



GPU Nuclear Corporation  
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Writer's Direct Dial Number:

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April 21, 1994  
C311-94-2038

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Gentlemen:

Subject: Three Mile Island Nuclear Station Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
Final Safety Analysis Report, Update 12  
Fire Hazards Analysis Report, Revision 15

Enclosed are one signed original and ten copies of the Final Safety Analysis Report, Update 12 (UFSAR), for TMI-1 submitted pursuant to 10 CFR 50.71(e). This UFSAR update contains changes necessary to reflect facility changes, procedure changes and analyses through December 31, 1993, as required by the rule.

The TMI-1 UFSAR includes figures which depict building general arrangements, electrical one line diagrams, mechanical system flow diagrams, etc. A number of these figures are reproduced directly from GPUN drawings listed in the Plant Configuration Control List (CCL) which are subject to the GPUN Operational Quality Assurance Plan (OQAP) requirements. This list provides the official record of the current condition of all technical documents and drawings for the plant. Plant activities within the scope of the OQAP and working configuration control must utilize the most recent revision of controlled drawings, when applicable. The FSAR figures do not constitute controlled drawings in this sense. For past FSAR updates, our practice was to copy the latest revision of the GPUN drawing and add a new title block with the appropriate figure number.

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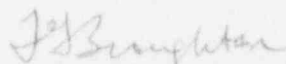
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To encourage the use of the current drawing revision and to reduce administrative costs, GPU Nuclear removed in Update 12 those FSAR figures which are copied from a GPUN controlled drawing and included a specific reference in the text to the GPUN drawing number. This activity was previously discussed with NRC TMI-1 Senior Project Manager.

GPUN estimates this change will reduce the administrative cost for the duration of the current license by approximately \$224,000 without a decrease in safety.

In addition, as part of the annual SAR update process enclosed herewith is one copy of Revision 15 to the Fire Hazards Analysis Report (FHAR). The FHAR, Revision 15, reflects the methodology used at TMI-1 to meet 10 CFR 50, Appendix R. Revision of the document resulted from changes to the facility, procedures, and new design information having been incorporated since Revision 14, through December 31, 1993, as annotated by revision bars.

Sincerely,



T. G. Broughton  
Vice President and Director, TMI

Enclosures

PAA

cc: Region I Administrator, w/FSAR  
TMI-1 Senior Project Manager, wo/enclosure  
TMI Senior Resident Inspector, w/FSAR and FHAR

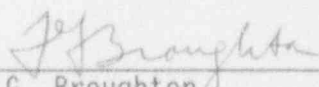
METROPOLITAN EDISON COMPANY  
JERSEY CENTRAL POWER AND LIGHT COMPANY  
PENNSYLVANIA ELECTRIC COMPANY  
GENERAL PUBLIC UTILITIES NUCLEAR CORPORATION

Three Mile Island Nuclear Station, Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289

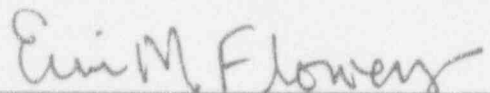
Final Safety Analysis Report, Update 12  
Fire Hazards Analysis Report, Revision 15

COMMONWEALTH OF PENNSYLVANIA) )  
COUNTY OF DAUPHIN ) ) SS:

This letter is submitted to update the Final Safety Analysis Report, Update 12 and the Fire Hazards Analysis Report, Revision 15. As part of this submittal, replacement pages to the Final Safety Analysis Report Report are enclosed. The Fire Hazards Analysis Report is submitted in its entirety due to a word processing conversion.

  
\_\_\_\_\_  
T. G. Broughton  
Vice President and Director, TMI

Signed and sworn before me this  
21<sup>st</sup> day of April, 1994.

