

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT



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SERIAL: April 30, 1982
JAFP-82-0478

Mr. Ronald C. Haynes
Regional Administrator
United States Nuclear Regulatory Commission
Region 1
631 Park Avenue
King Of Prussia, Pennsylvania 19406

Subject: Health Physics Appraisal (50-333/80-20)

Dear Mr. Haynes:

With reference to the appraisal conducted by Mr. Knapp and the Health Physics Appraisal Team of your office November 10-21, 1980 at the James A. FitzPatrick Nuclear Power Plant, we are submitting our response to the Appendix A findings transmitted by your letter dated January 20, 1982 as received by the undersigned on January 25, 1982.

Very truly yours,

CORBIN A. McNEILL, JR.

CAM:jaa

Enc. (16 pp)

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POWER AUTHORITY OF THE STATE OF NEW YORK
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A. RADIATION PROTECTION ORGANIZATION

1. Formally document and issue assignments of supervisors and technicians to the major functions of the department.
(Section 1.3)

RESPONSE

Since the appraisal conducted by the NRC in November 1980 major functions of the Radiological and Environmental Services Department have been reassigned. Examples include:

- a) Emergency Planning - assigned to the department Emergency Planning Coordinator.
- b) Training - assigned to the department Training/QC Supervisor.
- c) Quality Control - assigned to the department Training/QC Supervisor.
- d) Respiratory Protection Program - assigned to the department Training/QC Supervisor.
- e) Internal Dosimetry Program - assigned to the Assistant to Radiological and Environmental Services Superintendent.
- f) Radiation Protection - assigned temporarily to a Radiological and Environmental Services Senior Technician.
- g) Chemistry - assigned temporarily to a Radiological and Environmental Services Senior Technician.
- h) Radiochemistry - assigned temporarily to a Radiological and Environmental Services Senior Technician.
- i) Dosimetry - assigned temporarily to a Radiological and Environmental Services Senior Technician.
- j) ALARA Program - primary responsibility of the Radiological and Environmental Services Superintendent with the assistance of contract engineer as necessary, i.e., refueling outages, extended maintenance outages, etc.
- k) Off Site Dose Assessment - assigned to Environmental Supervisor.

Primary responsibility for major functions temporarily assigned will be reassigned to Radiological and Environmental Services Supervisors that

as of this date have not been hired. Radiological and Environmental Senior Technicians temporarily assigned these functions will continue to assist those supervisors who are eventually hired by July 1, 1982.

Department Standing Order #3, "Organization of the Radiological and Environmental Services Department", will be revised to include major functions assigned to department personnel. This revision is expected to be completed by September 30, 1982.

A. RADIATION PROTECTION ORGANIZATION

2. Assign additional qualified personnel at the professional level to the Radiological and Environmental Services Group. (Section 1.3)

RESPONSE

Since November 1980, approval has been obtained to increase the number of qualified personnel at the professional level in the Radiological and Environmental Services Department. Numerous interviews have been conducted with the result that two of the four open positions have been filled, that of Emergency Planning Coordinator and Training/QC Supervisor. Individuals for the two remaining positions, Radiation Protection and Radiochemistry Supervisory and Dosimetry and ALARA Supervisor, are actively being sought. It is expected that these positions will be filled by July 1, 1982.

B. TRAINING

Implement a formal training and retraining program including lesson plans, acceptance criteria and formal examinations to maintain technician competence at a prescribed level. (Section 2.2)

RESPONSE

In May 1981, an individual was appointed as the Radiological and Environmental Training and Quality Control Supervisor. Procedure ITP-7 "Training for Radiological and Environmental Services (RES) Technicians" has been revised to provide a program for the technical and practical training of entry level technicians as well as the retraining of incumbents. In addition, a formal orientation and qualification program for contractor radiation protection technicians has been developed and implemented.

Initial training for entry level personnel consists of a program which is based on draft INPO and NRC (NUREG-0761) guidance. This program is scheduled as necessary when entry level personnel are hired.

An acceptable program has been achieved, but a full training/retraining cycle for those presently assigned to the RES Department will require approximately two years (May 31, 1984) for completion of a full cycle.

The area of requalification is under study and will be in accordance with the final INPO guidelines for training and qualification.

