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NPP Training Center

EVERYTHING UNDER ONE ROOF

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NERS 2024



Slovakia Power Generation Mix

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Nuclear Power Industry



0
1

STUDY

Pre-design analyses, feasibility studies



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2

DESIGN

Construction proceeding, safety documentation and regulations, project management



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CONSTRUCTION

Design, delivery, assembly, initialization, physical & power start-up, assessment of the equipment



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OPERATION

Operation safety & reliability, **personnel training**, diagnostics, NDT inspections, development of manipulators

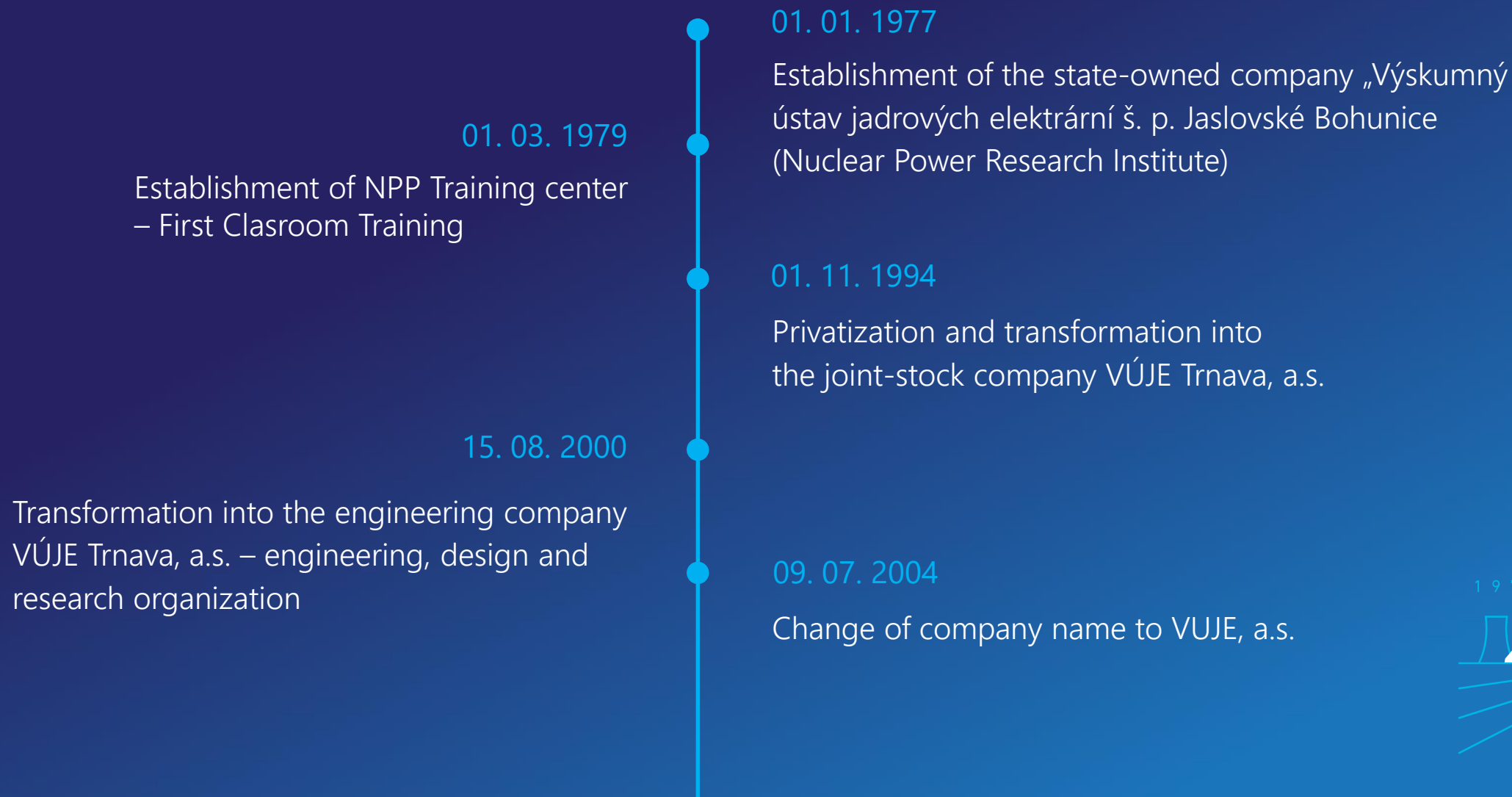


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DECOMMISSIONING

NPP decommissioning RAW management, On-site works

VUJE - History and Key Events



VUJE NPP Training Center

- Energy Sector Workforce training
- NPP Workforce Training according „Slovak Atomic law“
- Classroom Training – Initial and Continuing training
- Operation of NPP Full Scope Simulator
- Full Scope Simulator Training
- Development of Training Simulators (Full scope Control room replicas, Display simulators, Part task trainers, desktop simulators)
- Training of Power distribution Grid Operators
- Low voltage Trainings (live-line works) up to 1000 V
- Operation of live-line work training polygon

