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**Jerry C. Roberts**  
Director, Nuclear Safety Assurance

January 28, 2010

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

Subject: Proposed Emergency Plan Change  
River Bend Station, Unit 1  
Docket No. 50-458  
License No. NPF-47

RBG-46996  
RBF1-10-0013

Dear Sir or Madam:

The enclosed Emergency Plan changes are hereby submitted for NRC staff review and approval as required by 10 CFR 50.54(q), 50.4, and 50.90. The proposed change modifies the station's commitment to NUREG-0654, Table B-1, "Minimum Staffing Requirements for NRC Licensees for Nuclear Power Plant Emergencies," and will allow two maintenance positions on shift to be filled with any combination of the three maintenance craft disciplines. Currently, Table 13.3-17 of the Emergency Plan shows that only Electrical or Instrumentation & Control (I&C) technicians may fill the two positions. This change is intended to reduce the burden related to scheduling only selected maintenance technicians on shift.

The proposed change was evaluated against the criteria of 10 CFR 50.47, 10 CFR 50, Appendix E and other NRC guidance documents. This change has been deemed a decrease in effectiveness of the Emergency Plan in accordance with 10 CFR 50.54(q) and the guidance contained in NRC RIS 2005-02, therefore NRC approval is required. The requested change is acceptable in that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. This change has been reviewed and approved by the Onsite Safety Review Committee (OSRC). This change was prepared using the Emergency Plan SMART Application Template format requirements.

The proposed change has been evaluated in accordance 10 CFR 50.92(c) and it has been determined that the changes involve no significant hazards considerations. Attachment 1 provides the No Significant Hazards Consideration for the change.

Attachment 1 provides the justification for each change. Attachment 2 includes a mark-up of the latest Emergency Plan illustrating the proposed changes. Attachment 3 is a revised copy of Emergency Plan Table 13.3-17 and reflects all proposed Attachment 2 changes. The proposed change includes three new commitments as listed in Attachment 4.

AX45  
NRR

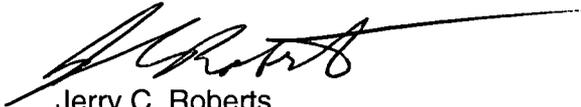
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Although this request is neither exigent nor emergency, your prompt review is requested. Once approved, the amendment shall be implemented within 90 days.

If you have any questions or require additional information, please contact David Lorfing at 225-381-4157.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 28, 2010.

Sincerely,



Jerry C. Roberts  
Director, Nuclear Safety Assurance

DNL/kh

Attachments:    1. Justification for Revision to Emergency Plan  
                  2. Mark-up of Affected Emergency Plan Pages  
                  3. Proposed Emergency Plan Mark-up Information Incorporated  
                  4. List of Regulatory Commitments

cc:    Regional Administrator  
      U. S. Nuclear Regulatory Commission  
      Region IV  
      612 E. Lamar Blvd., Suite 400  
      Arlington, TX 76011-4125

NRC Senior Resident Inspector  
P. O. Box 1050  
St. Francisville, LA 70775

U.S. Nuclear Regulatory Commission  
Attn: Mr. Alan Wang, Project Manager  
MS O-7-D1  
Washington, DC 20555-0001

Mr. Jeffrey P. Meyers  
Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Attn. OEC - ERSD  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

Attachment 1

RBG-46996

Justification for Revision to Emergency Plan

## Justification for Revision to Emergency Plan

### 1.0. Description of Proposed Change:

The current RBS Emergency Plan (Plan) requires three personnel on shift to perform Repair and Corrective Action functions associated with mechanical, electrical and I&C tasks. The current Plan Table 13.3-17 (copied below) lists the specific personnel that may fill these positions on shift.

**Current Emergency Plan Table 13.3-17**

Major Functional Area	Emergency Tasks	Position Title Or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
Repair and Corrective Actions		Mechanical Maintenance/ Radwaste Operator	OSC	1 (a)	2
					--
		Electrical Maintenance/ I&C Maintenance	OSC	2 (i)	2
					1

(a) May be provided by Shift Personnel assigned other duties.

