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SUBJECT: Forwards draft changes to Tech Specs, FSAR & SER re inconsistencies for Unit 2.

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NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

August 21, 1986
(NMP2L 0836)

Ms. Elinor G. Adensam, Director
BWR Project Directorate No. 3
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Washington, DC 20555

Dear Ms. Adensam:

Re: Nine Mile Point Unit 2
Docket No. 50-410

Niagara Mohawk Power Corporation is continuing the review of the Final Draft Technical Specifications and has identified changes to the following:

1. Technical Specifications - The specific changes to the Technical Specifications and their justification (where appropriate) are provided in the enclosure.

2. Final Safety Analysis Report - Where the Technical Specification changes affect the Final Safety Analysis Report, the changes to the appropriate pages of the Final Safety Analysis Report are provided in the enclosure. In addition, changes to the Final Safety Analysis Report are also included to correct inconsistencies between the Technical Specifications and the Final Safety Analysis Report.

3. Safety Evaluation Report - Areas of inconsistencies are identified between the Safety Evaluation Report and the Technical Specification and/or Final Safety Analysis Report.

A list of the changes to the Technical Specifications and to the Final Safety Analysis Report is included to aid your staff in the review of these changes. These changes are categorized as necessary for certification of the Technical Specifications, editorial, clarification, or for operational flexibility. The changes provided in the enclosure of this letter are in addition to the changes requested by our letters dated August 6, 1986 and August 19, 1986. If the previously mentioned letters contained changes on the same pages which are included in this letter, then the previous changes are also included.

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Since certification of the Technical Specifications now appears to be the critical step in the Licensing of Nine Mile Point Unit 2, we would appreciate your expeditious resolution of these items.

Very truly yours,

C. V. Mangan
Senior Vice President

WHB/ar
1968G

xc: W. A. Cook, NRC Resident Inspector
Project File (2)

UNITED STATES OF AMERICA
NULCEAR REGULATORY COMMISSION

In the Matter of	)	
Niagara Mohawk Power Corporation	)	Docket No. 50-410
(Nine Mile Point Unit 2)	)	

AFFIDAVIT

C. V. Mangan, being duly sworn, states that he is Senior Vice President of Niagara Mohawk Power Corporation; that he is authorized on the part of said Corporation to sign and file with the Nuclear Regulatory Commission the documents attached hereto; and that all such documents are true and correct to the best of his knowledge, information and belief.

CVMangan

Subscribed and sworn to before me, a Notary Public in and for the State of New York and County of Onondaga, this 21st day of August, 1986.

Christine Austin
Notary Public in and for
Onondaga County, New York

My Commission expires:

CHRISTINE AUSTIN
Notary Public in the State of New York
Qualified in Onondaga Co. No. 4787687
My Commission Expires March 30, 1987

(1968G)

List of Technical Specification and
Final Safety Analysis Report Pages Changed

Page No. In This Submittal	Description	Document*	Page	Category
3	Emergency Diesel Generator	TS	3/4 8-4	Certification
4		TS	3/4 8-4a	
5		TS	3/4 8-5	
6		TS	3/4 8-8	
7		TS	3/4 8-8a	
8		TS	3/4 8-9	
9		TS	3/4 8-9a	
10		TS	3/4 8-10	
13	Standby Gas Treatment System	TS	3/4 6-43	Certification
14		TS	3/4 6-44	
15		FSAR	6.2-57a	
16		FSAR	6.2-57d	
17		FSAR	6.5-2	
18		FSAR	6.5-4	
19		FSAR	6.5-6	
22	Overcurrent Protective Devices	TS	3/4 8-29	Certification
23		TS	3/4 8-30	
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27	Automatic Depressurization System	TS	3/4 5-5	Clarification
30	Loose-Parts Detection System	TS	3/4 3-97	Certification
33	Division II Battery Charger	TS	3/4 8-15	Certification
36	Scram Discharge Volume	TS	3/4 1-5	Certification

*FSAR = Final Safety Analysis Report
TS = Technical Specification
SER = Safety Evaluation Report

(1968G)

Page No. In This Submittal	Description*	Document*	Page	Category
39	Organization	TS	6-4	Certification
40		TS	6-5	
41		FSAR	Figure 13.1-6	
42, 43		FSAR	Figure 13.1-7	
44		FSAR	Figure 13.1-8	
45		FSAR	Figure 13.1-9	
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49		TS	3/4 3-109	
50		TS	3/4 6-34	
51		TS	3/4 7-28	
52, 53 54	List of SER/TS/FSAR Discrepancies	List	________	Certification

*FSAR = Final Safety Analysis Report
TS = Technical Specification
SER = Safety Evaluation Report

(1968G)

Change to Technical Specification 3/4 8.1.1 in the Area of Required Time for the Diesels to Reach Rated, Stabilized Frequency.

(1968G)

Subject: Justification for changes to Technical Specification 3/4.8.1.1 in the Area of Required Time for the Diesels to Reach Rated, Stabilized Frequency.

Niagara Mohawk requests that the required frequency tolerance be increased from + 2.4 Hz - 1.2 Hz to ± 3 Hz for Division I and II diesels such that the frequency obtained in 10 seconds is 60 ± 3 Hz. Also for Division III diesel, the time to reach steady state voltage and frequency be increased from 13 to 15 seconds. The requested changes to the Technical Specifications are enclosed.

The increase in the frequency tolerance (to ±5% at 10 seconds) for Divisions I and II is in agreement with Reg. Guide 1.9, Rev. 2, Section C.4, which limits the frequency to no less than 95% of nominal during the loading sequence. The larger tolerance is also supported by plant design in that all safety related electrical components were specified to tolerate ±5% of nominal frequency. The Division I and II diesel requirement to meet a frequency of 60 ± 1.2 Hz (±2%) within 13 secs. will remain unchanged.

The Division III generator steady state voltage is 4160 ± 416 volts and the frequency is 60 ± 1.2 Hz.

Niagara Mohawk Engineering has obtained concurrence from General Electric for the Division III diesel on the following basis:

1. Although the diesel generator may take up to 15 seconds to stabilize, if the engine speed reaches 870 rpm and the voltage reaches 3750 volts within 10 seconds, then it can successfully accept and support acceleration of HPCS motor within the 27 seconds assumed in the accident analysis.

2. Division III diesel will not have a voltage and frequency band limitation at 10 seconds. As stated in Item 1., above, the limiting factor at 10 seconds for determining operability of the HPCS diesel is the minimum speed and voltage requirement.

The increase in the frequency tolerance for Divisions I and II, is to account for the diesel being in an unloaded condition.

The increase in stabilization time for the Division III diesel describes the actual response of the equipment and does not degrade the operational requirements of the HPCS pump motor.

Surveillances 4.8.1.1.2.a.4, e.5, and e.8 are not ECCS load sequencing tests. The expanded frequency tolerances and stabilization time will still provide adequate assurance that the diesels will perform in a manner consistent with the ECCS analysis for all three divisions.

CHANGES REQUESTED FOR CERTIFICATION

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

LIMITING CONDITIONS FOR OPERATION

3.8.1.1 (Continued)

ACTION:

h. With one offsite circuit of the above-required AC electrical power sources inoperable and diesel generator EDG*2 inoperable, apply the requirements of ACTIONS a and d specified above.

i. With either diesel generator EDG*1 or EDG*3 inoperable and diesel generator EDG*2 inoperable, apply the requirements of ACTIONS b, d, and e specified above.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be determined OPERABLE at least once every 7 days by verifying correct breaker alignments and indicated power availability.

4.8.1.1.2 Each of the above required diesel generators shall be demonstrated OPERABLE:

a. In accordance with the frequency specified in Table 4.8.1.1.2-1 on a STAGGERED TEST BASIS by:

1. Verifying the fuel level in the day fuel tank.

2. Verifying the fuel level in the fuel storage tank.

3. Verifying each fuel transfer pump starts and transfers fuel from the storage system to the day fuel tank.

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4. Verifying diesel engines EDG*1 and EDG*3 start from ambient conditions and accelerate to at least 600 rpm in less than or equal to 10 seconds and diesel engine EDG*2 starts from ambient conditions and accelerates to at least 900 rpm in less than or equal to 10 seconds.* The generator voltage and frequency shall be 4160 ± 416 volts and 60 + 2.4 - 1.8 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz

* All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

JUN 25 1986

4. a) For Divisions I & II:

Verifying diesel engines EDG*1 and EDG*3 start from ambient conditions and accelerate to at least 600 rpm in less than or equal to 10 seconds*. The generator voltage and frequency shall be 4160± 416 volts and 60± 3.0 HZ within 10 seconds and 4160 ± 416 volts and 60± 1.2 HZ within 13 seconds after the start signal.

b) For Division III:

Verifying diesel engine EDG*2 starts from ambient conditions and accelerates to at least 870 rpm and at least 3750 volts in less than or equal to 10 seconds*. The generator voltage and frequency shall be 4160± 416 volts and 60± 1.2 HZ within 15 seconds after the start signal.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.a.4 (Continued)

c. ~~within 13 seconds after the start signal. The~~ Each diesel generator shall be started for this test by using one of the following signals:

a) Manual.

b) Simulated loss of offsite power by itself.

c) Simulated loss of offsite power in conjunction with an ESF actuation test signal.

d) An ESF actuation test signal by itself.

