

WOLF CREEK GENERATING STATION

MONTHLY OPERATING REPORT

MONTH: December YEAR: 1985

Docket No.: STN 50-482

Facility Operating License No.: NPF-42

Report No. 10

Submitted by:

Kansas Gas and Electric Company

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The following report highlights the operating experience of Wolf Creek Generating Station for the month of December, 1985. This report is being provided pursuant to Technical Specification 6.9.1.8.

#### I. SUMMARY OF OPERATING EXPERIENCE

During the entire month of December, the unit operated in Mode 1, Power Operation, bringing Wolf Creek's record continuous days on line to eighty-one days. Two significant load reductions occurred in December. One was necessitated by cumulative penalty deviation time as a result of the Axial Flux Difference being outside the required target band; and the second was a planned load reduction for troubleshooting the turbine oil pump on Main Feedwater Pump "A".

#### II. MAJOR SAFETY RELATED MAINTENANCE ACTIVITIES

The major safety related maintenance activities performed during the month of December included the semi-annual maintenance of the reactor trip breakers and the semi-annual oil change on Centrifugal Charging Pump "A". In addition, oil leakage on both Centrifugal Charging Pumps "A" and "B" was corrected.

#### III. CHANGES, TESTS, AND EXPERIMENTS

The following is a brief description of safety evaluations performed pursuant to 10 CFR 50.59 on changes, tests, and experiments during the month of December.

1. Temporary Modification 85-504-WS - Originated to allow the installation of temporary drain lines, along with the associated fittings and valves, on Service Water System Strainers LWS01FA & B. No unreviewed safety or environmental questions are generated as a result of this temporary modification.
2. Safety Evaluation 85-SE-110 - Originated to allow the lifting of a lead from radiation monitor BM-RT-25 to prevent the initiation of a Steam Generator Blowdown Isolation Signal while troubleshooting was being performed. Automatic actuation of the Steam Generator Blowdown Isolation valves remained available via redundant radiation monitors SJ-RE-02 and BM-RE-52. No unreviewed safety or environmental questions are generated as a result of this temporary modification.
3. Safety Evaluation 85-SE-111 - Originated to allow the attachment of a hose to the leakoff line on valve LF-FV-96, containment outside isolation valve in the line leading from the containment normal sumps to the floor drain tank. The addition of the drain hose is for the purpose of routing leakage to the floor drain to avoid contaminating the floor, and does not affect operation of the subject valve, or any other component. No unreviewed safety or environmental questions are generated as a result of this temporary modification.

4. Plant Modification Request 01149, Revision 0 - Originated to allow the installation of larger capacity hydraulic fluid reservoirs on the Main Steamline Isolation Valves, AB-HV11, 14, 17, and 20 and on the Main Feedwater Isolation Valves, AE-HV39, 40, 41 and 42, actuators to stop hydraulic fluid leakage during periodic maintenance. This plant modification also added local pressure gauges on the hydraulic fluid lines to simplify maintenance. No unreviewed safety or environmental questions are generated as a result of this modification.
5. Plant Modification Request 01185, Revision 2 - Originated to allow the addition of fire wrap thermo/lag material on cables to eliminate IEFE 384-1974 separation violations between conduits (4J1106, 1U3A2C, 4U3E7N, 1U1119 and 1J3A) and the exposed cables on radiation monitors (GT RT22, GT RT31, GT RT32 and GT RT41). No unreviewed safety or environmental questions are generated as a result of this modification.
6. Plant Modification Request 01426, Revision 0 - Originated to change the valve identification number on the valve associated with the Auxiliary/Fuel Building Normal Fan Exhaust Filter Adsorber Unit (FGL02) from 1GL-V-750 to 1GL-V-760 to eliminate duplication of valve identification numbers. No unreviewed safety or environmental questions are generated as a result of this modification.
7. Plant Modification Request 01440, Revision 0 - Originated to allow the addition of flanged connections upstream and downstream of Gaseous Radwaste System drain traps, FHA04 and FHA05 to simplify maintenance on the traps. No unreviewed safety or environmental questions are generated as a result of this modification.
8. Plant Modification Request 01443, Revision 0 - Originated to allow the addition of two manual valved drains to each actuator hydraulic reservoir drip pan on the Main Steamline Isolation Valves and the Main Feedwater Isolation Valves to prevent insulation contamination. No unreviewed safety or environmental questions are generated as a result of this modification.
9. Plant Modification Request 01445, Revision 0 - Originated to allow the installation of threaded pipe caps as per design on the outlet of valves AQ-V832, V879, V880, V912, V914, V920, V943, V968, V970 and V991, of the Condensate and Feedwater Chemistry Control System. This Plant Modification also removed indication of a flow path from the discharge of valves AQ-V879, V920, V943, V970 and V991 to the oily waste system from the design drawings, as the oily waste system is incapable of handling/processing the chemicals discharged through these valves. No unreviewed safety or environmental questions are generated as a result of this modification.

