Provincial Administrative Court in Warsaw through General Directorate for Environmental Protection

in Warsaw

ul. Wawelska 52/54 00-922 Warsaw

Complainants:

Association "Partnerstwo Dzikie Mazury" Ściborki 6, 19-520 Banie Mazurskie REGON 281405822, KRS 0000384720 represented by vice-chairman Zbigniew Sienkiewicz Address for correspondence: Raczki Wielkie 20, 19-400 Olecko

Accused:

General Directorate for Environmental Protection ul. Wawelska 52/54 00-922 Warsaw Decision - DOOŚ-OAI.4202.3.2013.AŁ.7, dated 16.12.2013.

Based on Article. 53 § 1 and art. 54 § 1 of the Act of 30 August 2002 - Law on proceedings in front of administrative courts (Journal of Laws No. 153, item 1270) Association "Wild Mazury Partnership", hereinafter referred to as "Association", complains about the decision of the General Director of Protection Environment in Warsaw, hereinafter referred to as GDEP, dated 16/12/2013., nr DOOŚ-OAI.4202.3.2013.AŁ.7 regarding unjustified maintenance of decision about the environmental impact assessment (EIA) WOOŚ-II.4201.1.2012.AS issued by RDEP in Białystok. "Association" maintain its statement included in proposal that was delivered to GDEP in Warsaw for annul the decision about the environmental impact assessment WOOŚ-II.4201.1.2012.AS issued by RDEP in Białystok on 04th July 2013 in case of environmental impact assessment of project called "Budowa dwutorowej napowietrznej linii elektroenergetycznej 400 kV Ełk – granica RP", accusing decisions mentioned above that:

they were issued despite the fact that in main environmental impact assessment of high voltage transmission lines meaning the influence of EMF electromagnetic radiation on human health was not sufficiently taken into account.

Example of prudencial proceeding of Kraftnat company building similar investitions in Sweden presented by Association was included by GDEP to internal company strategies in range of limiting the magnetic field around electric power lines, by setting itself threshold values  $4\mu T$  (microtesla) in the distance of 50 metres from the line and  $0.4\mu T$  in the distance of 130 metres from the line. GDEP adds that "Swedish policy in the field of radiation safety rules for building new electric power lines is not based on specific limits of electromagnetic field and mentioned values of  $4\mu T$  and  $0.4\mu T$  are only accepted by Swedish enterprise responsible for energy delivery. Further, the accused concludes that there is an increased freedom of investing in Sweden due to the lower population density per 1 / km2.

In point 18th of decision the accused presents the quality standard determined as permissible level of the electrical component of the 50 Hz electromagnetic field for areas intended for housing development of 1kV / m, while the magnetic component is 60A / m.

In this point GDEP mentions that the requirements of national regulations regarding permissible levels of electromagnetic fields are much stricter than the European regulations in this sector, presenting the Council of Europe's Recommendations of 1999 and the recommendations of the International Commission for Protection against non-ionizing radiation, concerning the limitation of the general population to electromagnetic radiation, pointing reference level for 50 Hz frequency as follows;

- level of the electromagnetic field intensity 5 kV / m
- level of magnetic field intensity 80 A / m
- magnetic induction 100 μT

from mathematical dependencies, GDEP concludes that the environmental quality standard for magnetic induction in accordance with national standards would be 75  $\mu T$  if it was registered by law.

In the summary of the accused, the applicant emphasizes that the restrictions applied in Poland are stricter than those recommended by the European Parliament, adding that the Polish regulations were considered by the WHO to be sufficient.

In this part complaining Association maintains in its entirety the conclusions set out in the case and adds the following:

This 400 kV (WN) high voltage line may be hazardous to health due to the existence of: electric and magnetic fields (EMF). We refer to the impact on the population of the magnetic field from the HV line, defined in the units of magnetic induction (microtesla,  $\mu$ T), and to the relevant standards and regulations. Conversion applied - 1 A / m = 1.257  $\mu$ T.

## Conclusions:

Having become acquainted with the regulations and other health protection mechanisms in force in various jurisdictions, with the state of science on the impact of EMF HV lines on health, and documentation for the 400 kV double track line, we believe that social protest in this matter is right and in accordance with democratic principles and concern for the health of the society.

According to inefficiency of democratic social and political process, people who live near projected 400 kV power line are left with protest or moving out. System do not give them another option. Resolutions of independent scientists and the growing number of protest groups on the HV lines in the world prove that the care of citizens of Mazury and Suwalszczyzna for health and protest is justified, while the existing system that responds to the population for protecting their health is ineffective if not even dependent on energy corporations.

In conjunction with the plans for the development of electricity generation presented in the project "above heads of citizens", the issue of transmission super-lines calls for public debate as part of the overall energy policy of Poland.

