2 If the mounting is complex make a sketch to insure all parts are replaced properly.

6.2.3 When you are sure of the proper mounting and tagging is complete (if applicable), remove the device for maintenance. If the orientation of the mounting is not obvious, place alignment marks on the device and the mounting. Insure proper collection of the water if the device has a liquid boundary.



6.2.4 When the unit is repaired, remount the device and if necessary, consult the applicable mounting print or sketch. If any mounting part (i.e. nuts, bolts, washer, etc.) is lost or broken, replace it with an equivalent commercially available

part. For a question concerning the parts equivalency consult the Mechanical Engineering Department for guidance.

6.3 Electronic/Electrical control devices mounted in racks, cabinets, or mounting.

6.3.1 All wires shall be routed and supported so as not to be the support of the device. Terminal screws should be checked for tightness.

6.3.2 All conduit supports shall be tight.

6.3.3 Mounting bolts and screws shall be tight.

NOTE: This section is also applicable to devices mounted in the internals of QC instruments.

6.4 Devices with process connections.

6.4.1 Must be supported per original design.

6.4.2 The pressure connection point shall be sealed with proper thread sealant. (Note: Teflon tape is prohibited in primary system). Any gasket should be inspected for damage and reinstalled or replaced.

6.4.3 The device shall be leak tested in accordance with Step 6.7.5.

6.5 Instrument valves

NOTE: This procedure is not applicable if any welding is required.

6.5.1 The pressure connection point shall be sealed with proper thread sealant. (Note: Teflon tape is prohibited in primary systems). Any gasket should be inspected for damage and reinstalled or replaced.

6.5.2 The valve shall be leak tested in accordance with Step 6.7.5.

6.6 Valve operators and associated equipment.

6.6.1 Before removing the operator ensure a sketch showing all the mountings and connections is on hand, if applicable.

6.6.2 When replacing the operator or associated equipment all brackets and mountings shall be tight.

6.6.3 All pneumatic or process connections shall be connected per 6.7.

6.6.4 Lubricate as necessary to insure all moving parts are free to move smoothly.

6.7 Threaded pipes and tubing.

6.7.1 Before removing any pipe or tubing support, make sketches and record all dimensions necessary to ensure supports are properly replaced. (eg. length of support rod, distance between supports, etc.).

6.7.2 All piping connections must be sealed with proper thread sealant. (Note: Teflon tape is prohibited in primary systems).

6.7.3 All tubing connections shall be connected properly. (Note: Use vendors manual or 1410-Y-4 for reference).

6.7.4 All pipe hangers and supports must be reinstalled in accordance with engineering specifications. If there is any questions regarding support design or spacing contact Mechanical Engineering.

6.7.5 All piping and tubing connections shall be inspected for leaks and normal operating pressure immediately upon presumption and after about 10 minutes at pressure.

6.8 Mechanical linkages.

6.8.1 Ensure a sketch of the linkage is available before disassembly. (Either obtain a vendor drawing or make your own). Ensure all sketches indicate which joints should be tight and which are free to move.

6.8.2 Reassemble the linkage in accordance with the sketch. Lubricate as necessary. Ensure all fasteners are properly secured.

6.9 Report clear to the Shift Foreman and clean up the work area.

6.10 Document the completed work on the work request.

6.11 Acceptance Criteria

6.11.1 The device is mounted per the original or applicable mounting print.

6.11.2 All screws, bolts, and fasteners are properly tightened.

6.11.3 No pressure boundary leaks at normal operating pressure per 6.7.5.

GENERATION CORRECTIVE MAINTENANCE SYSTEM
CM STATUS ACTIVITY FORM

UNIT 2

COMPONENT DESIGNATOR				LOCATION UNIT	JOB TYPE	WORK AUTHORIZATION NUMBER	REQUEST DATE
SYS (5)	COMP. TYPE (8)	COMP. ID. (12)	LOOP (16)	(17–22)	(23-24)	(28–32)	MO DAY YR (33–38)
A C S A		A		0 3 5 0 0 2	C M	C 0 9 5 6	0 1 3 0 7 7

TXN (1)	ACT (4)	STATUS HOLD CODE (39-40)	START DATE MO DAY YR (41–46)	RELEASE DATE MO DAY YR (47–52)	% Completed (53–55)	S/M APPROVAL TO COMMENCE WORK MO DAY YR (56–61)	FIELD WORK COMPLETION DATE MO DAY YR (62–67)
8 1 0	A					7 7	7 7