VUJE NPP TRAINING CENTER Achievements

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45 years
of experience



77 174
overall trained
people



1706
people passed through
TC from new Unit MO34



NEW training system
development for
NEW NPPs



**New NPP
personnel training**
unique in Central Europe



**New Training
Center**
Design, construction,
organization, management



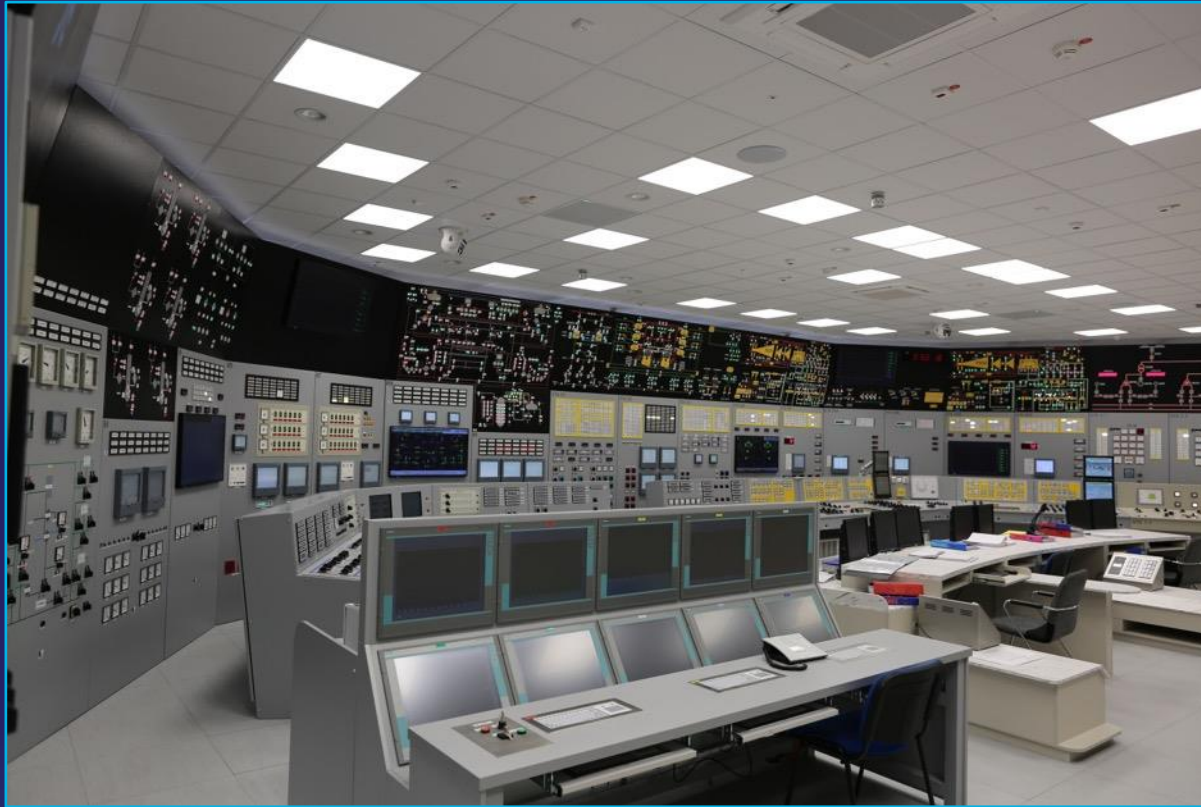
**New Full Scope
Simulator**
Delivery, operation and
maintenance



