

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-397/81-05

Docket No. 50-397 License No. CPPR-93 Safeguards Group _____

Licensee: Washington Public Power Supply System

P. O. Box 968

Richland, Washington 99352

Facility Name: Washington Nuclear Project No. 2 (WNP-2)

Inspection at: WNP-2 Site, Benton County, Washington

Inspection conducted: February 2-27, 1981

Inspectors: *D.P. Harris for* 4/22/81
A. D. Roth, Senior Resident Inspector / Date Signed

Date Signed

Date Signed

Approved By: *D.P. Harris for* 4/23/81
R. T. Dodds, Chief / Date Signed
Reactor Construction Projects Section 2

Summary: Inspection on February 2-27, 1981, Report No. 50-397/81-05.

Areas Inspected: Routine, unannounced inspection of licensee and contractor activities to re-evaluate and improve detailed work methods.

The inspection involved 108 inspector hours on-site by the NRC resident inspector.

Results: One item of noncompliance was identified relative to failure to record magnetic particle examination results(paragraph 9.c).



1. Persons Contacted:

Washington Public Power Supply System

W. C. Bibb, WNP-2 Project Manager
A. M. Sastry, Deputy Project Manager-Systems Turnover
*B. A. Holmberg, Deputy Project Manager-Engineering
*R. T. Johnson, Quality Assurance Manager
D. C. Timmons, Director Contract 215 Engineering
*W. G. Keltner, Manager-Change Control
R. T. Grant, Manager-Construction Quality

Burns and Roe Engineers (B&R)

*H. Tuthill, Assistant QA Manager
R. D. Carmichael, Supervisor QA - Surveillance
L. F. Akers, Senior Supervisor - Welds
*J. Thorpe, Special Coordinator - QA Documentation

Bechtel Power Corporation (BPC)

D. Johnson, Quality Control Manager

Wright-Schuchart-Harbor/Boecon Corp./General Energy Resources, Inc. (WBG)

P. Garcia, Project Manager
M. Houch, Manager-Engineering
M. H. Brenner, Manager-Quality Assurance
D. W. Tolley, Deputy Project Manager-Containment
R. J. D'Amato, Deputy Project Manager-Reactor Building

Pittsburgh Des Moines Steel Co. (PDM)

F. Warrington, Project Manager
T. Foley, Manager-Quality Assurance

Johnson Controls Incorporated (JCI)

T. Bastyr, Senior Project Manager
R. Swift, Manager-Quality Assurance

Other general contracts and notes

In addition to the persons identified above, the inspector also interviewed personnel from the construction, engineering, and quality control site contractor organizations.

*Denotes personnel present at the monthly management meeting. Also, the WPPSS QA Manager met weekly with the resident inspector to discuss current status of licensee activities and NRC inspection findings.

2. Project Personnel

During this period the following key personnel changes were made on this project:

- a. WPPSS Reverification (work restart) Task Force II Team #1 leader for review of contract 215, WBG:

D. J. Wilsey - December 15, 1980, to February 9, 1981

R. Jones - February 9, 1981, to February 12, 1981

D. M. McCorkle - February 23, 1981, to present (Previously leader of Team #3).

- b. WPPSS Reverification (Work Restart) contract 215

Supervisor - R. M. Tanner - February 23, 1981, to present

This appointment, made February 23, 1981, was apparently in response to NRC concerns expressed regarding February 12, 1981, WPPSS plans to delete all three prior levels of management between the contract 215 Team #1 personnel and the Deputy Project Manager for Systems Turnover.

- c. The mechanical contractor reorganized this month to assign an Area Deputy Project Manager for each of three areas. Each Deputy Project Manager would be responsible for all operations for systems completion in their respective area. This will include engineering, material control and scheduling.

The Area Deputies are:

R. D'Amato - Reactor Outside

D. Tolley - Containment

W. Whittaker - Balance of Plant

3. General

The resident inspector was on-site February 2-6, 9-13, 17-20, 23, 26 and 27, 1981. During this period, the inspector continued examination of daily activities of the licensee, the architect-engineer, and the mechanical contractor, concerning efforts to re-evaluate and improve detailed work methods. Attendance at meetings, examination of correspondence, and interviews with personnel, at all organizational levels, were involved. Emphasis was on examination of a work restart package and related documentation for the protective coatings contractor (Contract No. 234 concrete coatings). The inspector sought to ascertain the scope, criteria, personnel, data base, conclusions, and corrective actions involved in the implementation of the commitments in the WPPSS July 17, 1980, reply to the NRC 10 CFR 50.54(f) inquiry.

