

Commissioner
Karmenu Vella
European Commission Fisheries Fund
Rue de la Loi/Wetstraat 200
1049 Brussels
Belgium

Halmstad 2015-11-22	
CABINET VELLA	
27 NOV. 2015	
Action:	LF
Info:	

Information about the serious risk of interference with the production of salmon in the river Nissan, Halland, Sweden and adverse effects on the EU fishing tourism project Location Relax Fishing Sweden.

Association Good Living Environment Hylte has since 2009 worked to protect the Nissan valley in Halland, from the over-exploitation of wind power.

We have in authorities and courts made a number of arguments against planning of 25 wind turbines in the area adjacent to the national interest-rated Nissan River and its tributary salmon reproducing river Sennån.

We have in the environmental process presented evidence showing that this project will have serious effects on the area's groundwater and surface water as well as the EU-funded tourism project Destination Relax Fishing Sweden. Annex 1.

We have referred to Directive 2004/35/EC, Article 2 under the Water Framework Directive 2000/60/EC and to the state monitoring system VISS. This system shows that the ecological status is already low and affected by the strong acidification and leaching of contaminants in the country's wettest area. Measurements in Nissan's water show very low PH values (average 5.4) and risk assessed to exist for the chemical status of the aquifer is not reached 2021.

We also have to the Supreme Environmental Court /Svea Court of Appeal recognized the Scottish report on wind power, serious disturbance of groundwater in violation of DIRECTIVE 2004/35/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 April 2004 on environmental liability Article 12 Request for Action Water damage which is any damage that significantly adversely affects the ecological, chemical and or quantitative status and or ecological potential, as defined in Directive 2000/60/EC of the Waters Concerned compiled by Susan Crosthwaite 07/07/2015. The material is based on research from Dr. Rachel Connor. These health impacts are also relevant for Swedish conditions.

We can thus make the conclusion that neither the county government nor the courts has touched the hydrological risks, both for surface water and the two municipal supplies.

Acceptance of eternal landfill of cables, foundations, non-woven is contrary to the European Waste Directive. Courts reasoning are thus unfounded.

We also argue that the licensing procedure does not correspond to the Union law on the completeness, accuracy and finality and that the judgment does not comply with other international regulations and legislation which are incompletely implemented in Swedish law, e.g;

- The European Convention on Human Rights and Environment, Article 8, for the protection of citizens' homes, and respect for the right to a pleasant living space. Previous as well as new research related to harmful health, other qualities of life and economy for wind turbine neighbors are neglected, with serious consequences for public health.
- UNESCO's goals for Health Promotion.
- EU Directive 85/337/EEC, as amended by Directive 97/11/EC as regards the possibility of "Salami" tactics to avoid early cumulative assessment. There are already two wind farms (8 + 6 VT) and planned two (12 + 13 VT) as well as potentially another park (10 VT). MOD does not take into account the requirement to seek the guidance of the European Commission.
- EU Birds Directive (2009/147/EC), as well as the Bern- and Bonn-conventions.

- DIRECTIVE 2004/35/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 April 2004 on environmental liability Article 12 Request for Action.
- Aarhus Convention Article 3.4 and 7. The Court has not ruled on the application of the UNECE have 2013-07-28 ruled that UK does not meet the Convention standard of proof.
- EUROBAT'S GUIDELINES 2015 that discourages the establishment of windfarms in all types of forests. Risks of increased invasive insect species - climate stress on forests and a serious ozolytprocess. This may also impact on surface and ground water.
- EU Council strategy on biodiversity and the Aichi Target No. 5. The Council of the European Union strategy is to tackle the problems that prevented the EU from reaching its 2010 targets and that by 2020, "put a stop to the loss of biodiversity and destruction of ecosystem services". The destruction of the vast expanses of southern Sweden's (Northern European) quietest areas of "taiga" character and breeding, hibernation and migration route for endangered species, is a violation of the EU's strategy.
- The Nagoya convention target of 17 % protected national area.

In addition, severe deviations from the Swedish environmental legislation have been found.

We now regret that the Supreme Environmental Court/Svea Court of Appeal rejected our protest with no comments.

We also argue that the wind turbine licensing procedure does not correspond to the Union law on the completeness, accuracy and finality and are now looking to get reconsideration by

- request for "uprising" in the Supreme Environmental Court /Svea Court of Appeal, because of departure from EU legislation etc.
- appeal to the Supreme Court due departure from EU legislation etc.
- guidance of the European Commission of several aspects, such as
 - the possible application of so-called "salami strategy", which overrides the cumulative assessment.
 - Effects on public health, in light of new data on infra-sound effects.

We regret that this letter is not sent before. The translation work is complex and we are a nonprofit organization with limited resources and multiple parallel cases. We also had reason to be optimistic for success in the highest instance, when several new facts spoke for a refusal of the wind power project.

We hereby request your opinion on the matter been handled correctly, in accordance with EC Directive 2000/60/EC and OSPAR Commission Agreement 2010-03 UNCLOS.

We also would appreciate direct contacts with the Swedish Government and other authorities to eliminate the serious risk of disturbance of salmon production in the river Nissan and correct implementation of EU law in accordance with Directive 2004/35/EC article 2 and the water framework directive 2000/60/EC.

Sincerely

Association Good Living Environment Hylte
 Association Swedish Landscape Protection
 Dagsländevägen 27
 30256 Halmstad

Email:

Copies:

- **The County Administrative Board of Halland (CAB). The Environmental Unit and the Unit for nature conservation and environmental monitoring.**
 - **European Commission Fisheries Fund**
 - **Marine and Water Authority, Gothenburg**
 - **Destination Relax Fishing Sweden**
 - **Water District of West Sweden**
 - **Fishing Area of Halland**
 - **Nissan Water Council (Formerly Water Management)**
 - **Region Halland with the county's Leader organization**
 - **Hylte and Halmstad municipalities**
 - **Other environmental organizations such as Save the Wild Salmon Nissan, Halland Anglers, Angling Club Salmon, Swedish Ornithological Society and the local Conservation compounds**
-

Materials for the main hearing regarding the appeal of the County Administrative Board's decision 2013-12-18 authorizing Statkraft Södra Vind AB (Statkraft) for the construction and operation of windfarm Örken at Hylte and Halmstad municipalities. Reference No. 551-2473-12.

The Association Good Living Environment Hylte (GLEHy) has through Hylte municipality been informed that the matter being considered for review, which should lead to hearing and sight under the Environmental Code, Chapter 22. § 11-12.

The association has previously relied on a series of formal errors, proving our claim to the Land and Environment Court set aside by the provincial government announced the state and rejects Statkraft Södra Vind AB's license application.

The association has in previous appeals presented inaccuracies showing that Statkrafts EIA and the Environmental Testing Delegation notices and decisions do not meet the formal requirements and the requirements of the Aarhus Convention, EU Directive, the Environmental Code and the Environmental Protection Agency's (EPA) regulatory regime and over long time recognized knowledge on the uncertainty in the noise calculation.

Enhanced support for our claim can now be presented in the form of relevant EU directives, new legislation, new rulings in MÖD (Note: Environmental Court of Appeal/Svea Court of Appeal), damning research and letter to the Government of extreme threats to biodiversity, as well as new technological developments.

We hereby invoke the following new facts and formal errors;

- CAB's MPD (Environmental Investigation Delegation) has not sought the views of the key acting parts in the developing project of fishing tourism "Relax Fishing Sweden", financed by the EU Commission's Fisheries Fund. Wind power exploitation is counterproductive and has major negative impacts on water quality and experience values in the important salmon producing river Sennån. Wind power project Örken, of which 90 % are run by the Norwegian Statkraft, counteracts the strategy for fishing tourism and conservation of salmon and trout spawning and nursery areas, developed by the county organization Fiskeområde Halland (Fishing area of Halland).

Support for the protection of salmon nursery places is available in the EU water framework directive. Implementation of this legislation has now begun by the new Marine and Water Authority (Havs- o Vattenmyndigheten) and the Water District of West Sweden (Vattendistriktet Västsverige).

Actors in this EU project is the Fishing Region Halland (Fiskeområde Halland), the municipalities concerned, Region Halland, the Water District of West Sweden, Destination Relax Fishing Sweden,

Nissan's water protection area and local environmental organizations such as Save The Wild Salmon Nissan, Anglers Halland, the Angling Club Salmon, Swedish Ornithological Society and the local Conservation compounds. Although the County Administrative Board in Halland (Environmental Protection Division and the Department of Conservation and environmental monitoring), Environmental Protection Agency and the Marine and Water Authority are relevant consultative bodies. Appendix 1 and Appendix 4.

- The County Administrative Board MPD has thus failed to meet the requirements of EU Directive 2000/60/EC framework for Community action in the field of water policy including

- Paragraph 17. Regarding an effective and coherent water policy and protection of water status within river basins.
- Paragraph 33. The objective of achieving good water status should be pursued for each river basin, so that measures relating to surface waters and groundwaters belonging to the same ecological, hydrological and hydrogeological system are coordinated.

-
- Intentions of the OSPAR Commission Agreement 2010-03 UNCLOS, the Convention on Biological Diversity (CBD) http://www.ospar.org/html_documents/ospar/html/10-. Towards a Common Agenda of clean, healthy and biologically diverse oceans and seas, distressed sustainably.

The aim is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater, in order to prevent further deterioration and protect and enhance the status of ecosystems and wetlands.

