

Legal Steps taken by the Federated States of Micronesia against the Prunéřov II coal-fired power plant, Czech Republic

Background information

"We are not certain if our biggest threat is from ocean acidification that will erode our islands from underneath, or from sea-level rise that could submerge our islands under the sea, or from changes in weather and typhoon intensity that could make inhabiting our islands impossible. But we know that our continued peaceful existence is totally at risk. We know that the enemy that gives rise to these threats is climate change. And we know that to survive, we must act now."¹

- President Mori of the Federated States of Micronesia

Summary

The Federated States of Micronesia (FSM) have requested the initiation of a transboundary environmental impact assessment, to examine the expansion and life-extension of the Prunéřov II coal-fired power plant in the Czech Republic. This is the first request of its kind, but other small island developing states (SIDS), individuals and organisations from these countries, may consider pursuing similar strategies as they fight for survival in the face of climate change.

This case shows the connection between corporate polluters and some of the most vulnerable people in the world. It demonstrates that governments have a responsibility to take account for the impact of their decisions beyond the boundaries of their own countries.

FSM were permitted to submit their concerns to the Environmental Impact Assessment (EIA) for the plant. The Czech Minister for the Environment must now decide whether to give a positive or negative statement on the EIA. To help him make this decision, he has contracted risk management consultants Det Norske Veritas to advise him on the quality of the assessment.

In this briefing you will find information about:

1. The Federated States of Micronesia and climate change
2. The Czech Republic, the company ČEZ and the Prunéřov coal-fired power plant
3. The plan to expand the Prunéřov II power plant and related emissions
4. The request for a transboundary assessment
5. A new legal trend
6. Next steps
7. The global impact of climate change and the need for a global phase-out of coal use.

¹ <http://climatepasifika.blogspot.com/2009/12/fsmcop15-seal-deal-to-save-humanity.html>

1. The Federated States of Micronesia and climate change

The Federated States of Micronesia (FSM) are a group of widely scattered islands located in the western Pacific at 7° 46N, 151° 84E. They are on the frontline of climate impacts, especially sea-level rise, changing weather patterns, and increased storms.

The FSM consist of some 607 islands grouped into four states: Kosrae, Pohnpei, Chuuk (Truk) and Yap, with a total population of around 111,000.

Although occupying only a small total land area of 702 sq km (271 sq miles), the islands of the FSM are located in an ocean expanse five times the size of France. The FSM's culture and economy are heavily reliant on marine resources, and most settlements and infrastructure projects are coastal.²

The Intergovernmental Panel on Climate Change (IPCC) has recognised that island communities and low-lying areas are especially vulnerable to climate change, including sea-level rise, which is expected to exacerbate inundation, storm surges, erosion and other coastal hazards. These impacts threaten vital infrastructure, settlements and facilities that support the livelihood of communities. Warming oceans and ocean acidification are likely to heavily impact coral reefs, fisheries and other marine-based resources, increasing the incidence of ciguatera poisoning and affecting food webs. Water resources are likely to be seriously compromised by rainfall changes and flooding.³

The FSM have highlighted their concern about the expected increase of more extreme weather events such as droughts and storms related to El Niño and La Niña events.

During the Copenhagen climate summit in December 2009, FSM President Mori was outspoken about the fact that his nation is fighting for its very survival:

*"We are not certain if our biggest threat is from ocean acidification that will erode our islands from underneath, or from sea level rise that could submerge our islands under the sea, or from changes in weather and typhoon intensity that could make inhabiting our islands impossible. But we know that our continued peaceful existence is totally at risk. We know that the enemy that gives rise to these threats is climate change. And we know that to survive, we must act now."*⁴

2. The Czech Republic, ČEZ and the Prunéřov coal-fired power plant

The Czech Republic relies heavily on brown-coal (lignite) for power generation. Burning coal is the single biggest source of CO₂ emissions, which are the main cause of climate change. The ČEZ Group⁵ is the country's largest power company and is the utility with the highest total shareholder return in the world⁶. It wants to substantially rebuild its Prunéřov power plant – one of Europe's largest – and prolong its life for another 25 years.⁷ According to Reuters⁸, ČEZ a.s. is Central Europe's largest listed company and, in its own words, Europe's most profitable energy utility⁹.