  
\_\_\_\_\_  
Erin M. Flowers  
Notary Public

UPDATE 12  
TMI FSAR  
INSTRUCTION MEMO

RETURN TO: GPU Nuclear Corporation  
P. O. Box 480  
Middletown, PA 17057  
Attention: Betty Nash/Debbie Marshbank

NRC  
Document Control Desk  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Date: April 25, 1994

Please update your Three Mile Island FSAR with the attached pages, tables and figures in accordance with the instructions below. Also, please sign this acknowledgement form at the bottom of this page and return the entire page to the addressee above by May 24, 1994.

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Volume 1</u>		
<u>List of Effective Pages</u>	<u>1 thru 41</u>	<u>1 thru 79</u>
<u>Drawing Cross Reference Index</u>	<u>1 thru 60</u>	<u>1 thru 58</u>
<u>Table of Contents</u>	<u>TC-i thru TC-xvii</u>	<u>TC-i thru TC-xvii</u>

(Do not cut off this part from the above)

Additional Instructions:

Please destroy all removed pages.

I hereby acknowledge receipt of the items listed on Pages 1 thru 13 and I have complied with the removal and insertion instructions.

(Name)

(Signature)

(Date)

(Extension)

**NOTE:** Please note the inclusion of pages other than Update 12. They represent reverse sides, punctuation and grammatical changes, and lead-in information essential to printing and distribution process.

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Chapter 1</u>		
<u>Table of Contents</u>	P. 1-xi thru 1-xvi	P. 1-xi thru 1-xiv
<u>Page</u>	P. 1.1-1 & 1.1-2	P. 1.1-1 & 1.1-2
	P. 1.2-5 & 1.2-6	P. 1.2-5 & 1.2-6
	P. 1.3-5 & 1.3-6	P. 1.3-5 & 1.3-6
	P. 1.3-9 & 1.3-10	P. 1.3-9 & 1.3-10
<u>Table</u>	T. 1.3-1 (Sh 3 & 4) (P. 1.3-14 & 1.3-15)	T. 1.3-1 (Sh 3 & 4) P. 1.3-14 & 1.3-15)
<u>Page</u>	P. 1.4-7 & 1.4-8	P. 1.4-7 & 1.4-8
<u>Figure</u>	P. 1.FIG-1 thru 1.FIG-52	Deletion Sheet
<u>Chapter 2</u>		
<u>Page</u>	P. 2.5-11 & 2.5-12	P. 2.5-11 & 2.5-12
	P. 2.6-5 & 2.6-6	P. 2.6-5 & 2.6-6
<u>Table</u>	T. 2.6-5 (Sh 1 thru 3) (P. 2.6-46 - 2.6-48)	T. 2.6-5 (Sh 1 thru 3) (P. 2.6-46 - 2.6-48)
<u>Volume 2</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 3</u>		
<u>Table of Contents</u>	P. 3-ix & 3-x	P. 3-ix & 3-x
<u>Page</u>	P. 3.1-1 & 3.1-2	P. 3.1-1 & 3.1-2
	P. 3.1-7 & 3.1-8	P. 3.1-7 & 3.1-8
	P. 3.2-1 thru 3.2-4	P. 3.2-1 thru 3.2-4
	P. 3.2-7 & 3.2-8	P. 3.2-7 & 3.2-8
	P. 3.2-11 & 3.2-12	P. 3.2-11 & 3.2-12

