

JUN 01 1983

Docket: 50-285/82-30

Omaha Public Power District  
ATTN: W. C. Jones, Division Manager  
Production Operations  
1623 Harney Street  
Omaha, NE 68102

Gentlemen:

Thank you for your letter of April 15, 1983, in response to our letter and the attached Notice of Violation dated March 17, 1983. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of these actions during a future inspection to ensure they have been effective in precluding future noncompliance.

In regard to our concern regarding your apparent lack of attention to the timely resolution of previously identified open items, you expressed concern that we did not give sufficient credit to the progress made on some items. We believe the report adequately reflects your progress and the timeliness of your actions. Of the original 18 items reviewed in NRC Inspection Report No. 50-285/82-30, only 7 were adequately resolved to allow closing. The majority of the 18 items were initially discussed in the 1980 NRC Inspection Report No. 50-285/80-16 and subsequently in other NRC reports. It should be noted that one item has been open since 1978. Several of the items, especially item 285/7805-03, involve basic ALARA concepts for the minimizing of personnel exposure. Based on a review of your response, the following comments are provided:

Item 3: (285/8016-04), Internal Dosimetry Procedures - Our concerns regarding back-calculating MPC-hours in bioassay procedures were initially discussed in NRC Inspection Report No. 50-185/80-16, and should not be considered new requirements. An adequate internal dosimetry program is necessary to demonstrate compliance with 10 CFR 20.103.

Item 6: (285/8016-31), Testing of Auxiliary Building HEPA Filters - Your response does not adequately address actions to be taken to ensure that the recommendations of NRC Regulatory Guide 1.140 regarding inplace filter testing are implemented.

Item 7: (285/8016-31), Effluent Monitor Calibrations - The NRC does not consider that your instrument sensitivity program satisfies the recommendations of NRC Regulatory Guide 1.21 or ANSI N323-1978 as they apply to calibration of radiation

FRPS <i>[Signature]</i> DChaney:jd 5/13/83	FRPS <i>[Signature]</i> BMurray 5/17/83	TPB <i>[Signature]</i> GBrown 5/23/83	RPS-C <i>[Signature]</i> WJohnson 5/24/83	RPB2 <i>[Signature]</i> WSeidle 5/24/83	DRR&EP <i>[Signature]</i> JGagliardo 5/27/83	DV&TP/LB <i>[Signature]</i> RBangart 5/31/83
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Omaha Public Power District

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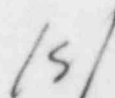
protection instrumentation. Also, your use of a single source during actual calibration (performed by the Instrument and Controls Department) does not satisfy the aforementioned referenced documents for calibrating a system over its intended range of energy and rate capabilities. In addition, you do not have adequate records that relate the solid sources used during routine calibration to the initial calibration of the instrument.

Item 11: (285/8128-03), Evaluation of Contract HP Technicians - The current NRC position on creditable experience for contract-type HP technicians is contained in NRC Staff Position, W. J. Morrison, NRC, subject: "Clarification of experience requirements for radiation protection technicians," Task No. RS 807-5, August 26, 1980. This reference allows for utilization of only 50 hours per week of work for meeting experience qualifications of ANSI N18.1-1971 criteria.

We will review the implementation of your corrective actions for these and other referenced open items during a future inspection.

Should you have any questions concerning the above-referenced items, we will be pleased to discuss them with you.

Sincerely,



W. C. Seidle, Chief  
Reactor Project Branch 2

cc:

W. G. Gates, Manager  
Fort Calhoun Station  
P. O. Box 399  
Fort Calhoun, Nebraska 68023

Harry H. Voight, Esq.  
LeBoeuf, Lamb, Leiby & MacRae  
1333 New Hampshire Avenue, N.W.  
Washington, D. C. 20036

bcc: c/o DMB (IE01)

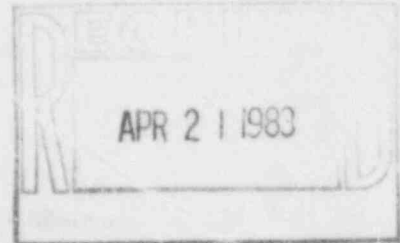
bcc's distributed by RIV:

Resident Inspector	Section Chief (RPS-C)
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RPB1	RPB2
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**Omaha Public Power District**  
1623 Harney Omaha, Nebraska 68102  
402/536-4000

April 13, 1983  
LIC-83-091

Mr. W. C. Seidle, Chief  
Reactor Project Branch 2  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011



Reference: Docket No. 50-285

Dear Mr. Seidle:

IE Inspection Report 82-30

Please find attached the Omaha Public Power District's response to the one (1) violation and twelve (12) open items discussed in the referenced report.

