



## NRC Assistance for Emerging Nuclear Power Programs

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## Presentation Organization

- Global Expansion of Nuclear Power
- Regulatory Partnerships
  - Information Exchange Agreements
  - Multilateral Activities
  - Bilateral Activities
  - Cross-Cutting Activities
- Conclusion

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## Global Expansion of Nuclear Power

- 439 nuclear power plants operating in 31 countries with 37 plants under construction (as of October 2008).
- Approximately 50 countries currently without nuclear power programs have expressed interest in developing such a program by 2020 and many countries with nuclear power programs are expanding these programs.

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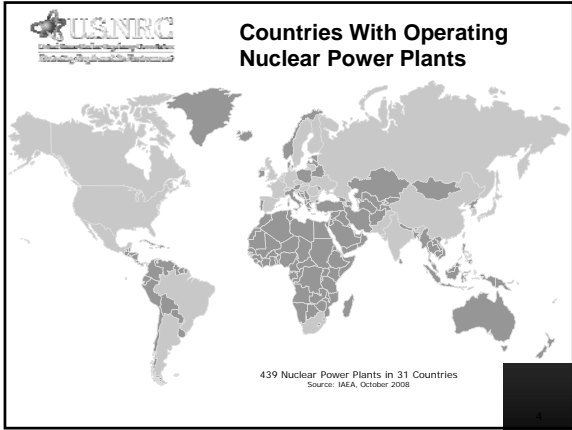
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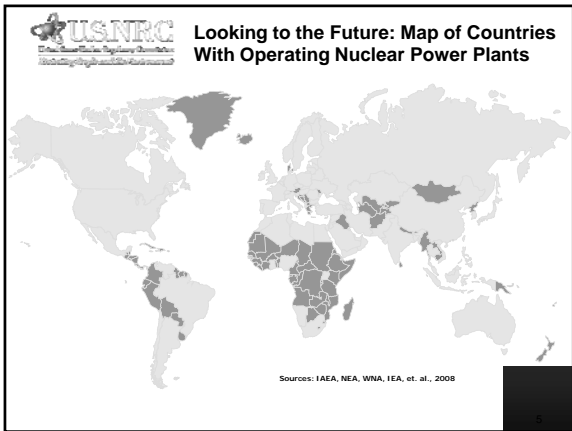
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**USNRC**  
U.S. Nuclear Regulatory Commission

**Regulatory Partnerships – Information Exchange Agreements and Memorandums of Cooperation**

- Technical Information Exchange Arrangement and/or Memorandums of Cooperation include (or have included):
  - Argentina, Armenia, Belgium, Bulgaria, Brazil, Bulgaria, Canada, China, Croatia, Czech Republic, Egypt, Finland, France, Germany, Greece, Hungary, Indonesia, Italy, Israel, Japan, Kazakhstan, Lithuania, Mexico, Netherlands, Peru, Philippines, Romania, Russia, Slovak Republic, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, (Taiwan), Ukraine, the United Kingdom and Vietnam
- Global expansion of nuclear power could, within the next five years, double the number of NRC's technical information exchange partners

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**Regulatory Partnerships – Multilateral Activities**

- Nuclear Energy Agency
  - Support for Multinational Design Evaluation Program
  - Support for Working Group on the Regulation of New Reactors (WGRNR)
  - Provision of NRC-sponsored cost-free expert
  
- International Atomic Energy Agency
  - Provision of NRC-sponsored cost-free expert
  - Support for IAEA's other ongoing or planned activities (Milestones document, Integrated Regulatory Review Service missions, Technical Cooperation projects, etc.)
  
- Others

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**Regulatory Partnerships – Bilateral Activities**

- Enhanced Information Exchange
  - Safety and security technical information exchange
  - First-of-a-kind construction outside of the U.S.
  - Major component manufacturing outside of the U.S.
  
- Pilot Regulatory Infrastructure Projects
  - Legal Framework
  - Organizational Structure (structure, staffing, technical support)
  - Regulatory Program (technical requirements for siting, design, operation and decommissioning)
  - Training Program (qualification program)

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**Regulatory Partnerships – Cross-Cutting Activities**

- International Assignee Program
  - Placement within NRC staff
  - Short-term and/or long-term assignments
  
- Technical Training
  - Opportunities provided on a space-available basis

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## Conclusion

- Renewed global interest in nuclear power has resulted in a tripling, since 2007, in requests received by NRC for new reactor-related regulatory support.
- Requests for new reactor-related regulatory support are expected to continue to increase.
- This includes regulatory authorities from countries just starting a nuclear power program, countries with small nuclear power programs, and even countries with developed nuclear power programs.
- NRC is working with other parts of the U.S. government, international institutions (like the IAEA and NEA) and with our international regulatory counterparts to meet this challenge.

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