Personnel Access Data System Operational Overview

James W. Davis

202-739-8105

June 12, 2001

NEI

Agenda

- Overview--Jim Davis
- In-processing guidance--Rich Enkeboll
- PADS screens and fields--Bob Kelm
- System Operation--Bob Kelm
- Examples--All
  - On-line using PADS training data base

NEI

History

- March 94--Industry initiative vote
- January 95--Audit program starts
  - NEI-94-02 guidance
  - Team audits of approved contractors
- January 96--Electronic system starts
  - Subsumes the "INDEX" system
  - Two years to provide all licensees have on line capability

NEI

Commitment

- "I agree to **standardize** the approach for in-processing of nuclear plant workers through the establishment of a computer-based national personnel data system, a central records repository for access authorization records for transient workers, **standardized** plant access training programs and **shared** contractor/vendor access authorization audit functions and results."
- Participation agreement signed by all power reactor licensees
  - Does not include shutdown plants with unique requirements, such as Main Yankee

NEI

Governing Principles

- The industry's standards for assuring safe and reliable electricity from commercial nuclear power will not be compromised;
- Any actions taken will use existing organizations, programs, processes and material to the maximum extent possible;
- Collective industry knowledge and experience will be used to ensure best business and operating practices;
- The transition from current individual licensee processes and practices to the industry-wide process will be accomplished in the simplest, most cost-effective and equitable manner;
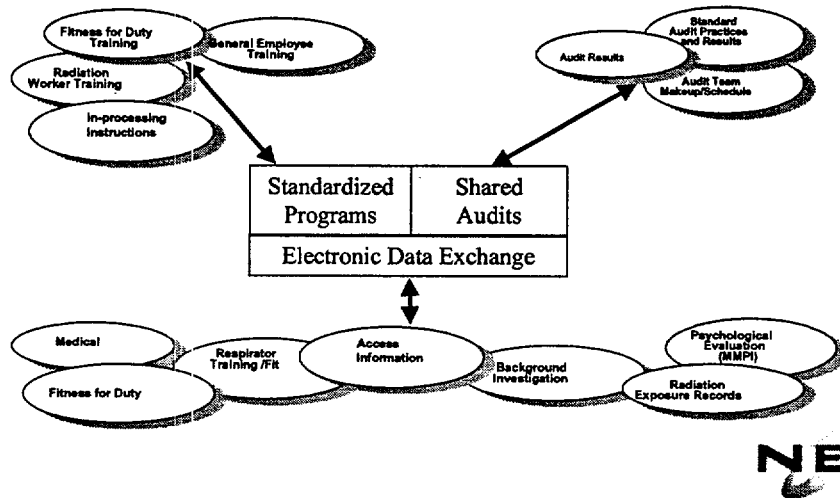
NEI

Governing Principles (Cont.)

- Members will be provided proposed standardized products for review and comment and an industry-wide standard approach will be developed;
- The system will provide information in a timely, accurate, complete, and secure manner that can be easily and quickly revised, if needed;
- The approach will minimize the need to generate additional paper, with the ultimate industry goal of a "paperless process"; and
- The system will provide security for personal information in the data base with due regard for all legal requirements.

NEI

PADS Scope

Fitness for Duty Training

General Employee Training

Radiation Worker Training

In-processing Instructions

Standard Audit Practices and Results

Audit Results

Audit Team Makeup/Schedule

Standardized Programs	Shared Audits
Electronic Data Exchange	

Medical

Respirator Training /Fit

Access Information

Background Investigation

Psychological Evaluation (MMPI)

Radiation Exposure Records

Fitness for Duty

NEI

Standard Process

- A major, two year, challenge
  - Up to 7 Task Forces involved
  - Many workshops and meetings
- Regulatory interface
  - Detailed review of all existing guidance
  - Frequent meetings and discussion
  - Formal correspondence
    - NEI 95-01 submitted for comment two times
    - Series of letters on open issues