- The County Administrative Board MPD has therefore not met the requirements of

- SOU 2014: 50 57. Final Report. Strategies for land and water to reach the objectives. This underlines several major challenges to reach the water-related environmental quality objectives and the need to take a holistic perspective on marine and freshwater environment to allow ecosystems to provide ecosystem services.
- Government commissioned in January 2015, the Environmental Protection Agency to prepare for the implementation of the EU Regulation on the implementation of the Nagoya Protocol. M2015/Nm.
- Government decision 2014-02-27, M2014/593/Nm. New environmental targets for strengthening biodiversity and ecosystem services. Inter alia protection of at least 20 percent of Sweden's land and freshwater areas, and 10 percent of Sweden's marine areas by 2020. The protection of terrestrial and aquatic extended by at least 1.142 million hectares starting from 2012. The ecological relationships are strengthened so that the protected/preserved areas and habitats are well connected and integrated into the landscape, including the marine environment.

- The County Administrative Board MPD has not acted to evaluate the environmental impact caused by wind turbines extensive land encroachment and its impact watercourses and surface water through leakage and poor conditions of supervision, maintenance and recycling. The area is the country's wettest region causing severe acidification through natural deposition and airborne pollutants (methyl mercury, phthalates, PFO etc.). The substantial intervention in nature, in the preparation of 25 wind turbines and associated infrastructure systems, has strong impact on the geological and hydrological systems. The Sea- and Water Authority (Havs- o Vattenmyndigheten) new monitoring system VISS, show very low pH-values around 5.4 grade point average. The continuous sampling of the water in Sennån shows only "Moderate ecological status" and poor chemical status is classified "Achieves not good, unsatisfactory". The risk is deemed to exist for that good surface water status cannot be achieved in 2021. Environmental problems correctly finds relating to the assessment points Environmental pollutants, Acidification, Altered habitats and Physical impact and Alien species. The risk of spread of bisphenol A, dioxin, oils and more should not be underestimated. Eternal disposal of concrete

foundations (nonyfenol, reinforcement), cables (copper, oil) and fiber reinforcement ground cloth is in long term environmentally destructive. (Note. Endless deposit). Appendix 1.

- The Environmental assessment department (MPD) of the County Administrative Board has completely ignored the risks of the large groundwater systems that surround the Örken area and leading to the two major water catchments in Sennan for Halmstad city and Torup. According to the Marine and Water Authority's monitoring system VISS has the aquifer Sennan currently "Good chemical status", but the risk is deemed to be the status "Cannot be maintained", already in 2021. The same negative trend applies to the aquifer in the upper yard, Torup. Appendix 1.

The new land use through wind power development in the catchment area affects groundwater recharge by changing flows, rainwater and runoff through land sealing, soil erosion, recharge, damming or drainage, and increased leaching of nutrients, metals and airborne pollutants. The new water legislation requires new monitoring program for its groundwater systems, which are not considered by the County Board.

- The County Administrative Board MPD has not acted to prioritize and follow up the Nagoya Convention requirement on the provision of areas for protection of biodiversity and the future protection of official **national interests**; Great Jöns bog, Snokke bog and the Nissan valley. Proposals have been put in contact with the Environmental Protection Agency and Environment responsible units within the County Board, but has been known not taken into account.

- The County Administrative Board MPD has not acted in accordance with the EG Convention for landscape protection and taking into account the county's sensitivity and especially the great effects, from the tourism point of view, at the important Natura 2000 area Virsehatt in direct proximity of Sennån. The 12 hectare broadleaved area represents a unique rock formation, magnificent vantage point, ancient landmark for sailors and probable old defense establishment with high recreational value.

- New facts. New GPS-based studies of eagles movement patterns, and three-year inventory of birds killed at Näsudden on Gotland, shows that the low reproduction of the golden eagle cannot handle the rapidly increasing death rates at the Swedish wind turbines. Only 170 wind turbines on Gotland kills 7-34 eagles per year. The number of fledgling eagles varies between 110-210 per year. 77 % of the young eagles die within 5 years prior to claiming territory. The threat from the planned 4-5000 wind turbines is apparent.

Confederation of Swedish Landscape Protection (FSL) has forwarded a letter to the government and all political parties, regarding the extreme threat to the Nordic Golden eagles, several raptor species, forest birds, biodiversity and the ecological system. Demands have been made on the acute need of protection and Countervailing Measures and establishment of protected areas, like the four protected national rivers of northern Sweden. Government Issue Environment and Energy Department, No. M2014/2719/Nm. Appendix 2.

The new GPS-based research results show that the threat of eagles during the movements under autumn and spring, and stay on distant wintering areas is seriously underrated and relevant to the Örken area and the two other existing wind farms. An established migration route follow the precipices along the lake Vättern, the mountains Taberg and Isaberg in the Nissan valley to the Örken area before the Eagles fold against the rock formation Virsehatt and Skåne. Appendix 3.

The gravity of the situation is obvious and is supported by the national Environmental Protection Agency, which estimates that expanded wind power is affecting the species' conservation status (Web page). Support for the conservation of threatened species available in the EU Birds Directive (2009/147/EC), Article 4 and Annex 1, where member states are required to appoint Special Protected Areas for the Golden Eagle and Eagle Owl, in order to ensure survival and reproduction. Support is also available in the Bern Convention, Bonn Convention and the Convention on Biological Diversity (CBD/Rio Convention) and the Swedish Environmental Code.

The current regulatory landscape and environment fragmenting the proliferation of small and medium-sized wind power groupings must be limited to places that are less environmentally harmful and unique

environments those national interests in Örken and the Nissan valley aside as compensation areas for the protection of biodiversity.

- New ruling. Land and Environmental Court, Svea Court of Appeal. JUDGMENT 2014-12-22. Case No. M4937-14.

Application for exemption under § 14 Species Protection Ordinance, the case of deliberate killings according to § 4 Species Protection Ordinance (Broge, Gotland). The request for a preliminary ruling from the European Court of Justice rejected. MÖD states that species protection issues have their rightful place in the permitting process for hazardous operations and notes that knowledge of a nesting place for an eagle pairs in the vicinity of wind turbines, means that the company is aware that the activity can kill or disturb Sea Eagles and deliberate incitement fulfillment (cf. European Court of Justice in Case C-103/00 and C-221/04 on the concept of "deliberate"). Appendix 1.

The County Administrative Board Gotland claims increased risks for particularly raptors near nesting sites. Raptors collide more frequently with wind turbines than other birds. Birds that breed in the area run higher risk than migratory birds. The collision risk is not reduced with time; there is no indication that the birds learn to avoid turbines. EPA goes on the same line and claim Species Protection

Regulation is applicable in this case and the activities prohibited under § 4, first paragraph 1 and 2 and would require an exemption under § 14 as the Species Protection Ordinance applies to all wild birds.

The judgment is relevant regarding awareness of the serious barrier effects in the Nissan valley.

- CAB's MPD has contributed to the breakdown of environmental assessment processes in 4-5 subprojects. This has created barrier effects for migrating birds and bats on both sides of the Nissan valley. The serious cumulative effects have therefore not been considered.

The County Board has not, at the Ministry of Environment and the European Commission, applied after consulting the requested interpretation of 85/337/EEC and the EU Commission criticized 'salami-slicing'. Appendix 1.

- New ruling. Land and Environmental Court, Svea Court of Appeal. MOD 2013:33 Case nr P9722-12

Rejection of the establishment of wind turbines close to the conservation area pursuant to Chapter 3. 2§ Environmental Code, nature reserves and Natura2000 area. The investigative material is insufficient for leveling of land suitability under Chapter 2. 1 § ÄPBL. The verdict is relevant to stop the serious barrier effect in the Nissan valley. Appendix 1.

- Forest Stewardship Council (FSC) has developed new guidelines for the establishment of wind power in FSC-certified land, which places demands on land conversion for biodiversity. This means that 25 hectares of productive forest land will be converted to formally protected habitats and have not been treated.

- New ruling. Land and Environment Court Växjö District Court. JUDGMENT 2014-03-07. Case No. M 4224-13.

Land and Environment Court finds that no account has been taken of the reported overall measurement error referred to ± 2.6 dB (standard deviation) even though the estimation of measurement uncertainty determined to be unsafe. This means that the measured value, with some probability, will lie outside the upper uncertainty limit. The Court thus accepted the scientific arguments that have long relied on in the judicial process. These margins of uncertainty also apply to the calculation and for the indicated source sound, why unveiled noise calculations are incorrect. Appendix 1.

In total, the cumulative effects are now so large that the land based wind power must be stopped, evaluated, re-regulated and concentrated on areas where the least possible damage to the environment and optimal economic exchange. This is possible by stopping the ongoing design of unprofitable work and focus on fewer, but more efficient models. According to the wind energy industry is ongoing technology that enables 1000 new turbines to replace about 3000 turbines in ongoing projects. This is economically viable within a few years, related to the wind power industry signals of poor performance and the fact that most projects yield loss of about one million SEK/turbine and year.

The current wind policy does not fulfill the Environmental criteria under Chapter 2, § 3, for Caution and best possible technology. Non-compliance can also in varying degrees noted regarding Section 1 (Burden), Section 2 (Proficiency), Section 5 (Ecocycle Requirements), Section 6 (Localization), Section 8

(Liability). These defects cause deterioration of conditions for achieving the national environmental goals Non-toxic environment, Living lakes and streams, Groundwater of good quality, Balanced Marine Environment, Living coast and archipelago, Living wetlands and Sustainable Forests.