C. EXTERNAL EXPOSURE CONTROL

1. Select and implement a method for personnel neutron exposure monitoring and provide training in this method. (Section 3.1.3)

RESPONSE

Acceptable personnel neutron dosimetry is presently in use at James A. FitzPatrick Nuclear Power Plant (JAF). When surveys indicate that neutron dosimetry is required, Landauer Neutrack-ER packets are issued. This dosimetry packet has been tested by Battelle Northwest Labs and demonstrated to meet the specifications claimed by the processor. These specifications include sensitivity for measuring neutron radiations at energies below 0.1 MEV.

In addition, two procedures are under development which will formalize our method for personnel neutron exposure monitoring and require performance of routine neutron radiation surveys following extended maintenance or refueling outages. The personnel neutron exposure monitoring procedure will be written to comply with the methods contained in Regulatory Guide 8.14, Revision 1, "Personnel Neutron Dosimeters". It is expected that these procedures will be issued and training completed by August 31, 1982.

C. EXTERNAL EXPOSURE CONTROL

2. Establish a procedure to require and specify investigations of personnel external exposures in excess of established limits. (Section 3.1.4)

RESPONSE

A procedure entitled "Radiological Incident Investigation" is under development which provides instructions to RES Supervisors for investigating personnel external exposures in excess of established limits or plant guides. Full compliance will be achieved when this procedure is issued and training completed. Training shall be completed by July 31, 1982.

C. EXTERNAL EXPOSURE CONTROL

3. Include in the external dosimetry program provisions and procedures for quality assurance of extremity dose and neutron

dose equipment and evaluations. Include a provision for irradiation of whole body and extremity equipment by known amounts of low energy beta radiation. Include procedural requirements for review and sign-off of all quality assurance measures by responsible supervision. (Section 3.1.6)

RESPONSE

An in-house testing program has been initiated and is under development for randomly testing by exposing extremity TLD's to a known Cs-137 source. When this phase of testing is defined, the program will be expanded to develop a means for beta testing. The plant dosimetry procedures will be revised to include extremity dose in-house testing methods, frequency, and acceptance criteria when this program is developed. This revision will also include procedural requirements for review and sign off quality assurance measures by responsible supervision.

Whole body TLD's are tested for response to beta and X radiation as well as for high energy photons on a predetermined frequency in accordance with department procedures. These tests are conducted every other month "blind" by a DOE approved independent testing laboratory (Battelle Northwest Labs). Procedures also require that an in-house test be performed twice monthly by exposing a random sampling of TLD's to known Cs-137 doses. In-house and contracted tests are evaluated to verify proper equipment operability.

It is expected that these and other planned revisions to this procedure will be completed by September 30, 1982.

Refer to C.1 for the response to providing adequate neutron dosimetry and evaluations.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

1. Establish a formal program to identify, evaluate and implement corrective actions for personnel airborne radioactivity exposures in excess of "40-MPC hours". (Sections 3.2.4 and 3.2.5.3)

RESPONSE

A procedure is under development which will include evaluation and corrective action requirements for incidents involving airborne radioactivity exposures determined to have been in excess of "40-MPC hours" in one week. This procedure will include various methods for determining if an airborne radioactivity incident investigation is required. The procedure will also include instructions for obtaining nasal smears, air sampling and analysis, MPC hour calculations and whole body counting data. Evaluation of the "40-MPC hour" exposure level will be based on Radiation Work Permit data and whole body counter data. This procedure shall be implemented and training completed by September 30, 1982.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

2. Establish an approved, documented program to relate direct and indirect bioassays to the effectiveness of the respiratory protection program. (Section 3.2.5.3)

RESPONSE

The whole body counting procedure will be revised to include a calculational method for relating whole body count data to MPC-hour exposures. The whole body counting, radiological incident investigation and radiation protection procedures will be written and/or revised to include a method for determining when and how to relate direct evaluations to bioassay evaluations. Initiation and/or revisions will be completed by September 30, 1982.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

3. Establish a quantitative respiratory equipment fit testing and training program and procedures. (Section 3.2.5.4 and 3.2.5.5)

RESPONSE

Quantitative fit testing is not currently under consideration for implementation at JAF. The below listed reasons are justification for not considering quantitative fit testing:

- a) Protection factors which could be determined to be superior to referenced protection factors for respiratory equipment are not required by JAF. The Power Authority does not intend to permit work in areas where greater than approved protection factors would be required.
- b) Physical screening of respirator users precludes those individuals with physical abnormalities from being allowed to use respirators.
- c) Quantitative tests are recommended when highly toxic atmospheres or atmospheres immediately dangerous to life and health are encountered. If highly toxic atmospheres were to be encountered, protection factors greater than those listed in Table 1 of Regulatory Guide 8.15 would be necessary to provide adequate protection. Under those conditions, quantitative testing is necessary to demonstrate high protection factors. Regulatory Guide 8.15, Section C.7 requires Commission approval for applying protection factors greater than those listed in the reference. A description of necessity and demonstration of achieving a higher protection factor would have to be submitted to and approved by the Commission. For routine use in non-toxic atmospheres quantitative fit testing is not justified because referenced protection factors are adequate.

- d) Quantitative fit testing is not nor generally cannot be performed on individuals immediately after dress out but prior to entry into areas requiring respiratory protection. Qualitative tests are presently being used to assure proper fit of workers' air supplied respirators at job sites.

The JAFNPP respiratory protection program is presently being reviewed to assure that it meets the requirements contained in NUREG-0041. Review and corrective actions are expected to be completed by December 31, 1982.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

- 4. Establish adequate respiratory protective equipment testing, storage, control and issuance program and procedures. (Section 3.2.5.4 and Section 3.2.5.6)

RESPONSE

The Radiation Work Permit is the mechanism used to mandate the requirement for using respiratory equipment. Radiation Work Permit procedures and respiratory protection procedures are included in approved radiation protection procedures. Only qualified technicians are authorized to approve Radiation Work Permits.

- a) Only authorized individuals are allowed to perform work under a Radiation Work Permit requiring the use of respiratory protection.
- b) Inspections of stored respiratory devices have not produced evidence that damage or misshaping is resulting from storage and practices. Inspection of stored respiratory devices will be performed in accordance with NRC instructions to assure that damage or misshaping is not occurring.
- c) An RES Department procedure entitled "Respiratory Protection Procedures" (RPOP-6) is currently under development. This procedure will provide for equipment testing, storage and issuing instructions to RES Technicians. This procedure will be issued and technician training will be completed by September 30, 1982.

Also under consideration is the purchase of a respiratory protection testing device. Budgeting for this device is tentatively planned for 1983.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

- 5. Establish an internal dosimetry quality assurance program and procedures consistent with ANSI N343 and Chapter 10 of NUREG-0041. (Section 3.2.5.4)

RESPONSE

The quality assurance requirements of ANSI N343 and Chapter 10 of NUREG-0041 which pertain to internal dosimetry will be addressed in the next revisions of applicable procedures. Among the requirements that are to be included:

- a) Use of additional sources for routine operational check of the whole body counting equipment.
- b) Use of wider range sources during routine calibration of the whole body counter.

This evaluation and subsequent revision to the whole body counter procedure will be completed by September 30, 1982 and at that time an acceptable program will be achieved.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

- 6. Establish means to ensure respiratory protective equipment is not routinely used in airborne radioactivity concentrations whose MPC fraction exceeds the protection factor of the equipment. (Section 3.2.5.7)

RESPONSE

Several RES Department procedures are presently under development or undergoing revisions which will require investigations and recommend corrective actions to prevent recurrence of incidents which result in airborne radioactivity concentrations with greater MPC fractions for the protective equipment being utilized.

The following procedures are under development:

- a) RPOP-6, "Respiratory Protection", describes the plant's program with regard to selection, issuance, use and maintenance of respiratory protective equipment as well as providing guidance for use of engineering controls to minimize the use of protection devices.
- b) RPOP-7, "Radiological Incident Reporting and Review", provides action levels for investigation of radiological incidences such as exceeding respiratory protection factors.
- c) CRI-6, "Whole Body Counter - Operation and Calibration", is being revised to include instructions for evaluating radioactive airborne exposures in excess of "40-MPC hours".

These procedures will be developed/revised and issued by September 30, 1982.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

7. Establish a program and procedures to assure that process or other engineering controls are used to the extent practicable to limit the concentrations of airborne radioactive materials. (Section 3.2.5.7)

RESPONSE

A plant ALARA program will be developed which includes procedures for use of temporary engineering controls to limit concentrations of airborne radioactive materials. Refer to the response for Section G.

