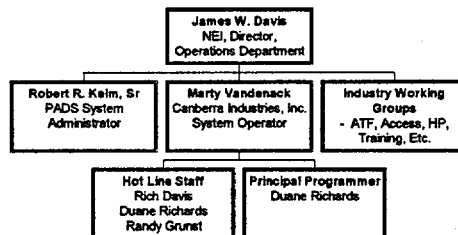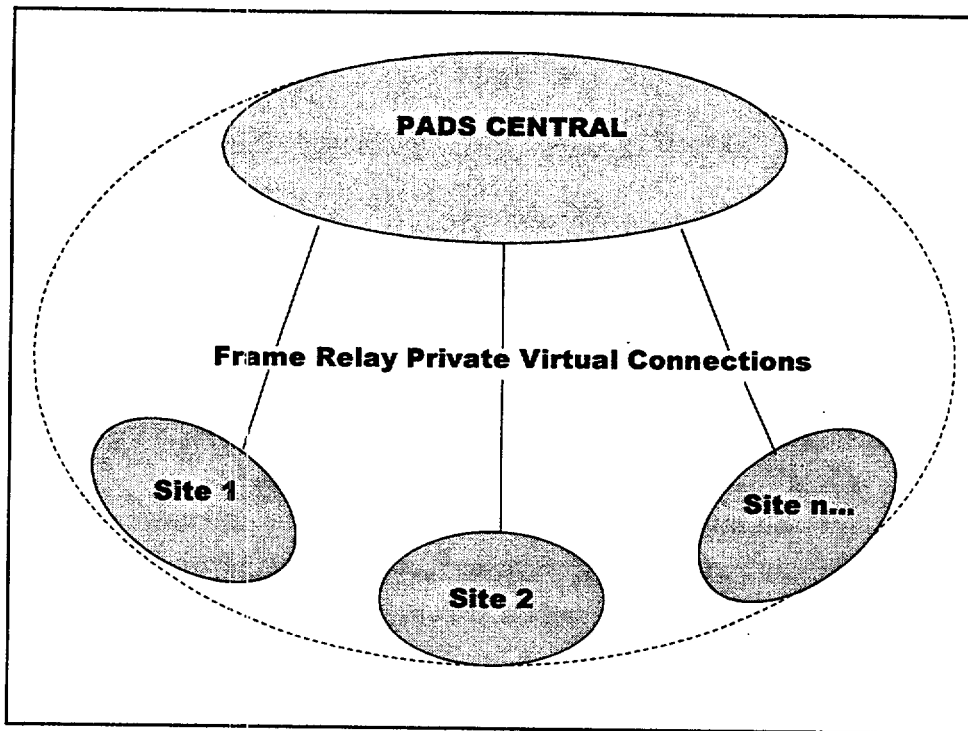# Evolving To An Electronic System

- **All Workers Undergo All Program Elements**
- **91-03 Transfer – Permitted the Physical (Paper) Transfer of Worker Data**
- **Common Performance Requirements (Rules) Ensured Equality Within programs**
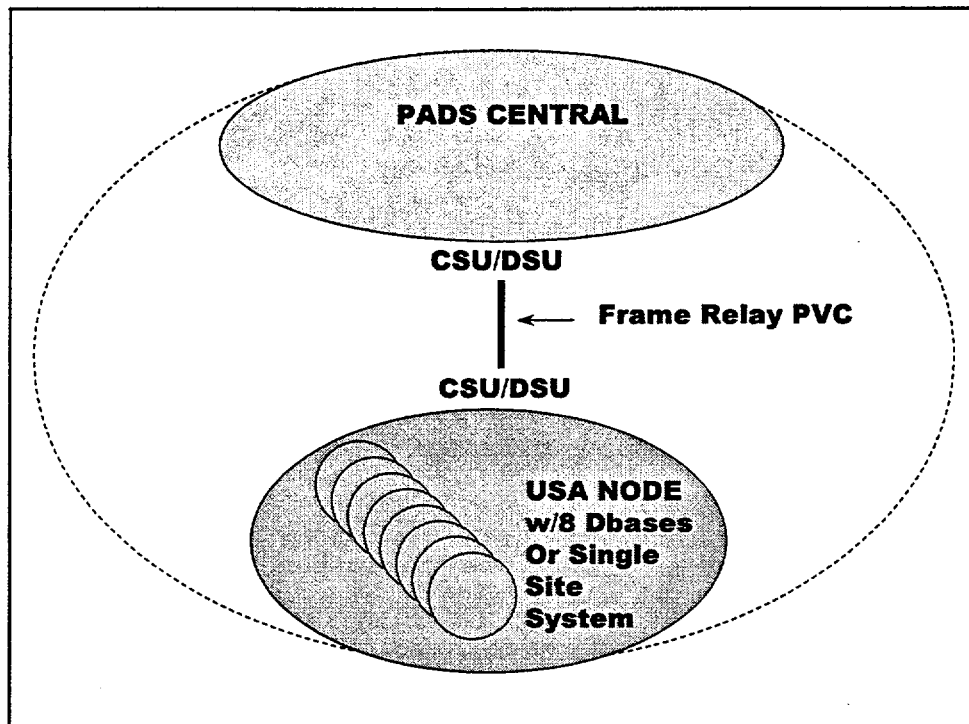- **Common Data Standards (PADS) Permit Electronic Sharing of Program Elements**