(h) These ERO positions may be vacant for not more than 2 hours, in order to provide for unexpected absences, provided action is taken to fill the required position. This allowance is not applicable during declared emergencies.

(i) Trained in valve manipulation for basic mechanical tasks.

The current RBS practice is to fill these positions with a Radwaste Operator and two I&C Technicians. These personnel are on shift to perform the function of Repair and Corrective Actions associated with mechanical, electrical and I&C related tasks during the first 90 minutes of an event. The current shift staffing practice does not include mechanical or electrical maintenance technicians on shift. I&C Maintenance personnel who fill the on-shift positions are trained in valve manipulation for basic mechanical tasks as required by Plan Table 13.3-17. Electrical Maintenance also receives this training.

Augmented personnel consist of Mechanical Maintenance (2), Electrical Maintenance (2) and I&C (1). These additional personnel report to the site within 90 minutes of an event.

The proposed change would revise Plan Table 13.3-17 as follows:

**Proposed Emergency Plan Table 13.3-17**

Major Functional Area	Emergency Tasks	Position Title Or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
Repair and Corrective Actions		Mechanical Maintenance/ Radwaste Operator	OSC	1 (a)	2
					--
		Electrical Maintenance/ I&C Maintenance/ Mechanical Maintenance	OSC	2 (i)	2
					12
					2

(a) May be provided by Shift Personnel assigned other duties.

(h) These ERO positions may be vacant for not more than 2 hours, in order to provide for unexpected absences, provided action is taken to fill the required position. This allowance is not applicable during declared emergencies.

(i) Electrical / I&C personnel trained in valve manipulation for basic mechanical tasks. Mechanical maintenance personnel are trained in basic electrical / I&C tasks. The two personnel on shift may be any combination of the three maintenance disciplines.

River Bend's proposal designates the Emergency Response Organization (ERO) function of Repair and Corrective Actions, currently performed by I&C or Electrical Maintenance personnel, to be performed by Electrical, I&C, or Mechanical Maintenance. As changed, the required shift complement of two technicians may be any combination from the three maintenance discipline groups. The Radwaste Operator will remain under the Repair and Corrective Action functional area.

Section 13.3.4.2.2.4 of the Emergency Plan will also be changed to reflect the different maintenance disciplines on shift:

13.3.4.2.2.4 Plant Systems Engineering, Repair, and Corrective Actions

A Nuclear Equipment Operator, trained in the operation of the plant radioactive waste system, and two electrical/I&C or **mechanical** maintenance personnel (may be 2 electricians or 2 I&C Technicians or 1 of each) are immediately available to perform repair and corrective actions as directed by the Shift Manager.

An additional aspect of this proposed change increases the 90-minute responders for I&C Maintenance from one to two. Table 13.3-17 currently shows one additional I&C technician responding at 90 minutes. The proposed change adds an additional I&C technician responding within 90 minutes. The result of the proposed change is six additional maintenance personnel, two from each discipline, responding within 90 minutes.

**2.0 Justification for the Request:**

River Bend's Plan requires two dedicated Maintenance personnel on shift for the Repair and Corrective Action function. The Plan does not delineate any specific tasks related to repair and corrective actions during the first 90 minutes of an event. However, during the initial stages of an event, the maintenance need would be of a troubleshooting or minor repair nature.

The guidance in NUREG-0654/FEMA-REP-1, Table B-1, for repair and corrective actions states that two individuals, one Mechanical Maintenance/Radwaste Operator and one Electrical Maintenance/I&C technician, should be designated for each shift, but their functions may be carried out by shift personnel assigned other duties:

**NUREG-0654 – Table B-1, Minimum Staffing Requirements for NRC Licensees for Nuclear Power Plant Emergencies**

Major Functional Area	Location	Major Tasks	Position title or Expertise	On Shift	Capability for Additions	
					30 min	60 min
Plant System Engineering, Repair and Corrective Actions		Repair and Corrective Actions	Mechanical Maintenance/Radwaste Operator	1**	--	1
			Electrical Maintenance/Instrument and Control (I&C) Technician	1**	1	1
				--	1	--

\*\*May be provided by shift personnel assigned other functions.