New technology development. It should also be noted that The European Wind Initiative in 2014, in the report Wind power Research and Development to 2020, has prioritized the development of turbines by 10 - 20 MW of large offshore wind farms. Offshore wind power is expected to increase its share from 7 % to 38 % in 2030. Here, the new super material graphene has great importance.

The Association Good Living Environment Hylte hereby invokes new facts and maintains its claim to the Land and Environment Court set aside by the provincial government announced the state and rejects Statkrafts permit application for the construction and operation of wind farm Örken at Hylte and Halmstad municipalities. Reference No. 551-2473-12.

Halmstad March 1st, 2015

[Redacted]
Authorized representative of the Association Good Living Environment Hylte
Dagsländevägen 27
302 56 Halmstad
Tel [Redacted]
E-mail: [Redacted]

Appendix 1. Inadequate handling of environmental assessment case Wind farm Örken.

Appendix 2. Mail to the government. The need for compensatory measures.

Appendix 3. Summary of golden eagles and birds move and wintering patterns and the increased threat to these species through habitat loss and deaths from collisions with wind turbines.

Appendix 4. Strategy for FISHING AREA HALLAND Structural 2010-2013.

Appendix 1

Inadequate management of environmental assessment case Windfarm Örken

Formal errors in the handling of the EU-funded project Fishing Tourism "Destination Laxaland", later reorganized as the destination "Relax Fishing Sweden"

The association (GLEHy) has in earlier appeal to the County Board and the District Court, noted administrators and policy makers in the ongoing fishing tourism project Location Laxaland and rendered inappropriate to establish a dominant, noisy and flashing wind industry with large land encroachment and road systems, the center of the water collecting system for the Nissan salmon main spawning ground in the river Sennån. This threat can have fatal consequences for investment in tourism.

Fishing Tourism Project Location Laxaland, funded by the European Commission's Fisheries Fund. The project has been granted by FISHING AREA of HALLAND and was later reorganized as the destination Relax Fishing Sweden.

Destination Laxaland is a collaboration of growth-enhancing sustainable fishing between Laholm, Halmstad and Falkenberg municipalities, for developing a sport-fishing destination under a common name and brand. The project will be completed in 2015 and the destination Relax Fishing Sweden is owned and operated by an Economic Association for the Fishery conservation areas and municipalities that are members. Nissan Sport fishing and Laholms Salmon are members who sell fishing licenses and fishing experiences in the area.

Actors in this EU project is Fishing Area Halland, the municipalities concerned, Region Halland, Water District West Sweden, Destination Relax Fishing Sweden, Nissan's water councils and local environmental organizations such as Save The Wild Salmon Nissan, Anglers Halland, Angling Club Salmon, Swedish Ornithological Society and the local Conservation compounds. Although the County Administrative Board in Halland (Environmental Protection Division and the Department of Conservation and environmental monitoring), Environmental Protection Agency and the Marine and Water Authority are relevant consultative bodies.

Fishing Area Halland was formed in 2010 and covers the entire County of Halland and is a compound consisting of representatives of fishermen, processing and trade, sport fishing, subsistence fishing, fishing waters, municipalities and Region Halland. The Fishing area group's main task is to select projects that will receive EU contributions to the development of the fisheries. The strategy has, inter alia, the following formulation;

"Fishing Area Halland" will support projects where the fish resource is utilized in a biologically and economically sustainable manner. Projects in the field of fisheries should also aim to protect and preserve the environment, nature and cultural values in such a way as to preserve and develop on the basis of a long-term and sustainable approach. The environmental targets of the Halland County, in particular; Balanced Marine Environment, Zero Eutrophication and Living streams and lakes are basic points at each examination of applications to the fishing area.

Kattegat exposed position and a reduced fleet leads to the need to find new ways and strengthen innovative ideas and projects. This can involve linking traditional fishing with other value chains (innovative processing companies, food companies outside the fishing industry, restaurants, business experience, local shops, etc.), develop new and reinvention of raw materials (shellfish, seaweed, salt, etc.) and develop activity experiences that sport fishing and guided experiences at sea and in lakes.

Fishing area HALLAND will therefore support projects aimed at finding venues for fishermen, processing industry, consumers and visitors. These venues must be a horizontal approach that gives an opportunity to profile the uniqueness found in the Halland fishing industry, Halland fishing culture and Halland environment.

All food led will be integrated with its fishing culture and natural environment, cross-fertilized with the coastal urban tourism supply and rural touristic entrepreneurship and connected together within the framework of sustainable fisheries "

The strategy for fisheries-related tourism is said

... .. Communications with Europe also means a good opportunity to reach interested tourists for fishing on Atlantic salmon and trout. To this fishery is to be sustainable and attractive needed to salmon and trout spawning and nursery areas recreated in waterways, where these have been destroyed. It is also important that the Halland commercial fishing for salmon conservation and development.

Fishing area HALLAND shall support actions means that:

- hiking fish spawning and nursery areas will be increased and protected
- migration obstacles for fish is eliminated
- the commercial fishing for salmon will be conserved and developed"

We can therefore conclude that wind power project Örken, of which 90% is owned by Statkraft AS (Norway), contrary to the approach of fishing tourism and conservation of salmon and trout spawning and nursery areas, developed with the support of the European Commission's Fisheries Fund.

We can also introduce additional formal errors and new legislation, new damning research on the threat to biodiversity;

- The County Administrative Board MPD has not sought the views of key stakeholders in the EU Commission's fisheries fund financed development of fishing tourism Relax Fishing Sweden. Wind power exploitation is counterproductive and has major negative impacts on water quality and recreational value in the important salmon producing river Sennån.
- The County Administrative Board MPD does not meet EU Fisheries Directive, relating to the protection of salmon nursery areas. Implementation of this legislation has now begun of Marine and Water Authority and the Water District of West Sweden.
- The County Administrative Board MPD has not lived up to EU Directive 2000/60/EC framework for Community action in the field of water policy, including
 - Item 17. Regarding an effective and coherent water policy, and the protection of water status within river basins.
 - Item 33. The objective of achieving good water status should be pursued for each river basin, so that measures in respect of surface water and groundwater, which belongs to the same ecological, hydrological and hydrogeological system, are coordinated.

The aim is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater, in order to prevent further deterioration and protect and enhance the status of ecosystems and wetlands.

- Intentions of the OSPAR Commission Agreement 2010-03 UNCLOS, the Convention on Biological Diversity (CBD) http://www.ospar.org/html_documents/ospar/html/10-. Towards a Common Agenda of clean, healthy and biologically diverse oceans and seas, distressed sustainably.
- The County Administrative Board MPD has therefore not lived up to
 - SOU 2014:50. Final Report. Strategies for land and water to reach the objectives. This underlines several major challenges to reach the water-related environmental quality objectives and the need to take a holistic perspective on marine and freshwater environment, to allow for the ability of ecosystems to provide ecosystem services.
 - Government commissioned in January 2015, the Environmental Protection Agency to prepare for the implementation of the EU Regulation on the implementation of the Nagoya Protocol. M2015/Nm.
 - Government decision 2014-02-27, M2014/593/Nm. New environmental targets for strengthening biodiversity and ecosystem services. Inter alia protection of at least 20 percent of Sweden's land and freshwater areas, and 10 percent of Sweden's marine areas by 2020. The protection of land and water increased by at least 1.142 million hectares starting from 2012. The ecological relationships are strengthened so that the protected/preserved areas and habitats are well connected and integrated into the landscape, including the marine environment.

Background

Excerpts from the GLEHy's previous opinion to the Land and Environment Court Vänersborg:
Section National legislation and regulations Item 10. National areas of national interest for nature conservation and outdoor recreation. The Environmental Code, Chapter 3 and 4
The Environmental third and fourth chapter regulates the management of land and water resources. The premise is that land and water will be used for the purposes for which they are most suited for. National interests of the natural and cultural heritage conservation and outdoor recreation should be protected against measures that may damage the purposes they aim to achieve.

The project area is surrounded by;

- Three adjacent national interests for nature conservation, to be given absolute priority.
 - Great Jöns bog. 242 hectares. Large-scale wetland complex and water sampling area for the salmon reproducing river Sennån and water supply to Halmstad city.
 - Snoke Bog. 330 hectares.
 - Nissan valley. National interest for outdoor recreation. Angling and important spawning ground for salmon in the river Sennån. Salmon is the county's landscape fish and Sennån has the only stock of bullhead in Halland.
- Three Natura2000 sites
 - Rågetaåsen. 500 meters west Great Jöns bog.
 - Havstenshult (67 hectares), in the southwest. Well integrated with the Nissan valley.
 - Moshult. 1 km away from the area.
- At least six key habitats with the value straight hardwood forests, linked to the national interest Nissan valley. The wind turbines intruding here on an area of 4-6 premises for "ArtDatabanken" and a key habitat. Board of Forestry specifies seven key habitats and some 50 sub-regions with swamp, marsh and forest moisture totaling 650 hectares. Partly within the intermediate area of Bergvik AB's land.
- Great Jöns bog has project number 49 in the area of national interest for nature conservation in the County of Halland. The area has value judgment as a large valuable wetland complex with highly rated marshes along watercourses and particularly well shows the development of the landscape. Hydrology will be protected against drainage, water control, damming and peat. Felling of swamp forests, forests on land islets and in the edge zones can damage the natural values, as fertilization and liming. The material indicated that the area is under investigation by the Environmental Protection Agency. The area is catchment area for the river Sennån as the meandering trails run through the marshes. The river Sennån is in turn the water catchment area for Halmstad and is the main breeding area for salmon stock in Nissan with two fish ladders and stated to be the area of influence where any intervention or influence have an impact in the mainstream. The County Board states in the compilation of Nissan's important for sport fishing for salmon and trout may increase significantly and that just flows in the river Sennån, will be very attractive for sport fishing. The whole area is for this reason subject to extensive liming. The water management plan for the area includes several projects for the demolition of water hazards, why a dominant, noisy and flashing wind industry in the middle of the field would be fatal for the EU-supported Fishing Tourism Project Location Laxaland (now renamed to Relax Fishing Sweden).

