APPENDIX B
UNIT SHUTDOWNS

DOCKET NO. 50-289
DATE August 14, 1997
COMPLETED BY W. HEYSEK
TELEPHONE (717) 948-8191

REPORTING PERIOD: **JUNE 1997**

No.	Date	Type*	Duration (Hours)	Reason[1]	Method of Shutting Down Reactor[2]	Cause & Corrective Action to Prevent Recurrence
97-01	06/21/97	F	~~205.8~~ 181.8	A	3	On 6/21/97 at 1214 hours, the plant tripped on a Loss Of Offsite Power (LOOP). It had been operating at 100% power. The plant trip was caused by the catastrophic failure of generator breaker GB-1-02 in the plant 230KV switch-yard. A fault in the "B" phase of the breaker caused severe overheating and ejection of the bushing and conductor from the breaker. The fault was detected on the #4 bus (230KV) which resulted in the opening of the parallel breaker which suffered a re-strike and caused a fault on the alternate #8 bus. The two faults resulted in breaker action which isolated power to the station and resulted in the LOOP. The LOOP resulted in immediate reactor and turbine trips. Both emergency diesel generators started and loaded on to their respective safeguards buses as designed. Without balance of plant power, the condensate, feed, circulating water and main condenser vacuum pumps were not operable. The once through steam generators were fed through the Emergency Feedwater System via two electric pumps powered by the engineering safeguards busses and a steam driven pump. Heat was removed via the steam generator atmospheric dump valves. Loss of station power also deenergized the reactor coolant pumps which forced the plant into a natural circulation mode. Natural circulation flow was achieved within 19 minutes of the trip. Offsite power was restored within 90 minutes. Systems were restored to enable cooling via the main condenser and subsequent restart of the reactor coolant pumps. The failed breakers were replaced with new ABB model 242 PMG 3000 amp breakers. The plant was back on line at 0202 on June 29, 1997.

*
F Forced
S Scheduled

1
Reason
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & Licensing Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

2
Method
1-Manual
2-Manual Scram
3-Automatic Scram
4-Other (Explain)

SUMMARY: The plant entered the month operating at 100% power and remained at that power level until the plant trip at 1214 on June 21 described above. The plant returned to power operation at 0202 on June 29, 1997. The plant is scheduled to shutdown on September 5, 1997 for refueling.