

**To:**

**Energy Community Secretariat  
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**CC:**

**Commission of the European Communities  
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71 000 Sarajevo  
BOSNIA AND HERZEGOVINA**

**Delegation of the European Union to Bosnia and  
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BOSNIA AND HERZEGOVINA**

**Ministry of Spatial Planning, Construction and Ecology of  
the Republika Srpska  
Trg Republike Srpske 1  
78 000 Banja Luka  
BOSNIA AND HERZEGOVINA**

**Ministry of Foreign Trade and Economic Relations of Bosnia  
and Herzegovina  
Trg BiH 1  
71 000 Sarajevo  
BOSNIA AND HERZEGOVINA**

**COMPLAINT  
TO THE ENERGY COMMUNITY SECRETARIAT AGAINST BOSNIA  
AND HERZEGOVINA CONCERNING FAILURE TO COMPLY WITH ENERGY  
COMMUNITY LAW**

**1. Name of complainants:**

- a) Centar za životnu sredinu
- b) Fundacja ClientEarth Poland

**2. Represented by:**

- a) Ms Nataša Crnković
- b) Mr Marcin Stoczkiewicz

**3. Nationality:**

- a) Bosnia and Herzegovina
- b) Polish

**4. Address or Registered Office:**

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**6. Field and place(s) of activity:**

a) Center for Environment is a non-profit, non-partisan, Banja Luka-based NGO dedicated to the protection and improvement of the environment. Its goals and activities are to raise awareness on environment, protection and improvement of the environment, promoting and advocating the principles of sustainable development, popularization of volunteering and advocating for the involvement of civil society in the decision-making processes concerning the environment.

b) Established in 2007, ClientEarth is a non-profit environmental law organisation headquartered in London, with offices in Brussels and Warsaw. It is comprised of activist lawyers working at the interface of law, science and policy to uphold the right of citizens to live and work in a healthy environment. ClientEarth's programme areas cover EU law and justice, climate change and energy policy, health and environment, and the protection of oceans, biodiversity and tropical forests. ClientEarth works to protect the environment through advocacy, litigation and research using the best scientific and policy analysis when choosing strategic directions. The legal action, whether in advocacy or in cases before courts and administrative bodies, is built on solid law and science.

**7. Party alleged by the complainant not to have complied with Energy Community Law:**

Bosnia and Herzegovina,

including the following administrative bodies:

The Ministry of Spatial Planning, Civil Engineering and Ecology of the Republika Srpska;

The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina;

## **8. Fullest possible account of facts giving rise to the complaint:**

### **Thermal Power Plant Stanari – project description**

In the Republika Srpska entity, approximately 70 km east of Banja Luka, Energy Financing Team (EFT Group) is building the 300 MW Stanari lignite-fired thermal power plant (TPP), the first privately-owned power plant in the Balkans.

The project value is estimated at over €500 million with a €350 million loan from the China Development Bank (CDB) and EFT to finance the remaining sum from its own equity. The project is being built by China's Dongfang Electric Corporation. The project company, EFT Rudnik i Termoelektrana Stanari d.o.o., will sell all production, estimated at around 2 TWh per annum, to EFT AG, the main trading arm of the EFT group based in Switzerland, with a portion of this power to then be sold to Swiss utility Alpiq, under a long-term power purchase agreement.

EFT was awarded a 30-year concession for construction and operation of a 410 MW lignite fired thermal power plant in Stanari by the Republika Srpska government in February 2008. The environmental permit was granted in May 2008. The Regulatory Commission for Energy of Republika Srpska granted the EFT Group a licence for the construction for TPP Stanari in August 2008.

After previous talks with the EBRD and French company Alstom failed, in 2009 EFT started negotiating with China Development Bank (CDB), and EFT accepted the technological changes proposed by the Dongfang Electric Corporation (DEC).

In November 2010, EFT received an approval to modify the license for the construction of TPP Stanari. The new amended permit reduced the nominal capacity from 420 MW to 300 MW, annual output from 3,000 GWh to 2,000 GWh and the project's gross efficiency from the original 43% to 38.5%.

After several prolongations, due to the change of financiers and contractors, construction started in May 2013 and is expected that the testing startup might happen during 2015 and that the plant may get its operating permit during 2016.