² See BBC under http://news.bbc.co.uk/2/hi/asia-pacific/country_profiles/1300849.stm

³ Mimura, NL. Nurse, RF. McLean J. Agard, L. Briguglio, P. Lefale, R. Payet and G. Sem, 2007: Small Islands Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of working Group II to the Fourth Assessment Report of the IPCC, ML Parry, OF Canziani, JP Plutikof, PJ van der Linden and CE Hanson, Eds, Cambridge University Press, Cambridge, UK pp687-716

⁴ <http://climatepasifika.blogspot.com/2009/12/fsmcop15-seal-deal-to-save-humanity.html>

⁵ See <http://www.cez.cz/en/home.html>

⁶ <http://www.bcg.com/documents/file31738.pdf> (Page 47)

⁷ See the Carbon Monitoring Project Online Database, <http://carma.org/dig/show/world+country#digTop>

⁸ <http://www.reuters.com/article/idUSL1735891820071017>

⁹ CEZ Group: The Leader in Power Markets of Central and Southeastern Europe, Investment story, March 2010, page 30, http://www.cez.cz/edee/content/file/investori/equity_investors_march_2010.pdf

ČEZ's annual earnings (EBITDA) were 91.1 billion CZK (€3.53 billion), while the net income of the company was 51.9 billion CZK (€2.04 billion). The profitability of the company was an incredible 46.4% (EBITDA margin)¹⁰, the highest among the all European energy utilities. The company is the biggest Czech player in electricity generation, with 70% of the national installed capacity and 45% of the market electricity sales, as well as brown coal mining with 47% of the national market. It has been accused of functioning as a monopoly¹¹. The company enjoys strong state policy support as 60% of the company shares are held by the Czech government.

The company is the second biggest European exporter of electricity (after EDF)¹². Recently, the company assertively expanded into Eastern Europe (Germany, Poland, Slovakia, Hungary, Romania, Bulgaria, Albania and Turkey), focusing its acquisitions on coal mining, coal and gas power generation and electricity distribution¹³.

ČEZ has repeatedly refused requests from the Ministry of Environment to use best available technology (BAT) by installing supercritical units with net thermal efficiency above 42% for the Prunéřov II renewal, reportedly because of a lack of economical feasibility. This means that the region's most profitable company deliberately intends to save money at the expense of the health and welfare of local people and the global climate. The price of the BAT would be 5 billion CZK (€0.2 billion) more expensive compared to the project proposed by ČEZ, i.e. 0.4% of the company's total net income over Prunéřov's proposed extended lifetime of 25 years.

The Prunéřov power plant is already the largest single source of carbon dioxide (CO₂) emissions in the Czech Republic. The entire plant, comprising Prunéřov I and II, emitted 10.1 million tonnes of CO₂ in 2007. CO₂ emissions from Prunéřov II were 7.1 million tonnes¹⁴.

This means that the total annual CO₂ emissions from Prunéřov could be around 40 times higher than those of the FSM, which amounted to 236,000 tonnes in 1994 (the latest year for which official data are available)¹⁵, assuming that such emissions from the FSM have not increased substantially since. Moreover, Prunéřov's annual CO₂ emissions are higher than those of 112 nations of the world¹⁶.

The Environmental Law Service (ELS), together with Greenpeace Czech Republic, has led a campaign against the Prunéřov plant called 'Pohoda ČEZ' (www.pohodacez.cz). The ELS lawyers have pointed out that ČEZ has violated legal regulations and ignored concerns raised by the communities living near the plant and by the Ministry of Environment. ČEZ plans to use inefficient technology, which does not comply with BAT requirements, to modify Prunéřov so that it can be operated for 25 more years.

In association with the ELS, Greenpeace is calling for the decommissioning of Prunéřov by 2015. ČEZ Group's plans are out of step with the global phase-out of coal needed to prevent dangerous climate change. Further expansion of the power plant would lock the Czech Republic into using dirty brown coal for several more decades. Brown coal (lignite) is the most climate-threatening of the fossil fuels, producing 1.07 times more CO₂ emissions than black coal per calorific value of the fuel¹⁷.