Debate cannot be democratic or impartial, when scientific community is dependent on megaelectroenergetic investors and "guidelines" for norms come from outside and were created with participation of commercial investors, however with violation of public health interest.

The association claims that the norm introduced by GDEP is far away from being equal to the norms

related with "prudential approach" initially presented by association with approach of Swedish company Kraftnat.

Polish norm is more severe than guidelines of ICNIRP (International Commission on Non-Ionizing Radiation Protection) for HV lines but it is far away from more progressive norms. Acceptable value ICNIRP for magnetic fields on the level of 100  $\mu T$  concerns a short-term exposure, however the majority of countries accepted ICNIRP threshold for this kind of exposure. WHO commented on the topic:

"While the ICNIRP guidelines for EMF exposure are based on comprehensive reviews of all the science, the limits are intended to prevent health effects related to short-term acute exposure. This is because ICNIRP considers the scientific information on potential carcinogenicity of ELF fields insufficient for establishing quantitative limits on exposure."

World Health Organization, International EMF Project, Fact Sheet No. 263, Electromagnetic Fields And Public Health: Extremely low frequency fields and cancer, October 2001

The ICNIRP guidelines are based on the research results up until the turn of the year 1997–1998.

The European Union did not update the 1999/519/EC recommendation, based on the ICNIRP guidelines, even though subsequent research confirms that staying in the high-voltage line's EMF can lead to diseases statistically associated with prolonged exposure of organism to magnetic fields hundreds and thousands of times weaker than 100µT. For example, in the British scientific consultation for the National Radiation Protection Board (NRPB) in 2003 it was stated that:

Potentially, serious are the health effects of exposure to time-weighted averages of magnetic frequency fields of the electric energy [below 100 Hz]. These averages are in the range  $0.2-1.6~\mu T$  and exceed normal levels in human residential environment. Thus, the effects can be important for public health policy. Some countries have already introduced strict limits for exposure to new fixed installations, based on a much scarcer evidence of negative impacts on health than we have today. Similar measures should be urgently taken if the United Kingdom is not to be seen as insensitive to the effects on health of people involuntarily exposed to the elevated levels of magnetic fields. The ideal objective should be to reduce exposure to levels typical in residential environments, i.e. approx.  $0.05~\mu T$ . [...] Moreover, for the existing installations, in particular the high-voltage line, near houses, hospitals, nurseries and playgrounds, a plan of remedial measures should be developed. Denis L. Henshaw, NRPB Consultation Document Issued 1 May 2003, Proposals for Limiting Exposure to Electromagnetic Fields (0 – 300 GHz): Comments from Professor Denis L. Henshaw,

More recent studies confirm the threat. Independent scientific body, the International Commission for Electromagnetic Safety (ICEMS) writes in its Benevento Resolution from February 2006: 'Based on our review of the science, biological effects can occur from exposures to both extremely low frequency fields (ELF EMF) and radiation frequency fields (RF EMF). Epidemiological and in vivo as well as in vitro experimental evidence demonstrates that exposure to some ELF EMF can increase cancer risk in children and induce other health problems in both children and adults.'

In view of the evidence compiled on the health risks of EMF, ICEMS resolution recommends adoption of the Precautionary Principle in regulations and standards, as a sensible approach used in decisions connecting serious consequences with scientific uncertainty:

We encourage governments to adopt a framework of guidelines for public and occupational EMF exposure that reflect the Precautionary Principle — as some nations have already done. Precautionary strategies should be based on design and performance standards and may not necessarily define numerical thresholds because such thresholds may erroneously be interpreted as levels below which no adverse effect can occur.

In other words, the current knowledge does not allow to determine the limits of acceptability for EMF. Perhaps they will be even lower than those currently adopted based on the Precautionary Principle. Then how can the Polish state norm presented by GDEP and RDEP Białystok be safe, when it is on the level hundreds of times higher than the scientifically estimated threat level? Perhaps it is not about health, but about the usefulness of standards for the energy industry?

The Precautionary Principle suggests that we should act even in the face of scientific uncertainty and demand evidence for a lack of threat from the product or technology supporters, rather than evidence of threat from the potential victims. Alternatives should also be considered and the democratic process taken advantage of, including the involvement of the most vulnerable. We also share this opinion:

'In the risk analyses, what cannot be quantified [...], is simply ignored as irrelevant. This creates large gaps in our understanding of the subject, and gives corporations and government agencies a good excuse to continue activities, which can successfully endanger health'

(Thomas, P., Living Dangerously, NewLeaf, 2003).

We believe that the threshold set by ICNIRP, 100  $\mu$ T, and even stricter limit, 75  $\mu$ T (60A/m), allowed in Polish standards, do not protect public health. As an example, the following countries or their internal administrative units have adopted stricter than Polish standards, regulations, and rules: Argentina, Denmark, Spain, the Netherlands, Israel, Costa Rica, Luxembourg, Norway, Slovenia, Switzerland, Sweden, United Kingdom, Italy. Descriptions of standards can be found on the World Health Organization website.