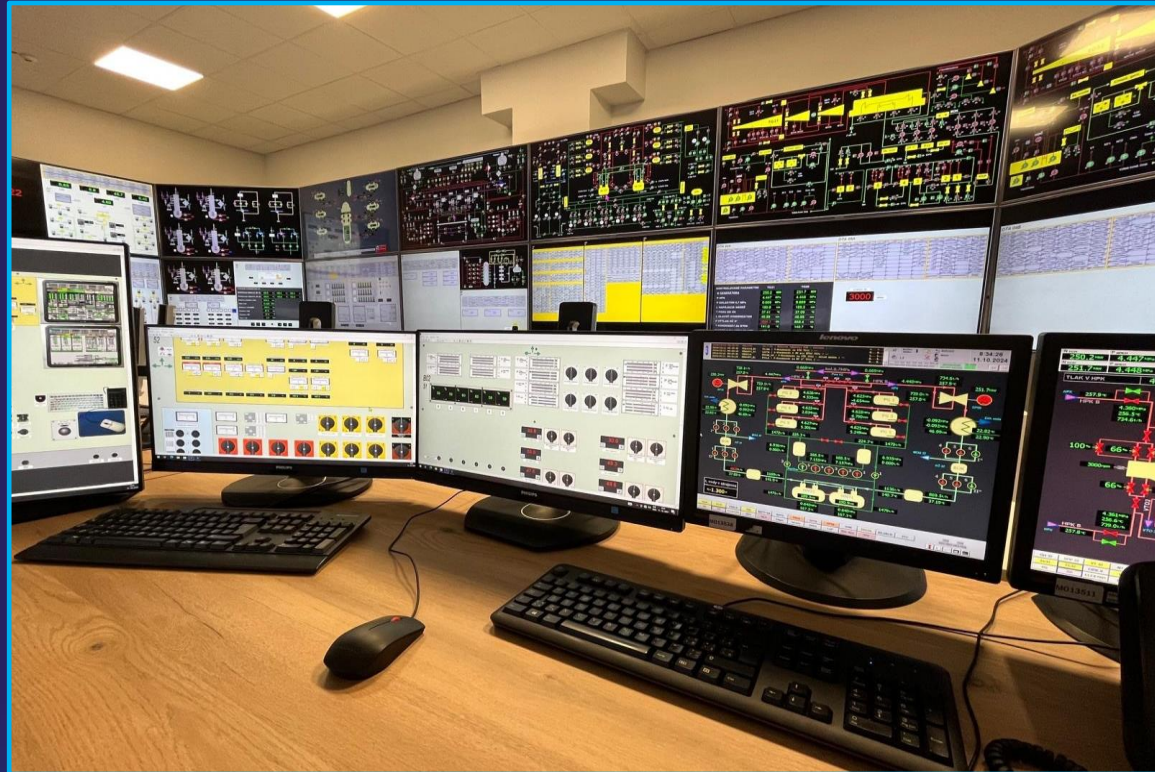
**Digital learning
tools**
Simulators, E-learning, VR

Full Scope Simulator NPP EBO V2

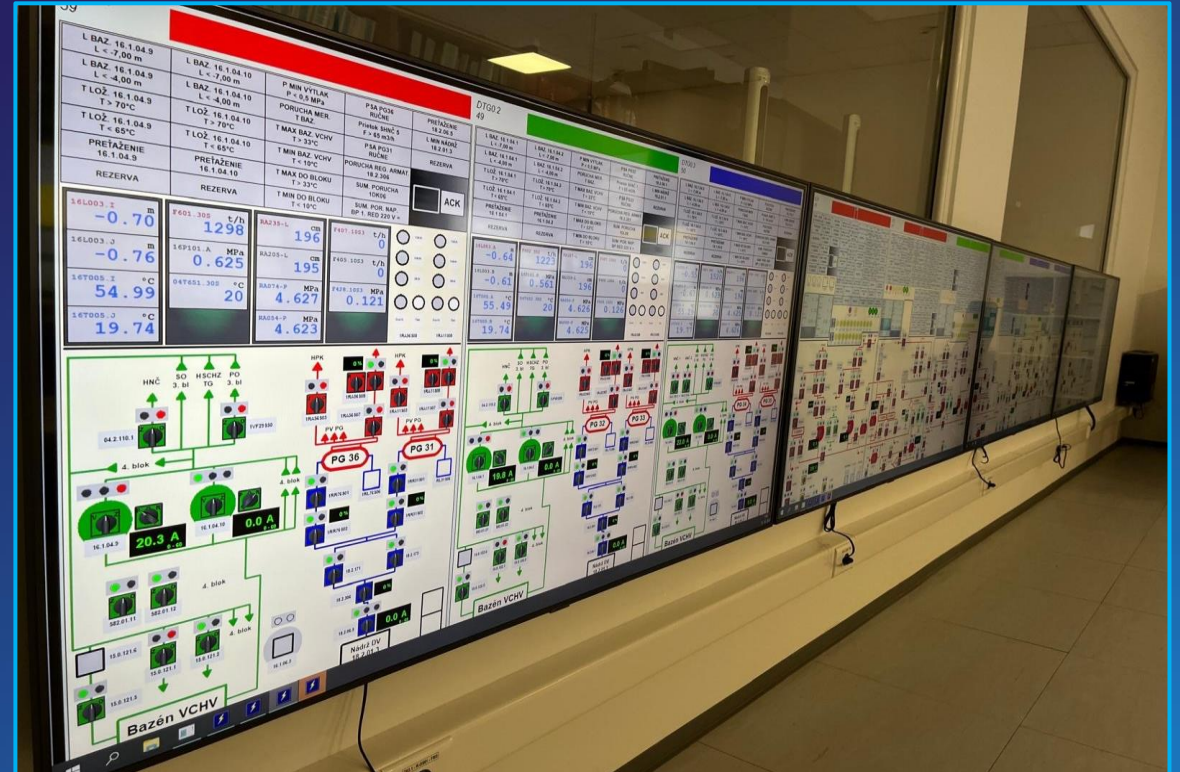
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Display simulator NPP EBO V2



