

A3. Eolic (Wind Park) Power Plant

1	Applicant Name	
2	Contact Name	
3	Address and Applicant Details	

a) Connection

1	Connection Point	Indicates a single line diagram of the proposed Connection to the Transmission System in a hard and a soft copy.
2	Location	
3	Nominal Voltage	(kV) Voltage level in Connection points to the Transmission System
4	Eolic Generator Type	Technical description of the generator, its type, etc.,
5	Meteorology Data	Provide complete meteorological data for the area in which you will generating units are installed.

b) Plant Capacity

1	Total Capacity of the Plant (MW)	Condition of existing plants. Capacity of new plants, divided in phases
2	Number of units and their capacity	n x MW

c) Data of Generating Units

1	Working Regimes	Working parameters in Maximum, Minimum, Averages.
2	Turbines	Condition, types, capacity.

3	Generator (Alternator)	<p>Type</p> <p>Nominal characteristics (S_n, P_n in MVA and MW)</p> <p>Minimum power that the generator can produce (P_{min} in MW) Generator reactive power output limits (Q_{max}, Q_{min} in MVar)</p> <p>Nominal Voltage (U_n in kV)</p> <p>Power Nominal Factor($\cos\phi$)</p> <p>Capacity for Reactive Power (MVar)</p> <p>Short Circuit Power (MVA)</p> <p>Direct synchronous reactance, X_d (in p.u of MVA)</p> <p>Transverse synchronous reaction X_q (in MVA p.u.)</p> <p>Direct Transient Reactance, X'_d (in MVA p.u.)</p> <p>Direct Transient Reaction, X''_d (in MVA p.u.)</p> <p>Quadrature Transient Reactance, X''_q (in MVA p.u.)</p> <p>Negative sequence Reactance, X_2 (in MVA p.u.)</p> <p>Zero sequence Reactance, X_0 (in MVA p.u.)</p> <p>Nominal Speed (N_n in rot/min)</p> <p>Inertia Factor H (MW Sec/MVA)</p> <p>Volant moment (GD^2 in Tm^2) or Inertia Constant H (sek)</p> <p>Mechanical time constant, T'_m (in sec)</p> <p>Direct transient time constant for open winding in stator, T'_{do} (in sec)</p> <p>Direct sub-transient time constant for stator winding open, T''_{do} (in sec)</p> <p>The quadrature sub-transient time constant for the stator winding of open, T''_{qo} (in sec)</p> <p>The direct transient time constant for the stator winding of tied in short, T'_d (in sec)</p> <p>Direct sub-transient time constant for stator winding short, T''_d (in sec)</p> <p>The quadrature sub-transient time constant for the stator winding of connected in short, T''_q (in sec)</p> <p>The time constant of the stator winding connected in short, T_s (no sec)</p>
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4	Transformer of Generator-Transformer Block	Type Nominal Power MVA Nominal Voltage kV Nominal Currents(HV/LV) in A Voltage Adjustment (Number of steps and steps $\pm\%$); Type of Tap changer (off-load/on-load) Vector group Type of voltage regulator (off load, on load) Short circuit impedance in% On Load losses in kW Off Load losses in kW Off Load current in% Cooling type (ONAN/ONAF)
5	Data on MV Network	Scheme of connection of generating units between them in medium voltage specifying: Nominal mains voltage TM Lengths of connecting lines Electrical conductor sections (cable / overhead)

d) Power for own needs

1	Total Power in MW and required MVA for auxiliary equipment	In MW and MVA
2	Total external power for Black-Start	In MW

Note 2: For Generator types not included in the above types, data will be submitted according to the specific requirements specified by the OST.