

**Nuclear**

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December 22, 1983  
4410-83-L-0263

TMI Program Office  
Attn: Dr. B. J. Snyder  
Program Director  
US Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Quality Assurance Plan, Revision 2

In your letter of October 17, 1983, which approved Revision 2 of the TMI-2 Quality Assurance Plan, you requested that several actions be taken. GPUNC's response to these items is included as Attachment 1 to this letter.

Additionally, GPUNC Letter 4410-83-L-0032 dated April 11, 1983, requested a partial exemption from the update requirements of 10 CFR 50.59(a) for TMI-2. As your response dated October 17, 1983, did not address this request, GPUNC assumes that this request is still undergoing NRC review and no further action on GPUNC's part is required.

If you have any questions or need additional information, please contact Mr. J. J. Byrne of my staff.

Sincerely,

*B. K. Kanga*  
B. K. Kanga  
Director, TMI-2

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BKK/JJB/jep

Attachment

CC: Mr. L. H. Barrett, Deputy Program Director - TMI Program Office

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PDR ADOCK 05000320  
P PDR

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NRC COMMENT NO. 1

The Quality Classification List (QCL) addressed in Section 2 of the QA Plan should be updated within 30 days of receipt of this letter, eliminating the term "important to recovery". Those items previously identified as "important to recovery" are to be reclassified as either "important to safety" or "not important to safety" using the updated engineering methodology.

GPUNC RESPONSE

The updated QCL was issued on July 1, 1983, as part of GPUNC Procedure No. 4000-ENG-7313.01, "TMI-2 Recovery Quality Classification List". This updated QCL eliminated the term "important to recovery" and reclassified each structure, system, or component appropriately.

NRC COMMENT NO. 2

The revised QCL and all GPUNC procedures that describe quality classification criteria and methodology should be submitted to the NRC TMI Program Office for review. It is the staff's understanding that this information is presently contained in GPUNC Procedure 4000-ENG-7313.01 dated July 1, 1983. GPUNC will be notified within 30 days if this document and any other applicable documents are found unacceptable. Future changes to this and other applicable documents shall be forwarded to the NRC for approval prior to implementation. During the initial 30 day NRC review period, you should continue to use the July 1, 1983, revision of GPUNC Procedure 4000-ENG-7313.01 and the current GPUNC approved version of other associated procedures.

GPUNC RESPONSE

The updated QCL, as contained in GPUNC Procedure 4000-ENG-7313.01, is included as Attachment 2 to this letter and is forwarded for your information. GPUNC will respond to any comments you may have on this document. Additionally, as discussed with members of your staff, any decisions which lessen the quality classification of a listed system will be forwarded to the TMI Program Office for information. GPUNC will also forward to the TMI Program Office any periodic updates of the QCL and other applicable documents.

GPUNC Procedure 4000-ENG-7313.01 will not be forwarded to the NRC for approval. Appendix A to TMI-2's operating license contains the Interim Recovery Technical Specification for TMI-2. Section 6 of this document provides criteria specifying which procedures and changes thereto are subject to approval by the NRC prior to implementation. These procedures are those which:

- ° directly relate to core cooling,
- ° could cause the magnitude of radiological releases to exceed limits established by the NRC,

- could increase the likelihood of failures in systems important to nuclear safety and radioactive waste processing or storage, and
- alter the distribution or processing of significant quantities of stored radioactivity or radioactivity being released through known flowpaths.

The GPUNC procedure requested by your letter for review and approval simply establishes the QCL and the criteria for maintaining the QCL. As this procedure does not authorize any plant activities, none of the criteria listed above are applicable and, therefore, is not subject to prior NRC approval under the TMI-2 Technical Specifications. This procedure is, of course, available for NRC inspection and GPUNC will respond to any questions or comments you may have on this document.

#### NRC COMMENT NO. 3

The clarifications as to the applicability of Regulatory Guides 1.30 (Page 107 of the QA Plan), 1.37 (Page 109 of the QA Plan), 1.39 (Page 112 of the QA Plan), and 1.116 (Page 116 of the QA Plan) to the operational phase should be deleted since the application of the Regulatory Guides are clearly stated. This change is to be scheduled for incorporation in the next revision of the QA Plan.

