

ATTACHMENT 5 TO NL-05-020

UPDATED ERRATA PAGES FOR IP3 SPU; WCAP-16212-NP

Section	Page	Revision Location	Revision Description
6.11	6.11-92	Table 6.11-22	Changed footnote to revise X/Q inputs
6.11	6.11-93	Table 6.11-23	Changed footnote to revise X/Q inputs
6.11	6.11-94	Table 6.11-24	Changed footnote to revise X/Q inputs
6.11	6.11-95	Table 6.11-25	Changed footnote to revise X/Q inputs
6.11	6.11-96	Table 6.11-26	Changed footnote to revise X/Q inputs

These five updated errata pages replace the corresponding five errata pages transmitted by Entergy letter NL-05-013, Attachment 5, dated January 28, 2005.

Table 6.11-22 (Cont.)

Assumptions Used for LBLOCA Analysis

Offsite Atmospheric Dispersion Factors	See Table 6.11-11
Offsite Breathing Rates	See Table 6.11-11
Control Room Model	See Table 6.11-12
Time to Start Crediting Emergency Control Room HVAC	1 minute
Control Room Atmospheric Dispersion (χ/Q) Factors¹	
Containment Releases:	
0 - 2 hours	3.57E-4 sec/m ³
2 - 8 hours	3.12E-4 sec/m ³
8 - 24 hours	1.24E-4 sec/m ³
24 - 96 hours	1.06E-4 sec/m ³
96 - 720 hours	7.99E-5 sec/m ³
ECCS leakage:	
0 - 2 hours	5.93E-4 sec/m ³
2 - 8 hours	4.92E-4 sec/m ³
8 - 24 hours	2.06E-4 sec/m ³
24 - 96 hours	1.69E-4 sec/m ³
96 - 720 hours	1.26E-4 sec/m ³

1. The χ/Q values listed in this table are those used in the analysis to calculate the control room operator doses for this postulated event. Subsequent to submittal of this report, the χ/Q values were corrected from the original determination. The values for containment leakage releases did not change. The revised values for the ECCS leakage releases via the containment vent are slightly higher than those used in the dose analysis:

0 - 2 hr	6.00E-4 sec/m ³
2 - 8 hr	5.20E-4 sec/m ³
8 - 24 hr	2.12E-4 sec/m ³
24 - 96 hr	1.76E-4 sec/m ³
96 - 720 hr	1.30E-4 sec/m ³

Evaluation of the LBLOCA dose analysis has determined that, due to unspecified conservatisms in the analysis, the reported doses do not change.

Table 6.11-23

Assumptions Used for GDT Rupture Dose Analysis

Nuclide Parameters	See Table 6.11-10
GDT Inventory (Dose Equivalent Xe-133)	50,000 Ci
Duration of Release	5 minutes
Offsite Atmospheric Dispersion Factors	See Table 6.11-11
Offsite Breathing Rates	See Table 6.11-11
Control Room Model	See Table 6.11-12
Control Room Atmospheric Dispersion (χ/Q) factors ¹	
Containment Vent Releases:	
0 - 2 hours	5.93E-4 sec/m ³
Time to Start Crediting Emergency Control Room HVAC	5 minutes

1. The χ/Q value listed in this table was used in the analysis to calculate the control room operator doses for this postulated event. Subsequent to submittal of this report, the χ/Q values were corrected from the original determination. The revised value for the containment vent releases increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 6.11-24

Assumptions Used for VCT Rupture Dose Analysis

Nuclide Parameters	See Table 6.11-11
VCT Inventory (Ci)	See Table 6.11-6
Duration of Activity Release from Tank	5 minutes
Iodine Partition Coefficient for VCT Liquid	0.01
Primary Coolant Noble Gas Activity	1.0% fuel defect level (See Table 6.11-14)
Primary Coolant Initial Iodine Activity	1.0 $\mu\text{Ci/gm}$ of DE I-131 (See Table 6.11-15)
Letdown Flow Rate	132 gpm
Iodine Partition Coefficient for Letdown Releases	0.1
Letdown Line Demineralizer DF for Iodine	10
Time to Isolate Letdown Flow	30 minutes
Offsite Atmospheric Dispersion Factors	See Table 6.11-11
Offsite Breathing Rate	See Table 6.11-11
Control Room Model	See Table 6.11-12
Control Room Atmospheric Dispersion (χ/Q) factors ¹	
Containment Vent Releases:	
0 - 2 hours	5.93E-4 sec/m^3
Time to Start Crediting Emergency Control Room HVAC	5 minutes

1. The χ/Q value listed in this table was used in the analysis to calculate the control room operator doses for this postulated event. Subsequent to submittal of this report, the χ/Q values were corrected from the original determination. The revised value for the containment vent releases increased slightly to 6.00E-4 sec/m^3 . Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 6.11-25

