

Dry Fuel Storage Update



NRC Presentation

May 2, 2002

Presentation Topics

- ◆ **Spent fuel pool capacity (Bill Chapin)**
- ◆ **Project schedule**
- ◆ **ISFSI & OPS preparations**
- ◆ **Heavy Load movement**
- ◆ **APS QA Activities**
- ◆ **Licensing actions (Glenn Michael)**
- ◆ **Security overview (Dave Huttie)**



Spent Fuel Pool Capacity

- ◆ **Loss of full core offload reserve**
- ◆ **Unit 1 Spring 2004**
- ◆ **Unit 2 Fall 2003**
- ◆ **Unit 3 Fall 2004**
- ◆ **Possible pool capacity expansion if needed**

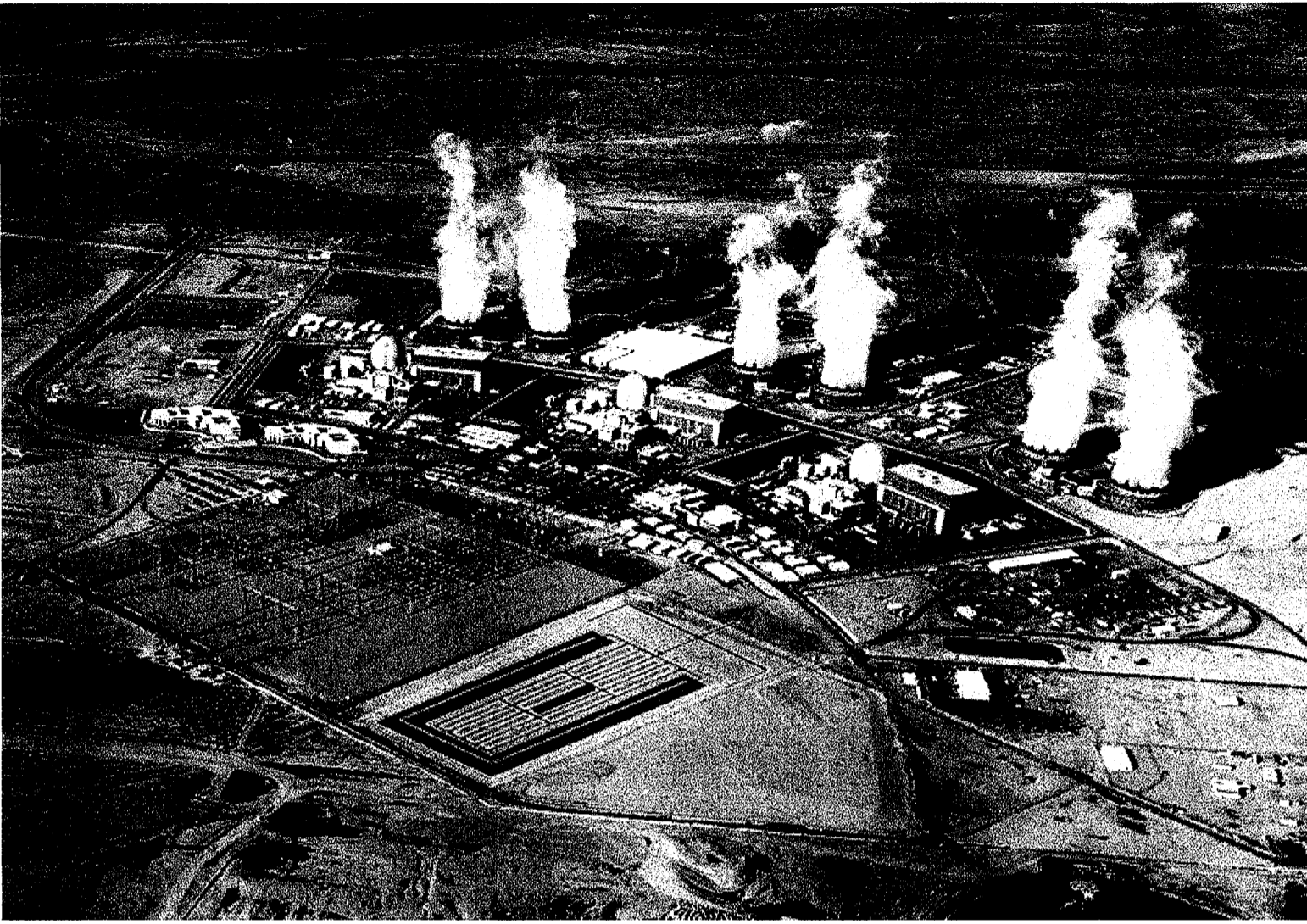


Project Schedule

- ◆ **Concrete Cask fab completed 3/31/02**
- ◆ **First Canister delivery 6/28/02**
- ◆ **ISFSI Construction complete 8/19/02**
- ◆ **Security features installed 9/15/02**
- ◆ **Dry run practice begins 8/1/02**
- ◆ **NRC dry run observations mid November**
- ◆ **First system on the pad by Christmas**