¹⁰ Ibid 9, page 6. Also, ČEZ had the highest Total Shareholder Return (43.9%) for any utility in the world for 2004-2008 <http://www.bcg.com/documents/file31738.pdf> (Page 47)

¹¹ Weston Stacey, executive director of the American Chamber of Commerce, called ČEZ "a monopoly by any legal or economic definition," adding, "From what I have read and heard here and abroad, ČEZ is hurting the country's reputation." <http://www.praguepost.com/business/2710-cez-is-worlds-most-profitable-energy-company.html>

¹² <http://www.cez.cz/cs/o-spolecnosti/skupina-cez/o-skupine-cez/profil-skupiny-cez.html>

¹³ Ibid 9 page 37

¹⁴ The EIA documentation on the project 'Complete renewal of Prunerov II 3 × 250 Mwe power plant', according to the Act No. 100/2001 Coll., page 105. See http://tomcat.cenia.cz/eia/detail.jsp?view=eia_cr&id=MZP221.

¹⁵ Czech Republic's total CO₂ emissions (2007): 129.949 million tons. See Czech Hydrometeorological Institute, <http://www.chmi.cz/cc/tabulky.html>
Prunéřov power plant total emissions (2007): 10.103 million tons See The Czech Registry for Emission Allowances Trading, http://www.ote-cr.cz/povolenky/files/novinky/ISR_Data_2007_CZ.pdf, pages 54 and 55)
Federated States of Micronesia total CO₂ emissions (1994): 0.236 million tonnes
http://unfccc.int/files/ghg_data/ghg_data_unfccc/ghg_profiles/application/pdf/fsm_ghg_profile.pdf

¹⁶ <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749&crd>

¹⁷ Official edict No. 696/2004 Coll., Annex 3 <http://aplikace.mvcr.cz/archiv2008/sbirka/2004/sb235-04.pdf> (page 26) Black coal (except anthracite) = 94.6 t CO₂/TJ; Brown coal and lignite = 101.2 t CO₂/TJ; Natural gas /dry/ = 56.1 t CO₂/TJ

3. The plan to expand the Prunéřov II power plant

ČEZ is planning the replacement of three of the five existing blocks in its Prunéřov II coal-fired power plant. The plans will increase the size of the plant from its current capacity of five blocks of 210 MWe to two blocks of 210 MWe and three blocks of 250 MWe.

Under Czech law, ČEZ should be obliged to equip any new power plant with the best available technology, which would operate between 42% and 45 % net thermal efficiency.¹⁸ The new blocks proposed by ČEZ would operate at a minimum net thermal efficiency about of 38%¹⁹ rather than the 42%²⁰ required by legislation.

ČEZ has for a long time argued that it does not need to comply with the EU law on BAT because only three blocks are being 'reconstructed', rather than the whole plant. However, analysis shows that all major parts (such as boilers, turbo sets, generators and desulphurisers) of the three blocks will be entirely replaced, making the project a 'complex renewal', subject to more stringent energy efficiency requirements.²¹ If ČEZ moves forward under existing plans, the coal-fired power plant will be in violation of both Czech and EU law. Under heavy pressure from opponents, ČEZ publicly admitted in December 2009 that the plan is for a new plant. However, the company insists on developing the project without changes, because implementing better technology would not, allegedly, be economically feasible²².

ČEZ's current replacement plans for Prunéřov II would lower its CO₂ emissions from 7.1 million tonnes²³ to 4.4 million tonnes of CO₂ a year. However, if Prunéřov II used the best available technology with higher efficiency, CO₂ emissions could be lowered further to 3.9 million tonnes a year.²⁴ Although at first sight the difference between the two figures appears small, the overall environmental impact will be significant, as ČEZ plans to operate this outdated technology for the next 25 years. Overall, the difference will amount to 12.4 million tonnes of CO₂ over 25 years.²⁵

4. The request for a transboundary assessment

In June 2008, the Czech Ministry of the Environment opened proceedings for an Environmental Impact Assessment (EIA)²⁶ concerning the new installation at the Prunéřov II power plant²⁷.

