



The Future of Nuclear Energy: Nuclear Safety and Security

03-21-2019

R.S. Bobrov
M17-510

Glossary

NPP

Glossary

NPP - nuclear power plant

Glossary

NPP - nuclear power plant

АЭС - атомная электростанция

Glossary

IAEA

Glossary

IAEA - International Atomic Energy Agency

Glossary

IAEA - International Atomic Energy Agency

МАГАТЭ - Международное агентство по
атомной энергии

Glossary

WWER or VVER

Glossary

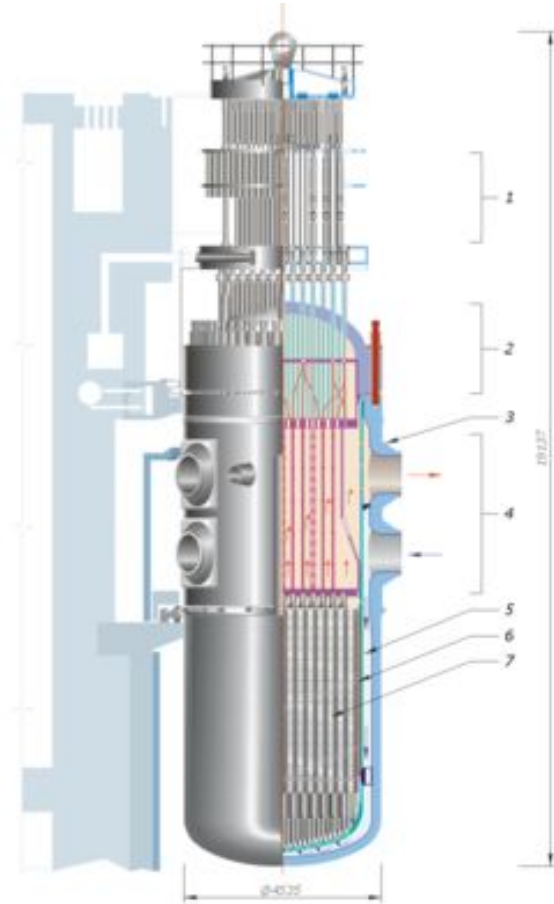
WWER or VVER - water-water energetic reactor.
They are the basis of the world's peaceful nuclear
energy

Glossary

WWER or VVER - water-water energetic reactor.
They are the basis of the world's peaceful nuclear
energy

Водо-водяной энергетический реактор (ВВЭР)

Glossary



Glossary

RBMK - High Power Channel-type Reactor

Glossary

RBMK - High Power Channel-type Reactor

RBMK - High Power Channel-type Reactor
Реактор большой мощности канальный (РБМК)

Glossary



Reactor cover

Glossary

in other countries VVER called
PWR (AP)

Glossary

in other countries VVER called
PWR - pressurized water reactor

Водяной реактор под давлением

Glossary

Safety and security

Glossary

Safety and security - the condition of being protected from or unlikely to cause danger, risk

Glossary

Safety and security - the condition of being protected from or unlikely to cause danger, risk

Безопасность и физическая защита

Glossary

Awareness (syn.: understanding, recognition)

Glossary

Awareness (syn.: understanding, recognition) -
knowledge or perception of a situation or fact

Glossary

Awareness (syn.: understanding, recognition) -
knowledge or perception of a situation or fact

Осознание

Glossary

Sentiment (syn.: emotion, feeling)

Glossary

Sentiment (syn.: emotion, feeling) - a feeling or emotion

Glossary

Sentiment (syn.: emotion, feeling) - a feeling or emotion

Настроение

Glossary

To hinder (syn.: prevent, delay)

Glossary

To hinder (syn.: prevent, delay) - create difficulties
for (the expansion of nuclear power)

Glossary

To hinder (syn.: prevent, delay) - create difficulties
for (the expansion of nuclear power)