The proposed change will allow the required shift complement of two technicians to be any combination from the three maintenance groups. Since the repair and corrective action function is currently filled by I&C technicians, additional actions will be taken to ensure basic Electrical/I&C tasks can be performed by Mechanical Maintenance personnel. Mechanical Maintenance personnel will receive training in basic electrical and I&C tasks to ensure that tasks related to these disciplines can be performed if needed in the first 90 minutes of an event.

During the initial stages of an event, the major response activities are concentrated on determining the cause of the event and placing the plant in a safe condition through plant manipulations and system alignments. Major equipment repairs are not expected to be performed in the initial phases of the event. The repair and corrective action functions that will be performed will be focused on those necessary to implement Emergency Operating Procedures. These specific emergency tasks are proceduralized in Emergency Operating Procedure (EOP)-0005, "Emergency Operating and Severe Accident Procedures Enclosures" and are performed by non-licensed and licensed operators. Using EOP-0005, River Bend identified the following areas where Maintenance can be used to assist Operators.

- Electrical theory
- Electrical safety for electrical workers
- Cardiopulmonary Resuscitation (CPR)
- Remove/Replace fuses
- Trip units (dial up)
- Install/remove electrical jumpers

- Open/close breakers
- Operating relays
- Gagging valves
- Venting control rods

A task analysis will be conducted and training plans developed. Training of repair and corrective action tasks will be conducted prior to using Mechanical Maintenance personnel to fill this position.

Significant, ERO-resource intensive repair and corrective action activities are not performed until Emergency Response Facilities are operational and staffed with augmenting personnel as described in Table 13.3-17 of the Emergency Plan. It is important to note that River Bend emergency facilities are required to be operational at the declaration of an ALERT. Early activation at an ALERT ensures that emergency response personnel are readily available to respond to a change in plant conditions.

## **2.1 Basis for Effectiveness of Change**

The proposed changes were evaluated to ensure compliance with 10CFR50.47(b)(2) such that the key functional tasks that on-shift ERO personnel should be able to perform at all times without augmentation are unaffected. The key functional tasks are:

- Classification of an event.
- Declaration of an event.
- Offsite agency notification.
- Dose assessment and issuance of PAR's (protective action recommendations).
- Mitigation of the event.

In order to make the proposed change, it was necessary to verify there were no remaining tasks that on-shift personnel could not perform. For the Repair and Corrective Action Function, there was no loss in effectiveness since two dedicated Maintenance personnel will be on shift. Each Maintenance discipline will be appropriately trained to fulfill the required function.

There is no loss of effectiveness in performing the key functional tasks in a timely manner, by experienced and trained personnel, therefore compliance with 10CFR50.47 and NUREG 0654 is maintained. The ability to perform key functions at all times, combined with two dedicated Maintenance personnel on shift, and early augmentation at an ALERT, result in no loss of effectiveness and therefore the changes are acceptable.

## **2.2 Conclusion**

Since the initial repair and corrective actions are primarily observations and other duties, the type of craft on duty as part of the shift staffing need not be limited to I&C personnel. It is only later that basic repair and corrective actions can be undertaken. Since the ERO will be staffed within 90 minutes, appropriate resources will be available to support the planning and execution of craft-specific maintenance tasks. Therefore, it is appropriate to add Mechanical Maintenance personnel to the shift complement as an option to fill the two maintenance positions.

Regulatory Issue Summary (RIS) 2005-02 defines a decrease in effectiveness as a change in an emergency preparedness (EP) requirement that results in the degradation or loss of the capability to perform a function or perform a function in a timely manner, as contained in the Emergency Plan. RIS 2005-02 clarifies a change in an EP requirement based on capability, meaning the Emergency Plan as changed, would result in the loss or degradation of the capability to meet the regulatory requirements of an Emergency Plan. Consequently, the capability to perform a function(s) as previously stated in the Emergency Plan no longer exists or is degraded. RIS 2005-02 defines an EP requirement, in part, as a statement made in the Emergency Plan which addresses how a particular regulatory requirement will be met and emphasizes all EP requirements are subject to the 10 CFR 50.54(q) change process. Thus, allowing a combination of two maintenance personnel from any discipline to perform the repair and corrective action function constitutes a decrease in effectiveness and requires prior approval before implementation.