The inspector also examined weld joint preparation activities for the sacrificial shield wall repair girth weld. Regional Office inspectors and supervision also visited the site during this period.

4. Limited Work Start Authorizations

The inspector examined work restart authorizations issued to the site contractors in February. For each such authorization, the inspector verified that the authorization had been reviewed by Project Quality Assurance and the Reverification of Completed Safety Related Work (RCSW) Task Force as appropriate. The inspector ascertained that the particular work released was commensurate with the status of the WPPSS evaluations of detailed work methods and corrective action plans, as described in the WPPSS response, dated July 17, 1980, to the NRC 10CFR 50.54(f) inquiry. The following work release items were reviewed as per above:

- a. Electrical Contractor (218) - inspections of previous welding.
- b. Electrical Contractor (218) - inspections to verify PGCC cable routings.
- c. Electrical Contractor (218) - receiving inspection
- d. HVAC Contractor (216) - training of personnel
- e. Instrumentation Contractor (220) - conditional work release
- f. Coatings Contractor (234) - conditional work release

5. WPPSS Summary Evaluation of Protective Coating Contractor (Concrete)

The inspector examined the RCSW Reverification Package for Contract 234, for coating of concrete, and the project quality assurance evaluation of the package (QA2-81-066).

These documents reflect the procedure, deficiency backing, and quality assurance program review efforts commensurate with the commitments in the WPPSS reply of July 17, 1980, to the NRC 10CFR50.54(f) inquiry. The reviews confirmed that quality program deficiencies that were identified have been corrected. Work by this contractor was about 1% complete at the time.

The RCSW review team identified several items which require further action. The Quality Assurance organization incorporated these into an action list addressed to the WPPSS Program Director. The approval to restart work was issued to the contractor (Oliver B. Cannon).

Prior approval by the NRC resident inspector was not required for this contractor, and the restart package was provided to the inspector following the WPPSS approval actions. At that time, the inspector reviewed the package and requested that the licensee address the following items regarding compliance with commitments on procedural requirements of the quality assurance program:

1. Demonstrate that all applicable WPPSS Project Management Instructions have been considered by the restart review team. (397/81-05-01)
2. Identify the restart review team recommendations relating to the anticipated future reinspection (RCSW Phase II) activities. (397/81-05-02)
3. Identify performance indicators and performance standards associated with this contractor. (397/81-05-03)

These items relate to general RCSW activities. The resident inspector considers the above items to be unresolved.

The licensee provided adequate supplementary information for other information requests regarding re-training, action on negative evaluations, Ken Tator Associates (painting consultant) responsibilities and adherence to Regulatory Guide - 1.58.

6. WPPSS Lessons Learned Activities

The inspector monitored a February 11, 1981 WPPSS meeting of key project personnel from WNP-2, 1/4, and 3/5 projects. Attendees at this meeting included Program Directors, Project Managers, Quality Assurance Managers and corporate office senior management personnel. This was introduced as a "kick-off" meeting, which may be followed by similar periodic sessions, as yet to be defined. The WNP-2 staff presented data and recommendations regarding management and quality assurance deficiencies, consequences, and corrective actions. Experience gained from reviews conducted over the past six months was discussed. Presentations were made by contract, construction management, system turnover, and quality assurance managers. The WNP-2 staff discussed their efforts to upgrade procedures and management controls, and the need to be ultraconservative in view of the NRC questions regarding the credibility of their quality assurance program. The WNP-2 staff discussed the principal enforcement correspondence from and to the NRC, principal NRC concerns, and several major problem areas. Specific items included: excessive back logs of deficiency reports of various types, training of craft/inspection personnel, overly complex procedures, insufficient construction management involvement in disposition of deficiencies identified by the quality assurance organization, lack of performance standards for quality activities, postponements of

quality documentation reviews, excessive specification requirements (including material traceability requirements beyond applicable codes and standards), civil testing contractor deficiencies, and application of ASME Section XI. Also included in the discussion were WNP-2 project actions to correct these items, the degree of success involved, and whether the personnel felt that some conclusions could be reached. For instance, attempts to simplify procedures have not been as successful as had been anticipated. The meeting clearly identified the magnitude of the problems faced by the WNP-2 project, the difficulties in recovering, and the motivation for the other projects to take steps to assure that similar problems do not develop.

