

July 16, 1986
(NMP2L 0783)

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

Enclosed is a final copy of Niagara Mohawk's comments on the Safety Evaluation Report including Supplements 1 and 2. Our comments reflect differences between the Safety Evaluation Report and Supplements, and the Final Safety Analysis Report through Amendment 26. Generally, the comments do not address the status of open issues.

We have separated our comments into two categories. Those in Section II we consider to be generally self-explanatory and minor. The 12 items identified in Section I may require additional discussion between Niagara Mohawk and your reviewers.

We would be pleased to discuss these at your convenience.

Very truly yours,

C. V. Mangan

C. V. Mangan
Senior Vice President

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Enclosure

xc: R. A. Gramm, NRC Resident Inspector
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SER COMMENTS

SECTION I

1. Page 3-6, first paragraph, second to last sentence where it describes, "There are no nonseismic or no nontornado protected Category I vessels, pipes or tanks located outside of buildings." The SER Section (3.4.1) should be revised to agree with FSAR section 3.4.1.1.3, page 3.4-3 (AMD 13).
2. Page 5-10, second paragraph, second line indicates that the drywell equipment and floor drain sump level gaseous radiation level in the primary containment airborne particulate radiation monitoring are unidentified leakage. The drywell equipment drains are not unidentified leakage; they are identified leakage. Further, in the next sentence, it indicates that these leakage detection systems are seismic category 1. The drywell floor drain tank level monitoring and gaseous and particulate radiation monitoring system are the only ones that remain functional when subjected to an SSE. See Reg. Guide 1.45 position statement, FSAR Table 1.8-1, pg. 47 of 169 (AMD 5). Sump level and flow monitoring is not required to remain functional, and therefore, is not designed to seismic category 1 requirements. See FSAR Table 3.2-1, pg. 14 of 26 (AMD 19). The SER is, therefore, misleading in saying that all three of the primary LDS systems are capable of performing their function following an SSE. Further, only the drywell floor drain level and flow monitoring system on the airborne particulate and gaseous radioactivity monitoring systems are required to monitor unidentified leakage with a sensitivity in accordance with Reg. Guide 1.45. The SER should be clarified to reflect this.
3. Page 5-18, sixth paragraph, first line says, "Isolation between the reactor coolant system and RCIC is provided by two check valves." The word "testable" should be added (FSAR page 5.4-19, Rev. 0) between the words "two" and "check."

The next paragraph indicates that the applicant performed an analysis assuming 25 gallons per minute leakage to determine leak detection setpoints.

The Nine Mile 2 equipment area and pipe chase area leak detection system temperature element setpoints were selected to ensure that detection and isolation of a high energy line break would occur in sufficient time to ensure that the environmental qualification temperature profiles would not be exceeded, based upon a number of factors including the design of equipment area cooling system. In addition, the setpoints were set sufficiently above the expected peak abnormal area temperature for a given area to minimize the occurrence of spurious trip signals. Ref. Q&R 440.16 (AMD 23).

This leak detection system would prevent the RCIC system inadvertent isolation because of high differential temperature in the equipment area. The high differential temperature equipment has been removed from Nine Mile Point Unit 2. FSAR pg. 7.3-16 (AMD 23) and 7.3-17 (AMD 23)

4. Page 5-23, second paragraph - The first sentence should end between "leak detection system" and "actuation". Then, after the sentence "Actuation of the standby liquid control system and nonregenerative heat exchanger high outlet temperature" "close the outside isolation valve only" should be added. Reference FSAR pg. 5.4-46 (AMD 18).
5. Page 6-52, item 5 under Mark II Owners Group load specification, it says, "Use 20% of maximum pressure..." That should be changed to, 20% standard drag, 10% acceleration drag. See page 6A.4-36, Rev. 0. Further, C.1.A and B reference NEDEs that aren't referenced in the FSAR. The reference in the FSAR, pages 6A.4-23 (Rev. 0) and 24 (AMD 23). Further, under the Nine Mile 2 position, for item 4 at the top of the page, it references 6.2.1.1.7.3(1). It should be 6.2.1.7.3(1).
6. Page 7-28 - The service water pump writeup has been modified in the FSAR pg. 9.2-6 (AMD 24). Paragraphs 1, 3 and 6 need to be revised to reflect this logic.

In the first paragraph, second line, remove the word "LOCA" and let it read "signals generated by loss of power."

In the first paragraph, third line, it says, "when a LOCA signal along with a loop is present..." Change it to read, "when a loop is present..."

In the first paragraph, sixth line, remove "when a LOCA signal coincides with a loop..." and add "automatically," so the beginning of the sentence reads, "Only one pump in each division is started, automatically."

In the third paragraph, second line, remove the words "LOCA signal coincident with the loop."

In the sixth paragraph, second line, remove the words "LOCA signal coincident with either a" and also remove "or a low hydropressure in the respective system."

7. SER2 page 7-2, middle paragraph - NRC references "root mean square" method in Supplement 2. This is not consistent with the Owners Group position which references square root sum of the squares. Refer to a letter from B. J. Youngblood, USNRC, 9/24/84, pg. 9.
8. Page 9-16, second paragraph, last line should read "shore and 22 feet below water level of the lake." See FSAR page 9.2-40 (Rev. 0).

Fourth paragraph - Remove the words "discharge tunnel/pipe." Refer to FSAR Section 9.2.5.3, pg. 9.2-33 (Rev. 0). This section of pipe is not seismic Category 1.

9. Page 10-5, fourth paragraph, first sentence says "the applicant has selected materials for Class 2 components." Remove "Class 2" and add "including the ANSI B31.1 portions" on the second line between "systems" and "that." Refer to FSAR pg. 10.3-1 (AMD 5).

Fifth paragraph, first sentence - "The code allowed waiving of impact testing of Class 2 materials." Impact testing is not required by ANSI B31.1.

10. Page 11-15 - The following comments are provided: The precoat filter and demineralizer are not the same as those on FSAR Table 11.2-1. The surge tank under the waste collector system should be 29,800 gallons. The surge tank for the floor drain collector system should be 29,800 gallons. The evaporator distillate tank under regenerate waste system should be 470 gallons, and evaporator bottoms tank under regenerate waste system should be 8,000 gallons and the number of them should be changed to 4. The phase separator tank should be 8,200 gallons, and the sample tank should be removed. All these changes are based upon FSAR Table 11.2-1 (AMD 25).
11. Page 11-16 is inconsistent with FSAR Table 11.3-1 (AMD 12).
12. SER, page 13-35, fifth paragraph - It indicates that "in addition because an NSSS vendor representative is a member of the joint test group that reviews operating and testing procedures the staff does not consider an additional NSSS review of low power and power ascension necessary." Remove the words "is a member of the joint test group." The joint test group reviews preoperational tests. A NSSS representative does review startup procedures.

SECTION II

1. Page 2-1, third paragraph lists the Nine Mile Point Unit 2 site location as 43 degrees, 31 minutes, and 20 seconds. This should be 17 seconds. Further, the north latitude of 76 degrees, 24 minutes, 36 seconds should be 27 seconds. The universal transfer mercator should be 4819478M in lieu of 4819559M north and 386047M should be 386254M east. See FSAR page 2.1-1 (AMD 26).
2. Page 2-2 - Resident population versus distance the 0-10 mile - 1980 year should read 35,467 in lieu of 39,467. See FSAR Table 2L-1. (AMD 7)

3. Supplement 2 to the SER, page 2-2 - In the first line, 8.4 E^{-5} should be 1.9 E^{-4} . This is shown on FSAR Tables 2.F-2, (AMD 13) 15.6 and 15.6-6. (AMD 23) Remove "southwest of the plant" which is limiting 0.5 percentile X/Q value. Remove "directional" in the first sentence. Also, remove "occur southwest of the plant" in the second sentence.