PADS MANAGEMENT TEAM

```
              James W. Davis
               NEI, Director,
           Operations Department

Robert R. Keim, Sr    Marty Vandenack       Industry Working
  PADS System       Canberra Industries, Inc.     Groups
  Administrator        System Operator      - ATF, Access, HP,
                                              Training, Etc.

          Hot Line Staff      Principal Programmer
           Rich Davis           Duane Richards
          Duane Richards
           Randy Grunst
```

Frame Relay Private Virtual Connections

PADS DESIGN STRENGTHS

- **Uses Proven Technology** (Computers-Software)
- **Secure Environment** (Telecommunications and Networks)
- **Scalable to Needs of Industry**
  - Single System/Single Database
  - Single System/Multiple Databases
- **Transportable**
- **Reliable** – Operating Continuously Since July 1989

SECURE ENVIRONMENT

- **Direct PVC Connection "On" 24 Hrs/day**
- **Accessed Either Directly or Through Local Area Network (LAN)**
  - **Relies on Logon Techniques**
    - **USERID Accounts**
    - **Passwords (Changed on Specified Frequency)**
  - **Data Access Uses "Permission" Levels -** Review, Change, Add, Delete Down to Screen, Field Level, Table or Report Level
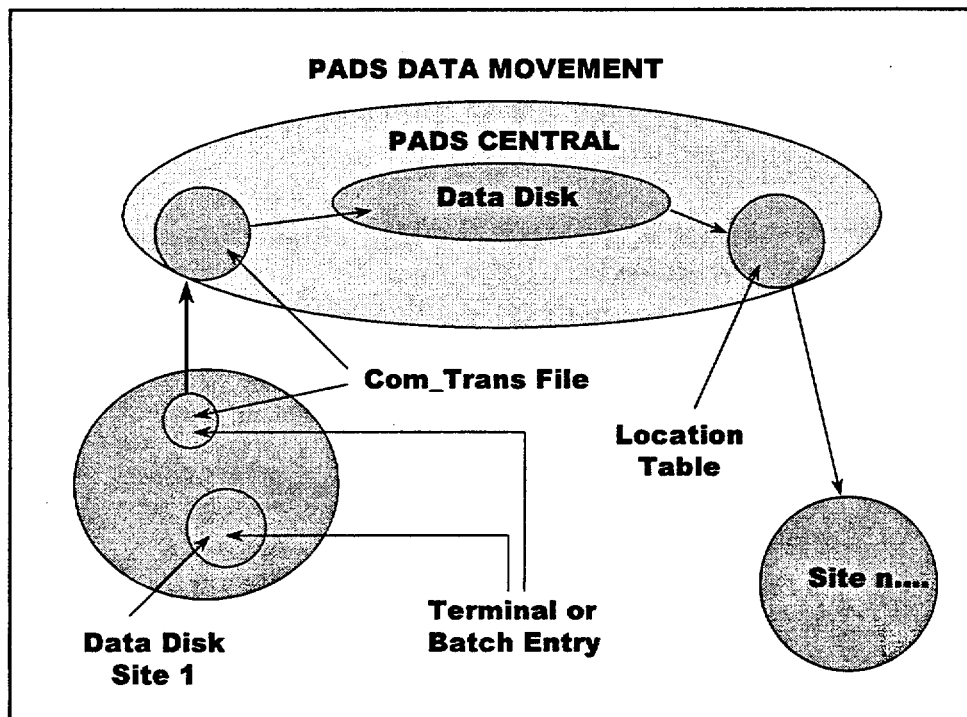
PADS IS SCALABLE

