

50-387/388



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 2, 1996

LICENSEE: Pennsylvania Power and Light Company
FACILITY: Susquehanna Steam Electric Station (SSES), Units 1 and 2
SUBJECT: SUMMARY OF OCTOBER 30, 1996 MEETING TO DISCUSS INSTALLATION OF ON-SITE STORAGE FACILITY FOR SPENT FUEL AT SSES, UNITS 1 AND 2

On October 30, 1996 a management meeting was held between members of the Office of Nuclear Reactor Regulation (NRR), Office of Nuclear Material Safety and Safeguards (NMSS), and Pennsylvania Power & Light Company (PP&L or the licensee) to discuss the licensee's plans for design and installation of a new on-site storage facility for spent fuel at the Susquehanna Steam Electric Station located in Berwick, Pennsylvania. Enclosure 1 is a list of the meeting attendees.

The first part of the meeting was a presentation by PP&L staff about PP&L's design control process, a discussion of the spent fuel storage design, public involvement and quality assurance oversight of the design process, plans for implementation, project organization, and the strategy for implementation. Enclosure 2 is a set of the slides outlining the details of the discussions. Other key items discussed were that 13 procedures are in draft form now with the remainder expected to be completed in draft by the end of the year. The approved procedures would then be "dry runned" and also evaluated at the Davis Besse site when its procedures are being implemented. PP&L also emphasized that it will maintain its vigilance over the project and considers the work to be as important as a safety-related modification to the plant. Also, it was stated that the licensee was developing detailed design basis documentation which would be developed for the project.

During the second part of the meeting, the NMSS staff provided a discussion of the status of pending regulatory guidance regarding Part 72 licensing. Specifically new inspection procedures are being issued, a draft Standard Review Plan (SRP) section is to be issued in January for general license reviews, a site-specific license SRP is expected to be issued in draft for comments soon and transportation and dual purpose license SRP sections are also under development. Other industry issues were mentioned for consideration including the quality of concrete aggregate in the storage modules, the use of thermal heat shield paint in the casks, and American Society of Mechanical Engineers Code and testing requirement development.

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Participants stated that the exchange of information was valuable for both the licensee and regulator and the staff noted that it felt that PP&L was doing a good job in its oversight and control of the quality of the project.

/S/

Chester Poslusny, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-387/388

Enclosures: 1. Meeting Attendees List
2. Licensee's Handouts

cc w/encls: See next page

DISTRIBUTION: *w/Enclosures 1 and 2

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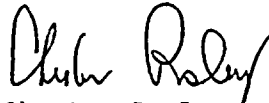
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|--------|--------------|----------|----------|--|--|
| OFFICE | PDI-2/PM | PDI-2/IA | PDI-2/D | | |
| NAME | CPoslusny:rb | MO'Brien | JStolz | | |
| DATE | 11/23/96 | 11/14/96 | 11/26/96 | | |

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Participants stated that the exchange of information was valuable for both the licensee and regulator and the staff noted that it felt that PP&L was doing a good job in its oversight and control of the quality of the project.



Chester Poslusny, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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cc w/encls: See next page

Pennsylvania Power & Light Company

Susquehanna Steam Electric Station,
Units 1 & 2

cc:

Jay Silberg, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N Street N.W.
Washington, D.C. 20037

Bryan A. Snapp, Esq.
Assistant Corporate Counsel
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. J. M. Kenny
Licensing Group Supervisor
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. K. Jenison
Senior Resident Inspector
U. S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, Pennsylvania 18603-0035

Mr. William P. Dornsife, Director
Bureau of Radiation Protection
Pennsylvania Department of
Environmental Resources
P. O. Box 8469
Harrisburg, Pennsylvania 17105-8469

Mr. Jesse C. Tilton, III
Allegheny Elec. Cooperative, Inc.
212 Locust Street
P.O. Box 1266
Harrisburg, Pennsylvania 17108-1266

Chairman
Board of Supervisors
738 East Third Street
Berwick, PA 18603

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

Mr. Harold G. Stanley
Superintendent of Plant
Susquehanna Steam Electric Station
Pennsylvania Power and Light Company
Box 467
Berwick, Pennsylvania 18603

Mr. Herbert D. Woodeshick
Special Office of the President
Pennsylvania Power and Light Company
Rural Route 1, Box 1797
Berwick, Pennsylvania 18603

George T. Jones
Manager-Engineering
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Mr. Robert G. Byram
Senior Vice President-Nuclear
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dr. Judith Johnsrud
National Energy Committee
Sierra Club
433 Orlando Avenue
State College, PA 16803