Some of these jurisdictions have defined thresholds for the exposure of children, usually at a fraction of µT. Others provided an acceptable value (of the order of 10–25 µT) on the edge of the OHL course. The rest banned the construction of high-voltage lines near human settlements or required buffer strips along the passage, where residential settlements, recreation areas, and institutions for children can not be located. For example, the Luxembourg Circular (Circular 1644, ref 26/94) of 11 March 1994 orders not to approve the construction development of areas in the close proximity to high-voltage lines. Furthermore, in the USA, the National Institute of Environmental Health Sciences (NIEHS) suggested that the energy companies 'continue their practice of transmission lines localization with the objective of reducing exposure and that they should seek ways to reduce the formation of magnetic fields around transmission and distribution lines'. Over a dozen states in the USA have introduced this recommendation into their legislation. Although in the USA there are no federal standards or regulations on this matter, still, the population exposures govern: state legislation, municipal ordinance, proceedings of a committee for the public service companies, and injunctions. Negation, belittling, and disparaging the research importance, as well as evading precautionary standards based on research are beneficial to the energy industry, but not for the public health. The existing laboratory and epidemiological research have provided enough scientific evidence to prudently start preventing excessive emissions from new installations and to take precautionary measures for the existing lines.

The Association do not agree on statement of GDEP page 41, 3rd paragraph from above, that ,,because of supra-normative impact of the line will fit within the limits of the technological belt, there is no point in increasing distance between investment and places of human presence".

As it was demonstrated above and in previous proposals - safety zone should be established regardless of the technological belt, which as the name suggest is intended for service the process of energy transmission. We believe that independently of border regulations in Polish law, new installations should meet the best available quality standards for environmental impacts, in particular, as demonstrated above, for installations with unexplored impact on human health and the environment.

We also state that we are dealing with the company that uses European funds and at the same time strives to use them in a timely manner, which is raised in many places by GDEP, the company does not apply European CSR standards (Corporate Social Responsibility) neither in its operation nor in respect to human security standards. The same applies to environment and communication with society in whose area of residence company wants to carry out an investment with huge impact on environment. Surely it has an impact on quality of legal document which is without complains environmental impact assessment of this investition which resolutions are often mentioned by GDEP without examination of problem area and not allowing the complainant to ask for an examination of environmental impact and health of people by independent experts. In whole raport we have not seen any opinion of medical specialist on directional preparation in the field of EMF impacts.

The delay in tightening standards for the OHL while planning investments, negatively affects the population located along the line, as well as the investors. Residents, in a long-term perspective, risk theirs and their children's health and are exposed to noise, visual intrusion, and radioelectric interferences. The value of their properties will lower as compared with the properties not affected by these issues. Conflicts, like the one in Masuria region and Suwałki district, expose PSE investor to additional administrative costs and delays. Options exist — itinerary and technological, which would reduce the social costs, but the investors are not driven by socio—economic calculus. Change in their practice may be induced by new norm and regulations. Until then, according to the Bakałarzewo Community, there will be conflicts and protests.

A variety of standards for EMF in the EU creates the community–prey. Jurisdictions with weak regulations attract high-voltage lines: given a choice, the investor will choose the route through the 'mild' jurisdiction. The protesters are right then that they do not want to be victims of foreign energy markets. Anomalies in the provisions concerning energy production can also affect the locations of hazardous power plants. On 9 January 2007 Greenpeace announced that 'over the heads of Baltic

countries and communities of Poland', Polish government 'intends to support a dangerous and unprofitable investment' of the nuclear plant in Ignalina in Lithuania, a result of which is construction of energy bridge between Poland and Lithuania.

"PSE S.A., a company entirely owned by the State Treasury, plans to spend up to 4 billion PLN to participate in this project. Meanwhile, the fourth of this amount would be sufficient to achieve the objectives of adopted by Poland 'Strategy for the development of renewable energy sources', which government is obliged to do [...] the same public money invested in renewable energy, would not only give 166% more electricity, but also additional benefits in the form of heat and 5 thousand job openings [...] Greenpeace considers an attempt to exclude community from the decision-making process in such an important matter as a violation of democratic principles for the functioning of the State. Plans for this investment are also, according to ecologists, an example of mismanagement and short sightedness of Polish authorities and they should be abandoned as soon as possible."

Investments in the super-grids, without the prior amendment of provisions limiting population exposure to EMF, also violate the rules of democracy, favoring unhealthy and expensive megasolutions. EMF levels, 'mild' for the investor and acceptable for the high-voltage line, disqualify on the basis of unprofitability the healthier, though more expensive, transmission technologies and distributed electricity generation systems (e.g. geothermal and biomass cogeneration, small dams, small wind and photovoltaic generators), which do not require a giant grid linking mega-power plants with the customer. A group of public individuals stressed the non-competitiveness and discord with community values of mega-energy industry:

Therefore, in the Association's opinion, arguments about economic benefits and necessity of the implementation of the important public interest by this undertaking, which was concluded on many pages of the EIA report, as well as decisions of RDEP and GDEP, is misconceived.