Мешать

Glossary

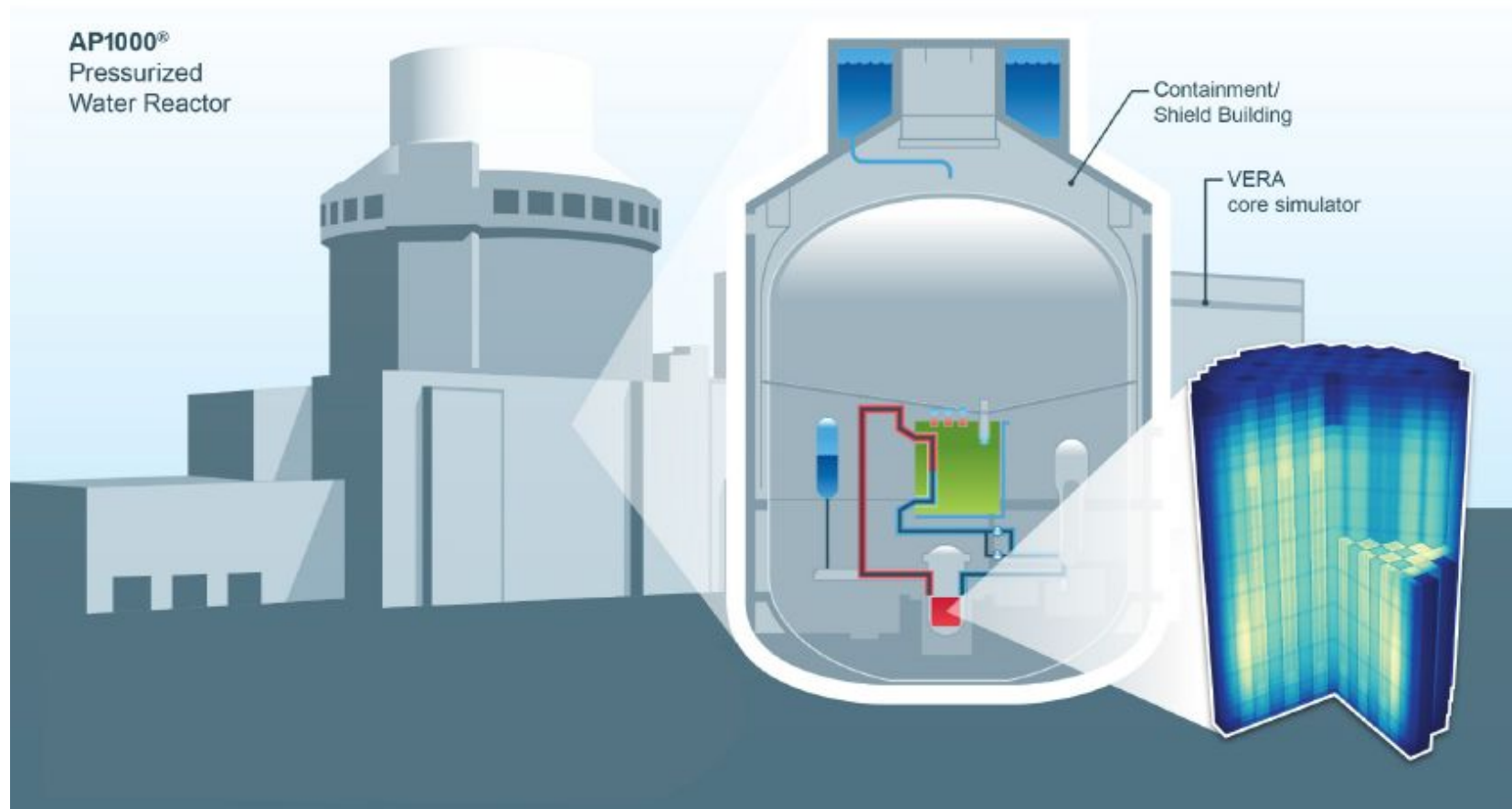
Containment - the action of keeping something harmful under control or within limits

Glossary

Containment - the action of keeping something harmful under control or within limits

Защитная оболочка, гермооболочка

Glossary



Glossary

Proliferation (syn.: spread)

Glossary

Proliferation (syn.: spread) - rapid increase in numbers

Glossary

Proliferation (syn.: spread) - rapid increase in numbers

Распространение

Glossary

Missile (syn.: rocket)

Glossary

Missile (syn.: rocket) - an object that is forcibly propelled at a target, either by hand or from a mechanical weapon

Glossary

Missile (syn.: rocket) - an object that is forcibly propelled at a target, either by hand or from a mechanical weapon

Ракета

Glossary

Abandoned (syn.: deserted, unused)

Glossary

Abandoned (syn.: deserted, unused) - having
been deserted or cast off

Glossary

Abandoned (syn.: deserted, unused) - having
been deserted or cast off

Заброшенный

Glossary

Site (syn.: place, position, locate)

Glossary

Site (syn.: place, position, locate) - an area of ground on which a town, building, or monument is constructed