MEETING ATTENDEES LIST

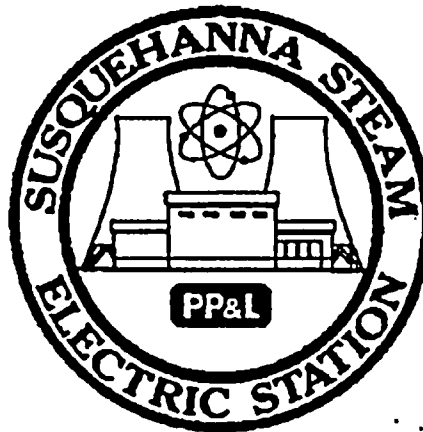
INSTALLATION OF ON-SITE STORAGE FACILITY FOR SPENT FUEL

OCTOBER 30, 1996

| <u>NAME</u> | <u>ORGANIZATION</u> |
|---------------|---------------------|
| S. Varga | NRC/NRR |
| W. Reckley | NRC/NRR |
| C. Poslusny | NRC/NRR |
| F. Sturz | NRC/NMSS |
| E. Leeds | NRC/NMSS |
| T. McGinty | NRC/NMSS |
| P. Eng | NRC/NMSS |
| P. Ray | NRC/NRR |
| G. Marcus | NRC/NRR |
| J. Spets | NRC/NMSS |
| C. Haughney | NRC/NMSS |
| J. Kenny | PP&L |
| W. Burchill | PP&L |
| R. Saccone | PP&L |
| G. Miller | PP&L |
| G. Jones | PP&L |
| D. Maron | PP&L |
| R. Matthews | PP&L |
| R. Sgarro | PP&L |
| K. Kelenski | PP&L |
| H. Woodeshick | PP&L |
| D. Larkin | WPPSS |
| V. Franceschi | Vectra |
| A. Nelson | NEI |
| B. Maiers | PADEP-BRP |
| A. Panogos | ComEd |

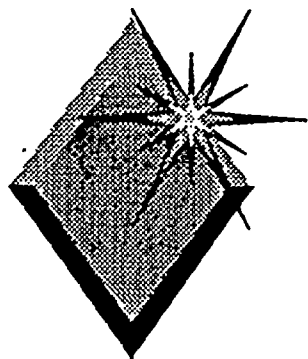
ENCLOSURE 1

**SPENT FUEL STORAGE
SENIOR MANAGEMENT MEETING**



**U.S. Nuclear Regulatory
Commission
Rockville, MD**

OCTOBER 30, 1996



*SPENT FUEL STORAGE AT
SUSQUEHANNA STEAM
ELECTRIC STATION*

SENIOR MANAGEMENT MEETING
U.S. NRC

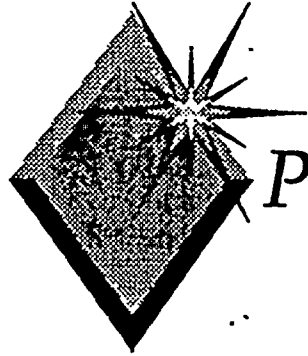
October 30, 1996

Rockville, MD



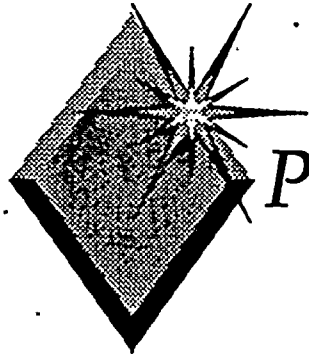
PP&L's Plans for Spent Fuel Storage at Susquehanna Steam Electric Station

- ◆ Introduction G. T. Jones
Vice President - Nuclear Operations
- ◆ Management Perspective G. D. Miller
Manager-Nuclear Engineering
- ◆ Project Overview R. A. Saccone
Manager-Nuclear Modifications
- ◆ Quality Assurance W. E. Burchill
Manager-Nuclear Assessment Services



PP&L MANAGEMENT PERSPECTIVE

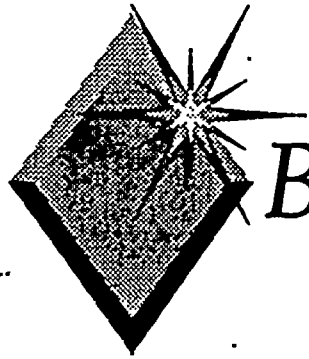
- ◆ PP&L's Design Control Process
- ◆ SSES ISFSI Attributes
 - Pad Design
 - Public Involvement
 - QA Oversight



PP&L MANAGEMENT PERSPECTIVE

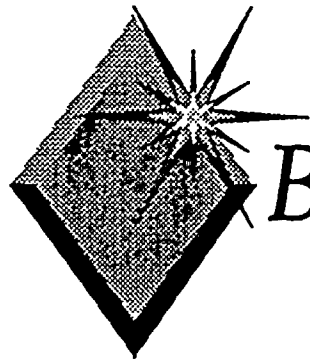
◆ Specific Standards Applied to this Project Include:

- Regulatory Compliance
- Industry Experience
- Good Public Involvement
- Proactive Approach
- Strong Management Involvement and Commitment of Resources
- Engineering Accountability
- Strong Quality Assurance Plan



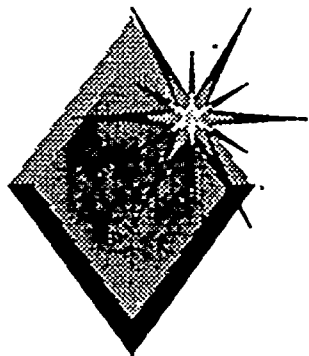
BACKGROUND

- ◆ Susquehanna Steam Electric Station - 2 Unit Site, each consisting of a General Electric Boiling Water Reactor, BWR/4 with a 1150 MWe nominal rating.
- ◆ Unit 1 original fuel load - July 27, 1982; commercial operation June 8, 1983.
- ◆ Unit 2 original fuel load - March 28, 1984; commercial operation February 12, 1985.
- ◆ Common Refuel Floor and Maintain a Single Failure Proof Crane



BACKGROUND (CONTINUED)

