

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

January 23 2 1987: 11  
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W. L. STEWART  
VICE PRESIDENT  
NUCLEAR OPERATIONS

Mr. Virgil L. Brownlee, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N. W.  
Atlanta, Georgia 30323

Serial No. 86-836  
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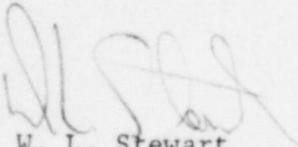
Dear Mr. Brownlee:

VIRGINIA ELECTRIC AND POWER COMPANY  
SURRY POWER STATION UNITS 1 AND 2  
ALLEGED CONTAMINATION AND CONTROL DEFICIENCIES  
DURING OUTAGE (FILE NO. RII-86-A-0618)

We have reviewed your letter, dated December 4, 1986, regarding the allegation of contamination and control deficiencies during the recent Unit 2 refueling outage at our Surry Power Station (File No. RII-86-A-0168). The findings of our investigation are provided in the attachment for your review and consideration.

If you have any questions regarding this matter, please contact us.

Very truly yours,

  
W. L. Stewart

Attachment

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ATTACHMENT

Statement of Concerns

### Statement of Concerns

2960168001:

"Work during the refueling outage at the Surry Nuclear Plant was hampered by poor housekeeping, particularly the "dirty conditions" in the plant. These conditions included excessive dirt, dust and oil in the working areas. These poor housekeeping conditions raised a concern regarding the possibility of excessive contamination in those areas containing excessive dust such as on pipes and up in the overheads."

#### Response:

We presume that the alleged "poor housekeeping conditions" is not the particular item of concern. Plant housekeeping conditions/cleanliness is an item that is routinely inspected by the NRC and has been addressed in previous NRC Inspection Reports. We were and still are aware of the potential for contamination in work areas and loose contamination in the overhead spaces within containment. Some of these areas are not normally accessible to decontamination crews. Presently, the Station has an aggressive program to recover contaminated spaces. At Surry Power Station in 1986, this program has recovered 7815 square feet of previously contaminated area.

This potential for contamination is taken into account when a Radiation Work Permit (RWP) is written for work done in an area with expected high levels of contamination and/or loose contamination. The RWP usually prescribes extra protective clothing or plastic disposable clothing and respiratory protection as a precaution to protect the worker. Health Physics personnel survey these areas prior to allowing work to commence and, depending upon contamination and radiation levels, provide surveillance during work to ensure protective measures are adequate.

2860168002:

"Many of the workers employed during the outage were temporary workers at the plant specifically to work during the outage. Some of these workers were concerned about getting contaminated and possibly losing their jobs as a result of picking up contamination. It was reported that there were signs posted in the containment that stated words to the effect that if workers got contaminated that they would be barred from containment. Many workers took those signs as a threat or warning that if they got contaminated that they would lose their jobs. As a result, many workers were not frisking properly. Some workers were alleged to be decontaminating themselves and cleaning "hot spots" before going through the friskers so that the friskers would not alarm. Some workers were alleged to have frisked improperly so that the friskers would not alarm by avoiding "hot spots" during frisking."

Response:

There were no signs posted in containment that stated words to the effect that if workers got contaminated that they would be barred from containment. In fact, our current Station policy regarding repetitive contamination of a worker due to his negligence, poor work practices, or inadequate training requires that the worker be restricted from further entry to the Restricted Controlled Area (RCA) until his immediate supervisor prescribes appropriate corrective actions. This policy has been encouraged in the past by the NRC and INPO.

We have found no evidence to suggest that workers were not frisking properly or were decontaminating themselves and cleaning "hot spots" before going through the friskers to prevent the friskers from alarming. Improper frisking is unlikely since health physics personnel are continuously stationed in the frisking area at the exit to the RCA. Furthermore, there is no area in the RCA for workers to decontaminate themselves before exiting. The workers exit through newly installed automatic personal contamination monitors which provide a whole body frisk. An improper frisk cannot be accomplished without sounding an alarm.

Improper frisking and failure to notify Health Physics of contamination is strictly against Station policy and procedures. Frisking procedures are posted at the friskers and are taught in General Employee Training.

2860168003:

"The clean change area was contaminated."

Response:

During the Unit 2 refueling outage, the clean change area was not contaminated. However, on October 21, 1986 (third week of the outage), there was a localized liquid spill of sample water in the hallway leading to the RCA. This spill was the result of a worker accidentally kicking a sample bottle after exiting a frisker. The spill was immediately contained and was cleaned up within an hour. No one was contaminated during this incident, and the sample bottle was later determined to have contained non-radioactive water.

2860168004:

"Some of the temporary workers employed during the outage were concerned about reporting problems for fear of losing their jobs. These workers avoided expressing concerns to either the Health Physics personnel or the NRC because they did not want to risk being removed from the job because they needed the work."

Response:

We are not aware of any instances where an employee was concerned about reporting problems. There exists several mechanisms at the Station to allow workers to express their concerns to management which are routinely utilized. Radiological Problem Reports, ALARA Suggestion Reports and Industrial Safety Deficiencies may be submitted by any worker. General Employee Training (GET), which is required for all radiation workers, includes instruction in Worker's Rights and Employee Protection, as described in 10 CFR 19. GET informs workers of the correct procedures for reporting problems. The content and posting locations for Form NRC-3 are also discussed in GET. In conclusion, workers are informed and have adequate opportunity to express concerns without fear of discrimination.

2860168005:

"It was alleged by some of the workers on the day shift that they would remain in the contaminated areas even though they had no work to do. They would remain in the contaminated areas trying to appear as though they were working. These workers apparently felt that they "had to look busy" so that they would not be laid off or told to go home because of lack of work."

Response:

Although we are unaware of the specific instance referred to in the allegation, Station policy and training is to minimize time in the radiation and contamination areas. During major working hours in containment, there is a Health Physics Containment Coordinator assigned to the containment to assure that Health Physics coverage and controls are adequate. The Coordinator is responsible to maintain an awareness of work activities throughout containment. The Coordinator will direct individual workers or work groups observed to be loitering or not performing activities authorized by their RWP to leave the containment in accordance with Station policy.

Workers are instructed in General Employee Training of the importance of minimizing their time in radiation and contamination areas. They are further instructed in the mechanisms available to report practices contrary to Station policies to appropriate management. No such reports were received.