0 1	OUTAGE HOLD
0 2	PART HOLD
0 3	QUALITY CONTROL PART HOLD
0 4	QUALITY CONTROL PROCEDURE HOLD
0 5	OPERATIONS HOLD
0 6	CHANGE MODIFICATION HOLD
0 7	
0 8	
5 0	MANPOWER NOT AVAILABLE
5 1	AT PORC
5 2	AT QUALITY CONTROL
5 3	AT UNIT SUPERINTENDENT
5 4	AT READING
5 5	
5 6	

Duplicate
04/12/78

WR Proc for C0956

WORK REQUEST PROCEDURE

TMI Nuclear Station

Maintenance Procedure Format and Approval

Unit No. 1

This form outlines the format and acts as a cover sheet for a maintenance procedure. Due to the limited size of the form, additional pages may be attached as required. Work Request procedure AP 1016 Section 6 should be used as a guide in preparing the maintenance procedure.

1. Procedure Title & No.:

   TERMINATE SPARE FIELD WIRES IN RTD HEAD FOR ALL RC 15's

2. Purpose:

   Provide guidance for terminating spare field wire in RTD head for all RC 15's

3. Description of system or component to be worked on.

   RCS Temp Monitoring

4. References:

   AP 1002
   AP 1003
   Met Ed Safety Manual.

5. Special Tools, and Materials required.

   None

6. Detailed Procedure (attach additional pages as required)

   Per Attached Pages.

Supervisor of Maintenance recommends approval Wm. Metzger per telecon Date 1/30/79

* PORC RECOMMENDS APPROVAL

Unit No. 1 Chairman _____ Date _____ Unit No. 2 Chairman R D Wilson Date 1/30/79

* UNIT SUPERINTENDENT APPROVAL

Unit No. 1 _____ Date _____ Unit No. 2 _____ Date 1/30/79

* Standing Procedure _____ _____

Supervisor of QC Date

*Note: These approvals required only on Nuclear Safety Related/Radiation work permit jobs.

6.0 Procedure

6.1 Notify Shift Foreman/Supervisor prior to commencing work.

6.2 Locate RC 15A-TE1 (A loop T_H) and remove cover from RTD head assembly.

6.3 RC 15A-TE1 is a dual element RTD, with only one element being used for CR indication (YM-TR-192Z) Locate spare field wire inside RTD head (Refer to Fig 1) and terminate on RTD head terminal block. Terminate to spare RTD sensing lead (Refer to fig 1). Replace RTD Head Cover.

6.4 Repeat Steps 6.2 & 6.3 for Following RTD's

6.4.1	RC 15A-TE2	A loop T_C	by RC-P-1A
6.4.2	RC 15A-TE3	A loop T_C	by RC-P-2A
6.4.3	RC 15B-TE1	B loop T_H	
6.4.4	RC 15B-TE2	B loop T_C	by RC-P-1B
6.4.5	RC 15B-TE3	B loop T_C	by RC-P-2B

6.4 Notify Shift Forman/Supervisor and I&C Engineer after work is completed

{NOTE: Initial and date Figure 1 after each RTD has been completed.