It should be also emphasized that Polish Radiation Research Society memorial to Maria Skłodowska-Curie (PTBR) does not demand amendments to the Polish regulations on exposure to EIA, despite the fact that the responsibility for such lobbying lies with the scientific community. PTBR claims that the procedures in force regarding building permits in Poland "assume that standards of protection of people and the environment against the negative impact of EMF are met"

PTBR refers to scientific data from 2002, developed "relatively recently" and providing "a large margin of safety". Based on much earlier research, countries that care about the health of their citizens have already adopted much stricter standards than current Polish ones. The progress of science since 2002 shows that "relatively recently" is quite a long time ago in the new research confirming threats, and the "large margin of safety" is ridiculous at a hundred times higher level of acceptable exposure than independent researchers recommend.

Resolution of International Commission for Electromagnetic Safety (ICEMS) from 2006 suggests the influence of energy industry on scientists and specialists. It also admits that funds for researching of threat to public health are "grossly inadequate" in relation to the rapid growth of wireless telecommunications and huge investments in HV lines, while ,,present sources of funding bias the analysis and interpretation of research findings towards rejection of evidence of possible public health risks."

Group of ICEMS scientists stated in 2006: "Epidemiological and in vivo as well as in vitro experimental evidence demonstrates that exposure to some ELF EMF can increase cancer risk in children and induce other health problems in both children and adults." Similar conclusion was committed by their predecessors from ICEMS in Catania from September 2002: "Epidemiological and in vivo and in vitro experimental evidence demonstrates the existence of electromagnetic field (EMF) induced effects, some of which can be adverse to health."

We do not know why project of resolution by PTBR goes far away from resolution of ICEMS concerning adoption of Safety Rules till the evidences of potential threat would be clarified.

PTBR admits because of really fast progress of knowledge "it is necessary to periodically verify

normative values taking into account current scientific data." After the assurances about the adequacy of existing standards, can we expect action to amend the regulations? Polish scientific bodies have so far failed to translate scientific conclusions into the needs of society.

We accuse the GDEP of violating Articles 7 and 8 of the Code of Administrative Procedure due to the lack of a detailed explanation of the facts and the failure to take into account the properly understood social interest and legitimate interest of citizens, thus violating the principle of deepening citizens' trust in State authorities and disturbing the determinants of legal culture.

The Association also maintains in its entirety the allegation from point 21) of the decision on the lack of protection against surges where GDEP and RDEP incorrectly compare this threat with lightning protection. The complainants concerned the protection of people and animals during farm work, in particular the necessity of traveling with high-altitude machines, combines, loaders, etc. We express our concern about the disrespectful treatment of occupational safety issues, since the decision is that the area of the technological belt is the site of the plant and there is no need to designate a limited usage of described kind of area. The principles of occupational health and safety should apply to every workplace. It is worth explaining who is the supervisor of this plant and decides about the introduction of third parties to the plant. The threat is serious, there are examples of farmers paralysed by unloading from high voltage lines.

The Association also maintains in its entirety the allegation from point 21) of the decision connected with the lack of application of the principles and pillars of sustainable development. GDEP in its argumentation sets an economical priority and arguments necessity of building infrastructure to achieve the goals of balanced social and civilization development. It do not mention a word about other aspects like;

- 1. Solidarity of all people both in space (ie today at the local, regional, national or global level) as well as in time (ie between present and future generations).
- 2. Orientation for future generations choices made today can not limit the freedom of all future participants in socio-economic life.
- 3. Participation involvement of all participants of the socio-economic life in the region.

The Association maintains that mentioned rules of balanced development of Mazury and Suwalszczyzna regions were not used during project environmental impact assessment. The part of this environment are people living in close distance from mentioned power line. There was no other way than corporate endeavors to realize the investment, the principle of intergenerational solidarity, the impact of investments on future generations of residents, and the residents are not contributors to this economic enterprise. They are considered to be the main obstacle to the economic development of the country.

Concluding, the "Association" seeks the annulment of the decision of the General Director for Environmental Protection in Warsaw and RDEP in Bialystok of the body of first instance, as unlawful, we also demand reimbursement of court costs from the accused GDEP.

Representative of the Association

Zbigniew Sienkiewicz

representing also Coalition of Associations "Safe Energy" gathering 27 associations from Warmian-Masurian and Podlasie voivodeships.

Address for correspondence: Raczki Wielkie 20, 19-400 Olecko

e-mail: zsienkiewicz@wp.pl