The District is concerned about the statement in your March 17, 1983 letter regarding the lack of sufficient management attention for resolution of previously identified open items.

The District believes it is unfortunate that the progress on the resolution of the open items referenced in the subject report was not reflected in that report. The District believes that timely action has been taken to resolve many of these open items, as discussed in the attached response.

During future inspections and exit interviews, we will attempt to make the I&E inspectors more fully aware of the District's efforts on issues such as these. We solicit your cooperation in these matters.

Sincerely,

*R L Jaworski for*

W. C. Jones  
Division Manager  
Production Operations

WCJ/TLP:jmm

Attachments

8406230617 830601  
PDR ADOCK 05000285  
PDR  
G

cc: LeBoeuf, Lamb, Leiby & MacRae

Mr. L. A. Yandell, NRC Senior  
Resident Inspector

Mr. E. G. Tourigny, NRC Project Manager

Employment with Equal Opportunity  
Male/Female

Attachment 1

OMAHA PUBLIC POWER DISTRICT  
IE INSPECTION REPORT 82-30

Violation

Procedural Compliance

Technical Specification 5.11, "Radiation Protection Program," states: "Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be . . . maintained and adhered to . . . ."

Radiation procedures are also addressed in your Standing Order T-1, "Radiation Protection Manual," which states: "All station personnel . . . will abide to every provision of the Radiation Protection Manual . . . ."

In addition, Section IV.I.1, "Weekly Review of Standing R.W.P.'s," of Radiation Protection Procedure (RPP)-20, "Radiation Work Permit," which is part of the Radiation Protection Manual states: "All R.W.P.'s written for a period greater than five working days will be reviewed by a designated individual within the Radiation Protection Group . . . the R.W.P. will be dated and initialed in the space provided."

Contrary to the above, on November 30, 1982, the NRC inspector determined that the licensee has not performed the proper weekly review of 18 Standing RWP's between November 12-November 30, 1982.

This is a Severity Level V violation. (Supplement IV)

Response

- (1) Corrective steps which have been taken and the results achieved.

The Radiation Work Permits (RWP) in question were reviewed by qualified personnel within two (2) days of discovery of the incident. Qualified individuals to perform future RWP reviews have been designated and the Plant Health Physicist has been given the responsibility of ensuring these reviews are completed as scheduled. This action will result in reducing the probability of recurrence of this incident.

- (2) Corrective steps which will be taken to avoid further violations.

The RWP review process will be closely monitored by responsible plant personnel to ensure the RWP review schedule is adhered to.

- (3) Date when full compliance will be achieved.

The District is presently in full compliance with RWP reviews.

## Attachment 2

### RESPONSE TO OPEN ITEMS IDENTIFIED IN IE REPORT 82-30

- 1.0 Open Item (285/7805-03): Installation of Remote Containment Air Sampler - This item was discussed in NRC Inspection Report Nos. 50-285/78-03, 50-285/79-14, 50-285/81-12, and 50-285/82-04 and involved the licensee's use of personnel to obtain the routine weekly air sample from within the reactor containment during reactor operation. The licensee had constructed and tested a remote containment air sampling system; the system failed to produce representative samples and was abandoned. The licensee plans on using, when installed, the Postaccident Sampling System (PASS) to obtain the weekly containment air samples. This item (285/7805-03) remains open.

#### Response

The previous plan to use the PASS to obtain the weekly containment atmosphere sample has been changed because the PASS does not provide for particulate sampling.