NEI

Industry Guidance

- NEI 94-02, Standard Audit Process for Licensee-Approved Contractor/Vendor AA/FFD Programs
- NEI 95-01, NPP Personnel Access Authorization Standards and Procedures
- NEI 95-03, PADS Health Physics Standards and Procedures
- NEI 95-04, Guideline for General Plant Access Training

NEI

ORGANIZATION OF INDUSTRY GUIDANCE DOCUMENTS

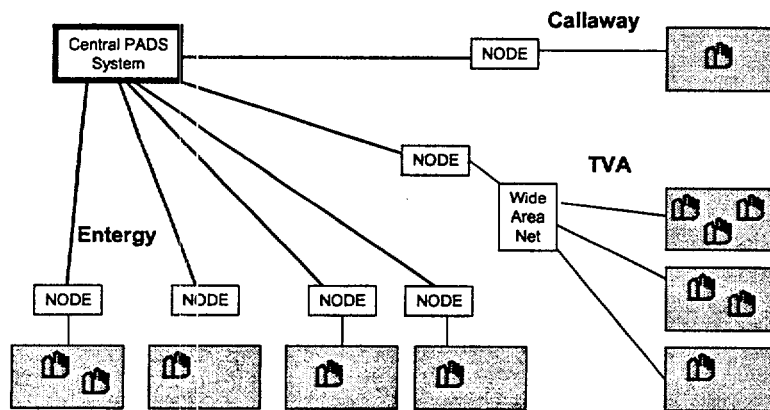| Industry Standard Practices Including Meeting Regulatory Intent	PADS NEI 95-05 Operating Manual	NEI 95-06, PADS Electronic System Technical Documentation

- NEI 95-01, NPP Personnel Access Authorization Standards and Procedures
- NEI 94-02, Standard Audit Process for Licensee-Approved Contractor/ Vendor AA/FFD Programs
- NEI 95-03, PADS Health Physics Standards and Procedures
- NEI 95-04, Guideline for General Plant Access Training
	- Part 1 -- Guidelines
	  Responsibilities and policies
	  Data element definitions
	
	- Part II -- Operating Procedures
	  Basic data entry
	  Access screens
	  HP screens
	  Training screens
	
	- Part III -- System Administration
	  Data validation
	  Internal audits
	  Training
	  System management
	  Database administration
		- Part 1: System manager's manual
		
		- Part 2: Enhanced batch interface user's manual

NEI

The System

- Equipment
  - Central server--the master
  - User "node", or local server
  - Frame relay communications system
- "Relational database with partial replication"
  - Each node maintains an exact copy of those records being used
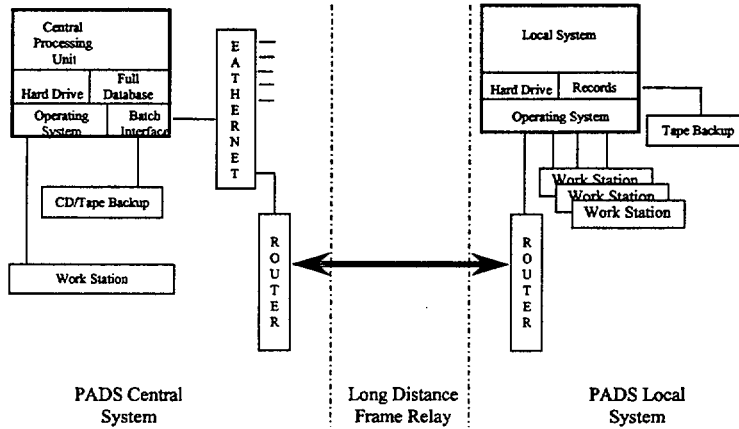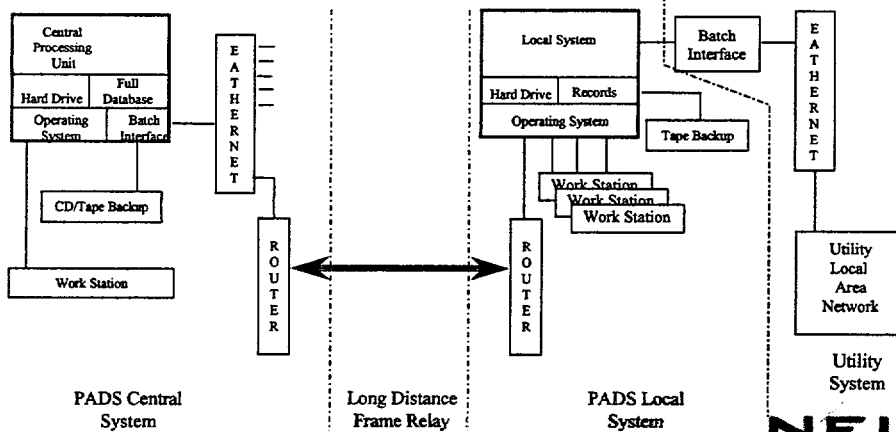 - Provides reliability and timelines