Also, at this meeting, the corporate staff briefly described the preliminary WPPSS program for compiling lessons learned from each of the projects and disseminating these to the other projects. The described program included feedback and monitoring activities. The presentation discussed criteria for the corporate determination of appropriateness for dissemination of cost, schedule, and technical and quality impacts. The cost/schedule aspect was promptly identified by WPPSS senior management attendees as a criteria deserving further consideration. The described plans included little emphasis on the WNP-2 specific problems identified in the past six months. However, the Corporate Quality Assurance Manager advised that much data of that nature has been exchanged under informal or miscellaneous daily activities. This subject of specific WNP-2 lessons learned was also the subject of a February 25, 1981, meeting between WPPSS and NRC Region V management.

7. Licensee Staff Technical Training

The inspector attended one of several repeat training sessions regarding the ASME Code Section XI. These sessions were conducted on-site to briefly familiarize site engineering and quality assurance personnel with the code's basic requirements. The inspector noted this activity as being representative of current site efforts to sensitize personnel to requirements of the applicable ASME codes and standards.

8. WBG Internal Audit Program

The inspector examined the WBG internal audit program, including an interview of the two auditors currently assigned with a review of their personnel files, Audit Handbooks, Auditor Training Handbook, and the audit schedule. Audit Plan #WBG-81-1 and follow-up Audit for WBG-SP-2-80 were also examined, as were the findings status. The inspector affirmed that basic source material, such as relevant ANSI Standards were available. One auditor had attended an auditor training school run by General Atomics. One auditor and one auditor-in-training were scheduled to attend this school in February, 1981.

The guidelines of ANSI-N45.2.23 were used by WBG for evaluation of auditor qualifications. The principles of ANSI-N45.2.12 appeared to be implemented in audit planning, preparations, scheduling, addressing of problem areas

and prior findings, documentation, procedures and followup. Current attention on auditor training includes audit techniques. The inspector had some questions regarding sampling techniques. The auditors and supervision stated their intent to address this via written instructions.

The inspector examined audit findings issued in February and noted appropriate attention was being directed toward details of current work activities. The auditors were identifying significant findings in current implementation of work procedures and training. The licensee was aware of the findings and was monitoring steps effecting corrective actions.

The inspector identified no items of noncompliance or deviations regarding the audit activities.

9. Sacrificial Shield Wall: Repair Girth-Weld Work Activities

The inspector examined the work packages, inspected the sacrificial shield wall repair girth weld joint preparation at elevation 541 feet, and interviewed personnel in quality control, quality assurance, field engineering and project management regarding the configuration of the weld joint and the problems being experienced during work and inspection activities.

The inspector considered these matters relative to the details on joint preparation and inspections, as described to the NRC in Attachment 4 to the WPPSS "Engineering Evaluation of the WNP-2 Sacrificial Shield Wall". This WPPSS report notes that the sacrificial shield wall was a post-construction-permit item. The report supplements previous submittals to NRC which discussed loads, fabrication procedures, and erection methods used. The Attachment 4 included Project Engineering Directives #215-3775 and 3776 and 3830, which prescribe weld joint preparation, welding, and magnetic particle examination details. These documents were used as criteria for WPPSS RCSW task force reviews of work procedures for the repair weld activities. The inspector identified the following departures from the above referenced details:

- a. PED-215-W-3775 prescribes weld joint preparation details commensurate with the Attachment 4 (Enclosure-Partial Penetration Weld Structural Considerations). The details show substantial metal backing for welding. The WBG flux core arc welding procedure WPS-26 was qualified with backing metal, and AWS-DI.I requires procedure requalification upon omission of backing material. The PED details did not indicate any breaks through the steel to expose concrete and/or water inside the Sacrificial Shield Wall annulus.