### **3.0 No Significant Hazards Consideration**

River Bend has evaluated the proposed Emergency Plan revision against the criteria of 10 CFR 50.92(c) to determine if any significant hazards consideration is involved. River Bend has concluded that this proposed change does not involve a significant hazards consideration. The following is a discussion of how each of the 10 CFR 50.92(c) criteria is satisfied.

- (1) *Does not involve a significant increase in the probability or consequences of an accident previously evaluated.*

The proposed change does not increase the probability or consequences of an accident. The change only impacts the implementation of the Emergency Plan by changing staffing of the Repair and Corrective action functions after an event. It has no impact on plant equipment or the operation of plant equipment and thus has no impact on the probability or consequences of an event. The number of personnel on shift has not been revised from the current Emergency Plan. The repair and corrective action function would continue to be performed by trained personnel. Because the process, personnel, and equipment involved in implementing the Emergency Plan would complete the same functions as those completed under the existing Emergency Plan, the Plan would continue to ensure adequate protection of public health and safety.

- (2) *Does not create the possibility of a new or different kind of accident from any accident previously evaluated.*

The change only impacts the implementation of the Emergency Plan by changing staffing of the Repair and Corrective action functions after an event. The change does not impact any plant equipment or systems needed to respond to an accident, nor does it involve any analysis of plant accidents. The proposed change does not create a new or different kind of accident from any previously evaluated because this change only impacts emergency response repair functions.

(3) *Does not involve a significant reduction in a margin of safety.*

The change to the Emergency Plan does not reduce the margin of safety currently provided by the Plan as it maintains the current number of personnel on shift to perform Repair and Corrective action functions. Repair and corrective actions will continue to be performed by trained personnel. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

#### **4.0 Environmental Impact Evaluation**

The proposed Plan change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

#### **5.0 Precedent References**

None

Attachment 2

RBG-46996

Mark-up of Affected Emergency Plan Pages

The emergency response organization divides radiological accident assessment into onsite and offsite groups. The onsite group is stationed in the OSC and is under the supervision of the Radiation Protection Coordinator. Nuclear Chemistry Technicians under the coordination of the OSC Director will be available in the OSC to assist in accident assessment. Radiation Protection Technicians can use portable equipment to determine radiation levels and contamination levels from liquid and gaseous releases. Nuclear Chemistry Technicians can provide samples of reactor coolant and containment atmosphere or suppression pool water to analyze for radioisotopic concentrations when conditions allow the use of the Reactor Sample System. Offsite radiation surveys will be directed and the results analyzed by the Radiation Protection Advisor at the EOF or the Radiation Protection Coordinator at the TSC if the EOF is not operational. Each offsite team includes two individuals of which at least one is a Radiation Protection Technician. The team is dispatched using appropriate EIPs. Radiological monitoring equipment for use by offsite dose assessment teams is stored in the EOF. The team will obtain samples in the local area as directed for analysis. The particulate filter and iodine cartridge can be evaluated in the field using portable radiation instruments, or may be returned to the site and analyzed using a multichannel analyzer, at the discretion of the Radiation Protection Advisor. The offsite teams have dedicated vehicles that are radio equipped for communications with the EOF. In addition, portable radios are available for use by the offsite emergency response teams. Readiness for deployment is expected to be as soon as possible but no later than 90 minutes following notification.

#### 13.3.4.2.2.4 Plant Systems Engineering, Repair, and Corrective Actions

A Nuclear Equipment Operator, trained in the operation of the plant radioactive waste system, and two electrical/I&C or **mechanical** maintenance personnel (~~may be 2 electricians or 2 I&C Technicians or 1 of each~~) are immediately available to perform repair and corrective actions as directed by the Shift Manager.

Depending upon the type and severity of the emergency, a minimum of eight additional support personnel are available onsite within about 90 minutes. The maintenance and repair personnel will operate out of the OSC.