5. Verifying that after the diesel generator is synchronized, it is loaded to greater than or equal to 4400 kW for diesel generators EDG*1 and EDG*3 and greater than or equal to 2600 kW for diesel generator EDG*2 in less than or equal to 90 seconds* and operates with these loads for at least 60 minutes.

6. Verifying the diesel generator is aligned to provide standby power to the associated emergency buses.

7. Verifying the pressure in diesel generator air start receivers for EDG*1, EDG*2 and EDG*3 to be greater than or equal to 225 psig.

* All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.e.4 (Continued)

b) For Division III:

1) Verifying deenergization of the emergency bus.

2) Verifying the diesel generator starts* on the autostart signal, energizes the emergency bus with the permanently connected loads within 13 seconds** and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency bus shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.

INSERT Page 3/4 8-8a

~~5. Verifying that on an ECCS actuation test signal, without loss of offsite power, the diesel generator starts* on the autostart signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 416 volts and 60 + 2.4 - 1.8 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the autostart signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.~~

6. Simulating a loss of offsite power in conjunction with an ECCS actuation test signal, and:

a) For Divisions I and II:

1) Verifying deenergization of the emergency buses and loads shedding from the emergency buses.

---

* All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Furthermore all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

** From initiation of loss of offsite power.

5. a) For Divisions I & II:

Verifying that on an ECCS actuation test signal, without loss of offsite power, the diesel generator starts* on the auto start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160± 416 volts and 60± 3.0 HZ within 10 seconds and 4160± 416 volts and 60± 1.2 HZ within 13 seconds after the auto start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

b) For Division III:

Verifying that on an ECCS actuation test signal, the diesel generator starts* on the auto start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160± 416 volts and 60± 1.2 HZ within 15 seconds after the auto start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.e.6.a) (Continued)

2) Verifying the diesel generator starts* on the autostart signal, energizes the emergency buses with permanently connected loads within 10 seconds, energizes the auto-connected (shutdown) loads through the load timers, and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency buses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.

b) For Division III:

1) Verifying deenergization of the emergency bus.

2) Verifying the diesel generator starts* on the autostart signal, energizes the emergency bus with the permanently connected loads and the auto-connected emergency loads within 10 seconds and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency bus shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.

7. Verifying that all automatic diesel generator trips are automatically bypassed upon loss of voltage on the emergency bus concurrent with an ECCS actuation signal except engine overspeed trip and generator differential trip.

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~~8. Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4840 kW for diesel generators EDG*1 and EDG*3 and 2860 kW for diesel generator EDG*2.** During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 4400 kW for diesel generators EDG*1 and~~

* All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Furthermore, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

** Momentary transients due to changing bus loads shall not invalidate the test.

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8\. a) For Divisions I & II:

Verify the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4840 KW**. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 4400 KW*. The generator voltage and frequency shall be 4160± 416 volts and 60± 3.0 HZ within 10 seconds and 4160± 416 volts and 60± 1.2 HZ within 13 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24 hour test, perform surveillance requirement 4.8.1.1.2.e.4.a)2)**.

b) For Division III:

Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 2860 KW**. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 2600KW*. The generator voltage and frequency shall be 4160± 416 volts and 60± 1.2 HZ within 15 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24 hour test, perform surveillance requirements 4.8.1.1.2.e.4.b)2)**.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.e.8 (Continued)

EDG*3 and greater than or equal to 2600 kW for diesel generator EDG*2.* The generator voltage and frequency shall be 4160 ± 416 volts and 60 + 2.4 - 1.8 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.e.4.a)2) and b)2).**

9. Verifying that the autoconnected loads to each diesel generator do not exceed the 2000-hour rating of 4750 kW for diesel generators EDG*1 and EDG*3 and 2850 kW for diesel generator EDG*2.

10. Verifying the diesel generator's capability to:

    a) Manually synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,

    b) Transfer its loads to the offsite power source, and

    c) Be restored to its standby status.

11. Verifying that with the diesel generator operating in a test mode and connected to its bus, a simulated ECCS actuation signal overrides the test mode by (1) returning the diesel generator to standby operation and (2) automatically energizes the emergency loads with offsite power.

12. Verifying that the automatic load timer relays are OPERABLE with the interval between each load block within ± 10% of its design interval for diesel generators EDG*1 and EDG*3.

13. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

* Momentary transients due to changing bus loads shall not invalidate the test.

** If Surveillance Requirement 4.8.1.1.2.e.4.a)2) and/or b)2) are not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at 4400 kW or more for EDG*1 and EDG*3 and 2600 kW or more for EDG*2 for 1 hour or until operating temperature has stabilized before reperforming Surveillance Requirements 4.8.1.1.2.e.4.a)2) and/or b)2).

Changes to Technical Specification 3/4 6.5.3 and Final Safety Analysis Report in the Area of Standby Gas Treatment System Flow Rate.

Subject: Justification for the changes to Technical Specification 3/4 6.5.3 and Final Safety Analysis Report in the area of Standby Gas Treatment System flow rate.

Niagara Mohawk requests that the requirements for system flow rate be increased from 3500 cfm ± 10% to 4000 cfm ± 10%. The requested changes are enclosed.

To attain the required draw down time of the Secondary Containment, an increase in the Standby Gas Treatment System (SGTS) flow rate is required. Therefore, the verification of system operability will be performed at the system flow rate, 4000 cfm, that will produce the required results.

The decay heat removal valves will now be normally maintained closed. Since the intent of the surveillance is to verify system performance during a LOCA, the SGTS system will be tested with the decay heat removal valves closed.

CHANGES REQUESTED FOR CERTIFICATION.

CONTAINMENT SYSTEMS

SECONDARY CONTAINMENT

STANDBY GAS TREATMENT SYSTEM

SURVEILLANCE REQUIREMENTS

4.6.5.3 Each standby gas treatment subsystem shall be demonstrated OPERABLE:

a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters OPERABLE.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings or (2) following painting, fire or chemical release in any ventilation zone communicating with the subsystem by:

   1. Verifying that the subsystem satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Positions C.5.a, C.5.c, and C.5.d of RG 1.52*, Revision 2, March 1978, and the subsystem flow rate is ~~3500~~ 4000 cfm ± 10%.

   2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Position C.6.b of RG 1.52*, Revision 2, March 1978, meets the laboratory testing criteria of Position C.6.a of RG 1.52*, Revision 2, March 1978, for a methyl iodide penetration of less than 0.175%; and

   3. Verifying a subsystem flow rate of ~~3500~~ 4000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1980.

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Position C.6.b of RG 1.52*, Revision 2, March 1978, meets the laboratory testing criteria of Position C.6.a of RG 1.52*, Revision 2, March 1978, for a methyl iodide penetration of less than 0.175%.

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* ANSI N510-1980 is applicable in place of ANSI N510-1975, and ANSI N509-1980 is applicable in place of ANSI N509-1976.

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CONTAINMENT SYSTEMS

SECONDARY CONTAINMENT

STANDBY GAS TREATMENT SYSTEM

SURVEILLANCE REQUIREMENTS

4.6.5.3 (Continued)

d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 5.5 inches Water Gauge while operating the filter train at a flow rate of ~~3500~~ 4000 cfm ± 10%.

2. Verifying that the filter train starts and isolation valves open on each of the following test signals:

   a. Manual initiation from the control room, and
   b. Simulated automatic initiation signal.

3. Verifying that the decay heat removal ~~isolation~~ valves are ~~open and the fan can be manually started.~~ closed and can be manually opened.

4. Verifying that the heaters dissipate 20.0 ± 2.0 kW when heated in accordance with ANSI N510-1980.

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of ~~3500~~ 4000 cfm ± 10%.

f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of ~~3500~~ 4000 cfm ± 10%.

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of SGTS and unit cooler initiation to a value of -0.25 in W.G. at 129 sec. The pressure continues to decrease to a minimum value of -0.36 in W.G. at 620 sec. The pressure then rises to a value of -0.27 in W.G. at 6,000 sec before decreasing to a constant value of -0.29 in W.G. at 30,000 sec.

4. The reactor building and auxiliary bay temperature will increase from 104°F to 104.4°F at 42 sec. The temperature then decreases to a minimum value of 103.08°F at 3,110 sec before increasing to a maximum and constant temperature of 109.38°F. This behavior is the result of the variation in unit cooler heat removal with temperature.

5. The capacity of one SGTS train, 4,000 cfm, is adequate to restore and maintain the reactor building and auxiliary bays at a negative pressure of 0.25 in W.G., relative to atmosphere after a LOCA, as shown on Figure 6.2-76.

6. The period during which the pressure profile is greater than -0.25 in W.G. is indicated on Figure 6.2-76 and lasts approximately 129 sec.