The coal will come from two locations which are both in close vicinity of the TPP, open pits of Raškovac and Ostružnja in Stanari basin.

Although the environmental impact assessment states that the macrolocation of Stanari TPP contains no larger settlements the closest settlement is Teslic (around 7000 people), which is located some 17 km south of the location and Doboj (24 000 inhabitants) 25 km from the location. The macrolocation includes smaller places like Stanari (1000 inhabitants), Gornja and Donja Ostružnja, Raskovci and Dragalovci. Larger towns apart from Doboj in Stanari's proximity include: Gracanica (around 15 000 inhabitants, 38 km east of Stanari), Zavidovici (around 15 000 inhabitants, 42 km southeast of Stanari). Zenica – the 4<sup>th</sup> largest city in Bosnia and Herzegovina is located some 60 km south of Stanari. Stanari TPP is situated near several watercourses, comprising the river Mala Ukrina with its tributaries.

### **Administrative proceedings:**

- On February 15, 2008 the Government of Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a decision on the concession for the construction

and operation of the Stanari TPP with installed power of 410 MW (decision number 04/1-012-291/08).

- On May 19, 2008 the Ministry of Spatial Planning, Civil Engineering and Ecology of the Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a decision on the environmental permit for the Stanari TPP (decision number 15-96-70/08). The permit was issued:
  - on the land plot determined by the subdivision plan, a constituent part of the zoning and technical conditions, prepared by the Urban Planning Institute of Republika Srpska, May 2007;
  - for the chosen technology for combustion of pulverised coal with supercritical steam parameters;
  - for a capacity of 410 MW.
- On August 7, 2008 the Regulatory Commission for Energy of Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a licence for the construction of the Stanari TPP with installed power of 410 MW, annual output of 3,000 GWh and gross efficiency of 43% (decision number 01-299-10/08).
- On September 9, 2010 the Ministry of Spatial Planning, Construction and Environment of the Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a decision on changes in the decision on the environmental permit for the Stanari TPP:
  - on the chosen technology for coal combustion with subcritical steam parameters in a circulating fluidised bed boiler (CFB).
  - of a capacity of 300 MW.
- On November 26, 2010 the Regulatory Commission for Energy of Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a decision on changing the licence for the construction of the Stanari TPP. The installed power was changed from 410 MW to 300 MW, annual output from 3,000 GWh to 2,000 GWh and the project's gross efficiency from 43% to 38.5%. (decision number 01-530-11/10)
- On November 7, 2011 the Ministry of Spatial Planning, Civil Engineering and Ecology of the Republika Srpska issued EFT Rudnik i Termoelektrana Stanari d.o.o. with a construction permit for the Stanari TPP.

**9. The provisions of Energy Community law which the complainants consider to have been infringed by the Party concerned:**

**Article 12 read in conjunction with Article 16 of the Treaty establishing the Energy Community**

**Article 12**

*Each Contracting Party shall implement the *acquis communautaire* on Environment in compliance with the timetable for the implementation of those measures set out in Annex II.*

**Article 16**

*The “*acquis communautaire on environment*”, for the purpose of this Treaty, shall mean (i) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC of*

*3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003, (ii) Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC, (iii) Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants, and (iv) Article 4(2) of Directive 79/409/EEC of the Council of 2 April 1979 on the conservation of wild birds.*

## Annex II

- 1. Each Contracting Party shall implement Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directives 97/11/EC of 3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003, on the entry into force of this Treaty.*
- 2. Each Contracting Party shall implement Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC by 31 December 2011.*
- 3. Each Contracting Party shall implement Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants by 31 December 2017.*
- 4. Each Contracting Party shall implement Article 4(2) of Directive 79/409/EEC of the Council of 2 April 1979 on the conservation of wild birds on the entry into force of this Treaty.*

Article 12 read with Article 16 of the Treaty establishing the Energy Community have been infringed by non-implementation of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC of 3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 (EIA Directive) and in particular:

### Article 3 of the EIA Directive

*The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11, the direct and indirect effects of a project on the following factors:*

- human beings, fauna and flora;*
- soil, water, air, climate and the landscape;*
- material assets and the cultural heritage;*
- the interaction between the factors mentioned in the first, second and third indents.*

In the Stanari TPP environmental permit there are only data on emission limit values of some pollutants emitted to the atmosphere, *i.e.* SO<sub>2</sub>, NO<sub>x</sub>, dust and CO. The other data are unavailable, although they are crucial for evaluation of the environmental impact of the planned facility in the meaning of Article 3 of the EIA Directive.