10. Plant Modification Request 01446, Revision 0 - Originated to re-install flow elements EM-FE924, 925, 926, and 927, which are currently installed backwards. These elements are used to balance flow in the safety injection system boron injection lines to the Reactor Coolant System cold legs. The use of reverse-installed flow element differential pressure ( $\Delta P$ ) readings for balancing purposes is acceptable as  $\Delta P$  measurements between the parallel lines are compared on a relative (in  $H_2O$ ) basis rather than on an absolute (gpm) basis. Absolute flow (gpm) is measured as total flow on another flow element, EM-FE917A or B. This modification indicates that the flow elements will be re-installed correctly prior to any future flow balance testing or during the next refueling outage. No unreviewed safety or environmental questions are generated as a result of this modification.
11. Plant Modification Request 00577, Revision 3 - The original PMR and Revisions 1 and 2, as reported in March, 1985, document the addition of a recirculation line with a pressure regulated control valve and the addition of a liquid drain trap on the suction line to each Waste Gas Compressor, SHA02A and B, to prevent loss of units with inadvertent closed discharge. Revision 3 provides engineering disposition to certify conformance of purchased and installed valves with Regulatory Guide 1.143, Table 1 requirements of D-Augmented Special Scope lines. No unreviewed safety or environmental questions are generated as a result of this modification.

# OPERATING DATA REPORT

DOCKET NO. STN 50-482  
WOLF CREEK GENERATING STATION  
KANSAS GAS AND ELECTRIC COMPANY  
DATE 01-01-86  
COMPLETED BY M. Williams  
TELEPHONE 316-364-8831

## OPERATING STATUS

1. Reporting Period: December, 1985 Gross Hours in Reporting Period: 744.0
2. Currently Authorized Power Level (MWt): 3411 Max. Depend. Capacity (MWe-Net): 1128  
Design Electrical Rating (MWe-Net): 1170
3. Power Level to Which Restricted (If Any) (MWe-Net): N/A
4. Reasons for restriction (If Any): N/A

|   | This Month       | Yr to Date       | Cumulative       |
|---|------------------|------------------|------------------|
| 5. Number of Hours Reactor was Critical     | <u>744.0</u>     | <u>2790.3</u>    | <u>2790.3</u>    |
| 6. Reactor Reserve Shutdown Hours           | <u>0.0</u>       | <u>78.7</u>      | <u>78.7</u>      |
| 7. Hours Generator on Line                  | <u>744.0</u>     | <u>2771.6</u>    | <u>2771.6</u>    |
| 8. Unit Reserve Shutdown Hours              | <u>0.0</u>       | <u>0.0</u>       | <u>0.0</u>       |
| 9. Gross Thermal Energy Generated (MWh)     | <u>2,368,666</u> | <u>8,874,933</u> | <u>8,874,933</u> |
| 10. Gross Electrical Energy Generated (MWh) | <u>828,142</u>   | <u>3,071,090</u> | <u>3,071,090</u> |
| 11. Net Electrical Energy Generated (MWh)   | <u>794,915</u>   | <u>2,942,100</u> | <u>2,942,100</u> |
| 12. Reactor Service Factor                  | <u>100.0</u>     | <u>96.9</u>      | <u>96.9</u>      |
| 13. Reactor Availability Factor             | <u>100.0</u>     | <u>99.6</u>      | <u>99.6</u>      |
| 14. Unit Service Factor                     | <u>100.0</u>     | <u>96.2</u>      | <u>96.2</u>      |
| 15. Unit Availability Factor                | <u>100.0</u>     | <u>96.2</u>      | <u>96.2</u>      |
| 16. Unit Capacity Factor (Using MDC)        | <u>94.7</u>      | <u>90.6</u>      | <u>90.6</u>      |
| 17. Unit Capacity Factor (Using Design MWe) | <u>91.3</u>      | <u>87.3</u>      | <u>87.3</u>      |
| 18. Unit Forced Outage Rate                 | <u>0.0</u>       | <u>3.8</u>       | <u>3.8</u>       |
|   | Forecast         | Achieved         |                  |
| Initial Criticality                         | <u>5-22-85</u>   | <u>5-22-85</u>   |                  |
| Initial Electricity                         | <u>6-13-85</u>   | <u>6-12-85</u>   |                  |
| Commercial Operation                        | <u>9-09-85</u>   | <u>9-03-85</u>   |                  |

AVERAGE DAILY UNIT POWER LEVEL

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 KANSAS GAS AND ELECTRIC COMPANY  
 DATE 01-01-86  
 COMPLETED BY M. Williams  
 TELEPHONE 316-364-8831

MONTH December, 1985

DAY AVERAGE DAILY POWER LEVEL  
 (MWe-Net)

