ข้อมูลสมรรถนะของเครื่องกำเนิดไฟฟ้า (สำหรับโรงไฟฟ้าที่ใช้เครื่องกำเนิดไฟฟ้าแบบซิงโครนัส)

Generator Data

Number of generators : _____

Total installed capacity (MW) : _____

Total contacted capacity (MW) : _____

	1st Unit (or 1st Type)	2nd Unit (or 2nd Type)	3rd Unit (or 3rd Type)
Plant type: TH, CC, CHP, GT, Hydro, Biomass, Biogas			
Unit type:			
Number of generators classified by unit type:			
Installed capacity (MW)			
Contracted capacity (MW)			
Continuous operating capacity (MW)			
Nominal MVA of each generator (MVA)			
Nominal Voltage of each generator (kV)			
Lagging power factor			
Leading power factor			

Generator Data For Power System Study

- Items marked with "*" must be identified by the applicant.
- Items marked with "§"must indicate within a given time. If applicant does not specify inform the EGAT is about values. And the applicant must accept all the risk.

	1st Unit (or 1st Type)	2nd Unit (or 2nd Type)	3rd Unit (or 3rd Type)
X_d– Generator Direct Axis Positive Phase Sequence Synchronous Reactance * : (pu machine MVA base)			
X_q– Generator Quadrature Axis Positive Phase Sequence Synchronous Reactance § : (pu machine MVA base)			
X'_d– Generator Direct Axis Transient Reactance (Unsaturated) * : (pu machine MVA base)			
X'_{ds} – Generator Direct Axis Transient Reactance (Saturated) * : (pu machine MVA base)			
X'_q – Generator Quadrature Axis Transient Reactance (Unsaturated) § : (pu machine MVA base)			
X'_{qs} – Generator Quadrature Axis Transient Reactance (Saturated) § : (pu machine MVA base)			
X''_d– Generator Direct Axis Sub-transient Reactance (Unsaturated) * : (pu machine MVA base)			
X''_{ds} – Generator Direct Axis Sub-transient Reactance (Saturated) * : (pu machine MVA base)			
X''_q – Generator Quadrature Axis Sub-transient Reactance (Unsaturated) § : (pu machine MVA base)			
X''_{qs} – Generator Quadrature Axis Sub-transient Reactance (Saturated) § : (pu machine MVA base)			
X_l– Amature leakage reactance § : (pu machine MVA base)			
T'_{do} – Generator direct axis transient Open circuit time constant § : (Sec)			

T''_{do} – Generator direct axis subtransient Open circuit time constant § : (Sec) _____ _____ _____

T'_{qo} – Generator quadrature axis transient Open circuit time constant § : (Sec) _____ _____ _____

T''_{qo} – Generator quadrature axis subtransient Open circuit time constant § : (Sec) _____ _____ _____

H – Inertia of complete turbo-generator * : (MW-Sec/MVA) _____ _____ _____

Saturation factor at 1.0 per unit terminal voltage § : _____ _____ _____

Saturation factor at 1.2 per unit terminal voltage § : _____ _____ _____

ข้อมูลหม้อแปลงและสายส่งสำหรับการเชื่อมต่อระบบไฟฟ้า (สำหรับโรงไฟฟ้าทุกประเภท)

Generator transformer / Distribution transformer / Transmission line

Generator Transformer

Transformer Name: _____ Substation : _____

Manufacturing By: _____

No.Phase _____

Connection (vector group) _____

No.Winding _____

Frequency (Hz.) _____

KVA.Rating _____

Nominal Voltage (kV)

H.V.Winding _____

L.V.Winding _____

T.V.Winding _____

	Max.Tap	Rated Tap	Min.Tap	(At Base MVA)
% Impedance Voltage				
HV.to LV.				
HV.to TV.				
LV.to TV.				

Load Tap-Changing

Tap-Changing Type ☐ **On Load Tap** ☐ **Off Load Tap**

Load Tap Change At ☐ **High Volt** ☐ **Low Volt**

At Tap No. _____ Maximum Voltage (v.) _____

At Tap No. _____ Normal Voltage (v.) _____

At Tap No. _____ Minimum Voltage (v.) _____

At Tap No. _____ **(For Normal Operation)**

Neutral Grounding

Neutral Grounding : ☐ SOLID ☐ UNGROUND

Neutral Grounding Equipment : ☐ HAVE ☐ NONE

Neutral Grounding Type : ☐ RESISTER ☐ REACTOR

Connected AT : ☐ HIGH SIDE ☐ LOW SIDE

Size(OHMS) : _____

Voltage Rated (V.) : _____

Current Rated (A.) : _____

Reference Data From :_ _ _ _ _ _ _ _ _

Distribution transformer

Number of distribution transformer : _____

Nominal MVA for transformer (MVA) : _____

Nominal Voltage of each transformer (kV) HV / LV : _____

% Impedance for two-windings transformer (at rated MVA base) : _____

	HV / LV 1	HV / LV 2	HV / LV 3
% Impedance for three-windings transformer (at rated MVA base) :	_____	_____	_____

Transmission line

The length of the transmission line from distribution transformer to connection point. (km)	_____
Nominal Voltage of transmission line (kV)	_____
Conductor Type	_____
Positive Sequence Impedance (R+jX) per Km (or p.u. and MVA base)	_____
Zero Sequence Impedance (R+jX) per Km (or p.u. and MVA base)	_____
Positive Sequence Charging Admittance (B) per Km (or p.u. and MVA base)	_____
Zero Sequence Charging Admittance (B) per Km (or p.u. and MVA base)	_____
Positive X/R Ratio at Connection Point	_____
Zero X/R Ratio at Connection Point	_____