The analytical results, based on the assumptions in Section 6.2.3.3.1.3, show that the SGTS will accomplish its design objective of maintaining a negative pressure of 0.25 in W.G. within the reactor building and auxiliary bays following a LOCA.

6.2.3.3.1.2 Calculation Approach

The analysis was performed assuming that the reactor building and auxiliary bays are one large constant volume. One SGTS filter train was considered in operation. The inleakage was assumed to be 100 percent of the reactor building and auxiliary bays volume per day at the design outside air temperature of 93°F. The heat transfer between the outside environment and the reactor building and auxiliary bays was considered since this results in a net positive heat gain to the reactor building and auxiliary bays. The heat loads used in this analysis were separated into the following time periods:

1. 0-25 sec

2. 25-345,600 sec (96 hr)

6.2.3.4 Test and Inspection

Tests and inspections of the reactor building ventilation system and the SGTS will be performed prior to initial fuel load and periodically thereafter in accordance with technical specification requirements.

To demonstrate that the SGTS will accomplish its design objectives under design basis accident conditions, the technical specifications require that the system must draw down the pressure in secondary containment from 0 psig to -0.25 in water gauge within 120 sec. This test drawdown time is different from the post-LOCA containment pressurization time of 129 sec specified in Section 6.2.3.3.1.1 for the following reasons:

1. The characteristics of the secondary containment atmosphere are different under LOCA conditions and test conditions. (The net heat load for test conditions is assumed to be zero.)

2. The secondary containment unit coolers do not perform a depressurization function during testing.

If, under test conditions, an SGTS train is able to draw the secondary containment pressure down to -0.25 in water gauge within 120 sec at a flow rate of 4,000 cfm, the inleakage to secondary containment is verified to be not greater than 3,190 cfm at -0.25 in water gauge differential pressure. The value of 3,190 cfm corresponds to an inleakage rate of 100 percent per day of the secondary containment volume (4,593,600 ft^3) and is consistent with the assumptions used in the secondary containment functional design analyses.

The SGTS fans are rated for a design flow of 4,000 cfm. Under post-LOCA drawdown operation, 4,000 cfm is drawn from secondary containment through the online filter train (see Figure 9.4-8L). Under post accident conditions decay heat cooling can be provided by manually activating the decay heat removal valves.

6.2.3.5 Instrumentation Requirements

A reactor building negative air pressure of 0.25 in W.G. is automatically maintained under normal operating conditions by the reactor building ventilation system. Normally,

6.5.1.2 System Design

6.5.1.2.1 General System Description

The SGTS is schematically shown on Figure 9.4-8. Design data of the SGTS principal equipment are listed in Table 6.5-1.

The SGTS consists of two identical, parallel, physically separated, 100-percent capacity air filtration assemblies with associated piping, valves, controls, and centrifugal exhaust fans. Effluents from the SGTS connect to a common exhaust line discharging to the exhaust tunnel leading to the main stack. The SGTS draws air from the reactor building.

6.5.1.2.1.1 SGTS Modes of Operation

The SGTS has three modes of operation:

1. Safety-Related Mode - To maintain negative pressure in the reactor building secondary containment (post-LOCA) via connection to the reactor building recirculation ventilation system.

2. Nonsafety-Related Mode - To provide charcoal filtration of the primary containment atmosphere when inerting (startup) or de-inerting (shutdown) via connection to the containment purge system (CPS) full-flow 20-in. line.

3. Nonsafety-Related Mode - To provide charcoal filtration of the primary containment atmosphere during normal power operation to control primary containment pressure via connection to the CPS 2-in. bypass line.

Within 25 sec of a high radiation or LOCA signal, the SGTS draws 4,000 cfm from the discharge duct of the emergency recirculation unit cooler (Section 9.4.2) to either maintain or restore a subatmospheric pressure within the reactor building.

The SGTS is started automatically by any of the following signals:

1. High radiation or low air flow in the exhaust ducts above and below the refueling floor.

2. High pressure in the drywell.

A 4,000-cfm capacity centrifugal fan is provided downstream of each SGTS filter train. This fan is a direct-drive type with a single-speed motor powered from Class 1E buses. The decay heat produced by the radioactive particles in the inactive charcoal filter train is removed by passing equipment room air through the inactive filter train. The air is then exhausted to the main stack by the fan of the active filter train. A missile-protected opening with a backdraft-type tornado damper located in the equipment room allows outside air to be induced into the room when makeup air for decay heat cooling is required.

The SGTS charcoal filter trains are located in the standby gas treatment building at el 261 ft.

Access doors are provided to give complete accessibility to all components for servicing. The doors are airtight, fitted with locking devices, and have provisions for opening inside the housing, as recommended in ERDA-76-21, Section 4.5.

6.5.1.3 Design Evaluation

The SGTS is designed to preclude direct release of fission products from the reactor building to the environment during all modes of operation by the following features:

1. The SGTS is housed in a Category I structure. All surrounding equipment, components, and supports are designed to pertinent safety class and Category I requirements.

2. The SGTS consists of two 100-percent capacity, physically separated filter trains. Should any component in one train fail, filtration can be performed by the redundant train.

3. The SGTS component design and qualification testing are in accordance with the recommendations of Regulatory Guide 1.52 to the extent discussed in Section 1.8.

4. During loss of offsite power, all active components such as motors, damper operators, controls, and instrumentation operate from their respective independent standby power supplies.

Should a loss-of-coolant accident occur during primary containment purge with the SGTS operating in the pressure

6.5.1.5 Instrumentation Requirements

Description

Safety-related instruments and controls are provided for automatic and manual control of the SGTS. The controls and monitors described below are located in the main control room. The control logic is shown on Figure 6.5-1.

Operation

Both filter trains are started automatically when there is a LOCA or a reactor building refueling area exhaust vent duct low air flow or high radiation signal. Stopping one of the trains manually after automatic initiation will reset its start signal and place it in standby. The standby filter train will start automatically when a high filter charcoal temperature occurs in the operating filter train or when the indoor negative/outdoor atmospheric pressure differential falls below a predetermined set point, coincident with either a LOCA or high radiation signal. The filter trains can also be started manually.

An SGTS inlet valve from the reactor building ventilation system will open automatically when the associated filter train start signal is present and close when the signal is reset. The valves can also be opened and closed manually.

SGTS filter train inlet and fan discharge valves will open automatically when the associated filter train start signal is present and close when the signal is reset or when the filter train fan has failed to start after a preset time. The valves can also be opened and closed manually.

The SGTS filter train decay heat removal air inlet valves can be opened and closed manually.

An SGTS filter train fan will start automatically when its associated filter train start signal is present and stop when the signal is reset. The fans can also be started and stopped manually. Interlocks prevent a fan from running unless its discharge valve is open.

Negative pressure in the reactor building is automatically controlled by the SGTS filter train air inlet pressure control valves. Differential pressure is set by

Changes to Technical Specifications 3/4 8.4.2 and 3/4 8.4.3
in Area of Testing Over Current Protective Devices.

Subject: Justification for changes to Technical Specifications 3/4 8.4.2 and 3/4 8.4.3 in the area of testing overcurrent protective devices.

The requested change is enclosed. The change is necessary to make the testing of overcurrent protective devices consistent with manufacturers recommendations.

CHANGES REQUESTED FOR CLARIFICATION.

(1968G)

SURVEILLANCE REQUIREMENTS

4.8.4.2.a.1 (Continued)

a) A CHANNEL CALIBRATION of the associated protective relays, and
b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and overcurrent control circuits function as designed.
c) For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.

2. By selecting and functionally testing a representative sample of at least 10% of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis. Testing of these circuit breakers shall consist of injecting a current with a value equal to 300% of the pickup of the long time delay trip element and 150% of the pickup of the short time delay trip element, and verifying that the circuit breaker operates within the time delay band width for that current specified by the manufacturer. The instantaneous element shall be tested by injecting a current [IN excess] ~~equal to ±20%~~ of the pickup value of the element and verifying that the circuit breaker trips instantaneously with no intentional time delay. Molded case circuit breaker testing shall also follow this procedure except that generally no more than two trip elements, time delay and instantaneous, will be involved. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status before resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.

b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

ELECTRICAL POWER SYSTEMS

ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

EMERGENCY LIGHTING SYSTEM - OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.3 The emergency lighting system overcurrent protection devices shown in Table 3.8.4.3-1 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

With one or more of the overcurrent protective devices shown in Table 3.8.4.3-1 inoperable, within 72 hours remove the inoperable circuit breaker(s) from service by opening the breaker. Return the breaker(s) to OPERABLE status within 7 days, otherwise be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

~~4.8.4.3 The overcurrent protective devices shall be demonstrated OPERABLE at least once per 18 months by selecting and testing one-half of each type of circuit breaker on a rotating basis. Testing of these circuit breakers shall consist of injecting currents in excess of the breaker's normal setpoint and measuring the setpoint of the instantaneous element. The measured data shall be compared with the manufacturer's data to ensure that it is less than or equal to a value specified by the manufacturer.~~

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4.8.4.3 The overcurrent protective devices shall be demonstrated OPERABLE at least once per 18 months by selecting and testing one-half of each type of circuit breaker on a rotating basis. Testing of these circuit breakers shall consist of injecting a current with a value equal to 300% of the pickup of the time delay element. The measured response time shall be compared to the manufacturer's data to ensure that it is less than or equal to a value specified by the manufacturer. The instantaneous element shall be tested by injecting a current in excess of the nominal instantaneous pickup setting and verifying that circuit breaker trips instantaneously with no intentional time delay.