Assumptions Used for HT Failure Dose Analysis

Nuclide Parameters	See Table 6.11-10
Duration of Activity Release from Tank	5 minutes
Iodine Partition Coefficient for HT Liquid	0.01
HT Volume	8500 ft ³
HT Full Level	80%
Primary Coolant Noble Gas Activity	1.0% fuel defect level (See Table 6.11-14)
Primary Coolant Initial Iodine Activity	1.0 μCi/gm of DE I-131 (See Table 6.11-15)
Tank Fill Time	24 hours
Letdown Demineralizer DF for Iodines	10
Offsite Atmospheric Dispersion Factors	See Table 6.11-11
Offsite Breathing Rates	See Table 6.11-11
Control Room Model	See Table 6.11-12
Control Room Atmospheric Dispersion (χ/Q) factors ¹	
Containment Vent Releases:	
0 - 2 hours	5.93E-4 sec/m ³
Time to Start Crediting Emergency Control Room HVAC	5 minutes

1. The χ/Q value listed in this table was used in the analysis to calculate the control room operator doses for this postulated event. Subsequent to submittal of this report, the χ/Q values were corrected from the original determination. The revised value for the containment vent releases increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 6.11-26

Assumptions Used for FHA Analysis

Source Term	
Nuclide Parameters	See Table 6.11-10
Core Total Fission Product Activity (with 84 Hours Decay)	See Table 6.11-27
Number of Fuel Assemblies	193
Radial Peaking Factor	1.70
Fuel Rod Gap Fraction	
I-131	12%
Kr-85	30%
Other Iodines and Noble Gases	10%
Fuel Damaged	One assembly
Time after Shutdown	84 hours
Water Depth	23 feet
Overall Iodine Scrubbing Factor	200
Noble Gases Scrubbing Factor	1
Filter Efficiency	No filtration of releases assumed
Isolation of Release	No isolation of releases assumed
Time to Release All Activity	2 hours
Offsite Atmospheric Dispersion Factors	See Table 6.11-11
Offsite Breathing Rates	See Table 6.11-11
Control Room Model	See Table 6.11-12
Time to Start Crediting Emergency Control Room HVAC	24 minutes
Control Room Atmospheric Dispersion (χ/Q) Factors ¹	
Containment Vent:	
0 - 2 hours	5.93E-4 sec/m ³
<p>1. The χ/Q value listed in this table was used in the analysis to calculate the control room operator doses for this postulated event. Subsequent to submittal of this report, the χ/Q values were corrected from the original determination. The revised value for the containment vent releases increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatisms in the analysis, the reported doses do not change.</p>	

ATTACHMENT 6 TO NL-05-020

UPDATED ERRATA PAGES FOR IP3 AST

Page	Revision Location	Revision Description
50	Table 12	Changed footnote to revise X/Q inputs
65	Table 21	Changed footnote to revise X/Q inputs
66	Table 22	Changed footnote to revise X/Q inputs
67	Table 23	Changed footnote to revise X/Q inputs
68	Table 24	Changed footnote to revise X/Q inputs

These five updated errata pages replace the corresponding five errata pages transmitted by Entergy letter NL-05-013, Attachment 3, dated January 28, 2005.

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

Table 12 (Cont.): Assumptions Used for Large Break LOCA Dose Analysis	
Containment spray DF	
Elemental	200
Particulate	1000
Credited containment sump volume	374,400 gal
Leakage of sump solution outside of containment	
0 – 4 hours	1.0 gph
4 – 6.5 hours	0.0 gph
> 6.5 hours	4.0 gph
Iodine airborne fraction for leakage of sump solution outside of containment	
0 – 4 hours	10.0%
4 – 6.5 hours	NA
> 6.5 hours	2.7%
Control Room atmospheric dispersion (χ/Q) factors	
Releases from containment surface ⁽¹⁾ :	
0 – 2 hours	3.57E-4 sec/m ³
2 – 8 hours	3.12E-4 sec/m ³
8 – 24 hours	1.24E-4 sec/m ³
24 – 96 hours	1.06E-4 sec/m ³
96 – 720 hours	7.99E-5 sec/m ³
Control Room atmospheric dispersion (χ/Q) factors	
Releases from containment vent ⁽²⁾⁽³⁾ :	
0 – 2 hours	5.93E-4 sec/m ³
2 – 8 hours	4.92E-4 sec/m ³
8 – 24 hours	2.06E-4 sec/m ³
24 – 96 hours	1.69E-4 sec/m ³
96 – 720 hours	1.26E-4 sec/m ³

Notes:

1. Used for activity released via containment leakage
2. Used for activity released via leakage of sump solution outside of containment (RCP seal leak-off and ECCS)
3. Subsequent to submittal of the original version of this report, the χ/Q values were corrected from the original determination. The revised values are slightly higher than those used in the dose analysis:

0 – 2 hr	6.00E-4 sec/m ³
2 – 8 hr	5.20E-4 sec/m ³
8 – 24 hr	2.12E-4 sec/m ³
24 – 96 hr	1.76E-4 sec/m ³
96 – 720 hr	1.30E-4 sec/m ³

Evaluation of the LBLOCA dose analysis has determined that, due to unspecified conservatisms in the analysis, the reported doses do not change.