Risks of leaching of methyl mercury and heavy metals increases significantly at excavation of soil for foundations, cables and road systems. There are risks of oil leaks, bisphenol, cleaning fluids and dioxin spread from fire mm. Vibration effects are underestimated.

The compilation is mentioned that the County Administrative Board in a letter to the Environmental Protection Agency 2001-06-05/2001-06-13 (D.nr 240-2631-99) has clarified that the area of 238 hectare and that the matter rests with the Environmental Protection Agency handling.

It is also noted that the area of established ornithologists considered to give sense of "Taiga Character" (according to E.ON inventory) and that the area can be considered as the most southerly quietest area in Europe. The area thus has potential as a European Community interest and for classification as a National Park, a Natura 2000 area (the Nagoya convention) or for development of ecotourism where Halland has unique conditions for the presentation of the coast, plains, forests and quiet wilderness.

- Snoke Bog. A 330-hectare valuable mire complexes north of wind turbines with highly rated topogene marshes, slightly domed bogs and sloping bogs, also has a corresponding potential.
- Additional; In addition, there are many large high-altitude marsh, bog and swamp forest areas in the intermediate Örken area:
 - Rommamossen. 48 hectares. Next to the eastern boundary of Örken North
 - Bastö mossar. 204 hectares. Southern part of Örken North on Bergvik ABs land
 - Killingshult. 79 hectares. Western part of Örken North on Bergvik ABs land
 - Kyrkeledet. 22 hectares. Eastern part of Örken North, including important habitat
 - 3 less areas. 11 hectares of marsh and forest moisture in Örken North
 - Pågölsmossen. 140 hectares. Örken South
 - Kylesjömaden. 30 hectares. Örken South
 - Hässjön. 20 hectares. Örken South
 - 26 less areas. 104 hectares of swamp, marsh and forest moisture in Örken South

According to the National Board of Forestry, there are ten key habitats in Örken South, two natural values and 38 swamp forests.

Peatlands are extensive within the area, barely 20 % of the surface. Peatlands with swamp forest is often hydrologically sensitive environments and are important for forest birds and wildlife. Wetlands are often of great importance for biodiversity. Two key habitats with spruce swamp forest and swamp forest among and rashness marsh has National Board of Forestry classified as valuable for nature conservation. According inventory characterized subdivisions of lots with older swamp forest, abundant with ancient trees, some dead standing trees and wood on the ground. They are also relatively unaffected by recent forest intervention or drainage. It is above all environments with older forests that are important to many forest species of birds, insects, fungi, mosses and lichens. Such environments can also pose refuges for many endangered species. They are also hydrologically sensitive environments where changes in groundwater conditions can have negative consequences for many plant and animal species.

Drainage and road construction should be completely avoided in environments with sensitive hydrology.

- Nissan valley. National interest for outdoor recreation. Angling and reproduction area for salmon stocks where the river Sennån is flowing up in Great Jöns bog, is the main breeding area with two fish ladders, stated to be influence area where the intervention has an impact in the mainstream. Nissan is also lined with value considered deciduous forests, which stretches about 1.5 km east of the river.
The provincial government set in compiling, that Nissan's importance to the sport fishing for salmon and sea trout can increase substantially and that just the flows in the Sennån area, will be very attractive for leisure fishing.
- The association GLEHy has early in the environmental assessment process, stressed that the EU, the Region Halland and the municipalities have invested in the Fishing Tourism Project Location Laxaland, why a dominant, noisy and flashing wind industry in the middle of the area would be fatal for this tourism venture. At least six key habitats with the value of straight broadleaf coupled to the national interest Nissan valley. The wind turbines intruding here on an area of 4-6 premises for "ArtDatabanken" and a key habitat.
- The two adjacent Natura 2000 sites are also considered as national interest pursuant to Chapter 4:1§ and Chapter 4:8§ The environmental code. It should be noted that Rågetaåsen is a relatively large area (15 hectares) and only 700 meters west of Great Jöns bog. The areas can be considered as a single area. It should also be noted that the EU Commission demanded that Sweden recognizes tougher action plans for the management of Natura 2000 sites, in order to avoid suspension of Justice. This should include the national interest for nature conservation and outdoor recreation.

It may also be noted that Energy Agency Report 6473 (Dec 2011) Opportunities for wind power development in Natura2000 areas, clearly indicates; Natural forests and primeval forests of type western taiga are other examples of sensitive areas at risk of significant harm when wind power. (See e.g. Case M456-01 and NV No. 382-5115-08 and NV-06192-11).

It is highly remarkable that the provincial government has given permission to place three 175 meter high wind turbines only 100-200 m from Great Jöns bog. In addition, at heights of 25-45 m above the bog. The overall height 210-230 m represents a catastrophic desecration of the natural area. This is not even mentioned in the company's EIA.

The Hylte Municipality's wind power plan states that "consideration distance to Great Jöns bog should be kept. Areas with long continuity, which today is a strong shortage in the province, should be given particularly high conservation value ". This departure also seems to have been made without contacting the Environmental Protection Agency for tuning alerted processing, which in this case can be considered as a formal procedural error.

Nagoya Convention. National areas of national interest for nature conservation and outdoor recreation Environmental Code, Chapter 3 and 4.

The association (GLEHy) has argued that reconciliation with the Convention ratified requirement of 17 % area for biodiversity is missing. (Paragraph 2 and 9 of appeal). This "Global interest" overshadows the country's national interest for energy. There is also a so-called conflicting interests, which are not mentioned in the EIA. It offers good conditions for establishing protected areas in Europe's most southern quietest area, the national interest Great Jöns bog and the great national interest Snoke bog north of the development site.

The association has said that the provincial government Halland first need to ensure that the global target is met in relation to large-scale industrialization and unnecessary interference with the valuable nature, including three very nearby national interest for environmental conservation and recreation. Primarily through contact with the Environmental Protection Agency.

CAB's MPD has therefore not lived up to SOU 2014: 50 57. Final Report. Strategies for land and water to reach the objectives. This underlines several major challenges to reach the water-related environmental quality objectives and the need to take a holistic perspective on marine and freshwater environment, to allow for the ability of ecosystems to provide ecosystem services.

Suggested management plan for the North Sea Basin 2015-2021. Effects on surface water and groundwater

<http://www.vattenmyndigheterna.se/SiteCollectionDocuments/sv/vasterhavet/publikationer/samradsdokument/VH-FP-total.pdf>

The Water Authority Gothenburg.

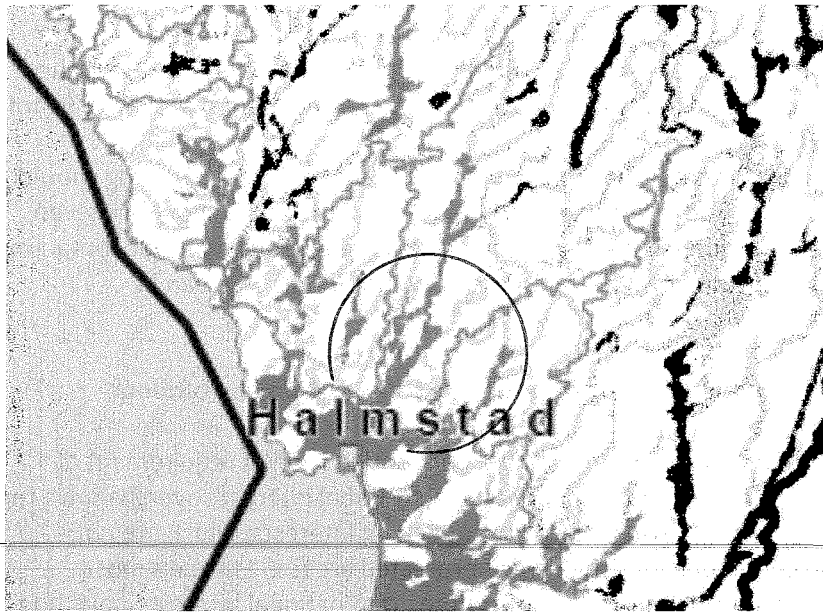
Suggested management plan for the North Sea Basin 2015-2021 has been prepared by the Water Authority of the County Administrative Board of Västra Götaland. Halland is part of the North Sea Basin and each catchment is managed by a Water Council, composed of various operators in the area. Nissan's catchment area includes lateral flows from the two rivers Sennån and Färgeån and several smaller streams, which drains the planned wind farm area Örken.

Classification of ecological status is done by assessing three groups of quality factors: biological, physico-chemical and hydro morphological quality elements.

• Groundwater

Although groundwater areas will be defined and the two lateral flows are large groundwater and water protection. The area in the upper yard at Färgeåns outlet is water source for Torup's community and the area at Sennåns bottom is the largest aquifer in Halmstad Municipality. The management plan shows that the monitoring of groundwater is flawed and that the surface water impact is underestimated.

Each water district has to do a survey of the impact of human activities on the state of surface and ground water. All fields of water management will be responsible for an extensive inspection activities and regularly report data to the National Water Information System VISS.



