

Facility: <u>South Texas Project</u>		Date of Examination: <u>9/17/01</u>
Examination Level: RO		Operating Test Number: <u>1</u>
Administrative Topic/Subject Description		Describe method of evaluation: ONE Administrative JPM
A.1	Conduct of Operations	K/A: 2.1.20 [4.3] Ability to execute procedure steps
		Title: (A1) Perform QPTR Calculation
	Conduct of Operations	K/A: 2.1.25 [2.8] Ability to obtain and interpret references
		Title: (A2) Determine Boration Required to Achieve Desired Shutdown Margin
A.2	Equipment Control	K/A: 2.2.12 [3.0] Knowledge of surveillance procedures
		Title: (A3) Review Completed Surveillance
A.3	Radiation Control	K/A: 2.3.10 [2.9] Ability to guard against personnel exposure
		Title: (A4) Determine Radiological Requirements to Enter a High Rad Area
A.4	Emergency Plan	K/A: 2.4.39 [3.3] Knowledge of RO's responsibilities in emergency plan implementation
		Title: (A5) Make the Necessary Communications for a Given Accident

Approved:

Facility: /s/ Ken Struble Date: 9/6/01Chief Examiner: /s/ H F Bundy Date: 9/6/01

Facility: <u>South Texas Project</u>		Date of Examination: <u>9/17/01</u>
Examination Level: SRO		Operating Test Number: <u>1</u>
Administrative Topic/Subject Description		Describe method of evaluation: ONE Administrative JPM
A.1	Conduct of Operations	K/A: 2.1.7 [4.4] Ability to evaluate plant performance and make operational judgements based on operating characteristics, reactor behavior, and instrument response
		Title: (A6) Review RCS Inventory and Determine Tech Spec applicability
	Conduct of Operations	K/A: 2.1.33 [4.0] Ability to recognize indications for system operating parameters which are entry-level conditions for Technical Specifications
		Title: (A7) Review Control Room Logs
A.2	Equipment Control	K/A: 2.2.12 [3.4] Knowledge of Surveillance Procedures
		Title: (A8) Review Completed Surveillance
A.3	Radiation Control	K/A: 2.3.10 [3.3] Ability to gaurd against personnel exposure
		Title: (A4) Determine Radiological Requirements to Enter a High Rad Area
A.4	Emergency Plan	K/A: 2.4.41 [4.1] Knowledge of emergency action level thresholds and classifications
		Title: (A9) Declare Emergency Action Level

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Facility: <u>South Texas Project</u>	Date of Examination: <u>9/17/01</u>
Exam Level: SRO(U)	Operating Test No.: <u>1</u>

B.1 Control Room Systems		
System / JPM Title	Type Code*	Safety Function
a. AC/ (S1) Restore Offsite Power to ESF Bus	S, D, L	VI
b. ECCS/ (S2) Transfer to Hot Leg Recirculation	S, D, L, E	III
B.2 Facility Walk-Through		
a. Liquid Waste/ (P1) Perform Local Channel Check of RT-8038, Liquid Waste Effluent Monitor	P, D, R, A	IX
b. CRDS/ (P2) Locally Trip the Reactor	P, D, A	I
c. Boric Acid/ (P3) Secure Alternate Boration	P, N, R, L	II
* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA, (P)lant, (E)SF		

Note: The following simulator JPMs are intended to be performed simultaneously

- S1 and S2

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Facility: <u>South Texas Project</u>	Date of Examination: <u>9/17/01</u>	
Exam Level: RO / SRO(I)	REV 1	
Operating Test No.: <u>1</u>		
B.1 Control Room Systems		
System / JPM Title	Type Code*	Safety Function
a. AC/ (S1) Restore Offsite Power to ESF Bus	S, D, L	VI
b. ECCS/ (S2) Transfer to Hot Leg Recirculation	S, D, L, E	III
c. NIS/ (S3) Respond to a SRNI Failure	S, D	VII
d. RMS/ (S4) Respond to a Radiation Monitoring Alarm	S, D, A	VIII
e. CVCS/ (S5) Maximize Letdown Due to High RCS Activity	S, D, L	II
f. FW/ (S6) Restore Main Feedwater Following Reactor Trip	S, N, L, A	IV
g. CS/ (C1) Determine/Establish CS Pump Requirements	C, D, L	V
B.2 Facility Walk-Through		
a. Liquid Waste/ (P1) Perform Local Channel Check of RT-8038, Liquid Waste Effluent Monitor	P, D, R, A	IX
b. CRDS/ (P2) Locally Trip the Reactor	P, D, A	I
c. Boric Acid/ (P3) Secure Alternate Boration	P, N, R	II
* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA, (P)lant, (E)SF		

Note: The following simulator JPMs are intended to be performed simultaneously

- S1 and S2
- S3 and S4
- S5 and S6

Rev 1: Replaced Control Room System JPMs c and e.

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Facility: South Texas Project**Scenario No.:** 1 **Rev** 1**Op-Test No.:** 1**Source:**New ☒ Bank - Significantly Modified ☐ Bank - Initial Condition Change ☐Examiners:Operators: SRO-
RO-
BOP-

See Simulator Crew Assignment Table to determine Examiner/Operator assignments. This scenario will be administered to all applicants on a single day.