#### GPUNC RESPONSE

Based on further discussions with members of the NRC, GPUNC understands that the concern with these Regulatory Guide positions is that they appear to be lessening GPUNC's commitment to them. As discussed with the NRC, this was not GPUNC's intent. In light of this, the positions described for:

- (1) Regulatory Guides 1.30 and 1.116 will not be changed as these positions are consistent with Chapter VI of the QA Plan,
- (2) Regulatory Guide 1.37 will be revised to delete the second paragraph of Item 6 of the clarified position, and
- (3) Regulatory Guide 1.39 will be revised to delete the last sentence of Item 3 of the clarified position.

#### NRC COMMENT NO. 4

The clarification Items 2.B and 2.C to Regulatory Guide 1.58, Revision 1 (Page 114 of the QA Plan) should be modified to assure that evaluations of inspection and test activities and training programs will be performed by personnel having documented evidence that they have demonstrated their proficiency in accomplishing the assigned Level II and III responsibilities in an acceptable manner. This change should be scheduled for incorporation in the next revision to the QA Plan.

GPUNC RESPONSE

Based on further discussions with members of the NRC, GPUNC understands that the concern with this position is that GPUNC would not evaluate proficiency of inspection personnel. This is not GPUNC's intent, however, and as discussed with the NRC, GPUNC interprets the statement "competent to perform these functions" with regard to inspection personnel as requiring proficiency to be evaluated as required in Section 2.4 of ANSI N45.2.6.

NRC COMMENT NO. 5

The Plan should clearly state that in the event conflicts exist between the QA Plan and the approved Technical Specifications, the Technical Specifications shall govern.

GPUNC RESPONSE

This comment was also discussed with members of the NRC staff in that GPUNC reviews QA Plan and Technical Specification revisions to assure they are consistent. Therefore, this clarification will not be added to a QA Plan revision.

The structures, components, and systems listed on the Quality Classification List (QCL) have been determined to be Important to Safety or Safety Related based on the definitions provided below.

Important to Safety Class (1) - A special classification of those structures, components, and activities that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public. It encompasses the broad class of plant features covered (not necessarily explicitly) in the General Design Criteria, (10 CFR 50 Appendix A) that contributes in important ways to the safe operation and protection of the public in all aspects of facility operation (i.e., normal operation and transient control as well as accident mitigation). It includes "Safety-Related" as a subset.

Safety Related Class (1N)

- A subset of Important to Safety and are those permanent plant structures, systems, components, or portions thereof designed to remain functional for the Safe Shutdown Earthquake (SSE) and which:
  - ° are necessary to ensure the integrity of the reactor coolant boundary,
  - ° are necessary to ensure the capability to shut down the reactor and maintain it in a safe shutdown condition, or
  - ° whose failure could result in potential offsite exposures comparable to the guideline values of 10 CFR 100.