There are several changes relative to the X/Q values shown on the table. Nine Mile 2 LPZ ground level X/Q values are not consistent with the FSAR. Zero to eight hours should be 1.78 E^{-5} , 8-24 hours should be 1.19 E^{-5} , 1-4 days should be 4.93 E^{-6} and the 4-30 day should be 1.4 E^{-6} . In the next full paragraph, EAB values should read 2.47 E^{-5} and remove the words "south of the plant." For the table, Maximum LPZ values of X/Q, it should read 0-2 hour fumigation and 0-8 hours elevated. The X/Q values for the whole table should be changed to 1.92 E^{-5} , 1.03 E^{-5} , 8.85 E^{-7} , 3.66 E^{-7} , 1.03 E^{-7} . (See references above.)

4. Page 2-4 of the SER, fourth paragraph, third line indicates that the conrail line is 2.8 kilometers from Nine Mile 2. FSAR page 2.2-1, (AMD 19) shows it as 2.5 kilometers, which is 1.5 miles.
5. Similarly, on 2-5 page of the SER, second paragraph, third line shows Alcan Aluminum at 2.8 miles which should be 2.7 miles from page 2.2-2 of the FSAR. Also, in the third paragraph relative to Lakeside air park, the distance is 10 kilometers, which is 6.2 miles. Ref. FSAR page 2.2-2 (AMD 26).
6. SER page 2-6, fifth paragraph - The annual temperatures in the area need correction. They should range from a hourly minimum in February of -16F to an hourly July maximum of 89F. This is shown on Table 2b-24 (Rev. 0) of the FSAR.

The next paragraph indicates 168 days per year for 0.01 precipitation; should be 150 from FSAR page 2.3-4. A total annual average snowfall equals more than 70 inches from FSAR page 2.3-4. (Rev. 0)

7. Page 2-7 of the SER, second full paragraph - The last part of that paragraph discusses air pollution episodes. This information is not consistent with Table 2b-23. (Rev. 0)
8. Page 2-9 of the SER shows the 0-2 hour X/Q value expected to be exceeded less than 5% of the time as 1.8×10^{-4} for the EAB. This value is 1.9×10^{-4} in the FSAR page 2.3-43 (AMD 23).
9. Page 2-10 shows that Nine Mile 2 is located on the "southwestern" shore of Lake Ontario. This should read "southeastern."

At the bottom of page 2-10 on the footnote, it indicates that we subtract "1.22" feet from MSL value to get the IGLD value. Based upon FSAR page 2.4-1 (Rev. 0), this should read "1.23."

10. SER page 2-12 indicates in the second paragraph, third line the applicant is committed to solving this problem by placing neoprene gaskets in the tornado missile protected barriers. The FSAR was changed in Question and Response 240.10 (AMD 7) that we are using dymeric caulking.
11. SER Page 2-17, first paragraph relative to the makeup water from the cooling water supply in the second sentence. This is not consistent with FSAR page 9.2-27 (AMD 25) and 9.2-28 (AMD 25). The error extends into the second paragraph, first line. In lieu of those words, we suggest that the following words be used.

"The circulating water system makeup is provided by the plant service water system. Cooling tower blowdown is directed to the service water system discharge bay. Two identical intake structures are located approximately 1,000 feet offshore. This service water intake and discharge system is designed to supply water to the service water pumps and fire protection pumps and to return the plant discharge to the lake under all modes of operation. Normal service water pump flow is approximately 40,000 gallons per minute, not including fish bypass discharge. After passing through the service water system, a constant 25,000 gallons per minute makeup is directed to the circulating water system."



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The fifth paragraph on page 2-17 - At the end of that paragraph, it discusses the pump motors are located above elevation 261'. FSAR page 9.2-5 (AMD 11) indicates that this is not correct. It should read, "including service water pumps and motors are within a Category I structure which is designed for flooding up to an elevation of 261'."

The sixth paragraph on page 2-17, first line shows the minimum safety related flow of 22,700. FSAR page 2.4-18 (Rev. 0) states that it should be 21,700.

12. Page 2-18, fifth paragraph, second line indicates that the bedrock is covered by about 16 feet. This should be 30 feet from page FSAR 2.4-24 (Rev. 0). Also, fourth line same paragraph shows 50 feet of Oswego sandstone which should read 100 feet. Refer to page 2.4-26 (Rev. 0).
13. Page 2-58 of the SER under bearing pressure for the intake shaft tunnel and intake structure does not show the same values for the actual and for the allowable per FSAR Table 2.5-43 (Rev 0).
14. Page 3-2, last paragraph, second line - This description does not take into account the main steam isolation valve alternative approach noted on Note 9 of Table 3.2-2 (AMD 15).
15. Page 3-8, third paragraph - Halfway through the paragraph, the sentence reads, "Valve stems have insufficient stored energy to damage equipment." This is inconsistent with our description on page 3.5-5 (Rev. 0) of the FSAR, although the conclusion is the same.
16. Page 3-14, last line indicates that we have electrical control circuits for load control. This is not included in the Nine Mile 2 design. We control loads by steam volume control. We do not have load following capability. See FSAR Section 10.2, page 10.2-3a (AMD 13).
17. SER page 3-15, first paragraph, fourth line indicates that at 103% of rated speed, the EHC will close the governor and intercept valves. This should be changed to at 102% intercept valves start to close which is shown on FSAR page 3.5-16 (Rev. 0).

In the third paragraph where it describes the applicant's inservice test program, this writeup is not consistent with FSAR Table 3.5-20 (Rev. 0). Fourth full paragraph, item 1 indicates that we will dismantle at least one main steam stop, one main steam control valve, one reheat intercept valve. The list should add one reheat stop valve (from FSAR Section 10.2.3.6, pg. 10.2-11) (Rev. 0).

18. Page 3-18, third paragraph in the middle, it says all other of the safety related systems, components and stored fuel are located within tornado-generated missile protected structures or provided with barriers, etc. This does not address the diesel fuel oil tank vent lines are not missile protected, which was described Q&R F430.63 (9.5.4) (AMD 7).
19. Page 3-26, last paragraph, first line says the drywell is stainless steel clad, steel lined. The drywell is steel lined but not stainless steel clad. The stainless steel cladding is in the suppression pool. See FSAR pg. 3.8-3 (AMD 18).
20. Page 3-29, first paragraph, second line - Change "for steel internal structures." Add "other than the star truss." Refer to FSAR pg. 3.8-32 (Rev. 0) and pg. 3.8-37 (AMD 26). Add another sentence to the first paragraph that says the star truss was designed to ASME Section III, subsection NF unstamped.
21. Page 3-30, first full paragraph - The criteria used in design and analysis of construction of containment and internal structures list ACI standard 349-1980. This should be changed to ACI standard 349-76. This was transmitted in our letter of 7/6/84 from C. V. Mangan to the NRC.
22. Page 3-31, first paragraph, second line - ACI standard 318-71 is referenced. It should also reference ACI standard 301-72 Ref. FSAR page 3.8-50 (AMD 23).
23. Page 3-32, fourth paragraph, after it says that the materials of construction... It refers to ACI standard 318-71. It should also reference ACI standard 301-72. Refer to FSAR page 3.8-50 (AMD 23).