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Page</u>	P. 3.2-17 & 3.2-18	P. 3.2-17 & 3.2-18
	P. 3.2-21 & 3.2-22	P. 3.2-21 & 3.2-22
	P. 3.2-27 & 3.2-28	P. 3.2-27 & 3.2-28
	P. 3.2-35 thru 3.2-38	P. 3.2-35 thru 3.2-38
	P. 3.2-43 & 3.2-44	P. 3.2-43 & 3.2-44
	P. 3.2-53 thru 3.2-56	P. 3.2-53 thru 3.2-56
	P. 3.2-67 thru 3.2-78	P. 3.2-67 thru 3.2-78
	P. 3.2-83 thru 3.2-88	P. 3.2-83 thru 3.2-88
<u>Table</u>	T. 3.2-1 (P. 3.2-95)	T. 3.2-1 (P. 3.2-95)
	T. 3.2-2 (Sh 1 & 2) (P. 3.2-96 & 97)	T. 3.2-2 (Sh 1 & 2) (P. 3.2-96 & 97)
	T. 3.2-4 (P. 3.2-99)	T. 3.2-4 (P. 3.2-99)
	T. 3.2-5 (P. 3.2-100)	T. 3.2-5 (P. 3.2-100)
	T. 3.2-6 (P. 3.2-101)	T. 3.2-6 (P. 3.2-101)
	T. 3.2-7 (P. 3.2-102)	T. 3.2-7 (P. 3.2-102)
	T. 3.2-9 (P. 3.2-104)	T. 3.2-9 (P. 3.2-104)
	T. 3.2-11 (Sh 1-4) (P. 3.2-106 -3.2-109)	T. 3.2-11(Sh 1-4) (P. 3.2-106 - 3.2-109)
	T. 3.2-16 (Sh 1 & 2) (P. 3.2-114 & 3.2-115)	T. 3.2-16 (Sh 1 & 2) (P. 3.2-114 & 3.2-115)
	T. 3.2-18 (P. 3.2-117)	T. 3.2-18 (P. 3.2-117)



<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Table</u>	T. 3.2-19 (P. 3.2-118)	T. 3.2-19 (P. 3.2-118)
	T. 3.2-24 (P. 3.2-125)	T. 3.2-24 (P. 3.2-125)
<u>Page</u>	P. 3.4-5 & 3.4-6	P. 3.4-5 & 3.4-7
<u>Figure</u>	P. 3.FIG-1 P. 3.FIG-2 P. 3.FIG-7 P. 3.FIG-8	P. 3.FIG-1 P. 3.FIG-2 P. 3.FIG-7 Deletion Sheet
<u>Chapter 4</u> <u>Table of Contents</u>	P. 4-iii thru 4-viii	P. 4-iii thru 4i-viii
<u>Page</u>	P. 4.1-3 & 4.1-4  P. 4.1-7	P. 4.1-3 & 4.1-4  P. 4.1-7
<u>Table</u>	T. 4.1-1 & 4.1-2 (P. 4.1-8 & 4.1-9)	T. 4.1-1 & 4.1-2 (P. 4.1-8 & 4.1-9)
<u>Page</u>	P. 4.2-1 & 4.2-2  P. 4.2-7 & 4.2-8  P. 4.2-19 thru 4.2-24  P. 4.3-9 thru 4.3-21  P. 4.4-5 & 4.4-6  P. 4.5-3	P. 4.2-1 & 4.2-2  P. 4.2-7 & 4.2-8  P. 4.2-19 thru 4.2-24  P. 4.3-9 thru 4.3-21  P. 4.4-5 & 4.4-6  P. 4.5-3
<u>Figure</u>	P. 4.FIG-1	Deletion Sheet
<u>Volume 3</u> <u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 5</u> <u>Table of Contents</u>	P. 5-vii thru 5-xiv	P. 5-vi thru 5-xiv
<u>Page</u>	P. 5.1-6 thru 5.1-9  P. 5.2-47 & 5.2-48  P. 5.2-53 & 5.2-54	P. 5.1-6 thru 5.1-9  P. 5.2-47 & 5.2-48  P. 5.2-53 & 5.2-54

