

Sample for Discussion



**APPENDIX A**

**Analyzed Events and Accidents**

Analysis #	Summary Description of Event or Accident	Plant Mode	Reference Document(s)	ECL	Analysis Required?
1	Land and/or waterborne HOSTILE ACTION directed against the Protected Area by a HOSTILE FORCE. Assume adversary characteristics defined by the Design Basis Threat (DBT).	1	Security Plan	Site Area Emergency	Yes
2	Large-break Loss of Coolant Accident. Assume General Emergency declaration and a release that necessitates formulation of Protective Action Recommendations.	1	UFSAR section 15.6.5.	General Emergency	Yes
3	Fire requiring evacuation of the Control Room and plant shutdown from remote location(s).	1	Appendix R Fire Analysis	Alert	Yes
4					
5	Sample for Discussion				
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Sample for Discussion

## APPENDIX B

### On-Shift Staffing Analysis

*Complete this appendix by following the instructions in section 3.2.2.*

This OSA is applicable to Analysis # 1 as identified in Appendix A.

**TABLE 1 – On-shift Positions**

Line	On-shift Position	Emergency Plan Reference	Augmentation Elapsed Time (min)	Role in Table#/Line#	TMS Required?
1.	Shift Manager	Emergency Plan Chapter 8, Figure 3.  Sample for Discussion	N/A	T2/L1 T5/L1 T5/L2 T5/L3 T5/L4 T5/L5 T5/L6 T5/L7 T5/L8 T5/L9 T5/L10 T5/L13	Yes
2.	Unit Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L2	No
3.	Shift Technical Advisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L3	No
4.	Control Room Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L4	No
5.	Control Room Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L5 T5/L11	Yes
6.	Work Control Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
7.	Equipment Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L6	No

<b>Line</b>	<b>On-shift Position</b>	<b>Emergency Plan Reference</b>	<b>Augmentation Elapsed Time (min)</b>	<b>Role in Table#/Line#</b>	<b>TMS Required?</b>
8.	Equipment Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L7	No
9.	Equipment Operator #3	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
10.	Equipment Operator #4	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
11.	Equipment Operator #5	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
12.	Radiation Protection Technician	Emergency Plan Chapter 8, Figure 3.	60	N/A	No
13.	Chemistry Technician	Emergency Plan Chapter 8, Figure 3.	60	N/A	No
14.	Fire Brigade Leader	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No

Sample for Discussion

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # 1

**One Unit - One Control Room**

Applicable to site unit(s) # 1

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager	Shift Manager	Operator Training
2	Unit Supervisor	Unit Supervisor	Operator Training
3	Shift Technical Advisor	Shift Technical Advisor	Operator Training
4	Reactor Operator #1	Control Room Operator #1	Operator Training
5	Reactor Operator #2	Control Room Operator #2	Operator Training
6	Auxiliary Operator #1	Equipment Operator #1	Operator Training
7	Auxiliary Operator #2	Equipment Operator #2	Operator Training
8	Other	N/A	N/A
9	Other	N/A	N/A
10	Other	N/A	N/A

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Mechanic	N/A	N/A
2	Electrician	N/A	N/A
3	I&C Technician	N/A	N/A
4	Other	N/A	N/A

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # \_\_\_\_\_

**Two Units - One Control Room**

Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager		
2	Unit Supervisor		
3	Shift Technical Advisor		
4	Reactor Operator #1		
5	Reactor Operator #2		
6	Reactor Operator #3		
7	Auxiliary Operator #1		
8	Auxiliary Operator #2	Sample for Discussion	
9	Auxiliary Operator #3		
10	Other		
11	Other		
12	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Mechanic		
2	Electrician		
3	I&C Technician		
4	Other		



**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown (continued)**      Analysis # \_\_\_\_\_

**Two Units - Two Control Rooms**                      Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager		
2	Unit Supervisor #1		
3	Unit Supervisor #2		
4	Shift Technical Advisor		
5	Reactor Operator #1		
6	Reactor Operator #2		
7	Reactor Operator #3		
8	Reactor Operator #4		
9	Auxiliary Operator #1	Sample for Discussion	
10	Auxiliary Operator #2		
11	Auxiliary Operator #3		
12	Auxiliary Operator #4		
13	Other		
14	Other		
15	Other		
16	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Mechanic		
2	Electrician		
3	I&C Technician		
4	Other		

### On-Shift Staffing Analysis

**TABLE 3 – Firefighting**

Analysis # 1

<b>Line</b>	<b>Performed By</b>	<b>Task Performance Validation</b>
1	N/A – no fire significant enough to warrant firefighting efforts prior to the arrival of offsite resources and/or the augmented ERO.	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A