An alternative to the weekly personnel entry of containment to collect the necessary gas and particulate samples is presently being evaluated and may involve relocation of the sampling point or monitors. This alternative is being developed in conjunction with a program to test the representative sampling capability of RM-050, 051, 061, and 062 (see response to Open Item 285/8016-32). This alternative will be developed by September 1, 1983 and is expected to be operational by February, 1984.

- 2.0 Open Item (285/8016-03): QA/QC Program for Gamma, Beta, and Neutron Personnel Monitoring Devices - This item was first discussed in NRC Inspection Report No. 50-285/80-16 and also again in NRC Inspection Report No. 50-285/81-28 and involved the failure of the licensee to provide full range calibration for personnel radiation exposure monitoring devices.

Gamma TLD: This portion was previously closed out on NRC Inspection Report No. 50-285/81-28.

Neutron TLD: This portion was found to be satisfactory by the NRC inspector and is considered closed. See Section 12 for details.

Beta TLD: The licensee is still performing evaluations and testing of TLD's for proper beta energy response. This portion of open item (285/8016-03) is still considered open. See Section 12 for details.

## Response

The District's program for evaluating current personnel beta dosimetry and beta radiation fields at the Fort Calhoun Station is in progress. The purposes of the program are: (1) to review the current two-element TLD for its responsiveness to beta radiation; (2) to investigate improved TLD's using two, three, and four elements; (3) to survey the Fort Calhoun Station and determine locations and spectrum of beta radiation fields; and (4) to revise and update instructions and procedures currently in use at the Fort Calhoun Station.

- 2.1 Review of Two-Element TLD's - The current two-element TLD was found to over-respond by 46% and 27%, respectively, to high energy beta sources  $^{90}\text{Sr}/^{90}\text{Y}$  and  $^{106}\text{Ru}/^{106}\text{Rh}$  but to under-respond by 63% for the low energy  $^{85}\text{Kr}$  beta source. However, when the current two-element TLD was tested in the University of Michigan study of TLD processors (Study No. 3), it passed Category No. V for exposure to beta field from  $^{90}\text{Sr}/^{90}\text{Y}$ . The effect of these test results on personnel monitoring is being considered in conjunction with other information collected from all elements of the study program.
- 2.2 Investigation of Improved TLD's - An improved four-element TLD has been proposed and is currently undergoing field testing and calibration. This four-element TLD may be provided as an alternate or supplement to the two-element TLD.
- 2.3 Survey of Beta Fields - During the recent refueling outage, identification and characterization of beta fields at the Fort Calhoun Station was completed. Locations surveyed included the primary side of the steam generators, the spent fuel pool, corridors in the auxiliary building around control panel AI-100, the low pressure safety injection (LPSI) pumps, and the waste drumming station. The only areas where any measurable beta fields were identified were the steam generator, the LPSI pumps, and the drumming station.

High energy beta fields were only identified inside the primary side of the steam generator. Energies in excess of 1 Mev with  $\text{Co}^{60}$  as the isotope were identified. In the LPSI pump and drumming areas, the beta fields were low in energy with only 15% of the total doses penetrating beyond  $32 \text{ mg/cm}^2$ . New coverall material,  $25 \text{ mg/cm}^2$ , or approximately 10 inches of air would attenuate the beta dose from these areas to approximately 15-20% of its original value.

Additional field measurements are scheduled at the Fort Calhoun Station to check for beta fields. To date, only the steam generator has been shown to have beta fields which allow for the possibility of any significant beta dose.

- 2.4 Instructions and Procedures - Preliminary evaluation of the steam generator fields has determined that the beta dose is reduced by a factor of 1/3 of its original value by an absorber thickness of 30 mg/cm<sup>2</sup>. Workers entering the steam generator primary side have a minimum skin covering of approximately 60 mg/cm<sup>2</sup> (one paper coverall, one cloth coverall, and one wet suit). Two-element TLD's worn by the personnel entering the primary side of the steam generator estimated no beta dose to the trunk of the body but some dose at the wrist and foot extremities. Only in the case of one extremity dose did the extremity non-penetrating beta dose exceed the extremity penetrating dose. Personnel protective clothing was effective in minimizing or eliminating the high energy beta dose inside the steam generators.