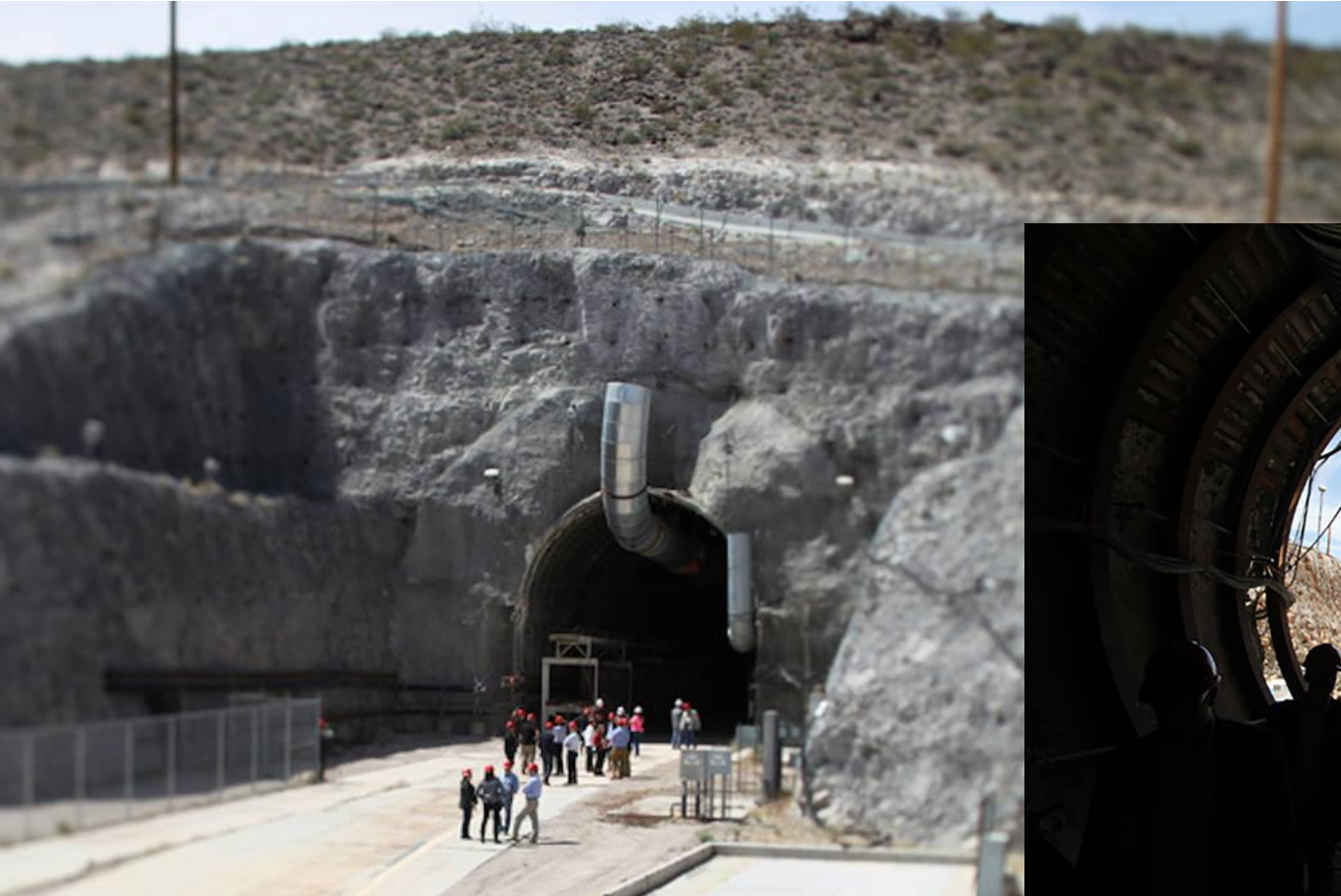
Glossary

Site (syn.: place, position, locate) - an area of ground on which a town, building, or monument is constructed

Хранилище, склад

Glossary

Yucca Mountain nuclear waste site or repository



Glossary

Confront (syn.: challenge, trouble)

Glossary

Confront (syn.: challenge, trouble) - meet (someone) face to face with hostile or argumentative intent

