

# Shifting Dynamics of the Middle East: Turkey's Pursuit of Nuclear



Site of the planned Akkuyu NPP in the southern province Mersin, Turkey

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# Turkey's Pursuit of Nuclear Energy

- 1953: Eisenhower's "Atoms for Peace" address at the UNGA
- 1956: Turkey passed legislation to establish the Atomic Energy Commission (TAEC)
- 1961: United States provided TAEC with support to launch the Cekmece Nuclear Research Training Center
- 1969: Turkey signs the NPT
- 1976: Consideration of the Akkuyu Bay
  - French, Swiss, and Swedish biddings for consortium
- 1980: Ratification of the NPT
- 1980: Military coup in Turkey interrupts the process
  - Closer alignment between General Kenan Evren and Pakistan's President General Zia-ul-Haq
- 1981: United States expressed concerns about illicit shipments from Turkey to Pakistan

# Why Did Turkey Opt for a Build-Own-Operate Model?

- Nuclear energy development part of the AKP's ten-year agenda and 2023 vision
- Financing – Know-How – Time
- Energy diversification
- Gas import dependency
  - Preventing net foreign currency inflow
- Economic development



*“Economic development cannot take place in a country without nuclear energy” – Turkish Energy Minister Taner Yildiz, 14 April, 2015*

# The Akkuyu NPP



- First time the BOO model is applied in the nuclear energy sector
- Intergovernmental agreement between Russia and Turkey signed in 2010
  - Ratified by both parliaments
  - ROSATOM
- The Akkuyu NPP has been awarded \$20 billion
  - Financing a capacity of 4,800 megawatts, meeting 16% of Turkey's energy demand
- Puts all financial risk on Russia
  - The Turkish Electric Company (TETAS) guarantees to purchase 50% of the
- Four VVER-1200 reactors to be built, owned and operated by Russia
- After the first fifteen years: electricity to be sold on the open market and 20% of the profits to be transferred to the Turkish government
- Spent fuel to be owned by Russia and exported from Turkey

# Verification Mechanisms

- Turkey has been subject to the IAEA Comprehensive Safeguards Agreement since 1982
  - Implementation of the Additional Protocol in 2001
  - Broader conclusion awarded by the IAEA in 2012
- IAEA Integrated Nuclear Infrastructure Review in 2012
  - The government of Turkey should clarify the roles and responsibilities for nuclear policy development
  - The Akkuyu Project Company should finalize its organizational structure for fulfilling its operator responsibilities, during siting, construction and operation taking
  - Nuclear waste management
- On May 8, 2015, Turkey became an Associate Member of The European Organization of Nuclear Research (CERN)

# Transnational Risks

- The intergovernmental agreement is a political framework
- Despite Turkey's solid track record, the hurried process of implementing the BOO model raises security concerns
  - Developing a domestic regulatory infrastructure and capabilities
  - Safeguards implementation
  - Import and export regulations
  - Preventing illicit trade, non-state actors
  - Environmental issues



"Strong Turkey's New Energy, Akkuyu Nuclear

# Implications of a Successful BOO Model in the Middle East

- Domestic politics
- Commitments to non-proliferation
  - US nuclear umbrella and NATO
  - EU accession process
- Strengthened strategic relationship between Turkey and Russia
  - Russia's posture in the Middle East
- Strive for energy diversification and economic development by other Middle Eastern states.
- ROSATOM's grand strategy
  - Turkey, Iran, Jordan & Egypt

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