# LICENSEE EVENT REPORT

	CONTROL BLOCK
	CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)
0 1	S C H B R 2 2 0 0 - 0 0 0 0 - 0 0 3 4 1 1 1 1 1 4 5 6 EIGENSE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58
0 1 7 8	REPORT LIG 0 5 0 0 0 2 6 1 7 0 1 0 9 8 1 8 1 1 1 1 7 8 2 9 60 EVENT DATE 74 75 REPORT DATE 80
0 2	On January 9, 1981, with the unit at 100% power, it was determined that operation with
0 3	the RPI System input to the turbine runback and auto rod withdrawal defeated and power
0 4	range channel N41 input out of service is contrary to the assumptions in the safety
0 5	analysis prepared during the fuel reload safety evaluation. Still the probability of
0 6	not sensing a dropped rod is small since three of the power range detectors were
0 7	operable. This occurrence is reportable pursuant to Technical Specifications
0 8	6.9.2.a(6). No adverse consequences resulted from the above condition.
0 9	SYSTEM CODE CODE SUBCODE COMPONENT CODE SUBCODE SUBCOD
	LER/RO EVENT YEAR REPORT NO.  SEQUENTIAL REPORT NO.  ODE TYPE NO.
	ACTION FUTURE EFFECT SHUTDOWN HOURS 22 ATTACHMENT NPRD-4 PRIME COMP. COMPCNENT SUBMITTED FORM SUB. SUPPLIER WILL 2 0 2
	33 34 35 36 37 40 41 42 43 44 47 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
10	A review of the H. B. Robinson Unit 2 FSAR and Fuel Reload Safety Evaluation
	identified that the rod drop analysis assumes both turbine runback and auto rod
1 2	withdrawal block. A new analysis of this event concluded that operation without
1 3	these protective systems is not adverse to safety. Administrative controls, which were implemented following this event, will be revised to delete the 70% power
1 4	restriction.
7 8	FACILITY STATUS  E   28   1   0   0   29   N/A   D   31   OBSERVATION   32    9   0   0   0   0   0   0   0   0   0
	STIVITY CONTENT  SELEASED OF RELEASE  AMOUNT OF ACTIVITY (35)  AND ACTIVITY (35)  AMOUNT OF ACTIVITY (35)  AMOUNT OF ACTIVITY (35)  N/A  LOCATION OF RELEASE (36)  N/A
7 8	9 10 11 44 45 80 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)
1 7	0 0 0 37 Z 38 N/A  9 11 12 13  PERSONNEL INJURIES 80
1 8	NUMBER DESCRIPTION (41) N/A
	LOSS OF OR DAMAGE TO FACILITY 43  TYPE OESCRIPTION N/A
7 8	8211290703 821117
20	PDR ADOCK 05000261 S PDR DESCRIPTION 45
7 8	9 10 68 69 80 % NAME OF PREPARER Howard T. Cox PHONE: (803) 383-4524 0

#### SUPPLEMENTAL INFORMATION

FOR

### LICENSEE EVENT UPDATE REPORT 81-001, REVISION 1

### I. Cause Description and Analysis

On January 7, 1981, the Power Range Channel N41 was taken out of service. Previous to this, the Rod Position Indication System (RPI) input to the turbine runback system and auto rod withdrawal circuit had been defeated due to spurious rod drop indications in an effort to prevent unnecessary thermal cycles to Reactor Coolant System (RCS) components. On January 9, 1981, it was determined, by a review of the H. B. Robinson, Unit No. 2 FSAR and Fuel Reload Safety Evaluation, that both of these documents assume that turbine runback and auto rod withdrawal defeat occur following a control rod drop. These systems are actuated by any one RPI bottom signal or a rapid flux decrease on any one power range channel. By having N41 inoperable, a few rods located in the core region nearest N41 might not be detected by the other three power range detectors if they were to drop. Based on this review, therefore, the event was identified as reportable pursuant to Technical Specification 6.9.2.a.6.

Since an RCCA drop event did not occur during this time, no adverse consequences resulted from the above situation.

## II. Corrective Action

All affected systems were immediately returned to service when it was determined that having both inputs to the turbine runback and auto rod withdrawal systems defeated may be contrary to the FSAR and fuel reload safety analysis.

#### III. Corrective Action To Prevent Recurrence

A review of this issue has been completed, and an analysis has been performed by the fuel supplier. On the basis of this analysis, it has been concluded that even without the turbine runback and automatic rod withdrawal block protection systems, H. B. Robinson, Unit No. 2 will have acceptable thermal margin with respect to a dropped rod transient. The results of this analysis also envelope the current reduced temperature and power operation.

Following this event, administrative controls were implemented to ensure that both turbine runback and auto rod withdrawal block initiating circuits are not defeated at power levels greater than 70%. Based on the analysis described above, the administrative controls governing the RPI and power range nuclear instrumentation inputs to be the turbine runback and automatic rod withdrawal block circuits will be revised to delete the requirement to reduce power to 70%. In general, this action will be taken when instrument problems in the rod position indication system cause false rod bottom signals leading to needless turbine 1 nbacks, or when a power range NIS channel fails or is taken out of service for maintenance and/or testing. The intent of the remaining controls will be to minimize the time these inputs are blocked. Normal operation will continue to be with the runback initiating circuits in place. No further action is considered necessary.