Table 21: Assumptions Used for Gas Decay Tank Rupture Dose Analysis	
Gas decay tank inventory	50,000 Ci of dose equivalent Xe-133
Duration of release	5 minutes
Control Room atmospheric dispersion (χ/Q) factors Releases from containment vent ⁽¹⁾ : 0 – 2 hours	5.93E-4 sec/m ³

Note:

- 1 Subsequent to submittal of the original version of this report, the χ/Q value was corrected from the original determination. The revised value increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 22: Assumptions Used for Volume Control Tank Rupture Dose Analysis	
Volume control tank inventory (Ci)	
I-130	1.97E-2
I-131	6.29E-1
I-132	9.61E-1
I-133	1.14E0
I-134	2.33E-1
I-135	7.38E-1
Kr-85m	1.61E2
Kr-85	2.24E2
Kr-87	4.96E1
Kr-88	2.40E2
Xe-131m	3.95E2
Xe-133m	4.18E2
Xe-133	3.04E4
Xe-135m	7.54E1
Xe-135	9.57E2
Xe-138	6.68E0
Reactor coolant iodine activity prior to accident	1.0 μ Ci/gm of DE I-131 – See Table 15
Reactor coolant noble gas activity prior to accident	1.0% fuel defect level – See Table 6
Iodine partition factor in VCT	0.01
Duration of release of VCT contents	5 minutes
Letdown flow rate	132 gpm
Operator action time to isolate the letdown line	30 minutes
Letdown line demineralizer iodine DF	10
Airborne fraction for iodine in water released from letdown line	0.1
Control Room atmospheric dispersion (χ/Q) factors Releases from containment vent ⁽¹⁾ :	
0 – 2 hours	5.93E-4 sec/m ³

Note:

- Subsequent to submittal of the original version of this report, the χ/Q value was corrected from the original determination. The revised value increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 23: Assumptions Used for Holdup Tank Failure Dose Analysis	
Holdup tank volume	8500 ft ³
Holdup tank full level	80%
Reactor coolant iodine activity prior to accident	1.0 μCi/gm of DE I-131 – See Table 15
Reactor coolant noble gas activity prior to accident	1.0% fuel defect level – See Table 6
Letdown line demineralizer iodine DF	10
Time assumed to fill holdup tank	24 hour
Iodine partition coefficient for holdup tank liquid	0.01
Duration of release	5 minutes
Control Room atmospheric dispersion (χ/Q) factors Releases from containment vent ⁽¹⁾ : 0 – 2 hours	5.93E-4 sec/m ³

Note:

- Subsequent to submittal of the original version of this report, the χ/Q value was corrected from the original determination. The revised value increased slightly to 6.00 E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

Table 24: Assumptions Used for FHA Analysis	
Source Term	
Core Total Fission Product Activity (84 hrs decay)	See Table 25
Number of Fuel Assemblies	193
Radial Peaking Factor	1.70
Fuel Rod Gap Fraction	
I-131	12%
Kr-85	30%
Other Iodines and Noble Gases	10%
Fuel Damaged	One assembly
Time after Shutdown	84 hours
Water Depth	23 feet
Overall Iodine Scrubbing Factor	200
Noble Gases Scrubbing Factor	1
Filter Efficiency	No filtration of releases assumed
Isolation of Release	No isolation of releases assumed
Time to Release All Activity	2 hours
Time to Start Crediting Emergency Control Room HVAC	24 minutes
Control Room Atmospheric Dispersion (χ/Q) Factor Containment Vent ⁽¹⁾ : 0 - 2 hours	5.93E-4 sec/m ³

Note:

- Subsequent to submittal of the original version of this report, the χ/Q value was corrected from the original determination. The revised value increased slightly to 6.00E-4 sec/m³. Evaluation of the dose analysis has determined that, due to unspecified conservatism in the analysis, the reported doses do not change.

ATTACHMENT 7 TO NL-05-020

RESPONSE TO QUESTIONS REGARDING AST

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

NRC QUESTION:

Please discuss the impact of postulated accidents occurring at IP3, on control room doses at the IP2 and vice versa.

ENTERGY RESPONSE:

A number of factors together demonstrate that for a postulated accident occurring at IP3 the doses in the IP2 control room would be lower than the doses calculated for the IP3 control room.

For releases from IP3, the X/Q values for IP3 to IP2 control room air intake are substantially lower than those for releases from IP3 to the IP3 control room air intake. X/Q values for IP3 releases to the IP2 control room range from 17 to 50 percent of the X/Q values for IP3 releases to the IP3 control room.

Additionally, the IP2 control room air intake filter has an elemental iodine removal efficiency of 95% whereas the IP3 filter efficiency is 90%. The removal efficiencies for organic iodine and for particulates are the same for the two units.

During emergency mode operation, the IP2 control room air intake flow is ≥ 1800 cfm which is higher than the ≥ 1500 cfm associated with the IP3 control room. It has been determined as part of the IP3 radiological consequences analysis effort that a higher inflow has the effect of reducing the calculated doses.

