

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

November 26, 1996

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 96-587
SPSLIC/CGL R3
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
COMMENTS ON SALP REPORT (INSPECTION REPORT 96-99)

On November 8, 1996, you transmitted the Systematic Assessment of Licensee Performance (SALP) for Surry Power Station for the period of January 22, 1995, through September 28, 1995. You noted superior performance in the areas of Plant Operations, Engineering, and Plant Support. Performance in Maintenance was considered to have improved but remained at the good level. Your recognition of the high level of performance achieved at Surry Power Station is appreciated. We also appreciate the open discussion of the SALP process and results provided at the public meeting held at the Surry Nuclear Information Center on November 18, 1996.

While we agree with most of the comments in the SALP report related to our performance in Maintenance, we believe that the overall performance in Maintenance merited a superior rating, particularly when considering the latter portion of the SALP period. Our conclusion is supported by observable improvements in key performance indicators. This performance improvement late in the SALP period was in part the result of process improvements planned and implemented earlier in the SALP period. We specifically request your reconsideration of the performance rating assigned to the Maintenance area of the SALP. The following information concerning Maintenance processes and performance is offered for your consideration in reviewing the overall rating of Maintenance.

Numerous equipment related performance improvements were realized during the SALP period. Furthermore, several process improvements were implemented based on our self-assessments and a requested INPO assist visit. These included the establishment of formal resolution plans, improvements in the work control process, and increased focus on human performance. These improvements are discussed below with specific examples of the related performance improvements provided.

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Equipment Related Performance Improvements

The following examples of equipment related performance improvements are attributed to maintenance activities:

- The Rod Control System performance has dramatically improved as a result of improved personnel training, preventative maintenance, testing, and environmental control. While rod control problems were the leading cause of reactor trips in early 1995, there have been no Rod Control System related reactor trips since May 1995 and no rod urgent failures since September 1995.
- Service Water/Circulating Water System traveling screens have been replaced, resulting in reduced carryover of material from the river. This has resulted in significant reductions in macrofouling of the Component Cooling heat exchangers, Service Water System components, and condenser water boxes. This has increased the reliability of these components and reduced the requirement for corrective maintenance support by operations and other plant personnel.
- Improvements in the maintenance and testing of the Turbine-Driven Auxiliary Feedwater Pump were implemented. As a result, the reliability has improved with no overspeed trips occurring since January 1995.
- Several maintenance activities were focused on assuring continued excellent long term plant performance. Although these items have not caused significant problems in the past, they are being upgraded to ensure continued reliability in the future. Specific examples of these activities include rebuilding of Circulating Water Pumps, replacement of Emergency Diesel Generator fuel oil supply lines, replacement of Station Service Transformer cables, and replacement of Radiation Monitoring System components with digital equipment.

Additional examples of improved equipment reliability resulting from maintenance activities were discussed in our October 10, 1996 letter (Serial No. 96-408).

Resolution Plans

Formal resolution plans for improving performance of important equipment were initiated during early 1996. These resolution plans support station management's evaluation of the timeliness and effectiveness of equipment improvements. As a result, management attention and station resources have continued to be focused on improving long-term equipment performance.

Work Control Process Improvements

Several work control process improvements were implemented during the SALP period which improved the effectiveness and efficiency of maintenance. For

example, we completely revised the work order process. In addition, we implemented the computer based Work Information, Control, Assessment, and Tracking System (WICATS) to provide better tracking of work packages. These changes resulted in improved communications and teamwork, as well as encouraged advance work package reviews, job walkdowns, and material verifications. As a result of these improvements, the following benefits have been realized:

- The availability of important safety equipment has improved. Out-of-service time for important safety equipment is almost exclusively due to pre-planned maintenance. Such maintenance has been completed in significantly less time during the latter portion of the SALP period.
- The number of open work packages, minor maintenance items, and catch containers has been reduced, resulting in improved equipment condition and reliability. This is demonstrated by the reduced number of reactor trips and forced outages experienced, particularly during the latter portion of the SALP period.