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
	P. 5.3-1 thru 5.3-15	P. 5.3-1 thru 5.3-15
<u>Table</u>	T. 5.3-1 (P. 5.3-16)	T. 5.3-1 (P. 5.3-16)
	T. 5.3-2 (Sh 1 thru 6) (P. 5.3-17 - 5.3-22)	T. 5.3-2 (Sh 1 thru 6) (P. 5.3-17 - 5.3-22)
		T. 5.3-5 (P. 5.3-25)
	T. 5.3-5 (P. 5.3-28)	T. 5.3-5 (P. 5.3-28)
<u>Page</u>	P. 5.4-9 thru 5.4-14	P. 5.4-9 thru 5.4-14
<u>Table</u>	T. 5.4-1 (Sh 3-6) (P. 5.4-25 - 5.4-28)	T. 5.4-1 (Sh 3-6) (P. 5.4-25 - 5.4-28)
<u>Page</u>	P. 5.5-5 & 5.5-6	P. 5.5-5 & 5.5-6
	P. 5.7-5	P. 5.7-5 thru 5.7-7
<u>Table</u>	T. 5.7-1 (Sh 1-4) (P. 5.7-6 - 5.7-9)	T. 5.7-1 (Sh 1-4) (P. 5.7-8 - 5.7-11)
	T. 5.7-2 (P. 5.7-10)	T. 5.7-2 (P. 5.7-12)
	T. 5.7-3 (P. 5.7-11)	T. 5.7-3 (P. 5.7-13)
<u>Figure</u>	P. 5.FIG-3a thru 5.FIG-3e	Deletion Sheet
	P. 5.FIG-35 thru 5.FIG-38	Deletion Sheet
	P. 5.FIG-40	Deletion Sheet
	P. 5.FIG-41 & 5.FIG-42	Deletion Sheet
	P. 5.FIG-44 thru 5 FIG-47	Deletion Sheet
	P. 5.FIG-60	Deletion Sheet
<u>Volume 4</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Appendix 5A TOC</u>	P. 5A-iv & 5A-v	P. 5A-iv & 5A-v
<u>Page</u>	P. 5A-9 & 5A-10	P. 5A-9 & 5A-10



<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
	P. 5A-13 & 5A-14	P. 5A-13 & 5A-14
<u>Figure</u>	P. 5A.FIG-24 & 5A.FIG 25	Deletion Sheet
<u>Appendix 5D TOC</u>	P. 5D-iii & 5D-iv	P. 5D-iii & 5D-iv
<u>Figure</u>	P. 5D.FIG-1 thru 5D.FIG-6	Deletion Sheet
<u>Volume 5</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 6</u>		
<u>Table of Contents</u>	P. 6-vii & 6-viii	P. 6-vii & 6-viii
<u>Page</u>	P. 6.0-1 & 6.0-2	P. 6.0-1 & 6.0-2
	P. 6.1-1 thru 6.1-4	P. 6.1-1 thru 6.1-4
	P. 6.1-7 thru 6.1-10	P. 6.1-7 thru 6.1-10
	P. 6.1-13 & 6.1-14	P. 6.1-13 & 6.1-14
<u>Table</u>	T. 6.1-2 (Sh 1 & 2) (P. 6.1-18 & 6.1-19)	T. 6.1-2 (Sh 1 & 2) (P. 6.1-18 & 6.1-19)
	T. 6.1-3 (Sh 1 & 2) (P. 6.1-22 & 6.1-23)	T. 6.1-3 (Sh 1 & 2) (P. 6.1-22 & 6.1-23)
<u>Page</u>	P. 6.2-1 thru 6.2-4	P. 6.2-1 thru 6.2-4
	P. 6.2-7	P. 6.2-7
<u>Table</u>	T. 6.2-1 (P. 6.2-8)	T. 6.2-1 (P. 6.2-8)
<u>Page</u>	P. 6.3-1 & 6.3-2	P. 6.3-1 & 6.3-2
<u>Table</u>	T. 6.3-1 (Sh 1 & 2) (P. 6.3-4 & 6.3-5)	T. 6.3-1 (Sh 1 & 2) (P. 6.3-1 & 6.3-5)
	T. 6.3-2 (Sh 1 & 2) (P. 6.3-6 & 6.3-7)	T. 6.3-2 (Sh 1 & 2) (P. 6.3-6 & 6.3-7)
<u>Page</u>	P. 6.4-1 & 6.4-2	P. 6.4-1 & 6.4-2
<u>Table</u>	T. 6.4-2 (P. 6.4-8)	T. 6.4-2 (P. 6.4-8)
<u>Page</u>	P. 6.5-1 thru 6.5-6	P. 6.5-1 thru 6.5-6