Both the IP2 and the IP3 control rooms have an assumed inleakage rate of 700 cfm so this is not a factor. While the IP2 control room volume of 102,400 cubic feet is substantially larger than the IP3 control room volume of 47,200 cubic feet, this does not significantly impact the doses. There is not expected to be a significant difference in the X/Q for the IP2 control room intake and potential inleakage locations as the ductwork for the IP2 HVAC is located above the control room not far from the intake location.

For accidents at IP2 and their effect on the IP3 Control Room, there is an additional approximate 695 feet between the release points at IP2 and the IP3 Control Room intake. Since the X/Q decreases with distance, the resultant doses would be much less than those projected for an accident at IP3.

The HVAC for each unit is activated by radiation monitors as well as safety injection signals on the respective units. In addition, the emergency plan requires notification of the other unit's control room in the event of an emergency.

There currently is no requirement to have the Control Room HVAC operable for IP2 during fuel handling (except for recently irradiated fuel) as the analysis for the Fuel Handling Accident takes no credit for its operation. Although the analysis submitted for the IP3 Fuel Handling Accident credited the HVAC, an evaluation shows that the 5 rem limit is still satisfied without crediting the operable HVAC.

A comparison of the X/Qs for Unit 3 Releases to Unit 2 Control Room to X/Qs for Unit 2 Releases to Unit 2 Control Room shows that in all cases the X/Qs for the Unit 2 releases are much greater than the X/Qs for the Unit 3 releases. Since the source terms for both

units are similar (see the attached table for calculated LBLOCA releases of nuclides that are significant for control room doses, i.e. 95% of the dose), the accident doses from Unit 3 at the Unit 2 Control Room would be expected to be less than those previously approved for the IP2 SPU.

Unit 3 Releases to Unit 3 Control Room

Release Location	95% X/Q from ARCON96				
	0 to 2 hours	2 to 8 hours	8 to 24 hours	1 to 4 days	4 to 30 days
Containment Surface	3.57E-04	3.12E-04	1.24E-04	1.06E-04	7.99E-05
Containment Vent	6.00E-04	5.20E-04	2.12E-04	1.76E-04	1.30E-04
ABFB South Side	9.86E-04	8.74E-04	4.50E-04	3.50E-04	2.80E-04
ABFB SE Organ Pipe	1.14E-03	1.04E-03	5.05E-04	4.01E-04	3.21E-04
ABFB S Silencer	1.00E-03	8.79E-04	4.41E-04	3.47E-04	2.78E-04

Unit 3 Releases to Unit 2 Control Room

Release Location	95% X/Q from ARCON96				
	0 to 2 hours	2 to 8 hours	8 to 24 hours	1 to 4 days	4 to 30 days
Containment Surface	1.78E-04	1.38E-04	5.86E-05	3.79E-05	3.14E-05
Containment Vent	2.95E-04	2.25E-04	9.21E-05	6.06E-05	4.87E-05
ABFB North Side	3.51E-04	2.15E-04	9.14E-05	6.33E-05	5.14E-05
ABFB NE Organ Pipe	3.49E-04	2.25E-04	9.75E-05	6.73E-05	5.43E-05
ABFB N Silencer	3.32E-04	2.12E-04	9.26E-05	6.33E-05	5.14E-05

Unit 2 Releases to Unit 2 Control Room

Release Location	95% X/Q from ARCON96				
	0 to 2 hours	2 to 8 hours	8 to 24 hours	1 to 4 days	4 to 30 days
Containment Surface	3.82E-04	2.81E-04	1.05E-04	8.31E-05	7.04E-05
Auxiliary Boiler Feed South Side	1.09E-03	1.02E-03	4.99E-04	3.86E-04	2.99E-04
Auxiliary Boiler Feed Stack	9.49E-04	8.65E-04	4.17E-04	3.30E-04	2.54E-04
Containment Vent	6.44E-04	4.69E-04	1.72E-04	1.37E-04	1.17E-04

SOURCE TERM COMPARISON FOR LBLOCA RELEASE

IP3 LBLOCA Releases (Ci)

	0-8 hr	8-24 hr	24-720 hr
I-131	8.883E+02	1.740E+02	4.856E+02
I-133	1.726E+03	2.367E+02	6.120E+01
I-135	1.404E+03	8.620E+01	3.800E+00
Cs-134	1.501E+02	2.402E+01	8.623E+01
Cs-137	8.718E+01	1.391E+01	5.075E+01
Te-132	1.677E+02	2.647E+01	1.486E+01
Sr-89	4.645E+01	8.060E+00	2.418E+01
Sr-90	4.625E+00	8.070E-01	2.946E+00
Ru-106	3.186E+00	5.555E-01	1.973E+00
Pu-238	5.412E-03	9.450E-04	3.449E-03
Pu-241	1.540E-01	2.688E-02	9.803E-02
I-131	4.453E+01	1.646E+02	2.549E+03
I-133	8.143E+01	2.140E+02	3.039E+02

IP2 LBLOCA Releases (Ci)