Change to Technical Specification 3/4 5.1 in the Area of the ADS Accumulator Backup Gas System, Low Pressure Alarm Set Point.

Subject: Justification for the change to Technical Specification 3/4 5.1 in the area of the ADS accumulator backup gas system, low pressure alarm set point.

The requested change is enclosed. This change is required to conform to the as built set point and supporting calculation. This change is a revision to the change transmitted by letter dated August 6, 1986 (NMP2L 0807).

CHANGE REQUESTED FOR CERTIFICATION.

(1968G)

SURVEILLANCE REQUIREMENTS

4.5.1 (Continued)

e. For the ADS by:

1. At least once per 31 days, performing a CHANNEL FUNCTIONAL TEST of the accumulator backup compressed gas system, low-pressure alarm system.

2. At least once per 18 months:

a) Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence, excluding actual valve actuation.

b) Manually opening each ADS valve when the reactor steam dome pressure is greater than or equal to 100 psig* and observing that either:

1) The SRV discharge acoustic monitoring system responds accordingly, or

2) The control valve or bypass valve responds accordingly, or

3) There is a corresponding change in the measured steam flow, or

4) The SRV discharge line temperature monitoring system responds accordingly.

c) Performing a CHANNEL CALIBRATION of the accumulator backup compressed gas system, low-pressure alarm system, and verifying an alarm setpoint of 163.5 ~~+ 2.5, - 2.5~~ + 3.2, - 3.2 psig on decreasing pressure.

d) Performing a leak rate test for ADS SRV pneumatic operators by pressurizing each ADS accumulator at 178 psig (supply header high pressure alarm) up to its supply header isolation check valve with the SRV in the open position. Total leakage rate for each SRV shall not exceed 0.5 SCFH for the SRV actuated by either of the ADS solenoids.

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* The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

Change to Technical Specification 3/4 3.7.9 in the area of surveillances.

(1968G)

Subject: Justification for changes to Technical Specification 3/4 3.7.9 in the area of surveillances.

The requested change is enclosed. This change is being made to be consistent with Section 4.4.6.1.4 of the FSAR with respect to required surveillances for the loose parts monitoring system.

CHANGES REQUESTED FOR CERTIFICATION

(1968G)

INSTRUMENTATION

MONITORING INSTRUMENTATION

LOOSE-PART DETECTION SYSTEM

LIMITING CONDITIONS FOR OPERATION

3.3.7.9 The loose-part detection system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

a. With one or more loose-part detection system channels inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.7.9 Each channel of the loose-part detection system shall be demonstrated OPERABLE by: ~~performance of a:~~

a. Performing a CHANNEL CHECK at least once per 24 hours,

c ~~b~~. " CHANNEL FUNCTIONAL TEST at least once per 31 days,

e ~~c~~. " CHANNEL CALIBRATION at least once per 18 months.

b. Listening to the audio output once per 7 days

d. Verifying acceptable background noise level at least once per 92 days.

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Changes to Technical Specification 3/4 8.2.1 in the
Area of Division III Battery Charger Required Amperage

(1968G)

Subject: Justification for change to Technical Specification 3/4 8.2.1 in the area of Division III battery charger required amperage.

The requested change is enclosed. Of the D.C. loads addressed in FSAR Table 8.3-10 under infrequent random loads, only the air start motor (12.0 amps) would be carried by the battery charger. During a loss of AC power the remaining loads would be covered by the battery and during a condition without a loss of AC power, there are AC pump motors provided. Therefore, to reflect the actual battery charger performance of the normal load (27.4 amps) and the air start motor (12 amps), a change in the required amperage of the Division III battery charger from 50 to 40 amps is requested.

CHANGES REQUESTED FOR CERTIFICATION

SURVEILLANCE REQUIREMENTS

4.8.2.1 (Continued)

b. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 107 volts, or battery overcharge with battery terminal voltage above 142 volts, by verifying that:

1. The parameters in Table 4.8.2.1-1 meet the Category B limits,
2. There is no visible corrosion at either terminals or connectors.
3. The average electrolyte temperature of one out of five connected cells is above 60°F.

c. At least once per 18 months by verifying that:

1. The cells, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration,

2. The cell-to-cell and terminal connections are clean, tight, free of corrosion,

3. The resistance of each cell-to-cell and terminal connection is less than or equal to 120% of the resistance readings taken during initial installation,* and

4. The battery charger will supply:

    1. For Divisions I and II, at least 300 amperes at a minimum of 130 volts for at least 4 hours.

    2. For Division III, at least ~~50~~ 40 amperes at a minimum of 130 volts for at least 4 hours.

d. At least once per 18 months, during shutdown, by verifying that either:

1. The battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours for Divisions I and II, and 2 hours for Division III when the battery is subjected to a battery service test, or

2. The battery capacity is adequate to supply a dummy load of the following profile while maintaining the battery terminal voltage greater than or equal to 105 volts for Division I and II and 112.5 volts for Division III:

* In accordance with IEEE 450-1980.

Changes to Technical Specification 3/4 1.3.1 in the

Area of Scram Discharge Volume Surveillance

(1968G)

Subject: Justification for the change to Technical Specification 3/4 1.3.1 in the area of Scram Discharge Volume Surveillance.

The requested change is enclosed. To perform a scram test to verify operability of the scram discharge volume vent and drain valves, the reactor must be in operational condition 1 or 2. The provisions of specification 4.0.4 must be waived to enter operational condition 2 to accomplish this verification. This change is similar to an existing provision in Washington Nuclear - Unit 2 Technical Specifications.

CHANGES REQUESTED FOR CERTIFICATION

REACTIVITY CONTROL SYSTEMS

CONTROL ROD OPERABILITY

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The scram discharge volume drain and vent valves shall be demonstrated OPERABLE by:

a. At least once per 31 days verifying each valve to be open,* and
b. At least once per 92 days cycling each valve through at least one complete cycle of full travel.

4.1.3.1.2 When above the low-power setpoint of the rod worth minimizer (RWM) and rod sequence control system (RSCS), all withdrawn control rods not required to have their directional control valves disarmed electrically or hydraulically shall be demonstrated OPERABLE by moving each control rod at least one notch:

a. At least once per 7 days, and
b. At least once per 24 hours when any control rod is immovable as a result of excessive friction or mechanical interference.

4.1.3.1.3 All control rods shall be demonstrated OPERABLE by performance of Surveillance Requirements 4.1.3.2, 4.1.3.4, 4.1.3.5, 4.1.3.6, and 4.1.3.7.

4.1.3.1.4 The scram discharge volume shall be determined OPERABLE by demonstrating:

a. The scram discharge volume drain and vent valves OPERABLE when the control rods are scram tested from a normal control rod configuration of less than or equal to 50% rod density at least once per 18 months,** by verifying that the drain and vent valves:

   1. Close within 30 seconds after receipt of a signal for control rods to scram, and

   2. Open when the scram signal is reset.

** The provisions of specification 4.0.4 are not applicable for entry into operational condition 2 provided the surveillance is performed within 12 hours after achieving less than or equal to 50% rod density.

*These valves may be closed intermittently for testing under administrative controls.

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Changes to Technical Specification and Final Safety
Analysis Report in the Area of Organization

