Non-Technical Summary of the Project

A Wind Energy Power Plant is planned in Çelin Dağı, Atalan Tepe, Bahçekuyu Tepe, Büyükkuşça Tepe, Akdağ Locations on Aydın N19-d3 ve N19 - d4 map sections with 1/25.000 scale within the borders of Muğla Province, Bodrum District by Borares Elektrik Üretim A.Ş. The decisions of "EIA Not-Required" taken earlier in relation to the project are provided in Annex-7 and they are listed in chronological order as follows:

1. "EIA Not Required" decision no. V529 with the letter dated 15/09/2009 and no. 620-2175; subject of the decision; 30 Turbines, each of which is 30 in generation field with 1080 m2;
2. Coordinates of activity area constituting the basis for the decision of "EIA Not-Required" have been reported with the letter dated 13/05/2011 and no. 706-2319;
3. Notification as the project owner "Borares Enerji Elektrik Üretim A.Ş." has been accepted with the letter subject of change of the Project owner no. 05/12/2012 and no. 13365 and validity of the decision of "EIA Not-Required" has been reported;
4. "EIA Not Required" decision no. V529 with the letter dated 27/05/2014 and no. 7011 maintains its validity; subject of the decision; Approval decision for 16 turbines with total 30 MW capacity as 4 pcs 2,85 MW and 12 pcs 1,7 MW instead of 30 turbines, each of which is 1 MW; it has been reported that it shall be adhered to the provisions of "The Communiqué on Method of Identification of Power Plant Site in Wind Energy Based Electricity Generation Plants" issued by Renewable Energy General Directorate;
5. "EIA Not Required" decision no. with the letter dated 31/10/2014 and no. 14862 maintains its validity; subject of the decision; Approval decision for 13 turbines with total 30 MW electrical installed power 30 MW mechanical installed power
   as 8 pcs 2,75 MW and 5 pcs 1,6 MW instead of 16 turbines with total 30 MW capacity as 4 pcs
   2,85 MW and 12 pcs 1,7 MW;
6. Coordinates relating to the decision of "EIA Not-Required" with the letter dated 31/10/2014 and no.
   14862 have been reported.

A plant that shall bring up mechanical power to 30,15 MW in a way that electrical installed power shall remain the same with 30 MW on the same field with the decision taken as "EIA Not-Required" dated 31/10/2014 and no. 14862 within the scope of this project presentation file shall be installed. Total 7 wind turbines (total installed power is 30,15 MWm) with 2,85 MW power each and 6 wind turbines with 1,7 MW power each (total installed power is 30,15 MWm) shall be constructed within the scope of the project. In addition to this, place of the turbines within the project field has not been altered. Turbine coordinates are given in Annex-1. It is planned to generate average 122.500.000 MWh/year energy in Planned Wind Energy Power Plant.

Electrical energy generated in the plant with 49 years of service life is envisaged to be connected as input-output to Bodrum-Yeniköy Electrical Transmission Line with 154 kV high voltage (HV) transmission line. (See Part I).

Project Cost is envisaged as 110 million TL. Other cost items constituting the project cost are provided in detail in the following table.

KAROVA RES	
30,15 MWm / 30 MWe	
BUDGET (without VAT)	
Turbine Equipment	71.973.933 TL
Turbine Installation	3.232.425 TL
Electricity	10.215.163 TL
Construction	12.358.251 TL
Logistics	4.074.426 TL
Energy Transmission Line	1.550.000
Other	6.380.490 TL
TOTAL	109.784.688 TL

Wind turbines are GE2.85-103 and GE1.7-103 type turbines; technical specifications of which are provided in Table I-8 and representation of which is provided in Figure I-7. (See Part I.1.b). Turbine units within the scope of the project are anemometer and weather vane, flap, disc brake, control unit, gearbox, generator, cooling unit, high speed axle/shaft, low speed axle/shaft, hydraulic system, hub, machine location, pitch, propeller, tower and tilt mechanism.

Approximately 45 personnel shall work throughout construction works of the project. Prefabricated container shall be erected for the needs of personnel majority of whom is planned to be selected from the close residential areas; this container shall be removed at the end of construction works. Number of personnel to be employed during operation phase is 12 and construction site building shall offer service for 12 persons. (see Part I.1.d). Construction site area to be used within the scope of the project is 400 m2.
Coordinates of construction site area are provided in Annex-1 and Topographic Map on which construction site area is processes is provided in Annex-2.

The area to be used for RES envisaged to be constructed by Borares Enerji Elektrik Üretim A.Ş. is 50 m × 50 m = 2.500 m² for each wind turbine. Use of any land is not in question other than the areas on which wind turbines shall be placed. (See Part I.2.a).

Water to be needed throughout construction and operation process shall be provided from picnic areas and/or water networks in the close residential areas and shall be carried to operation area via tankers. (See Part I.2.b). Waste waters shall be of only domestic nature in construction phase and shall be stored in sealed cesspool. (See Part I.3.a, Annex-19). 8m_3 cesspool with 2 compartments shall be made for domestic wastewaters. Domestic wastewaters accumulated in cesspools shall be disposed of by way of drawing with sewage truck
by Muğla Metropolitan Municipality, Water and Sewage Administration General Directorate, Water and Channel Operation Department. Letter of opinion in question is provided in Annex-14.