	0-8 hr	8-24 hr	24-720 hr
I-131	9.448E+02	1.842E+02	4.880E+02
I-133	1.825E+03	2.500E+02	6.100E+01
I-135	1.478E+03	9.100E+01	4.000E+00
Cs-134	1.597E+02	2.580E+01	8.580E+01
Cs-137	9.229E+01	1.491E+01	5.020E+01
Te-132	1.768E+02	2.840E+01	1.490E+01
Sr-89	4.852E+01	8.600E+00	2.386E+01
Sr-90	4.814E+00	8.590E-01	2.895E+00
Ru-106	3.366E+00	5.990E-01	1.970E+00
Pu-238	5.686E-03	1.014E-03	3.420E-03
Pu-241	1.625E-01	2.890E-02	9.770E-02
I-131	6.907E+01	5.087E+02	3.282E+03
I-133	1.140E+02	6.551E+02	5.469E+02

Ratio of IP3 to IP2 Releases

	0-8 hr	8-24 hr	24-720 hr
I-131	94.0%	94.5%	99.5%
I-133	94.6%	94.7%	100.3%
I-135	95.0%	94.7%	95.0%
Cs-134	94.0%	93.1%	100.5%
Cs-137	94.5%	93.3%	101.1%
Te-132	94.9%	93.2%	99.7%
Sr-89	95.7%	93.7%	101.3%
Sr-90	96.1%	93.9%	101.8%
Ru-106	94.7%	92.7%	100.2%
Pu-238	95.2%	93.2%	100.8%
Pu-241	94.8%	93.0%	100.3%
I-131	64.5%	32.3%	77.7%
I-133	71.4%	32.7%	55.6%

Note: The iodines in the last two rows are for ECCS recirculation leakage, all other lines are for containment leakage.

NRC QUESTION:

Please verify the content of meteorology files used for the AST analyses.

ENTERGY RESPONSE:

Data files for three years of meteorology data were transmitted electronically to NRC on 2/1/2005. These are the same files that had been previously transmitted for use in the Indian Point Unit 2 AST submittal. These files have been converted to ARCON96 format to degrees C/100 meters. The atmospheric stability categories were determined using the delta-T method. The measurement heights used were the 10 meter and 60 meter heights from the on-site tower.

NRC QUESTION:

Please verify that control room tracer gas testing supports the inleakage analysis assumptions used for AST.

ENTERGY RESPONSE:

The Vendor conducting the control room tracer gas test has reported the results. For the four tests performed in the incident (pressurization) mode, the results were 42 SCFM, 62 SCFM, 81 SCFM, and 88 SCFM with an analysis assumption of 700 CFM. For the Toxic Gas (Hazardous Chemical) mode, the result was 301 ACFM with an analysis assumption of 1300 CFM. For the Normal mode, the result was 1393 ACFM with an analysis assumption of a total 2200 CFM.

NRC QUESTION:

Please provide the ARCON96 input/output log sheets for the IP3 release point to the IP2 control room calculation.

ENTERGY RESPONSE:

The requested information is provided in the attached pages excerpted from Calculation C-1109298-03, Revision 0. The key to the five ARCON96 runs is as follows:

RUN ID	IP3 SOURCE	INTAKE
IP3S06R2	Containment Surface	Unit 2 Control Room
IP3S02R2	Containment Vent	Unit 2 Control Room
IP3S07R2	Auxiliary Boiler Feed Building, North Side	Unit 2 Control Room
IP3S08R2	Auxiliary Boiler Feed Building, NE Organ Pipe	Unit 2 Control Room
IP3S09R2	Auxiliary Boiler Feed Building, North Silencer	Unit 2 Control Room

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

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Code Developer: J. V. Ramsdell Phone: (509) 372 6316
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Code Documentation: NUREG/CR-6331 Rev. 1

The program was prepared for an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibilities for any third party's use, or the results of such use, of any portion of this program or represents that its use by such third party would not infringe privately owned rights.

Program Run 2/ 5/2005 at 10:54:01

***** ARCON INPUT *****

Number of Meteorological Data Files = 3
Meteorological Data File Names
C:\IP3Prime\IP_1995.MET
C:\IP3Prime\IP_1996.MET
C:\IP3Prime\IP_1997.MET

Height of lower wind instrument (m) = 10.0
Height of upper wind instrument (m) = 60.0
Wind speeds entered as miles per hour

Ground-level release
Release height (m) = 40.3
Building Area (m^2) = 3059.3
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 206
Wind direction sector width (deg) = 90
Wind direction window (deg) = 161 - 251
Distance to intake (m) = 134.3
Intake height (m) = 20.6
Terrain elevation difference (m) = .0

Output file names
ip3s06r2.log
ip3s06r2.cfd

Minimum Wind Speed (m/s) = .5
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = 7.32
Initial value of sigma z = 13.31

Expanded output for code testing not selected

Total number of hours of data processed = 26304
Hours of missing data = 170
Hours direction in window = 6929
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 361
Hours direction not in window or calm = 18844

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
LOW LIM.	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	7290.	8839.	10801.	13298.	15149.	19089.	25091.	25424.	25378.	25002.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	18844.	17279.	15287.	12730.	10899.	6922.	750.	171.	0.	0.
TOTAL X/Qs	26134.	26118.	26088.	26028.	26048.	26011.	25841.	25595.	25378.	25002.
% NON ZERO	27.89	33.84	41.40	51.09	58.16	73.39	97.10	99.33	100.00	100.00