D. INTERNAL EXPOSURE CONTROL - RESPIRATORY PROTECTION

8. Establish a program and procedures for calibration and quality assurance checks of the whole body counter consistent with the recommendations of ANSI N343. (Section 3.2.6)

RESPONSE

Requirements of ANSI N343 which are practical with existing equipment will be incorporated in the next revision of the procedure "Whole Body Counter - Operation and Calibration" (CRI-6) but limited to the capability of the equipment operating characteristics.

This procedure will be revised and issued by September 30, 1982.

E. SURVEILLANCE PROGRAM

1. Establish and implement a formally documented and approved routine plant radiation and contamination surveillance program. (Section 3.3.2)

RESPONSE

A section has recently been added to the plant chemistry, radiation protection, and environmental surveillance procedures entitled "Radiation Protection Procedures". This section was developed specifically for formalizing RES Department radiation protection procedures and surveillances. Among the procedures designated to be included in this section is the routine radiation and contamination surveillance procedure. This procedure will include instructions on performance of this routine as well as corrective actions, reporting criteria, and frequency of surveys. A means for displaying current plant radiation and contamination conditions will be developed with instructions for updating to be included in this procedure.

This surveillance is presently assigned to an RES Technician on an informal basis with regard to instructions and frequency. A formal procedure is expected to be written and issued by September 30, 1982 which will expand the scope and documentation.

E. SURVEILLANCE PROGRAM

2. Establish formal procedures on the type of radiation surveys required prior to issuance of Radiation Work Permits. (Section 3.3.2)

RESPONSE

The need for developing formal procedures on the type of radiation surveys required prior to issuance of Radiation Work Permits is recognized by the RES Department staff. Such procedures would be especially beneficial for assuring (through training and as reference material) that contract technicians perform adequate surveys. It is expected that these procedures will require revisions to the plant radiation procedures. Efforts have begun toward development of such procedures, but because of the magnitude of this undertaking completion of all revisions to existing procedures and development of new procedures is expected to require approximately eight months. Completion of this task is scheduled for September 30, 1982.

E. SURVEILLANCE PROGRAM

3. Obtain and utilize appropriate airborne radioactivity sampling equipment and media with known sampling, collection and retention efficiencies for iodine. (Section 3.3.3.2)

RESPONSE

Airborne radioactive sampling equipment and media has been upgraded and includes sampling media with known collection and retention efficiencies for iodine. Certified charcoal cartridges are presently being utilized for air sampling of potential airborne iodine areas.

E. SURVEILLANCE PROGRAM

4. Enforce personnel contamination self-survey requirements upon departure from contaminated areas and furnish an adequate number of portal monitors at appropriate locations. (Section 3.3.3.3)

RESPONSE

Workers are required to frisk at access points between the restricted and unrestricted areas of the plant in accordance with plant radiation protection procedures. RES Department personnel are not required to continuously monitor plant worker frisking techniques but do inform individuals as to proper frisking techniques when observations dictate. In general, our observations indicate an improved attitude in frisking techniques by plant workers.

In addition, routine surveys of the plant for smearable contamination result in very few occasions of contamination spread.

Three portal monitors were placed at various plant access points during the 1981 refueling outage for evaluation on a loan basis. One unit has been purchased based upon performance of the tested units particularly with regard to sensitivity and dependability. It is expected that additional units will be purchased and placed in operation following a study which will identify locations and sensitivities.

An acceptable program has been achieved, but will be greatly enhanced by the placement of additional portal monitors at access and/or final exiting points. Additional portal monitors will be purchased and in place by December 1983.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

1. Formally assign radioactive waste shipping responsibilities. (Section 4.2)

RESPONSE

Radioactive waste shipping responsibilities have been formally assigned with issuance of Plant Standing Order #29, "Handling and Packaging of Contaminated Materials", Revision 0 dated 11/23/81. In addition, responsibility for resolving problems with shipments in transit have been assigned through Plant Standing Order #21B entitled "Emergency Notification - Radwaste Shipment Trouble", Revision 3 dated 02/09/82.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

2. Promptly repair and utilize the off gas treatment system. (Section 4.3.2.1)

RESPONSE

The off gas treatment system has undergone significant repair and modification. The goal of the repairs was to minimize leakage from the

system. A modification has been implemented which resulted in the replacement of the drying towers. Leak testing using helium as a tracer gas was used to evaluate the tightness of the system.