- Supports Single Site/single Database System (Original Configuration)
- As Networks Matured, One System Could Be Sized to Handle Multiple Databases for the Same Company e.g., *Progress Energy*, and Added to LAN
- As Utilities Merged or Formed Alliances, Single System Are Sized to Serve Multiple Companies e.g., *Utility Service Alliance (USA)*

PADS IS RELIABLE

- Operating Continuously Since July 1989
- Available 24 Hrs/day
- Disaster Recovery Plan
- Site Systems Monitored Continuously for Failure Points E.G., Communications Disruptions
- Backups Weekly at Central and Monthly at Sites

PADS IS RELIABLE (Cont.)

- **Uses combination of Journals and Checkpoints to recreate database in the event of hardware or software failure.**
- **Each Site Has Administrator and System Manager Assigned**
- **PADS Hotline 14 hrs/day 5 days/week**

PADS DATA MOVEMENT

PADS CENTRAL

Data Disk

Com_Trans File

Location Table

Site n....

Data Disk Site 1

Terminal or Batch Entry

PADS - MAKING CHANGES

- Controlled Through "ECN" Process Defined in Procedures
- Draft Design Developed and Costs Obtained
- Reviewed/approved by Industry Panel – ATF
- Must Fit Within PADS Budget
- Developed and Tested IAW Software Quality Assurance Plan

PADS QUALITY PROGRAMS

- **Pre-Operational Audit** – Once Prior to Initial Operations
- **Data Validation** – Monthly on Each Database
- **Internal Audits** - Biennial
- **Assistance Visits** – As Needed
- **Central System Audited** - Biennial

SAMPLE PADS POLICIES

Key Policies:

- **General**
  - Information from PADS may only be used for the purpose of processing applications for access authorization *(NEI 95-05 §2.0)*
  - When a PADS screen indicates that "additional information" is available, a Participant cannot presume the information is disqualifying...a PADS database entry ...may not be used as an automatic basis for denial of access. *(NEI 95-05 §2.0)*

SAMPLE PADS POLICIES (Cont.)

- **Information Security**
  - Access to PADS terminals on a "need to know" basis *(NEI 95-05 §2.1)*
  - Site Administrator must assign identification numbers and passwords to users and the passwords are changed at least every 90 days *(NEI 95-05 §2.1)*

SAMPLE PADS POLICIES
(Cont.)

- **Program Validity**
  - **If potentially disqualifying information is received or developed on an individual after UA has been granted, PADS will be updated within one (1) business day** *(NEI 95-05 §2.2)*
  - **Any participant that authorizes ...temporary UA before the Full UAA is completed shall ensure that the AA program features are completed for FULL UA** *(NEI 95-05 §2.2)*

PADS IS CONSENT-BASED

- **Worker must authorize entry of data into PADS** *(NEI 95-05 §2.0)*
- **Worker has right to request copy of records for review and challenge** *(NEI 95-05 §2.0)*
- **Worker may withdraw consent by written notice to a PADS participant** *(NEI 95-05 §2.0)*

DATA OWNERSHIP

- **Only Company Making Entry Into PADS May Change the Entry**
- **Controlled by Software**

TYPES OF SCREENS

- **Without Data Ownership**
  - Top Level (TOPL)
  - Positive Identification (POID)
- **With Data Ownership**
  - Security Screens (SEC1-SEC6)
  - Health Physics (HPED)
  - Respirator (RPFT & RPME)
  - Training (TRNS)

TABLE PERMISSIONS

- **Company Code (COMM)**
  - Controlled by System Operator
- **Phone Directory (PHON)**
  - Controlled by individual sites

Personnel Access Data System - Update

PADS Supports:

- **34 Companies**
- **66 Individual Plants**
- **103 Commercial Nuclear Units**

PADS SYSTEM

System Description:
- 41 Nodes (Compaq AlphaServers)
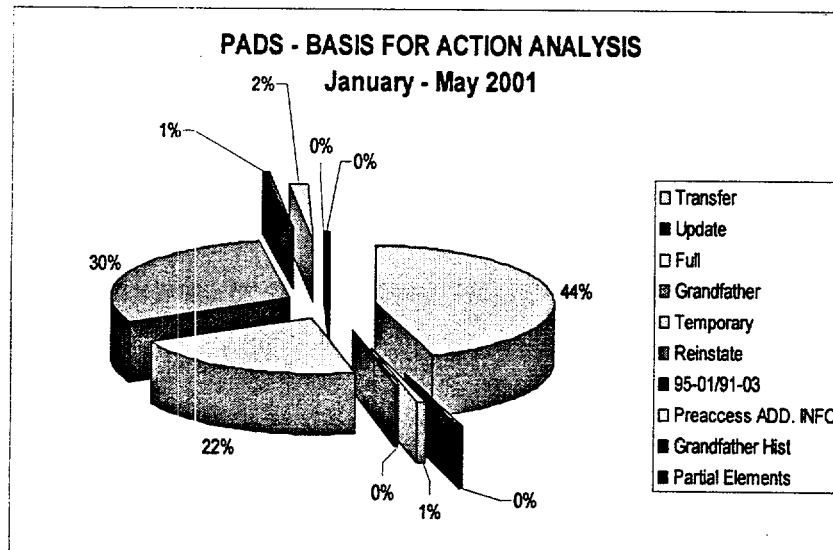- 1 Central Computer
- Frame Relay Network

PADS SOFTWARE

Software:
- VMS Operating System
- INGRES II (Database Management Software)
- PADS Software
- Communications Software

BASIS FOR ACTION ANALYSIS
January-May 2001

Since January 1, 2001:

- **75% of Workers Inprocessed are Transfers or Reinstatements**
- **22% are Rookies**
- **3% Combination of 95-01/91-03, Grandfathers, Pre-Access Denials, or workers who have not completed the processing**

PADS - BASIS FOR ACTION ANALYSIS
January - May 2001

2%
1%
0%
0%
30%
44%
22%
0%
1%
0%

- ☐ Transfer
- ■ Update
- ☐ Full
- ▨ Grandfather
- ☐ Temporary
- ▨ Reinstate
- ■ 95-01/91-03
- ☐ Preaccess ADD. INFO
- ■ Grandfather Hist
- ■ Partial Elements

WORKER DATA IN PADS

205,992 Workers Documented in PADS
- **629,500 Individual Access Records**
- **259,700 Background Investigations**
- **565,300 FFD Tests**
- **1,102,400 Dosimetry Records**
- **542,100 Training Records**
- **4,690,700 Total Records**

ADDITIONAL INFORMATION

- **Pre-Access Additional Information – 9442 (1.5%)**
- **Additional Information – 14,849 (2.4%)**
- **Additional Information Subsequent To Termination – 10,964 (1.7%)**

NEI SHARED AUDIT PROGRAM

NEI Shared Audit Program:

- **Schedules audits for contractor/vendor company audits used by two or more companies**
- **Currently (2001) 36 Audits Scheduled**
- **2002 Schedule being developed** *(To Be Announced in July 2001)*

NEI SHARED AUDIT PROGRAM (Cont.)

- **Conducted Under Lead Auditor Company Audit Program**
- **Sharing Formula Based on Number of Nuclear Units and the Number of C/V's Used**
- **Audit Team Composition Reviewed Annually**
- **Lead Auditor is Responsible for Audit**
- **AOC Reviews Reports for Compliance with NEI 94-02**

INDUSTRY MEETINGS - 2001

PADS-Related Meetings:
- **AA & FFD Workshop** (July 2001)
- **Auditor Meeting** (September 2001)
- **Access Personnel** (As Needed)
- **HP Dosimetry Personnel** (December 2001)
- **Site Administrator/System Manager** (As Needed)
- **Audit oversight Committee** (Once per Calendar Quarter)

CRAFT/SKILL TASKS UNDER DEVELOPMENT

Additions To PADS (Cont):
- Personal Protective Equipment
- Rigging
- Fire Extinguisher Operation
- Torquing
- FME (SOER 95-01)
- Electrical Safety
- Swaglock Training
- SOERS

PADS – UPCOMING ADDITIONS

Evolving Programs:
- **NEI 99-08**
- **Craft/Skill Training Documentation**
- **Automated Fingerprint Submittal**
- **PADS RIERS Connection**