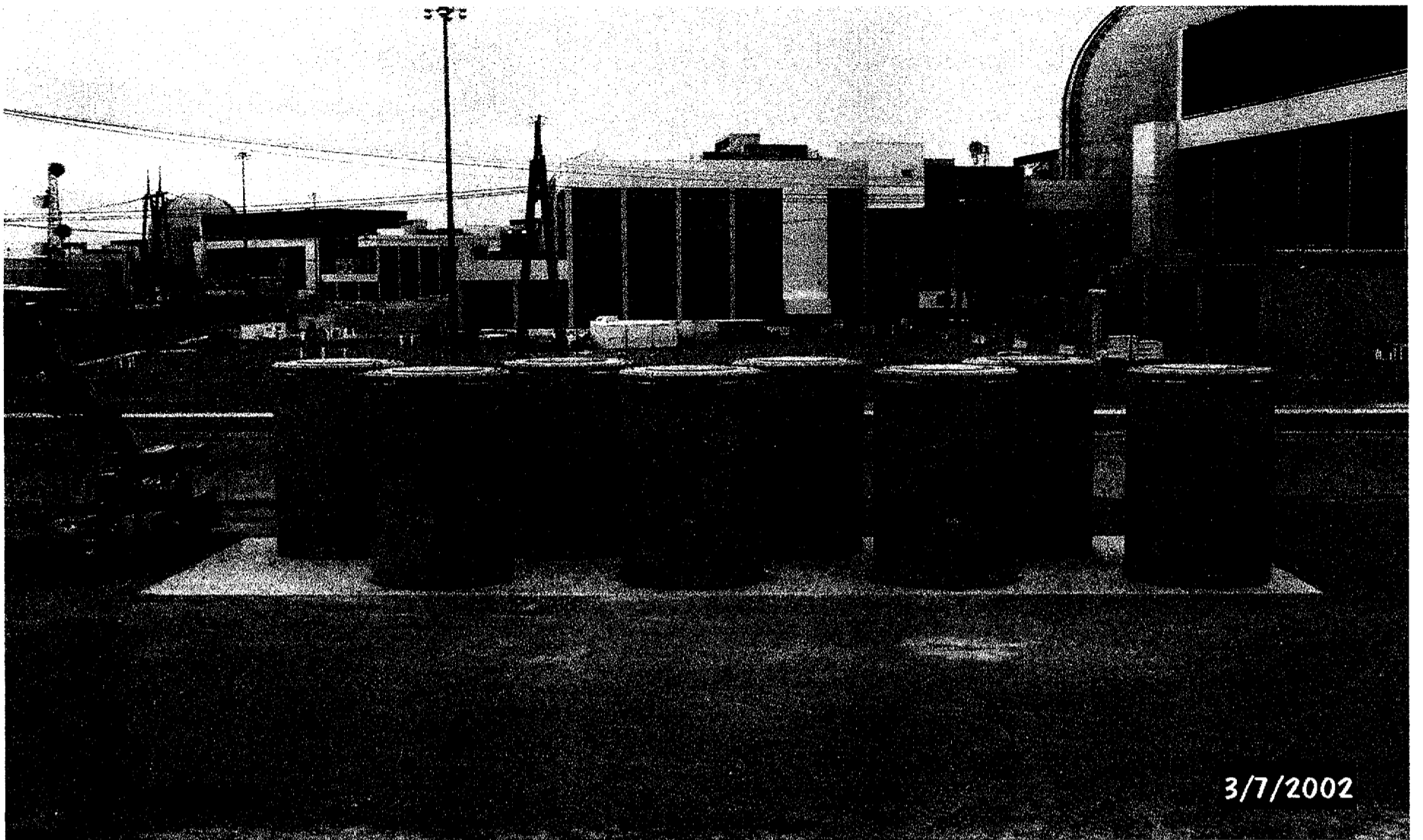
ISFSI Location





ISFSI Construction

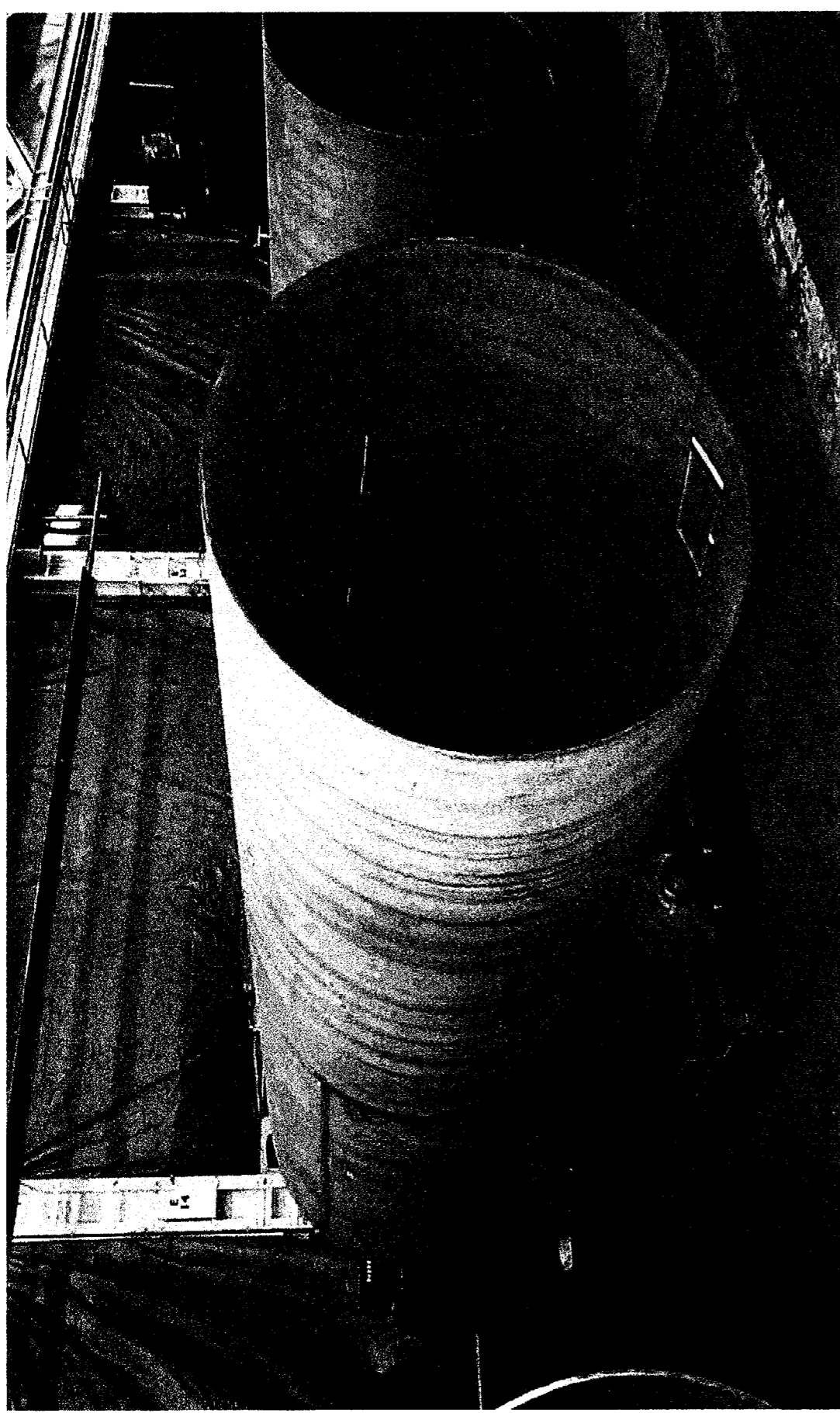
Completed VCCs



3/7/2002



Canister Fabrication



Palo Verde Dry Cask Storage Principal Components

(Cut-away View)