24. Page 3-38 indicates that we had requested the use of revised damping values for seismic design of nuclear power plants developed by the PVRC. This has been approved by the NRC, and the SER should be changed in the fourth paragraph. Change the last sentence in the 4th paragraph to read, "This has been approved by the NRC".
25. Page 3-41, fourth paragraph lists the topical report NEDO number incorrectly. NEDO 21984 should be 21985. See FSAR Section 1.6 (AMD 19).
26. Page 3-49, fifth paragraph indicates that the leakage rate from reactor coolant pressure boundary valves should be 1 gpm. This should be changed. Our response to Question F210.62, pg. F210.62-3 (AMD 23) changed this commitment.

Similarly, the second to last paragraph should be changed as follows: 1 gpm is changed to 0.5 gpm per nominal inch of valve size up to a maximum of 5 gpm.

27. Page 4-4, second paragraph - NEDO 24011-A-4 is incorrectly referenced. It should be NEDE. Because this was a general statement by NRC no corresponding FSAR.
28. SER pg. 4-7, last sentence of Sec. 4.4.3 - After "larger," add "or equal to." Refer to FSAR Table 4.4-1 (Rev. 0).
29. Page 4-11 and the fifth paragraph. The NRC has referenced Hatch. Nine Mile 2 FSAR table references Nine Mile 2, LaSalle, and WPPS2 under Table 4.4-1 (Rev. 0). We do not reference Hatch.
30. Page 5-1, third paragraph indicates quality components are identified in Table 3.2-4. However, they should reference our alternative in accordance with 10 CFR 50.55(a)(3) for the main steam isolation valves. Ref. FSAR Table 3.2-4 (AMD 25).

31. Page 5-2, second paragraph indicates in the fourth line that code case acceptability in accordance with ASME Section III materials. It should also indicate "and those approved via Footnote 6 of 10 CFR 50.55(a)" (i.e., code case N-413) Ref. FSAR Table 5.2-1 (AMD 26). Ref. letter from CVM to Denton 9/7/85, Docket No. 50-410.
32. Page 5-5 of the FSAR, fourth paragraph indicates this includes conformance with Reg. Guide 1.44. It should also indicate "or the applicant's alternative approaches which are acceptable to the Staff and described in FSAR Section 1.8" Ref. SER 4.5.1 (pg. 4-12) & 6.1.1 (pg. 6-1).
33. Page 5-9, last paragraph should be revised. Identified leakage should include anticipated leakage from other reactor recirculation pump seals and RPV head flange seal leakoff system. FSAR 5.2.5.4.2 pg. 5.2-39 (Rev. 0) and pg. 5.2-33 (AMD 5).
34. Page 5-17, second paragraph, third line indicates that the RCIC is required to maintain the reactor in standby conditions. FSAR page 5.4-29 (AMD 24) says hot standby.
35. Page 5-25 provides information from several BWRs (Table 5.1 "safety/relief valve comparison"). This information cannot be verified within the Nine Mile 2 FSAR.
36. Page 6-1, second paragraph in the middle indicates that fractured toughness was not indicated as having been performed. We suggest that it would be appropriate to add the word "tests" after the word "toughness."
37. Page 6-2 of the SER indicates in the fifth paragraph that Table 6.1-3 was changed in Amendment 4. This should be Amendment 25.
38. Page 6-6, fifth paragraph, fifth line - Change 444 seconds to 0.25 psi. Ref. pg. 6.2-76 (AMD 15). Remove the words "At this point," which starts the next sentence, and continue the sentence after 34 psig by adding the words "at 444 seconds." The reason for the change is the



suppression chamber maximum pressure occurs at 444 seconds FSAR Table 6.2-4 (Rev. 0), while the peak drywell pressure occurs at 252 seconds on the same table. The vacuum breakers are mechanical devices which respond to the differential pressure. Because the differential pressure occurs over the time frame between 252 and 444 seconds, the vacuum breakers will open as determined by the pressure differential, not the time.

39. Page 6-11, sixth paragraph, fourth line - Remove the words "both the SWEC and" insert the word "the" before "LOCTVS." Remove the "s" after codes, and change "were" to "was." The SWEC code used was LOCTVS Ref. 6.2-47a (AMD 5).
40. Page 6-14, third paragraph indicates that results of the analysis indicate that the plant will operate within 215 degrees local pool temperature. This should be changed to 214 degrees per FSAR page 6A.10-9 (AMD 22). Similarly, the 216 degrees in the same paragraph, last sentence should be changed to 214 degrees.
41. Page 6-17, last paragraph, second and third line says these devices provide redundant valve position indication for each valve This is incorrect. It does not match up with FSAR Attachment 1.9-42 (AMD 26). Redundant position indication does not exist for each valve. NMP2 has redundant valves in series.
42. Page 6-18, last paragraph, fourth line - Change "The strainers are seven feet below the minimum water level" to "about eight feet." See page 6.2-43 (AMD 18).
43. SER pg. 6-19, fourth paragraph, third sentence says, "The location of system and return lines..." It should read, "The location of suction and return lines..." Ref. 6.2-47 (AMD 5).
44. Page 6-19, last paragraph - Change NPSH for RHR to "8200 at 15.09 feet," which is greater than the required value of "14 feet" as shown on page 6.2-47 of the FSAR (AMD 23).

45. Page 6-20, first paragraph, fifth line says two other types of fiberglass insulation are used inside the drywell. The word "fiberglass" should be removed because MIN-K is not fiberglass insulation - pg. 6.2-44 (AMD 15). Further, on the same page, third paragraph, last sentence indicates that alarms provided to the security alarm station, which is manned 24 hours a day by security personnel, etc. See revised Section 6.2.3.1, pg. 6.2-51a (AMD 25). The fifth paragraph, first sentence indicates that reactor building ventilation is not required to operate during accident conditions. We suggest it read, "The reactor building normal (add the word "normal") ventilation system is not required to operate (add the words "for atmospheric cleanup")." Also, in that same paragraph, down seven lines, it indicates that air operated butterfly dampers are used in series. Remove the word "butterfly." Not all of them are butterfly type. Refer to page 9.4-25 (AMD 10).

46. Page 6-21, item 7 - Change 3160 ft^3 per minute to 3190 ft^3 per minute. Also, under item 8, change 3600 cubic feet to 3500 cubic feet, based upon page 6.2-57d (AMD 26) and 6.2-57a (AMD 26), respectively.

In the next paragraph after item 9, second line, it says "0.03 inch water gauge at 42 seconds." It should read, "0.04" instead of "0.03." Ref. FSAR pg. 6.2-57 (AMD 23). Also in that same paragraph, it indicates that a -0.25 inches at 90 seconds. Change 90 seconds to 129 seconds. Ref. FSAR 6.2-57a (AMD 23).

Further, the last paragraph indicates that the drawdown to the -0.25 inches is at 90 seconds. Change that to 120 seconds, and change 3600 cubic feet to 3500 cubic feet. See FSAR page 6.2-57d (AMD 26).

47. Page 6-22 at the top of the page, item 3 - Change 3160 to 3190. See FSAR page 6.2-57 (AMD 26).

48. Page 6-23, third paragraph, second line indicates that we have 14 inch and 2 inch purge and vent valves. Add 12 inch valves to agree with FSAR page 9.4-23 (AMD 25).