Technical support will be provided by available RBS personnel. The TSC Manager will coordinate the technical support group which will develop plans and procedures to return the plant to a safe status.

#### 13.3.4.2.2.5 Radiation Protection Coverage

Radiation protection coverage will be provided by the Radiation Protection staff. Additional Radiation Protection Technicians are available after notification of a radiological emergency as shown on Table 13.3-17. The Radiation Protection Technicians, working out of the OSC, will perform monitoring, provide radiation protection support, and limit access to radiologically controlled areas. In addition to the radiation protection coverage provided by the Radiation Protection staff, Chemistry and Operations personnel are trained in the use of portable survey instruments. Decontamination of personnel and equipment is under the direction of Radiation Protection personnel in accordance with RBS procedures.

RBS - EP  
TABLE 13.3-17

SHIFT STAFFING AND AUGMENTATION CAPABILITIES

Major Functional Area	Emergency Tasks	Position Title Or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
Plant Operations and Assessment of Operational Aspects	Emergency Direction and Control	Shift Manager (SRO)	CR	1	--
		Emergency Director	TSC	--	1 (e)
	Firefighting, firefighting communications	Control Room Supervisor (SRO)	CR	1	--
		Nuclear Control Operator (RO)	CR	2	--
		Nuclear Equipment Operator	CR	4(k)	
	Technical Support and Core/Thermal Hydraulics (d)	Fire Brigade (ROs, NEOs, Security)	CR	5 (a)	Provided by offsite fire department personnel
	Core/Thermal Hydraulics	Shift Technical Advisor	CR	1 (c)	--
Core/Thermal Hydraulics	Reactor Engineer, Technical Advisor	TSC/EOF	--	1 (e)	
Notification/Communication	Offsite Notifications (State, Local, Federal) and maintain communications, Notification of plant On-Call emergency personnel	Nuclear Equipment Operator	CR	1	
		TSC/CR Communicator OR TSC Communicator OR EOF Communicator OR ENS Communicator	CR/TSC/EOF	--	3 (e)
Radiological Accident Assessment and Support of Operational Accident Assessment	EOF Direction and Control	Recovery Manager	EOF	--	1 (e)
	Offsite Dose Assessment	Shift Personnel (Operations)	CR	1 (a)	--
		RP Coordinator OR RP Advisor OR Radiological Assessment Coordinator	TSC/EOF	--	3 (e)
	Chemistry/Radio-Chemistry	Chemistry Technician	CR/OSC	1	3
Plant System Engineering	Technical Support (f)	Electrical Engineer OR Mechanical Engineer OR Engineering Coordinator OR TSC Manager OR Operations Support Coordinator OR EOF Manager OR Technical Advisor	TSC/EOF	--	6
Repair and Corrective Actions		Mechanical Maintenance/ Radwaste Operator	OSC	1 (a)	2
		Electrical Maintenance/ I&C Maintenance/ Mechanical Maintenance	OSC	2(i)	--
					2
					12
					2

**RBS - EP  
TABLE 13.3-17**

**SHIFT STAFFING AND AUGMENTATION CAPABILITIES**

Major Functional Area	Emergency Tasks	Position Title or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
Radiation Protection	-Access Control -HP coverage for repair, corrective actions, search and rescue, first-aid, and fire fighting -Personnel monitoring -Dosimetry -Surveys (offsite, onsite, and in-plant surveys on as-needed basis only)	Radiation Protection Technician	OSC	2	11(b) (g) (j)
Rescue / First aid		First Responders	OSC	2 (a)	Provided by support hospitals
Security	Security, personnel accountability	Security Personnel			(See Security Plan)

Notes:

