VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH SEPTEMBER YEAR 1981

APPROVED:

STATION MANAGER

OPERATING DATA REPORT

DOCKET NO. 50-338

DATE 10-05-81

COMPLETED BY L.L. Rogers

TELEPHONE (703) 894-5151 X2510

| | OPERATING STATUS | Notes | | | | |
|-----|--|--------------|--------------------|--------------------|--|--|
| , | Unit Name: North Anna 1 | | Notes | | | |
| 2. | Reporting Period: September 1981 | | | | | |
| 3. | Licensed Thermal Power (MWt): | 2775 | | | | |
| 4. | Nameplate Rating (Gross MWe): | 947 | | | | |
| 5. | Design Electrical Rating (Net MWe): | 907 | | | | |
| 6. | Maximum Dependable Capacity (Gross MWe): | | | | | |
| 7. | Maximum Dependable Capacity (Net Mwe): | 865 | | | | |
| 8. | If Changes Occur in Capacity Ratings (It | | 7) Since Last Re | port, Give Reasons | | |
| | N/A | | | | | |
| | | | | | | |
| 9. | Power Level To Which Restricted, If Any | (Net MWe): | N/A | | | |
| 10. | Reasons For Restrictions, If Any: | | N/A | | | |
| | | | | | | |
| | | | | | | |
| | | This Month | Yrto-Date | Cumulative | | |
| 11. | | 720 | 6,551 | 29,112 | | |
| 12. | | 720 | 4,243.8 | 22,216.9 | | |
| 13. | Reactor Reserve Shutdown Hours | 0 | 13.8 | 226.9 | | |
| 14. | Hours Generator On-Line | 720 | 4,124.8 | 21,772.9 | | |
| 15. | Unit Reserve Shutdown Hours | 0 | 0 | 0 | | |
| 16. | Gross Thermal Energy Generated (MWH) | 1,929,551 | 10,897,224 | 56,065,927 | | |
| 17. | Gross Electrical Energy Generated (MWH) | 620,516 | 3,540,720 | 17,875,632 | | |
| 18. | Net Electrical Energy Generated (MWH) | 586,022 | 3,341,231 | 16,826,234 | | |
| 19. | Unit Service Factor | 100 | 62.9 | 74.8 | | |
| 20. | Unit Availability Factor | 100 | 62.9 | 74.8 | | |
| 21. | Unit Capacity Factor (Using MDC Net) | 94.1 | 58.9 | 66.8 | | |
| 22. | | 89.7 | 56.2 | 63.7 | | |
| 23. | | 0 | 1.3 | 5.1 | | |
| 24. | Shutdowns Scheduled Over Next 6 Months | (Type, Date, | and Duration of Ea | ach): | | |
| | Fall Maintenance - 10-05-81 th | iru 10-23-81 | | | | |
| _ | | | | | | |
| 25. | | | | N/A | | |
| 26. | Units In Test Status (Prior to Commerci | | : Forecast | Achieved | | |
| | | | | | | |
| | INITIAL CRITICALITY | | | | | |
| | INITIAL ELECTRICITY COMMERCIAL OPERATION | | | | | |

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-338

UNIT NA-1

DATE 10-05-81

COMPLETED BY L.L. Rogers

TELEPHONE703-894-5151X2510

| MONTH | September | | |
|-------|-------------------------------------|-----|-------------------------------------|
| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
| 1 | 840 | 17 | 843 |
| 2 | 843 | 18 | 839 |
| 3 | 841 | 19 | 835 |
| 4 | 839 | 20 | 841 |
| 5 | 541 | 21 | 845 |
| 6 | 838 | 22 | 844 |
| 7 | 842 | 23 | 846 |
| 8 | 706 | 24 | 846 |
| 9 | 592 | 25 | 780 |
| 10 | 717 | 26 | 562 |
| 11 | 841 | 27 | 821 |
| 12 | 845 | 28 | 851 |
| 13 | 843 | 29 | 852 |
| 14 | 844 | 30 | 852 |
| 15 | 842 | 31 | |
| 16 | 844 | | |

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

UNIT SHUTDOWNS AND POWER REDUCTIONS

| | | | | UNIT | SHUTDOWNS AND | DOCKET NO. 50-338 UNIT NAME North Anna 1 DATE 10-05-81 | | | | |
|-------|------------------|--|--|--|--|--|--|---------------------|--|---|
| | | | | | REPORT MONTH _ | SEPTEM | BEK | | COMPLETED BY TELEPHONE | L. L. ROGERS (703) 894-5151 X2 |
| No. | Date | Type 1 | Duration (Hours) | Reason ² | Method of Shutting Down Reactor ³ | License Event Report | Code / | Component Code 5 | Cause & Corrective Action to Prevent Recurrence | |
| 81-14 | 810908 | F | N/A | D | 5 | LER-81- | 73 SF | ACCUMU | Reduced loa "B" accumul specificati | |
| 81-15 | 810925 | S | N/A | В | 5 | N/A | N/A | N/A | Reduced loa containment improve "B" ventilation | RCP |
| 1 | | 2 | | | | | 3 | | 4 | |
| | orced chedule | d A-E B-M C-R D-R E-O F-A | son: quipment quipme | Restrict raining & tive 1 Error (| ion License Examin | nation | Method: 1-Manual 2-Manual Scra 3-Automatic S 4-Continuatio 5-Load Reduct 9-Other | cram | Exhibit F - for Preparat Entry Sheets Event Report (NUREG-0161) 5 Exhibit 4 - | ion of Data for Licensee (LER) File |