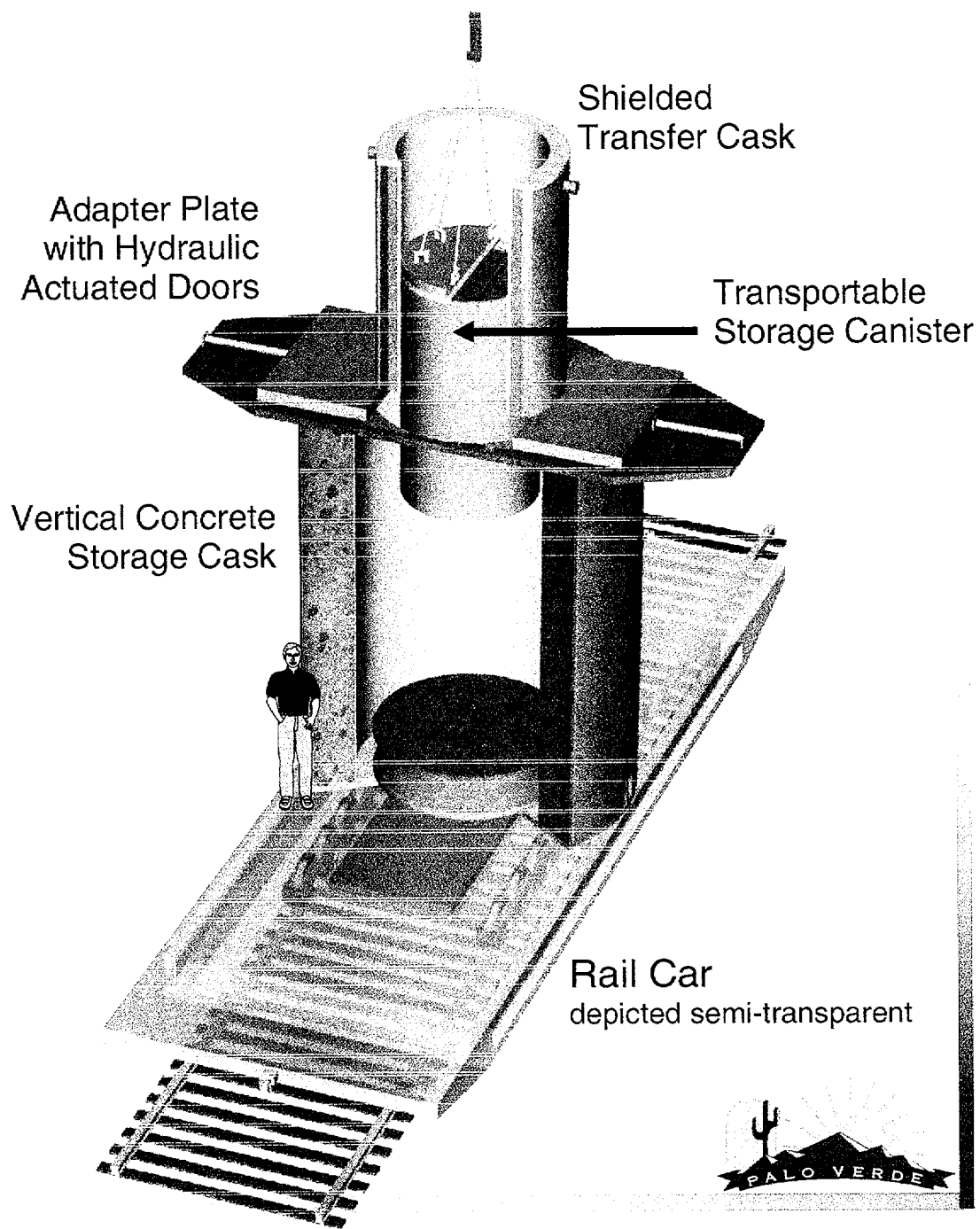
Schedule: Load first system July 2002

Dimensions:

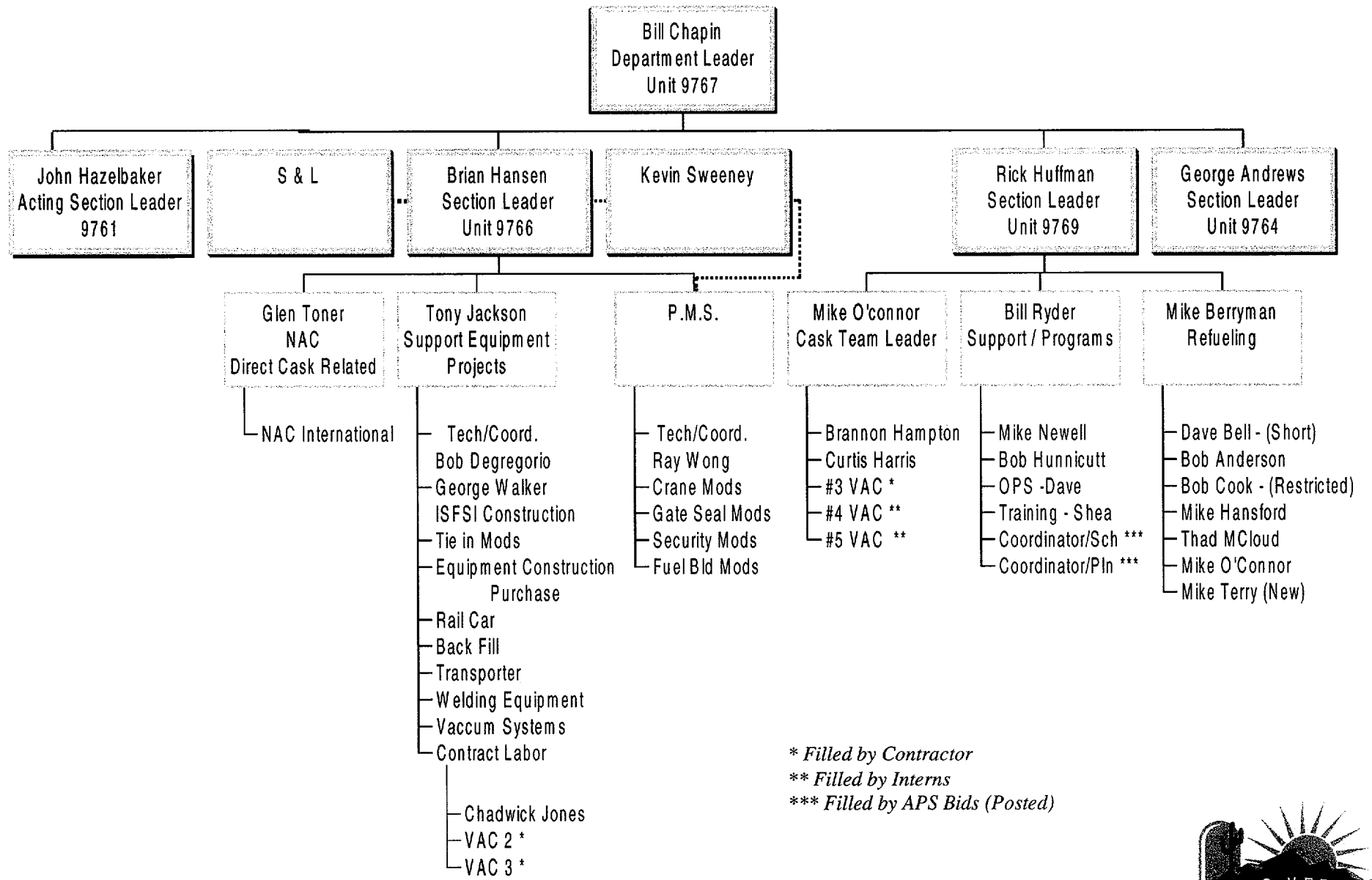
Transfer cask	Ht. 16 ft. 11 in. Dia. 7 ft. 1 in.
Loaded canister	Ht. 15 ft. 11 in. Dia. 5 ft. 7 in.
VCC	Ht. 18 ft. 10 in. Dia. 11 ft. 4 in.