- (a) May be provided by Shift Personnel assigned other duties.
- (b) Must be trained for the Emergency Task being performed.
- (c) STA staffing in accordance with River Bend Station Technical Specification.
- (d) Core/Thermal Hydraulics is part of normal STA duties as listed in the Updated Final Safety Analysis Report and Technical Specifications.
- (e) These personnel will report and augment shift personnel in 75 minutes (45 minutes if onsite).
- (f) Includes Sr. Engineering expertise and Sr. Operations personnel.
- (g) In addition to HP coverage provided by the radiation protection staff, Chemistry and Operations personnel are trained in the use of portable survey instruments.
- (h) ~~These ERO positions may be vacant for not more than 2 hours, in order to provide for unexpected absences, provided action is taken to fill the required position. This allowance is not applicable during declared emergencies.~~
- (i) Electrical/I&C personnel are trained in valve manipulation for basic mechanical tasks. Mechanical Maintenance personnel are trained in basic electrical/I&C tasks. The two personnel on shift may be any combination of the three maintenance disciplines.
- (j) Two RP Technicians will report as offsite team members in 75 minutes.
- (k) ~~At least one is communicator qualified.~~

Attachment 3

RBG-46996

Proposed Emergency Plan Mark-up Information Incorporated

The emergency response organization divides radiological accident assessment into onsite and offsite groups. The onsite group is stationed in the OSC and is under the supervision of the Radiation Protection Coordinator. Nuclear Chemistry Technicians under the coordination of the OSC Director will be available in the OSC to assist in accident assessment. Radiation Protection Technicians can use portable equipment to determine radiation levels and contamination levels from liquid and gaseous releases. Nuclear Chemistry Technicians can provide samples of reactor coolant and containment atmosphere or suppression pool water to analyze for radioisotopic concentrations when conditions allow the use of the Reactor Sample System. Offsite radiation surveys will be directed and the results analyzed by the Radiation Protection Advisor at the EOF or the Radiation Protection Coordinator at the TSC if the EOF is not operational. Each offsite team includes two individuals of which at least one is a Radiation Protection Technician. The team is dispatched using appropriate EIPs. Radiological monitoring equipment for use by offsite dose assessment teams is stored in the EOF. The team will obtain samples in the local area as directed for analysis. The particulate filter and iodine cartridge can be evaluated in the field using portable radiation instruments, or may be returned to the site and analyzed using a multichannel analyzer, at the discretion of the Radiation Protection Advisor. The offsite teams have dedicated vehicles that are radio equipped for communications with the EOF. In addition, portable radios are available for use by the offsite emergency response teams. Readiness for deployment is expected to be as soon as possible but no later than 90 minutes following notification.

#### 13.3.4.2.2.4 Plant Systems Engineering, Repair, and Corrective Actions

A Nuclear Equipment Operator, trained in the operation of the plant radioactive waste system, and two electrical/I&C or mechanical maintenance personnel are immediately available to perform repair and corrective actions as directed by the Shift Manager.

Depending upon the type and severity of the emergency, a minimum of eight additional support personnel are available onsite within about 90 minutes. The maintenance and repair personnel will operate out of the OSC.

Technical support will be provided by available RBS personnel. The TSC Manager will coordinate the technical support group which will develop plans and procedures to return the plant to a safe status.

#### 13.3.4.2.2.5 Radiation Protection Coverage

Radiation protection coverage will be provided by the Radiation Protection staff. Additional Radiation Protection Technicians are available after notification of a radiological emergency as shown on Table 13.3-17. The Radiation Protection Technicians, working out of the OSC, will perform monitoring, provide radiation protection support, and limit access to radiologically controlled areas. In addition to the radiation protection coverage provided by the Radiation Protection staff, Chemistry and Operations personnel are trained in the use of portable survey instruments. Decontamination of personnel and equipment is under the direction of Radiation Protection personnel in accordance with RBS procedures.