95th PERCENTILE X/Q VALUES

1.78E-04 1.72E-04 1.63E-04 1.48E-04 1.22E-04 8.84E-05 5.06E-05 4.36E-05 3.77E-05 3.40E-05

95% X/Q for standard averaging intervals

0 to 2 hours 1.78E-04
2 to 8 hours 1.38E-04
8 to 24 hours 5.86E-05
1 to 4 days 3.79E-05
4 to 30 days 3.14E-05

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	2.07E-04	1.67E-05
SECTOR-AVERAGE	1.29E-04	1.05E-05

NORMAL PROGRAM COMPLETION

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
e-mail: jy11@nrc.gov
J. J. Hayes Phone: (301) 415 3167
e-mail: jjh@nrc.gov
L. A. Brown Phone: (301) 415 1232
e-mail: lab2@nrc.gov

Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

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Program Run 2/ 4/2005 at 15:28:39

***** ARCON INPUT *****

Number of Meteorological Data Files = 3
Meteorological Data File Names
C:\IP3Prime\IP_1995.MET
C:\IP3Prime\IP_1996.MET
C:\IP3Prime\IP_1997.MET

Height of lower wind instrument (m) = 10.0
Height of upper wind instrument (m) = 60.0
Wind speeds entered as miles per hour

Ground-level release
Release height (m) = 76.2
Building Area (m²) = 3059.3
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m³/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 206
Wind direction sector width (deg) = 90
Wind direction window (deg) = 161 - 251
Distance to intake (m) = 141.5
Intake height (m) = 20.6
Terrain elevation difference (m) = .0

Output file names
ip3s02r2.log
ip3s02r2.cfd

Minimum Wind Speed (m/s) = .5
Surface roughness length (m) = .10
Sector averaging constant = 4.0
Initial value of sigma y = .26
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 26304
Hours of missing data = 170
Hours direction in window = 6939
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 293
Hours direction not in window or calm = 18902

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
LOW LIM.	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	7232.	8761.	10714.	13230.	15105.	19053.	25091.	25424.	25378.	25002.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	18902.	17357.	15374.	12798.	10943.	6958.	750.	171.	0.	0.
TOTAL X/Qs	26134.	26118.	26088.	26028.	26048.	26011.	25841.	25595.	25378.	25002.
% NON ZERO	27.67	33.54	41.07	50.83	57.99	73.25	97.10	99.33	100.00	100.00

95th PERCENTILE X/Q VALUES

2.95E-04 2.84E-04 2.67E-04 2.42E-04 1.99E-04 1.42E-04 8.10E-05 6.97E-05 5.89E-05 5.30E-05

95% X/Q for standard averaging intervals

0 to 2 hours 2.95E-04
2 to 8 hours 2.25E-04
8 to 24 hours 9.21E-05
1 to 4 days 6.06E-05
4 to 30 days 4.87E-05

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	3.78E-04	1.81E-05
SECTOR-AVERAGE	2.37E-04	1.13E-05

NORMAL PROGRAM COMPLETION

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
e-mail: jy11@nrc.gov
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e-mail: jjh@nrc.gov
L. A. Brown Phone: (301) 415 1232
e-mail: lab2@nrc.gov

Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

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Program Run 2/ 4/2005 at 15:28:39

***** ARCON INPUT *****

Number of Meteorological Data Files = 3
Meteorological Data File Names
C:\IP3Prime\IP_1995.MET
C:\IP3Prime\IP_1996.MET
C:\IP3Prime\IP_1997.MET

Height of lower wind instrument (m) = 10.0
Height of upper wind instrument (m) = 60.0
Wind speeds entered as miles per hour

Ground-level release
Release height (m) = 10.3
Building Area (m^2) = 3059.3
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 219
Wind direction sector width (deg) = 90
Wind direction window (deg) = 174 - 264
Distance to intake (m) = 118.9
Intake height (m) = 20.6
Terrain elevation difference (m) = .0

Output file names
ip3s07r2.log
ip3s07r2.cfd

Minimum Wind Speed (m/s) = .5
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = 1.74
Initial value of sigma z = 1.21

Expanded output for code testing not selected

Total number of hours of data processed = 26304
Hours of missing data = 170
Hours direction in window = 4834
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 284
Hours direction not in window or calm = 21016

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
LOW LIM.	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	5118.	6788.	9081.	12154.	14471.	18749.	24942.	25364.	25378.	25002.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	21016.	19330.	17007.	13874.	11577.	7262.	899.	231.	0.	0.
TOTAL X/Qs	26134.	26118.	26088.	26028.	26048.	26011.	25841.	25595.	25378.	25002.
% NON ZERO	19.58	25.99	34.81	46.70	55.56	72.08	96.52	99.10	100.00	100.00

