INAC 2015 Conference

Professional Maintenance Service for Nuclear Power Plant

October 6, 2015

KEPCO KPS

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Overview of KEPCO KPS

Introduction of KEPCO KPS

Creative company providing the best plant maintenance service

- Separated from KEPCO and transformed into a Service Company in 1984
  - A subsidiary of KEPCO / public company
  - Listed on Korean Stock Exchange in 2007 (KEPCO 75%)
  - Annual sales of approx. $1B (2014)
  - 5,100 full-time employees
- Business Scope
  - Nuclear, Fossil, Hydraulic, Transmission and Industrial facilities
  - Mechanical, Electrical and Instrumentation & Control
  - Commissioning, Routine, Outage, Modification and Rehabilitation

Introduction of KEPCO KPS

1980's

Accumulation of NPP Technology

- Began nuclear business (1978)
- Performed refueling (1981)
- Established refueling team (1984)

1990's

Self-Reliance in Technology

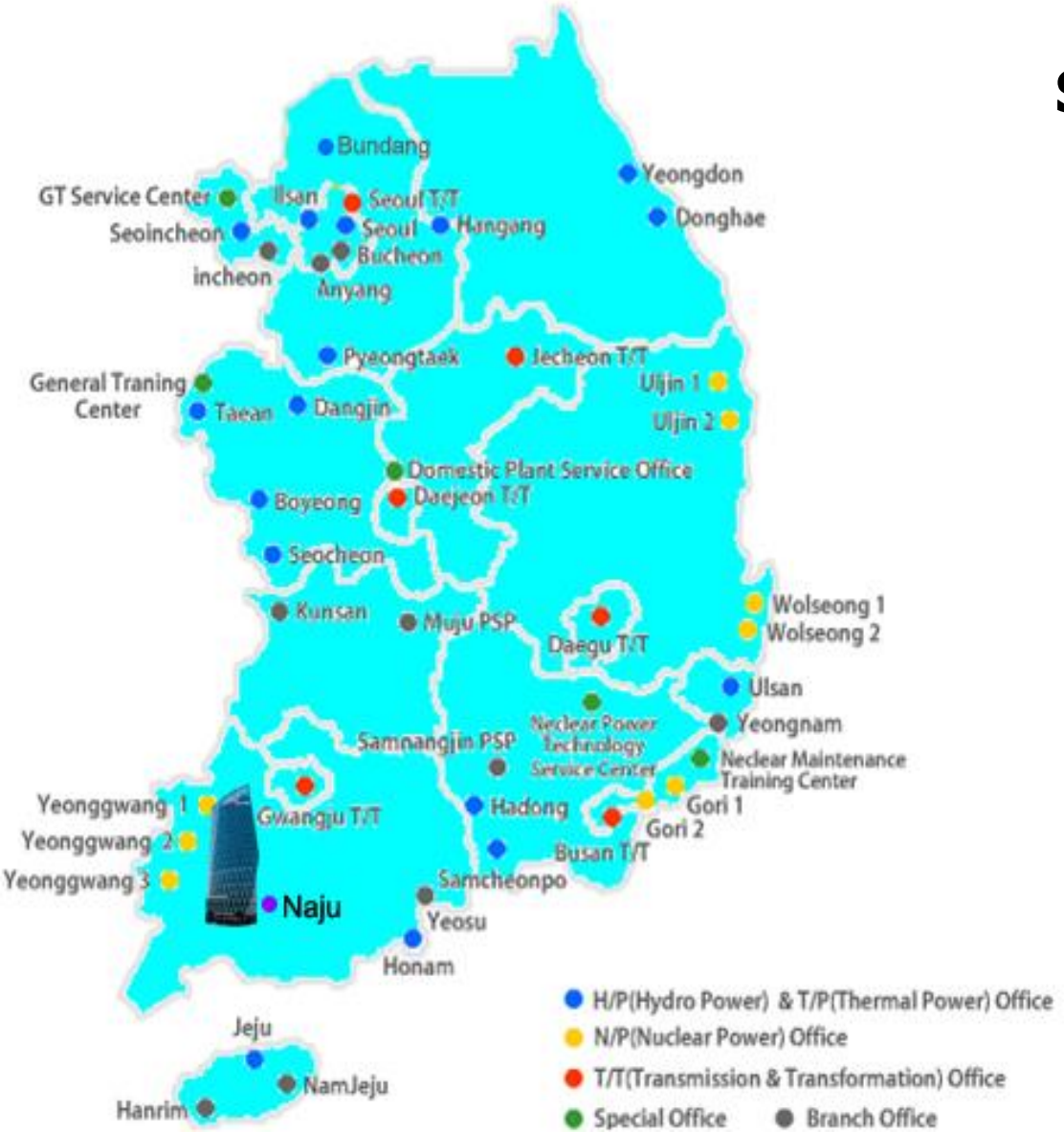
- Established Training Center (1990)
- First overseas business (1993)
- Established Service Center (1997)