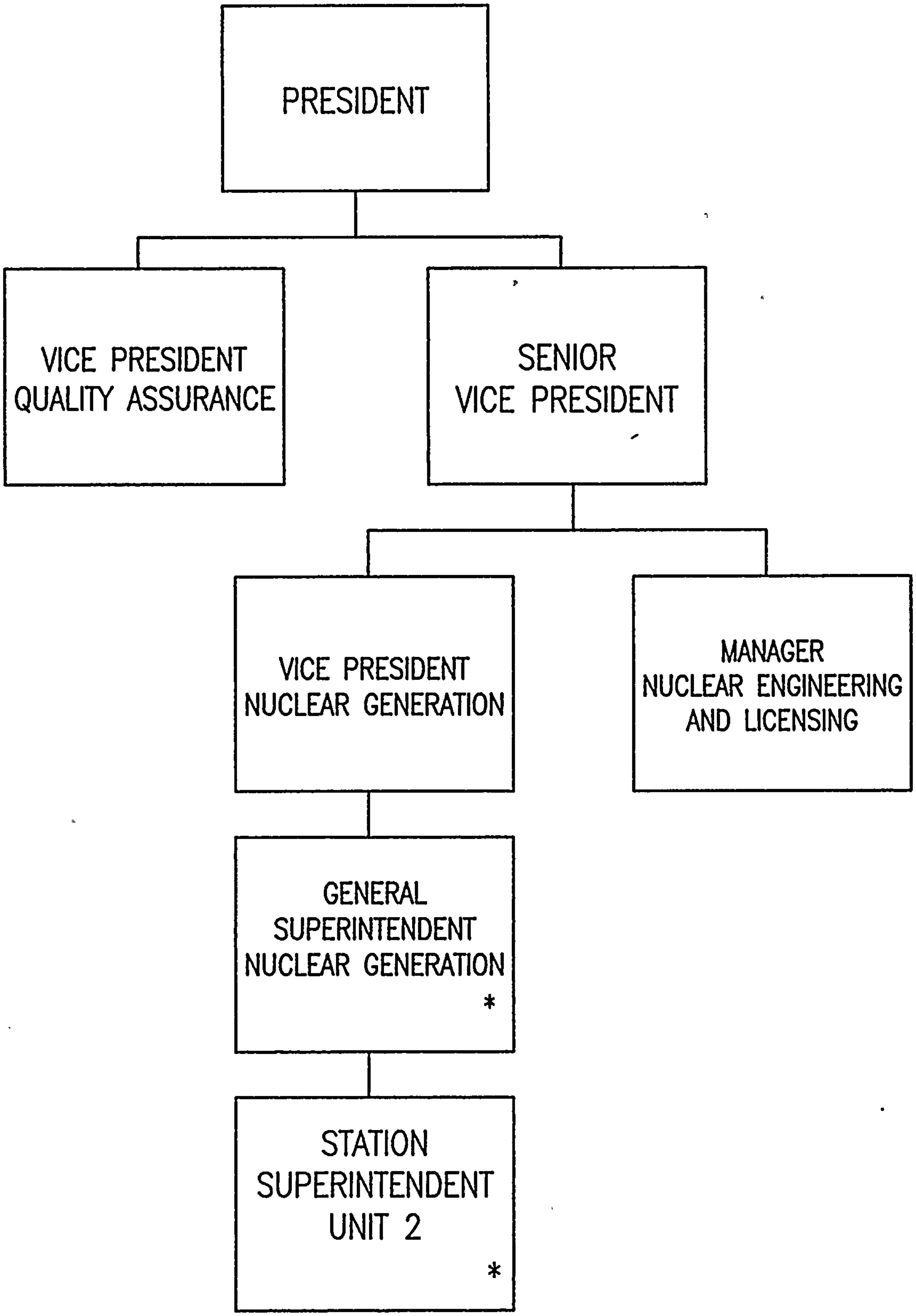
(1968G)

Subject: Justification for changes to Technical Specification and Final Safety Analysis Report in the area of organization

The mark-up requested changes to Technical Specification and the Final Safety Analysis Report (FSAR) are enclosed. These changes are made to reflect the organization of Niagara Mohawk. The changes to the figures in FSAR supercede those submitted in our letter dated July 24, 1986.

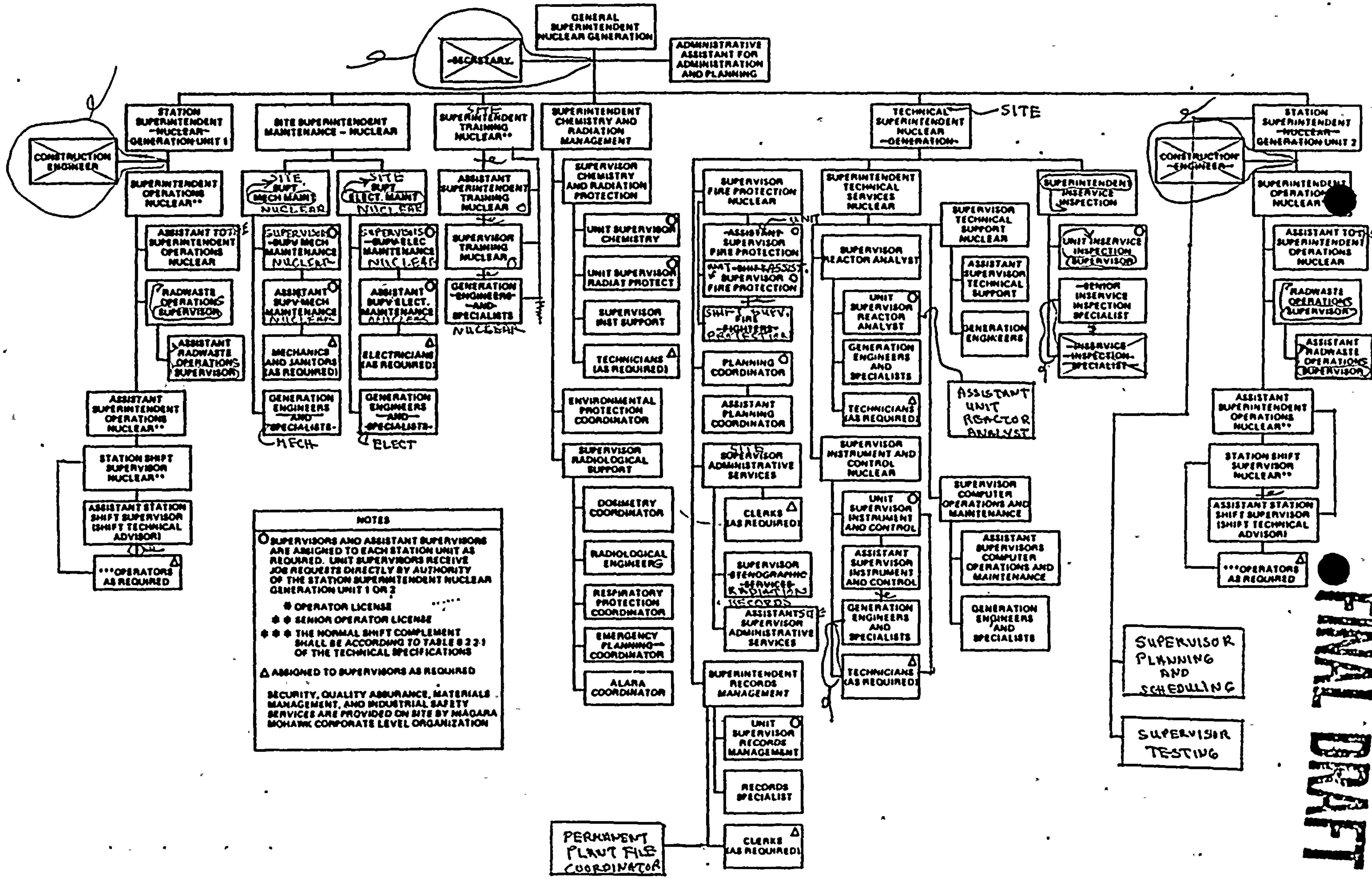
CHANGES REQUESTED FOR CERTIFICATION

FIGURE 6.2.1-1 NIAGARA MOHAWK MANAGEMENT ORGANIZATION CHART



* Onsite positions.

