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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

31st meeting
Strasbourg, 29 November – 2 December 2011

Follow-up of Recommendation No. 144 (2009) of the Standing Committee, on the wind park in Smøla (Norway) and other wind farm developments in Norway

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Recommendation No. 144 (2009) on the wind park in Smøla (Norway) and other wind farm developments in Norway

Reference is made to your letter of 5 May to Mr Størkersen regarding information on Recommendation No. 144 (2009), as well as on the outcomes of the Conference on Wind energy and Wildlife impacts. In the following you will find information on these topics, for the Bureau to use at its next meeting. The information will be supplemented and updated before the next meeting of the Standing Committee.

Conference on Wind energy and Wildlife impacts

May 2-5 2011, NINA (Norwegian Institute for Nature Research) and CEDREN (Environmental Design of Renewable Energy) hosted an international congress (CWW2011) with wildlife and wind power generation as core issues. The aim was to share experiences on how wind-power plants may affect wildlife, and discuss how to meet the challenges created by the world-wide increased activity in large scale wind-power plant construction. The congress received approximately 300 attendees from 30 countries. The conference program included i.a. the following topics: EIAs and site selection, pre- and post-construction monitoring, fatality studies, species-specific vulnerability and population effects, behavioural and spatial responses of wildlife, collision risk modelling, cumulative effects and mitigation and compensation. The conference ended with a panel debate focusing on future challenges.

Detailed information on CWW 2011 in English is accessed at http://cww2011.nina.no.

Although you did not specifically mention the BirdWind Project on Smøla in your letter, we would like to give you some updated information on this subject and some of its findings:

The BirdWind Project was formally finalized on December 31 2010. The main project objective has been to study species-, site- and season-specific bird mortality and how it is influenced by environmental and technical factors. Several work packages and subprojects have focused on behavioural and response studies at individual and population levels, for selected model species. The white-tailed eagle (WTE) has been a focal species during the studies. Modelling the WTE collision risk and modeling the WTE population dynamics were important elements of the project activities. The development of methodologies and technical tools for data collection and mitigating measures has also been an important part of the project.

Some of the findings as regards the WTE are:

Since 2005 39 WTEs have been recorded as victims of collisions with turbines. The numbers have varied from 2 to 11 eagles each year, with an average of 7.8 eagles or 0.11 WTE/turbine/year. 28 (72%) have been found during March-May and 7 (18%) in the autumn. 11 (28%) were found close to 5 turbines in the northwest part of the wind-power plant area. Of the 39 WTEs, 21 (54%) were adults (in their 6th calendar year or older).

DNA-profiles of eagles have been used to monitor the population on Smøla more precisely and the data has shown that the population size previously has been overestimated. The current white-tailed eagle population size estimate for Smøla is approximately 50 territorial pairs. There has been no significant trend in population size, neither positive nor negative, since the DNA monitoring started 5 years ago. The number of young eagles born within the wind power plant decreased throughout the study period (2002-2010), as did the reproductive rate. However, the number of young eagles born on Smøla *overall* increased, as did the reproductive success.

As regards mitigating measures, the findings of the project and the increased understanding provides a basis for further work. Progress on developing mitigating measures to reduce the collision hazards, require increased species-specific knowledge on how the birds´ behavior is determined by their vision

(including colour and movement sensibility), and at what distance their visual stimuli are triggered. Increased knowledge on how birds are using their biomechanics and aerodynamic skills, to cope with the turbulence and vortices in the vicinity of the wind turbines is also needed.

A final report in English can be accessed at http://www.nina.no/archive/nina/PppBasePdf/rapport/2011/620.pdf.

For the time being NINA/CEDREN is working on an application for autumn 2011 to the Research Council of Norway to grant a BirdWind 2 project, with focus i.a. on mitigation measures. In addition, Statkraft has contributed economically to keep unbroken time series on the white-tailed eagle and willow ptarmigan subprojects, and also to keep the bird radar running.

As regards **Recommendation No. 144 (2009)**, we would like to inform you of the following:

1. *Continue to develop regional plans which are subject to Strategic Environmental Assessment (SEA), in line with the national guidelines, taking into account cumulative effects on a wider scale, as well as carrying out the conflict assessments required for each project.*

According to national guidelines on wind farm planning, several Norwegian counties have developed and adopted regional plans aiming to clarify suitable and non-suitable areas for wind farming. All of these plans are subject to an SEA. In addition to already adopted plans, several planning processes are on-going. The ministry of Environment contributes economically to initialize such planning processes. After being adopted by the regional planning authority, the plans are sent to the Ministry of Environment for final approval in cooperation with other affected ministries.

For the time being NINA is evaluating the regional plans for wind-power generation to assess how this planning instrument can be further developed to secure a sustainable wind power development in Norway, including assessments of cumulative effects on a regional level. This project is initiated by the Directorate for Nature Management and funded by the Ministry of Environment. Conflict assessments are still carried out for all wind farming projects.

2. *Before licensing a wind farm ensure the quality, independency and completeness of the Environmental Impact Assessments (EIAs) including the interpretation and the follow-up of recommendations and complaints through a transparent procedure; the results of the current NINA-project at the Smøla wind power plant must enhance the fundamental knowledge needed for improved EIA processes.*

and

6. *The environmental authorities shall seek to strengthen investigation and mitigation measures related to wind farm licensing. The advice and comments from the environmental authorities or the complaints from NGOs are to be publicly addressed in the final decisions by the Norwegian Water Resources and Energy Directorate (NVE), in case they are not followed by the licensing authority, specifying the justification why the arguments were not taken into account.*

In accordance with the Norwegian EIA regulations wind farms exceeding 10 MW shall always undergo an EIA. The revised EIA regulations, enforced 26 June 2009, introduce a requirement to consider assessment of wind farms exceeding 5 MW if they may have significant impacts on the environment.