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| System   | Name                                                     | QCL       | Comments                                                                                       |
|----------|----------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------|
| 3153     | Reactor Building                                         | 1N        |                                                                                                |
| 3154     | Auxiliary Building                                       | 1N        |                                                                                                |
| 3155     | Control Building                                         | 1N        |                                                                                                |
| 3156     | Control Building Area                                    | 1N        |                                                                                                |
| 3157     | Diesel Generator Building                                | 1N        | Seismic I portions only                                                                        |
| 3159     | Fuel Handling Building                                   | 1N        |                                                                                                |
| 3160     | Fuel Transfer Canal                                      | 1N        |                                                                                                |
| 3161     | Spent Fuel Pools                                         | 1N        | Including liners                                                                               |
| 3162     | Service Building                                         | 1N        |                                                                                                |
| 3165     | Post Cooling Towers                                      | 1         | Structural basin only                                                                          |
| 3168     | River Water Pumphouse                                    | 1N        |                                                                                                |
| 3175     | Air Intake Tunnel                                        | 1N        | Portion below grade                                                                            |
|          | Air Intake Pagoda                                        | 1         | Above grade                                                                                    |
| 3177     | Chemical Cleaning Building                               | 1         |                                                                                                |
| 3182     | EPICOR II, TV Monitor and Control Building               | 1         |                                                                                                |
| 3184     | Solid Waste Staging Facility                             | 1         |                                                                                                |
| 3201     | NSSS Supports                                            | 1N        |                                                                                                |
| 3202     | Fuel Elements and Control Rods                           | 1N        | Control Rods Only.                                                                             |
| 3211     | HPI/Makeup and Purification System                       | See below |                                                                                                |
| 3211.1   | HPI System                                               | 1N        |                                                                                                |
| 3211.2   | MU and P System Letdown                                  | See below |                                                                                                |
| 3211.2.1 | MU and P - Letdown from RCS to outermost Isolation Valve | 1N        | RCS pressure boundary and containment isolation.                                               |
| 3211.3   | MU and P - Makeup and seal injection                     | 1N        | Excluding purification sub-loop between valves MU-V-224A, V-224B, V-226 and MU-V-107A, V-107B. |
| 3211.4   | Makeup Tank                                              | 1N        |                                                                                                |
| 3212     | LPI/Decay Heat Removal                                   | See below |                                                                                                |
| 3212.1   | LPI System                                               | 1N        |                                                                                                |
| 3212.2   | Decay Heat Removal                                       | 1N        |                                                                                                |
| 3212.3   | Borated Water Storage Tank                               | 1N        |                                                                                                |
| 3212.4   | Mini Decay Heat Removal Tank                             | See below |                                                                                                |
|          | a. Pressure boundary, pump, and pump controls            | 1N        |                                                                                                |
|          | b. Process instrumentation                               | 1         |                                                                                                |
| 3212.5   | Alternate Decay Heat Removal                             | 1N        | Pressure boundary only.                                                                        |

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| System   | Name                                                                | QCL       | Comments                                                                               |
|----------|---------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------|
| 3213     | Core Flood System                                                   | See below |                                                                                        |
|          | a. Piping from RCS up to and including CF-VIA and CF-VIB            | 1N        |                                                                                        |
|          | b. Containment penetrations including containment isolation valves  | 1N        |                                                                                        |
| 3214     | Reactor Building Spray                                              | See below |                                                                                        |
|          | a. Valves BS-V-3A and BS-V-3B                                       | 1N        | Closed valves isolate from DN:                                                         |
|          | b. Containment penetrations including containment isolation valves  | 1N        |                                                                                        |
| 3220     | Reactor Coolant System                                              | See below | RCS pressure boundary is that portion required to maintain pressure or fluid boundary. |
| 3221     | Reactor Vessel                                                      | 1N        |                                                                                        |
| 3221.1   | Standby Reactor Coolant Pressure Cnt. System:                       | 1         |                                                                                        |
| 3221.1.1 | Nitrogen Supply for Standby Reactor Coolant Pressure Control System | 1         |                                                                                        |
| 3222     | RCS Venting System                                                  | 1N        | RCS Pressure boundary only                                                             |
| 3223     | Pressurizer                                                         | See below |                                                                                        |
| 3223.1   | Pressurizer Vessel                                                  | 1N        | RCS Pressure boundary only                                                             |
| 3223.2   | Pressurizer PORV                                                    | 1N        | RCS Pressure boundary only                                                             |
| 3223.3   | Pressurizer Code Safety Valves                                      | 1N        | RCS Pressure boundary only                                                             |
| 3223.4   | Pressurizer Spray System                                            | 1N        | RCS Pressure boundary only                                                             |
| 3223.5   | Pressurizer PORV Block Valve                                        | 1N        | RCS Pressure boundary control:                                                         |
| 3224     | Steam Generators                                                    | 1N        | Primary and secondary pressure boundary                                                |
| 3224.3   | OTSG Decontamination and Layup System                               | 1         | Pressure boundary only                                                                 |
| 3225.2   | Control Rod Drive Mechanism                                         | 1N        | RCS pressure boundary only                                                             |
| 3226     | Reactor Coolant Pumps                                               | 1N        | RCS pressure boundary only                                                             |
| 3228     | Reactor Coolant System Pressure Boundary                            | 1N        |                                                                                        |
| 3231     | Gaseous Waste Disposal System                                       | See below |                                                                                        |
|          | a. Containment penetration including containment isolation valves   | 1N        |                                                                                        |
|          | b. Seismic I portions of system outside containment                 | 1         |                                                                                        |
| 3232.1   | Liquid Radwaste Disposal Fluid System                               | See below |                                                                                        |
|          | a. Containment penetrations including containment isolation valves  | 1N        |                                                                                        |
|          | b. Seismic I portions of system outside containment                 | 1         |                                                                                        |

