Workshop on Management Nuclear Knowledge

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Knowledge Preservation of Atucha Type Reactor
Case of Study: KP-Data Management and Technical Information in NPP

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1950 CNEA was born
1974 NPP Atucha I entered in commercial operation (risen later to 357 Mwe)
1981 NPP Atucha II (745 Mwe) started to be in construction
1984 Embalse NPP (Candu type) entered in commercial operation
2004 Atucha I and Embalse NPP are in operation, Atucha II 82% of work advance
Scenario

Objective

In order to

KP Development

KP Project

Introduction

Claudia Vetere-CNEA Argentina

Siemens transferred its nuclear activities to Framatone ANP

Nuclear Sector Personnel is aging and numerous people are near to retirement

Few young people in nuclear disciplines
The objective of the Project is to Implement a KM System to assure Knowledge Preservation of Atucha Reactor Technology.

In order to
- Extend Atucha I operative life
- Finish Atucha II construction
- Form new experts
- Capture and capitalize the tacit and explicit knowledge
- Provide much easier access to available knowledge
**Strengths**
- Huge quantities of documented Knowledge
- Several databases and software in use
- Permanent practise of meetings
- Local Net available

**Challenges at Analysis Stage**
- Recognizing the Knowledge domain
- Identifying critical Knowledge
After many interviews with individual experts in each area, it was possible to identify the Key Axes or Areas of Atucha type Reactor. Being possible to build The Atucha Type Knowledge Map.

A knowledge domain is critical because it needs to be capitalized, shared or it requires innovations. We made use of a library criterion to evaluate the knowledge criticality. Four possible thematic topics:

1) Rare or unable of replacement: The company is the only one that holds this knowledge.
2) Usefulness for the company: This knowledge belongs to a key area or department in a company, which is considered strategic.
3) Difficult to obtain: It is difficult to identify the sources of the knowledge.
4) Difficult to use: This knowledge is deep and complex.
Challenges at Design Stage

- Hardware
- Software

Two different NPP with different ITC Technology installed

- NPP in operation has installed local nets
- Intranet

- NPP in construction has installed MainFrame (host and Terminal OS 360) Tape Unites Devices to store information and application availables
- It is connected to Operation NPP Server to access Intranet
As a consequence of ITC software evolution during 30 years:

- **NPP in operation** has many Databases (Ms, SQL, Dbase, Oracle, MicroIsis) to different purposes.
- Data available in different formats. Most in word processors format, a few in pdf, html.
- Some drawing in dwg, Videos.
- **ALL IN PAPER**

- **NPP in construction** has few Databases that run in the Host
- **ALL IN PAPER**

**The KP Server**

- **A New Server** developed under NON Property Platform
- **Without data entry of information**. (The system will take Information from Databases in use)
At the Moment

- **Technical Documents** Database was migrated from Host to PC and was developed an application to manage it.
- It’s been designed the connection to share Databases.

Thank you for your attention