Human Performance

Your letter noted that human performance deficiencies remained a challenge during the SALP period. We agree that excellent personnel performance is essential in achieving superior maintenance. Ongoing initiatives addressing human performance were discussed in our October 10, 1996 letter. We have focused on improving human performance through training and coaching. For example, the supervisor of mechanical maintenance conducted training to reinforce our basic values, and first line supervisors routinely observe work in progress. As a result, corrective maintenance and surveillances have consistently demonstrated excellent equipment reliability. The number of Licensee Event Reports and Level IV violations related to maintenance activities has improved over the SALP period. While there was one Level III violation associated with the hydrogen analyzers, it was the result of problems occurring several years ago that were just identified during this SALP period.

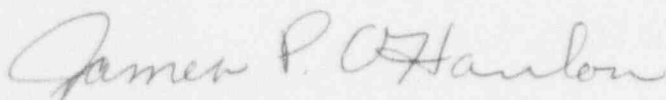
In summary, these programmatic improvements in Maintenance have resulted in improved plant performance. This conclusion is supported by a comparison of key performance indicators, presented in Attachment 1. Where possible the data in Attachment 1 have been compared for January to December 1995 (early in the SALP period) versus January to September 1996 (late in the SALP period). For the other parameters, the comparison has been presented based on a refueling basis or based on data availability (i.e., when tracking started along with intermediate/subsequent data points).

In addition to the above comments relative to the functional area of Maintenance and human performance, we acknowledge the importance of the statements made in your

letter regarding other challenges that are deserving of further management attention. These statements addressed operations tagout problems and management failures to observe procedural requirements during schedule-intensive activities. Management attention has focused on these concerns. Specifically, evaluation of tagging program enhancements noted in our August 14, 1996, letter (Serial No. 96-376) are continuing. While some actions to address management expectations during schedule-intensive activities have been taken and were discussed during the November 6, 1995 pre-decisional enforcement conference, this subject will continue to be an area of management focus.

We believe that this information demonstrates superior performance in the Maintenance area during the SALP period. We specifically request your reconsideration of the performance rating for maintenance based on this information and a more focused consideration of performance in the last six months of the SALP period. If you would like to discuss this information, please contact us.

Very truly yours,

A handwritten signature in cursive script, reading "James P. O'Hanlon".

James P. O'Hanlon
Senior Vice President - Nuclear

Attachment

cc: U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W.
Atlanta, Georgia 30323

Mr. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

ATTACHMENT 1

KEY PERFORMANCE INDICATOR COMPARISON RELATED TO MAINTENANCE

<u>Plant Performance</u>	<u>Jan - Dec 1995</u>	<u>Jan - Sept 1996</u>
Reactor Trips (total number) (manual, automatic)	5 (3, 2)	2 (1, 1)
Forced Outage Rate (%)	5.1	1.1

<u>Equipment Unavailability Hours Due to Planned Maintenance</u>	<u>Jan - Dec 1995</u>	<u>Jan - Sept 1996</u>
EDG	262.81	90.37
HHSI System	42.72	25.88
LHSI System	42.34	33.31
Recirculation Spray System	16.60	1.07
Containment Spray System	146.89	19.52
AF .V System	171.86	94.84
RHR System	0.0	0.0

Work Control Performance

Open Work Orders	<u>2/95 U2 RFO:</u>	<u>9/95 U1 RFO</u>	<u>4/96 U2 RFO:</u>
Beginning	6878	5095	4871
End	5105	3187	2980
Open DCP Work Orders	<u>7/95:</u> 638	<u>12/95:</u> 293	<u>6/96:</u> 250
Open Outstanding Minor Maintenance (Deficiency Cards)	<u>9/95:</u> 1259	<u>12/95:</u> 1053	<u>9/96:</u> 297
Catch Containers	<u>11/95:</u> 23	<u>1/96:</u> 27	<u>9/96:</u> 0

ATTACHMENT 1
(continued)

**KEY PERFORMANCE INDICATOR COMPARISON
RELATED TO MAINTENANCE**

<u>Regulatory Performance for Maintenance Activities</u>	<u>Jan - Dec 1995</u>	<u>Jan - Sept 1996</u>
Level III Violations	0	1**
Level IV Violations	4	1
Non-cited Violations	1	4
Licensee Event Reports	13	8

** Pre-existing problem with the containment hydrogen analyzer identified during this SALP period