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Figure</u>	P. 6.FIG-3 & 6.FIG-4	Deletion Sheet
	P. 6.FIG-5	Deletion Sheet
	P. 6.FIG-7	P. 6.FIG-7
	P. 6.FIG-12	Deletion Sheet
<u>Appendix 6B</u>		
<u>Page</u>	P. 6B-9 & 6B-10	P. 6B-9 & 6B-10
	P. 6B-11 thru 6B-14	P. 6B-11 thru 6B-14
	P. 6B-17 & 6B-18	P. 6B-17 & 6B-18
<u>Chapter 7</u>		
<u>Table of Contents</u>	P. 7-iii thru 7-vii	P. 7-iii thru 7-vii
<u>Page</u>	P. 7.1-5 & 7.1-6	P. 7.1-5 & 7.1-6
	P. 7.1-17 thru 7.1-20	P. 7.1-17 thru 7.1-20
	P. 7.1-25 & 7.1-26	P. 7.1-25 & 7.1-26
	P. 7.1-29 & 7.1-30	P. 7.1-29 & 7.1-30
<u>Table</u>	T. 7.1-1 (Sh 1 & 2) (P. 7.1-34 & 7.1-35)	T. 7.1-1 (Sh 1 & 2) (P. 7.1-34 & 7.1-35)
	T. 7.1-2 (Sh 1 & 2) (P. 7.1-36 & 7.1-37)	T. 7.1-2 (Sh 1 & 2) (P. 7.1-36 & 7.1-37)
<u>Page</u>	P. 7.2-3 thru 7.2-8	P. 7.2-3 thru 7.2-8
	P. 7.2-13 thru 7.2-22	P. 7.2-13 thru 7.2-22
	P. 7.3-5 thru 7.3-8	P. 7.3-5 thru 7.3-8
	P. 7.3-13 thru 7.3-18	P. 7.3-13 thru 7.3-18
	P. 7.3-25 & 7.3-26	P. 7.3-25 & 7.3-26
<u>Table</u>	T. 7.3-2 (Sh 1-18) (P. 7.3-35 - 7.3-52)	T. 7.3-2 (Sh 1-18) (P. 7.3-35 - 7.3-52)

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Page</u>	P. 7.4-1 thru 7.4-8	P. 7.4-1 thru 7.4-8
	P. 7.4-15 thru 7.4-23	P. 7.4-15 thru 7.4-22
<u>Table</u>	T. 7.4-1 (Sh 1 thru 12) (P. 7.4-24 - 7.4-35)	T. 7.4-1 (Sh 1 thru 12) (P. 7.4-23 - 7.4-34)
<u>Page</u>	P. 7.5-1	P. 7.5-1 & 7.5-2
<u>Figure</u>	P. 7.FIG-1 thru 7.FIG-5	Deletion Sheet
	P. 7.FIG-6	P. 7.FIG-6
	P. 7.FIG-10 & 7.FIG-11	P. 7.FIG-10 & 7.FIG-11
	P. 7.FIG-13 & 7.FIG-14	Deletion Sheet
	P. 7.FIG-19 thru 7.FIG-21	Deletion Sheet
	P. 7.FIG-23	Deletion Sheet
	P. 7.FIG-27 thru 7.FIG-31	Deletion Sheet
	P. 7.FIG-34 & 7.FIG-35	Deletion Sheet
<u>Volume 6</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 8</u>		
<u>Table of Contents</u>	P. 8-i thru 8-iv	P. 8-i thru 8-iv
<u>Page</u>	P. 8.2-1 thru 8.2-14	P. 8.2-1 thru 8.2-14
	P. 8.2-21 thru 8.2-26	P. 8.2-21 thru 8.2-26
	P. 8.2-29 thru 8.2-30	P. 8.2-29 thru 8.2-31
<u>Table</u>	T. 8.2-1 thru 8.2-7 (P.8.2-31 - 8.2-57)	Deletion Sheet
	T. 8.2-8 (Sh 1-3) (P. 8.2-58 - 8.2-60)	T. 8.2-8 (Sh 1-3) (P. 8.2-32 - 8.2-34)
	T. 8.2-9 (Sh 1-3) (P. 8.2-61 - 8.2-63)	T. 8.2-9 (Sh 1-3) (P. 8.2-35 - 8.2-37)
	T. 8.2-10 (Sh 1) (P. 8.2-64)	T. 8.2-10 (Sh 1-3) (P. 8.2-38 thru 8.2-40)

