



## Department of Energy

Washington, DC 20585

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Mr. Frederick A. Tarantino

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Bechtel Nevada

2621 Losee Road

North Las Vegas, NV 89030-4129

Subject: Bechtel Nevada Price-Anderson Amendments Act Limited Program Review

Dear Mr. Tarantino:

The Department of Energy (DOE) Office of Price-Anderson Enforcement (OE), at the request of DOE's Nevada Operations Office (DOE-NV), conducted a limited review of Bechtel Nevada's (BN) Price-Anderson Amendments Act (PAAA) program during November 14-15, 2002. This included a review of pertinent documents and onsite interviews with key personnel. DOE-NV expressed significant concerns to my staff that BN's PAAA program had not demonstrated any observable improvement since DOE's November 2000 PAAA program review. Therefore, DOE-NV had diminished confidence in BN's ability to reliably identify and correct nuclear safety noncompliances.

PAAA program reviews are generally conducted against applicable criteria and guidance established by DOE Enforcement Guidance Supplement 00-02. For this limited review, BN's processes for identifying and screening nuclear safety noncompliances, as well as reporting applicable noncompliances to DOE's Noncompliance Tracking System (NTS), were evaluated.

Overall, our review concluded that the portion of your PAAA program that we evaluated did not meet DOE expectations and guidance. The review identified no significant strengths, and a number of significant weaknesses. These are summarized below and are described in more detail in the enclosed report.

### PAAA Program Weaknesses

- The PAAA Coordinator's role is performed on a part-time basis and no other individual is available to provide support as needed.
- BN's procedural NTS reporting criteria are not fully consistent with DOE guidelines.
- BN does not adequately identify and internally track nuclear safety noncompliances below DOE's NTS reporting thresholds. This results in failing to place the commensurate priority on resolving matters that are noncompliances with nuclear safety regulatory requirements. In addition, it prevents the company from effectively

identifying problems that may be repetitive or constitute programmatic issues.

- BN's process for determining if an "issue" is a PAAA noncompliance has too many steps, including requiring Senior Review Board determination. This hinders the identification of noncompliances, as well as their timely reporting, development and implementation of corrective actions, and closure.
- The Senior Review Board, which is responsible for identifying noncompliances, determining reportability, and approving corrective action plans, inconsistently applies DOE's noncompliance reporting guidelines.
- BN's process for identifying and reporting nuclear safety noncompliances, either to the NTS or BN's internal tracking system, is lengthy, averaging 61 days for NTS reports.
- BN has no mechanism in place to identify possible programmatic or systemic problems.
- There was no evidence that Authorization Basis implementation issues identified by external organizations were being assessed for nuclear safety noncompliances.
- Certain Authorization Basis noncompliances meeting NTS reporting thresholds are not reported by BN.
- BN often allows at least six months to one year or more for corrective actions to be completed, without explanation or justification.

Several Quality Assurance noncompliances that merit further evaluation were discovered during this PAAA program review. This evaluation will be provided to you under separate cover.

No reply to this report is required. It is expected that BN will work with DOE-NV in resolving these weaknesses. If you have any questions, please contact Steven Zobel of my staff at (301) 903-2615.

Sincerely,



Stephen M. Sohinki  
Director  
Office of Price-Anderson Enforcement

Enclosure: PAAA Program Review

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## **Price-Anderson Amendments Act Limited Program Review Bechtel Nevada**

### **I. Introduction**

The Department of Energy (DOE) Office of Price-Anderson Enforcement (OE) conducted a limited review of the Price-Anderson Amendments Act (PAAA) Program implemented by Bechtel Nevada (BN). OE staff performed this limited review in accordance with applicable portions of DOE Enforcement Guidance Supplement (EGS) 00-02, "Price-Anderson Amendments Act Program Reviews." The review focused on BN's PAAA program regarding the identification and screening of nuclear safety noncompliances, and how a noncompliance's reportability to the DOE Noncompliance Tracking System (NTS) is determined. OE staff also reviewed BN procedures and other documents, and interviewed BN personnel during November 14-15, 2002.

This limited PAAA program review was requested by the DOE Nevada Operations Office (DOE-NV) because DOE-NV's confidence in BN's ability to reliably identify and correct nuclear safety noncompliances has diminished since OE's initial PAAA program review in November 2000.

### **II. General PAAA Program Implementation**

The BN PAAA program is formally established and implemented, in part, by the following documents:

- Company Directive CD-3200.005, "Deficiency Reporting," revision 0, dated August 16, 1999.
- CD-3200.007, "Price Anderson Amendments Act Review Process," revision 0, dated September 3, 1999.
- CD-3200.017, "Issue Reporting," revision 0, dated September 26, 2002.