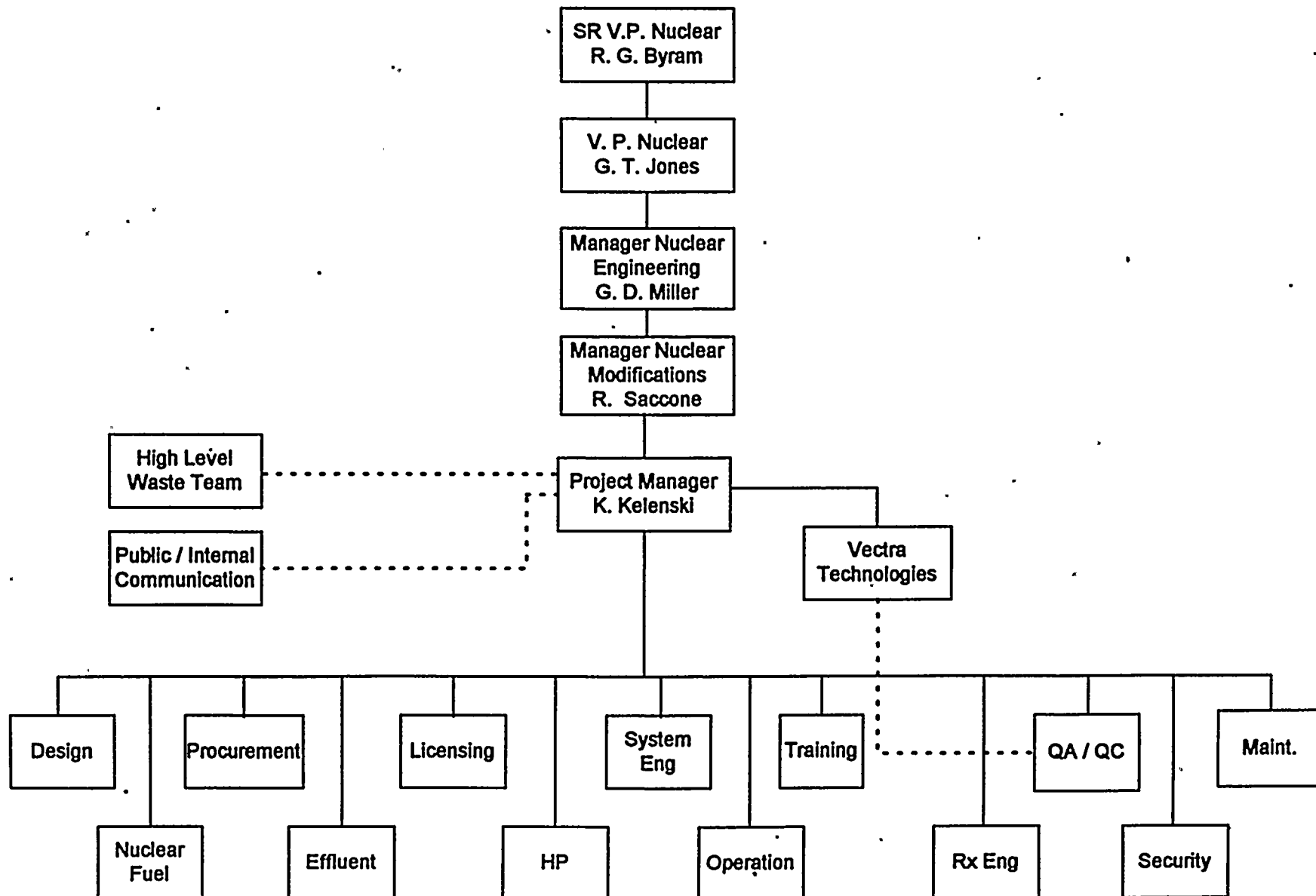
- ◆ Each Unit has its own spent fuel storage pool
- ◆ Project Objective/Schedule is predicated on maintaining Dual Core Offload Capabilities
- ◆ Project Plan calls for the first fuel moves to the Independent Facility to begin in September 1997

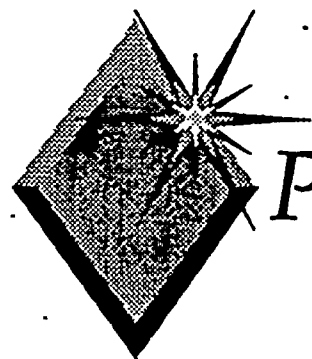


PROJECT ORGANIZATION

SPENT FUEL STORAGE PROJECT

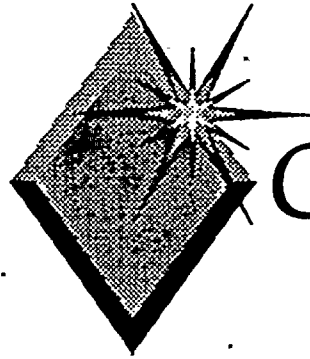
PROJECT ORGANIZATION





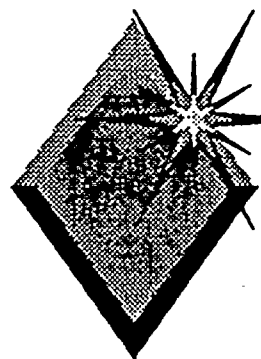
PROJECT EVALUATIONS

- ◆ Siting Report - September, 1992
- ◆ Phase I Technical Assessment - February, 1993*
- ◆ Performance Specification Developed for Reracking and Dry Cask Storage - June, 1993*
- ◆ Final Technical Assessment Completed - October, 1994*
- ◆ Awarded Contract - January 1995*