In particular, the lacking data are as follows:

- a) annual amounts of gaseous-dusty pollutants emitted to air, *i.e.* the masses of SO<sub>2</sub>, NO<sub>x</sub>, dust

and CO introduced to the atmosphere every year;

b) emission concentrations and annual amounts of such pollutants as chlorides, sulfates and heavy metals (Zn, Cd, Hg, Pb, Cu, Ni), emitted to waste waters;

c) annual amounts of solid waste.

Without this information, the correct assessment of environmental impact of a lignite-fired power plant is impossible.

Article 4 of the EIA Directive

*1. Subject to Article 2 (3), projects listed in Annex I shall be made subject to an assessment in accordance with Articles 5 to 10.*

Annex I

*(...) 2. Thermal power stations and other combustion installations with a heat output of 300 megawatts or more*

*(...) 22. Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex.*

After the issuance of the Stanari TPP environmental permit on 19 May 2008, the project of this power plant was changed, which was confirmed by the Decision on Changes to the Environmental Permit issued on 9 September 2010. No environmental impact assessment on the changes to the project was done before issuing the decision.

The principal changes in the Stanari TPP environmental permit concern:

a) the technology of combustion (one with pulverised coal with supercritical steam parameters was replaced by that with subcritical steam parameters in a circulating fluidised boiler);

b) decrease of electric power - 300 MW<sub>e</sub> instead of 410 MW<sub>e</sub> and, although neither the previous version of the Stanari PP Environmental Permit nor the present one states anything about thermal efficiency a decrease of thermal efficiency has occurred simultaneously with the decrease of electric power.

The first change will have an ambiguous effect. Generally, one can expect that the replacement of pulverised coal combustion by circulating fluidised bed combustion will increase SO<sub>2</sub> emission and decrease NO<sub>x</sub> emissions. Pressurised fluidised bed combustion is characterized by higher sulphur dioxide emission and lower nitrogen oxides emissions, comparing to pulverised combustion. Thus to be in compliance with Industrial Emissions Directive, according to the previous project (pulverised coal combustion), Stanari TPP should emit a maximum of 150 mg/m<sup>3</sup> of SO<sub>2</sub> and 200 mg/m<sup>3</sup> of NO<sub>x</sub>, while according to the present one (circulating fluidised bed combustion) – maximum 200 mg/m<sup>3</sup> of SO<sub>2</sub> and 150 mg/m<sup>3</sup> of NO<sub>x</sub>. The net environmental effect of such change is debatable, however, the fact of higher emissions of one crucial pollutant (SO<sub>2</sub>) and lower emission of another one (NO<sub>x</sub>), requires, a new environmental impact assessment.

The second change, i.e. the decrease of electric power from 410 MW<sub>e</sub> to 300 MW<sub>e</sub>, will only seemingly decrease the environmental impact of the whole power plant. In fact, this change is probably associated with a decrease of the net thermal efficiency, this phenomenon being generally typical for replacement of pulverized combustion by fluidized bed combustion. In consequence, the annual emissions per unit of electric energy will be, most likely, higher than expected during the environmental permit issue. If thermal efficiency of the concerned power plant is decreased (e.g. when the thermal power remains the same while the

electric power becomes smaller), the respective environmental balance becomes worse – although the same amount of pollutants is formed (it is determined by the thermal power, i.e. by the amount of fuel), much less electricity is produced. By other words, more tonnes of SO<sub>2</sub>, NO<sub>x</sub> and dust must be emitted to the atmosphere in order to produce 1 MWh of electricity (i.e. to replace the same amount of energy from other sources).

The above described changes on Stanari TPP are so large, from the viewpoint of their environmental impact, that this project can be regarded as a new one, compared to the time when the environmental permit was issued.

#### Article 5 of EIA Directive

*(...) 3. The information to be provided by the developer in accordance with paragraph 1 shall include at least:*

*(...) — an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects.*

The investor should discuss both alternative combustion technologies, i.e. pulverised coal and supercritical steam parameters versus subcritical steam parameters in a circulating fluidised boiler, and evaluate which is better for the environment and why. In the case of Stanari TPP project the pulverised coal with supercritical steam parameters technology was replaced by that with subcritical steam parameters in a circulating fluidised boiler without assessing the impact of each technology on environment and thus the choice was made without taking into account the environmental effects.