Glossary

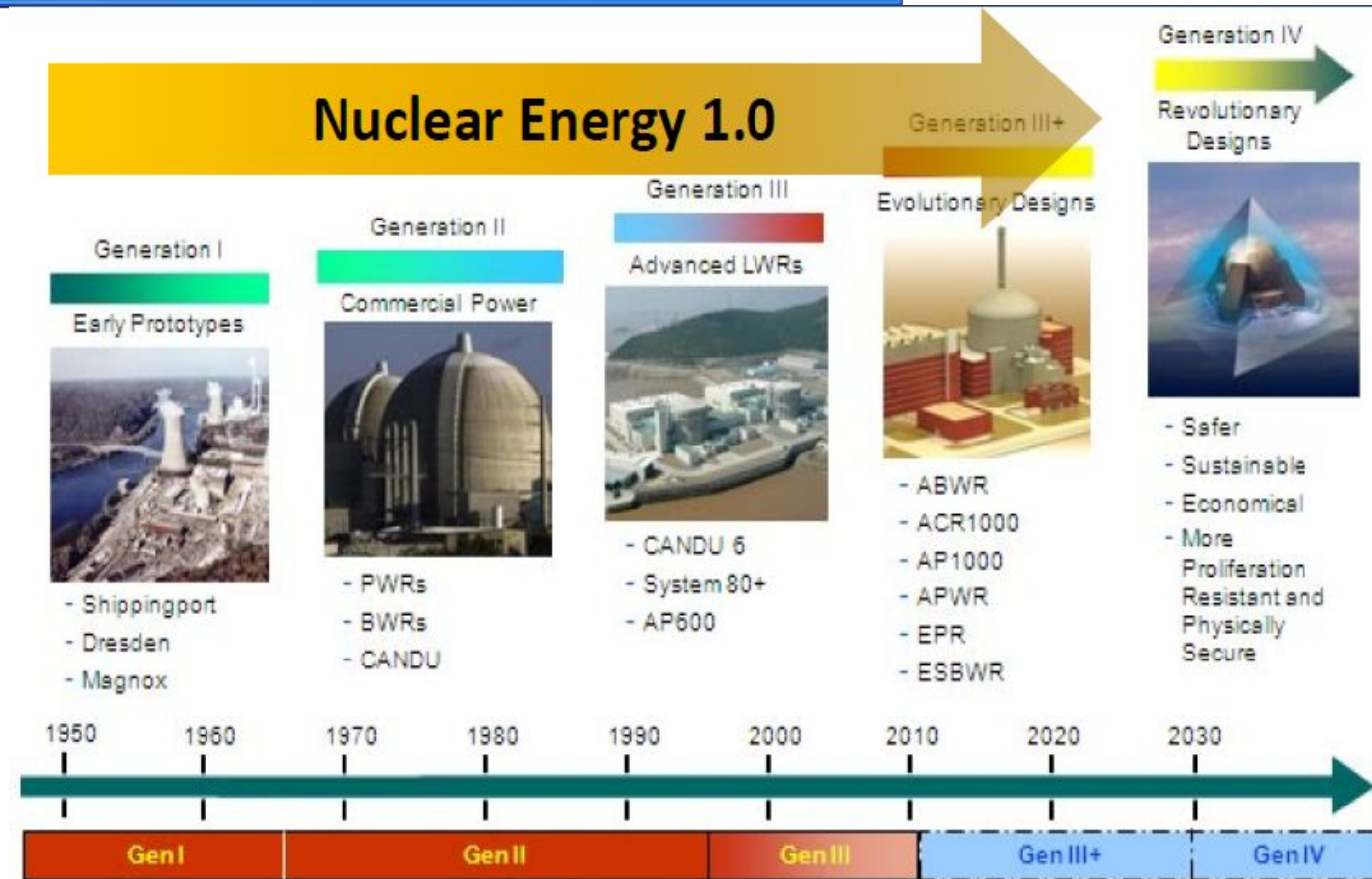
Confront (syn.: challenge, trouble) - meet
(someone) face to face with hostile or
argumentative intent

Противостоять

Problems: Rising Costs, Safety and Security Concerns

Approaches: Rethink Safety Goals and Design Principles

Nuclear 2.0: Fundamentally Safe and Manufactured Systems



Questions

Who were the authors of the article?

Questions

At which NPPs did 3 major accidents occur?

Questions

What type of a reactor stopped to construct in Russia after Chernobyl?

Questions

When was accident on Three Mile Island?

Questions

What happened on Three Mile Island?

Questions

What country refused from Nuclear energy program in 1970s?

Questions

What type of the reactor is more safety?
(RBMK or VVER)

Questions

When did the USA stop the construction of the
their NPPs in the USA?

Questions

What are the main differences of RBMK and VVER?

Questions

Thank you!