Sample for Discussion

## On-Shift Staffing Analysis

**TABLE 4 – Radiation Protection & Chemistry**

Analysis # 1

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																		
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	
1	In-Plant Survey On-Shift Position: N/A	N/A – The performance of an in-plant survey is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. On-shift personnel do not require in-plant surveys in order to perform in-plant EOP/shutdown actions. An in-plant survey team may be dispatched after activation of the OSC.																		
2	On-Site Survey On-Shift Position: N/A	N/A – no radiological release for this event.																		
3	Personnel Monitoring On-Shift Position: N/A	N/A – no radiological release for this event. Personnel can out-process from the Radiologically Controlled Area (RCA) using portal and small article monitors. On-shift personnel do not require monitoring support in order to perform in-plant EOP/shutdown actions.																		
4	Job Coverage On-Shift Position: N/A	N/A – The performance of job coverage is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. On-shift personnel do not require job coverage in order to perform in-plant EOP/shutdown actions.																		
5	Offsite Radiological Assessment On-Shift Position: N/A	N/A – no radiological release for this event.																		
6	Other Site- Specific RP – Describe: N/A On-Shift Position: N/A																			

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																	
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
7	Chemistry function/task #1 – Describe: N/A On-Shift Position: N/A																		
8	Chemistry function/task #2 – Describe: N/A On-Shift Position: N/A																		

Sample for Discussion

**On-Shift Staffing Analysis**

**TABLE 5 – Emergency Plan Implementation**

Analysis # 1

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Declare the Emergency Classification Level (ECL)*	Shift Manager	Operations Training
2	Approve Offsite Protective Action Recommendations*	Shift Manager	Operations Training
3	Approve content of State/local notifications*	Shift Manager	Operations Training
4	Approve extension to allowable dose limits*	Shift Manager	Operations Training

\* Shift Manager non-delegable duty

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
5	Notification and direction to on-shift staff (e.g., to assemble, evacuate, etc.)	Shift Manager	Operations Training
6	ERO notification	Shift Manager	Operations Training
7	Abbreviated NRC notification for DBT event	Shift Manager	Operations Training
8	Complete State/local notification form	Shift Manager	Operations Training
9	Perform State/local notifications	Shift Manager	Operations Training
10	Complete NRC event notification form	Shift Manager	Operations Training
11	Activate ERDS	Control Room Operator #2	NV – Task not previously analyzed
12	Offsite radiological assessment	N/A – no release for this event	N/A
13	Perform NRC notifications	Shift Manager	Operations Training
14	Perform other site-specific event notifications (e.g., INPO, ANI, etc.)	N/A	N/A
15	Personnel accountability	Will be performed well after the threat is neutralized; coordinated with LLEA	N/A
16	Other: Specify	N/A	N/A



## APPENDIX B

### On-Shift Staffing Analysis

*Complete this appendix by following the instructions in section 3.2.2.*

This OSA is applicable to Analysis # 2 as identified in Appendix A.

**TABLE 1 – On-shift Positions**

Line	On-shift Position	Emergency Plan Reference	Augmentation Elapsed Time (min)	Role in Table#/Line#	TMS Required?
1.	Shift Manager	Emergency Plan Chapter 8, Figure 3.  Sample for Discussion	N/A	T2/L1 T5/L1 T5/L2 T5/L3 T5/L4	No
2.	Unit Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L2	No
3.	Shift Technical Advisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L3	No
4.	Control Room Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L4	No
5.	Control Room Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L5	No
6.	Work Control Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	T5/L5 T5/L8 T5/L9 T5/10 T5/L11 T5/13	No
7.	Equipment Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L6	No
8.	Equipment Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L7	No
9.	Equipment Operator #3	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No

<b>Line</b>	<b>On-shift Position</b>	<b>Emergency Plan Reference</b>	<b>Augmentation Elapsed Time (min)</b>	<b>Role in Table#/Line#</b>	<b>TMS Required?</b>
10.	Equipment Operator #4	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
11.	Radiation Protection Technician	Emergency Plan Chapter 8, Figure 3.	60	T4/L4 T5/L5	Yes
12.	Chemistry Technician	Emergency Plan Chapter 8, Figure 3.	60	N/A	No
13.	Fire Brigade Leader	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No
14.	Security Officer #1	Emergency Plan Chapter 8, Figure 3.	N/A	T5/L6	No
15.	Security Officer #2	Emergency Plan Chapter 8, Figure 3.	N/A	T5/15	No
16.	Electrician #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L12	No