NEI

Types of Service

NEI

PADS basic system

PADS Central System   Long Distance Frame Relay   PADS Local System

PADS with LAN access

PADS Central System   Long Distance Frame Relay   PADS Local System   Utility System

PADS Data

- Data Element
  - Clearly defined in NEI 95-05
  - Not narrative--(one exception in HP)
  - No attachments
- Tables
  - A database function
  - Stores information in logical sets--HP, training, etc.
- Screens
  - User interface only
  - Draws from multiple tables
  - Only update database when "saved"
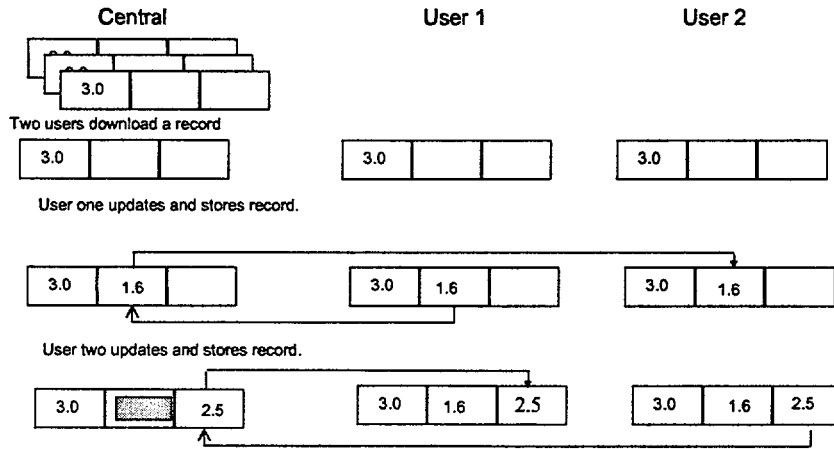 - "Tested" before database updated

NEI

Database

- All records reside on the central server
- Nodes have copies of records being used
  - Improved speed for record updates
  - Continued operation if communications lost
  - Efficient batch processing and searches
- For each "transaction" all copies of a record update

NEI

Partial Replication

Central   User 1   User 2

3.0

Two users download a record

| 3.0 | | | | 3.0 | | | | 3.0 | | |

User one updates and stores record.

| 3.0 | 1.6 | | | 3.0 | 1.6 | | | 3.0 | 1.6 | |

User two updates and stores record.

| 3.0 | | 2.5 | | 3.0 | 1.6 | 2.5 | | 3.0 | 1.6 | 2.5 |

NEI

Where did data come from?

- Plant Code
  - Generated the record and has the files
  - For example: Harris, Westinghouse, INPO
- Input Code
  - Put the information into PADS
  - In the example: Harris, Harris, Harris
- Screening Company
  - Actually did the work for a BI or HHS lab for a FFD sample
- Holding Company
  - The licensee that made the UAA determination.

NEI

Key time periods

- Less than 30 days
- Within last 60 days
- 31 to 365 days
- between 366 days and 5 years
- Greater than 5 years

NEI