Map C6. Groundwater at risk for poor chemical status in the North Sea Basin. Shows that the entire Örken area is located between two threatened groundwater areas. Red color.

According to the monitoring system VISS has aquifer Sennån unusually good withdrawal options in the order of >125 liters/s or more than 10 000 m³/day. The chemical status is currently good but the risk is deemed for not to be achievable 2021.

This negative trend also applies to the aquifer in Torup, where it also is a risk that the chemical status is deemed for not to be achieved 2021.

Comment: The presented EIA has not recognized the impact that human activity has on groundwater, because wind turbines can affect the leaching of pollutants. Such accounting shall present

- Location of points in the groundwater body used for the abstraction of water
- The average abstraction from such points.
- The chemical composition of water abstracted from the groundwater body.
- The location of points in the groundwater body into which surface water is supplied directly.
- The amount of discharge at such points.
- The chemical composition of the water to the groundwater body.

The new land use in the catchment area that affect groundwater recharge results in altered flows, rainwater and runoff through land sealing, soil erosion, recharge, damming or drainage, and increased leaching of nutrients, metals and airborne pollutants.

• Surface water

For the assessment of ecological status are five classes: high, good, moderate, poor and bad status.

The continuous catchment of the water in Sennån shows

- Ecological Status - Moderate
- Chemical status - Achieves not good, unsatisfactory
- Chemical status (excluding mercury) - Not Classified

Environmental problems

1. Eutrophication and oxygen-poor conditions - No.
2. Contaminants - Yes
3. Acidification - Yes
4. Changes in habitat, physical impact - Yes
5. Alien species - Yes

The low ecological status is largely affected by the strong acidification of the area and leaching of pollutants. Measurements in Nissan's water system in November/December 2013 show very low PH values. The year 2012 was the acid index (ACID) at an average of 5.4.

West Sweden has the highest nitrogen deposition in the country and thus the greatest risk of increased leaching of nitrogen and toxic pollutants. Activities in forestry can lead to increased nutrient leaching and forestry considered to account for 21 % of the load of coastal waters. The forest-dominated watersheds, leakage of both phosphorus and nitrogen constitute the largest source of eutrophication. Nitrogen enters the forest land primarily through airborne deposition while phosphorus mainly derived from weathering, which increases in acidic environment.

At Sennån it is found that water body failing to achieve good chemical status with regard to mercury, whose concentrations in fish exceed EU limits. Probably the biggest source is the historical emissions of mercury, that through atmospheric deposition has been stored into the surrounding land and now leaking to the surface water and accumulates in fish. In the case of land use, measures should be taken, that prevent increased mercury leakage. Due to the major source consists of atmospheric deposition, it is not possible to determine the period within which it is possible to reduce the levels below the EU threshold for fish. Generally measured very high TOC values, high color values and turbidity, which binds toxins in biological material and are passed up in the food chain.

Environmental burden on wind power exploitation

Industrialization of Swedish natural and cultural landscapes through the construction of wind turbines is associated with environmental disturbances. In addition to threats to biodiversity, health impacts and encroachment on private property, recreation and other industries, there is a clear lack of knowledge regarding state and the chemical and indirect environmental risks.

- Wings - large residual amounts of epoxy plastic and composite materials. About 200 000 tons of which 140 000 tons consists of fiberglass. New opportunities with super material graphene and bio-based fiber.

- Wings - great uncertainty about the additives that may be hazardous to the environment during production, operation or in the future recycling processes.

- Nanoparticles. Large differences exist among researchers and legislators of nanoparticles health and environmental hazards. The extremely small particles can pass the natural protective barriers.
- Bisphenol A/F/S. Not cured residues. Allergenic, hormonal and fertility-lowering agent. Wings into a modern turbine weighs about 60 tons. A half percent residual BPA equivalent to 300 kg/turbine.
- UV filters A and B. Titanium etc.
- Zinc, boron. Possibly Barium nitrate (Ba (NO₃)₂) reconditioning. Freely soluble and toxic.
- Stabilizers (calcium, zinc, lead, possibly cadmium and tin), colorants, antioxidants, biocides.
- Softeners and brominated flame-retardants. Any presence of phthalates (e.g. DEHP) and chlorinated paraffin cables. Possibly etching of glass with borosilicate and barium titanate.

Comment: Risk analysis absence of BPA and effects. Today permitted landfill that is contrary to European legislation (Directive 2008/98/EC) regarding recycling. The industry has not been required to present the optimum final disposal.

- Wings - reconditioning.

- Repair of damage in composites and surface occurs with open hardening of nature.
- Surface layer is eroded and causes reduced power. Reconditioning of porosity with new coating is transparent.
- Micro and Nano-fibers. Eroded composite material wears down to the nanoscale and has been shown to bind toxins that enter the food chain. Long degradation in the aquatic environment.

Comment: Risk analysis of management and regulatory missing.

- Wings and towers - coating of insects and algae results in reduced efficacy. Uncertainty about cleaning methods and risks of transmission of solvents, aerosols and detergents. Eventually high-pressure technology. Oil leakage occurs, with high standards of sanitation. Follow-up of EC detergent Regulation necessary.

http://ec.europa.eu/growth/sectors/chemicals/legislation/index_en.htm)

Comment: Risk analysis of management and regulatory missing.

- Oils. Three hydraulic systems, transmission oil and transformer oil. Uncertainty about shrinkage between oil changes. Regulated control of leakages missing.

- Ground leakage. Air pollution has led to gradual acidification of the soil and deposition of methylmercury. Excavation for the foundation, work surfaces and roads make great engagement (1 hectare/turbine). Wing length requires extra deep intersections and filling the hollows to allow transport out of unspoiled land. Shaft width 8-15 m, including slopes. Rock quarries for stone crusher makes deep engagement and explosives add nitrates. Crushed road materials results in increased surface area exposed to acidic water. Precipitation of
 - humid bound methylmercury
 - minerals; iron, aluminum and heavy metals (cadmium, copper, lead, zinc, etc.).
 - Groundwater. Excavation and road construction involves hydrological changes. Roads can prevent but also drain the bog in its longitudinal direction, which results in increased leakage. Reduced water level in the marshes cause increased emissions of greenhouse gases. (Methane and CO₂).
 - Foundations. Potential precipitation of nonylphenol and iron from reinforcement. Unsatisfactory demands for environmentally sound recovery of land. Today permitted eternal landfill after cutting down to ground level and covering. Future forestry spoiled. Generally, low deposit fees and legal uncertainties relating to liability for third parties.
-
- Cables. Hazardous substances can be found in the cable insulation. Unsatisfactory demands for environmentally sound recovery of land. Today permitted eternal landfill.
 - Paved land. Hard-packed stone crusher under the faucet/crane places (<1 m), work surfaces and roads. Unsatisfactory demands for environmentally correct restoration of woodland. Today permitted eternal landfill. Future forestry spoiled.
 - Nonwovens. Geotextile left in nature. Warranty maximum of 25 years. Requirements are missing out on ISO standards and environmental declaration of leachable additives, agents, finishing agents, stabilizers, fillers, microfiber, etc. The material submitted for eternal landfill.
 - Rare earth metals. Large amounts of the generators. No functional recovery, despite high value, limited access and strong environmental toxin. Neodymium-extraction also takes place in scandalous working environment and mining residues final stored in open landfills where leaching occurs uranium mm.
 - Transmission poles. Still being built overhead line with impregnated wooden posts. Deforestation causes loss of production and wires constitute obstacles and collision threat against the larger birds.
 - Fire. Dissemination of dioxin and other toxic substances. Remarkable examples of panic removal from actual fires. Dioxin in sediments and aquatic environment has extreme long degradation.
 - PFOA (perfluorooctanoic acid) and PFOA-like substances. Here are some twenty subjects with lower carbon chain (C10-C13), Very High Concern (Substances of Very High Concern). The reason is that they are very persistent and very bio accumulative. PFO/PFOA are not broken down either in nature, it is toxic to reproduction and suspected to be carcinogenic to humans. The blanks are supplied globally through the atmosphere and have been placed on the EU candidate list of extremely toxic substances.
 - Methane and greenhouse gases. Draining the swamp, bog and peatland generates substantial emissions of methane and greenhouse gases. Examples from Scotland have shown that wind turbines generate a gross surplus of greenhouse gases.

Indirect impact is also achieved through

- Cooling and dehydration. Depression of cold air in the daytime, decrease temperature about 4° C, up to 10 kilometers. During summer nights, warmer and drier air will be depressed, which prevent dew formation and causes desiccation of the soil layer during the sensitive period of growth for seed and seedlings. In certain weather conditions triggered additional precipitation when moist air is forced down into the colder air layer, which results in enhanced acidification and deposition of environmentally harmful substances.
- Reduced absorption of greenhouse gas emissions through deforestation. (1 hectare/turbine).
- Shadow effect. The hypothetical impact on plant assimilation abilities and cellulose production.

- Vibration and noise. Research studies show progressively increasing habitat loss. Research on vibration effects in marshes and water are breached. Former US research suggests effects that points to underestimate. Italian example measures the vibrations in twenty kilometers (Pisa) and discusses the reflection from the underlying sediment layer. Portuguese example shows extreme change of horse hooves on horses kept close to wind turbines. Swedish University of Agricultural Sciences has concluded that reindeers gradually avoid windfarm areas.
- Negative health effects. There are clear indications that the noise and vibrant infrasound causes sleep disturbances and thus adverse health effects. Approximately 30 % of the population is extra sensitive, which means that much of the legacy systems is based on the offending noise limits. In many cases, people have been forced to leave their homes, or bought in by the developer.