Sample for Discussion



**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # 2

**One Unit - One Control Room**

Applicable to site unit(s) # 1

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager	Shift Manager	Operator Training
2	Unit Supervisor	Unit Supervisor	Operator Training
3	Shift Technical Advisor	Shift Technical Advisor	Operator Training
4	Reactor Operator #1	Control Room Operator #1	Operator Training
5	Reactor Operator #2	Control Room Operator #2	Operator Training
6	Auxiliary Operator #1	Equipment Operator #1	Operator Training
7	Auxiliary Operator #2	Equipment Operator #2	Operator Training
8	Other	N/A	N/A
9	Other	N/A	N/A
10	Other	N/A	N/A

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
11	Mechanic	N/A	N/A
12	Electrician	Electrician #1	Maintenance Training Program
13	I&C Technician	N/A	N/A
14	Other	N/A	N/A

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # \_\_\_\_\_

**Two Units - One Control Room**

Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager		
2	Unit Supervisor		
3	Shift Technical Advisor		
4	Reactor Operator #1		
5	Reactor Operator #2		
6	Reactor Operator #3		
7	Auxiliary Operator #1		
8	Auxiliary Operator #2	Sample for Discussion	
9	Auxiliary Operator #3		
10	Other		
11	Other		
12	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
13	Mechanic		
14	Electrician		
15	I&C Technician		
16	Other		

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown (continued)**      Analysis # \_\_\_\_\_

**Two Units - Two Control Rooms**                      Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager		
2	Unit Supervisor #1		
3	Unit Supervisor #2		
4	Shift Technical Advisor		
5	Reactor Operator #1		
6	Reactor Operator #2		
7	Reactor Operator #3		
8	Reactor Operator #4		
9	Auxiliary Operator #1	Sample for Discussion	
10	Auxiliary Operator #2		
11	Auxiliary Operator #3		
12	Auxiliary Operator #4		
13	Other		
14	Other		
15	Other		
16	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
17	Mechanic		
18	Electrician		
19	I&C Technician		
20	Other		

### On-Shift Staffing Analysis

**TABLE 3 – Firefighting**

Analysis # 2

<b>Line</b>	<b>Performed By</b>	<b>Task Performance Validation</b>
1	N/A – there is no fire associated with this accident.	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A

Sample for Discussion

## On-Shift Staffing Analysis

**TABLE 4 – Radiation Protection & Chemistry**

Analysis # 2

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																	
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
1	In-Plant Survey On-Shift Position: N/A	N/A – The performance of an in-plant survey is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. On-shift personnel do not require in-plant surveys in order to perform in-plant EOP/shutdown actions. An in-plant survey team may be dispatched after activation of the OSC.																	
2	On-Site Survey On-Shift Position: N/A	N/A – The performance of an on-site survey is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. An on-site survey team may be dispatched after activation of the OSC.																	
3	Personnel Monitoring On-Shift Position: N/A	N/A – Personnel can out-process from the Radiologically Controlled Area (RCA) using portal and small article monitors. On-shift personnel do not require monitoring support in order to perform in-plant EOP/shutdown actions. If necessary, site evacuees would be monitored at the Remote Monitoring Area after arrival of augmented ERO personnel.																	
4	Job Coverage for Electrician entering ECCS room On-Shift Position: RP Technician #1		X	X	X														
5	Offsite Radiological Assessment On-Shift Position: RP Technician#1			X	X	X	X	X	X	X	X	X	X						
6	Other Site-Specific RP – Describe: N/A On-Shift Position: N/A																		

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																	
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
7	Chemistry function/task #1 – Describe: N/A On-Shift Position: N/A																		
8	Chemistry function/task #2 – Describe: N/A On-Shift Position: N/A																		

Sample for Discussion

## On-Shift Staffing Analysis

**TABLE 5 – Emergency Plan Implementation**

Analysis # 2

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Declare the Emergency Classification Level (ECL)*	Shift Manager	Operations Training
2	Approve Offsite Protective Action Recommendations*	Shift Manager	Operations Training
3	Approve content of State/local notifications*	Shift Manager	Operations Training
4	Approve extension to allowable dose limits*	Shift Manager	Operations Training

