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December 10, 2003

**SUBJECT: WESTINGHOUSE AP1000 PROBABILISTIC RISK ASSESSMENT REPORT  
REVISION 5**

Attached please find Revision 5 of the AP1000 Probabilistic Risk Assessment (PRA) report. Revision 5 incorporates the additional Westinghouse responses to Open Items identified in the Draft Safety Evaluation Report that have been transmitted to the U.S. Nuclear Regulatory Commission since August 29, 2003. The PRA report contains a Revision 5 Change Roadmap that provides the basis for each of the changes incorporated in the PRA. Please note that Revision 5 only includes an update to those sections of the PRA that contain changes.

There is no information proprietary to Westinghouse included in this transmittal. The Westinghouse Electric Company copyright notice is included within the document.

Please contact me if you have any questions concerning this transmittal.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'R. P. Vijuk'.

R. P. Vijuk, Manager  
Passive Plant Engineering  
AP600 & AP1000 Projects

/Attachment

1. APP-GW-GL-022, Revision 5, "AP1000 Probabilistic Risk Assessment," December 20, 2003

D063

December 10, 2003

Attachment 1

APP-GW-GL-022, Revision 5  
“AP1000 Probabilistic Risk Assessment”  
dated December 10, 2003

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# AP1000 Probabilistic Risk Assessment

## Instructions for Inserting Revision 5 Change Pages

(December 2003)

### Volume 1

Remove the Revision No. 4 "AP1000 Document Cover Sheet" from the front of the volume, and insert the Revision No. 5 "AP1000 Document Cover Sheet."

Then after the AP1000 Volume 1 Title Page (color), remove the following pages and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
i (Rev. 4)/ii (Rev. 4) <u>through</u> cxiii (Rev. 4)/Blank	i (Rev. 5)/ii (Rev. 5) <u>through</u> cxv (Rev. 5)/Blank

### Volume 2

After the AP1000 Volume 2 Title Page (color), remove the following pages and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
i (Rev. 4)/ii (Rev. 4) <u>through</u> cxiii (Rev. 4)/Blank	i (Rev. 5)/ii (Rev. 5) <u>through</u> cxv (Rev. 5)/Blank

## Volume 3

After the AP1000 Volume 3 Title Page (color), remove the following pages and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
i (Rev. 4)/ii (Rev. 4) <u>through</u> cxiii (Rev. 4)/Blank	i (Rev. 5)/ii (Rev. 5) <u>through</u> cxv (Rev. 5)/Blank

After Tab 43 “Release Frequency Quantification,” remove all of the pages within this tab and insert the Revision 5 pages as follows:

Remove Pages	Insert Page
43-1 (Rev. 4)/43-2 (Rev.4) <u>through</u> 43E-1 (Rev. 4)/43E-2 (Rev. 4)	43-1 (Rev. 5)/43-2 (Rev.5) <u>through</u> 43E-1 (Rev. 5)/43E-2 (Rev. 5)

After Tab 45 “Fission-Product Source Terms,” remove all of the pages within this tab and insert the Revision 5 pages as follows:

Remove Pages	Insert Page
45-1 (Rev. 4)/45-2 (Rev.4) <u>through</u> 45-47 (Rev. 4)/45-48 (Rev. 4)	45-1 (Rev. 5)/45-2 (Rev.5) <u>through</u> 45-47 (Rev. 5)/45-48 (Rev. 5)

## Volume 4

After the AP1000 Volume 4 Title Page (color), remove the following pages and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
i (Rev. 4)/ii (Rev. 4) <u>through</u> cxiii (Rev. 4)/Blank	i (Rev. 5)/ii (Rev. 5) <u>through</u> cxv (Rev. 5)/Blank

**Volume 4 (Cont.)**

After Tab 54 “Low Power and Shutdown Risk Assessment,” remove all of the pages within this tab and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
54-1 (Rev. 4)/54-2 (Rev. 4) <u>through</u> 54-147 (Rev. 4)/54-148 (Rev. 4)	54-1 (Rev. 5)/54-2 (Rev. 5) <u>through</u> 54-171 (Rev. 5)/54-172 (Rev. 5)

After Tab 55 “Seismic Margin Analysis,” remove all of the pages within this tab and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
55-1 (Rev. 4)/55-2 (Rev. 4) <u>through</u> 55-29 (Rev. 4)/55-30 (Rev. 4)	55-1 (Rev. 5)/55-2 (Rev. 5) <u>through</u> 55-29 (Rev. 5)/55-30 (Rev. 5)

After Tab 59 “PRA Results and Insights,” remove all of the pages within this tab and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
59-1 (Rev. 4)/59-2 (Rev. 4) <u>through</u> 59-99 (Rev. 4)/59-100 (Rev. 4)	59-1 (Rev. 5)/59-2 (Rev. 5) <u>through</u> 59-99 (Rev. 5)/59-100 (Rev. 5)

**Volume 5**

After the AP1000 Volume 5 Title Page (color), remove the following pages and insert the Revision 5 pages as follows:

Remove Pages	Insert Pages
i (Rev. 4)/ii (Rev. 4) <u>through</u> cxiii (Rev. 4)/Blank	i (Rev. 5)/ii (Rev. 5) <u>through</u> cxv (Rev. 5)/Blank

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**Volume 5 (Cont.)**

After Tab "Appendix A," remove all of the pages within this tab and insert the Revision 5 pages as follows:

<b>Remove Pages</b>	<b>Insert Pages</b>
A-1 (Rev. 3)/A-2 (Rev. 3) <u>through</u> A-181 (Rev. 3)/A-182 (Rev. 3)	A-1 (Rev. 5)/A-2 (Rev. 5) <u>through</u> A-181 (Rev. 5)/Blank