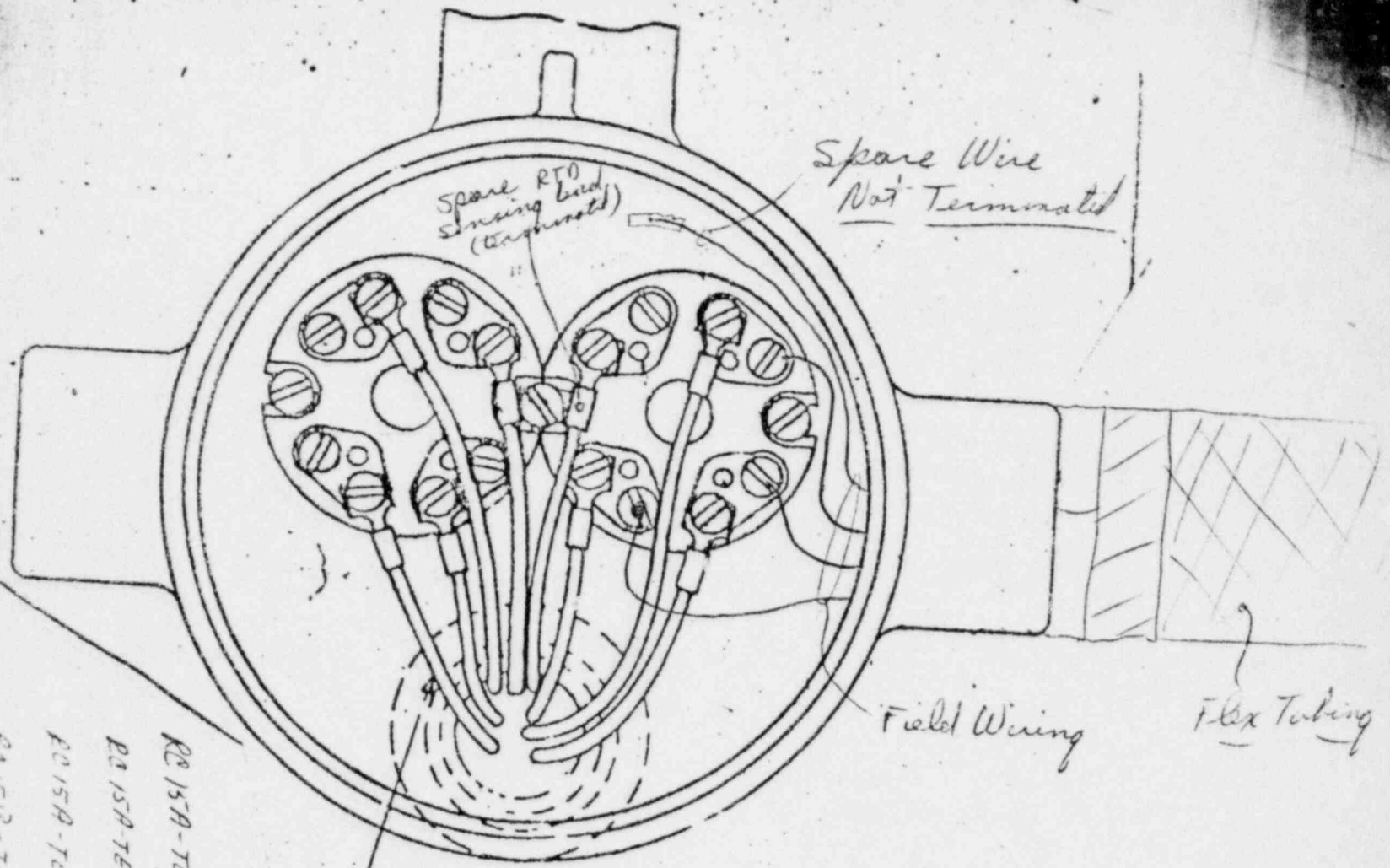

Spare Wire
Not Terminated
Spare RTD Lead
(Terminated)
Field Wiring
Flex Tubing
8 LEADS, #22 GA. NICKEL CLAD
COPPER, PRIMARY INORGANIC FIBER.
SECONDARY MICA LAYER WITH
WOVEN INORGANIC FIBER JACKET
RE 15A-TE1
RE 15A-TE2
RE 15A-TE3
RE 15B-TE1
INITIAL/DATE

FIG-1

I26-36

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS (5–7)	COMP TYPE (8–11)	COMP ID (12–15)	LOC (16)	LOCATION / UNIT (17–22)	JOB TYPE (23–24)	JOB TICKET NUMBER (25–32)	REQUEST DATE MO	DAY	YR (33–38)	RECOMMENDED PRIORITY
SW	V	0020		036002	CM	C09570	12	29	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

VALVE DID NOT OPEN TO SUPPLY BACK UP LUBE WATER SOURCE

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO	SUPERVISOR'S SIGNATURE	DATE
01800	Curtis Conrad	1/29/79	05498	K R Hart	1/29/79

AG721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001578	HQ	53607	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
	5	0	0				X			40

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
02	06	79					2	03K	02	20

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	02	13	79				2A				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 SEE WR 936
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

6-36

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION: SYS	COMP TYPE	COMP ID.	LOOP	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE: MO	DAY	YR	RECOMMENDED PRIORITY
SW	V	0020		036002	CM	C09570	12	19	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

VALVE DID NOT OPEN TO SUPPLY BACK UP LUBE WATER SOURCE

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06800	Curtis A Conrad	1/29/79	05498	K R Hoyt	1/29/79

AG721

WORK ORDER NUMBER: LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION: SU	OP	HO	CD	RF		HS	LR	NPRD FAILURE: YR	MO	DAY	START: HR	MIN
0360	001879		53017	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK: MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
02	06	79	2	036N

Cancel

Comply with the Provisions set forth in AP 1002 and Met Ed Safety Manual

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria.