\* Shift Manager non-delegable duty

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
5	Notification and direction to on-shift staff (e.g., to assemble, evacuate, etc.)	Work Control Supervisor	Operations Training
6	ERO notification	Security Officer #1	Security Training, and EP Drills and Exercises
7	Abbreviated NRC notification for DBT event	N/A	N/A
8	Complete State/local notification form	Work Control Supervisor	Operations Training
9	Perform State/local notifications	Work Control Supervisor	Operations Training
10	Complete NRC event notification form	Work Control Supervisor	Operations Training
11	Activate ERDS	Work Control Supervisor	Operations Training
12	Offsite radiological assessment	N/A – performed by RP Technician #1	N/A
13	Perform NRC notifications	Work Control Supervisor	Operations Training
14	Perform other site-specific event notifications (e.g., INPO, ANI, etc.)	N/A	N/A
15	Personnel accountability	Security Officer #2	Security Training, and EP Drills and Exercises
16	Other: Specify	N/A	N/A





**APPENDIX B**

**On-Shift Staffing Analysis**

*Complete this appendix by following the instructions in section 3.2.2.*

This OSA is applicable to Analysis # 3 as identified in Appendix A.

**TABLE 1 – On-shift Positions**

Line	On-shift Position	Emergency Plan Reference	Augmentation Elapsed Time (min)	Role in Table#/Line#	TMS Required?
1.	Shift Manager	Emergency Plan Chapter 8, Figure 3.  Sample for Discussion	N/A	T2/L1 T5/L1 T5/L2 T5/L3 T5/L4 T5/L5 T5/L8 T5/L9 T5/L10 T5/L11 T5/13	Yes
2.	Unit Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L2	No
3.	Shift Technical Advisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L3	No
4.	Control Room Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L4	No
5.	Control Room Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L5	No
6.	Work Control Supervisor	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L7	No
7.	Equipment Operator #1	Emergency Plan Chapter 8, Figure 3.	N/A	T2/L6	No
8.	Equipment Operator #2	Emergency Plan Chapter 8, Figure 3.	N/A	T3/L2	No
9.	Equipment Operator #3	Emergency Plan Chapter 8, Figure 3.	N/A	T3/L3	No

<b>Line</b>	<b>On-shift Position</b>	<b>Emergency Plan Reference</b>	<b>Augmentation Elapsed Time (min)</b>	<b>Role in Table#/Line#</b>	<b>TMS Required?</b>
10.	Equipment Operator #4	Emergency Plan Chapter 8, Figure 3.	N/A	T3/L4	No
11.	Equipment Operator #5	Emergency Plan Chapter 8, Figure 3.	N/A	T3/L5	No
12.	Radiation Protection Technician	Emergency Plan Chapter 8, Figure 3.	60	N/A	No
13.	Chemistry Technician	Emergency Plan Chapter 8, Figure 3.	60	N/A	No
14.	Fire Brigade Leader	Emergency Plan Chapter 8, Figure 3.	N/A	T3/L1	No
15.	Security Officer #1	Emergency Plan Chapter 8, Figure 3.	N/A	T5/L6	No
16.	Security Officer #2	Emergency Plan Chapter 8, Figure 3.	N/A	T5/L15	No
17.	I&C Technician #1	Emergency Plan Chapter 8, Figure 3.	N/A	N/A	No

Sample for Discussion

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # 3

**One Unit - One Control Room**

Applicable to site unit(s) # 1

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Shift Manager	Shift Manager	Operator Training
2	Unit Supervisor	Unit Supervisor	Operator Training
3	Shift Technical Advisor	Shift Technical Advisor	Operator Training
4	Reactor Operator #1	Control Room Operator #1	Operator Training
5	Reactor Operator #2	Control Room Operator #2	Operator Training
6	Auxiliary Operator #1	Equipment Operator #1	Operator Training
7	Auxiliary Operator #2	Work Control Supervisor	Operator Training
8	Other	N/A	N/A
9	Other	N/A	N/A
10	Other	N/A	N/A

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

<b>Line</b>	<b>Generic Title/Role</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
11	Mechanic	N/A	N/A
12	Electrician	N/A	N/A
13	I&C Technician	N/A	N/A
14	Other	N/A	N/A

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown**

Analysis # \_\_\_\_\_

**Two Units - One Control Room**

Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

Line	Generic Title/Role	On-Shift Position	Task Performance Validation
1	Shift Manager		
2	Unit Supervisor		
3	Shift Technical Advisor		
4	Reactor Operator #1		
5	Reactor Operator #2		
6	Reactor Operator #3		
7	Auxiliary Operator #1		
8	Auxiliary Operator #2	Sample for Discussion	
9	Auxiliary Operator #3		
10	Other		
11	Other		
12	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

Line	Generic Title/Role	On-Shift Position	Task Performance Validation
13	Mechanic		
14	Electrician		
15	I&C Technician		
16	Other		