#### Conclusion

Our existing two-element program appears to be adequate in the only area where there is beta radiation in the plant; i.e., steam generators. Entry to the steam generators is carefully controlled and protective clothing is worn which effectively eliminates beta exposures to the worker. However, the District will continue its evaluation to improve its beta dosimetry program and expects to complete their evaluation by September 30, 1983.

- 3.0 Open Item (285/8016-04): Internal Dosimetry Procedures - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-28 and involved the licensee's failure to establish an internal dosimetry program that meets the recommendations of ANSI Standard N343-1978 and NRC Regulatory Guide 8.26. The NRC inspector determined that the licensee had not, as of this inspection (50-285/82-30), provided suitable procedures that will ensure indirect bioassay sampling is performed properly, or provide suitable instructions for extrapolation of whole body counting data back to initial intake of radioactive materials. See Section 11 for details. This item (285/8016-04) is still considered open.

#### Response

IE Inspection Report 80-16, Open Item 04, Section 3.2.5, identified a weakness in internal dosimetry procedures and made specific recommendations for improvement as follows:



"3.2.5

Conclusions

Based on the above findings, internal dosimetry procedures have not been developed that would contain the biological models and calculational techniques necessary to assess the results of direct and indirect bioassay measurements in terms of the amounts and dosimetry of radioactive materials taken into the body. These procedures need to be developed and implemented to achieve a fully acceptable program."

The District responded promptly and fully to this original finding through the initiation of a new Health Physics Procedure, HP-10, "Whole Body Count Evaluation". Biological models and calculational techniques for assessing internal deposition radiation utilizing ICRP 2, 10, and 30 methodology were incorporated into this procedure. The District believes its response fully addressed the elements of Open Item 8016-04.

The District believes the elements now identified in IE Inspection Report 82-30, which retain 8016-04 as an open item, are new recommendations.

The District has or intends to take the following actions in response to the new recommendations identified in IE Inspection Report 82-30:

- 3.1 The District will review HP-10 and either upgrade this procedure or develop a new procedure to provide additional station instructions for a controlled process of persons referred to the UNMC/RHC for indirect bioassay evaluation. A special review and revision of HP-10 will be performed by September 1, 1983.
- 3.2 The District has completed the annual calibration of the whole body counter. A phantom, as discussed in recommendations of ANSI N343-1978, was utilized for this calibration. A review with revision improvements to Health Physics Procedure HP-10, "Whole Body Counting", was issued on November 30, 1982 as part of this action. The District believes these actions fully address the recommendation and this item was considered closed prior to the end of the year of 1982.

3.3 Revised procedure HP-10 was issued on April 8, 1982 and the District believes it contains adequate instruction to perform internal radioactivity assessments. During the course of procedure review, the District intends to re-evaluate its content before September 1, 1983 and provide more specific information pertaining to the determination of MPC-hour intake, if determined by the review. It should be noted that the District policy designates supervisory and more experienced HP personnel the responsibility of assessment of special radiological incidents. These persons include the Supervisor - Chemistry & Radiation Protection, Plant Health Physicist, and lead HP group personnel. Shift C/RP Technicians and other persons in the C/RP group have the responsibility to identify the incident or problem and then secure more technical guidance from the HP Supervisor. As such, the District believes that training of all C/RP group personnel on complex internal radiation methodology is not advisable as it is not within their work responsibilities. However, the responsible persons identified shall receive full training on this procedure.

4.0 Open Item (285/8016-05): Portable Instrument Calibration - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-28 and involved the licensee's lack of an established calibration program for several types of portable radiation monitoring instruments, as noted below.

Gamma: This portion was previously closed out on NRC Inspection Report No. 50-285/81-28.

Beta: The licensee has procured a strontium-90 beta source of significant activity and is in the process of obtaining National Bureau of Standards (NBS) certification for the source. Development of station instrument calibration procedures is in progress. See Section 13 for details. This portion of open item (285/8016-05) is still considered open.