Pic.1: Display simulator NPP V2



Pic.2: Safety Systems visualization



CONSTRUCTION OF THE NEW NPP MO34 Training Solutions:

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- Training needs analysis for professional training according Atomic Law
- Design of Training programs according SAT methodology
- Development of Training plans and schedules
- Training materials development and modernization
- Training performance according Training programs
- Instructors certification



CONSTRUCTION OF THE NEW NPP MO34 Training Solutions:

- Implementation of preparation for verification of professional competence of NPP Workforce
- Verification of professional competences
- Evaluation of professional training
- Coordination and cooperation of On-site training and On the job training

Simulation Solutions:

- Full Scope Simulator Upgrade
- Full Scope Simulator Maintenance

NPP WORKFORCE Challenges

- Workforce ageing and retiring
- Lack of people on the labor market
- Young Generation is not interested in Technical fields, including Nuclear Industry
- Quality of education in general falls down
- People are learning in different ways
- New Generation - People are communicating in new ways

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NPP WORKFORCE KNOWLEDGE Solutions

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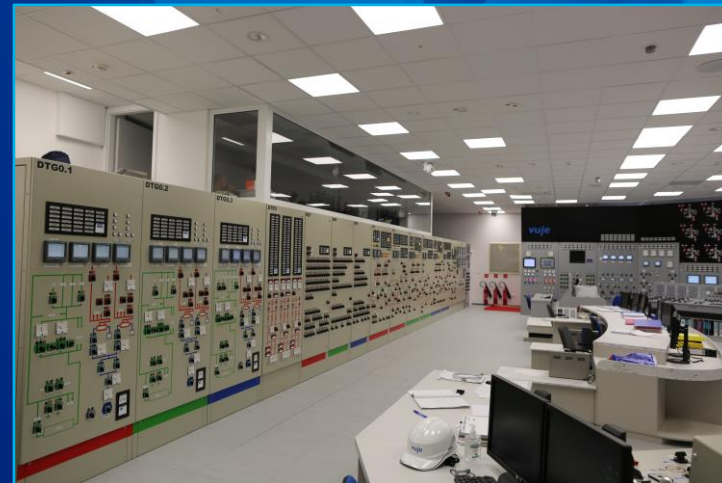
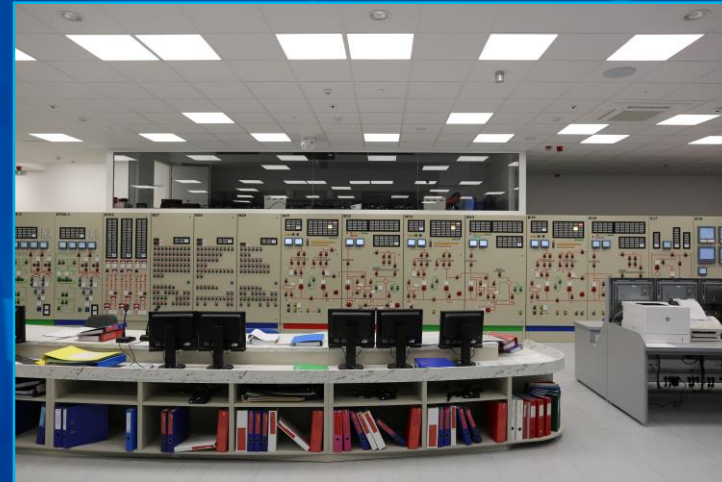
- Attracting the next generation of the nuclear workforce will require the industry to “win the hearts and minds” of the youth population.
- We should take advantage of today’s social networks and communications systems to help young people gain a better appreciation of the positive contribution of nuclear energy.
- Ensure continuation of science, technology, engineering and math programmes in grade schools to foster interest in nuclear technology and related fields.
- Actions are needed now to educate, attract, and retain the next generation of nuclear workers - getting the right people at the right place at the right time