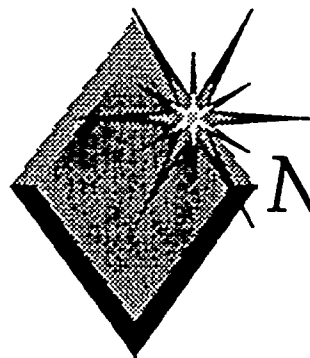
COMMUNICATIONS

- ◆ A Public Involvement Program was initiated to ensure Public awareness and to solicit input into decision making process
- ◆ Various methods of presenting PP&L's plans were implemented:
 - Presentations to the Susquehanna Citizens Committee
 - Personal Notification of Area Officials
 - Media Day
 - Presentations to Volunteer Organizations which support the Susquehanna Emergency Response Organization
 - Articles in the Susquehanna Newsletter which is distributed to the surrounding communities



DRY STORAGE TECHNOLOGY AT SSES

- ◆ VECTRA "NUHOMS" (Horizontal Storage Technology)
- ◆ Implementing under General License
- ◆ Certificate of Compliance (Certificate Number 72-1004)



NUHOMS - KEY SYSTEM COMPONENTS

- ◆ Dry Shielded Canister (DSC's)
- ◆ Horizontal Storage Modules (HSM's)
- ◆ Transfer Cask