49. Page 6-24, first paragraph, fourth line - Add "or hydrogen" after "oxygen." See FSAR page 6.2-76 (AMD 15).
50. Page 6-25, fifth paragraph, fourth line - Change "2 v%" to "2-1/2 v%." See page 6.2-76 (AMD 15) of the FSAR. Same paragraph, add in parentheses at the end "(greater than 2-1/2 v% O₂)."
51. Page 6-27 - Add an item 11 to the ten already there. It should include main steam. See FSAR page 6.2-85a (AMD 17). In the next paragraph, it indicates that CRD and hydraulic control lines for the recirculation flow control valves will be drained during the type A test. The following paragraph also indicates that the control rod drive system is required to be vented but not drained for the type A test, thus providing leakage monitoring for the control rod insert and withdrawal. Add "Also, the scram discharge vent and drain valves will be type C tested." This is not consistent with page 6.2-86 (AMD 23).
52. Page 6-28, item 8 - traversing incore probe penetrations should refer to "Traversing in-core probe N₂ purge penetration." There is only one. See FSAR Table 6.2-56 Pg. 7 of 56 (AMD 26).
53. SER pg. 6-32, middle of first paragraph - It is just cooled by the service water system, not the RHR service water system. Reference FSAR page 6.3-3 Item (6) (Rev. 0).
54. SER pg. 6-33, last paragraph, first sentence - It says "...the (ADS) can be used to depressurize the system..." System is clarified to "reactor or primary system." Ref. FSAR Pg. 9.3-10 (AMD 24).
55. Page 6-33, third paragraph discusses the high pressure connection of the differential pressure transmitter. This information was changed in Amendment 26. Further, we suggest the wording change to read as follows: "To ensure an interlock at all times for both automatic and manual valve actuation, the high pressure connection of each differential pressure transmitter directly senses reactor vessel pressure with a permissive setpoint of approximately 88 psid (LPCS) and 130 psid (LPCI). Ref. FSAR Q&R F421.39 (7.6) (AMD 26). The last

paragraph, second sentence indicates that in accident conditions, "the air supply to the valves of the ADS system is provided by seismically qualified accumulators... Change "air" to "nitrogen." Further, "bottled air supply" should be changed to "seismically qualified accumulators inside the secondary containment." Refer to pages 9.3-10 (AMD 24) and 9.3-11 (AMD 23) and Table 9.3-1e (AMD 26). Also, change "nitrogen bottles outside of containment" to "2 nitrogen tanks" are valved in upon receipt of a low pressure.

56. Page 6-34, first paragraph, second line - Change "air" to "nitrogen." After that sentence, add "In addition, nitrogen bottles located outdoors can be lined up to supply extended long-term N₂ storage to the system." Ref. FSAR 9.3-10 (AMD 24) and 9.3-11 (AMD 23).
57. Page 6-40, second paragraph, sixth line - Change for "possible charcoal desorption" to "for possible iodine desorption." Refer to FSAR page 6.5-2a (AMD 25). Also in that same paragraph, last line, remove "9.4.3" and put in "9.4.2." Ref. FSAR Pg. 6.5-2a (AMD 25).
58. Page 6-46 references FSAR Figure 6.2. Should reference FSAR Figure 6.2-4 (Rev. 0).
59. Under Mark II Owners Group load specification page 6-50, under item I.B.1.b should read "delta P," not "P." Ref. FSAR Pg. 6A.4-5 (AMD 23).
60. Page 7-9 of the SER, second paragraph, first line - Change "C71" to "C72."
61. Page 7-10, third paragraph, third line - Change B21 to B22. Similarly, on the following line, B21 should be B22.
62. SER page 7-16, relative to HPCS, last paragraph - There is no HPCS discharge flow alarm. There is a valve position indication for valves E22-E010 and E011. There are valve status lights for all these valves. Ref. FSAR Figure 7.3-3 (AMD 23), pgs. 1 of 3 and 2 of 3.

63. Page 7-17, second paragraph - ADS does not use high drywell pressure. FSAR does not include 120 seconds timer. ADS high drywell pressure initiation was removed from the FSAR. Ref. Tech. Spec. Table 3/4 3-36.
64. Page 7-17, second paragraph is incorrect. It should be revised to match FSAR page 7.3-5 (AMD 23) and page 1.10-91 (AMD 14).

Fourth paragraph, first line, change "120 second" delay to "105 seconds" for ADS timer. Ref. Tech. Spec. Table 3/4 3-36 and GE 22A2887AL, Rev. 13, Sheet 28. Fourth paragraph, sixth line says, "The primary containment drywell high pressure signals are arranged to seal in control circuitry; they must manually be reset to clear." Remove that sentence. ADS no longer uses high drywell signal. See page 7.3-5 (AMD 23) and 1.10-91 (AMD 14).

Fifth paragraph, first line, remove the words "trip and seal in on high drywell pressure." This has been revised. See Section 1.10-91. Also, add in descriptions on the manual inhibit switches that were added per FSAR Section 1.10 page 91 (AMD 14).

65. SER page 7-18, fifth paragraph, item d and page 7-19, items b and c - There is no load sequence for Nine Mile Point Unit 2. We use load sequencing relays. FSAR Q&R F430.15 (AMD 13) and pg. 8.5-18(2) (AMD 7).
66. Page 7-20 - High drywell pressure description describes certain valve closures. FSAR Table 6.2-56 (AMD 26) does not show MSIV closure on high drywell pressure.

Page 7-20, under drywell pressure, second to the last sentence - Change "trip" isolation valves to "tip." In the first paragraph, last line in between the words "fan cooling isolation valves," put "fan cooling water..." Again, Ref. FSAR page 7.3-13 (AMD 9).

67. Page 7-21 - SER references six differential temperature sensors for RWCU and RHR. The FSAR section 7.3 has been modified to remove "differential signal" from the temperature sensors. Page 7.3-16 (AMD 23), 7.3-17 (AMD 23).

68. SER pages 7-22 and 7-23, last paragraph - Not all valves have position indication. However, all valves do have position status lights. Ref. 9.3-35 (AMD 18) and 7.5-3 (Rev. 0).

Page 7-22, first paragraph, fourth line - Change "four sensors" to "two sensors." Refer to FSAR page 7.3-16 (AMD 23).

69. Page 7-24 sixth paragraph says one of two 100% capacity recombiners is manually initiated following a LOCA to prevent the oxygen concentration from exceeding 5%. Add the words "or hydrogen" after oxygen. Ref. FSAR Pg. 6.2-81 (AMD 15).

Remove the eighth paragraph and put in the following: Redundant cooling water block valves located in the water supply lines are manually operated. These valves are interlocked with the recombiner discharge line containment isolation valves so that they cannot be opened unless the isolation valves are already open. They will automatically close if the isolation valves are closed. See FSAR page 6.2-83 (AMD 25).

70. SER page 7-25, under 7.3.1.7, reactor ventilation, third paragraph, items 2 and 3 are not in agreement with FSAR Section 9.4.2.5.1. Same page, sixth paragraph states "air." Refer to FSAR page 9.4-29 (AMD 24). It should read "nitrogen."

71. On page 7-29, first paragraph should be removed. Refer to page 9.2-8 (AMD 25).

In the second paragraph, relative to "the service water discharge header," change "pressure..." to "flow control valves control the respective makeup to the circulating water system. The flows are set by manual/automatic..." Refer to page 9.2-3 (AMD 25).

