

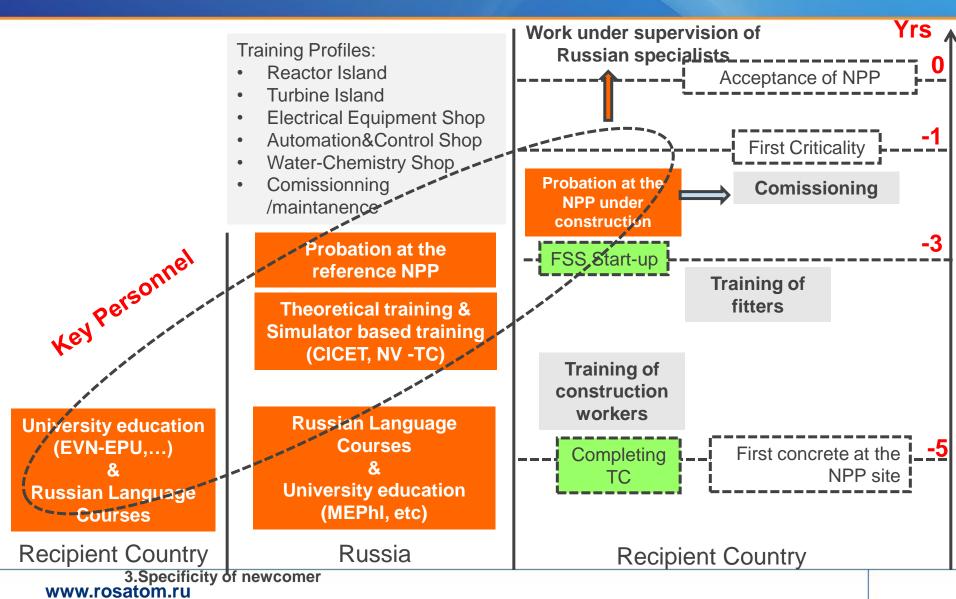
# Theoretical Training for Operating Personnel in New Entrant Countries

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# Stages of NPP Personnel Training: the case of recepient country



# Theoretical Training in the Central Institute for Continuing Education and Training

#### General Issues of Safety

Rules and regulations in the field of atomic energy use

Rules and regulations of Industrial Safety

Labour protection, Electrical Safety

**Fire Safety** 

**Radiation Safety** 

**Nuclear Safety** 

#### General Issues of Operation

Administrative issues of operation

Basic knowledge to conduct technological processes

General issues of NPP operation





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#### **Theoretical Courses**

### General Issues of Operation

Administrative issues of operation

Basic knowledge to conduct technological processes

General issues of NPP operation

Basics of nuclear physics

Basics of thermo hydraulics

Structural materials

**Electrical Equipment** 

Specifics of VVER reactor physics

Specifics of VVER thermo hydraulics

**Nuclear fuel** 

Testing of NPP electrical circuits

Basics of measurement systems at NPP

Reactor
Operation&Con
trol

Dosimetry Control at NPP

Heat exchangers at NPP

Water chemistry

Basics of relay protection.

#### **Theoretical Courses**

### General Issues of Operation

Administrative issues of operation

Basic knowledge to conduct technological processes

General issues of NPP operation

**NPP Processes** 

**Basic rules for NPP Operation** 

Quality management during Operation

Safety Management during Operation

Technological protection and block systems

**Safety Culture** 

Operative change over procedures

Operational limits& Safety margins.

**NPP** Unit management

Maintenance

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#### Challenge of Working Language

A DEC CONTRACTOR OF CONTRACTOR	THE RESIDENCE CONCRETE CONCRETE		
Реакторный и турбинный цех	Reactor and Turbine Shop		
СИУР	Senior Reactor Operator		
OPO	Reactor Operator		
ВИУТ	Senior Turbine Operator		
CMOTO	Senior Turbine Machinist		
MOTO	Turbine Inspecting Machinist		

- Are we to use abbreviations in English or translate the whole word?
- > Is there a generally accepted translation?

**Glossary Development is a Must!** 

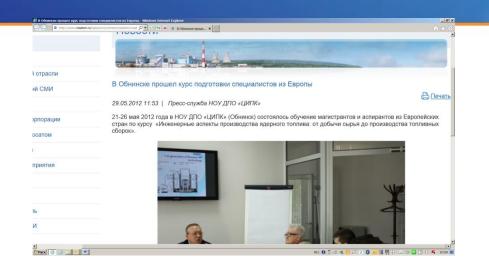
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### **Challenge of Working Language**

Russian	Arabic	Spanish	English	Bengali	Vietna mese
подготовка персонала	بىيىردت ئەخلوملا	la capacitación del personal	personnel training	কর্মীদরে	
	ن ن	aci personai	333335	প্রশক্ষিণ	
радиационная	الأأمان ما ما ما	seguridad de la	radiation	বকিরিণ নরিাপ	
безопасность	عاعشالا ي	radiación	safety	ত্তা	
культура	ا مُفاقت	cultura de	safety	নরিাপত্তা সংস্	
безопасности	ئمالس <u>ل</u>	la seguridad	culture	কৃত	

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#### **Pilot Training**



21st – 26th of May, 2012 the training course for the European students on «Engineering Aspects of Nuclear Fuel Fabrication, from Initial Raw Materials to Fuel Assemblies» had been held in Central Institute for Continuing Education & Training (CICE&T), Obninsk.

Eight students from the European institutions (Politecnico di Torino, University Politehnica Bucharest and Slovak University of Technology in Bratislava) by results of the final testing will receive credits according to the system existed in the European Union - ECTS.



## Thank You!