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|--------|--------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------|
| 3232.2 | Reclaimed Boric Acid Tanks                                               | 1         |                                                                                                     |
| 3232.3 | Reactor Coolant Bleed Tanks                                              | 1         |                                                                                                     |
| 3232.5 | Deborating Demineralizers                                                | 1         |                                                                                                     |
| 3233   | Solid Radwaste Disposal System                                           | 1         | Flow Diagram 2039                                                                                   |
| 3241   | Penetration Pressurization System                                        | 1         | Seismic I portion attached to:<br>containment penetration                                           |
| 3242   | Fluid Block System                                                       | 1         | Seismic I portion attached to:<br>containment penetration                                           |
| 3244   | Reactor Building Isolation System                                        | 1N        |                                                                                                     |
| 3245   | Penetrations used for Recovery                                           | 1         | Recovery added                                                                                      |
| 3251   | Spent Fuel Cooling System                                                | 1N        |                                                                                                     |
| 3252   | Fuel Handling System                                                     | 1         |                                                                                                     |
| 3254   | Spent Fuel Racks                                                         |           | To be determined for Recovery:                                                                      |
| 3257   | Failed Fuel Canisters                                                    |           | To be determined for Recovery:                                                                      |
| 3258   | IIF Processing System                                                    | 1         |                                                                                                     |
| 3261   | Reactor Servicing Equipment                                              |           | To be defined on a case basis:                                                                      |
| 3262   | Incore Detector Disposal                                                 |           | To be determined for Recovery:                                                                      |
| 3282   | Shielding                                                                | 1         | Seismic I designed structures:                                                                      |
| 3411.1 | Main Steam System to MSIV's                                              | 1N        | From OTSG up to and including:<br>MS-V-15A, MS-V-15B, MS-V-11A<br>MS-V-11B                          |
| 3411.2 | Main Steam Isolation Valves                                              | 1N        |                                                                                                     |
| 3411.3 | Main Steam Safety Valves                                                 | 1N        |                                                                                                     |
| 3412.1 | Atmospheric Dump Subsystem                                               | 1N        | Main steam line pressure<br>boundary up to and including:<br>MS-V-3A, MS-V-3B                       |
| 3415   | Main Steam to Relief Valve Post Supports                                 | 1         |                                                                                                     |
| 3421.1 | Main Condensate System: EFW Pump Suction<br>from CST                     | 1         | Seismic I piping from CST to:<br>CO-V-82A, CO-V-82B (retains<br>tankage for possible future<br>use) |
| 3422   | Main Feed Water System                                                   | See below |                                                                                                     |
|        | a. From OTSG's up to and including FW-V-18A:<br>FW-V-18B                 | 1N        |                                                                                                     |
|        | b. From FW-V-18A, 18B up to and including:<br>FW-V-19A, V19B, V17A, V17B | 1         | To establish system boundary                                                                        |
| 3424   | Emergency Feedwater                                                      | 1N        | From OTSG up to and including:<br>EF-V-12A, V12B, V33A, V33B                                        |