Neutron: The licensee has implemented calibration of station neutron measuring instruments by NBS using a moderated californium-252 source. The licensee had not completed development of calibration contracts with NBS or developed station procedures implementing the new calibration process. See Section 13 for details. This portion of open item (285/8016-05) is still considered open.

Instrument Performance Check: The licensee has implemented a suitable preuse instrument performance check program that provides for the checking of up to 3 points on an instrument and provides rejection criteria. This portion of open item (285/8016-05) is considered closed.

Pocket Dosimeters (PDs): The licensee had procured a multiple PD calibrator and had located it within the auxiliary building. The licensee had established a semiannual functional check procedure for PDs that meet the recommendations set forth in NRC Regulatory Guide 8.4. This portion of open item (285/8016-05) is considered closed.

Lapel Air Samplers: The licensee had not implemented procedures that provide for the routine use of lapel samplers to substantiate MPC-hour data gathered by other air sampling programs, or incorporated the lapel air samplers into an approved maintenance and calibration program. See Section 13 for details. This portion of open item (285/8016-05) is still considered open.

#### Response

- 4.1 Portable Instrument Calibration and Beta Radiation Calibration Program - A Strontium-90 beta source has been procured and certification of source strength has been received from NBS. A procedure for calibration of portable beta instruments is in the draft stage of development. Full range calibration of beta instruments will not be possible until an additional higher range source is acquired. Final approval of the calibration procedure is expected to be completed by June 1, 1983. Procurement and use of a new source is expected to be completed by January 1, 1984.
- 4.2 Neutron Survey Instrument Calibration - A neutron survey instrument has been calibrated by NBS using a moderated Californium-252 source with certification on file at the Fort Calhoun Station. Procedures controlling the method of assuring timely calibration will be completed by July 1, 1983. Investigation into the availability and procurement of a moderated Californium-252 source is presently scheduled to be completed by the same date.
- 4.3 Breathing Zone (Lapel) Air Samplers - The Fort Calhoun Station respiratory protection program was developed under the criteria of NUREG-0041. Review of the air sampling program has resulted in draft revisions to Section 2 of the Radiation Protection Manual and procedure HP-5, "Collection and Analysis of Air Samples".

Use of lapel air samplers is addressed in these changes. Purchase of improved lapel air samplers is being pursued. On receipt of these units, procedures for their care, maintenance and calibration will be completed. Completion date is expected to be December 1, 1983.

- 5.0 Open Item (285/8016-18): Documentation of Air Quality - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-21 and involved the failure of the licensee to establish a program to verify both station-supplied and vendor-supplied breathing air met NUREG-0041 recommendation for Grade D breathing air. The licensee still had not fully implemented a satisfactory quality control program for breathing air that satisfies NUREG-0041 criteria. The licensee is currently procuring analytical standards and developing procedures for the breathing air QA program. This item (285/8016-18) is still considered open.

Response

All elements of a program meeting NUREG-0041 recommendations for confirmation of Grade D breathing air are complete except for the receipt of a carbon monoxide (CO) analyzer from the vendor, the calibration and use procedures for the analyzers, and final Plant Review Committee approval of the program. The program is expected to be in full compliance two months after receipt of the CO analyzer. The District has received verbal confirmation of a shipping date of May 15, 1983 from the vendor.

- 6.0 Open Item (285/8016-31): Testing of Auxiliary Building HEPA Filters - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-21 and involved the licensee failure to implement surveillance, maintenance, and testing programs for the auxiliary building filtered ventilation system in order to satisfy the recommendations of NRC Regulatory Guide 1.140. The licensee had only partially implemented the aforementioned NRC recommendations. See Section 15 for details. This item (285/8016-31) is still considered open.

Response

The District has evaluated the current surveillance program for the auxiliary building HEPA filters and the following actions are being or will be taken in order to satisfy the recommendations of Regulatory Guide 1.140:

- 6.1 The differential pressure gauges for HEPA filters will normally be calibrated every 18 months + 15% in accordance with Standing Order M-28.
- 6.2 The HEPA filters will be replaced when the differential pressure across the filter bank exceeds 4 inches of water.
- 6.3 Replacement HEPA filters are procured in accordance with the industry standards referenced in Regulatory Guide 1.140.
- 6.4 A procedure will be developed for the replacement of HEPA filters. This procedure will include, among other things, the visual examination to assure proper installation and quality control steps.
- 6.5 A visual examination of the HEPA filters will be made during each refueling outage to ensure that leakage paths do not exist.