During actual weld joint preparation arc gouging and grinding, joint break-through was experienced at several points. Burns and Roe issued PED-215-W-4959 which prescribed seal welding where the opening was less than 3/16 inch wide; however, nondestructive examination was not prescribed. The inspector questioned the apparent deviation from backing requirements and the absence of verification of seal weld

fusion. On February 27, 1981, Burns and Roe issued PED-215-W-4920 which clarified the previous PED to require backing bar and visual examination where break-through occurs.

- b. PED-215-W-3775 shows weld joint preparation details. It does not indicate presence of free water behind the girth welds nor potential break-through. The WPPSS Engineering Evaluation Report addresses NRC concern #19 (regarding impact of free water on weld quality) by stating that for previous welding on the Sacrificial Shield Wall no water was present behind the subject welds during installation. There is no discussion of this matter relative to the planned new girth weld.

During actual joint preparation some break-through occurred and water was encountered. These spots are being dried by application of heat. Where thin metal exists but break-through has not occurred after grinding, such break-through may occur during the flux core arc welding. The Burns and Roe weld engineer stated that such an event would create immediate difficulty for the welder, who would need to stop work, grind out the area, excavate concrete, dry the area, and install a backing bar before proceeding. The instructions for installing backing bars are provided in PED-215-W-4920.

- c. PED-215-W-3775 prescribes the weld joint preparation details commensurate with Attachment 4 (Enclosure-Partial Penetration Weld Structural Consideration). Neither of these documents indicates any base-metal discontinuities at the corner of the upper ring segment.

During actual weld joint preparation, the contractor quality control inspectors visually identified indications of existing non-fused metal, and documented this as a problem in inspection reports (e.g. IR-215-6469 dated February 11, 1981). The inspection reports were dispositioned the same day by the contractor's welding engineer and quality assurance, on the basis that the indications were "interface". Burns and Roe weld engineers on the scene apparently concurred. On February 12, 1981, the WPPSS construction quality engineer identified the "interface" as insufficient penetration of what should have been an existing full penetration weld. The contractor quality control personnel agreed and identified this situation and the previous improper acceptance of the condition, on inspection report IR-215-6571 dated February 12, 1981. An associated nonconformance report #6643, dated February 17, 1981, was subsequently issued for Burns and Roe to disposition. The WPPSS construction quality manager removed the construction quality engineer from his sacrificial shield wall assignment on February 13. The NRC inspector interviewed this individual February 19, 1981, regarding the "interface" details. The construction quality manager fired this construction quality engineer on February 20, 1981.



On February 13, 1981, the NIX nondestructive examination personnel issued magnetic particle examination report No. SAC-8 which showed an interface area as "acceptable," with no record of the existence of any "indication" or "comment". The NRC inspector interviewed the NIX site manager and foreman on February 23, 1981. They did not have details of the existing full penetration weld, but rather had relied upon the "interface" apparently being acceptable to the Burns and Roe and contractor weld engineers. On February 18, 1981, Burns and Roe design engineering dispositioned the nonconformance report "accept-as-is", based upon information furnished by the Burns and Roe weld engineer that the existing penetration was 1/2" to 3/4". No mention was made of the NIX failure to record the indications. On February 27, 1981, the NRC inspector interviewed the Burns and Roe design engineer and the welding engineer and ascertained that the 1/2" minimum penetration was based only on visual observation, and could not be assured at all locations. The engineers advised the NRC inspector that instructions would be issued to assure that sufficient penetration is achieved at all points.

The evaluation, repair and inspection of the weld interface/lack-of-penetration situation is unresolved pending review of the final corrective action plan and its implementation. (397/81-05-04)

The NIX disposition of magnetic particle examination indications as non-relevant, in absence of knowledge of the specific joint configuration, and failure to record the existence and type of indication appears to be an item of noncompliance. (397/81-05-05)

The personnel action taken regarding the individual who identified this item is being reviewed by licensee management. The results of this review will be evaluated during a future inspection. (297/81-05-06)

10. Sentry Automatic Sprinkler Company: Quality Assurance Program Scope

The inspector examined corrective action report #1467, which Burns and Roe issued to the fire protection system contractor. The contractor's reply was unacceptable and was rejected by Burns and Roe, with specific instructions for resolution of the deficient conditions. Action due-dates were defined by Burns and Roe to assure timely actions. However, the Burns and Roe response did not challenge the more general quality assurance program questions introduced by the contractor's initial response to the corrective action request.