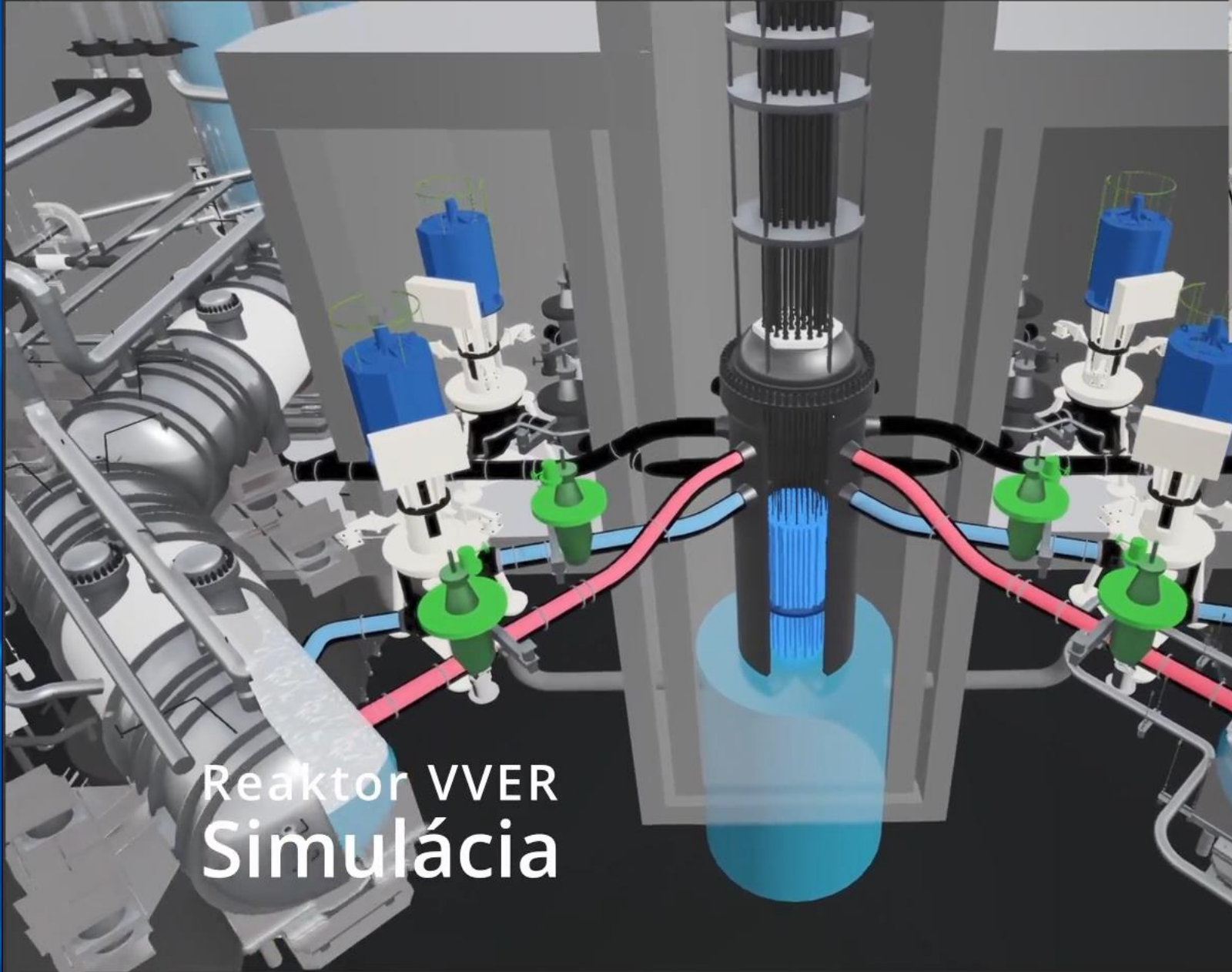
NPP WORK FORCE KNOWLEDGE Solutions

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- Perform Education, Training and Qualification of a Nuclear Workforce – knowledge, skills and abilities needed to perform all duties.
- Government support for human resource development is critical, and active intervention may be required.
- New ways of professional training - advanced Digital Learning Tools and Methodologies (E-learning, 3D virtual models, e.t.c.)



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Reaktor VVER Simulácia

- Slučka 1
- Slučka 6

Celková animácia tavenia jadra



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Thanks for your attention!

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