Items (1) and (3) are presently being utilized. Items (2), (4), and (5) will be implemented by August 31, 1983.

With regard to the concern on the HEPA filter installed on the compaction machine, it is considered redundant and unnecessary to develop a testing or maintenance program as the discharge from this filter exhausts into the auxiliary building HEPA filters.

- 7.0 Open Item (285/8016-32): Effluent Monitor Calibrations - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-21 and involved the licensee's lack of full range and energy calibrations for process and effluent monitors to satisfy the recommendations of ANSI Standards N323-1978 and N42.18-1980. The licensee had not completed implementation of a suitable effluent monitor calibration program. See Section 14 for details. This item (285/8016-32) is still considered open.

#### Response

Procedures for sensitivity and alarm setpoint determinations of RM-050, 051, 057, 059, 060, 061, and 062 were rewritten during the 1983 refueling outage and include provisions for determination of full range sensitivity and linearity. Kr-85 was used for noble gas determinations, Cs-137 for particulate determinations, and Ba-133 (mock iodine) for I-131 determinations. All sources were presented to the detectors in the same geometry as the normal sample stream. In the case of liquid process and effluent monitors (RM-055 and RM-055A), sample jigs were constructed duplicating the physical shape and materials of construction of the in-place

monitor housing. Monitors RM-050, 051, and 061 were tested through their full range. Monitors RM-057 and 062 were tested in all but the upper most decade of their range due to limited quantity of source material. RM-060 was tested in all but the two highest decades due to limited quantity of source. Calibration of RM-1 and RM-2 through these monitors' full range would involve unacceptable personnel radiation exposure. Monitors RM-052, 053, 054A, 054B, 056A, and 056B are not controlling effluent monitors. They were calibrated during the 1983 refueling outage using existing calibration procedures. However, they will be calibrated at the next scheduled frequency (1984 refueling outage) with revised procedures similar to those already revised. The District believes its effluent monitor calibration program will meet the applicable standard by July 1, 1984.

A program to test the representative sampling capability of RM-050, 051, 061, and 062 will be developed by September 1, 1983 and performed by February 1, 1984.

- 8.0 Open Item (285/8016-33): Curie Content of Packages - This item was discussed in NRC Inspection Report Nos. 50-285/80-16, 50-285/81-21, and 50-285/82-26 and involved the licensee's method of determining the curie content of waste packages. The licensee had not completed implementation of a new curie estimate procedure. This item (285/8016-33) is still considered open.

#### Response

After receipt of IE Inspection Report 80-16, the District performed a responsive evaluation of solid radwaste procedures and practices. The results, reported to the Plant Review Committee on February 11, 1982 per memorandum FC-213-82, concluded that current methods, including the determination of radioactivity based on contact dose rates, were in general industry use and adequate. However, during later inspections, the NRC position was established that the method discussed in Health Physics, Volume 13, pages 445-450, "Determination of the Curie Content of Packaged Radioactive Wastes Using Measured Dose Rates", as developed by Carolina Power & Light Company, was recommended. Subsequent to receiving this article from the NRC inspector in early 1983, the District has performed preliminary reviews and calculations using the referenced guide. The new method, including appropriate training, will be incorporated into either HP-3, "Solid Waste Shipment Procedures", or a new, separate procedure and implemented by September 1, 1983.

- 9.0 Open Item (285/8016-38): Local Exhaust for Fume Hood - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-21 and dealt with the lack of sufficient air flow across the face of the radiochemical laboratory fume hood. The licensee had not finalized plans or obtained necessary approvals for modifying the existing ventilation system. This item (285/8016-38) is still considered open.

Response

An Engineering Evaluation Assistance Request (EEAR) FC-90-132 to alleviate the fume hood's problems was initiated on November 8, 1980, and Priority Level 2 was assigned to it. The priority level was upgraded to Level 1 on March 25, 1981. A preliminary design package was issued on June 10, 1982. Following the resolution of comments, a final design package was issued on November 15, 1982. This package was accepted by the plant staff on April 8, 1983.