| System | Name                                                           | QCL       | Comments                       |
|--------|----------------------------------------------------------------|-----------|--------------------------------|
| 3432.1 | Steam Generator Vents and Drains                               | See below | To prevent sump boron dilution |
|        | a. From OTSG's up to and including CA-V8, V9, SV-V-52, SV-V-22 | 1N        |                                |
|        | b. Containment penetrations including isolation valves         | 1N        |                                |
| 3442.1 | Diesel Generator Fuel Oil Transfer                             | 1N        |                                |
| 3442.2 | Diesel Generator Fuel Oil Storage                              | 1N        |                                |
| 3504.1 | Filtration System Fire Protection and Drains:                  | 1         |                                |
| 3526   | EPICOR II (Auxiliary Building)                                 | 1         |                                |
| 3527   | Submerged Demineralizer System                                 | 1         |                                |
| 3527.1 | SDS Monitor Tank                                               | 1         |                                |
| 3527.2 | SDS Transfer                                                   | 1         |                                |
| 3527.3 | SDS Off-Gas System                                             | 1         |                                |
| 3531   | Nuclear Services River Water System                            | 1N        |                                |
| 3534   | Reactor Building Emergency River Water                         | See below |                                |
|        | a. Containment penetrations including isolation valves         | 1N        |                                |
|        | b. Piping inside containment                                   | 1         | To prevent sump dilution       |
| 3535   | Screen Wash System                                             | 1         |                                |
| 3541   | Nuclear Services Closed Cooling Water                          | See below |                                |
|        | a. In containment piping inboard of inside isolation valves    | 1         | To prevent sump dilution       |
|        | b. All other M2 or seismic piping                              | 1N        |                                |
| 3542   | Intermediate Closed Cooling Water                              | See below |                                |
|        | a. In containment piping inboard of inside isolation valves    | 1         | To prevent sump dilution       |
|        | b. Containment penetrations including isolation valves         | 1N        |                                |
| 3543   | Decay Heat Closed Cooling Water                                | 1N        |                                |
| 3551   | Nuclear Liquid Sampling System                                 | See below |                                |
|        | a. Piping in containment to outmost isolation valve            | 1N        |                                |
|        | b. Nuclear 2, Seismic I piping outside containment             | 1         |                                |
| 3552   | Radgas Sampling                                                | 1         |                                |
| 3555.1 | Nuclear Sampling (Recovery portion)                            | 1         |                                |
| 3555.2 | EPICOR II Sampling                                             | 1         |                                |
| 3558   | Temporary Unit II Sampling                                     | 1         |                                |

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|--------|-----------------------------------------------------|-------------|---------------------------------------------------------|
| 3559   | : SDS Sampling                                      | : 1         | :                                                       |
| 3572.1 | : Reactor Building Sump                             | : 1N        | :                                                       |
| 3572.2 | : Reactor Building Sump Screen                      | : 1N        | :                                                       |
| 3572.3 | : Reactor Building Surface Suction Pump             | : 1         | :                                                       |
| 3573   | : Auxiliary Building Sumps and Drains               | : 1         | : As required to control possible releases              |
| 3574   | : Control Building Area Sump                        | : 1         | : As required to control possible releases              |
| 3576   | : Air Intake Tunnel Sump                            | : 1         | :                                                       |
| 3593   | : Steam Generator Chemical Cleaning                 | : 1N        | : Containment penetrations R561, R565 only              |
| 3611   | : Control Room and Main Control Panels              | : 1         | :                                                       |
| 3613   | : Local Control Panels                              | : 1         | : As required to support ITS systems                    |
| 3614   | : Remote Shutdown Panel                             | : 1         | : Operable channels                                     |
| 3623   | : Nuclear Instrumentation System                    | : 1         | :                                                       |
| 3624.2 | : Steam Generator Instrumentation                   | : See below | :                                                       |
|        | : a. As required to measure OTSG level and pressure | : 1         | :                                                       |
| 3625   | : Incore Monitoring System                          | : 1         | :                                                       |
| 3635.1 | : In plant General Annunciator System               | : 1         | :                                                       |
| 3641.3 | : Reactor Coolant Pressure/Level                    | : 1         | : Instruments used to determine: RCS level or pressure  |
| 3641.7 | : Reactor Building Pressure                         | : 1         | : Building pressure sensors to comply with Tech. Specs. |
| 3642   | : Engineered Safety Features Actuation              | : 1N        | : Required operable channels                            |
| 3661   | : Radiation Monitoring System                       | : 1         | : Portions monitoring release points                    |
| 3662   | : Post Accident Monitoring System                   | : 1         | :                                                       |
| 3663   | : Seismic Monitoring System                         | : 1         | :                                                       |
| 3664   | : Containment Monitoring System                     | : 1         | : Containment temperature                               |
| 3668   | : Stack Monitor                                     | : 1         | : Release point monitoring                              |
| 3669   | : Meteorological Station                            | : 1         | :                                                       |
| 3680   | : Fire Detection Systems                            | : See below | :                                                       |
| 3680.1 | : Fire Detection - Reactor Building                 | : 1         | :                                                       |
| 3680.2 | : Fire Detection - Control Building                 | : 1         | :                                                       |
| 3680.3 | : Fire Detection - Auxiliary Building               | : 1         | :                                                       |
| 3680.4 | : Fire Detection - Control Area Building            | : 1         | :                                                       |
| 3680.5 | : Fire Detection - Diesel Generator Building        | : 1         | :                                                       |