CD-3200.005 provides instructions on describing and submitting to BN's central database, CREATES, any actual or potentially hazardous nuclear safety condition or situation. Deficiencies that appear to meet or exceed the guidelines provided in CD-3200.007 are identified as "PAAA-applicable" and submitted to the PAAA Coordinator (Coordinator) for further review. CD-3200.017 superceded this directive on October 1, 2002.

CD-3200.007 establishes the roles and responsibilities of the Coordinator, the PAAA Senior Review Board (Review Board), and other individuals involved in identifying, processing, and resolving nuclear safety noncompliances. Appendix C, "PAAA Evaluation Guidelines/Criteria," includes Table 3.2 from OE's June 1998 Operational Procedures, "Identifying, Reporting, and Tracking Nuclear Safety Noncompliances Under Price-Anderson Amendments Act of 1988," but does not include notes one through three. These notes provide additional conditions that are necessary for identifying nuclear safety noncompliances.

CD-3200.017, effective October 1, 2002, implements issue (formerly "deficiency") reporting to the new tracking database called caWeb. This directive introduces five priority levels at which an issue can be categorized ("one" being the most serious and "zero" being the least serious) and is more descriptive than its predecessor regarding the types of information sources to be considered for issue identification. Other aspects of this directive are similar to its predecessor.

The Coordinator was found to be a qualified individual. He reports to the General Manager and has direct access to other senior management staff. The Coordinator, however, performs PAAA functions only on a part-time basis and, at the time of this review, had no support staff who could assist with these functions as needed. The majority of this individual's time appears to be devoted to corporate duties unrelated to the PAAA program. This weakness was identified during OE's November 2000 review of BN's PAAA program.

### **III. Identification and Screening of Noncompliances**

CD-3200.007 implements a complex and protracted review process for any concern that is suspected of having a nuclear safety implication. In this situation, section 4.2 directs the Coordinator to prepare a summary of a "...potential PAAA concern..." within 5 working days of notification. The summary is then distributed to various management staff for review and evaluation. Replies should be returned to the Coordinator within 15 working days. If the consensus is that a PAAA concern exists, the PAAA Coordinator then follows section 4.3 in convening the Review Board. The directive recommends the Review Board meet within 15 working days. PAAA concerns are discussed during the meeting. Afterwards, the meeting minutes are prepared by the Coordinator and General Counsel and forwarded to the Review Board chairperson. The directive recommends the chairperson review and approve the minutes within 10 working days of the meeting's conclusion. It is this approval of the minutes that signifies if a PAAA concern is a PAAA noncompliance and if that noncompliance is reportable to the NTS. CD-3200.007 thus allows a total of 45 working days (or approximately 80 calendar days based on BN's four-day work week) to make the decision whether a matter is a PAAA noncompliance. Clearly, this is not a timely determination. OE's June 1998 Operational Procedures provides several examples where a 15 calendar day time period to make this determination is considered reasonable. This lack of timely determination that a deficiency is a PAAA noncompliance was previously discussed as a weakness in OE's November 2000 PAAA Program Review report.

Other identification and screening weaknesses were observed:

- BN is not consistently identifying and tracking nuclear safety noncompliances that are below the NTS reporting threshold. For example, a review of a list of radiological awareness reports (RARs) for the 12 months preceding the PAAA program review found numerous RARs that were nonreportable noncompliances, yet these RAR deficiencies were absent from the list of internally tracked noncompliances provided by BN to OE. This observation was also made when reviewing quarterly reports concerning assessments of RAR and other deficiencies. Further evidence of this inconsistency is that for the 18 months preceding this PAAA program review, the Review Board identified 17 noncompliances, eight of which were nonreportable. This ratio of reportable versus nonreportable is quite inconsistent with that observed at other PAAA programs where noncompliance screening is more comprehensive. For those programs, the number of internally tracked, nonreportable noncompliances is much greater than the number of reportable noncompliances. Thus, it is apparent that BN's screening procedures are simply not capturing all PAAA-related events and issues. This weakness was described in OE's November 2000 PAAA Program Review report.
- No effective mechanism is utilized for trending nuclear safety noncompliances. The CREATES database does not allow detailed information to be evaluated for programmatic or systemic issues. The PAAA Coordinator periodically reviews tracked noncompliances to determine if there is an obvious pattern. However, this method is informal and possibly unreliable given the limited amount of time the Coordinator is able to devote to PAAA issues. The caWeb database will allow detailed trending to be performed. However, CREATES data cannot be transferred directly to the caWeb database, and it appears BN will take several months before the new database will contain enough information to allow an effective trending analysis to be performed. BN staff offered no interim solution for this weakness.
- There was no evidence that Authorization Basis issues described in assessment reports prepared by external organizations were being evaluated for possible nuclear safety noncompliances. BN staff acknowledged this oversight and indicated that an NTS report addressing Authorization Basis noncompliances from these reports would be submitted.
- The use of the Review Board to determine whether a PAAA concern is a noncompliance burdens that process, adds delays, and results in very few concerns being identified as PAAA noncompliances. The Review Board furthermore continues to apply a high threshold for determining what constitutes a PAAA noncompliance. Thus, PAAA concerns that should be reported either in the NTS or BN's internal database are not being identified as noncompliances. This weakness was previously discussed in OE's November 2000 PAAA Program Review report.