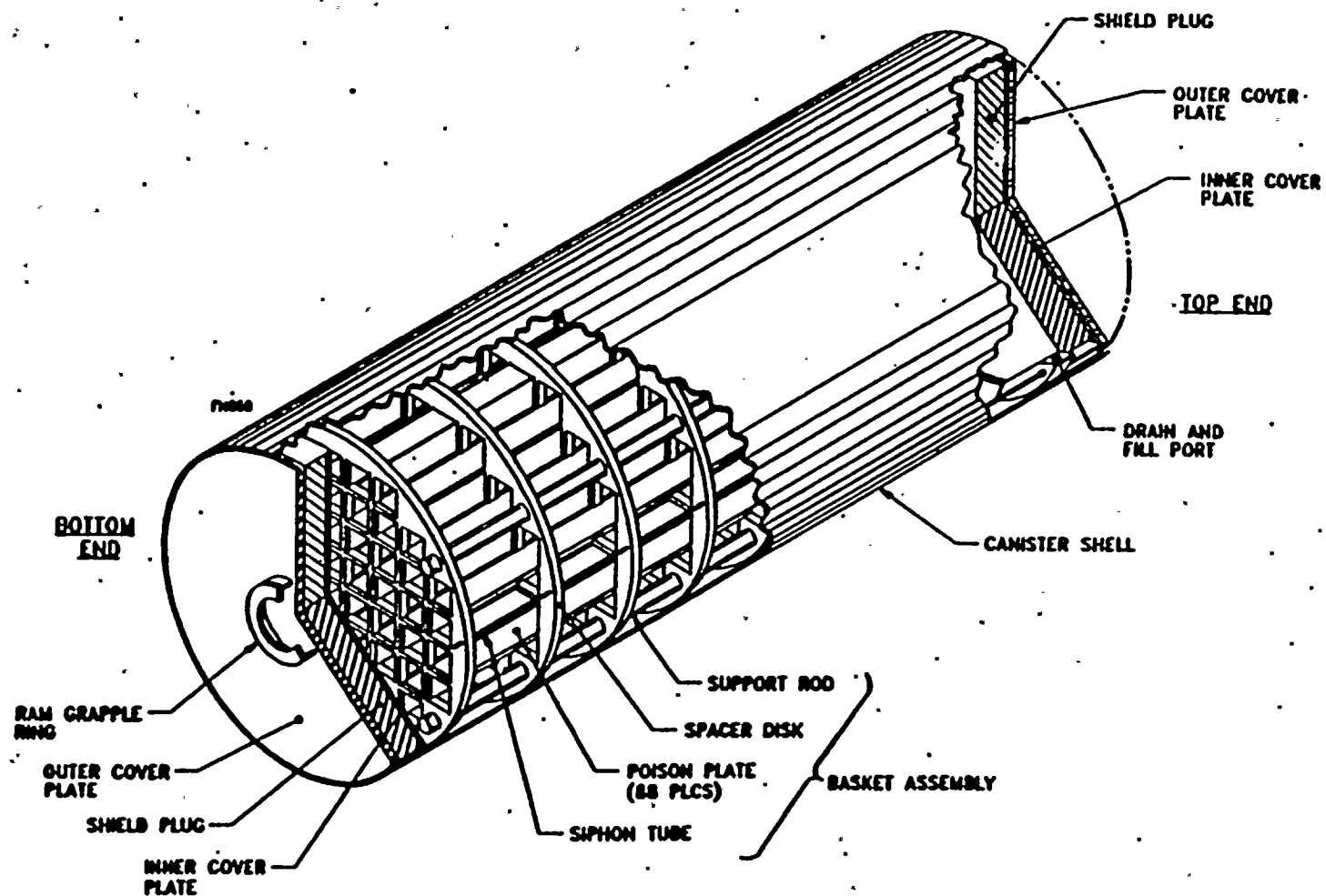


Figure 2.2-2

NUHOMS-52B Dry Shielded Canister Assembly Components

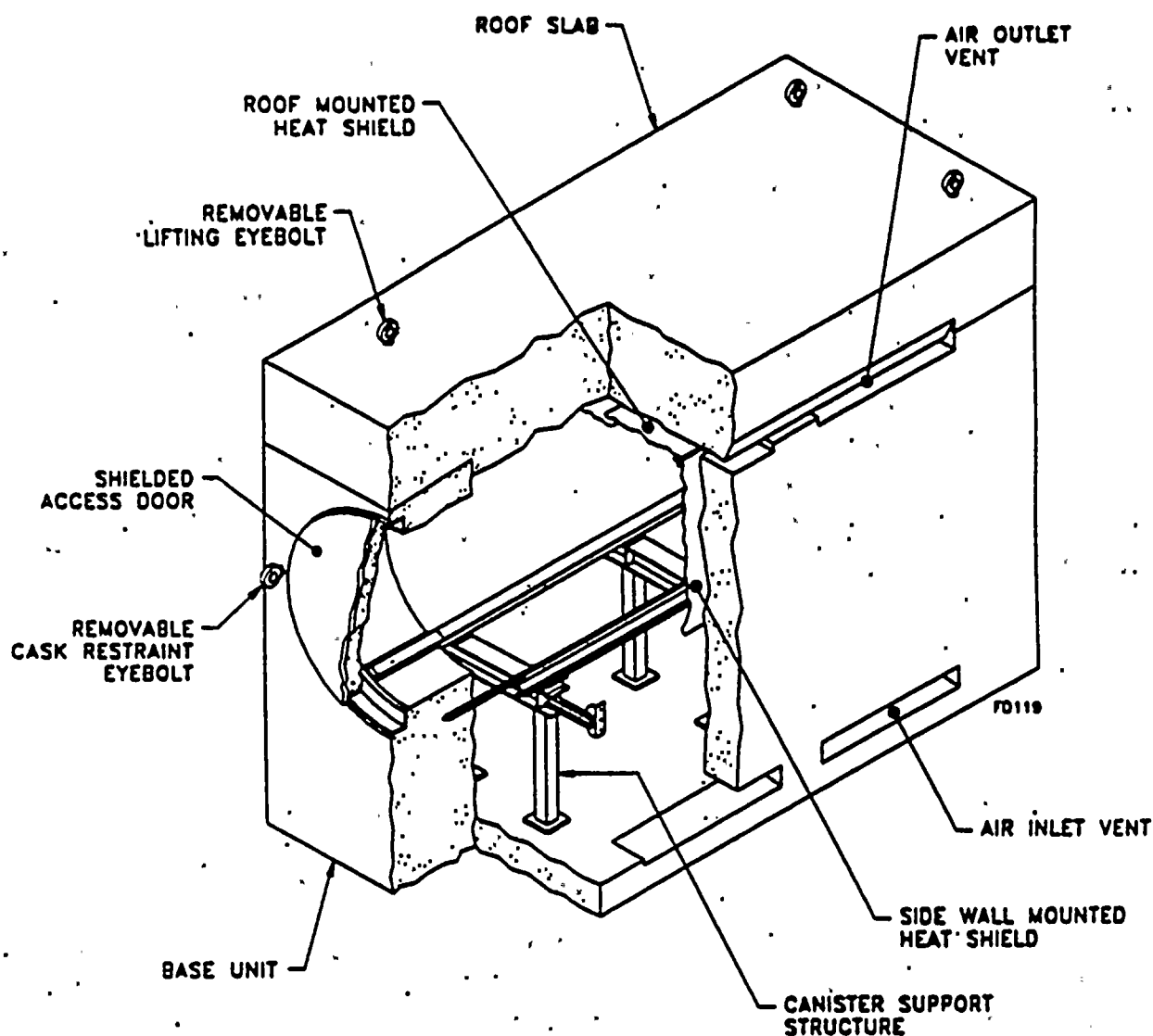


Figure 2.3-1