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|---------|---------------------------------------------|-------------|----------|
| 3680.6  | : Fire Detection - River Water Pumphouse    | : 1         | :        |
| 3680.7  | : Fire Detection - Fuel Handling Building   | : 1         | :        |
| 3680.8  | : Fire Detection - Air Intake Tunnel        | : 1         | :        |
| 3690    | : Security Systems                          | : See below | :        |
| 3690.1  | : Security - Access Control System          | : 1         | :        |
| 3690.2  | : Security - Video System                   | : 1         | :        |
| 3690.3  | : Security - Lighting System                | : 1         | :        |
| 3690.4  | : Security - Permalert System               | : 1         | :        |
| 3690.5  | : Security - Communication System           | : 1         | :        |
| 3690.7  | : Security - Electrical                     | : 1         | :        |
| 3690.8  | : Security - Gate Control System            | : 1         | :        |
| 3690.10 | : Security - Ingress/Egress Control         | : 1         | :        |
| 3690.15 | : Security - Fire Protection System         | : 1         | :        |
| 3702.1  | : 4160V Switchgear Room - Class 1E          | : 1M        | :        |
| 3703.1  | : 480V Switchgear Room - Class 1E           | : 1M        | :        |
| 3732.7  | : 4160 AC ESF Bus 2-1E                      | : 1M        | :        |
| 3732.8  | : 4160 AC ESF Bus 2-2E                      | : 1M        | :        |
| 3732.9  | : 4160 AC ESF Bus 2-3E                      | : 1M        | :        |
| 3732.10 | : 4160 AC ESF Bus 2-4E                      | : 1M        | :        |
| 3732.15 | : 4160V AC Diesel Generator Bus ZDG-1       | : 1M        | :        |
| 3732.16 | : 4160V AC Diesel Generator Bus ZDG-2       | : 1M        | :        |
| 3733.7  | : 480V AC ESF Unit/SS Bus 2-11E             | : 1M        | :        |
| 3733.8  | : 480V AC ESF Unit/SS Bus 2-12E             | : 1M        | :        |
| 3733.9  | : 480V AC ESF Unit/SS Bus 2-21E             | : 1M        | :        |
| 3733.10 | : 480V AC ESF Unit/SS Bus 2-22E             | : 1M        | :        |
| 3733.15 | : 480V AC River Water Pumphouse ESF Unit/SS | : 1M        | :        |
|         | : Bus 2-31E                                 | :           | :        |
| 3733.16 | : 480V AC River Water Pumphouse ESF Unit/SS | : 1M        | :        |
|         | : Bus 2-41E                                 | :           | :        |
| 3733.27 | : 480 USS 2-38                              | : 1         | :        |
| 3733.28 | : 480 USS 2-48                              | : 1         | :        |
| 3733.29 | : 480 MCC 2-33A                             | : 1         | :        |
| 3733.30 | : 480V Cap Gun No. 3 Distribution Center    | : 1         | :        |
| 3733.35 | : 480V Power Distribution Panel PDP-6A      | : 1         | :        |
| 3733.36 | : 480V Power Distribution Panel PDP-W1      | : 1         | :        |