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Table</u>	T. 8.2-11 (P. 8.2-65)	T. 8.2-11 (P. 8.2-41)
	T. 8.2-12 (Sh 1 & 2) (P. 8.2-66 & 8.2-67)	T. 8.2-12 (Sh 1 & 2) (P. 8.2-42 & 8.2-43)
	T. 8.2-13 (P. 8.2-68 & 8.2-69)	T. 8.2-13 (P. 8.2-44 & 8.2-45)
<u>Page</u>	P. 8.5-1 & 8.5-2	P. 8.5-1 & 8.5-2
	P. 8.6-1	P. 8.6-1
<u>Figure</u>	P. 8.FIG-1 thru 8.FIG-5	Deletion Sheet
	P. 8.FIG-7 & 8.FIG-8	Deletion Sheet
<u>Chapter 9</u>		
<u>Table of Contents</u>	P. 9-iii thru 9-vi	P. 9-iii & 9-vi
	P. 9-ix thru 9-xii	P. 9-ix thru 9xii
<u>Page</u>	P. 9.0-1 & 9.0-2	P. 9.0-1 & 9.0-2
	P. 9.1-1 & 9.1-2	P. 9.1-1 & 9.1-2
<u>Table</u>	T. 9.1-2 (Sh 1-4) (P. 9.2-10 - 9.2-13)	T. 9.1-2 (Sh 1-4) (P. 9.2-10 - 9.2-13)
<u>Page</u>	P. 9.2-1 & 9.2-2	P. 9.2-1 & 9.2-2
	P. 9.2-5 & 9.2-6	P. 9.2-5 & 9.2-6
<u>Page</u>	P. 9.3-1 & 9.3-2	P. 9.3-1 & 9.3-2
<u>Table</u>	T. 9.3-1 (Sh 1) (P. 9.3-4)	T. 9.3-1 (Sh 1) (P. 9.3-4)
	T. 9.3-2 (Sh 1) (P. 9.3-5)	T. 9.3-2 (Sh 1) (P. 9.3-5)
<u>Page</u>	P. 9.4-1 & 9.4-2	P. 9.4-1 & 9.4-2
<u>Table</u>	T. 9.4-1 (Sh 1 & 2) (P. 9.4-6 & 9.4-7)	T. 9.4-1 (Sh 1 & 2) (P. 9.4-6 & 9.4-7)
<u>Page</u>	P. 9.5-1 & 9.5-2	P. 9.5-1 & 9.5-2
<u>Table</u>	T. 9.5-1 (P. 9.5-5)	T. 9.5-1 (P. 9.5-5)

