



INSTITUTE FOR ELECTRIC POWER RESEARCH NUCLEAR ENGINEERING DIVISION

Introduction to Nuclear Situation in Hungary

1. Key Organizations
2. Selected Activities
3. VEIKI Profile

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1. Key Organizations

Regulatory Authority

HAEA NSD – Hungarian Atomic Energy Authority
Nuclear Safety Directorate

www.haea.gov.hu

Nuclear Installations

Paks Nuclear **Power** Plant (4 x 440 MWe, VVER ~38 %)

www.npp.hu

Budapest **Research** Reactor (10 MWt, Tank-type) - AERI

Nuclear **Training** Reactor (100 kWt, Pool-type) - BUTE

Research Institutes

KFKI Atomic Energy Research Institute (AERI)

www.kfki.hu

VEIKI Institute for Electric Power Research

www.veiki.hu

Education

Budapest University of Technology and Economics (BUTE) www.bme.hu

Institute of Nuclear Techniques

2. Selected Activities - for Paks NPP

POWER LEVEL UPRATE - by 8 % per unit to 500 MWe
(2 units completed, 2 units planned)

PLANT LIFE EXTENSION - 30+20 years, 1982? 2012? 2032
Preparation - ageing management
- maintenance efficiency

SAFETY UPGRADING - Seismic reinforcement (completed)
(PSA-informed decisions) Symptom-based EOPs (introduced)
Severe accident management (ongoing)

PERIODIC SAFETY REVIEW - by 10 years (ongoing)

REGULATION UPDATING - Safety Code revision: WENRA RL

3. VEIKI Profile

OPERATION

- founded in 1949, state owned
- supervised by Ministry of Economy
- contract-based operation

STRUCTURE

- 4 divisions + laboratories
(Nuclear/Power/Control/Combustion Engineering)
- scientific staff: 40

NUCLEAR ENGINEERING DIVISION

Risk and Reliability Project

(Project Manager: A. Bareith)

- SRA/PSA
- human reliability assessment

Safety Assessment Project

(Project Manager: Zs. Techy)-

- severe accident analysis
- containment studies

POWER ENGINEERING DIVISION

Nuclear Project

- plant life extension

Responsibilities

- TSO for Regulatory Body
- Main Consultant for Paks NPP