72. Page 7-30, section 7.3.10.1 - Conditions are not in agreement with FSAR Pg. 9.4-10 (AMD 25).

73. Page 7-39, middle paragraph - Remove the words "RCIC equipment ventilation air inlet and outlet high differential temperature." Refer to FSAR page 5.2-37 (AMD 23).

74. Page 7-40, section 7.4.1.3 - Not all valves have position indication. However, all valves do have position status lights. Ref. 9.3-35 (AMD 18) and 7.3-5 (Rev. 0).
75. Page 7-34, section 7.3.2.1 references G.E. topical report NEDO 21617, while FSAR Question and Response 421.22 (AMD 10) references NEDO 32617. NEDO reference should be corrected.
76. Page 7-40, second paragraph - Change the sentence to, "The pumps are interlocked so that the storage tank's discharge valves must be open for the pump to run." Refer to FSAR Section 9.3-35 (AMD 18).
77. SER Pg. 7-4 Section 7.2.1.1c relative to RPS neutron monitoring system

Nine Mile 2 APRM has no downscale RPS trip. The setdown APRM trips need to be better described. Ref. FSAR pg. 72-4 (AMD 9). As presently written, which one of the APRM trips is "setdown" is not clear. When not in the run mode, the fixed up scale neutron trip is reduced and takes precedence over the thermal trip, since it has a lower trip setpoint. In the run mode, the thermal trip takes precedence, since its variable values are less than the upscale fixed neutron trip. For clarity, the SER should be revised to read item c, "Average Power Range Monitor upscale fixed setpoint, upscale thermal power or inoperative trip. (In the startup refuel and shutdown mode, the fixed upscale neutron setpoint is reduced and is the one that will trip the system. In the run mode, the thermal power setpoint which varies with recirculation flow (to a maximum value) is the normal trip function. Additionally, in the run mode, the higher fixed upscale neutron setpoint backs up the thermal power trip.)" Ref. Technical Specifications.

78. Page 7-44, item 3 - Change "annunciators for RTS variables" to "annunciators for RPS variables." Ref. FSAR Pg. 7.5-2 (AMD 9).
79. Page 7-50, first line says redundant on-line gas monitors. Change to read "off-line." See FSAR page 11.5-7 (AMD 23). Same comment, first line next paragraph.

80. Page 7-51, third paragraph, second line says motor operated valves in series with a check valve. Change it to two check valves. Ref. FSAR Pg. 5.4-19(3) (Rev. 0).

Fourth paragraph, last sentence - "The valve decreases below the interlock setpoint." Add the words "following LOCA." Ref. FSAR pg. 6.3-14 (AMD 23).

Page 7-51, items 1, 2, 3 and 4 at the bottom of the page. Remove the discussion relative to high differential temperature. See FSAR pages 5.2-37 (AMD 23), 7.3-16 (AMD 23) and 7.3-17 (AMD 23).

81. Page 7-52, first paragraph, second line after the words "drywell floor" add "and equipment drain tank." After the word "fill rate" put "and pump out." Under the recirculation pump trip system writeup, seventh line, change the sentence to read, "First stage pressure is less than a predetermined setpoint" per FSAR page 7.6-7 (AMD 24) and pg. 5.2-33 (AMD 5).
82. Page 7-53, first line, the LPCI and LPCS "discharge" valves should be changed to "injection" valves, FSAR page 7-6-2a (AMD 23). Second paragraph, change 100 psid to 88 and 130 per previous discussion (item 55 above).
83. Page 7-60, first paragraph, fifth line says "the estimated increase in CPR is..." Change that to "delta CPR." Refer to Question 440.43 (AMD 7).
84. SER Section 8.4-2, page 8-10 indicates that all control and instrumentation circuits that penetrations can continuously carry. This is not true. Refer to Figures 8.3-8b (AMD 23) and page 8.3-40 (AMD 21).
85. SER Section 8.4-5, page 8-12, third paragraph states that the cable separation is three feet horizontal, five feet vertical. FSAR Pg. 8.3-50 (AMD 26) reduces separation requirements.

86. Page 8-5, second paragraph, first two sentences - A clarification may be necessary for conformance to Reg. Guide. 1.108 as described in this part of the SER. Periodic testing of HPCS diesel generators is performed from the control room (or locally) by manually initiation or simulation of a LOCA. This testing does not impair the capability of starting the HPCS pump within its required time. The test controls are overridden by a LOCA event. The local engine control switch is usually in the automatic position to allow operation and periodic testing from the control room. The local engine control switch also provides a maintenance and test position. The maintenance position places the HPCS diesel generator in out of service. If the test position is used only for test after maintenance prior to transferring to automatic operation. The local signal will not start the engine when the engine controls switch is in the test position. Ref. FSAR pg. 8.3-18c (AMD 8).
87. Page 9-3, third paragraph, third line - Remove "high density." Insert "poison," per FSAR Pg. 9.1-11a (AMD 23).
88. Page 9-6, fourth paragraph indicates that the SFPCS components are not located in the vicinity of other moderate or high energy piping. Change this to read, "System redundancy and protection from the effects of high and moderate energy line breaks ensure safety related system function, including the effect of single failures." Refer to FSAR Pg. 9.1-15a (AMD 5).
89. Last paragraph on page 9-6 is inconsistent with FSAR page 9.1-14a (AMD 19). Change the second sentence from 12 Mbtu per hour to 14.4. Change the third sentence from 7 to 12 day decay, and change the fourth sentence from 12 to 15 similar refueling discharges. Ref. FSAR pg. 9.1-14a (AMD 19). Change the seventh line from 31 Mbtu per hour to 31.2. Ref. FSAR pg. 9.1-15 (AMD 23).
90. Page 9-7, second paragraph, first sentence - Change the first sentence as follows: No connections are provided to the spent fuel pool below the normal water level of the fuel. Refer to FSAR page 9.1-7 (AMD 5).

91. Second paragraph, page 9-8 - Change "automatic" backwash to "manual."
Second paragraph, second line - Change "50" psid to "35." Refer to page 9.1-14 (AMD 26).
92. SER pg. 9-9, fifth paragraph, last sentence - The word "handed" should be "handled." Reference FSAR 9.1-18 (AMD 24).
93. Page 9-9, fourth paragraph, first sentence says the entire system is housed within the reactor building and the containment. Remove "and the containment." Fuel handling equipment is in the reactor building, not inside primary containment. Refer to FSAR Table 9.1-1 (Rev. 0) and Figure 9.1-25 (Rev. 0).
94. Page 9-12, third paragraph, last sentence - Remove "LOCA signal low header pressure in the SWS," and change it to "loss of offsite power." Refer to FSAR pg. 9.2-6 (AMD 24) and 9.2-7 (AMD 25).

Fourth paragraph, ninth line is incomplete.
95. Page 9-13, fifth paragraph, last three lines do not describe the booster pumps described on FSAR page 9.2-11 (AMD 23).
96. Page 9-14, fifth paragraph, fourth line - Add "quality group C" after quality group B as shown on FSAR Table 3.2-1 Pg. 11 (AMD 26) and 11a (AMD 9) of 26.
97. Page 9-15, second paragraph, second line - Add a sentence that says portions of the domestic water system are seismically designed, constructed and/or supported in the control building. Reference FSAR page 9.2-26 (AMD 23).
98. Page 9-20, third paragraph, second line says, "and an alternate air supply connection to the ADS system." Remove "an alternate air" and put in "a nitrogen." Refer to FSAR Section 9.3.1.