#### IV. Noncompliance Reporting

CD-3200.007, section 4.1.1, states that DOE's enforcement philosophy encourages the prompt reporting of "...noncompliances of nuclear safety requirements..." by contractors. Section 4.1.3 states that for "...BN to avail itself of mitigation of civil penalties for timely reporting, the analysis of concerns...shall be completed as quickly as possible and should not exceed 35 working days" (approximately 61 calendar days). This 35 working day period only covers the steps of evaluating a PAAA concern and conducting the Review Board meeting to discuss PAAA applicability to the concern and its possible reportability. Other steps in the procedure detail additional time allowed to finalize the Review Board report and to prepare, approve, and file an NTS report. The total time allowed by the procedure, from determination of a potential PAAA concern to the filing of an NTS report, is 56 working days or about 98 calendar days. OE's noncompliance reporting guidelines state that 20 calendar days is an adequate period to evaluate and report a noncompliance, and thereby qualify for consideration of mitigation should the reported noncompliance result in an enforcement action. Thus, there is no basis for the presence of a 35 working-day standard in CD-3200.007.

Other reporting weaknesses were identified:

- Contrary to OE guidance, which indicates reports should be made within 20 calendar days of a noncompliance's initial discovery, BN averaged 61 calendar days during the period of January 2001 through early November 2002 to report a noncompliance to the NTS. This was from the day a noncompliance was initially identified (as an unevaluated deficiency) to the reporting date. This lack of timely reporting was described in OE's November 2000 review of BN's PAAA program.
- Prior to this PAAA Program review, OE staff reviewed the Occurrence Reporting and Processing System (ORPS) database for relevant issues. Three ORPS reports, NVOO--BN-NTS-2002-0012, -0014, and -0015, described violations of Authorization Basis requirements involving transuranic waste drums. Each of these occurrences was classified as "Facility Condition/Safety Status Degradation" and categorized as "Unusual" in accordance with ORPS criteria. OE's June 1998 Operational Procedures states that any occurrence meeting these criteria also meets NTS reporting criteria. CD-3200.005, section 4.2.1, requires safety-related deficiencies be reported to CREATES and, presumably, these occurrences would also have been identified as PAAA concerns, thereby invoking further reviews prescribed by CD-3200.007. However, BN's "Fourth Quarter Fiscal Year (FY) 2002 Price Anderson Amendments Act (PAAA) Assessment/Deficiency Evaluation and Cause Code Analysis," document number E600-RL-03-0023, dated October 15, 2002, for the July 1 through September 30, 2002, time frame, did not indicate the occurrences in the first two ORPS reports as having "potential PAAA applicability." CD-3200.007, Appendix C, states that occurrences of this nature are NTS-reportable, yet none of these occurrences were reported to the NTS nor captured in BN's internal tracking system as nonreportable noncompliances.

It is clear that the failure to report these three Authorization Basis noncompliances indicates a significant weakness in BN's PAAA program.

## **V. Corrective Actions**

A review of the corrective actions developed for reported noncompliances during 2001 up to the time of this PAAA program review found that the time needed to complete root cause analyses and submit corrective actions was approximately 20 to 40 calendar days. This was considered to be a reasonable amount of time given the substance of the issues reported. The amount of time allocated to completing corrective actions, though, typically ranged from four months to as long as two years. Time frames of up to one year are not unusual among DOE contractors for resolving complex noncompliance issues. However, since few of the BN reports involved issues that could be considered complex, the time frames associated with BN corrective actions are unacceptable. This delay in resolving noncompliances represents a serious safety issue and suggests a lack of BN management concern about the timely resolution of these noncompliances.

## **VI. Conclusion**

The OE review determined that BN's PAAA program does not meet DOE expectations and guidance. Though procedures are in effect that establish and support the PAAA program, they are themselves deficient, and they are further diminished by the extensive number and substance of the observed weaknesses. Furthermore, BN did not address the observed weaknesses identified by DOE in its November 2000 PAAA Program Review report, most of which are again described in this report. We note that BN recently engaged a consultant to independently assess its PAAA program. However, BN apparently did not take action on any of the recommendations resulting from this assessment.

Several noncompliances with nuclear safety regulations were also identified during this PAAA program review that merit further review. Our evaluation of these, as well as any recommendation for additional action, will be provided to you under separate cover.

The DOE Enforcement Policy provides positive incentives for contractors who identify, report, and promptly and comprehensively correct nuclear safety noncompliances. The weaknesses identified in this report, if not corrected, could have an impact on the application of enforcement discretion in any future enforcement action.