Weight:

Transfer cask	60 tons
Loaded canister	35 tons
VCC	119 tons
Loaded system	154 tons



Fuel Services - 2002



Operations Preparations

- ◆ **Cask loading process being refined**
- ◆ **Procedure development in progress**
- ◆ **Training development in progress**
- ◆ **Ancillary equipment**
- ◆ **Observe Maine Yankee & Yankee Rowe dry runs and fuel loading in 2002**
- ◆ **DSQG checklists used in self assessment**



Heavy Loads

◆ Inside Fuel Building

- Single failure proof cranes
- Saflift Hoist for transfer operations

◆ Movement of Casks to ISFSI

- Rail car and transporter
- Travel path evaluation

◆ NUREG-0612 & NRCB 96-02 evaluation

◆ UFSAR update & 50.59 evaluation



APS QA Activities

- ◆ **Component fabrication oversight**
 - **Full time oversight of canister fab**
 - **Transfer cask and auxiliary equip.**
- ◆ **ISFSI design & construction oversight provided by PVNGS QA**
- ◆ **Joint users group audit of NAC week of March 4 - 8**



Licensing Actions

- ◆ **Exemption from 72.72(d) for fuel records submitted 9/4/01, needed for cask load**
- ◆ **Exemption for cask seismic and contamination limits needed for cask load**
- ◆ **No Part 50 OL/TS Changes needed**
- ◆ **QA letter submitted 10/5/01 - no reduction in commitments**



Licensing Actions cont.

- ◆ **Security Plan - no reduction in effectiveness**
 - **10 CFR 50.54 submittal**
- ◆ **Emergency Plan - no reduction in effectiveness**
 - **10 CFR 50.54 submittal prior to 6/15/02**
- ◆ **72.212 Evaluations**
 - **Expect to complete by 7/31/02**



Licensing Actions cont.

- ◆ **50.59 evaluations complete 7/31/02**
- ◆ **90 day letter submittal expected 8/1/02**
- ◆ **Part 50 UFSAR update complete 11/2/02**
- ◆ **NRC Region IV ISFSI/VCC construction inspection conducted**
- ◆ **72.48 program implemented**



Licensing Actions cont.

- ◆ **NAC UMS CoC Amendment Requests desired by APS**
 - **UMSS 02B & 02C (enhancements)**
 - **UMSS 02A (32 assembly design)**
- ◆ **UMS licensing of high burnup fuel requested by 2008**



Security Defense In-Depth

- ◆ **Equipment**

- **State of the Art Detection and Assessment**

- ◆ **Security Force response**

- **Staffing to support ISFSI**
- **Same high level training / qualifications**

- ◆ **Operations**

- **Training / Procedures**

- ◆ **LLEA**

- **No protracted loss of control**



Security Technologies

- ◆ Perimitrax IDS
- ◆ Intrepid Perimeter Detection System
- ◆ Cameras equipped with IR Illuminators
- ◆ Fiber Optic Connection To CAS
- ◆ Software Integration Design
- ◆ Perimeter Lighting >1 ft/candle



Interim Compensatory Measures

- ◆ **Immediate Response Capability**
- ◆ **Standoff Distance Considerations**
- ◆ **Temporary VBS**
- ◆ **Escort Requirements**
- ◆ **Emergency Response Readiness**



ISFSI Security Plan Submittal

- ◆ 10 CFR 72.212 Compliant
- ◆ 10 CFR 73.55 Compliant
- ◆ 10 CFR 50.54(p) Compliant
 - Biometrics
 - Sallyport
 - Last Access Control Point
 - Secondary Power Supply
 - Magnetically Secured Gates



Summary

- ◆ **Schedule**
- ◆ **Licensing**
- ◆ **Security**