Parts and supplies for this modification are presently in the Fort Calhoun Station Stores Warehouse. Construction is expected to begin in May, 1983 and completion is expected by June 30, 1983.

- 10.0 Open Item (285/8128-01): ALARA Program - This item was discussed in NRC Inspection Report Nos. 50-285/80-16 and 50-285/81-38 and involved the licensee's failure to establish an ALARA program. The licensee had established an ALARA program; however, the program is considered inadequate in several areas. See Section 9 for details. This item (285/8128-01) is considered open.

Response

Omaha Public Power District implemented a formal upgraded ALARA program on June 1, 1982, as documented in the District's letter LIC-82-222. The program was designed for compliance to the requirements of 10 CFR 20.1, utilizing guidance provided in Regulatory Guides 8.8 and 8.10.

- 10.1 Provide for designation of an ALARA Coordinator in the Fort Calhoun Station organization - The primary responsibilities of the ALARA program are established in OPPD Policy No. 9.03 and expanded in Fort Calhoun Station Standing Order G-50. Subsequently, the additional position of "ALARA Coordinator" is established in Station Operating Procedures, Radiation Protection Manual, Section 7, "Operational ALARA Program". By designation to the ALARA Committee, the senior C/RP Technician automatically becomes the ALARA Coordinator, tasked with providing ALARA assistance to

the Supervisor - Chemistry & Radiation Protection.

- 10.2 Designate an individual to fill the vacant ALARA Coordinator position - At the time IE Inspection Report 81-28 was in progress, Mr. Joe Mattice was the designated ALARA Coordinator. He was promoted to Plant Health Physicist effective January 1, 1983. He was the ALARA Coordinator until December 16, 1982, when Mr. Craig Crawford was appointed the ALARA Coordinator by assignment as the Health Physicist on the ALARA Committee.
- 10.3 Establish procedures that provide for: (a) periodic and comprehensive management assessment of the ALARA program performance and (b) establishment of ALARA goals for Fort Calhoun Station activities involving radioactive wastes, personnel contaminations, employee group radiation exposures, respiratory protection use frequency, and other activities involving exposure to radioactive materials or control of radioactivity - Fort Calhoun Station Standing Order G-50, which is an administrative procedure, specifically states that an annual ALARA report, which evaluates the success and status of the ALARA program shall be provided. The District notes that Regulatory Guide 8.8 states a "data base is not available" presently and that the "criteria for meeting 10 CFR 20.1(c) takes the form of qualitative guidance (e.g., goals, objectives, and statements of good practice)." The District issued its 1983 ALARA goals per memorandum dated December 10, 1982 (EP-82-329). The ALARA goals pertain to individual radiation exposure reduction and collective radiation exposure as recommended by Regulatory Guide 8.8, as well as to refueling activity; radioactive gaseous, liquid and solid wastes reduction; program effectiveness; and program documentation. The District believes its goal projections are commensurate to the proposed list.

The District believes its ALARA program meets essential requirements presently, that no open items exist, that improvements based on program experience may be adopted, and that it is currently in full compliance.

- 11.0 Open Item (285/8128-03): Evaluation of Contract HP Technicians - This item was discussed in NRC Inspection Report No. 50-285/81-28 and involved the licensee's failure to establish procedures that provided guidance in evaluating the work experience of contract HP technicians. The licensee's procedures to resolve this item do not agree with the NRC staff position on accounting of hours worked for each year of



creditable experience. See Section 7 for details. This item (285/8128-03) is still considered open.

Response

In response to Open Item 285/8128-03, the District prepared and issued procedure HP-16, "Selection of Contract Health Physics Technicians", on January 14, 1982. This action was performed in accordance with the best available information, including ANSI N18.1-1971. The District believed this item to be closed by this timely action. The acquisition of 4,000 hours work experience within at least a 66 week period is in accordance with normal national work practices for contract personnel who generally work between 60 and 72 hours per week. The promulgation of NRC Generic Letters 82-02 and 82-12 document an NRC position that 72 hour work weeks are sanctioned. Prior to receipt of IE Inspection Report 82-30 on March 23, 1983, the District was unaware that the NRC had established a new NRC position. The District believes that it conforms to nationally accepted recommendations for selection of contract HP Technicians by the present HP-16 criteria and considers our existing procedures to be adequate.