**On-Shift Staffing Analysis**

**TABLE 2 – Plant Operations & Safe Shutdown (continued)** Analysis # \_\_\_\_\_

**Two Units - Two Control Rooms** Applicable to site unit(s) # \_\_\_\_\_

**Minimum Operations Crew Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

Line	Generic Title/Role	On-Shift Position	Task Performance Validation
1	Shift Manager		
2	Unit Supervisor #1		
3	Unit Supervisor #2		
4	Shift Technical Advisor		
5	Reactor Operator #1		
6	Reactor Operator #2		
7	Reactor Operator #3		
8	Reactor Operator #4		
9	Auxiliary Operator #1	Sample for Discussion	
10	Auxiliary Operator #2		
11	Auxiliary Operator #3		
12	Auxiliary Operator #4		
13	Other		
14	Other		
15	Other		
16	Other		

**Other (non-Operations) Personnel Necessary to Implement  
 AOPs and EOPs, or SAMGs if applicable**

Line	Generic Title/Role	On-Shift Position	Task Performance Validation
17	Mechanic		
18	Electrician		
19	I&C Technician		
20	Other		

### On-Shift Staffing Analysis

**TABLE 3 – Firefighting**

Analysis # 3

<b>Line</b>	<b>Performed By</b>	<b>Task Performance Validation</b>
1	Fire Brigade Leader	Firefighter Training Program
2	Equipment Operator #2	Firefighter Training Program
3	Equipment Operator #3	Firefighter Training Program
4	Equipment Operator #4	Firefighter Training Program
5	Equipment Operator #5	Firefighter Training Program

Sample for Discussion

## On-Shift Staffing Analysis

**TABLE 4 – Radiation Protection & Chemistry**

Analysis # 3

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																	
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
1	In-Plant Survey On-Shift Position: N/A	N/A – The performance of an in-plant survey is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. On-shift personnel do not require in-plant surveys in order to perform in-plant EOP/shutdown actions. An in-plant survey team may be dispatched after activation of the OSC.																	
2	On-Site Survey On-Shift Position: N/A	N/A – no radiological release for this event.																	
3	Personnel Monitoring On-Shift Position: N/A	N/A – Personnel can out-process from the Radiologically Controlled Area (RCA) using portal and small article monitors. On-shift personnel do not require monitoring support in order to perform in-plant EOP/shutdown actions. If necessary, site evacuees would be monitored at the Remote Monitoring Area after arrival of augmented ERO personnel.																	
4	Job Coverage On-Shift Position: N/A	N/A – The performance of job coverage is not necessary for initial implementation of the Emergency Plan, and not required by any procedure. On-shift personnel do not require job coverage in order to perform in-plant EOP/shutdown actions.																	
5	Offsite Radiological Assessment On-Shift Position: N/A	N/A – no radiological release for this event.																	
6	Other Site- Specific RP – Describe: N/A On-Shift Position: N/A																		

Line	Position Performing Function/Task	Performance Time Period After Emergency Declaration (minutes)																	
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
7	Chemistry function/task #1 – Describe: N/A On-Shift Position: N/A																		
8	Chemistry function/task #2 – Describe: N/A On-Shift Position: N/A																		

Sample for Discussion



## On-Shift Staffing Analysis

**TABLE 5 – Emergency Plan Implementation**

Analysis # 3

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
1	Declare the Emergency Classification Level (ECL)*	Shift Manager	Operations Training
2	Approve Offsite Protective Action Recommendations*	Shift Manager	Operations Training
3	Approve content of State/local notifications*	Shift Manager	Operations Training
4	Approve extension to allowable dose limits*	Shift Manager	Operations Training

\* Shift Manager non-delegable duty

<b>Line</b>	<b>Function/Task</b>	<b>On-Shift Position</b>	<b>Task Performance Validation</b>
5	Notification and direction to on-shift staff (e.g., to assemble, evacuate, etc.)	Shift Manager	Operations Training
6	ERO notification	Security Officer #1	Security Training, and EP Drills and Exercises
7	Abbreviated NRC notification for DBT event	N/A	N/A
8	Complete State/local notification form	Shift Manager	Operations Training
9	Perform State/local notifications	Shift Manager	Operations Training
10	Complete NRC event notification form	Shift Manager	Operations Training
11	Activate ERDS	Shift Manager	Operations Training
12	Offsite radiological assessment	N/A – no radiological release	N/A
13	Perform NRC notifications	Shift Manager	Operations Training
14	Perform other site-specific event notifications (e.g., INPO, ANI, etc.)	N/A	N/A
15	Personnel accountability	Security Officer #2	Security Training, and EP Drills and Exercises
16	Other: Specify	N/A	N/A

## Sample for Discussion