The contractor maintained that he was not required to perform internal quality assurance audits, because his detailed quality assurance procedures omitted reference to this, and the procedures had been approved by Burns and Roe. Although this appears contrary to the contractor's quality assurance manual approved by Burns and Roe, the contractor



contended that the manual is a "standard manual" which is applicable to the WNP-2 project only to the extent that detailed procedures invoke it. Subsequently, the licensee effected acceptable clarification of this matter with the contractor.

11. Rework of Instrument Tubing by Johnson Controls Incorporated.

The inspector witnessed the cut-out of five 1/2 inch stainless steel couplings in instrumentation/control tubing at reactor building elevation 525' near column line 9.4. Ten socket welds were involved, designated as #9 and #10 of couplings #A9 thru A13 and A5 (a substitute). Senior site management of Johnson Controls witnessed the cut-out and collection/marketing/tagging of the samples. The samples were taken into custody by the Johnson Control Incorporated Project Manager and the Quality Assurance Manager, who plan to obtain sectioning and metallurgical tests of the welds. This activity was conducted to resolve quality assurance record discrepancies identified by the contractor as associated with one specific quality control inspector, who is no longer employed by Johnson Controls Incorporated. The cut-out welds are now in the custody of WPPSS. The Johnson Controls Incorporated manager stated that these samples are available to NRC upon request. The inspector identified no problems regarding the actions taken by the Johnson Controls Incorporated management relative to this matter.

12. On-Site Posting of 10CFR21

An on-site employee complained to the inspector that Part 21 was not posted; however, the employee was himself familiar with the regulation and knew where to find and examine copies.

The inspector, accompanied by a licensee quality assurance department representative, inspected the posting locations, reporting procedures, and training provisions relative to 10 CFR21. The inspection included the facilities of WPPSS/Burns & Roe, Johnson Controls, Fischbach & Lord, and WBG. The material posted or referenced in postings was generally not current, and posting locations were not conspicuous to all concerned personnel (especially crafts). Site training programs generally included orientation to the provisions of Part 21 (including crafts).

Fischbach & Lord and WBG did not provide postings conspicuous to the crafts, but posted information in office areas generally off limits to craft personnel unless approved by their supervisors. Outdated revisions of procedures were posted as QAP-11 in the WPPSS quality assurance department, as PMI-4-10 in the WPPSS project management department, and as WP-149 in the WBG project engineering and quality assurance areas. Outdated revisions of Part 21 were included in Johnson Controls Incorporated procedure QAS-1602-H2, Fischbach and Lord procedure FO-700, and Burns & Roe procedure WNP-2-PM-014.1.

When notified of the general site posting status on February 20, 1981, the WPPSS Project Manager stated that improved postings would be achieved within one week and that the procedures would be updated. The inspector added that WBG procedure WP-149 particularly required revision to specify posting locations available to the crafts. On February 27, 1981, the inspector verified that current and conspicuous postings had generally been achieved in the licensee facilities.

However, the site Quality Assurance Manager stated that some additional time would be required for site contractors to implement the new site standard notice required by the WPPSS instruction letter (WNP2MCL-81-49) dated February 25, 1981. No specific revised date was identified for the postings nor for associated procedure revisions. This matter is unresolved. (397/91-05-07).

13. Drilled-In Anchor Bolt Control

An individual expressed concerns to the NRC inspector relative to control of attaching Class II hangers to Class I walls.

The inspector examined the mechanical contractor (WBG) controls over drilling of holes for anchor bolts. The inspector determined that the controls provided assurance that drilling of holes will not cut critical reinforcing steel. The contract specification permits cutting of reinforcing steel, but only with specific case approval of the architect-engineer. The inspector interviewed a WBG construction superintendent, a general foreman, certain tool-room personnel, and inspected tool room equipment to ascertain the method of implementation of the specification requirement. In all cases it was concluded that drill bits capable of cutting reinforcing steel were not available to crafts, and obtaining of such tools involved requests to the site architect-engineer, who maintained control over such drill equipment. This control extended over all drilling activities regardless of the quality class of the work. Therefore, the attachment of Quality Class II hangers to Quality Class I walls did not appear to warrant special Quality Class I type controls.

14. Licensee Action on Previous Inspection Findings

(Closed) Open Item (397/80-08-23): Implementation of Requirements for Licensee Approval of Contractor (WBG) Procedures.