In March 2009, the Czech Ministry of the Environment returned the EIA documentation to ČEZ, asking for it to be revised, and for ČEZ to propose an alternative that included the best available technology for energy efficiency. Contrary to its obligations, ČEZ failed to submit such a proposal. An expert report was drawn up without the alternative proposal.

The Czech Ministry of the Environment, as the responsible public authority in the Czech Republic, contemplated conducting a transboundary EIA regarding the power plant's expansion, but decided against notifying any potentially affected states or interested parties.

¹⁸ See the Czech legal act No. 76/2002 Coll. (Zákon č. 76/2002 Sb.) and Directive 2008/1/EC of the European parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control. Concrete limits are in Reference Document on Best Available Techniques for Large Combustion Plants. http://ftp.jrc.es/eippcb/doc/lcp_bref_0706.pdf

¹⁹ EIA documentation on the project 'Complete renewal of Prunerov II 3 × 250 Mwe power plant', according to the Act No.100/2001 Coll., page 11. See http://tomcat.cenia.cz/eia/detail.jsp?view=eia_cr&id=MZP221.

²⁰ Reference Document on Best Available Techniques for Large Combustion Plants (BREF). See http://eippcb.jrc.ec.europa.eu/reference/brefdownload/download_LCP.cfm, Table 4.66: Levels of thermal efficiency associated with the application of the BAT measures (page 269)

²¹ See Informační systém [EIA, Complete Renewal of Prunerov II 3 × 250 MWe Power Plant According to the Act nr.100/2001 Coll. 105 (2009), http://tomcat.cenia.cz/eia/detail.jsp?view=eia_cr&id=MZP221 (in Czech).

²² <http://ekonomika.ihned.cz/energetika/c1-40288620-cez-laka-ministra-dusika-ucinnost-prunerova-bude-podle-nas-emise-podle-ekologu> "ČEZ argumetuje tím, že při vyšší než 25miliardové investici do modernizace elektrárny se mu projekt již navyplatí."

²³ The Czech Registry for Emission Allowances Trading, http://www.ote-cr.cz/povolenky/files/novinky/ISR_Data_2007_CZ.pdf, page 55

²⁴ Legal liability of using best available technology (BAT): Use of BAT defined in BREF is regulated by Act No. 76/2002 Coll. on Integrated Pollution Prevention and Control (IPPC). According to that the authority defines such emissions limits, which correspond to using BAT.

²⁵ EIA documentation, page 15

²⁶ Called "Complex renovation of Prunerov II power plant 3x250 MWe"

²⁷ See the EIA portal http://tomcat.cenia.cz/eia/detail.jsp?view=eia_cr&id=MZP221 (in Czech language)

In December 2009, the FSM requested the initiation of a Transboundary Environmental Impact Assessment proceeding. The FSM submitted their viewpoint on the expansion and life-extension of Prunéřov II to the Czech Ministry of the Environment on 4 January 2010. In this submission, the FSM stressed that the climate impacts of the project had not been assessed in the original EIA and argued that the Ministry of the Environment should issue a negative final statement on the EIA.²⁸ In other words, the EIA should be rejected, which would be a substantial roadblock in the Company's plans.

5. A new legal trend

The 1991 Espoo Convention is the principal treaty focusing exclusively on transboundary issues in EIAs.²⁹ The 44 parties to this Convention, which include the Czech Republic, all EU States and Canada,³⁰ have agreed to common EIA procedures for certain categories of projects when those projects have transboundary impacts in other Espoo parties.³¹

EC Directive 85/337 on EIA for public and private projects³² integrates the Espoo Convention into EU law. The Directive was implemented into the Czech legal system by Act No. 100/2001 Coll.,³³ on EIA.