Fourth paragraph, first line says, "the instrument air system supplies." Change that to read, "the nitrogen system" as described in Section 9.3.1.5. Same paragraph, in line one, it says, "nitrogen gas from the instrument and nitrogen system as a backup to instrument air." Remove "as a backup to instrument air." Nitrogen is used in primary containment during normal plant operation as described in Sec. 9.3.1.5 (AMD 15).

On line 19, it says, "a seven day supply." Change that to five days per page 9.3-11 (AMD 23).

99. Page 9-21, fifth paragraph in the middle it says, "containment, the drywell atmosphere, and the gaseous radwaste storage tank." Remove the "gaseous radwaste storage tank." It is not shown on FSAR Table 9.3-1, pg. 8 of 10 (AMD 23).
100. Page 9-23, first full paragraph, second line says "in-line monitoring of hydrogen in the containment atmosphere." Remove those words and insert, "in-line monitoring of hydrogen in the containment can be measured by the containment atmospheric monitoring system." Refer to FSAR page 1.10-64b (AMD 20).
101. Page 9-28, first paragraph, sixth line - It says, "nonseismic Category I piping, tanks or vessels." Change this to read, "nonseismic piping, tanks or vessels." Remove "Category I." Ref. FSAR pg. 3.7A-20 and pg. 3C-27 (AMD 13).
102. Page 9-30, fourth paragraph, second line - Change 4 to 2. Ref. 9.4-2a (AMD 25).
103. Page 9-31, paragraph six regarding reactor building ventilation, remove in the third line the words "drywell cooling system and." Put in the word "the" and refer to Section 6.2.4 which only describes the purge system. The same paragraph, fifth line, add the words after HVAC system, "that operate following a LOCA," Refer to FSAR page 9.4-25 (AMD 10).

Next paragraph, third and fourth line - Remove the words "ensure that the system collects" and put in "prevent the exfiltration of." Refer to page 9.4-21a (AMD 25).

Page 9-32, first paragraph, second to last line - After the word "signal" put in "or low flow in the ventilation exhaust ducts." Ref. FSAR pg. 9.4-15 (AMD 25).

Second paragraph, first line after the word "mode" in the emergency mode, add the words "one of." FSAR Fig. 9.4-8 (AMD 25).

104. Page 9-34, fifth paragraph, second line - It should read "Two 100% capacity, safety-related, unit coolers are provided..." Next sentence should read, "Each unit cooler consists of a supply fan and a cooling coil." Smoke exhaust fan, unit heaters, dampers and controls are provided to ensure a..." Ref. FSAR page 9.4-52 (AMD 23).

The eighth line, sixth sentence should read, "Each unit cooler is powered from a separate Class 1E source except for the heaters and smoke removal fans." Ref. FSAR Table 8.3-4, pg. 1 of 60 (Rev. 0).

105. Page 9-35, second sentence should read, "Each of the three diesel generator rooms emergency ventilation system consists of two 50% capacity exhaust fans..." Next sentence should read, "Each diesel generator room is equipped..." Ref. FSAR pg. 9.4-48 (Rev. 0).

Second paragraph, fifth line should say, "The air intake structures are approximately 20 ft. above..." Ref. FSAR pg. 1.2-17 (AMD 26).

Second paragraph, fifth line says the air intake structures are approximately "27" feet above grade. Change that to "20" feet above grade. Refer to FSAR Section 1.2 figures.

106. Page 9-36, last paragraph, fourth line says, "the applicant has designed components required for hot shutdown so that rupture or inadvertent operation of fire suppression systems will not adversely affect the operability of these components." Change that to "the applicant has provided physical separation such that redundant components required for hot shutdown are not adversely affected by rupture or inadvertent operation of fire suppression systems." Refer to FSAR page 9A.3-30 (AMD 26).
107. Page 9-37, first paragraph at the end, last sentence - Add the words "or an alternate shutdown method exists in a physically separated area." Refer to FSAR Question and Response entitled, Safe Shutdown. Pg. SSC-9 (AMD 23).
108. Page 9-39, third paragraph says "Concealed spaces above suspended ceilings are devoid of combustible materials." Add the words "except for electrical cables in conduit." See FSAR Pg. 9A.3-43 (AMD 26).
109. Page 9-41, second paragraph says in line seven "of not less than 1 foot candle measured at the floor." This was modified in Amendment 23. It should read, ".5 foot candles." See FSAR page 9.5-20 (AMD 23).
110. Page 9-42, third paragraph, first line - This should be clarified. The suction is from a common bay that is fed from two separate intake tunnels. Refer to FSAR Fig. 9.2-10 (Rev. 0).

Paragraph five, first line says yard hydrants are provided at intervals of 250 feet. This was modified recently and should read, "in general, yard hydrants are provided at intervals of 250 feet with a maximum distance between hydrants of 300 feet." Ref. letter NMP2L 706 from CVM to Adensam dated 5/7/86.

111. Page 9-43, first paragraph indicates that all areas throughout the plant meet NFPA 14 for manual hose stations. FSAR Pg. 9A.3-52 (AMD 12) indicate that this is for safety related areas.

112. Page 9-43, paragraph five, fifth line - The Halon 1301 suppression systems are manually initiated in the PGCC floor section. See FSAR Pg. 9.5-6 (AMD 27); they are automatic.
113. Page 9-51, first paragraph, third line - Section 9.5.5 should read 9.5.6.
- Second paragraph, ninth line says "in a concrete enclosure which provides protection from tornado-generated missiles." This should be removed. The vent oil filled lines are not provided tornado proof protection. The FSAR states that filling can be accomplished through the day tank connections in the diesel generator building. Same comment for the third paragraph, seventh, eighth and ninth lines. Ref. FSAR Pg. 9.5-25 (AMD 25).
114. Page 9-54, second paragraph, fifth and sixth lines - Change the capacity for the seven-day day tanks in accordance with FSAR page 9.5-23 (AMD 23). In lieu of 53150, it should be 52664. In lieu of 46850, it should be 36173.
115. Page 10-1, third paragraph, fourth line - Remove "twin" shell and replace with "triple" shell. See page 10.1-1 (AMD 1).
116. Page 10-2, SER, last paragraph, fourth sentence - Remove "one stop valve," since it is redundant.
117. Page 10-3, first sentence - There is no commitment for weekly exercising extraction steam nonreturn valves. Refer to page 10.2-3a (AMD 13).
118. Page 10-4, sixth paragraph, halfway through the paragraph describes air operated MSIVs. Nine Mile 2 does not use air operated MSIVs, and this paragraph needs to be modified in accordance with FSAR's Pg. 5.4-10 (AMD 23), 5.4-11 (AMD 23).
119. Page 10-6, third paragraph, third line - Remove "twin shell." Refer to FSAR page 10.4-7 (AMD 21).

120. Page 10-10, first paragraph, second line says there are no interconnections from the turbine building to safety related areas below elevation 261'. Refer to FSAR page 10.4-19 (AMD 18). The service water valve pits and the control building and the reactor building tunnel interfaces are sealed by watertight doors and penetrations.

121. Page 10-11, third paragraph, seventh line refers to quality group B. It should say quality group A. See FSAR Table 3.2-1 (AMD 12), footnote 18.