OPERATING DATA REPORT

DOCKET NO. 50-339

DATE 10-05-81

COMPLETED BY L.L. Rogers

TELEPHONE (703) 894-5151 X2510

OPERATING STATUS

| | | | Notes | |
|------------|--|--|--|--|
| 1. | Unit Name: North Anna 2 | | | |
| 2. | Reporting Period: September 1981 | | | |
| 3. | Licensed Thermal Power (MWt): | 2775 | | |
| 4. | Nameplate Rating (Gross Mee): | 947 | | |
| 5. | Design Electrical Rating ('et Mwe): | 907 | | |
| 6. | Maximum Dependable Capacit (Gross Mwe): | 938 | | |
| 7. | Maximum Dependable Capacity (Net MWe): | 890 | | |
| 8. | If Changes Occur in Capacity Ratings (It | All residents are as for the contract of the c | 7) Since Last Re | eport, Give Reason |
| | | | | |
| | N/A | | | |
| Q | Power Level To Which Restricted, If Any | (Net MWe): | N/A | |
| | Reasons For Restrictions, If Any: | (ince inc). | N/A | |
| | | | | |
| | | | | |
| | | | | |
| | | This Month | Yrto-Date | Cumulative |
| 11 | Hours In Reporting Period | 720 | 6,551 | 6,983 |
| 11. | Number of Hours Reactor Was Critical | 670.2 | 4,791.1 | 5,220 |
| 12. | | 0 | 1,341.4 | 1,621.4 |
| 14. | | 666.1 | 4,649.1 | 5,061.8 |
| | Unit Reserve Shutdown Hours | 000.1 | 0 | 0 |
| 15. 16. | | 1,802,899 | 11,904,002 | 12,990,999 |
| | 이 그렇게 그리지 않는데 그리고 이 경험하게 되는 사람이 모든 사람이 되었다. | A CONTRACTOR OF THE PROPERTY OF THE PARTY OF | 4,009,928 | 4,378,359 |
| 17. | | NAME AND ADDRESS OF THE OWNER, WHEN PERSON ADDRESS OF THE OWNER, WHEN PERSON AND ADDRESS OF THE OWNER, WHEN | 3,791,660 | 4,141,304 |
| 18. | | 576,864 | 70.9 | 72.5 |
| 19. | Unit Service Factor | 92.5 | The state of the s | 72.5 |
| 20. | | 92.5 | 70.9 | 66.6 |
| 21. | Unit Capacity Factor (Using MDC Net) | 90.0 | 65.0 | 65.4 |
| 22. | Unit Capacity Factor (Using DER Net) | 88.3 | 53.8 | 24.2 |
| 23. | Unit Forced Outage Rate | 7.5 | 25.6 | And the last of the Control of the C |
| 24. | Shutdowns Scheduled Over Next 6 Months | (Type, Date, a | nd Duration of Ea | cu). |
| | Refueling Outage - 03-05-82 | thru 05-14-82 | | |
| | | | | |
| 25. | If Shut Down At End Of Report Period, E | stimated Date | of Startup: | N/A |
| - A | | | | |
| 26. | Units in lest Status (Frior to commerci | | orecast | Achieved |
| | INITIAL CRITICALITY | | | |
| | INITIAL ELECTRICITY | | | |
| | COMMERCIAL OPERATION | | | |
| | The second secon | | and the same of th | AND DESCRIPTION OF THE PROPERTY OF THE PROPERT |

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-339

UNIT NA-2

DATE 10-05-81

COMPLETED BY L.L. Rogers

TELEPHONE703-894-5151X251(

| MONTH | September | | |
|-------|-------------------------------------|-----|-------------------------------------|
| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
| 1 | 884 | 17 | 731 |
| 2 | 887 | 18 | 0 |
| 3 | 885 | 19 | 0 |
| 4 | 884 | 20 | 579 |
| 5 | 868 | 21 | 881 |
| 6 | 885 | 22 | 860 |
| 7 | 887 | 23 | 874 |
| 8 | 874 | 24 | 877 |
| 9 | 874 | 25 | 880 |
| 10 | 882 | 26 | 875 |
| 11 | 876 | 27 | 863 |
| 12 | 882 | 28 | 868 |
| 13 | 856 | 29 | 882 |
| 14 | 855 | 30 | 886 |
| 15 | 833 | 31 | |
| 16 | 866 | | |