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
	T. 9.5-2 (Sh 1 & 2) (P. 9.5-6 & 9.5-7)	T. 9.5-2 (Sh 1 & 2) (P. 9.5-6 & 9.5-7)
<u>Page</u>	P. 9.6-1 thru 9.6-6	P. 9.6-1 thru 9.6-6
	P. 9.6-9 thru 9.6-14	P. 9.6-9 thru 9.6-14
<u>Table</u>	T. 9.6-1 (Sh 1-4) (P. 9.6-16 - 9.6-19)	T. 9.6-1 (Sh 1-4) (P. 9.6-16 - 9.6-19)
<u>Page</u>	P. 9.7-1 thru 9.7-4	P. 9.7-1 thru 9.7-4
	P. 9.7-9 thru 9.7-13	P. 9.7-9 thru 9.7-16
<u>Table</u>	T. 9.7-1 (P. 9.7-14)	T. 9.7-1 (P. 9.7-17)
<u>Page</u>	P. 9.8-1 & 9.8-2	P. 9.8-1 & 9.8-2
	P. 9.8-5 & 9.8-6	P. 9.8-5 & 9.8-6
	P. 9.8-11 & 9.8-12	P. 9.8-11 & 9.8-12
	P. 9.8-17 & 9.8-18	P. 9.8-17 & 9.8-18
	P. 9.8-23 thru 9.8-28	P. 9.8-23 thru 9.8-28
	P. 9.9-1 thru 9.9-6	P. 9.9-1 thru 9.9-6
	P. 9.9-9 thru 9.9-12	P. 9.9-9 thru 9.9-12
	P. 9.9-15 & 9.9-16	P. 9.9-15 & 9.9-16
	P. 9.10-1 thru 9.10-6	P. 9.10-1 thru 9.10-6
	P. 9.11-1	P. 9.11-1
<u>Figure</u>	P. 9.FIG-1 thru 9.FIG-22	Deletion Sheets
	P. 9.FIG-23	P. 9.FIG-23
	P. 9.FIG-25	Deletion Sheet
	P. 9.FIG-27 thru 9.FIG-30	Deletion Sheets
	P. 9.FIG-33 & 9.FIG-34	Deletion Sheet

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Volume 7</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 10</u>		
<u>Table of Contents</u>	P. 10-v	P.10-v
<u>Page</u>	P. 10.2-1 & 10.2-2	P. 10.2-1 & 10.2-2
	P. 10.3-1 & 10.3-2	P. 10.3-1 & 10.3-2
	P. 10.3-5 thru 10.3-8	P. 10.3-5 thru 10.3-8
	P. 10.4-1 & 10.4-2	P. 10.4-1 & 10.4-2
	P. 10.4-5 & 10.4-6	P. 10.4-5 & 10.4-6
<u>Table</u>	T. 10.4-1 (Sh 5) (P. 10.4-11)	T. 10.4-1 (Sh 5) (P. 10.4-11)
<u>Page</u>	P. 10.5-1 & 10.5-2	P. 10.5-1 & 10.5-2
	P. 10.6-1 & 10.6-2	P. 10.6-1 & 10.6-2
<u>Figure</u>	P. 10.FIG-1a & 10.FIG-1b	Deletion Sheet
<u>Chapter 11</u>		
<u>Table of Contents</u>	P. 11-i thru 11-viii	P. 11-i thru 11-viii
<u>Page</u>	P. 11.2-1 thru 11.2-23	P. 11.2-1 thru 11.2-23
<u>Table</u>	T. 11.2-1 (Sh 9 thru 12) (P. 11.2-32 - 11.2-35)	T. 11.2-1 (Sh 9 thru 12) (P. 11.2-32 - 11.2-35)
	T. 11.2-5 (Sh 1-3) (P. 11.2-42 - 11.2-44)	T. 11.2-5 (Sh 1-3) (P. 11.2-42 - 11.2-44)
	T. 11.2-9 (Sh 5 & 6) (P. 11.2-54 & 11.2-55)	T. 11.2-9 (Sh 5 & 6) (P. 11.2-54 & 11.2-55)
<u>Page</u>	P. 11.4-7 thru 11.4-15	P. 11.4-7 thru 11.4-16
<u>Table</u>	T. 11.4-1 (Sh 1-5) (P. 11.4-16 - 11.4-20)	P. 11.4-1 (Sh 1-5) (P. 11.4-17 - 11.4-21)
	T. 11.4-2 (Sh 1-9) (P. 11.4-21 - 11.4-29)	P. 11.4-2 (Sh 1-9) (P. 11.4-22 - 11.4-30)
	T. 11.4-3 (P. 11.4-30)	T. 11.4-3 (P. 11.4-31)