The system is currently being repaired and tested and will be in operation by June 1, 1982.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

3. Review all radioactive waste storage areas including temporary storage areas which had not been previously reviewed to ensure a documented 10 CFR 50.59 evaluation is on file. (Section 4.4.1)

RESPONSE

A review and revision to the FSAR is presently being conducted and will include upgrading nuclear safety evaluations for present radwaste processing equipment and procedures. In addition, a review of nuclear safety evaluations on file will be conducted to determine which temporarily stored material (outside of the buildings) have been evaluated. A nuclear safety evaluation will be conducted for material stored outside of the plant in accordance with Work Activity Control Procedure 10.1.6. Radioactive waste stored inside of the plant is controlled in the same manner as other services in accordance with the plant Radiation Protection Procedures.

Revision to radwaste operating procedures are reviewed by the Plant Operations Review committee (PORC) to ensure that such changes do not involve unreviewed safety questions. If necessary, Nuclear Safety Evaluations are performed prior to the approval of procedure changes. Such evaluations are also performed prior to modifications or other changes.

Recent Nuclear Safety Evaluations for changes in radwaste operation include the following:

- a) Solid Waste Compacting PORC-80-080
- b) Temporary Solid Waste Storage Area PORC-80-068

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

4. Establish and implement radioactive waste shipping cask loading and closure procedures to meet the requirements of 10 CFR 71.54. (Section 4.4.2.2)

RESPONSE

Radioactive waste shipping cask loading and closure procedures have been written, issued and were implemented in January 1982. The following procedures have been approved and issued:

F-OP-48C-1	Handling Procedure for CNSI 14-195H Cask*
F-OP-48C-2	Handling Procedure for CNSI 15-160B Cask*
F-OP-48C-3	Handling Procedure for CNSI 21-300 Cask*
F-OP-48C-4	Handling Procedure for CNSI 4-85 Cask*
F-OP-48C-5	Handling Procedure for CNSI 6-80-2 Cask*
F-OP-48C-6	Handling Procedure for CNSI 7-100 Cask*
F-OP-48C-7	Handling Procedure for CNSI 6-75 Cask*
F-OP-48C-8	Handling Procedure for CNSI 8-120 Cask*

The purpose of these procedures is to provide for the safe and efficient handling and loading of casks used at JAF.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

5. Establish and implement means to maintain and update documents required to be on hand prior to shipment of radioactive waste.
(Section 4.4.2.2) 10 CFR 71.54

RESPONSE

Procedures have been issued and implemented to maintain and update all documents required to be on hand prior for shipment of radioactive waste. These procedures include:

F-OP-48A	Document of Radwaste Shipments*
PSP-8	Radioactive Material Shipping Procedure*

These procedures are revised as necessary to ensure that radioactive waste shipments are made and documented in accordance with state and federal regulations.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

6. Establish and implement a radioactive waste shipping records program which meets the requirements of 10 CFR 71.62. (Section 4.4.2.2)

RESPONSE

The records required for shipping radioactive waste are contained in the two procedures referenced in response to F-5. Attachments containing the required records and instructions for completing these records are contained in the above mentioned procedures.

F. RADIOACTIVE WASTE MANAGEMENT PROGRAM

7. Establish and implement a quality assurance program sufficient to assure radioactive waste is packaged, transported and transferred in accordance with applicable regulatory requirements. (Section 4.4.2.2)

RESPONSE

The packaging of radioactive material for transport and transportation of radioactive materials is conducted in accordance with an NRC approved Quality Assurance Program. In addition, measures have been established with NRC concurrence to comply with the requirements of the draft Regulatory Guide - Task TP-020-4, Annex 2, Section 2.1 which covers this activity.

The Quality Assurance organization has increased the scope of activity in this area by the performance of more frequent audits, surveillance activities and increased review of procedures.

In addition, the plant operating staff has increased their training and expertise in this area to assure continued compliance with regulatory requirements.