In contrast to both Espoo and the EC Directive, however, the applicability of Czech law is not limited to other Espoo parties or EU member states. Instead, Czech law defines 'affected states', without limitation, as states whose territory may suffer significant environmental impacts due to a project.³⁴ Thus, the Czech Act includes by definition non-Espoo members, and states outside the borders of the EU, such as FSM.³⁵

Nevertheless, the option for initiating a climate transboundary EIA is open to any State. The Espoo Convention has 'open membership', so any country can join. Other non-European countries and the USA are not currently members of the Espoo Convention, however the wide interest generated by this case could lead to changes – particularly if the action taken by the FSM inspires other vulnerable countries to challenge projects that could result in increasing emissions of greenhouse gases.

While transboundary EIAs are common between neighbouring countries, this is the first time that a State from the opposite side of the world, which is threatened by climate change, has used the transboundary process to ensure its concerns are taken into consideration.

²⁸ Yatilman, FSM Office of Environment and Emergency Management, Viewpoint of Federated States of Micronesia on the Complex Renovation of Prunerov II Power Plant 3x250 MWe plan, http://www.pohodacez.cz/_files/file/Viewpoint%20of%20FSM%20on%20renovation%20of%20Prunerov%2011%20Plant.pdf (last visited 16 January, 2010).

²⁹ Espoo Convention on Environmental Impact Assessment in a Transboundary Context 1991, available at <http://www.unece.org/env/eia/documents/legaltexts/conventiontextenglish.pdf>

³⁰ The US and Russia are signatories but have not acceded to the Convention. See http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4&chapter=27&lang=en.

³¹ Participation in ESPOO is currently limited to members of the United Nations Economic Commission for Europe (ECE). Article 17 of ESPOO was amended in 2001 to allow any UN-member state to accede to ESPOO upon approval by the ESPOO parties, but that provision has not yet entered into force.

³² Directive 85/337 on EIA for public and private projects as amended in Directive 97/11/EC and 2003/35/EC.

³³ Act No. 100/2001 Coll., on Environmental Impact Assessment.

³⁴ Article 7 (1) of the Directive 85/337 on EIA for public and private projects as amended in Directive 97/11/EC and 2003/35/EC.

³⁵ Article 11 (1b) of Act No. 100/2001 Coll., on Environmental Impact Assessment.

6. Next steps

Greenpeace understands that the Czech Ministry of the Environment will release its final decision on the EIA sometime in the middle of March this year. If the Ministry issues a negative final statement on the EIA, this will seriously affect ČEZ's plans to extend Prunéřov II because it will make it much more difficult for the company to obtain the other necessary permits. In fact, the company has said that it will cancel its plans if the Ministry issues a negative statement, although the EIA outcome is not legally binding under Czech law.

Alternatively, if the Ministry issues a positive statement on the EIA – in other words, it accepts its findings on the current project - the extension still needs to overcome additional hurdles, such as building permits and complying with Integrated Pollution Prevention Control legislation.

In the wider context, the current case should put governments and corporations from industrialised states on notice that countries vulnerable to climate change are keen to explore new avenues to challenge decisions on projects that exacerbate climate change.

7. The global impact of climate change

According to a report by Kofi Annan's Global Humanitarian Forum, one in ten of the world's present population could be directly and seriously affected by climate change within the next 20 years. Hundreds of thousands of lives are already being lost every year due to climate change and the report foresees that this will rise to roughly half a million in the next two decades.³⁶

Coal contributes more to climate change than any other fossil fuel. Across the planet, 11 billion tonnes of CO₂ come from coal-fired power generation every year. In 2005, this made up around 41% of all CO₂ emissions from fossil fuels. If current plans to build new coal-fired power plants across the world go ahead, then coal will be responsible for 60% of CO₂ emissions by 2030. In the 10 years between 1997 and 2007, coal use around the globe rose by 39%, and continues to rise.

Only by quitting coal and increasing energy efficiency programmes and the production of renewable energy will we stand a chance of preventing catastrophic climate change. The world has enough technically accessible renewable energy to meet current energy demands six times over. We need an energy revolution that substitutes wind, solar, energy efficiency and other modern technologies for dirty energy sources like coal.³⁷

³⁶ Global Humanitarian Forum (2009): The anatomy of a silent crisis. Page 3

³⁷ <http://www.greenpeace.org/international/campaigns/climate-change/coal>