(ISI) Procedure 2303-M33 applies after repair

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	SUB	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
AH	D	4092A		036 0 0 2	CM	C21510	5	23	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

WHITE LITE ON PANEL 13 FOR AHD 4092A AND
S DOES NOT LIGHT WHEN TESTING EMERGENCY
VENTILATION SYSTEM IN RECIRC MODE. REQUI
RED FOR TECH SPEC SURVEILLANCE 2303 MISA

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0616	D. C. Knerr	5/23/79	0545		5/23/79

A 6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	001877		5305	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	0	0	0				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIOR	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
05	25	79	06	14	79		2	0064	02	00160

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	07	10	79	06	17	79	1	00040			

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 ADJUSTED LIMIT SWITCH. NOW FUNCTIONS AS
801	A	08 PER DESIGN
801	A	09
801	A	10

TXN CD	ACT	NPRO FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

COPY 2

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOOP	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
AH	D	4092A		03600 2	CM	C21510	05	23	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED

WHITE LITE ON PANEL 13 FOR AHD 4092A AND C DOES NOT LIGHT WHEN TESTING EMERGENCY VENTILATION SYSTEM IN RECIRC MODE. REQUIRED FOR TECH SPEC SURVEILLANCE 2303 M1.5A

CAUSE OF MALFUNCTION (IF KNOWN)

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
06616	D. C. Knerr	5-23-79	05755		5/23/79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
03600	01878	F2	5305	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NP RD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	0	0	0			X		

S/M APPROVAL COMMENCE WORK MO	DAY	YR	PRIOR	RESP. LOCATION OR CONTRACTOR
05	25	79		2OJ6L

Limits and Precautions:

a) Personnel

b) Equipment

c) Environment

d) Nuclear — Comply with the provisions set forth in AP 1002 and ~~Det~~ Ed Safety Manual

Post Maintenance Testing required and Acceptance Criteria. Light should work properly.

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE

COPY 1

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET NUMBER 2151

1. Does work represent a change or modification to an existing system or component? If yes, an approved change modification is required per AP 1021. C/M No. _____ Yes_____ No ✓

2a. Does work require an RWP Yes_____ No ✓

2b. Is an approved procedure required to minimize personnel exposure. Yes_____ No ✓

3a. Is work on a QC component as defined in GP 1008. Yes_____ No ✓

3b. If 3a is yes does work have an effect on Nuclear Safety? If 3b is yes, PORC reviewed Superintendent approved procedure must be used. Yes_____ No ✓

4. Agreement that a PORC reviewed, Superintendent approved procedure is not required for this work because it has no effect on nuclear safety. (Applies only if 3a is Yes and 3b is No).

_____ _____
Unit Superintendent Date

5a. Is the system on the Environmental Impact list in AP 1026 Yes_____ No ✓

5b. If 5a is Yes, is an approved procedure required to limit environmental impact Yes_____ No_____

6. Agreement that 5b is No. (Required only if 5a is Yes).

_____ _____
Unit Superintendent/Supervisor of Operations Date

7. Plant status or prerequisite conditions required for work. operating/shutdown

8. QC Dept. review, if required in item No. 3

QC Supervisor N/A Date _____

Code insp. To be notified

9. Supervisor of Maintenance approval to commence work: _____ Yes — No ✓ Date 5/29/79

10. Maintenance Foreman Assigned: B J Rutt Jorge 74

11. Shift Foreman's approval to commence work C D Adams Date 6-14-79

Initial if Shift Foreman signature is not required

_____
Radiation Work Permit No.

JOB TICKET (WORK REQUEST)
REVIEW – CLASSIFICATION – ROUTING CONTROL FORM

JOB TICKET (WORK REQUEST) NUMBER C-2151

12. Retest met acceptance criteria Yes [X] No [ ]

13. Work Performed by date/time Work Reviewed - Maintenance Foreman's Signature

Rich Jenkins 6/15/79 (Date) C. E. Rupp

14. Work completed and component alligned for testing.

[ ] Initial if S. F. signature is not required. C Cade (Shift Foreman's Signature) 6/15/79 (Date)

15. Testing completed and component released for normal use.

[ ] Initial if S. F. signature is not required. C Cade (Shift Foreman's Signature) 6/15/79 (Date)

16. Quality Control Department review of work and testing completed (QC work only).

_____ (Surveillance Report No.) NA (QC Department) _____ (Date)

17. Supervisor of Maintenance Job Ticket (Work Request) and procedure are complete and signed off as required. Change/modification form has been signed off as required.