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|----------|-------------------------------------------|-----------|----------|
| 3733.37  | 480V Power Distribution Panel PDP-W2      | 1         |          |
| 3733.38  | 480V Power Distribution Panel PDP-W3      | 1         |          |
| 3733.39  | 480V Power Distribution Panel PDP-41B     | 1         |          |
| 3733.40  | 480V Solid Waste Distribution Panel       | 1         |          |
| 3733.41  | 480V Strip Heater Panel SPC-PNL-4         | 1         |          |
| 3733.43  | 480-240V Transformer for Pump WG-P-2      | 1         |          |
| 3733.44  | 480-240V Transformer for Pump SHS-P-1     | 1         |          |
| 3733.47  | 480-120/208V Transformer for PNL MP2-33A  | 1         |          |
| 3733.48  | 480-120/208V Transformer for PNL MP-CN-1  | 1         |          |
| 3733.49  | 480-120/208V Transformer for PNL MP-CN-2  | 1         |          |
| 3733.50  | 480-120/208V Transformer for PNL MPF-1    | 1         |          |
| 3733.51  | 480-120/208V Transformer for PNL MPH-1    | 1         |          |
| 3733.52  | 480-120/208V Transformer for PNL MPT-1C   | 1         |          |
| 3733.53  | 480-120/208V Transformer for PNL HT-P-100 | 1         |          |
| 3734     | 125/250 Volt DC System                    | See below |          |
| 3734.1   | 125/250V DC Main Bus 2-1DC                | 1N        |          |
| 3734.1.1 | 125/250V DC Dist Panel DCA-1A             | 1N        |          |
| 3734.1.2 | 125/250V DC Dist Panel DCC-1A             | 1N        |          |
| 3734.1.4 | 125/250V DC Dist Panel DCW-1A             | 1N        |          |
| 3734.1.5 | 125/250V DC Dist Panel DCC-1B             | 1N        |          |
| 3734.2   | 125/250V DC Main Bus 2-2DC                | 1N        |          |
| 3734.2.1 | 125/250V DC Dist Panel DCA-2A             | 1N        |          |
| 3734.2.2 | 125/250V DC Dist Panel DCC-2A             | 1N        |          |
| 3734.2.4 | 125/250V DC Dist Panel DCW-2A             | 1N        |          |
| 3734.2.5 | 125/250V DC Dist Panel DCC-2B             | 1N        |          |
| 3735     | 120 Volt AC Vital Power Supply            | See below |          |
| 3735.1   | 120V Vital AC Dist Panel 2-1V             | 1N        |          |
| 3735.2   | 120V Vital AC Dist Panel 2-2V             | 1N        |          |
| 3735.3   | 120V Vital AC Dist Panel 2-3V             | 1N        |          |
| 3735.4   | 120V Vital AC Dist Panel 2-4V             | 1N        |          |
| 3737     | 120/208 Volt AC Power System              | See below |          |
| 3737.1   | 120/208V AC Distribution Panel MP2-11EB   | 1N        |          |

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| System  | Name                                           | QCL  | Comments                                                                  |
|---------|------------------------------------------------|------|---------------------------------------------------------------------------|
| 3737.2  | : 120/208V AC Distribution Panel MP2-21EB      | : 1N | :                                                                         |
| 3737.3  | : 120/208V AC Distribution Panel MP2-31E       | : 1N | :                                                                         |
| 3737.4  | : 120/208V AC Distribution Panel MP2-41E       | : 1N | :                                                                         |
| 3737.7  | : 120/208V Miscellaneous Power Panel MP2-33A   | : 1  | :                                                                         |
| 3737.8  | : 120/208V Miscellaneous Power Panel MP-CN-1   | : 1  | :                                                                         |
| 3737.9  | : 120/208V Miscellaneous Power Panel MP-CN-2   | : 1  | :                                                                         |
| 3737.10 | : 120/208V Miscellaneous Power Panel MP-CN-3   | : 1  | :                                                                         |
| 3737.11 | : 120/208V Miscellaneous Power Panel MPF-1     | : 1  | :                                                                         |
| 3737.12 | : 120/208V Miscellaneous Power Panel MPH-1     | : 1  | :                                                                         |
| 3737.13 | : 120/208V Miscellaneous Power Panel MPT-1C    | : 1  | :                                                                         |
| 3737.14 | : 120/208V Miscellaneous Power Panel HT-P-100  | : 1  | :                                                                         |
| 3738.1  | : 277/480 Volt AC Dist Panel PDP-1E            | : 1N | :                                                                         |
| 3738.2  | : 277/480 Volt AC Dist Panel PDP-2E            | : 1N | :                                                                         |
| 3741    | : Emergency Diesel Generators                  | : 1N | : Electrical Aspects                                                      |
| 3753    | : Electrical Heat Tracing (1E Portion)         | : 1N | : Only portions on operable systems                                       |
| 3761    | : Engineered Safeguards and Emergency Lighting | : 1N | : Control Building Only                                                   |
| 3771.1  | : Conduit Class 1E                             | : 1N | : Only portions within operable: required circuits                        |
| 3772.1  | : Cable Tray - Class 1E                        | : 1N | : Only portions which are carrying required operable class: (1E circuits) |
| 3773    | : Underground Duct Banks - Class 1E            | : 1N | :                                                                         |
| 3774    | : Containment Building Penetrations            | : 1N | : Does not include Recovery added penetrations which are designated as 1  |
| 3775.1  | : Wall Openings and Fire Stops                 | : 1N | : For class 1E Components                                                 |
| 3775.2  | : Recovery Added Fire Stops                    | : 1  | :                                                                         |
| 3776.1  | : Raceway Supports - Class 1E                  | : 1N | : Only portions which are carrying required operable Class 1E circuits    |
| 3777    | : Class 1E Supply for MDHR/ADH Code Break Vlv. | : 1N | :                                                                         |
| 3810    | : Fire Protection and Suppression Systems      | : 1  | :                                                                         |
| 3813    | : Fire Protection for Auxiliary Transformers   | : 1  | :                                                                         |
| 3814    | : Fire Protection (Misc. Buildings)            | : 1  | :                                                                         |