95th PERCENTILE X/Q VALUES

3.51E-04 3.27E-04 2.84E-04 2.49E-04 2.03E-04 1.44E-04 8.35E-05 7.49E-05 6.33E-05 5.56E-05

95% X/Q for standard averaging intervals

0 to 2 hours 3.51E-04
2 to 8 hours 2.15E-04
8 to 24 hours 9.14E-05
1 to 4 days 6.33E-05
4 to 30 days 5.14E-05

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	5.58E-04	7.40E-05
SECTOR-AVERAGE	3.50E-04	4.63E-05

NORMAL PROGRAM COMPLETION

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
e-mail: jy11@nrc.gov
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e-mail: jjh@nrc.gov
L. A. Brown Phone: (301) 415 1232
e-mail: lab2@nrc.gov

Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

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Program Run 2/ 4/2005 at 15:28:40

***** ARCON INPUT *****

Number of Meteorological Data Files = 3
Meteorological Data File Names
C:\IP3Prime\IP_1995.MET
C:\IP3Prime\IP_1996.MET
C:\IP3Prime\IP_1997.MET

Height of lower wind instrument (m) = 10.0
Height of upper wind instrument (m) = 60.0
Wind speeds entered as miles per hour

Ground-level release
Release height (m) = 24.1
Building Area (m²) = 3059.3
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m³/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 216
Wind direction sector width (deg) = 90
Wind direction window (deg) = 171 - 261
Distance to intake (m) = 129.7
Intake height (m) = 20.6
Terrain elevation difference (m) = .0

Output file names
ip3s08r2.log
ip3s08r2.cfd

Minimum Wind Speed (m/s) = .5
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 26304
Hours of missing data = 170
Hours direction in window = 5203
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 284
Hours direction not in window or calm = 20647

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	/ 168	360	720
UPPER LIM.	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
LOW LIM.	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	5487.	7147.	9393.	12360.	14620.	18863.	24968.	25366.	25378.	25002.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	20647.	18971.	16695.	13668.	11428.	7148.	873.	229.	0.	0.
TOTAL X/Qs	26134.	26118.	26088.	26028.	26048.	26011.	25841.	25595.	25378.	25002.
% NON ZERO	21.00	27.36	36.01	47.49	56.13	72.52	96.62	99.11	100.00	100.00

95th PERCENTILE X/Q VALUES
3.49E-04 3.34E-04 2.92E-04 2.56E-04 2.08E-04 1.50E-04 8.81E-05 7.88E-05 6.58E-05 5.88E-05

95% X/Q for standard averaging intervals

0 to 2 hours 3.49E-04
2 to 8 hours 2.25E-04
8 to 24 hours 9.75E-05
1 to 4 days 6.73E-05
4 to 30 days 5.43E-05

	HOURLY VALUE RANGE	
	MAX X/Q	MIN X/Q
CENTERLINE	5.08E-04	4.93E-05
SECTOR-AVERAGE	3.18E-04	3.09E-05

NORMAL PROGRAM COMPLETION

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

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Code Documentation: NUREG/CR-6331 Rev. 1

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Program Run 2/ 4/2005 at 15:28:40

***** ARCON INPUT *****

Number of Meteorological Data Files = 3
Meteorological Data File Names
C:\IP3Prime\IP_1995.MET
C:\IP3Prime\IP_1996.MET
C:\IP3Prime\IP_1997.MET

Height of lower wind instrument (m) = 10.0
Height of upper wind instrument (m) = 60.0
Wind speeds entered as miles per hour

Ground-level release
Release height (m) = 29.0
Building Area (m^2) = 3059.3
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 216
Wind direction sector width (deg) = 90
Wind direction window (deg) = 171 - 261
Distance to intake (m) = 134.3
Intake height (m) = 20.6
Terrain elevation difference (m) = .0

Output file names
ip3s09r2.log
ip3s09r2.cfd

Minimum Wind Speed (m/s) = .5
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 26304
Hours of missing data = 170
Hours direction in window = 5203
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 284
Hours direction not in window or calm = 20647

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03	1.00E-03
LOW LIM.	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07	1.00E-07
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	5487.	7147.	9393.	12360.	14620.	18863.	24968.	25366.	25378.	25002.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	20647.	18971.	16695.	13668.	11428.	7148.	873.	229.	0.	0.
TOTAL X/Qs	26134.	26118.	26088.	26028.	26048.	26011.	25841.	25595.	25378.	25002.
% NON ZERO	21.00	27.36	36.01	47.49	56.13	72.52	96.62	99.11	100.00	100.00

95th PERCENTILE X/Q VALUES

3.32E-04	3.14E-04	2.76E-04	2.42E-04	1.97E-04	1.43E-04	8.31E-05	7.45E-05	6.21E-05	5.56E-05
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95% X/Q for standard averaging intervals

0 to 2 hours	3.32E-04
2 to 8 hours	2.12E-04
8 to 24 hours	9.26E-05
1 to 4 days	6.33E-05
4 to 30 days	5.14E-05

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	4.76E-04	3.64E-05
SECTOR-AVERAGE	2.98E-04	2.28E-05