R. E. Seagle (Supervisor of Maintenance Signature) 7/16/79 (Date)

GENERATION CORRECTIVE MAINTENANCE SYSTEM
JOB TICKET FORM (WORK REQUEST) - THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOC	LOCATION / UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
MU	P	00C1	6	0360	02	CM	C12960	2	16	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: Casing drain slug orifice

CAUSE OF MALFUNCTION (IF KNOWN):

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
0583	Raymond Leythal	2-16-79	0587	A Mood	2-16-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	GC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF		HS	LR	NPRD FAILURE START YR	MO	DAY	HR	MIN
0360	001873		5301	1	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	RWP	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	TAGGING APPLICATION NO.	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE	ESTIMATED DOLLARS
0	1	1	C				X			

S/M APPROVAL COMMENCE WORK MO	DAY	YR	S/F APPROVAL COMMENCE WORK MO	DAY	YR	PROCEDURE NUMBER	PRIORITY	RESP. LOCATION OR CONTRACTOR	EST CREW SIZE	EST MANHOURS
							2	036M		

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

ASSISTING DEPARTMENT RESP. LOCATION OR CONTRACTOR	EST CREW	EST MANHOURS

TXN CD	ACT	JOB COMPLETION DATE MO	DAY	YR	FIELD WORK COMPLETION DATE MO	DAY	YR	SIGN OFF REASON CODE	TOTAL ACTUAL MANHOURS	PURCHASE REQUISITION NUMBER	PURCHASE ORDER NUMBER	MATERIAL ORDER NUMBER
807	A	03	08	79				2A				

TXN CD	ACT	RESOLUTION DESCRIPTION
801	A	07 SEE WR C0655
801	A	08
801	A	09
801	A	10

TXN CD	ACT	NPRD FAILURE END YR	MO	DAY	HR	MIN	FAILURE NO	FAILURE STATUS
808	A							

TXN CD	ACT	NPRD FAIL TYPE	NPRD FAIL MODE	CAUSE OF FAILURE CODES A	B	EFFECT OF FAILURE CODES A	B	FAILURE DETECTION CODE	ACTION TAKEN CODES A	B	LICENSE EVENT REPORTED DATE YR	MO	DAY
808	A												

ORIGINATOR — SUPERVISOR — SUPERVISOR OF MAINTENANCE — MAINTENANCE FOREMAN — JOB PERFORMER — MAINTENANCE FOREMAN — SUPERVISOR OF MAINTENANCE — CM COORDINATOR - DATA ENTRY - SUPERVISOR OF MAINTENANCE CM COORDINATOR - DATA ENTRY

COPY 2

GENERATIVE MAINTENANCE SYSTEM

JOB TICKET FORM (WORK REQUEST)-THREE MILE ISLAND

UNIT 2

COMPONENT DESIGNATION SYS	COMP TYPE	COMP ID	LOCATION/UNIT	JOB TYPE	JOB TICKET NUMBER	REQUEST DATE MO	DAY	YR	RECOMMENDED PRIORITY
MU	P	0001B	036 0025	CM	C12960	02	16	79	2

DESCRIBE MALFUNCTION OR MODIFICATION DESIRED: Casing drain plug dripping

CAUSE OF MALFUNCTION (IF KNOWN):

ORIGINATOR'S EMP. NO.	ORIGINATOR'S SIGNATURE	DATE	SUPERVISOR'S EMP. NO.	SUPERVISOR'S SIGNATURE	DATE
05893	Raymond M. Leythe	2-16-79	05873	A. Miller	2-16-79

A6721

WORK ORDER NUMBER LOCATION	SERIAL	QC CODE	ACCOUNT NUMBER	PLANT CONDITION SU	OP	HD	CD	RF	HS	LR	NPRD FAILURE YR	MO	DAY	START HR	MIN
0360	00187 BE		5301	1	1	1	1	0	1	1					

CHANGE MOD REQ'D	R W P	NUC SAFETY	NPRD	REG AGENCY CODE	CHG/MOD NUMBER	ENV CODE	OUTAGE CAUSE CODE	STATUS HOLD CODE
0	1	1	0			X		

S/M APPROVAL COMMENCE WORK MO | DAY | YR:

PRIORITY | RESP. LOCATION OR CONTRACTOR: 2036M

Cancel

Limits and Precautions:

a) Personnel: Comply with Admin. Ctl Provisions Set forth in AP1002, AP1003 and Met Ed Safety Manual.

b) Equipment

c) Environment

d) Nuclear

Post Maintenance Testing required and Acceptance Criteria: Leak repaired

ORIGINATOR—SUPERVISOR—SUPERVISOR OF MAINTENANCE—MAINTENANCE FOREMAN—JOB PERFORMER—MAINTENANCE FOREMAN—SUPERVISOR OF MAINTENANCE

COPY 1