The Ministry of Environment is the main responsible authority for the EIA provisions. For wind farm projects, the Norwegian Water Resources and Energy Directorate (NVE) is the competent authority. This is to ensure integration of the EIA process as a part of the licensing procedure in compliance with the Energy Act, as this is considered to give the best results. The Norwegian EIA regulations comply with the EU directives on EIA and SEA.

Possible shortcomings of the EIA reports will be commented on by environmental authorities and NGOs through the compulsory public consultations. It is a requirement that comments received during the license and EIA process must be presented. In addition it must also be identified how these comments are

being integrated in the handling of the EIA and the related decision-making process. Comments not followed are to be justified by the licensing authority. This process ensures a transparent assessment of the statements from e.g. environmental authorities and NGOs.

Improvement of the requirements on an EIA is a continuous process where research and experiences from development of all wind power projects are taken into account when it is relevant. This also includes the results from the Bird Wind project at Smøla. Moreover the Ministry of Environment in cooperation with the Ministry of Petroleum and Energy is identifying possible changes in the requirements on EIA for wind farms following the Norwegian Nature Diversity Act in force from 2009.

3. *Accept the need for imposing mitigation measures in order to reduce the detrimental impact of the existing Smøla wind farm on birds (especially White-tailed Eagles), such as shutting down (some of) the turbines in crucial periods of the annual bird cycle (pair formation, reproduction, fledging, migration) or in periods of adverse weather conditions, taking into account the recommendations of the NINA research programme on Smøla; also envisage further reduction of mortality caused by power-lines.*

The results from the NINA research program on Smøla, which was formally finalized on December 31 2010, have not yet been fully evaluated by the Energy authorities and thus, few mitigating measures have been implemented based on these results.

4. *When considering wind farm projects which have not yet been licensed, take into account the experiences and knowledge gained from the ongoing research at Smøla and other relevant projects including off-shore locations.*

All relevant results from the research project at Smøla, which is not site specific only to Smøla, will be taken into account when considering other wind power projects, including offshore locations. Also the results from other research projects and experiences from development of other wind power projects are continuously taken into account in the assessment of environmental impacts of new wind farm projects.

5. *EIAs must take into account the duly formulated NINA recommendations, follow qualitative guidelines, investigate alternative sites and, to the extent possible, predict cumulative effects of wind farms.*

and

7. *Take measures to improve pre- and post-construction studies of impacts of wind farm development.*

A coordinated licensing process, supplemented by regional plans, is by the authorities considered to be a suitable tool for assessing cumulative effects. Wind farm projects in defined regions undergo a coordinated licensing process by NVE. This enhances the possibility to compare the positive and negative effects of the different projects simultaneously and choose the projects with the lesser conflicts and most beneficial to the whole community.

On the initiative of The Ministry of Environment, a project on cumulative effects from wind power development on birds was established in 2009. NINA has prepared a report under the assignment of the Directorate of Nature Management. The main objective of the report is to define a common approach to impact assessments for all planned and existing wind power projects. This definition will be used to develop standard methodology for pre- and post construction surveys for a range of vulnerable species, and will improve the EIA basis as well as cumulative impact assessments.

The report was completed in December 2010 and is now being studied by the Norwegian environmental and energy authorities. The report can be accessed at http://www.nina.no/archive/nina/PppBasePdf/rapport/2010/623.pdf .

8. *The priority of designating internationally important sites may not be influenced or delayed by the potential suitability for wind farm development in those areas.*

and

10. *Compensate the loss of natural area with ecological functions by designation of new conservation areas and by designating selected habitat types at appropriate sites or regions, taking into account the ongoing gap analysis, in order to safeguard landscape and biological diversity as two of Norway´s most important assets.*

As regards the on-going processes for protection of specific areas, the priority of designating such areas (national parks, protected landscapes, nature reserves and habitat management areas) is in no case influenced or delayed by the potential suitability for wind farm development in those areas.

The gap analysis which is mentioned was completed in 2010. One of the conclusions was that today´s protected areas are not fully representative without increasing such area in the lower parts of Southern Norway. On this background, it has been decided that a strategy shall be completed on how to use the various legal tools available in the Nature Management Act to alter this situation.

9. *Investigate the possibilities and consequences of non-renewal of the license for exploiting the Smøla wind farm concession by the year 2026 or consider a reduced period, and create the possibilities for due ecological restoration of the site if and when the site is abandoned.*

Before 2026 a thorough assessment of negative and positive impacts of the wind farm will be carried out before deciding whether a renewal of the licence should be granted or not.

In all licences for wind farms there is a condition regarding restoration of the site after the end of the license period. This obligation is also expressed in the Energy Law Regulation, section 3-4. After deciding whether the licence for the Smøla wind farm should be renewed or not, the authorities will consider the possibilities for due ecological restoration of the site.

10. *Compensate the loss of natural area with ecological functions by designation of new conservation areas and by designating selected habitat types at appropriate sites or regions, taking into account the ongoing gap analysis, in order to safeguard landscape and biological diversity as two of Norway´s most important assets.*