<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
<u>Page</u>	P. 11.5-1 & 11.5-2	P. 11.5-1 & 11.5-2
	P. 11.5-5 thru 11.5-10	P. 11.5-5 thru 11.5-10
<u>Page</u>	P. 11.5-13 & 11.5-14	P. 11.5-13 & 11.5-14
	P. 11.6-1 thru 11.6-4	P. 11.6-1 thru 11.6-4
<u>Figure</u>	P. 11.FIG-1 thru 11.FIG-11	Deletion Sheet
	P. 11.FIG-13	Deletion Sheet
	P. 11.FIG-28	P. 11.FIG-28
<u>Appendix 11A</u>		
<u>Page</u>	P. 11A.6-5 & 11A.6-6	P. 11A.6-5 & 11A.6-6
<u>Volume 8</u>		
<u>Table of Contents</u>	TC-i thru TC-xvii	TC-i thru TC-xvii
<u>Chapter 12</u>		
<u>Table of Contents</u>	P. 12-i thru 12-vi	P. 12-i thru 12-vi
<u>Page</u>	P. 12.1-3 thru 12.1-65	P. 12.1-3 thru 12.1-61
	P. 12.2-1 thru 12.2-5	P. 12.2-1 thru 12.2-5
	P. 12.3-1 thru 12.3-4	P. 12.3-1 thru 12.3-4
	P. 12.4-1	P. 12.4-1
	P. 12.9-1	P. 12.9-1
<u>Figure</u>	P. 12.FIG-1 & FIG-2	P. 12.FIG-1 & FIG-2
<u>Chapter 14</u>		
<u>Table of Contents</u>	P. 14-i & 14-ii	P. 14-i & 14-ii
<u>Page</u>	P. 14.1-33 & 14.1-34	P. 14.1-33 & 14.1-34
	P. 14.2-7 & 14.2-8	P. 14.2-7 & 14.2-8
	P. 14.2-19 thru 14.2-22	P. 14.2-19 thru 14.2-22
	P. 14.2-25 thru 14.2-34	P. 14.2-25 thru 14.2-34
	P. 14.2-39 thru 14.2-42	P. 14.2-39 thru 14.2-42

<u>PAGE LOCATIONS</u>	<u>REMOVE PAGES</u>	<u>INSERT</u>
	P. 14.2-45 & 14.2-46	P. 14.2-45 & 14.2-46
<u>Table</u>	T. 14.2-1 (P. 14.2-51)	T. 14.2-1 (P. 14.2-51)
	T. 14.2-27) (P. 14.2-84)	T. 14.2-27 (P. 14.2-84)
	T. 14.2-28 (Sh 1) (P. 14.2-85)	T. 14.2-28 (Sh 1 & 2) (P. 14.2-85 & 14.2-86)
<u>Page</u>	P. 14.3-5	P.14.3-5
<u>Figure</u>	P. 14.FIG-50	P. 14.FIG-50
		P. 14.FIG-78
<u>Volume 9</u>		
<u>Table of Contents</u>	TC-i thru xvii	TC-i thru TC-xvii
<u>Appendix 14A</u>		
<u>Page</u>	P. 14A-3 & 14A-4	P. 14A-3 & 14A-4
	P. 14A-13 thru 14A-16	P. 14A-13 thru 14A-16
<u>Appendix 14B TOC</u>	P. 14B-i thru 14B-iv	P. 14B-i thru 14B-iii
<u>Page</u>	P. 14B-1 thru 14B-22	P. 14B-1 thru 14B-20
<u>Table</u>	T. 14B-1 (P. 14B-23)	T. 14B-1 (P. 14B-21)
	T. 14B-2 (Sh 1 & 2) (P. 14B-24 & 14B-25)	T. 14B-2 (Sh 1 & 2) (P. 14B-22 & 14B-23)
	T. 14B-3 (P. 14B-26)	T. 14B-3 (P. 14B-24)
<u>Appendix C</u>		
<u>Page</u>	P. 14C-1 thru 14C-6	P. 14C-1 thru 14C-6
<u>Table</u>	T. 14C-1 (P. 14C-7)	T. 14C-1 (P. 14C-7)

# VOLUME 1

# LIST OF EFFECTIVE PAGES