Prefabricated NUHOMS® Module

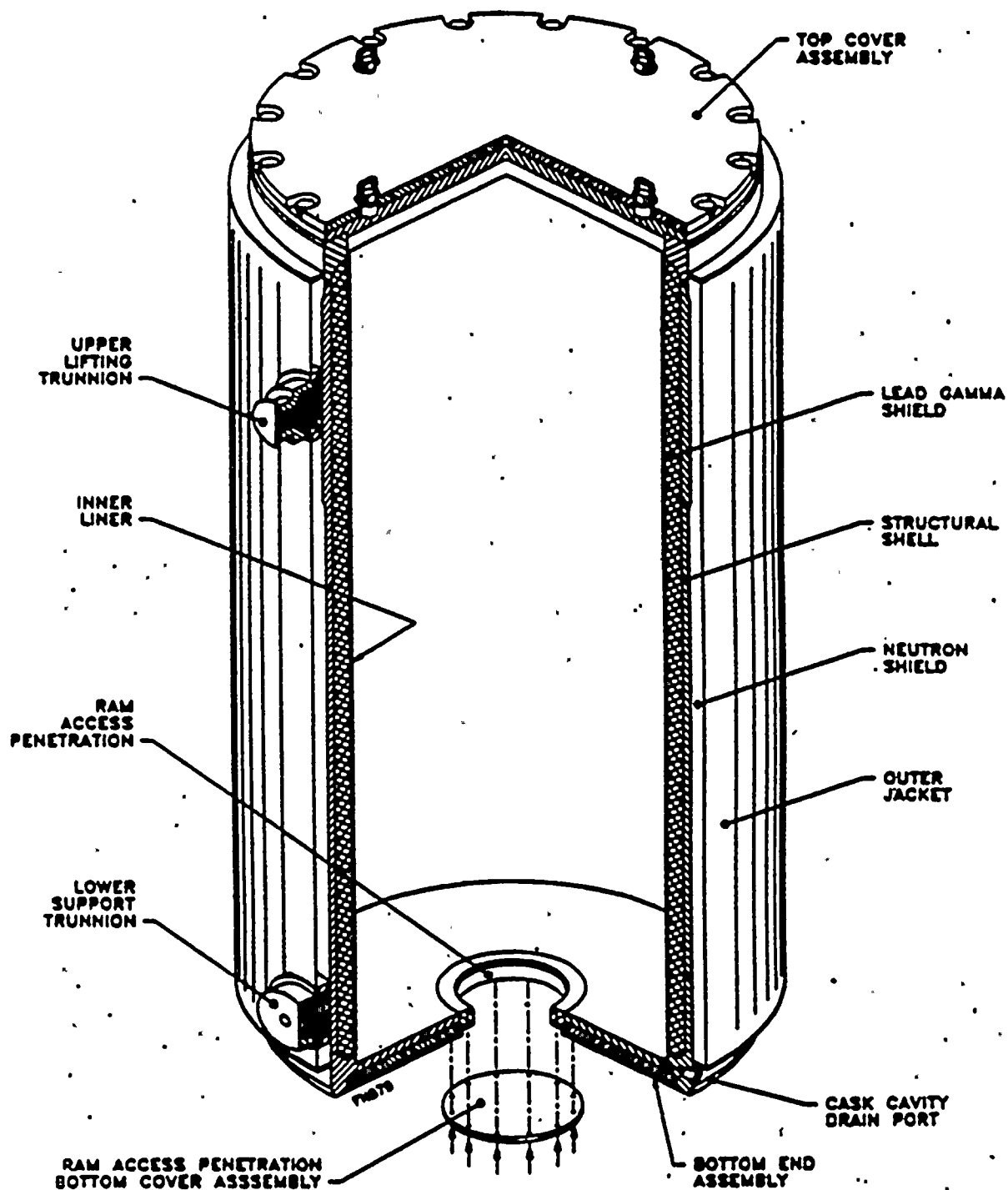
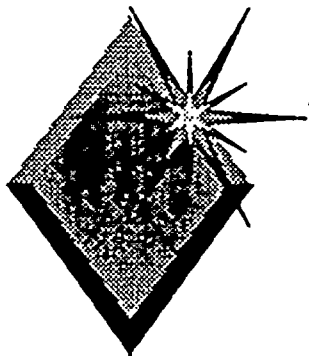
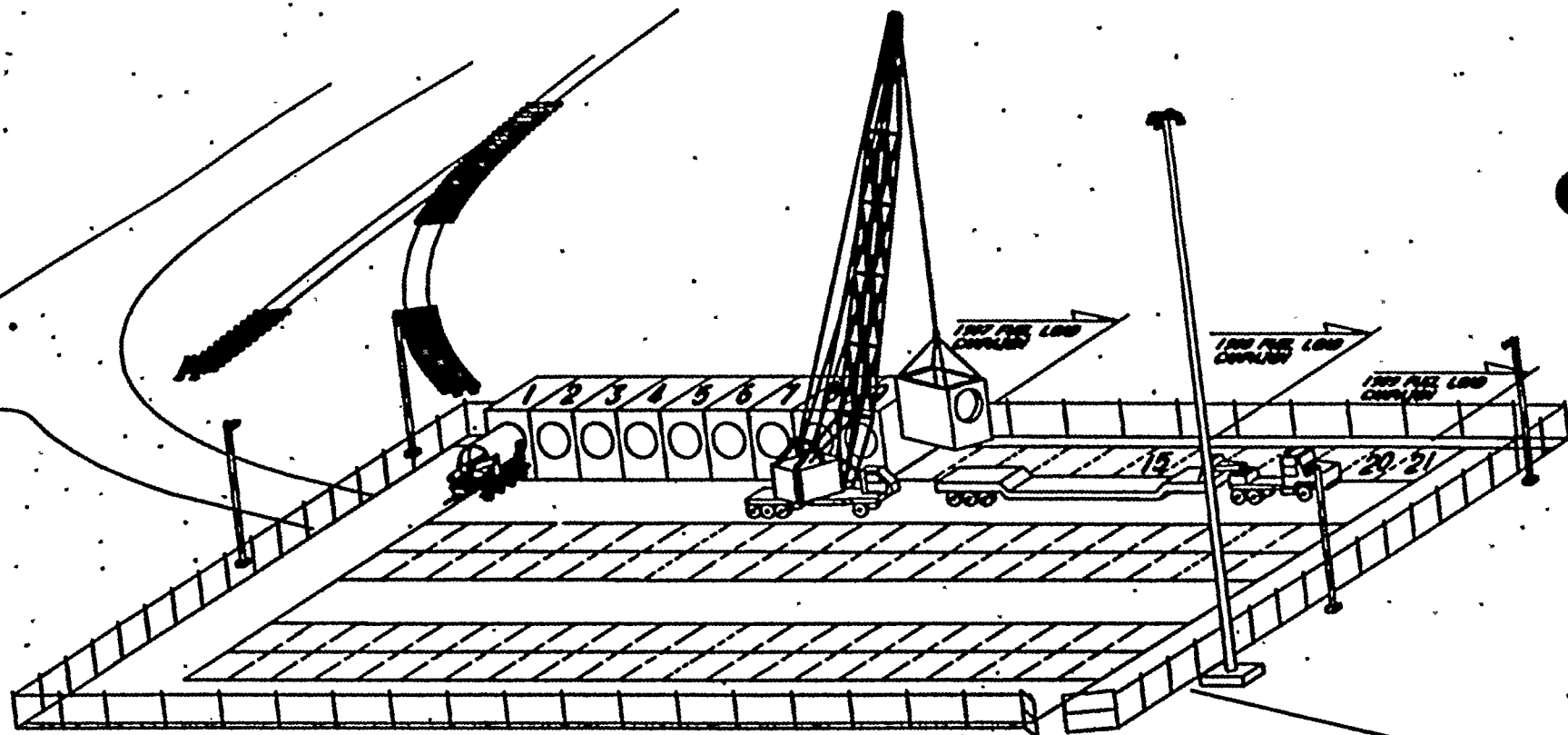


