Multilateral arrangements for power interconnection in Northeast Asia:

Recent developments
Russia – NEA countries bilateral arrangements

Russia

Mongolia

China

DPRK

RoK

Japan

- High-ranked governmental officials contacts
- Work of intergovernmental commissions and working groups
- Contacts on the level of industry
- Contacts on the level of academics
- MOU signed
- Agreements signed
Russia – Mongolia bilateral arrangements

Russia-Mongolia intergovernmental commission on trade, economic, scientific and technical cooperation

Agreement between Governments of Russia and Mongolia on economic and near-border cooperation, 1999

Agreements between Russian and Mongolian System operators on parallel operation, dispatching and technical data exchange, 2008

Agreements between Inter RAO EES (Russia) and Power grid companies of Mongolia on power supply, 2015

Study of Russia-Mongolia power trading expansion and export to the adjacent country

Agreement between Eurosibenergo (Russia) and Just Group (Mongolia) on strategic cooperation in electric power, 2010

Study of power export to the adjacent country

Road map on development of Russia–Mongolia cooperation in electric power, 2013
Russia – Mongolia recent bilateral arrangements

- Russia-Mongolia intergovernmental commission on trade, economic, scientific and technical cooperation
- Russia-Mongolia joint working group on cooperation in electric power
- Proposal of Rosseti to build a transmission line to Mongolia, 2017
- Project of 500 kV transmission line from Russia to Mongolia
- 1st meeting of the Russian-Mongolian working group on energy cooperation, 2018
- Expansion of Russia-Mongolia cooperation in electrical energy
Russia – China bilateral arrangements

Russia-China intergovernmental commission on energy cooperation

Russia-China joint working group on cooperation in electric power

Agreement between Governments of Russia and China on trade and economic cooperation, 1992

Agreement between Governments of Russia and China on energy cooperation, 1996

Agreement between RAO EES of Russia and China State grid corporation, 1999

Agreements between RAO EES of Russia and China State grid corporation, 2005-2006

Agreement between Federal State company of Russia and China State grid corporation, 2010

Agreement between Federal grid company, System operator (Russia) and Northeast China grid company, 2012

Russia-China, power export

Russia-China, interconnection and power trading

Russia-China, near-border trading expansion and study of power export from Siberia to China

Study of Russia-China large scale power export

Study of Eurasian power bridge

Agreements between Russian and Chinese state/private companies, 2010-2014

Contract between East power company (Russia) and China State grid corporation, 2012

Russia-China, power export

Expansion of Russia-China power interconnection and export

Agreement between Russian grids company and China State grid company, 2014

Study of Russia-China, power export

Agreement between Russian grids company and China State grid company, 2014
Russia – DPRK bilateral arrangements

Russia-DPRK intergovernmental commission on trade, economic, scientific and technical cooperation

Agreement between Governments of Russia and DPRK on cooperation in electric power, 2015

Agreement between RAO EES of Russia and Ministry of electric power and coal industry of DPRK, 2001

Protocol of Meeting of delegations of RAO EES of Russia and Ministry of electric power and coal industry of DPRK, 2008

Study of interstate interconnections and power trading

Study of Russia-DPRK, Russia-DPRK-RoK interconnections and power trading

Study of Russia-DPRK, interconnection and power trading

Russia-DPRK joint working group on cooperation in electric power
Russia – RoK bilateral arrangements

Russia-RoK intergovernmental commission on economic, scientific and technical cooperation

Agreement between Governments of Russia and RoK on cooperation in energy, 2000

MOU among Russia, DPRK, RoK, 2002
Russia – RoK joint plan of actions in trade and economic cooperation, 2005

Protocol of 13th Meeting of Russia-RoK intergovernmental commission, 2013

Russia-RoK-DPRK power interconnection study

MOU among Inter RAO EES of Russia, Russian grids, KEPCO, 2015
Russia–RoK recent bilateral arrangements

Russia-RoK intergovernmental commission on economic, scientific and technical cooperation

MOU between Governments of Russia and RoK on electrical energy and energy efficiency, 2018

MOU between KEPCO and Rosseti on power grid development, 2018

Russia-RoK power interconnection study
China-RoK recent bilateral arrangements

National Energy Administration of China & Ministry of Trade, Industry and Energy of ROK

Agreement for China-South Korea Grid Interconnection project with SGCC and KEPCO, 2017

Joint promotion of the implementation of China-South Korea Grid Interconnection

GEIDCO
Russia – Japan bilateral arrangements in power sector

Russia-Japan intergovernmental commission on trade and economic issues

Protocols on cooperation among RAO EES of Russia and Sumitomo and Marubeni Corporations, 1999-2004

10th meeting of Russia-Japan intergovernmental commission, 2012

Russia expressed its interest to Russia-Japan power bridge project

12th meeting of Russia-Japan intergovernmental commission, 2016

Study of Russia-Japan power bridge

Cooperation of RusHydro and Mitsui, Russian Grids and SoftBank, 2016

Study of Russia-Japan power bridge
Russia – Japan recent bilateral arrangements

Russia-Japan intergovernmental commission on trade and economic issues

Japan-Russia Energy Advisory Council, 2017

Russia-Japan power bridge discussion
Multilateral arrangements in NEA

- MOU on Study of Gobitec and Asian Supergrid, 2013
  - Energy Charter
  - Energy Economics Institute (RoK)
  - Ministry of Energy (Mongolia)
  - Renewable Energy Foundation (Japan)
  - JSC “Institute of Energy Systems” (Russia)

- MOU on Study of NEA wide grid prospects, 2016
  - Russian grids company (Rosseti)
  - Korea Electric Power Corporation (KEPCO)
  - China State Grid Corporation
  - SoftBank (Japan)
Recent multilateral arrangements in NEA

• The pre-feasibility study of the China-Korea-Russia-Japan project, 2016-2017
  – State Grid Corporation of China
  – Korea Electric Power Corporation
  – Rosseti
  – SoftBank Group Corp

• Expert Working Group on Energy Connectivity was established by UN ESCAP, 2018-
From bilateral - to multilateral arrangements in NEA

Bilateral arrangements

Multilateral arrangements
Organizational and regulatory infrastructure for the development of NEA power interconnections

NEA level

- NEAwide intergovernmental body

- Multilateral MOUs on NEA interconnection

Country by country level

- Bilateral agreements and MOUs on interconnections

- Bilateral intergovernmental commissions

Governmental activity

Non-Governmental activity

Governmental and Non-Governmental activities
THANK YOU VERY MUCH!