G. ALARA

1. Establish, document, and implement a formal corporate and plant ALARA program that conforms to the guidance in Section C of Regulatory Guide 8.8, and to Regulatory Guide 8.10. (Section 5.2)

RESPONSE

Steps have been taken toward establishing a formal corporate and plant ALARA program. Nuclear generation procedures were issued by the

Headquarters staff. These procedures provide for evaluation and audit of the plant program as well as require that certain facets of job review be performed by Headquarters staff. Goals and objectives are established and reviewed by the Radiation Safety Committee. The complete development and implementation of an ALARA program is ongoing. Corporate and plant management are committed to operating the plant such that radiation exposures to workers and public are maintained ALARA. Development of the complete program is expected to require approximately three years, but major aspects of the program (those having the greatest effect on exposure control reduction) are expected to be accomplished prior to the May 1983 refueling outage. Some specifics on accomplishments to date are addressed in subsequent responses to this section.

G. ALARA

2. Provide full-time professional level manning plus the necessary supporting personnel to operate the plant ALARA program and provide the necessary corporate level manpower. (Section 5.2)

RESPONSE

Interviews have been conducted with applicants interested in the newly created plant Dosimetry/ALARA Supervisor position. It is expected that this position will be filled before the 1982 year-end. In the meantime a contract ALARA engineer has been utilized for the 1981/1982 refueling outage which ran for four months and began in November. This individual has been responsible for significant radiation exposure reductions during that period. A final ALARA report documents the effectiveness of his efforts and includes several recommendations that should be considered for further reducing radiation exposures in future outages as well as during plant operation.

In addition to the ALARA engineer, many hours were spent by Corporate Headquarters personnel evaluating and supervising the installation of temporary and semi-permanent shielding.

G. ALARA

3. Provide procedural action levels in Radiation Work Permit review, planning and job review, consistent with good ALARA principles. (Section 5.2)

RESPONSE

Guidance for performing ALARA reviews at certain action levels are detailed in a department procedure entitled "ALARA Review" (RPOP-4). This procedure describes criteria and means for Radiological and

Environmental Services Technicians to review routine work efforts. Plant modifications originating at Headquarters will be reviewed by Headquarters personnel. Plant modifications originating at the plant are reviewed by RES Department supervision in conjunction with Work Activity Control Procedure (WACP) 10.1.6.

In general many tools and methods have been incorporated or use of them increased in an effort to reduce worker and total job radiation exposures. For example:

The torus T-quencher modification was performed largely without the use of respiratory protective devices due to intensive decontamination, installation and use of a temporary torus ventilation system, use of several portable filtration units, and assignment of many capable RES Technicians for monitoring.

Sophisticated decontamination units presently being utilized permitted work on plant components out of tents and without the use of respiratory protective devices which in the past required such controls. This resulted in exposure savings on such components as TIP indexer, various valves, snubbers, etc., by reducing the source and placing less constrictions on the workers.

The use of tents and installation of temporary shielding has been expanded where decontamination is not practical.

Software programs have been developed to provide additional data on man-rem expenditures as an aid to department personnel in assuring that high exposure jobs are being evaluated. Additional hardware has been purchased and software is being developed that will greatly extend and improve the data from the REM (Radiation Exposure Management) system. It is expected that the new system will be operational by the end of 1982.

H. FACILITIES AND EQUIPMENT

1. Locate clothing change areas and personnel access control points consistent with ALARA principles. (Section 6.1.4)

RESPONSE

Clothing change areas are presently being selected to ensure that exposures are maintained ALARA. We feel that an adequate program has been achieved with regard to this item.

H. FACILITIES AND EQUIPMENT

2. Reinstitute quantitative fit testing program using appropriate equipment for quantitative fitting of respirators and for retesting of repaired equipment. (Section 6.1.8)

RESPONSE

This item has been addressed in Responses to Section D, Internal Exposure Control - Respiratory Protection, Items 3 and 4.

H. FACILITIES AND EQUIPMENT

3. Provide additional personnel contamination "frisking" stations at appropriate locations to create conditions under which the procedure for personnel contamination self-surveys can be conscientiously followed. (Section 6.1.5)

RESPONSE

Additional "friskers" have been placed at heavy traffic access points. The number of friskers now in service is commensurate with the number of workers assigned but is limited by available space. At least two personnel monitoring devices are in service at the radiation protection office access area and the east turbine building access point. During the recent refueling outage two additional friskers were placed at the standby gas treatment room access point.

Adequate provisions (including space) will be designed into the proposed administration building. At this time it is expected that highly sensitive portal monitors will be the primary monitoring device used at all major access points to the plant.

Because of the improvements stated, compliance has been achieved.