Figure 2.4-1

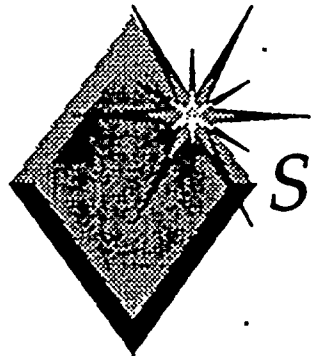
NUHOMS® On-Site Transfer Cask



*SSES SPENT FUEL
STORAGE FACILITY*



INDEPENDENT SPENT FUEL STORAGE INSTALLATION
• SUSQUEHANNA STEAM ELECTRIC STATION



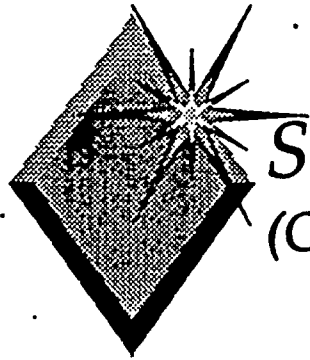
STRATEGY FOR IMPLEMENTATION

◆ Design

- PP&L's Project Management and Design Control Process
- Other utilities experience factored into SSES design

◆ Construction

- SSES ISFSI is being constructed inside the protected area and is encompassed by the existing Security and Emergency Plans
- Spent Fuel Storage Pad
- Fencing
- Lighting
- Temperature Monitoring

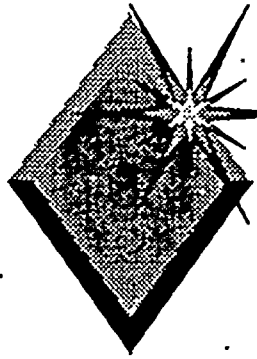


STRATEGY FOR IMPLEMENTATION

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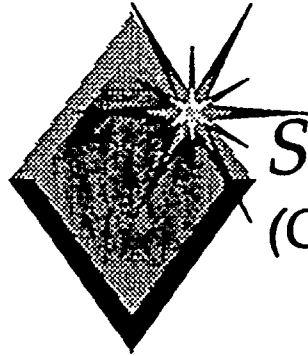
◆ Fabrication of Components

- Horizontal Storage Modules - Bayshore, Cape Charles VA.
- Dry Shielded Canisters - Ranor, Westminster MA.
- Transfer Cask- Leased from VECTRA Technologies (Fabricated by Ranor)



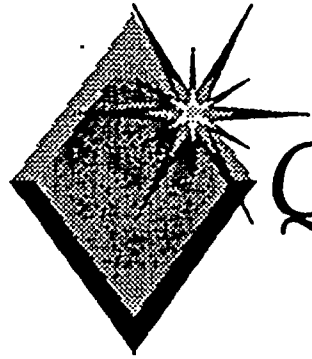
STRATEGY FOR IMPLEMENTATION (CONTINUED)

- ◆ Operation - tasks to support operation have been defined and will factor in Industry Experiences
 - Procedures Development
 - Training
 - Movement of Spent Fuel



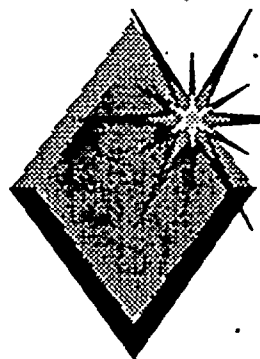
STRATEGY FOR IMPLEMENTATION (CONTINUED)

- ◆ Extensive Preplanning
- ◆ Certified Horizontal Design
- ◆ Public Involved in Decision
- ◆ PP&L 's Design Control Program



QUALITY ASSURANCE

- ◆ PP&L has put together a comprehensive Quality Assurance Plan for this Project
 - Special Integrated Quality Assurance Plan
 - PP&L Initiatives

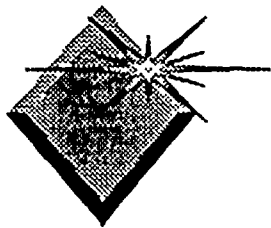


QUALITY ASSURANCE

(CONTINUED)