DAY AVERAGE DAILY POWER LEVEL  
 (MWe-Net)

|    |             |
|----|-------------|
| 1  | <u>1143</u> |
| 2  | <u>1141</u> |
| 3  | <u>1138</u> |
| 4  | <u>562</u>  |
| 5  | <u>911</u>  |
| 6  | <u>1137</u> |
| 7  | <u>1136</u> |
| 8  | <u>985</u>  |
| 9  | <u>970</u>  |
| 10 | <u>926</u>  |
| 11 | <u>897</u>  |
| 12 | <u>1045</u> |
| 13 | <u>1140</u> |
| 14 | <u>760</u>  |
| 15 | <u>927</u>  |
| 16 | <u>1074</u> |

|    |             |
|----|-------------|
| 17 | <u>1139</u> |
| 18 | <u>1149</u> |
| 19 | <u>1131</u> |
| 20 | <u>1134</u> |
| 21 | <u>1135</u> |
| 22 | <u>1142</u> |
| 23 | <u>1138</u> |
| 24 | <u>1148</u> |
| 25 | <u>1148</u> |
| 26 | <u>1138</u> |
| 27 | <u>1146</u> |
| 28 | <u>1146</u> |
| 29 | <u>1147</u> |
| 30 | <u>1149</u> |
| 31 | <u>1148</u> |

## UNIT SHUTDOWN AND POWER REDUCTIONS

DOCKET NO. STN 50-482  
 WOLF CREEK GENERATING STATION  
 KANSAS GAS AND ELECTRIC COMPANY  
 DATE 01-01-86  
 COMPLETED BY M. Williams  
 TELEPHONE 316-364-8831

REPORT MONTH December, 1985

| No | Date   | TYPE<br>F: FORCED<br>S: SCHEDULED | DURATION<br>(HOURS) | REASON<br>(1) | METHODS SHUTTING<br>DOWN THE REACTOR<br>OR REDUCING POWER(2) | CORRECTIVE ACTIONS/COMMENTS  |
|----|--------|-----------------------------------|---------------------|---------------|--|--|
| 23 | 851204 | F                                 | 0.0                 | A             | 1  | Power reduction due to Axial Flux Difference drifting outside target band as a result of immovable Control Rods (Licensee Event Report 85-079-00). |
| 24 | 851214 | S                                 | 0.0                 | B             | 1  | Power reduction for troubleshooting Main Feedwater Pump "A" turbine oil pump.  |

## SUMMARY:

(1) REASON: A: EQUIPMENT FAILURE (EXPLAIN)  
 B: MAINTENANCE OR TEST  
 C: REFUELING  
 D: REGULATORY RESTRICTION

E: OPERATOR TRAINING AND LICENSE EXAMINATION  
 F: ADMINISTRATIVE  
 G: OPERATIONAL ERROR (EXPLAIN)  
 H: OTHER (EXPLAIN)

(2) METHOD: 1. MANUAL  
 2. MANUAL SCRAM  
 3. AUTOMATIC SCRAM  
 4. OTHER (EXPLAIN)

## KANSAS GAS AND ELECTRIC COMPANY

## WOLF CREEK GENERATING STATION

## UNIT NO. 1

MONTH December, 1985

## SUMMARY OF OPERATING EXPERIENCE

Listed below in chronological sequence is a summary of operating experiences for this month which required load reduction or resulted in significant non-load related incidents.

| <u>DATE</u>       | <u>TIME</u> | <u>EVENT</u>  |
|-------------------|-------------|---|
| December 1, 1985  | 0000        | Unit in Mode 1, Power Operation.  |
| December 4, 1985  | 0207        | Commenced power reduction to less than 90 percent power because of Axial Flux Difference (AFD) drifting outside target band. AFD drift was caused by immovable Control Rods.  |
|                   | 0231        | Commenced power reduction to less than 50 percent power because of AFD cumulative penalty deviation time. Further discussion is provided in Licensee Event Report 85-079-00.  |
| December 5, 1985  | 0601        | Commenced power increase to 100 percent power.  |
| December 8, 1985  | 0120        | Power reduced by automatic setback resulting from trip of Circulating Water Pump "B". Unit remained at approximately 85 percent power to maintain Main Condenser $\Delta T$ and to perform repair work on Circulating Water Pump "A". |
| December 11, 1985 | 2145        | Commenced power increase to approximately 95 percent power.   |
| December 14, 1985 | 0400        | Commenced power reduction to approximately 55 percent power to allow troubleshooting of "A" Main Feedwater Pump turbine oil pump.   |
|                   | 1131        | Reduced power to approximately 49 percent because of excessive tilt in quadrant 3, causing Quadrant Power Tilt Ratio to exceed 1.02.  |
|                   | 1730        | Commenced power increase to approximately 80 percent power.   |
| December 15, 1985 | 0600        | Commenced power increase to approximately 100 percent power.  |



KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER  
VICE PRESIDENT - NUCLEAR

January 14, 1986

Director, Office of Resource Management  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. E.H. Johnson, Acting Director  
Division of Reactor Safety and Projects  
U.S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

KMLNRC 86-006  
Re: Docket No. STN 50-482  
Subj: December, 1985 Monthly Operating Report

Gentlemen:

Enclosed is the December, 1985 Monthly Operating Report for Wolf Creek Generating Station. This submittal is being made in accordance with the requirements of Technical Specification 6.9.1.8.

Yours very truly,

*John A. Bailey*  
for Glenn L. Koester  
Vice President - Nuclear

GLK:see

Enclosure

xc: PO'Connor (2), w/a  
JTaylor (12), w/a  
JCummins, w/a

IE24  
1/1