Initial Conditions: 48% power. On hold for feedpump repair.
Steam Generator Feedpump #11 is OOS for maintenance.

Turnover: Shift Feedwater Booster Pumps for pump vibration inspection and maintain current power.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	BOP (N) SRO (N)	Shift Feedwater Booster Pumps
2	05-12-03	BOP (I) SRO (I)	Steam Generator level transmitter LT-539 fails low
3	02-26-02	RO (I) SRO (I)	Loop 1B T-Cold RTD TT-420B fails high
4	07-04-03	RO (R) BOP (C) SRO (C)	Steam Generator Feedpump #13 trips, Startup Feedpump does not/will not start requiring a manual load reduction.
5	02-12-01 01-12-02	ALL (M)	Pressurizer steam space break. ATWS - Reactor fails to trip from the control room.
6	08-02-01	BOP (C) SRO (C)	Turbine driven auxiliary feedwater pump overspeeds upon start.
7	04-13-02	RO (C) SRO (C)	High head safety injection pump 1B trips (following verification).

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Rev 1 - Removed 9,000 MWD/MTU from initial conditions. Changed 'swap' to 'shift' in the turnover information and Event #1.

Facility: South Texas Project**Scenario No.:** 2 **Rev** 1**Op-Test No.:** 1**Source:**New _____ Bank - Significantly Modified _____ Bank - Initial Condition Change X Examiners:Operators: SRO-
RO-
BOP-

See Simulator Crew Assignment Table to determine Examiner/Operator assignments. This scenario will be administered to all applicants on a single day.

Initial Conditions: 75% power, with a power increase in progress.

Train 'A' Control Room HVAC and Feedwater Booster Pump #13 are OOS for maintenance.

Turnover: Load Steam Generator Feedpump #13 and continue power increase to 100%.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	BOP (N) SRO (N)	Load Steam Generator Feedpump #13
2	N/A	RO (R)	Increase power to 100%
3	05-17-03	BOP (I) SRO (I)	Steam Generator 1C PORV pressure transmitter fails high.
4	50-R3-02	RO (I) SRO (I)	Power Range Channel N42 control Power failure.
5	08-23-01	BOP (C) SRO (C)	Condensate Pump #11 trips.
6	02-01-03	ALL (M)	Large Break LOCA on Loop C Cold Leg.
7	01-12-4B bmp005	RO (C) SRO (C)	Containment Isolation Phase 'A' Train 'B' automatic failure. CV-MOV-0023, Letdown CIV, Train 'A' fails to close.

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Rev 1 - Removed 9,000 MWD/MTU from the initial conditions.

Facility: South Texas Project**Scenario No.:** 3 **Rev** 2**Op-Test No.:** 1**Source:**New _____ Bank - Significantly Modified _____ Bank - Initial Condition Change X Examiners:Operators: SRO-
RO-
BOP-

See Simulator Crew Assignment Table to determine Examiner/Operator assignments. This scenario will be administered to all applicants on a single day.

Initial Conditions: 27% power with a plant startup in progress.
ESF Diesel Generator #13 is OOS for maintenance.

Turnover: Continue with plant startup towards 100% power.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	RO (R)	Load increase towards 100% power.
2	02-19-03	RO (I) SRO (I)	Pressurizer pressure controlling channel (PT-457) fails low.
3	05-11-04	BOP (C) SRO (C)	SG D steam flow channel fails low.
4	03-23-05	RO (C) SRO (C) BOP (C)	RCP 1C #1 seal failure (ramp over 5 minutes) Main Turbine fails to automatically trip
5	05-02-01	ALL (M)	Steam break in containment on SG 1A after manual reactor trip from RCP seal leakoff trip setpoint exceeded.
6	04-16-01	RO (C) SRO (C)	1A Containment Spray Pump trips (following verification).

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Rev 1 - Added "Main Turbine fails to automatically trip" malfunction to Event #4

Rev 2 - Events 2 and 3 (shaded) were not administered per the Chief Examiners direction.

Facility: South Texas Project**Scenario No.:** Backup (spare)**Op-Test No.:** 1**Source:**New ☐ Bank - Significantly Modified ☐ Bank - Initial Condition Change ☒Examiners:Operators: SRO-
RO-
BOP-

See Simulator Crew Assignment Table to determine Examiner/Operator assignments. This scenario will be administered to all applicants on a single day.

Initial Conditions: 100% power

Circulating Water Pump #14 is OOS for maintenance.

Turnover: Shift Centrifugal Charging Pumps for upcoming maintenance.

Reduce power to 90% to remove a Steam Generator Feedpump from service.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	RO (N) SRO (N)	Shift Centrifugal Charging Pumps.
2	N/A	RO (R)	Reduce power to 90%.
3	03-09-02	RO (C) SRO (C)	1B Centrifugal Charging Pump trips.
4	08-15-01	BOP (I) SRO (I)	1A Steam Generator controlling feedwater flow channel fails low.
5	50-BM-01	RO (I) SRO (I)	VCT level transmitter LT-113 fails high.
6	05-03-02	ALL (M)	1B Steam Generator Tube Rupture (~700 gpm ramped over 10 minutes).
7	05-04-02	BOP (C) SRO (C)	Steam Generator 1B Main Steam Safety Valve fails open when actions are taken to isolate the steam generator during the tube rupture.

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor