



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064**

December 28, 2001

EA-01-236

Mr. J. V. Parrish  
Chief Executive Officer  
Energy Northwest  
P. O. Box 968; MD 1023  
Richland, Washington 99352-0968

**SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A YELLOW FINDING AND  
NOTICE OF VIOLATION (NRC Inspection Report No. 50-397/01-008)**

Dear Mr. Parrish:

The purpose of this letter is to provide you with the final results of our significance determination of the preliminary Yellow finding identified in the subject inspection report. Our preliminary findings were discussed with your staff during an exit briefing conducted on September 24, 2001. The inspection findings were assessed using the significance determination process and were preliminarily characterized as Yellow (i.e., an issue with substantial importance to safety that will result in additional NRC inspection and potentially other NRC action). This Yellow finding involved the apparent failure to meet the requirements of 10 CFR 50.54(q) in that Columbia Generating Station (CGS) did not follow and maintain emergency plans and procedures which met the emergency planning standards in 10 CFR 50.47(b)(10). Specifically, the finding involved a failure to provide a range of protective actions for certain members of the public, i.e., employees of companies that leased buildings within the CGS exclusion area boundary.

At your request, a Regulatory Conference was held on November 26, 2001, to further discuss your views on this issue. During the conference, your staff described your assessment of the significance of the findings, your evaluation of each of the inspection report concerns, and your position on whether a violation of NRC requirements occurred. Specifically, your position was that you had not violated 10 CFR 50.54(q) and 10 CFR 50.47(b)(10) in that Energy Northwest: had plans and procedures that described a process for notifying the lessees via telephone and sirens; had the ability to implement protective actions for the lessees; and had provisions for radiological monitoring of these lessees. Energy Northwest also stated its belief that a violation of NRC requirements had occurred, although not described in the NRC's inspection report. Specifically, Energy Northwest indicated that initial notification of essentially 100 percent of personnel during off-hours may not have been completed within 15 minutes as required by the CGS Emergency Plan. Energy Northwest stated its belief that this violation would have very low safety significance (green), if evaluated under the NRC's significance determination process. Energy Northwest also identified two weaknesses: (1) CGS had not confirmed that the lessees provided emergency response information to their employees, and (2) CGS had not provided these lessee employees additional written information in advance on evacuation routes and assembly areas, a factor which could have delayed evacuation.

During the regulatory conference, Energy Northwest also introduced certain information which had not been previously discussed with the NRC and was not documented in the NRC's inspection report, but which is pertinent to the NRC's final significance determination. This included the following information: (1) The Crossroads Siren was inoperable between January 1997 and March 1998; (2) Some of the emergency response actions that Energy Northwest described at the conference were contained in the WNP-1 Construction Site Emergency Evacuation and Response Plan and the Site Wide Instructions. However, this information was not contained or referenced in the CGS Emergency Plan nor its emergency plan implementing procedures and thus was not subject to periodic reviews, routine exercises, and submittal to the NRC for review; and (3) The WNP-1 Designated Site Authority maintained a call list which would have been used to notify lessees in an emergency.

After considering the information developed during the inspection, and the information you provided at the conference, the NRC has concluded that the inspection finding is appropriately characterized as Yellow. The NRC acknowledges that you had established some measures to provide for protective actions for members of the public who were employed by lessees within the exclusion area boundary of CGS. However, our conclusion is that these measures were not sufficiently comprehensive and were not sufficiently planned or established to meet the standard of providing a range of protective actions for these members of the public who were routinely working in your exclusion area boundary. Therefore, we have concluded that CGS violated 10 CFR 50.54(q) and emergency planning standard 10 CFR 50.47(b)(10). The bases for our conclusions are as follows:

- (1) Regarding the establishment of a means and time required to warn or advise lessees of an emergency, you stated that notification to lessees of an exclusion area evacuation was accomplished by multiple parallel processes, including sirens, other notification processes (Gaitronics, plant paging system, and Energy Northwest radio systems), systems sweeps by CGS security personnel, telephone notification (via call-trees initiated by the WNP-1 Designated Site Authority), and a sign posted on the access road. You also stated that the exclusion area sirens were reliable as demonstrated by successful periodic and annual siren tests.

In reviewing the process you described, we note the following:

- Your siren test data indicated that the notification sirens could not be reliably heard indoors at some lessee locations;
- The primary siren (the Crossroads Siren) was inoperable between January 1997 and March 1998, and some lessee employees were working in the exclusion area boundary during several months of this period;
- The other notification processes (Gaitronics, plant paging system, and Energy Northwest radio systems) did not apply to lessees;
- The evacuation sign on the access road entering the site was ineffective because several of the lessee employees interviewed by the NRC were unfamiliar with the response to the siren;

- The Designated Site Authority call-tree system was not proceduralized and was flawed because it relied on someone answering a specific telephone in the lessee's office; and
- The security sweeps were unreliable because the specific details of how the sweeps would be conducted (e.g., look for cars, knock on doors) was not proceduralized, the specific locations of occupied spaces were not identified, there was little to no training on the process and the effectiveness of the security sweeps had not been tested by drills or other means.

Therefore, the NRC has concluded that you had not developed an adequate means and time required to warn or advise these members of the public of an emergency.

- (2) Regarding the establishment of evacuation routes and transportation to some suitable offsite location for lessee employees, you stated that all lessee company officials were provided the WNP-1 Construction Site Emergency Evacuation and Response Plan and that site evacuation routes were established in the CGS Emergency Plan. You also stated that although these routes were not communicated to lessees in advance, a situation-specific route would be selected by the Emergency Director and communicated to evacuees, as required, via security officers who would be assigned to establish a roadblock.

In reviewing the process you described, we note the following:

- Lessees were not provided the CGS Emergency Plan;
- Neither lessee company officials nor Energy Northwest personnel trained many of the lessee employees on the WNP-1 Construction Site Emergency Evacuation and Response Plan or the CGS Emergency Plan;
- At least one lessee manager believed that the WNP-1 Construction Site Emergency Evacuation and Response Plan was no longer in effect;
- Energy Northwest employees and contractors were provided site training which included evacuation route information while lessee employees were not;
- CGS personnel designated to act as Emergency Directors were not trained about the presence of lessees in the exclusion area and therefore could have been unaware of a need to ensure their evacuation (at least one Emergency Director was unaware of their presence);
- There were circumstances under which a roadblock by site security personnel would not be established on plant access roads, such as a radiological release in that direction;
- A reliance on communicating evacuation route and assembly information at a single roadblock could create a significant impediment to the timely evacuation of the overall exclusion area.

We conclude that CGS had not sufficiently communicated information about expected evacuation routes and transportation to lessee employees in advance of an emergency (to at least the level of information provided to residents living within the emergency planning zone), and that CGS lacked reliable methods to ensure timely notification to lessee employees of situation-specific evacuation information. Therefore, the NRC has concluded that you had not made adequate provisions for evacuation routes and transportation to some suitable offsite location for these members of the public.

- (3) Regarding the provision of radiological monitoring of people evacuated from the site and a decontamination capability at the monitoring location, you stated that the WNP-1 Construction Site Emergency Evacuation and Response Plan did not distinguish between those actions taken for Energy Northwest personnel and those for lessees, and that lessees would be monitored (and if necessary decontaminated) at the Energy Northwest Office Complex in Richland. The CGS Emergency Plan, Revision 28, stated that during an exclusion area evacuation, non-essential personnel would be evacuated to the Energy Northwest Office Complex and personnel assigned emergency functions would proceed to their assigned emergency center(s).

In reviewing the process you described, we note the following:

- Energy Northwest employees and contractors were provided site training which included the location and function of offsite assembly areas, but comparable training was not provided to lessee employees;
- Lessee employees who were interviewed did not understand that Energy Northwest was responsible for radiological monitoring and were not aware of the location or function of the Energy Northwest Office Complex;
- The WNP-1 Construction Site Emergency Evacuation and Response Plan did not address radiological monitoring for any exclusion area evacuees; and
- The CGS emergency response organization was not trained about the presence of lessees in the exclusion area and therefore could have been unaware of a need to direct them to the Energy Northwest Office Complex for monitoring, and to monitor and decontaminate them once they arrived at the assembly location.

Therefore, the NRC has concluded that you had not developed provisions for the radiological monitoring and decontamination of these members of the public.

You have 10 business days from the date of this letter to appeal the staff's determination of significance for the identified Yellow finding. Such appeals will be considered to have merit if they meet the criteria given in NRC Inspection Manual Chapter 0609, Attachment 2.

The violation of the requirements of 10 CFR 50.54(q) and emergency planning standard 10 CFR 50.47(b)(10) is cited in the attached Notice of Violation (Notice). In accordance with the NRC Enforcement Policy, the Notice is considered escalated enforcement action because it is associated with a Yellow finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Because plant performance for this issue has been determined to be in the degraded cornerstone column, we will use the NRC Action Matrix to determine the most appropriate NRC response for this finding. We will notify you by separate correspondence of that determination.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

***/Thomas P. Gwynn for/***

Ellis W. Merschoff  
Regional Administrator

Docket: 50-397  
License: NPF-21

Enclosure: As stated

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## NOTICE OF VIOLATION

Energy Northwest  
Columbia Generating Station

Docket No. 50-397  
License No. NPF-21  
EA-01-236

During an NRC inspection conducted on July 23-27, 2001, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50.54(q) states, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 50.47(b). 10 CFR 50.47(b)(10) requires that the onsite emergency response plans for nuclear power reactors must meet the following standard, which states, in part: "A range of protective actions have been developed for the plume exposure pathway emergency planning zone for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place."

The Federal guidance is contained in NUREG-0654, FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." Section J provides the evaluation criteria for this planning standard. Section J.1 states, in part, that the licensee shall establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator. Section J.2 states, in part, that the licensee shall make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather and specific radiological conditions. Section J.3 states, in part, that each licensee shall provide for radiological monitoring of people evacuated from the site. Section J.4 states, in part, that each licensee shall provide a decontamination capability at or near the monitoring point specified in Section J.3.

Contrary to the above, from October 14, 1997, to July 23, 2001, a range of protective actions for certain members of the public within Columbia Generating Station's plume exposure pathway emergency planning zone had not been developed. Specifically, the licensee had not developed a range of protective actions for employees of private businesses leasing space within the licensee's exclusion area which were consistent with Federal guidance, as described below.

- The licensee had not adequately developed the means and time required to warn or advise lessee employees by activation of a reliable notification system. Specifically, the licensee's sirens could not be heard indoors at some lessee sites, and the crossroads siren (the primary siren for that area) was unavailable between October 1997 and March 1998 while lessee employees were onsite. In addition, other licensee notification processes did not apply to lessees, an evacuation sign was not effective based on the fact that several lessee employees were unfamiliar with the response to the siren, the telephone notification would not be fully effective during off-hours because it relied on someone being near the phone that was called, and mobile patrol security

sweeps would not be fully effective during off-hours because of the lack of training and procedures.

- The licensee had not adequately developed the means for evacuation routes and transportation to some suitable offsite location. Specifically, many lessee employees had not been trained on the WNP-1 Construction Site Emergency Evacuation and Response Plan or the evacuation routes established in the CGS Emergency Plan, CGS personnel designated to act as the Emergency Directors were not trained about the presence of the lessee employees in the exclusion area boundary, and the licensee's dependence on security officers, who would be assigned to a roadblock, would not be fully effective in informing lessee employees of situation-specific evacuation routes because roadblocks would not be established if a radiological release affected the plant access roads.
- The licensee had not adequately developed the means for radiological monitoring of people evacuated from the site and a decontamination capability at the monitoring location. Specifically, lessee employees had not been trained on the CGS Emergency Plan and were unaware of the location and function of offsite assembly areas, including radiological monitoring and decontamination capabilities. Many lessee employees who were interviewed did not understand that Energy Northwest was responsible for radiological monitoring. The WNP-1 Construction Site Emergency Evacuation and Response Plan did not address radiological monitoring for lessee evacuees, and the CGS emergency response organization was not trained about the presence of lessee employees in the exclusion area boundary.

This violation is associated with a Yellow Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, Energy Northwest is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region IV, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.



Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at the Public Electronic Reading Room, <http://www.nrc.gov/reading-rm/adams.html>. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated this 28<sup>th</sup> day of December 2001

Energy Northwest

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