There shall be no need for electrical energy during construction phase. During operation, it shall be met with the energy generated from REST installed availably. (See Part I.2.c).

Glass, paper, plastic type wastes that are possible for solid waste to be recycles shall be accumulated and collected and shall be taken to landfill of Torba Neighbourhood of Bodrum Municipality. (See Part I.3.b). Letter of opinion obtained in this regard from Bodrum Municipality, Cleaning Works Directorate is provided in Annex-14.

Excavation volume required to be performed for each wind turbine in construction phase of RES is envisaged to be 3.750 m^3. Excavation emerged during construction works shall be used in landfills in foundations of turbine feet and in this way, a vast majority of excavation wastes shall be consumed again within the project. Other section shall be disposed of by adhering to the provisions of "Regulation on Controlling Excavation Soil, Construction and Debris Wastes" effectuated by being published in the Official Gazette numbered 25406 and dated 18/03/2004. (See Part I.4.b).

Waste oils likely to emerge during maintenance works in operation phase of the plant shall be given to the licensed firms for disposal purpose pursuant to the provisions of "Regulation on Controlling Waste Oils" effectuated by being published in the Official Gazette no. 30/08/2008 and no. 26952. (See Part I.3.b).

It shall be adhered to the provisions of "Regulation on Controlling Vegetable Waste Oils" dated 06/06/2015 and no. 29378 within the scope of the project.

Dust formation shall occur during excavation works to be performed throughout the land preparation and construction phases. All vehicles carrying excavation and other similar materials shall cover the construction materials causing dusting with a coat that shall preclude dusting a specified in the regulations. All vehicles shall adhere to speed limits and shall show due diligence for preventing dusting while using especially stabilized and/or temporary roads. (See Part I.3.c).

Dust emissions occurred within the scope of the works of "Dismantling+Loading" and "Transportation+Unloading+Storage" procedures during the site preparation phase are total 0,92 kg/hour with the most pessimistic scenario. (all turbines are construction in very close locations to one another and at the same time). This value shall be taken lower with humidification works. In this context, dust emission estimated to be occur depending on excavation remains below 1,0 kg/hour limit value set forth in SKHKKY Annex-2 Table 2.1 (See Part I.3.c).

Emissions arising from the machines used in construction phase shall be temporary. In addition, total emission volume expected to occur is quite below emission volume likely to arise from any highway and is not to the extent that shall create significant effects on air quality. Thus, no measurement and monitoring program is envisaged in any air quality for construction phase. (See Part I.3.c)

Sound pressure levels after 50 m in the worst conditions to noise levels likely to arise from the construction machines and other equipment during the construction phase (all vehicles working at the same time and continuous working in operation hours)remain below 70 dBA. For this reason, 70 dBA limit given in Article 26 of Ambient Noise Assessment and Management Regulation shall be provided from 50 m. (See Part I.3.d).

It shall be considered that sound level likely to occur during operation of each wind turbine shall be 123,9 dBA and distribution of sound level as to distance is provided in Figure I-10. The closest residential area to the plant is Çocuk Mezarlığı Neighbourhood located at approximately 950 m distance. Sound level estimated to occur in these area is approximately 45 dBA-40 dBA. This value is even below the limit value (50 dBA) specified within the scope of night for the "areas populated with educational, cultural, healthcare, summer house and camp sites from the uses sensitive to noise" within Annex-VIII Table 4 Ambient Noise Assessment and Management Regulation (Environmental Noise Limit Values for Industrial Plants). Within this context, it is not possible for noise within the closest residential area to pose any adverse effect while alll units are working in full capacity in operation phase of Karova RES project. (see Part I.3.d).

Vast majority of the soils located within the project site and impact area:

- Red-Brown Mediterranean Soils, Colluvial Soils, Non-Calcareous Brown Forest Soils
- I., IV., VI., and VII. class utilization capability,
- 3rd degree (severe) erosion,

The project site and its vicinity environment do not have any National Park and Special Protection Area. (See Part II.2.e).

Population of Muğla Province was 894.509 (see Table II-10) and Bodrum District was 152.440 according to Address-Based Population Registration System carried out by Turkish Statistics Institution (TUIK). The number of men and women in Muğla Provice is approximately equal. (51 % male-49 % female). 43,9 % (373.937) of total population of Muğla province inhabit in province/district centers and 56,1 % (477.208) of which inhabit in villages. This value became 100 % in 2013 since towns and villages were converted into neighbourhood status of district populations as of 2012 and this rate for Turkey is 91,3 %. (See Part II.2.f).

The project site and its vicinity environment do not have any historical, cultural and similar significant area. However, five 1st degree archeological protected sites have been registered by Muğla Culture Heritage Protection Regional Institution Directorate on the project site. Coordinate information of these area is provided in opinions of the institution in Annex-11. (See Part II.2.g). In cases where any archaeological finding is encountered during construction and operation works to be executed within the scope of the project, the works shall be discontinued and relevant Museum Directorate and other institutions and organizations shall be immediately informed about the issue by the project authorities. Works shall then continue in line with the opinions Directorate authorities.

Wind power plant does not cause any CO2, NOx and SO2 emission.(See Part III).

It is envisaged that this project shall provide benefit and contribution to our country since some portion of energy request shall be met and this project is advantageous in terms of noise, dusting, appearance, emissions as described in the articles above.