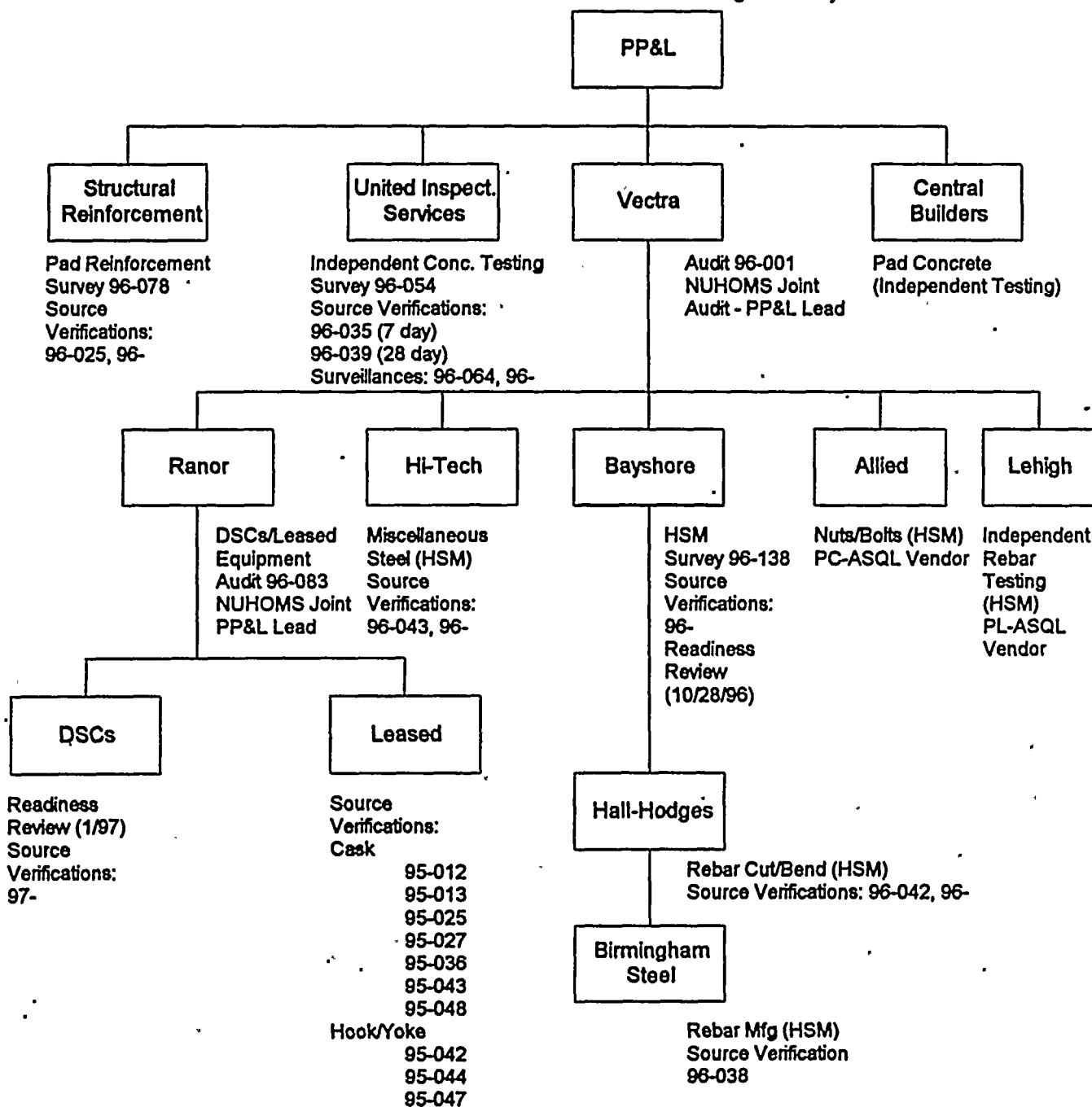
◆ Integrated Quality Assurance Plan

- Design Review / Technical Evaluations
- Procurement / Fabrication Oversight
- On Site Construction Oversight
- Operations / Maintenance Oversight

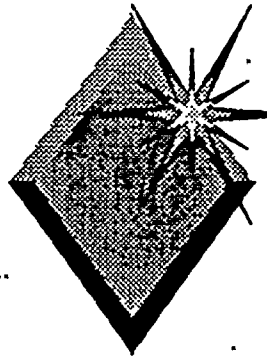


QUALITY ASSURANCE (CONTINUED)

PP&L Vendor Oversight Activity





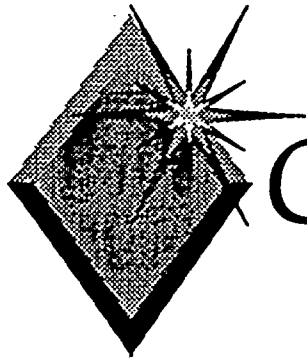


QUALITY ASSURANCE

(CONTINUED)

◆ PP&L Initiatives

- VECTRA Project Instruction FS-PPL-96-01
- NUHOMS Owners' Group QA Subcommittee
- NUHOMS Owners' Group Audit Team Leader
 - VECTRA, San Jose, CA
 - Ranor, Westminister, MA
- Leased Equipment Control
- Reactor Water Chemistry
- Load Test Calibration



CONCLUSION

- ◆ PP&L OWNS and is ACCOUNTABLE for all activities associated with the Design, Construction, and Operation of the ISFSI at SSES.

Ownership and Accountability demonstrated through:

- Strong Management Commitment.
 - Integrated Project Team.
 - Comprehensive Quality Assurance
 - Compliance to applicable Regulatory requirements
 - Continued Lessons Learned, both Others & PP&L.
-
- ◆ The SSES ISFSI is being Designed, Constructed, and Operated to PP&L's Standards and the NRC's Expectations.