12.0 Open Item (285/8230-02): Radiation Protection Manager (RPM) Qualifications - withholding from public disclosure requested by District's letter dated April 15, 1983.

Response

Technical Specification 5.3.1 states:

"The SCRP shall meet the requirements set forth in Regulatory Guide 1.8 dated September, 1975 entitled "Personnel Selection and Training." The SCRP is considered to meet the educational and experience qualifications set forth in Regulatory Guide 1.8 with at least five years of experience in applied radiation protection and extensive formal training in radiation protection."

The District has interpreted the first sentence to establish the documentary reference for the SCRP qualifications and the second sentence to define an acceptable criteria for application of the Regulatory Guide.

The first evidence of a conflicting NRC position surfaced during the 82-30 NRC inspection and was followed by an unofficial transmittal of an internal NRC document during the 83-06 radwaste inspection on March 7-11, 1983. The District was unaware of any conflicting NRC position on January 1, 1983 when the present SCRP appointment became effective.

The District believes that documents as important as Regulatory Guides, Technical Specifications, etc. should be sufficiently clear so as to stand alone and avoid additional position memorandums. In addition, the District believes all official, industry-wide distribution of information pertinent to licensees should be made in sufficient time for inclusion into important affected decisions. The District believes the appointment of its present SCRP conforms to official regulatory requirements.

independently of the computer calculation. Documentation of the program should include a description of the algorithm and a current listing of the program. Guidelines for the documentation of digital computer programs are given in ANSI N413-1974 (Ref. 29).

### **7. Quality Control for Continuous Effluent Monitoring Systems**

The specified frequency of calibration for a particular system should be based on considerations of the nature and stability of that system. For nuclear power plants, specific requirements for calibrations and checks of particular effluent monitoring systems usually are included in the technical specifications for the plant.

Initial calibration of each measuring system should be performed using one or more of the reference standards that are certified by the National Bureau of Standards or that are calibrated by a measurement system that is traceable to that of the National Bureau of Standards (Ref. 27). For nuclear power plants, these calibrations are usually repeated at least annually. The radionuclide standards should permit calibrating the system over its intended range of energy and rate capabilities. Periodic inplant calibration should be performed using a secondary source or method that has been related to the initial calibration. For nuclear power plants, these calibrations are usually performed at least monthly.

Periodic correlations should be made during operation to relate monitor readings to the concentrations and/or release rates of radioactive material in the monitored release path. These correlations should be based on the results of analyses for specific radionuclides in grab samples from the release path.

Flow-rate measuring devices associated with the system should be calibrated to determine actual flow rates at the conditions of temperature and pressure

under which the system will be operated. These flow rate devices should be recalibrated periodically.

Whenever practicable, a check source that is actuated remotely should be installed for integrity checks of the detector and the associated electrical system.

### **8. Review, Analysis, and Reporting Data**

Procedures for review, analysis, and reporting of data should include examinations for reasonableness and consistency of the data and investigative and corrective actions to be taken under specified circumstances.

### **9. Audits**

Planned and periodic audits should be made to verify implementation of the quality assurance program. The audits should be performed by qualified individuals who do not have direct responsibilities in the areas being audited.

Audit results should be documented and reviewed by management having responsibility in the area audited. Followup action, including reaudit of deficient areas, should be taken where indicated.

## **D. IMPLEMENTATION**

The purpose of this section is to provide information to applicants and licensees regarding the NRC staff's plans for using this regulatory guide.

This guide reflects current NRC staff practice. Therefore, except in those cases in which the applicant or licensee proposes an acceptable alternative method, the staff will use the method described herein in evaluating an applicant's or licensee's capability for and performance in complying with specified portions of the Commission's regulations until this guide is revised as a result of suggestions from the public or additional staff review.