#### **Article 15 read in conjunction with Article 16 of the Treaty establishing the Energy Community**

##### Article 15

*After the entry into force of this Treaty, the construction and operation of new generating plants shall comply with the *acquis communautaire* on environment.*

##### Article 16

*The “*acquis communautaire* on environment”, for the purpose of this Treaty, shall mean (i) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC of 3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003, (ii) Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC, (iii) Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants, and (iv) Article 4(2) of Directive 79/409/EEC of the Council of 2 April 1979 on the conservation of wild birds.*

Article 15 read with Article 16 of the Treaty establishing the Energy Community have been infringed by non-compliance with Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air

from large combustion plants (LCP Directive) and in particular:

#### Article 4 of the LCP Directive

*1. Without prejudice to Article 17 Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants which in the view of the competent authority are the subject of a full request for a licence before 27 November 2002, provided that the plant is put into operation no later than 27 November 2003 contain conditions relating to compliance with the emission limit values laid down in part A of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.*

*2. Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants, other than those covered by paragraph 1, contain conditions relating to compliance with the emission limit values laid down in part B of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.*

The allowed emission limit values applicable for Stanari TPP are listed in Part B of Annexes III, VI and VII:

SO<sub>2</sub>: 850 mg/m<sup>3</sup> for 50-100 MW<sub>t</sub>, 200 mg/m<sup>3</sup> for 100-300 MW<sub>t</sub>, 200 mg/m<sup>3</sup> for > 300 MW<sub>t</sub>;  
NO<sub>x</sub>: 400 mg/m<sup>3</sup> for 50-100 MW<sub>t</sub>, 200 mg/m<sup>3</sup> for 100-300 MW<sub>t</sub>, 200 mg/m<sup>3</sup> for > 300 MW<sub>t</sub>;  
Dust: 50 mg/m<sup>3</sup> for 50-100 MW<sub>t</sub>, 30 mg/m<sup>3</sup> for > 100 MW<sub>t</sub>.

According to the Environmental Permit, Stanari PP was to have 410 MW power, which was later changed to 300 MW. However, in this document it was not clarified whether it was thermal (MW<sub>t</sub>) or electric (MW<sub>e</sub>) power, as well as whether these were gross or net values. According to the webpage of the investing company ("Gross/net power capacity 300/262.5 MW, Gross unit efficiency 38.5%"; <http://www.eft-stanari.net/en/tpp-technology.html>) one can suppose that 300 MW is rather the electric gross power (300 MW<sub>e</sub>) while 265 MW is the electric net power (265 MW<sub>e</sub>), and none of these values is the thermal power. Moreover, taking into account the declared 38.5% gross thermal efficiency, the thermal power of Stanari PP can be evaluated as  $300 \text{ MW}_e / 0.385 = ca. 780 \text{ MW}_t$ .

Hence, taking into account that Stanari TPP belongs to the class of large power plants with > 300 MW<sub>t</sub>, allowed emission limit values applicable for Stanari TPP are: SO<sub>2</sub>: 200 mg/m<sup>3</sup>, NO<sub>x</sub>: 400 mg/m<sup>3</sup>, dust: 30 mg/m<sup>3</sup>. However, the emission limit values included in the Stanari TPP environmental permit are two to three times higher than those allowed by the LCP Directive: SO<sub>2</sub>: 400 mg/m<sup>3</sup>, NO<sub>x</sub>: 650 mg/m<sup>3</sup>, dust: 100 mg/m<sup>3</sup>.

#### **10. Documents or evidence which support of the complaint:**

Analysis on the compliance of the environmental permit for Stanari thermal power plant with EU Directives

#### **11. Confidentiality:**

The complainants authorise the Secretariat to disclose their identities in its contacts with the authorities of the Party against which the complaint is made, other interested parties or the



general public.

**12. Place, date and signature of complainant/representative:**

  


\_\_\_\_\_  
Banja Luka, 15 January 2014

  
**Członek Zarządu**  
**Marcin Stoczkiewicz**

\_\_\_\_\_  
Warsaw, 15 January 2014

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