Comments
on Super Grid Development

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<Personal Opinion>

♦ NEA-PSI : North-East Asian Power System Interconnection

♦ Meaning of PSI : Roadmap for Sustainable Peace & Economics

♦ So Many Interconnection Scenarios ... Multilateral & Bilateral

♦ Necessary on Technical & Economic Detailed Feasibility Study

♦ Practical Inter-Governmental & Utility Talks are necessary

♦ To be determined Topics for Asian Energy Highway
“Power System Interconnection & Cross-Border Trade”

- Enhancement the sustainable Regional Peace parade
- Economic Win-Win game & Technical Reserve Supporting System, But Positive & Negative Points in Energy Security
- No more Exist Border on power trading

Grid: Technically Advanced ICT Power System Web

- Most Advanced Distributed Networking
- Hyper-Navigation Type Service
- Grid Computing using AI
Many Studies performed on NEA-CBT since 2000 (Multilateral PSI)

- NEAREST (KERI, ESI 2003)
- Asian Super Grid (JREF 2011)
- GOBITEC (ECS 2014)
- Northeast Asia Supergrid (KEPCO, KEEI with Skoltech, 2014)
- GRENATEC (HRENATEC 2010)
- Asia Pacific Power Grid (Japan Policy Council 2011)
- And so on ...

Bilateral PSI Scenarios

- KO-CH, KO-JP, KO-RU in terms of KOREA
- CH-RU, RU-JP ...
<Common Issues for PSI & Deregulation>

- **[Technical] Transmission planning & Operation**
  - Planning: Capacity, Voltage, AC/DC, System design
  - Analysis the interconnected system security (short-term)
  - Evaluation the generation/load adequacy (short and long-term)

- **[Economic/Environmental] Generation tracking and electricity market**
  - Creation of international electricity market
  - Electricity and CO2 trading (Green market)
  - Pricing: Fixed or Negotiated pricing

- **Institutional & Marketable Issue**
  - Institutional considerations
  - Market Power & International Negotiation

- **Energy Security & Political & Financial considerations**
  - Intra political & financial factor (Deregulation)
  - Inter political & financial factor (Interconnection) & Energy Security