TABLE 13.3-17

## SHIFT STAFFING AND AUGMENTATION CAPABILITIES

Major Functional Area	Emergency Tasks	Position Title Or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
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		Emergency Director	TSC	--	1 (e)
		Control Room Supervisor (SRO)	CR	1	--
		Nuclear Control Operator (RO)	CR	2	--
		Nuclear Equipment Operator	CR	4(k)	
	Firefighting, firefighting communications	Fire Brigade (ROs, NEOs, Security)	CR	5 (a)	Provided by offsite fire department personnel
	Technical Support and Core/Thermal Hydraulics (d)	Shift Technical Advisor	CR	1 (c)	--
Core/Thermal Hydraulics	Reactor Engineer, Technical Advisor	TSC/EOF	--	1 (e)	
Notification/Communication	Offsite Notifications (State, Local, Federal) and maintain communications, Notification of plant On-Call emergency personnel	Nuclear Equipment Operator	CR	1	
		TSC/CR Communicator OR TSC Communicator OR EOF Communicator OR ENS Communicator	CR/TSC/EOF	--	3 (e)
Radiological Accident Assessment and Support of Operational Accident Assessment	<u>EOF Direction and Control</u>	Recovery Manager	EOF	--	1 (e)
	<u>Offsite Dose Assessment</u>	Shift Personnel (Operations)	CR	1 (a)	--
		RP Coordinator OR RP Advisor OR Radiological Assessment Coordinator	TSC/EOF	--	3 (e)
	Chemistry/Radio-Chemistry	Chemistry Technician	CR/OSC	1	3
Plant System Engineering	Technical Support (f)	Electrical Engineer OR Mechanical Engineer OR Engineering Coordinator OR TSC Manager OR Operations Support Coordinator OR EOF Manager OR Technical Advisor	TSC/EOF	--	6
Repair and Corrective Actions		Radwaste Operator	OSC	1 (a)	--
		Electrical Maintenance/	OSC	2 (i)	2
		I&C Maintenance/			2
		Mechanical Maintenance			2

**TABLE 13.3-17**

**SHIFT STAFFING AND AUGMENTATION CAPABILITIES**

Major Functional Area	Emergency Tasks	Position Title or Expertise	Location	On Shift (h)	Capability for Additions
					90 Min
Radiation Protection	-Access Control -HP coverage for repair, corrective actions, search and rescue, first-aid, and fire fighting -Personnel monitoring -Dosimetry -Surveys (offsite, onsite, and in-plant surveys on as-needed basis only)	Radiation Protection Technician	OSC	2	11(b) (g) (j)
Rescue / First aid		First Responders	OSC	2 (a)	Provided by support hospitals
Security	Security, personnel accountability	Security Personnel			(See Security Plan)

Notes:

- (a) May be provided by Shift Personnel assigned other duties.
- (b) Must be trained for the Emergency Task being performed.
- (c) STA staffing in accordance with River Bend Station Technical Specification.
- (d) Core/Thermal Hydraulics is part of normal STA duties as listed in the Updated Final Safety Analysis Report and Technical Specifications.
- (e) These personnel will report and augment shift personnel in 75 minutes (45 minutes if onsite).
- (f) Includes Sr. Engineering expertise and Sr. Operations personnel.
- (g) In addition to HP coverage provided by the radiation protection staff, Chemistry and Operations personnel are trained in the use of portable survey instruments.
- (h) These ERO positions may be vacant for not more than 2 hours, in order to provide for unexpected absences, provided action is taken to fill the required position. This allowance is not applicable during declared emergencies.
- (i) Electrical/I&C personnel are trained in valve manipulation for basic mechanical tasks. Mechanical Maintenance personnel are trained in basic electrical/I&C tasks. The two personnel on shift may be any combination of the three maintenance disciplines.
- (j) Two RP Technicians will report as offsite team members in 75 minutes.
- (k) At least one is communicator qualified.

**Attachment 4  
List of Regulatory Commitments**

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

Commitment	Type (check one)		Scheduled Completion Date (If Required)
	One-Time Action	Continuing Compliance	
Additional actions will be taken to ensure basic Electrical/I&C tasks can be performed by Mechanical Maintenance personnel. Mechanical Maintenance personnel will receive training in basic electrical and I&C tasks to ensure that tasks related to these disciplines can be performed if needed in the first 90 minutes of an event.		X	Prior to using Mechanical Maintenance to fill this position
A task analysis will be conducted and training plans developed.	X		Prior to using Mechanical Maintenance to fill this position
Each Maintenance discipline will be appropriately trained to fulfill the required function.		X	Prior to placing individuals on shift