

# Expert Working Group Meeting on Energy Connectivity

VIETNAM

UNCC, Bangkok  
13 December 2017

# Vietnam

The Major Challenges in promoting Cross Border Electricity Connectivity  
**(Study to address barriers to interconnections, cross-border trade and investment by the 5 HAPUA Working Groups-ASEAN)**

## ASEAN

- ✓ Harmonization of legal and regulatory framework for bilateral and cross-border power interconnections and trade
- ✓ Financial Model of Public-Private Partnership (PPP) for ASEAN Power Project
- ✓ Institutional and Contractual Arrangements for ASEAN Power Grid  
Multilateral Trade

# Vietnam

	Exist	On-going (Up to 2021)	Future	Total
<b>Northern System</b>	<b>4,152</b>	<b>2,469</b>	<b>15,774-18,924</b>	<b>22,395-25,545</b>
9 Thailand - Lao PDR	3,584	1,879	1,865	7,328
10 Lao PDR -Vietnam	248	290	-	538
11 Thailand - Myanmar	-	-	11,709-14,859	11,709-14,859
12 Vietnam - Cambodia	200	-	-	200
13 Lao PDR - Cambodia	-	300	-	300
14 Thailand - Cambodia	120	-	2,200	2,320
<b>Southern System</b>	<b>450</b>	<b>600</b>	<b>1,800</b>	<b>2,850</b>
1 P.Malaysia - Singapore	450	-	600	1,050
4 P.Malaysia - Sumatra	-	600	-	600
5 Batam - Singapore	-	-	600	600
16 Singapore - Sumatra	-	-	600	600
<b>Eastern System</b>	<b>230</b>	<b>30-100</b>	<b>600</b>	<b>860-930</b>
6 Sarawak - W.Kalimantan	230	-	-	230
7 Philippines - Sabah	-	-	500	500
8 Sarawak - Sabah - Brunei	-	30-100	100	130-200
15 E.Sabah - E.Kalimantan	-	-	-	-
<b>Northern - Southern System</b>	<b>380</b>	<b>100</b>	<b>300</b>	<b>780</b>
2 Thailand - P.Malaysia	380	100	300	780
<b>Southern - Eastern System</b>	<b>-</b>	<b>-</b>	<b>1,600</b>	<b>1,600</b>
3 Sarawak- P.Malaysia	-	-	1,600	1,600
<b>Grand Total</b>	<b>5,212</b>	<b>3,199-3,269</b>	<b>20,074-23,224</b>	<b>28,485-31,705</b>

# Vietnam

1. Sharing of stakeholder policies, issues and potential solutions
  - Regulations, Tariff and Charges including Third Party Access
  - Market/Industry Structure
  - Regulatory Framework
2. Cooperate to address common interest on cross-border issues
  - Regulatory Framework and Policies, Purchase Power Agreements (PPAs) and Asset Development
  - Taxation
3. Develop financing modalities for ASEAN Projects
  - Finance modalities, viability and sustainability of the business within member countries
4. Study and development of procurement strategies
  - Best practices in procurement of Major Equipment
  - Materials Management

# Vietnam

Vietnam – Laos: 02 lines (220kV):

- Line 1: 220kV Xekaman 3-Thanh My, distance 89km, from Xekaman 3 Hydro power plant (250MW) to Vietnam

(Xekaman 3 is facing some technical issues to be solved in 2019).

- Line 2: 220kV Xekaman 1 - Pleiku 2, distance 189km from Xekaman 1 Hydropower plant (290MW) and Xekaman Xanxay Hydro power plant (32MW).

- Purchase capacity from Laos:

2015: 0,54 bil. kWh,

2016 ~1,057 bil. kWh.

# Vietnam

Vietnam – Cambodia: 01 lines (220kV):

Line 220kV Chau Doc – Ta Keo.

- Cambodia purchase from Vietnam (200MW) and distribute to Phnomphenh and sub-area.
- Recently line operation capacity is reduced as some new power plants have been completed in Cambodia (up to 900MW).
- Electricity du Cambodia propose to export back to Vietnam, both sides are working on discussion and negotiation.

# Vietnam

- Role of regional cooperation in addressing the challenges.

+ ASEAN ENERGY COOPERATION

+ ASEAN + 3 (JAPAN, KOREA AND CHINA)

+ EAST ASIA COOPERATION ON ENERGY

+ ...

- What should be the main building blocks in developing the regional roadmap.

+ BILATERAL CONNECTION

+ Share border countries

# THANK YOU

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