NORMAL PROGRAM COMPLETION

ATTACHMENT 8 TO NL-05-020

COMMITMENT LIST AND PROPOSED LICENSE CONDITION
REGARDING INDIAN POINT 3 SPU

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

ENTERGY COMMITMENTS AND PROPOSED LICENSE CONDITION REGARDING
INDIAN POINT 3 STRETCH POWER UPRATE LICENSE AMENDMENT

COMMITMENT ID	DESCRIPTION	SCHEDULE
NL-05-020-01	<p>Entergy commits to revising Technical Specification Bases 3.4.3 to delete the reference to PTLR (which does not exist for IP3) and to clarify that the P/T curves are now based upon 34.0 EFPY instead of 34.7 EFPY. In addition, the basis for labeling the curves for 20 EFPY for applicability to the LTOPS arming temperature will be clarified.</p>	<p>Within 60 days of NRC approval of IP3 SPU license amendment</p>
NL-05-020-02	<p>Entergy determined that the end-of-license projected fluence for the Indian Point 3 (IP3) RV internals will exceed the threshold of 1×10^{21} n/cm² (E> 0.1 MeV). Therefore, Entergy commits to the following:</p> <p>Entergy is an active participant in the Electric Power Research Institute (EPRI) Materials Reliability Program (MRP) research initiatives on aging-related degradation of reactor vessel internal components. For IP3, Entergy commits to:</p> <p>A. Continue active participation in the EPRI MRP research initiatives regarding aging-related degradation of reactor vessel internal components.</p> <p>B. Evaluate the EPRI recommendations resulting from this initiative and implement a reactor vessel internals degradation management program applicable to IP3.</p> <p>C. Incorporate the results of reactor vessel internals inspections into the IP3 augmented inspection plan, as appropriate.</p> <p>D. Submit to NRC for review and approval, the augmented inspection plan that incorporates inspection of the IP3 RV</p>	<p>A. Ongoing</p> <p>B. Ongoing</p> <p>C. Ongoing</p> <p>D. March 2010 (Based on five years from the date of issuance of the IP3 SPU license amendment)</p>

PROPOSED LICENSE CONDITION:

With the reactor critical, Entergy shall maintain the reactor coolant system cold leg at a temperature (T_{cold}) greater than or equal to 525 °F. Entergy shall maintain a record of the cumulative time that the plant is operated with the reactor critical while T_{cold} is below 525 °F. Upon determination by Entergy that the cumulative time of plant operation with the reactor critical while T_{cold} is below 525 °F has exceeded one (1) year, Entergy must:

- (a) within one (1) month, inform the NRC, in writing, and
- (b) within six (6) months submit the results of an analysis of the impact of the operation with T_{cold} below 525 °F on the pressurized thermal shock reference temperature (RT_{PTS}).

ENCLOSURE A TO NL-05-020

Westinghouse authorization letter dated February 9, 2005 (CAW-05-1951), with the accompanying affidavit, Proprietary Information Notice, and Copyright Notice

**ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286**



Westinghouse Electric Company
Nuclear Services
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Direct tel: (412) 374-4643
Direct fax: (412) 374-4011
e-mail: greshaja@westinghouse.com

Our ref: CAW-05-1951

February 9, 2005

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Responses to NRC Request for Additional Information on WCAP-16212-P, Rev. 0, "Indian Point Nuclear Generating Unit No. 3 Stretch Power Uprate NSSS and BOP Licensing Report", dated February 2005 (Proprietary), TAC Number MC3552

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-05-1951 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Entergy Nuclear Operations.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-05-1951, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham'.

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures

cc: B. Benney
L. Feizollahi

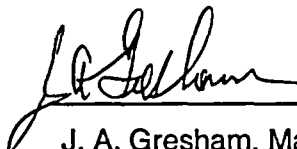
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



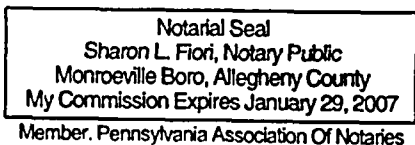
J. A. Gresham, Manager

Regulatory Compliance and Plant Licensing

Sworn to and subscribed
before me this 9th day
of February, 2005



Notary Public



- (1) I am Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse "Application for Withholding" accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any

of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in "Responses to NRC Request for Additional Information on WCAP-16212-P, Rev. 0, "Indian Point Nuclear Generating Unit No. 3 Stretch Power Uprate NSSS and BOP Licensing Report", dated February, 2005 (Proprietary)", being transmitted by the Entergy Nuclear Northeast letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted for use by Westinghouse for the Indian Point Nuclear Generating Unit No. 3 is specific to Indian Point Nuclear Generating Unit No. 3 in response to certain NRC requirements for justification of Stretch Power Uprate License Amendment Request.

This information is part of that which will enable Westinghouse to:

- (a) Provide information in support of plant power uprate licensing submittals.

- (b) Provide plant specific calculations.
- (c) Provide licensing documentation support for customer submittals.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation associated with power uprate licensing submittals.
- (b) Westinghouse can sell support and defense of the technology to its customers in the licensing process.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, evaluations, analyses and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

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Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as *proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).*

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