Same paragraph, sixth and fifth lines from the bottom of that paragraph - Each main feedwater line contains a motor-operated... Remove "check" and put in "gate valve." Further, remove the part of the sentence that says that "check valve held open by air pressure during normal operation." It should be a "spring-loaded piston actuated check valve" outside of the drywell. Refer to FSAR Fig. 10.1-63 (AMD 26).

122. SER Section 11.2, Liquid Waste Management System, should be updated to show backup system described in FSAR Pg. 11.4-4 (AMD 23).

123. Page 11-2, fifth paragraph, second sentence states, "The waste will be processed through a flat bed, pre-coat type filter, and a forced circulation type evaporator and series. Change this sentence to read, "Filter effluent is normally discharged to the waste collector tanks via floor drain filter effluent pump. If required by impurity levels, a filter effluent can be processed by flat bed filter, precoat-type filter or a forced circulation type evaporator in series. Refer to FSAR page 11.2-9 (AMD 23) and 11.2-10 (AMD 10).

In the fourth paragraph, fourth line from the bottom of the paragraph states, "the remainder will be recycled to the condensate storage tank for eventual reuse within the plant." Add the words "or service water discharge or waste sample tanks." See FSAR page 11.2-7 (Rev. 0), paragraph 2.

In the fifth paragraph, fourth line, it says, "11,200 gallons per day." It should be 9,420 per FSAR Table 11.2-3 (AMD 23).

Page 11-3, first paragraph, fourth line indicates 3,200 gallons per day. It should be 1,560 gallons per day per FSAR Table 11.2-3 (AMD 23).

The second paragraph, sixth line indicates 1,000 gallons per day. It should be 1,070 per FSAR Table 11.2-3 (AMD 23).

124. Page 11-5, third paragraph, sixth line says the hydrogen analyzers are designed to withstand a hydrogen explosion. Refer to page 11.3-2 (AMD 13).

Fourth paragraph, third line says, "the main stack receives exhaust inputs..." Add "condensate storage tank" to the end of the sentence. Refer to FSAR page 11.3-8 (AMD 12). Further, at the end of the next sentence, add "auxiliary boiler building ventilation." Refer to FSAR page 11.3-8 (AMD 12).

125. Page 11-8, fourth paragraph, fifth line - Change 49 CFR 170 to 49 CFR 190. Also, the last paragraph on the same page, second line - Change 6,000 curies to 11,000. See FSAR Table 11.4-2 (AMD 26). In the first line, change 40,000 cubic feet to 14,200. See FSAR Table 11.4-1 (AMD 8). In the second line of the same paragraph, change 22,000 cubic feet to 10,234. Last line, change "two month" capacity to "three month" capacity. See FSAR Section 11.4-5 (AMD 23).

126. Page 11-9, third paragraph, first line - Change "deluge water spray systems" to "wet pipe sprinkler systems." See FSAR page 9A.3-20 (AMD 23).

127. Page 11-10, fourth paragraph, first line - Add in containment purge to the list of inputs to the main stack. See FSAR page 11.5-9 (AMD 23).

Same paragraph, fifth line - Change "on-line" to "off-line." Fifth paragraph, first line - Change "on-line" to "off-line." Both these references are from FSAR page 11.5-9 (AMD 23).

Sixth paragraph, third line - Remove the words "residual heat removal system." It's just service water discharge. We do not have an "RHR" service water effluent. See FSAR page 11.5-8 (AMD 23).

128. Page 11-11, third full paragraph, fifth line - Change maximum required range of 10^5 microcuries per cc to "the required maximum upper range capacity of 10^5 ..." See FSAR Table 11.5-1, page 1 of 2 (AMD 23).
129. Page 11-14 - These calculated releases are not consistent with FSAR Tables 11.2-5 (AMD 5) and 11.2-4 (AMD 5).
130. Page 11-17 is inconsistent with FSAR Table 11.5-1 (AMD 23).

The following changes should be made:

Main stack exhaust on-line should be changed from 10^{-7} to 10^{-6} . The isotopic trip setpoint should be "NA" for particulates and "NA" isotopic. The Ks-85 should be next to Xe-133 instead of I-131.

Radwaste should be added before "reactor building vent," and it should be off line, not on line. The radwaste reactor building vent on-line should be changed from 10^{-7} to 10^{-6} and from 10^{+1} to 10^{+4} . The isotopic value should go from 10^{-10} to 10^{-11} for those same monitors. For the isotopic and the particulate, it should be both "NA" under trip setpoint.

For the drywell and containment atmosphere, change the off-line from 10^{-6} to 10^{-7} . For the gaseous, change it from 10^{-10} to 10^{-11} , and it should go up to 10^{-5} . The reactor building ventilation above the refuel floor should be changed to offline and on the offline side from 10^{-6} to 10^{-7} . Under function, it should read "monitors for drywell airborne radiation." The main control room intake should go from 10^{-6} to 10^{-7} . Change 10 CFR 20, Appendix B to Tech. Specs.* under trip setpoint.

Offgas pre-treatment off-line gaseous monitor value of 10^{-2} should be 10^{+2} .

The standby gas treatment discharge under function should read monitors containment purge exhaust.

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131. Section 12 of the SER, page 12-1 - SER references Rev. 3 of Reg. Guide 8.8. FSAR Table 1.8-2 (AMD 17) invokes Rev. 4 of the Reg. Guide.
132. SER page 12-7, Section 12.3.4.1 indicates 58 area monitors. FSAR Table 12.3-1 (AMD 24) shows 60 area radiation monitors.
133. Page 12-9 of the SER, first sentence indicates 848 person rems, while FSAR page 12.4-1 (AMD 17) and Table 12.4-12 (AMD 15) indicate 948 person rems.
134. Page 12-1, first paragraph, last line under Section 12.5-2 - The list of calibration facilities - add "at Nine Mile Point Unit 1" after "are available."
135. SER pg. 12-11, Sec. 12.5.3, first sentence - Add in after "assigned" "film badges or." Reference FSAR 12.5-15 (AMD 9), Section 12.5.3.3.7
136. SER page 12-11 states that there are portable air samplers. However, page 1.10-128 (Rev. 0) of the FSAR indicates that there are portable, semi-portable or fixed air samplers used for this purpose. The SER indicates that silver zeolight is used. The FSAR indicates that a charcoal filter or silver zeolight is used. The SER says if entrapped, noble gases ... air sample filters ... The FSAR says, "prior to analysis, filters will be purged. This is unnecessary for silver zeolight."
137. Page 13-2, second paragraph - Supervisory staff of 15 should be 12 permanent supervisors and additional supervisors as required. Ref. FSAR Fig. 13.1-7 (AMD 2).
138. SER pg. 13-23, last paragraph, second to last sentence - It refers to figure 8, and it should be figure 1.
139. SER pg. 13-32 - Add item (8) - Emergency Plan. See FSAR Page 13.2-6 (AMD 22).
140. SER pg. 14-2 - Delete first sentence. It is redundant.