New facts about extreme threats to biodiversity

Government Issue Environment and Energy Department, No. M2014/2719/Nm.

Letter to the government regarding wind turbines extreme threat to the Scandinavian population of Golden Eagles and other birds of prey. The need for compensatory measures.

Serious facts based on Norwegian and Swedish GPS studies of eagle movement patterns, and three-year inventory of birds killed at Näsudden on the island of Gotland, shows that the low reproduction of the Golden Eagle cannot handle the rapidly increasing death rates at the Swedish wind turbines. This poses a very serious threat to the Nordic population of Golden Eagles, most raptor species, grouse, biodiversity and the ecological system.

Only 170 turbines on Gotland kill 7-34 eagles per year. The number of fledgling eagles varies between 110-210 per year. 77 % of the young eagles die within 5 years prior to claiming territory.

GPS studies show that the established practice for the home range size of about 2 km is grossly inaccurate and pose a serious threat to the population of the Golden Eagle. This provides only a protected core area of 13 km², while studies show that the eagles habitats/home ranges in reality varies between 60-605 km² (average 214 km²) and is equivalent to 5 -15 km radius of a circular area. The habitations are in many cases the outskirts of or completely outside the core area (5-8 km) and are controlled by the availability of suitable nesting trees. Many habitats have several alternative nests. The young eagles may already after three months make trips of 3-5 km from the nest. The reports thus clarify the non-existent protection of eagle's habitats and the increased threat and conflict when wind power industry invades the eagle's habitats and heights.

After the mating season, the eagles are exposed to new hazards as they leave their home range and looking for new hunting grounds in forest landscapes. Young Golden Eagles wintering usually far south. The male birds moves 60-160 Swedish miles (1 Swedish mile is = 10 km) already in their first year (sometimes even to the county Skåne in south Sweden), while females move 10-55 Swedish miles from the home area. In the spring, they pass their home area to follow the reindeer walking to their calving sites. Then they always will return to their home area with excursions up to 10 Swedish miles. Up here, they stay the first five years before they form their own territories. In these moves they are forced to pass the greater part of the Swedish wind power plants, which are deployed at heights that are natural for the eagles to find good thermals and overview of foraging.

The three-year study at Näsudden on the island of Gotland, shows that increasingly effective means 5-12 times greater risk of eagles and raptors compared to other bird species. Even the red-listed species Eurasian Eagle Owl is exposed by mobility up to 10 km from the core area and foraging during the dark hours.

The new research results show that the threat of eagles during the autumn and spring movements and their stay in distant wintering areas are seriously underrated. This was already made in the appeal to the district court, in the Annex, which showed that one of the GPS marked the Golden Eagles' movement went on the west side of the lake Vättern and followed the Nissan valley to the Örken area, before it veered off towards Skåne (Appendix 7). Another three examples show that the eagles could have taken this route. Strong migration routes leads along the lake Vättern, to the mountains Taberg and Isaberg, the heights along the Nissan valley to the coast. The Eagles will here also meet the best thermals when facing the prevailing southwest winds. The reasoning is also supported by the eagle in the neighborhood of Örken folds to the south, which can be interpreted as the eagle partly sees the

Open sea in good visibility and also see the silhouette of the rock Virsehatt and wilderness expanses of Great Jöns bog. Regarding the Palsbo project in the Gislaved community, said ornithologists had observed a migration route for Sea Eagles following Vättern at south and that might lead towards the coast through the valleys. Filed EIS mentions three sightings of golden eagles (NT, near threatened), an observation of sea eagles, a sighting of Ospreys and an observation of Red Kite during inventory visit to the Örken area.

The statement in the EIA "There are no concentrated migratory birds that pass through the area" and "In the area there are no steep slopes that can attract thermal flying raptors" is in many cases totally misleading;

- It takes into account not the sharp precipices against Nissan on the western side and the nearby Virsehatt. Neither the heights of wind turbines on Nissan's west side.
- Environmental Protection Agency Report 6467 (The wind turbines effects on birds and bats - Synthesis Report, Project Vindval), emphasizes the collision risks when plants are placed in critical aerospace or migratory routes or near sharp relief or marked at the forest edge. One should avoid marked valleys (e.g. river valleys). Studies in Germany have shown that wind turbines casualties among thermal seeking birds of prey.
- Inventory report in the adjacent E.ON project notes that ornithologist, who lived along the Nissan in Oskarström for about 30 years, often have seen stretching birds of prey on/over the ridges along the Nissan towards the north.
- E.ON report also shows that it has long been known that the majority of Cranes in the spring rest or pass here at their move through the southern Halland, to the lake Hornborgasjön (15 000-20 000 individuals). Most of the Cranes rest on the island of Rügen in Germany, reaching Skåne in the neighborhood of Ystad. Thereafter, they continue through Skånes inland, passing Hallandsås and further across southern Hallands inland. The migration is in a relatively narrow corridor is dependent on the prevailing winds. Buzzards that can pass area in several thousand use partially same route. Common for Crane and Buzzard is that during the movement utilizes thermals to gain altitude and the gliding achieves up to seven times longer range.

It's the weather and the winds of departure that determines whether the birds moving. If the birds then met worse conditions they are forced to go down on lower altitude because the wind conditions which are generally more favorable why the risks increase. Buzzards pass from treetop height to about 200 meters.

- The County Board has simply omitted the substantial barrier effects resulting from the division of the area into four wind farms (Spenshult - E.ON - Örken North and Örken South), and opened for wind power at Bergvik AB's land between Örken North and South.

It is well known that birds of prey and other species follow the valleys and utilizes thermal updrafts and formed at ambient heights. Nissan valley is no exception.

The turbines in the Örken area can therefore form a major barrier along with the already existing turbines at Fröslida and Spenshult and a serious threat to many bird and bat species that either are crossing the area or follow the valley sides during spring and autumn.

The cumulative effect is even greater when plants placement forms a formation that gets a confining and tapering function with turbines on both sides of Nissan, which has an elevated character of "catch trap".

The area also has good potential as a resting place during bad weather conditions. Privacy and good foraging grounds can be a positive factor for migrating Golden Eagles.

In E.ON's, report states that *"the area to the east and northeast are pure wilderness and you can really get "taiga feeling" here. This is one of the most desolate areas in all of Halland and is for this reason alone worth protecting."* That Sea Eagles and Golden Eagles *"has only been seen over flying and do not breed close"* could just as well mean that quite a number of individuals crossing the area.

The 175 meter high turbines on the hills around the Nissan valley can have significant cumulative adverse effects on the ecosystem, both locally and in Northern Europe.

Even a well-conducted inventory is irrelevant, since it usually has too narrow a focus and lack of a holistic approach. It is noted that the state of knowledge is very unclear in many respects, that many species already show a strong downtrend and may soon reach the limits of extinction. This is in particular the effects on habitat and displacement.

Local effects at all of the currently planned wind farms can quickly provide regional and global effects. When wind turbines today are considered to have a lifespan of only about 20 years and the national objective mortgaged, it is highly necessary to apply the Precautionary Principle in The environmental code of the relatively untested technology. Let us learn and leave this matter in the next generation.

Inventories of **bats** are even more irrelevant when insect populations that pass on higher altitude control the moves. Bats have been observed over the sea up to 10 km from land when they followed such insect swarms.

Comment: The gravity of the situation is evident. This is also supported by the Environmental Protection Agency, which estimates that the increased number of wind turbines is affecting the Golden Eagles' conservation status (Web page).

Letter has been sent to the government and all political parties, requesting compensatory measures and review of the current regulatory fragmentation proliferation of wind turbines mm.

Support for the conservation of threatened species under the EU Birds Directive (2009/147/EC), Article 4 and Annex 1, where member states are required to designate special protection areas for the Golden Eagle and the Eagle Owl, in order to ensure the survival and reproduction. Support is also available in the Bern Convention, Bonn Convention and the Convention on Biological Diversity (CBD/Rio Convention) and the Swedish Environmental Code.

Wind power must be limited to places that are less environmentally vulnerable or unique than the national interests in the area Örken and the Nissan valley as compensation areas for the protection of biodiversity.

"Salami slicing"-strategy. EU Directive 85/337/EEC (as amended by Directive 97/11/EC)

The County Board has contributed to the breakdown of environmental assessment processes in 4-5 subprojects which according to the EU Commission considered 'salami-slicing'.

The County Board has not at the Ministry of the Environment and the European Commission after consulting the requested interpretation of EU Directive 85/337 / EEC and the EU Commission criticized 'salami-slicing'.

The investigation is unclear regarding any additional wind power projects in Bergviks area between Örken North and South. The area may in practice be considered acceptable, and then Bergvik consistently use or rent out their own land, often financed by international wind industry.

The term "salami strategy" must now be examined regarding the Swedish application relating to the breakdown of the total environment and avoidance of assessing cumulative effects with two previous wind farms. Concerning noise, shadows, biodiversity and landscape and settlement of constraint values, decreased effects of turbines, obstacle lights, run down of turbines during the critical time for bats, protection of the national environmental interests in the Nissan valley and Great Jöns bog, etc. The project has not been tested according to the European Commission's Environmental Impact Assessment of Projects. Rulings of the Court of Justice (2013-03-14).

Virsehatt - landscape scenery

Wind turbines negative effect on the landscape has thoroughly been recognized for the provincial government. The 150 meter tall turbines in Knäred are already visible from the coast at a distance of 24 km. Those planned turbines in Örken, have a height of 175 meters, and will have even more dominant influence.