| System | Name                                                               | QCL       | Comments                                                      |
|--------|--------------------------------------------------------------------|-----------|---------------------------------------------------------------|
| 3815   | Filtration System Fire Protection                                  | 1         |                                                               |
| 3824   | Reactor Building Ventilation and Purge                             | See below |                                                               |
|        | a. Containment penetrations and isolation valves                   | 1N        |                                                               |
|        | b. Exhaust outside containment up to and including exhaust filters | 1         |                                                               |
|        | c. Supply from intake tunnel to quick closing damper               | 1         |                                                               |
| 3824.1 | Ventilation for Decay Heat Pits                                    | 1         |                                                               |
| 3826   | Control Room HVAC                                                  | 1N        |                                                               |
| 3829   | Auxiliary Building H and V                                         | 1         | Supply from intake tunnel to quick close damper. All exhaust. |
| 3830   | Fuel Handling Building H and V                                     | 1         | Supply from intake tunnel to quick close damper. All exhaust. |
| 3831   | Emergency Diesel Generator Building H and V                        | 1N        |                                                               |
| 3833   | Chem. Lab Trailer Filter Exhaust                                   | 1         |                                                               |
| 3834   | MDHR Ventilation                                                   | 1         |                                                               |
| 3835   | Ventilation for Temporary Nuclear Sampling                         | 1         |                                                               |
| 3837   | Service Building Soiled Exhaust                                    | 1         |                                                               |
| 3838   | River Water Pumphouse H and V                                      | 1N        |                                                               |
| 3840   | Fire Pump House H and V                                            | 1         |                                                               |
| 3841   | Chemical Cleaning Building H and V                                 | 1         |                                                               |
| 3845   | Mechanical Equipment Room H and V                                  | 1N        | Control Building                                              |
| 3851   | Service Air                                                        | 1N        | Containment penetration and cont. isolation valves only.      |
| 3854   | Nuclear Plant Nitrogen                                             | 1N        | Containment penetration and cont. isolation valves only.      |
| 3861   | Emerg. Diesel Generators                                           | 1N        | Mechanical                                                    |
| 3862.1 | Emerg. Diesel Gen. DG-1, Air Intake/Exhaust                        | 1N        |                                                               |
| 3861.2 | Emerg. Diesel Gen. DG-2, Air Intake/Exhaust                        | 1N        |                                                               |
| 3862   | Emerg. Diesel Gen. Fuel                                            | 1N        |                                                               |
| 3863   | Emerg. Diesel Gen. Lube Oil, Oil Injection, Air Start              | 1N        |                                                               |
| 3864   | Emerg. Diesel Gen. Protective Trip Functions                       | 1N        |                                                               |
| 3882   | Reactor Building Polar Crane                                       | 1         | Structural Only                                               |
| 3883   | Fuel Handling Building Crane                                       | 1         | Structural Only                                               |
| 3909   | Containment ILRT Valves                                            | 1N        | Penetrations R571A and R571D                                  |
| 3910   | Reg. Guide 1.29 Supports                                           |           | Within QCL listed systems                                     |

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