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141. SER pg. 15-3, second sentence - The safety limit should be 1.07 for single loop operation and 1.06 for double loop operation. See FSAR Appendix 15B, pg. 15B.3-5 (AMD 26) and Tech. Spec. pg. 2-1, item #2.1.2.
142. SER pg. 15-15, Section 15.6.5.1, second paragraph - Change draw down time to 129 sec. Refer to FSAR page 6.2-57d (AMD 26).
143. Page 15-17, third paragraph, third and fourth lines - The sentence reads, "All liquid radwaste tanks are located below grade level." Change that to, "...at or below grade level." Ref. FSAR Figure 1.2-13 (AMD 26).
144. Page 15-18 of the SER, last paragraph, second line - Change the words "the air supply" to "the nitrogen supply." Refer to previous comment item 99.
145. Page 15-20, first paragraph, sixth line - It says at this point the main steam line will be isolated automatically and the high pressure core spray system and RCIC system will be automatically initiated. Remove the words "the main steam line will be isolated automatically and." Refer to FSAR page 5.4-17 (AMD 6).

Third paragraph, the seventh and eighth lines indicate ADS will occur on high drywell pressure. Remove the words "high drywell pressure" and refer to FSAR page 7.3-5 (AMD 23).

The last sentence indicates that there is a 120 second timer in that same paragraph. Change 120 to 105 second. Change four signals on that same line to three. Refer to comments item 64.

146. Page 15-23, first paragraph, sixth line indicates that intertie between service water system and reactor building closed loop cooling system. This statement is no longer true. Refer to pages 1.10-95 (AMD 23) and 1.10-96 (Rev. 0).
147. SSER-1, page 6-1, third paragraph - This paragraph needs to be updated based upon the Amendment 25 change to FSAR Pg. 6.1-5 (AMD 26).

148. SSER-2, page 2-1, last paragraph, second line - Remove the words "in NUREG CR2858." Niagara Mohawk did not use NUREG CR2858 - only the NRC staff. FSAR Pg. 2.3-34 (AMD 13) and 2.3-34a (AMD 13).
149. SSER-2, page 2-3 of Supplement 2, third paragraph refers to the US Army 1973. It should be third edition 1975 and addenda 1975. Ref. FSAR Pg. 2.4-42 (11) (Rev. 0).
150. SER page 3-9, second paragraph, second line - Change valves "twice against the maximum design pressure" to "once." Refer to FSAR page 5.2-8a (AMD 19).
151. SER page 13.7, second dot - Change "normal, abnormal and emergency (special operating procedures)" to "normal, abnormal and emergency operating procedures." Remove the word "special." Refer to FSAR Pg. 13.5-5 (AMD 20).
152. SER page 13-20, fifth paragraph says the current NMP-1 TSC is an interim facility. Remove that sentence in its entirety. The new TSC is described in the Emergency Plan.
153. SER page 13-21, second paragraph says the Energy Information Center is designated as the interim Emergency Operations Facility. Remove that sentence. Refer to the Emergency Plan.
154. SER page 13-29, fifth paragraph indicates that it is acceptable for the Station Shift Supervisor to be in the control room when he is located in a glass Shift Supervisor's office, the kitchen interior of the duplex panels or lavatory. It should read, "within aural and visual contact." See FSAR page 1.10-10 (AMD 17).
155. SER page 13-43 - Remove footnote 1. See revised FSAR Figure 13.1-5 (AMD 22).

156. SER page 13-44 - Title of the figure - Remove the words "production organization" and put "operation organization." Also, the Supervisor Operations - Nuclear and the Assistant Operations Supervisor - Nuclear should be changed to Superintendent of Operations and Assistant Superintendent of Operations.
157. SER Section 17.2, third subparagraph indicates the Director of Quality Assurance. This position is now the Vice President of Quality Assurance.
158. SER Table 17.1 is not consistent with Regulatory Guides listed in FSAR Table 17.0-1 (AMD 7). Specifically, Reg. Guide 1.116 and 1.144 do not match FSAR Section 1.8.
159. SER approves the FSAR QA program for the preliminary and preoperational testing phase for Unit 2. Mr. Mangan's March 14, 1986 letter to the NRC indicated that the use of the topical report replaces the Chapter 17 report during startup testing.

NIAGARA MOHAWK COMMENTS ON SER AND SUPPLEMENTS 1 AND 2

<u>Comment</u>	<u>Responsible Review Branch</u>	<u>SER Author</u>
Section I:		
1	PSB	A. Singh
2	PSB	A. Singh
3	PSB/RSB	K. Desai
4	PSB	K. Desai
5	PSB	F. Eltawila
6	EICSR	M. Virgilio
7	EICSB	J. Mauck
8	PSB	A. Singh
9	PSB	D. Smith
10	PSB	J. Lee
11	PSB	J. Lee
12	FOB	R. Benedict
Section II:		
1	EB	A. Brauner
2	EB	A. Brauner
3	EB	J. Levine
4	EB	A. Brauner
5	EB	A. Brauner
6	RSB	J. Levine
7	RSB	J. Levine
8	RSB	J. Levine
9	EB	R. Wescott
10	EB	R. Wescott
11	EB	R. Wescott
12	EB	R. Wescott
13	EB	B. Jagganath
14 (See 3/7/85 memo from Denton to Hooten)	EB	R. Kirkwood
15	EB/PSB	A. Singh
16	EB/PSB	S. Bhatt
17	EB/PSB	S. Bhatt
18 (See 5/13/86 memo Lainas to Adensam)	PSB	J. Ridgely
19 thru 23	EB	L. Yang
24	EB	R. Kirkwood
25	EB	D. Terao
26 (See SSER-3)	EB	O. Rothberg
27	RSB	W. Brooks
28 and 29	RSB	S. Sun
30 and 31	EB	R. Kirkwood

<u>Comment</u>	<u>Responsible Review Branch</u>	<u>SER Author</u>
32	EB	D. Smith
33	PSB	A. Singh
34	RSB	K. Desai
35	PSB	K. Desai
36	EB	D. Smith
37	PSB	F. Witt
38	ER	J. Lane
39 (See also SSER-3)	PSB	F. Eltawila
40	PSB	F. Eltawila
41 thru 44	PSB	J. Lane
45	ER	J. Lane
46 and 47	EB (also PSB/RSB)	J. Lane
48 thru 50	PSB	J. Lane
51 and 52	EB	J. Lane
53 thru 56	RSB	K. Desai
57	RSB/PSB	J. Read
58	PSB	J. Lane
59	PSB	F. Eltawila
60 thru 83	EICSB	M. Virgilio
84 through 86	EICSB	J. Lazevnick
87	PSB	A. Singh
88 thru 91	PSB	A. Singh/B. Turovlin
92 thru 98	PSB	A. Singh
99 and 100	PSB	F. Witt
101 thru 105	PSB	A. Singh
106 thru 112	PSB	J. Stang
113 thru 117	PSB	E. Tomlinson
118 and 119	PSB	A. Singh
120	PSB	B. Turovlin
121	PSB	A. Singh
122 thru 130	PSB	J. Lee
131 thru 136	PSB	F. Skopec
137	FOB	R. Benedict
138	EPLR	M. Gaitanis
139	FOB	R. Benedict
140	FOR	R. Becker
141	RSB	K. Desai
142	RSB (and PSB)	J. Read
143	PSB	J. Lee
144 thru 146	RSB	K. Desai
147	PSB	F. Witt
148	RSB	J. Levine
149	PSB	R. Wescott
150 (this comment should read SSER-2)	ER	R. Wright
151	FOB	D. Shum

<u>Comment</u>	<u>Responsible Review Branch</u>	<u>SER Author</u>
152 and 153 ~ ?	EPLR	M. Gaitanis
154 (See SSER-1)	FOR	R. Benedict
155	FOR	R. Benedict