FIGURE 6.2.2-1
NINE MILE POINT NUCLEAR SITE ~~OPERATIONS~~ ORGANIZATION



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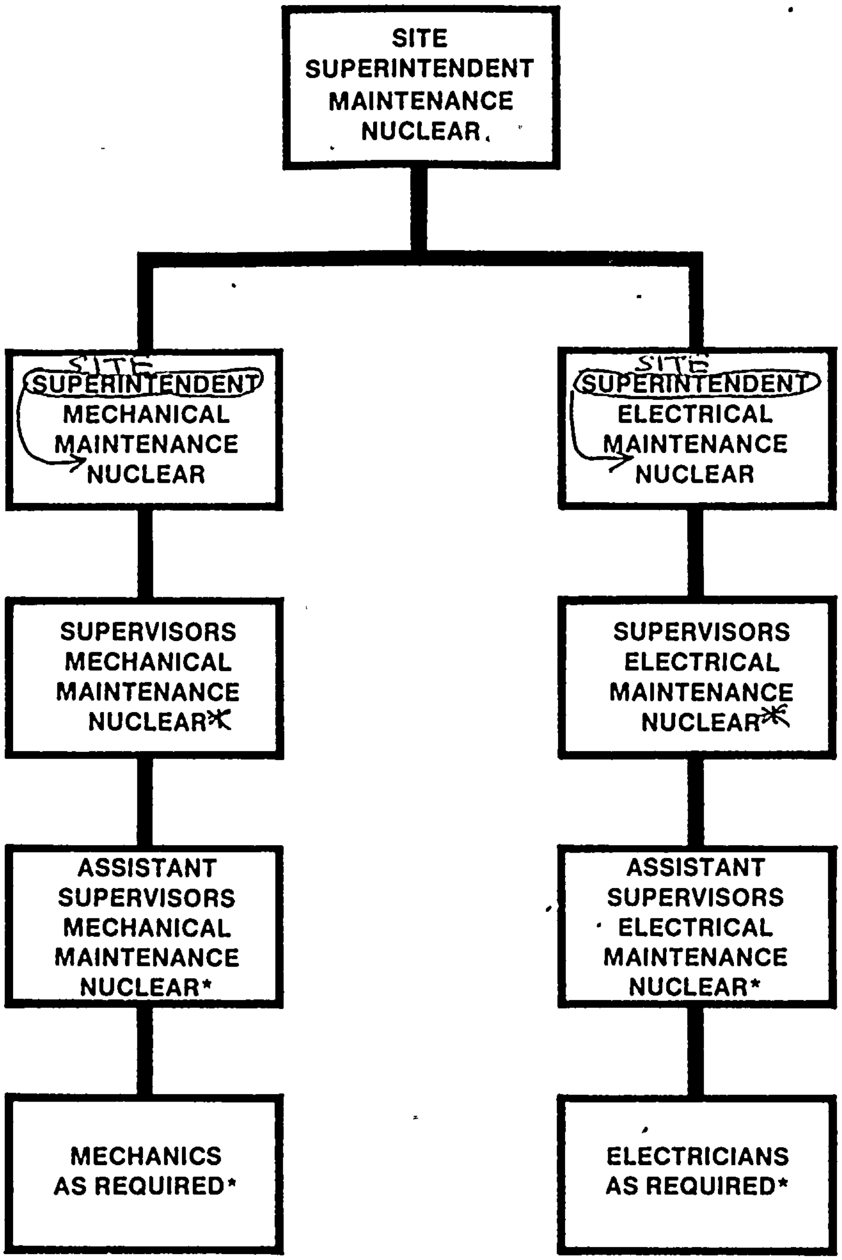
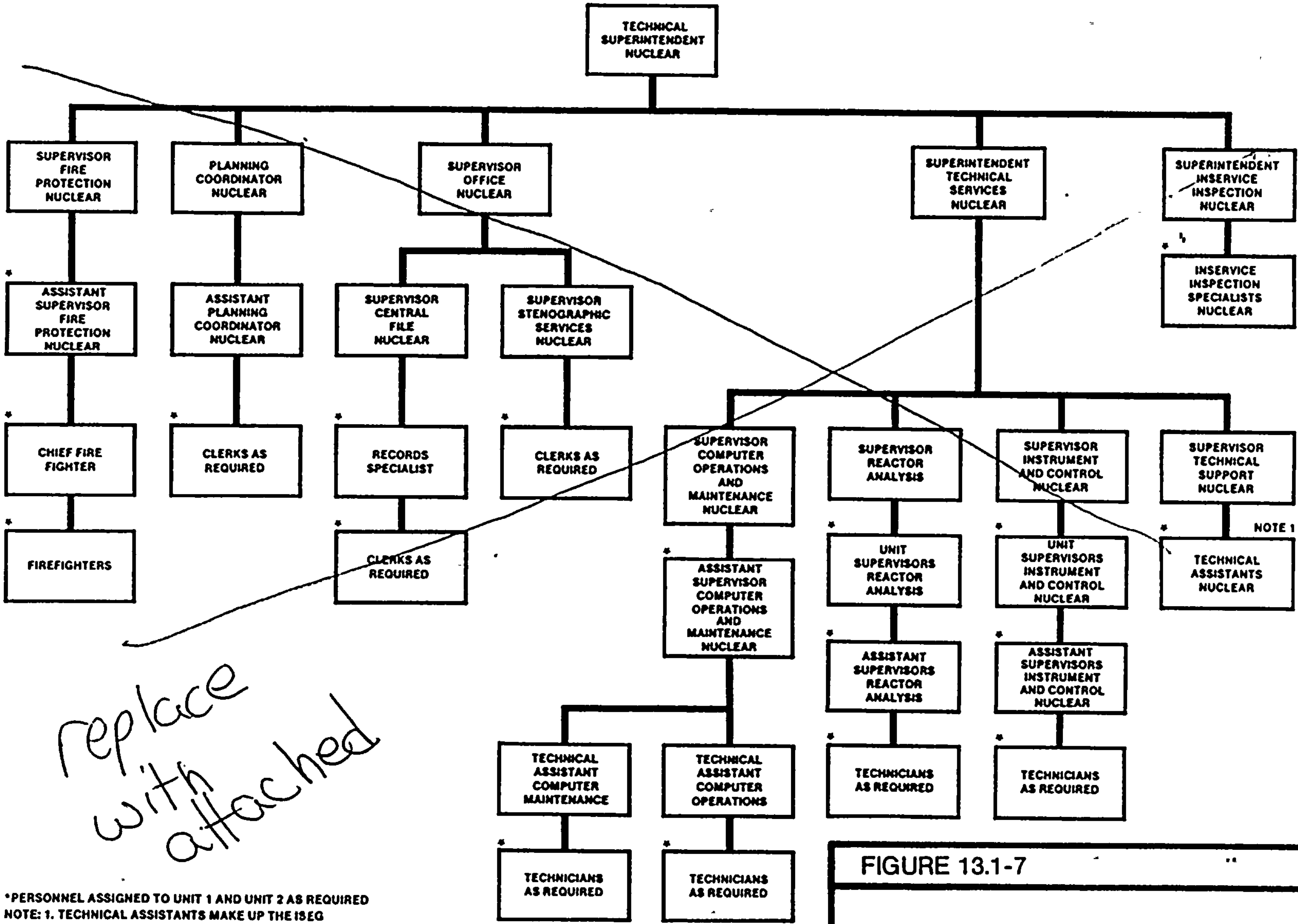


*PERSONNEL ASSIGNED TO UNIT 1 AND UNIT 2 AS REQUIRED

FIGURE 13.1-6

UNIT 2 SITE ORGANIZATION CHART-MAINTENANCE

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT



*PERSONNEL ASSIGNED TO UNIT 1 AND UNIT 2 AS REQUIRED
NOTE: 1. TECHNICAL ASSISTANTS MAKE UP THE ISEG

FIGURE 13.1-7

TECHNICAL ORGANIZATION

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT

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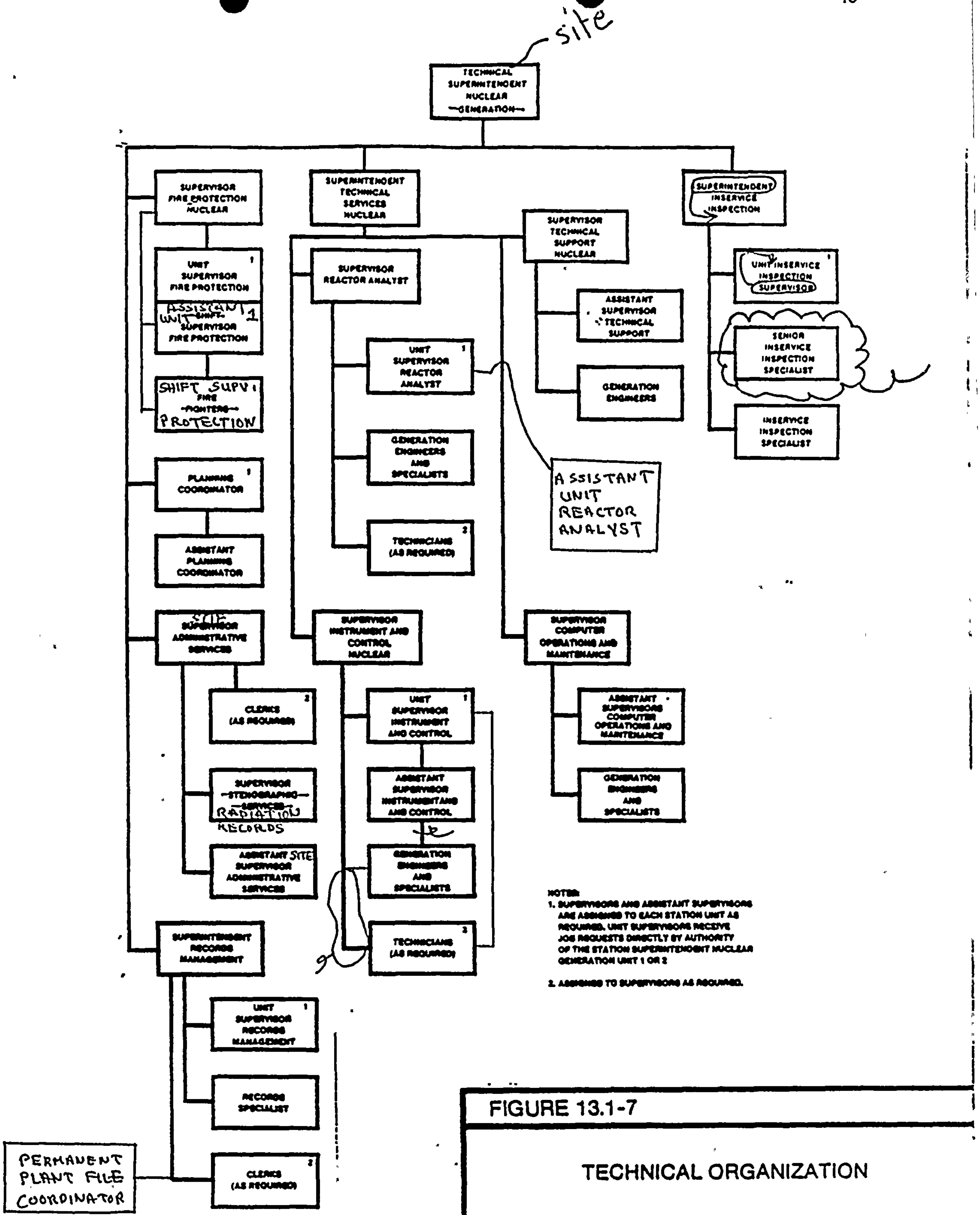