The WBG procedure QAP-7 describes how procedure review is handled only within the quality assurance department, and does not relate to interfaces with the licensee. The WBG procedure No. WP-137 was revised May 1, July 9, and finally October 31, 1980, to clarify document control requirements relative to owner approval of WBG procedures. Part 4-10-6 requires WBG procedures "to be submitted to the Owner for review/approval as required." Part 4-10-1 requires revisions to be "processed in the same manner as the original issue." All procedures for safety related work are now submitted



to WPPSS for original review by the system turnover, reverication and work restart (Phase 1) review group.

(Open) Unresolved Item (397/79-16-04) and (Closed) Unresolved Item (397/81-01-07): Validity of SSW weld re-inspection data.

The inspector interviewed the Weld Engineering Supervisor, two weld engineers, the Burns and Roe Level III Inspector, and the Burns and Roe Quality Assurance Manager. The experience and qualifications of weld engineers who had been available to perform visual inspections, the composite crew of one weld engineer plus one AWS tested quality assurance engineer, and the general AWS-D1-1 visual acceptance criteria were considered. The inspector concluded that sufficient criteria and qualifications of personnel were involved in the generation of the weld defect data submitted the NRC, with the exception of the one weld engineer in question for the 140 welds. Reinspection of the 140 welds, per Burns and Roe memorandum F-81-698 (dated 28 January 1981), appeared to have been handled satisfactorily. The inspector had no further question regarding qualifications and criteria. However, during an associated review of the weld re-inspection records, the inspector found that not all sacrificial shield wall exterior welds had been reinspected.

Sacrificial shield wall weld map #WF-3 shows 82 field welds, about 60 of which are color-coded to suggest that they are not inaccessible. The composite files of the welding engineers and the sacrificial shield wall review team showed no reinspection records for 29 of these. Subsequent interview of the Burns and Roe Level III Inspector, who had participated in the late February 1980 re-inspections, identified that he had records to show that 14 of the 29 had been re-inspected January 9, 1980, on an informal basis, with rejectable conditions identified. Further examination of the backup records for the data submitted to the NRC (1170 Total Welds Evaluated) showed that at least the 14 had not been involved in the 1170 weld data base. The licensee sacrificial shield wall Task Leader offered an explanation that changing or difficult inspection accessibility may have resulted in this omission from the formal re-inspection data base.

On February 17, 1981, WPPSS requested NRC to allow repair of "identified accessible defects". The NRC concurred in a February 25, 1981, reply, conditional upon a complete tabulation of the welding defects. The NRC letter clearly defined "accessible", as regards this tabulation. Under the NRC definition, difficulty in reaching an exterior wall weld would not be sufficient cause to deem the weld inaccessible.

In view of the identified discrepancies, the licensee advised the resident NRC inspector that all sacrificial shield wall exterior wall welds would be identified and inspections accomplished where previous inspection data had not been obtained.

Subsequently, the inspector identified that this same issue of incomplete data had been raised by an NRC inspector in October 1979 (IE Inspection Report 50-387/79-16). At that time the licensee had committed to perform reinspection activities, also. That inspection activity is the subject of the above questions. This matter continues to be unresolved. (397/79-16-04).

15. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of non-compliance, or deviations. Unresolved items identified during this inspection are discussed in paragraphs 5, 9.c and 12.

16. Management Meetings

The inspector met with the WPPSS site Quality Assurance Manager on February 6, 13, 20 and 27, 1981, to discuss the status of his inspection efforts and to receive a status report of principal WPPSS activities.

During the management meeting of February 13, 1981, the inspector expressed his concern that organization/personnel changes in the past 2 months may reduce the effectiveness of the Task II restart preparations review efforts. The RCSW Manager had left in February (F. Damerval), his phase I supervisor had left in February (R. Grant), and three different team leaders have been assigned to the mechanical contractor (WBG) review team during January-February (C. Henthorne, D. Wilsey, R. Jones). These shifts in first level management, and the loss of middle-management, have occurred at a time when review activities are addressing key areas, such as WBG pipe hangers and piping. The inspector stated that he would be giving increased attention to probing perceptions and comments (and comment dispositions) of individual review team members. The licensee representatives stated that the review team end-products should show that the reviews have been effective.