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

| | | | | SHUTDOWNS AND | POWER | | | DOCKET NO. UNIT NAME DATE COMPLETED BY TELEPHONE | 50-339 North Anna 2 10-05-81 L. L. ROGERS (703) 894-5151 X2510 | |
|--------------------------|--|---|--|--|---------------------------|---|-----------------------|---|--|--|
| No. Date | Type ¹ | Duration (Hours) | Reason ² | Method of Shutting Down Reactor ³ | Licens Event Report | Code 4 | Component Code 5 | Cause & Cor Action Prevent Rec | to | |
| 81-25 810903 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 95% due to "B" hi temperature | |
| 81-26 810908 | S | N/A | В | 5 | N/A | N/A | N/A | house to in | to 80% for Westing- vestigate turbine ration problem. | |
| 81-27 810911 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 93% due to "B" hi temperature | |
| 81-28 810912 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 95% due to "B" hi temperature | |
| 81-29 810913 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 94% due to "B" hi temperature | |
| F: Forced S: Schedule | d A-F B-M C-F D-F E-C F-A | son: Equipment I Maintenance Refueling Regulatory Operator T Administra Operationa Other (Exp | Restrict raining & tive 1 Error (| ion License Examin | | 3 Method: 1-Manual 2-Manual Scram. 3-Automatic Scra 4-Continuations 5-Load Reduction 9-Other | for En Ev (N | Exhibit F - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161) | | |

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| | | | UNIT SHUTDOWNS AND POWER REDUCTIONS REPORT MONTH SEPTEMBER | | | | | DOCKET NO. UNIT NAME DATE COMPLETED BY | 50-339 North Anna 2 10-05-81 L. L. ROGERS | |
|---------------------------|--|---|---|-----------|-----------------|--|--------------------------|--|--|--|
| No. Date | Type 1 | Duration (Hours) | | Method of | Licen: Event | see System | Component Code 5 | TELEPHONE (703) 894-5151 X251 | | |
| 81-30 810914 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 88% due to "B" hi temperature | |
| 81-31 810914 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 89% due to "B" hi temperature | |
| 81-32 810915 | F | N/A | F | 5 | N/A | N/A | N/A | | d to 90% due to "B" hi temperature | |
| 81-33 810917 | F | N/A | Н | 5 | N/A | N/A | N/A | Reduced loa Operator fo following t | | |
| F: Forced S: Scheduled | d A-F B-N C-F D-F E-C F-A | Reason: A-Equipment Failure (Explain) B-Maintenance or Test C-Refueling D-Regulatory Restriction E-Operator Training & License Examination F-Administrative G-Operational Error (Explain) H-Other (Explain) | | | | 3 Method: 1-Manual 2-Manual Scram. 3-Automatic Scra 4-Continuations 5-Load Reduction 9-Other | for Ent Eve (NI | nibit F - Instr r Preparation of try Sheets for ent Report (LER UREG-0161) | f Data Licensee) File | |

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| | | | | SHUTDOWNS AND | | REDUCT EMBER | TIONS | | DOCKET NO. UNIT NAME DATE COMPLETED BY TELEPHONE | 50-339 North Anna 2 10-05-81 L. L. ROGERS (703) 894-5151 X2510 |
|---------------------------|---|---|--------------------------------|--|-------------------------|-----------------|---|--------------------------|--|--|
| No. Date | Type 1 | Duration (Hours) | Reason ² | Method of Shutting Down Reactor ³ | Licen Event Repor | | System Code 4 | Component Code 5 | Cause & Corr Action t Prevent Recu | 0 |
| 81-34 810917 | F | 53.9 | A | 2 | LER-8 | 1-66 | SF | ACCUMU | Ramped unit due to "C" a out of speci Reactor trip steam genera level while to return un | occumulator ification. o due to "B" otor hi/hi |
| 81-35 810922 | F | N/A | F | 5 | N/A | | N/A | N/A | | to 93% due to "B" hi temperature |
| 81-36 810927 | F | N/A | F | 5 | N/A | | N/A | N/A | | i to 92% due to "B" hi temperature |
| F: Forced S: Scheduled | d A-E B-M C-R D-R E-O F-A G-O | son: quipment I daintenance lefueling legulatory perator Tr dministrat perational | Restrict: raining & tive | ion License Examin | ation | 3-Auto | ual Scram. omatic Scratinuations d Reductions | for Ent Eve (NU | ibit F - Instru Preparation of ry Sheets for I nt Report (LER) REG-0161) | f Data Licensee) File |

Page 1 of 1

| INIT | CHITDOWN | ANT | DOLTED | REDUCTIONS | |
|------|----------|------|--------|------------|--|
| UNLL | SHUIDOWN | MIND | LUMER | REDUCTIONS | |

LAPLANATION SHEET DOCKET NO. 50-339

REPORT MONTH SEPTEMBER UNIT NAME NA-2

YEAR 1981 DATE 10-05-81

COMPLETED BY L. L. ROGERS

81-33 (H) (5) Reduced load per System Operator to accomodate system load demand.

81-34 (A) (2) Ramped unit off line due to "C" accumulator out of specification, > 2100 ppm boron. Peactor trip due to "B" steam generator hi/hi level due to excessive leakage through the "B" main feedwater reg valve.