Even more questionable is the effect on the Natura2000 area on the high and unique rock formation Virsehatt at the river Sennån. The area is described by the County Administrative Board "Virsehatt has a dramatic topography with a dome shaped mountain raising 70 m above the surrounding area. Grassland, a wet area with birch and alder trees and a brook with fast flowing water surround the oak and beech covered mountain. Besides the biological values, the site is of geological and recreational

interest . The mountain is so high that it was the benchmark for mariners far out at sea in the past. The top has likely been used as a defense facility in troubled times. The view is magnificent and becomes totally demolished at the sight of the tall wind turbines and thus becomes counter-productive for the adopted eco-tourism. The approximately 11-hectare area with beautiful oak, beach and deciduous forest on the slopes could be a central part in fishing tourism directly adjacent to the river.

Comment: The County Administrative Board delegation has not taken into account the County Government own produced report on the county's sensitive landscape through open view between sea, coast, plains and woodland. Nor sensitivity at specific silhouettes that Virsehatt.

New guidelines for the establishment of wind in FSC-certified land

Forest Stewardship Council (FSC) is an independent, international membership organization, which will encourage environmentally appropriate, socially beneficial and economically viable management of the world's forests. FSC certification according to standard carries the right to higher wood prices. FSC forest management standard has previously not allowed industrial activity within the certified area, which has been a troublesome factor for LRF, forest owners and forest companies who also want to make money on the land lease of land. Large areas of forest are owned by people who do not live in development areas which suffer from degraded living environment, lower property prices and health effects.

The FSC has been forced to interpret the absolute requirement for a ban on industrial activity and the accompanying severe infrastructural interventions. After vigorous lobbyism from forest owners' interests, the requirement distorted and new guidelines for the establishment of wind on FSC-certified land supplemented by guidelines for land conversion. They said to take note of that establishment is effected in a manner that mitigates the negative consequences for biodiversity. If the requirements cannot be met, the area needs to be withdrawn its FSC certification in accordance with the policy of exclusion. The requirements apply to all FSC-certified forests where a wind power project is planned or where wind turbines and associated power lines and roads already are constructed.

FSC requirements shall apply in the case of wind power establishment at wooded land in addition to the statutory process. These additional requirements are in brief:

1. No wind power expansion in key habitats or in the forest areas of high conservation value (HCVF).

Applies to all land ownership categories.

2. Foresters will allocate an equal area to the area that has been converted for the establishment of wind. The area is calculated based on a flat rate of 1 hectare per wind turbine, which includes road building and power line. The allocated area should be prioritized for the area's importance for biodiversity and representativeness of the landscape and contribute to the obvious, significant, new, unsecured and long-term conservation benefits. Applies to all land ownership categories.

Comment: This means that 25 hectares of productive forestland will be converted to formally protected habitats. Provision can be done in groups and require redistribution of land between forest owners.

These are the new conditions that must be presented and discussed with the provincial government. Inhibition is necessary.

New verdict. Land and Environmental Court (MÖD)/Svea Court of Appeal. 2015-02-06. Case No. M 2538-14. Hylletofta, Sävsjö.

MÖDs verdict:

"The bird inventory that the company filed consists of an email message, a point routing and GPS map and two photographs. E-mails shows that the area of wind farm Hylletofta was visited on three occasions. Furthermore, it appears that there have been sightings of Capercaillie and black grouse - black grouse of one or possibly two males and one female Capercaillie. The area is considered to have a normal bird life and it has not observed any venue for Capercaillie. The e-mail lacks any kind of analysis or conclusions about the existence of Grouse. Although GPS maps are difficult to interpret and may probably not be used by the regulator or permitting authorities to draw any conclusions. It is clear from both points. Map as the e-mail and photographs that there are both female Capercaillie as gambling Grouses. The presence of venues for Grouse could entail a need for additional precautions such as at the location of the wind turbines or prohibition of the business. Land and Environmental Court therefore find

that the case as regards the existence of Grouse and its possible venues are not sufficiently investigated. Land and Environment Court's judgment and the county administrative board's decision should therefore be amended and the Board's decision annulled and the matter be remitted to the Board for further action".

Comment: The judgment indicates a heightened view of the protection of forest birds.

Despite the well-documented inventory is the analysis of the threat to forest birds and other endangered birds questionable.

The claims that "It has not been possible within the framework of this study deep in literature where, for example local or regional bird reports from the county could have been examined to find any older data on birds in the area "is strange" when there have been finished materials in the nearby E.ON project that gives a clear picture of the situation.

Statskraft further states in its EIA;

• We have today no knowledge of some nests of large birds of prey or owls in the wind park.

Nor Curlew or Sandpiper, has been within the planned wind farm, and no nesting has been recorded.

The impact on these species is deemed insignificant.

• Occasional observations have been made of Swifts and Wryneck. Impact on Swifts are deemed insignificant to small because it is linked to cultural landscape at the buildings in Bosared and thus of over 500 meters from the nearest possible work placement

On contrary and according to "Artdatabasen" there have been numerous sightings of this species

Arter	Rödlista					
EU-direktiv						
- 50 %	Hot	Örken	Nissadalen	Övre Mjälä	Mjälähult	Kragared
Goshawk		16 föda				6
Buzzard		2 häcktid	5 revir	2	2	13
Honey Buzzard			3 spel			6
Sparrowhawk			2 häcktid			4
Kestrel						
Tawny Owl		13 ungar	13 ungar	13	13	3
Tengmalms	EU- dir?	3	3	3	3	3
Pygmy Owl	EU- dir?		5 revir			
Red Kite			2 häcktid			
Osprey	EU- dir					20
Corncrake	EU- dir		3 spel			
Crane	EU- dir	3	16 föda	13	13 ung	5
Woodcock		5 revir	3	5	5	11
Curlew Red	Rödlista		5 revir	4	4	
C Sandpiper	Rödlista	4 Par	4 revir	2	2	4
G Sandpiper		3	2 häcktid	8	8	8
Enkelb.sin	-50 %			3	3	5
Nightjar	EU- dir?	3 spel		3 spel	3 spel	
Swifts	Rödlista	4 Par	14 bo	20 bo	20 bo	14 bo
Barn Swallow	14 bo	14	16	16	14	
House Martin	-50 %	2	12	14	14	14
Wryneck	Rödlista	3 Spel	2			
B Woodpecker	Rödlista	3 Spel	12	8	8	4
G Woodpecker			19	13	3	3
Minor nicks	Rödlista			14	14	
Goldcrest	-50 %	3	5	3	3	6
Whoope	EU- dir	2				
Mute swan				6	6	
Greylag		5 revir	18	13	13	5
Canada Goose		5 revir	5	13	13	5
Teal		4		8	8	7

Divers	EU- dir	4		4	4	5
Grey Heron				5 revir	5 revir	
Tree Pipit		7	8	3	3	
Cub	-50%		13	3	3	
Black grouse	EU- dir	5 revir	5 revir	5 revir	5 revir	6
Capercaillie	EU- dir	16	18 rede	13 ung	13 ung	5
Great Grey Shrike		16 föda				2 häck

According to the report, 6241, several of the observed species are listed in the EU Birds Directive or the Swedish Red List. Several species have also decreased by 50% during the period 1975-2010. Several species considered to be at risk of being adversely affected by wind energy in the form of collision or interference. That "only six listed species" were recorded at the bird inventory is no support for wind energy exploitation. Six more are listed in the EU Birds Directive and three species have been reduced by 50% in just ten years.

The allegations in the EIA are thus totally misleading. Within the mapping box Örken are both Goshawks, Buzzards, Tawny Owl and Pygmy Owl. In the adjacent box Nissan valley, there are also rare Red kite, Honey buzzard, Sparrow hawk and Pygmy owl. Board of Agriculture indicates that wind turbines in directly adjacent to a nesting area may be a risk factor for Red kite. Owls have slow reproductive rate and are foraging in darkness, which makes them extra exposed.

As regards the Black Grouse, it is registered in five territories in the areas Örken, Nissan valley, Kragared, Upper Mjåla and Mjålahult. Large number of sightings of Grouse chicks may also be noted. It is obvious that this area has many suitable playing-places for Black grouse and Capercaillie. Their positions will have less importance. In contrast, the risks increase during this time when the birds during flight to and from the venue fly longer distances during dark time and then pass the wind turbines.

In Fröslida area, has the rare Kestrel been observed during the breeding season and in Kragared is an Osprey territory. GPS study in Jämtland indicates that Kestrels have the same behavior as Golden Eagles with foraging up to 10 km from the nest.

In contrast to the data in the EIA are nesting Common Sandpipers (Red List) observed within the Örken area and in all other areas. The red listed Curlew is found in three adjacent areas.

The claim that Swifts and Wryneck only were observed at single observations and that the impact is assessed as "negligible to small" is a complete understatement. A large number of observations are recorded in "ArtDatabanken" in all mapping boxes.

Department of Biology, Lund University, has in the Annual Report for 2012 Monitoring of bird population trends, found that over the last 10 years have inter alia Swifts, House Martin and Gold crest the most alarming declines.

What do we know about the smaller birds' ability to cope with the sharp change in pressure that kills bats in the vicinity of the rotor blades? What impact has the strong turbulence and cooling behind the turbines?