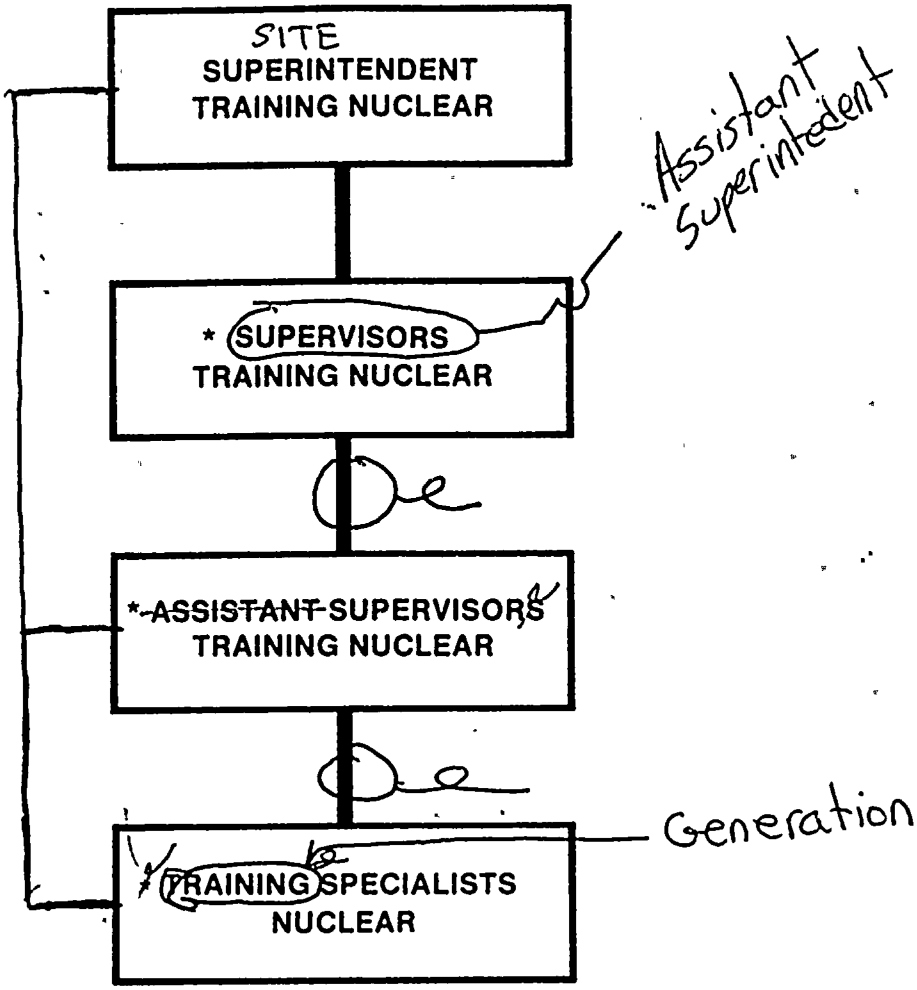
NOTES:
1. SUPERVISORS AND ASSISTANT SUPERVISORS ARE ASSIGNED TO EACH STATION UNIT AS REQUIRED. UNIT SUPERVISORS RECEIVE JOB REQUESTS DIRECTLY BY AUTHORITY OF THE STATION SUPERINTENDENT NUCLEAR GENERATION UNIT 1 OR 2

2. ASSIGNED TO SUPERVISORS AS REQUIRED.

FIGURE 13.1-7

TECHNICAL ORGANIZATION

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT

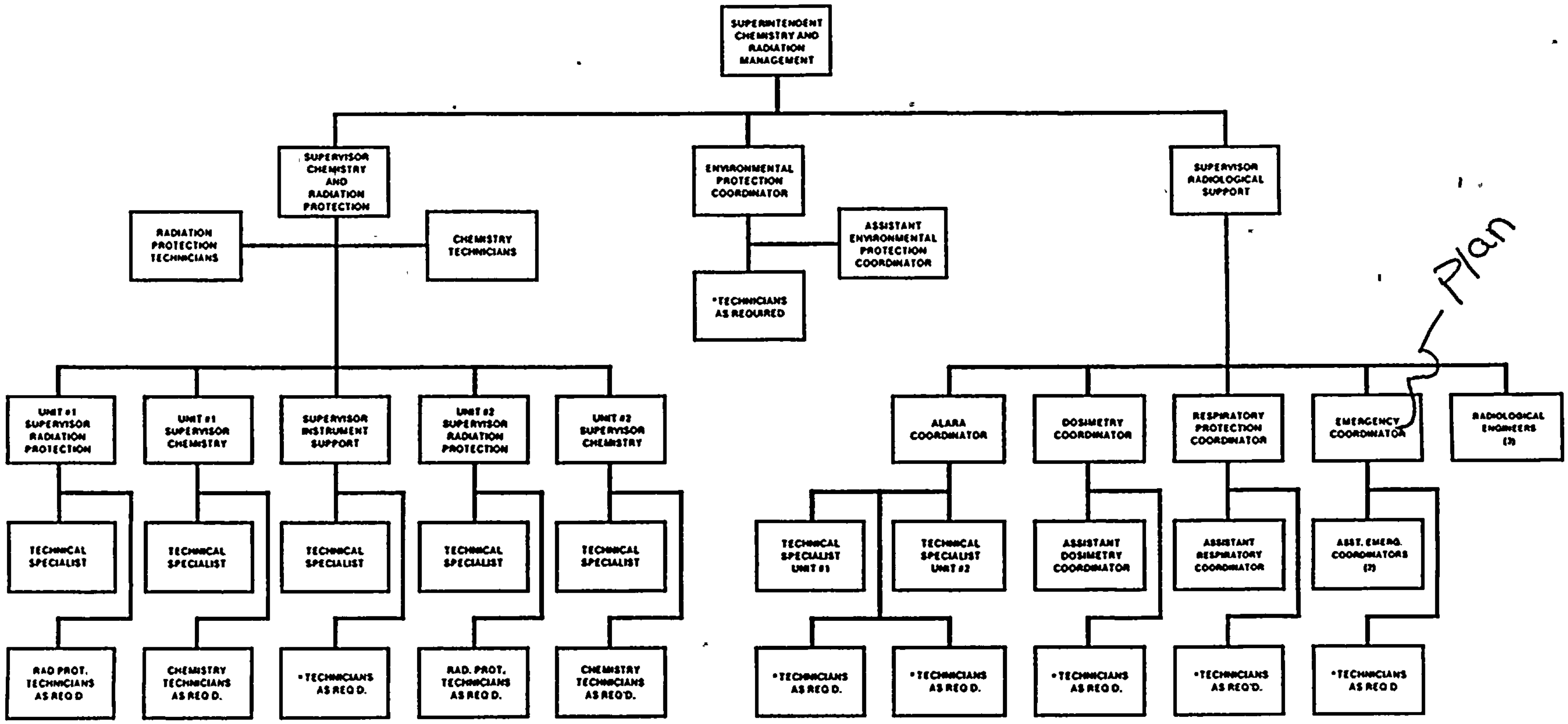


* PERSONNEL ASSIGNED TO UNIT 1 AND UNIT 2 AS REQUIRED.

FIGURE 13.1-8

UNIT 2 SITE ORGANIZATION CHART-TRAINING

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT



NOTES:

NUMBER IN PARENTHESIS REPRESENTS THE NUMBER OF POSITIONS.

*TECHNICIANS WILL BE ASSIGNED BY THE SUPERVISOR CHEMISTRY AND RADIATION PROTECTION AS REQUIRED.

FIGURE 13.1-9

CHEMISTRY AND RADIATION PROTECTION ORGANIZATION

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT-UNIT 2
FINAL SAFETY ANALYSIS REPORT

Changes to Technical Specifications

on Other Items

(1968G)

Subject: Changes to Technical Specifications for items required for certification

The requested changes to Technical Specifications are enclosed. These changes are requested for certification and reflect the Nine Mile Point Unit 2 design.