2000's

Development of Advanced Technology

- Established In-House Qualification System certified by the Korean government (2000)
- Patented RCP chemical decontamination(2002)

KEPCO KPS Domestic Business



Stationed Offices

Nuclear	:	13
Thermal / Hydro	:	29
Transmission	:	6
Special	:	7

- Special :

Maintenance Tech. Center (2)

Training Center (2)

Plant Business Center

Solution Center

Tech. R&D Center

KPS Overseas Business – 31 Countries

- Nuclear
- Non-Nuclear

Major Work Scope in NPP

Major Work Scope in NPP

Routine Maintenance

Periodical maintenance (Time based)

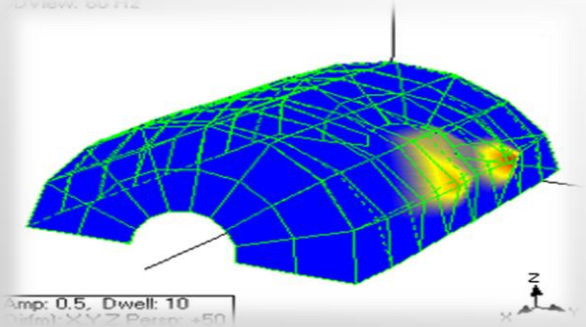
Check equipment on a regular basis to prevent potential failures

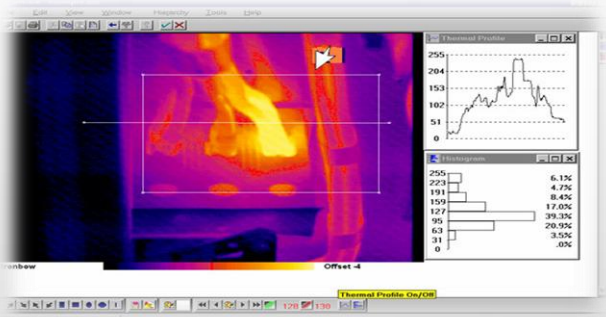
Predictive maintenance (Condition based)

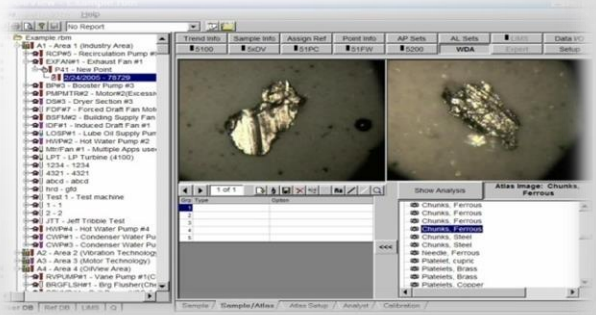
Analyze operational parameters such as vibrations, noise, temperature, pressure, and lubricant to predict and prevent accidents

Corrective maintenance

Restore failed equipment and facilities by applying systematic and advanced maintenance techniques







Major Work Scope in NPP

Planned Maintenance

- Refueling
- Reactor Inspection and Repair
- Steam Generator Repair
- RCP Inspection and Repair
- Turbine-Generator Overhaul
- Main Facilities Overhaul
- Pre and In-Service Inspection
- Engineering and Others

Business Experience in Brazil

Experience in Brazil

Refueling at Angra Unit 1

Project Overview

- Client : ETN (Eletrobras Eletronuclear)
- Project Outage : 1P20 - 1P23 (24 Mar. 2014 - 23 Mar. 2019)
- Work Scope

  - Refueling Activities

  - Visual Inspection of the unloading / reloading operation

  - Reactor Core Mapping

Experience in Brazil

Fuel Handling Training

Project Overview

- Client : INB (Industrias Nucleares do Brazil)
- Work Scope

  - Theoretical Basic Training (INB Training Center)
  - Practical Basic Training (KPS Training Center)
  - Refresh Training (before each Angra 1 outage)
  - On the Job Training (throughout Angra 1 outage 1P21 to 1P23)

Summary

Summary

- Comprehensive Maintenance Provider of Power Plants
- High Quality & Professional Maintenance Service
- Supporting Angra NPP for Self-reliance in Maintenance

Obrigado

KEPCO KPS

www.kps.co.kr