Inventory Analysis: This is also a general proof of the inventory's narrow tunnel vision. The Swifts are searching food a very long distance and follow the insect currents as like to gather over altitudes where wind turbines are placed. Swallows, Sailors and Nightjars catch insects in open air and, like bats gather around the turbines. The Swifts sometimes seek food at great distances and may in poor weather be gone for days to collect insects. According to the Environmental Protection Agency's report do Swifts and Swallows almost a quarter of all the found dead birds in wind farms in Germany (Table 5.3). This proportion is much higher than their proportion to the number of common birds. The species is extremely vulnerable to wind turbines during the two-month periods fled to South Africa, where it passes Europe's wind turbines. During this time it is constantly in the air and sleep at high altitude. They are then exposed in the same way for strong wind farms in South Africa during the whole winter break. The Swifts are, according to statistics, reduced by 50% since 2000. A crash among these species has major implications for the ecosystem.

Habitat Losses - Displacement

Many species can be affected by habitat loss.

Black Grouse and Capercaillie established in the area and possible playground is confirmed. Report 6231 indicates that the buffer zone for venues for Capercaillie and Black Grouse should be 1 km away. This means that the entire area of about 30 squarekilometers becomes unsuitable for these species.

The cumulative effect of turbines at Fröslida and Spenshult must also be considered.

Other research has put forward the hypothesis that wind turbine noise mask of Black Grouse low-frequency sounds, which favors individuals with higher pitch and eventually causes a genetic change. This would then also apply to territorial males of other species.

What do we know about the endangered King Bird's opportunities to its high pitched able to communicate through the turbines high frequency, intermittent, and amplitude noise spectrum? The knowledge Mode is unclear.

Shorebirds and Geese are said to leave areas near wind farms, which probably means that they leave the area by feeling of claustrophobia that occurs between wind turbines. Several species are deemed sensitive to disturbance. Also here the state of knowledge is unclear.

Some species can then still feel forced to fly into the area by foraging with an increased risk of collision. Osprey move between nests and fishing waters and then exhibit the same sensitivity such as Red-throated Diver.

Roads in previously inaccessible areas results in increased disturbance to sensitive species.

Habitat loss causes crowding and increased competition, exclusion and imbalance in the ecosystem in adjacent areas.

Risk of total habitat loss over time as older individuals seeking to assert their turf while younger establish themselves in another place.

Wind power habitat effects including studied in Storrun and Frösörun at Upper Oldsjön in Jämtland, two years before and two years after the establishment of the wind farm in 2009. The result has been reported by Falkdalen/Falkdalen/Lindahl/Nygård 2013. Bird Studies at Storrun wind farm, Jämtland. Report 6574, the Environmental Protection Agency.

Approximately 20 % of the observed birds that passed through or near the wind farm was flying within the rotor height. 44 % of raptors and shorebirds were flying at the altitude where they might collide with the rotor blades. These bird groups have shown a high risk of collision in other studies. 93 % of sea birds flew above the critical altitude. There are risks in severe weather and lifting and landing at soil and water.

The test area affected by the establishment showed the largest decline and had a statistically significant decline in the number of home range of each species.

A couple of Red-throated Diver, nesting in the area of wind power plant has completely disappeared and other observations of sea birds ceased after its establishment. The number of Willow Grouse has also fallen sharply. Willow Warbler and Tree Pipit showed no significant avoidance of buildings, roads and wind turbines. It showed a clear decline in the number and density of Capercaillie in 2011. The density of Grouse was low in the study area, compared to the situation in general in Jämtland during all the years. The rejuvenation of Grouse were also significantly lower than what has emerged in average in the rest of Jämtland, aside from 2010. The inventory of birds on the marshes Oldflån (3 km east) and Flån (10 km northeast) showed a sharp decline in the number of territories once established, but this result generally applies to the whole of Sweden and was considered too far to the decline should be able to be related to this.

This analyse has not considered the effects of the local climate impact that wind turbines cause by driving down the cold air that causes a reduced daily temperature of 1-4° C during the day and the risk of dehydration in sensitive environments through no-dew-point at nights and mornings (USA).

Several species have moved their turf from the turbines, which results in large habitat loss because wind turbines usually have a mutual distance of about 500 meters. Approximately 10 % of productive land have been lost for roads, foundations, parking areas for cranes and offices, resulting in less food and shelter.

The density of Grouse has gone down considerably once the turbines were established, but because most observations are made of coniferous quite far away from the wind turbines, it is difficult to imagine a direct connection, although it is possible that there is some interference effect.

New verdict. Land and Environmental Court, Svea Court of Appeal. JUDGMENT 2014-12-22. Case No. M 4937-14

Application for exemption under § 14 Species Protection Ordinance, the case of deliberate killings according to § 4 species protection regulation.

Land and Environmental Justice judgment

1. Land and Environmental Court rejects the claim that it is retrieved into a ruling from the European Court of Justice.

2. Land and Environmental Court annuls the lower court of appeal and rejects Boge Vindbruk AB's application for an exemption under § 14 species protection regulation.

Species protection issues have their rightful place in the permitting process for hazardous operations where regulation is to ensure that a clarification of what can be inferred from the general rules concerning the protection of species.

It is found that the provincial government Gotland adopted the conclusions obtained in the three-year study of bird deaths at Näsudden on Gotland and recognized in the statement Effects on bird life at a generation of wind turbines, control Näsudden, Gotland 2009 - 2013. Mårten Hjernquist 2014.

The County Administrative Board Gotland

Increased risks for particularly raptors are known consequences of that one up wind, especially near nesting sites. Raptors collide more frequently with wind turbines than other birds. Birds that nest in the area are at higher risk than migratory birds. The collision risk is not reduced with time; there is no indication that the birds learn to avoid the wind turbines.

Environmental Protection Agency has submitted observations and goes on the same line. Species Protection Ordinance is applicable in this case and the activities prohibited under § 4, first paragraph 1 and 2 and would require an exemption under § 14 because - Species Protection Ordinance applies to all wild birds,

- Those in the proceedings of the court noted settlements shows that there are pairs of sea eagles in the area or around the area where the wind turbines are supposed to be located, which may be interfered with or be killed. and that - the Company is aware that the activity may kill or interfere eagles which means that deliberate incitement fulfillment (cf. European Court of Justice in Case C-103/00 and C-221/04 on the concept of "deliberate").

Land and Environmental Court judgments MMÖD 2013: 33 Case number: P9722-12

Ruling

.....

Land and Environment Court judgement tells the rules in municipal comprehensive plan for the establishment of wind power in the area and that the establishment is located near the conservation area pursuant to Chapter 3. 2 § Environmental Code and nature reserve Brommö archipelago in which a number of bird sanctuaries included. Furthermore the Land and Environment Court for the report Birds in Vänern area describe it from a wind perspective. In addition, there is a Natura 2000 area, which includes a designated protected area under the Birds Directive, nearby.

The pending establishment thus lies in close proximity to areas that in several ways are protected, not least because of its interest in birding. Concrete information from individuals suggests that there may be nesting birds adjacent to the current location. Against this background, it is necessary to set higher standards for the investigation that will form the basis for building permit application than if planning permission is sought for an investment in an area where there are indications that the wind turbine at risk of conflict with various interests worthy of protection.

Land and Environmental Court is satisfied that any detailed inventory of the conditions at precisely the current location has not been made during the proceedings.

Brommö Wind has submitted a report consisting of conclusions and summaries of others, sometimes years old, reports. This investigation is general and not based on any own inventory of the presence of birds and bats on the current site.

In this case, the knowledge base regarding the presence of birds and bats and their patterns of movement within the area flawed. MMÖD finds summary, in conclusion to the investigation which forms the basis of the application, as well as the investigation that have been added to the application during the processing of the case, is not sufficient to make the balance between the different interests that must be made when assessing the suitability of the soil in accordance with Chapter 2. 1 § ÄPBL. Land and Environment Court ruling should in this context be established.

Brommö Wind argues that the corporation should have been supplementary ordered by the Land and Environment Court does not alter the assessment.

Comment: This anomaly can be equated with Statkraft's irrelevant allegations "There is no concentrated migratory birds passing through the area" and "In the area there are no steep slopes that can attract thermal flying birds of prey." Likewise, the underestimation of the threat to forest birds and the seven red listed species, as reported in another section.

All the facts about the threat to biodiversity and ecosystems, is now suggesting that onshore wind must be reconsidered, inhibited and limited to areas where they do minimal damage. The Swedish target for wind power of 20 TWh is already achieved.

Land and Environment Court Växjö District Court. New verdict. JUDGMENT 2014-03-07. Case No. M 4224-13

Land and Environment Court finds that the provincial government has made its decision based on the recorded background corrected mean time of measurement, 39 dB (A), thus is 1 dB below the conditional value of the equivalent noise level of 40 dB (A), which according to the state of the wind turbines must not exceeded during any part of the day. It should be noted that consideration when not taken to carrying a total measurement error referred to $-\infty$ - +2.6 dB (standard deviation) even though the estimation of measurement uncertainty determined to be unsafe. This means that the measured value, with some probability, will lie outside the upper uncertainty limit. When a large number of measurements can be expected that a significant proportion of the measured values may be higher than 41.6 dB (A), i.e., it is not statistically established that the condition is withheld.

The Court considers that the results of the subject completed the measurement is not sufficiently clear to the conclusion to be drawn that no action need be taken.

The licensing authority judge considering this, as well as a recently conducted emission measurements shortly, the Court considers that the County Administrative Board's decision should be set aside and the case referred back to the County Board for further handling.

Comment: The Court has now accepted the scientific arguments that have long relied on in the judicial process. These margins of uncertainty also applies to the calculation and for the indicated source sound.

This means that the conditional equivalent noise level will be 37.4 dBA.