CHANGES REQUESTED FOR CERTIFICATION

TABLE 3.3.2-2

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
1. Primary Containment Isolation Signals (Continued)		
a. Reactor Vessel Water Level*		
1) Low, Low, Low, Level 1	≥17.8 in.	≥10.8 in.
2) Low, Low, Level 2	≥108.8 in.	≥101.8 in.
3) Low, Level 3	≥159.3 in.	≥157.8 in.
b. Drywell Pressure - High	≤1.68 psig	≤1.88 psig
c. Main Steam Line		
1) Radiation - High	≤3x Full Power Background	≤3.6x Full Power Background
2) Pressure - Low	≥766 psig	≥746 psig
3) Flow - High	≤103 psid	≤109.5 psid
d. Main Steam Line Tunnel		
1) Temperature - High	~~≤175~~°F ≤159	≤~~181~~°F 169.5
2) ΔTemperature - High	≤50°F	≤ ~~57°F~~ 62.8°F
3) Temperature - High MSL Lead Enclosure	≤140°F	≤~~146°F~~ 150.5°F
e. Condenser Vacuum Low	≥8.5 in Hg vacuum	≥7.6 in. Hg vacuum
f. RHR Equipment Area Temperature - High (HXs/A&B Pump Rooms)	≤135°F	≤~~141~~°F 144.5
g. Reactor Vessel Pressure - High (RHR Cut-in Permissive)	≤128 psig	≤148 psig
h. SGTS Exhaust - High Radiation	~~≤1.6x10-2~~ µCi/cc ≤5.7x10-3	~~≤2.1x10-2~~ µCi/cc ≤1.0x10-2

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INSTRUMENTATION

3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

LIMITING CONDITIONS FOR OPERATION

3.3.8 At least one turbine overspeed protection system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

a. With one turbine control valve or one turbine throttle stop valve ~~or one turbine reheat stop valve~~ per high-pressure turbine steam lead inoperable and/or with one turbine combined intercept ~~interceptor~~ valve per low-pressure turbine steam lead inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours or close at least one valve in the affected steam lead(s) or isolate the turbine from the steam supply within the next 6 hours.

b. With the above required turbine overspeed protection system otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.8.1 The provisions of Specification 4.0.4 are not applicable.

4.3.8.2 The above required turbine overspeed protection system shall be demonstrated OPERABLE:

a. At least once per 7 days by cycling each of the following valves through at least one complete cycle from the running position:

   1. Four high-pressure turbine stop valves,
   2. Four high-pressure turbine control valves, and
   3. Six low-pressure turbine combined stop and intercept valves.

b. At least once per 31 days by direct observation of the movement of each of the above valves through at least one complete cycle from the running position.

c. At least once per 18 months by performance of a CHANNEL CALIBRATION of the turbine overspeed protection system.

d. At least once per 40 months by disassembling at least one of each of the above valves and performing a visual and surface inspection of all valve seats, disks, and stems and verifying no unacceptable flaws or excessive corrosion. If unacceptable flaws or excessive corrosion are found, all other valves of that type shall be inspected.

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

TABLE NOTATION

* Isolates on injection signal, not primary containment isolation signal.

(a) See Specification 3.3.2, Table 3.3.2-4, for valve groups operated by isolation signal(s).

(b) Deleted.

(c) These valves are the RHR heat exchangers vent lines isolation valves. The vent line connects to the RHR safety relief valves (SRVs) Discharge Header before it penetrates the primary containment. The position indicators for these valves are provided in the Control Room for remote manual isolation.

(d) Type C leakage tests not required.

(e) The associated instrument lines shall not be isolated during Type A testing. Type C testing is not required. These valves shall be tested in accordance with Surveillance Requirement 4.6.3.4.

(f) These valves are check valves, located on the vacuum breaker lines for RHR SRVs discharge headers. The SRV discharge header terminates under pool water and therefore has no containment isolation valves other than those on lines feeding into it.

(g) 2SLS*MOV5A and B are globe stop check valves. These valves close upon reverse flow. The motor operator is provided to remote manually close the valve from the control room.

(h) These valves are testable check valves. They close upon reverse flow. The air operator on each valve is provided only for periodic testing of the valve. These valves can only be tested against a zero d/p.

(i) Valves are maintained closed and the lines are capped. Valves are Type C tested.

(j) Not primary containment penetration isolation valves. These valves close on an isolation signal to provide integrity of "A" and "B" LPCI loops.

(k) Valves close on a SCRAM signal; not part of primary containment isolation system but are included here for Type C testing per Specification 3.6.1.2. These valves are not required to be OPERABLE per this specification but are required to be OPERABLE per Specification 3.1.3.1.

(l) Not subject to Type A or Type C leak test because of constant monitoring under constant 1800 psig pressure and the possible detrimental effects of shutdown.

(m) Not subject to Type C test per 10 CFR 50, Appendix J. A hydrostatic test is performed in accordance with Specification 4.6.1.2.d.3.

(n) These valves are Type C tested in the reverse direction.

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FIRE SUPPRESSION SYSTEMS

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITIONS FOR OPERATION

3.7.7.2 (Continued)

ACTION:

a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour ~~convert the applicable dry system(s) to a wet pipe system or~~ establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol. In addition, comply with the provisions of Specification 3.3.7.8.

b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.7.2 Each of the above required spray and sprinkler systems shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve-manual, power operated or automatic in the flow path is in its correct position.

b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.

c. At least once per 18 months:

   1. By performing a system functional test which includes simulated automatic actuation of the system, and:

      a) Verifying that the automatic valves in the flow path actuate to their correct positions on a test signal, and

      b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.

   2. By a visual inspection of the spray and sprinkler headers to verify their integrity, and

   3. By a visual inspection of each deluge nozzle's spray area to verify that the spray pattern is not obstructed.

d. At least once per 3 years by performing an air or water flow test through each open head spray and sprinkler header and verifying each open head spray and sprinkler nozzle is unobstructed.

[illegible]

LIST OF SER/T.S./FSAR DISCREPANCIES

1. Niagara Mohawk Power Corporation requested a revision to SER Section 3.5.1.3.8 by letter dated June 17, 1986 (NMP2L-0752). This was to support a change to Technical Specification Surveillance Requirement 4.3.8.2, which would relax the test frequency for direct visual observation of turbine stop and control valve movement.

2. Niagara Mohawk Power Corporation submitted a revision to the secondary containment bypass leakage analysis by letter dated June 30, 1986 (NMP2L-0761). This letter also revised Final Safety Analysis Report Table 6.2-55a & 6.2-55b, as well as Table 3.6.1.2-1 in the Technical Specification. These changes affect SER Table 6.1.

3. Niagara Mohawk Power Corporation submitted a revision to the Posi-Seal International LOCA and Seismic Qualification Report on containment purge and vent valves by letter dated June 13, 1986 (NMP2L-0748). This analysis supported restricting the open position of purge valves 2CPS*AOV107 and 109 to 70%. Appendix J to Safety Evaluation Report Supplement 3 (NUREG-1047), "Demonstration of Containment Purge and Vent Valve Operability," does not reflect this revision to the Nine Mile Point Unit 2 design.

4. Niagara Mohawk Power Corporation submitted a revision to Final Safety Analysis Report Table 480.37-1, "Reverse Tested Containment Isolation Valves," by letter dated July 3, 1986 (NMP2L 0768). Three valves were added to this table. Safety Evaluation Report Supplement 3, contains Table 6.6, which also lists reverse tested containment isolation valves. This table will require revision to match the Final Safety Analysis Report and Technical Specifications.

5. Niagara Mohawk Power Corporation submitted its current position on the Standby Liquid Control System (SLCS) at Nine Mile Point Unit 2 by letter dated May 2, 1986 (NMP2L 0698). Niagara Mohawk Power Corporation proposed an alternative to Paragraph (c)(4) of 10CFR50.62 requirements. Specifically, the current Technical Specification requirements for SLCS minimum pump flow is 41.2 gpm with a 13.57 percent boron concentration. Upon completion of the NRC's generic review of the ATWS mitigation system, Safety Evaluation Report section 7.2.2.4 will require revision to address Nine Mile Point Unit 2 Technical Specification commitments.

6. The Final Safety Analysis Report for Nine Mile Point Unit 2 contains Table 11.5-1, "Process and Effluent Radiation Monitoring Systems." Table 11.5 of the Safety Evaluation Report, "Continuous Monitors," corresponds with the Final Safety Analysis Report table. Due to changes to the Final Safety Analysis Report table in Amendment 23, the Safety Evaluation Report requires revision.

7. Based upon Final Safety Analysis Report and Technical Specification changes enclosed in this submittal, the Standby Gas Treatment System flow rate has been revised from 3500 cfm to 4000 cfm. In addition, Amendment 23 revised the secondary containment design inleakage from 3160 cfm to 3190 cfm (Final Safety Analysis Report Section 6.2.3.4). Safety Evaluation Report section 6.2.3 currently reflects a flow rate of 3500 cfm and design inleakage of 3160 cfm.

8. Appendix 15E of the Final Safety Analysis Report contains an analysis to support spiral offloading/reloading patterns with associated proposed Technical Specification changes that support initial core loading and subsequent core offloading/reloading. The Final Draft Technical Specifications contain changes that are consistent with Appendix 15E in the area of initial core loading only. The Safety Evaluation Report is silent on this discrepancy.

9. In this letter changes were made to Final Safety Analysis Report figures 13.1-6, 13.1-7, 13.1-8 and 13.1-9 and Technical Specification figures 6.2.1-1 and 6.6.2-1. All these figures address the Niagara Mohawk management organization structure. The corresponding figures in Chapter 13 of the Safety Evaluation Report need to be revised to reflect the changes made to the Final Safety Analysis Report and the Technical Specifications.

[illegible]