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# COMMENTS ON
## *DRAFT ENVIRONMENTAL IMPACT STATEMENT*
### *FOR THE*
### *NOBLE CHATEAUGAY AND BELLMONT WIND PARKS*

Towns of Chateaugay and Bellmont, Franklin County, NY

Town Boards of Bellmont and Chateaugay, Co-Lead Agencies

May 2, 2007

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Chateaugay and Bellmont Wind Parks. The Delaware-Otsego Audubon Society operates the Franklin Mountain Hawk Watch near Oneonta, New York. Our organization has operated the Franklin Mountain Hawk Watch for 18 consecutive fall seasons and tallied over 9000 hours of hawk counting. Our site often records over 200 Golden Eagles during the migration.

We generally support wind power as an alternative to nuclear and fossil fuels. A copy of our policy on windpower is attached to these comments.

Despite our support for wind power, we do have concerns about how this project will impact wildlife. This is a large project that is being built in what we believe is a migration corridor for Golden Eagles.

Below are more specific concerns regarding these issues and others, along with boldfaced recommendations.

## Impacts on migrating raptors

We have examined the Bird and Bat Impact Assessment for the projects and find flawed assumptions and serious deficiencies in the timing and scope of the raptor migration surveys.

The assessment states "*raptor migration areas are well documented*." After searching for documentation to support this statement, we cannot agree. Some sites that concentrate large numbers of some species are known. The presence or lack of hawk migration survey sites in an area is frequently the result of the interest of one person or a small group, or a lack thereof. If anything, there are major gaps in knowledge of hawk migration routes in New York State and elsewhere. This is particularly true in the northern portions of the region, including the area of the proposed project.

The survey of migrating raptors at the project site consisted of a total of 45 hours of coverage on 7 dates in one calendar year. Two of those days it rained. By any standard, such a sporadic and limited effort could not adequately assess even that year's migration, let alone provide a true picture of the expected raptor movement over the expected 20 year life of the project.

Many variables affect raptor migration counts, including wind speed and direction, weather fronts, precipitation, breeding success and other population factors, observation locations and observer effort and ability. Seven days of coverage in one spring and one fall migration is grossly inadequate to compensate for all these variables. At a minimum, 300-400 hours annually of properly timed coverage over two years of spring and fall migrations is needed to gain an understanding of raptor movements. That minimal amount of coverage also assumes weather conditions that are good enough for the data to be meaningful.

Clearly the effort to assess the magnitude of raptor migration through the project area fell far short of that necessary to make the stated claim that there is no evidence of pronounced spring and fall migratory raptor corridors in the project area.

More specifically, there are major concerns over Golden Eagle movements through the project area. We have been investigating how Golden Eagles move through New York during migration in order to address possible impacts of wind projects on the species. We know of no other systematic effort to identify hawk migration paths and concentration points in New York away from a few well known sites.

Very little is known about how and where Golden Eagles move through the state.

In an effort to determine where Golden Eagles migrate in New York, hawk count data from across eastern North American have been reviewed; The Kingbird journal reports have been read in detail; searches have been done on the primary listserve for reporting birds in northern New York - http://groups.yahoo.com/group/Northern_NY_Birds - with over 450 members; we have reviewed maps from a Golden Eagle telemetered by DEC; and, we have reviewed reports from contacts in northern New York. These data and sources strongly suggest a concentrated Golden Eagle migration between the Village of Saranac Lake and Jay Mountain to the east, in both spring and fall. This concentration of Golden Eagles found during migration is south of the project area. Further support for a concentrated Golden Eagle migration passing through the area was graphically displayed this spring on The National Aviary web site - http://www.aviary.org/csrv/eaglePA.php. Maps on that site show the spring 2007 migratory paths of 2 Golden Eagles telemetered in Pennsylvania . We have attached a map showing these birds' flight paths. After examining these data and reports, we believe Golden Eagles concentrate near or in the project during migration.

The dates chosen for the surveys may have been appropriate for early fall and late spring migrants like Broad-winged Hawks, assuming enough effort was made to adequately assess those species. Since surveys were terminated because of weather on one of the two mid-September days, only one day was covered during the Broad-winged Hawk migration. Broad-winged Hawks are less predictable migrants than other raptors. Weather and wind direction affect their migration to a large degree. **One day of surveying for a species that is known to be erratic in its migratory habits has no meaning. There was no effort made to assess the type or magnitude of Golden Eagle migration through this area.**

The number of days covered provide so little data as to be virtually meaningless. The assessment states *"Additional days of raptor surveys were unnecessary because the project area is not located in area known to have increased raptor migration.*" What is known about the raptor migration is totally dependent on effort. There was insufficient effort to determine much of anything about the migration. **Again, there was no effort to assess the Golden Eagle migration.**

Assessment Table 3-11 states Golden Eagle "*is likely a very rare transient or migrant over the project area.*" This is an assumption supported by poorly timed surveys, surveys done too early in fall and too late in spring to be meaningful. The amount of coverage was insignificant. The data have no value for determining possible impacts to this species. This is a rural area with few birders. Golden Eagles are a rare species. The consultant checked The Kingbird reports for the towns involved. Casual observations as reported in The Kingbird from this area are of little help in determining what is present, especially in regards to the magnitude of the raptor migration. An inquiry with John M. C, Peterson, The Kingbird Regional Editor, on the number of reports to The Kingbird from the towns involved, revealed that reports from Franklin County come from elsewhere in the county. Mr. Peterson writes: "those two towns (Chateaugay and Bellmont) are pretty much *terra incognita."*

**The number of reports of migrating Golden Eagles south of the project in the high peaks are compelling. The likelihood of these birds moving through the area, and the surrounding region, needs to be addressed before the project moves forward.**

Data suggests that Golden Eagles in the east concentrate along a small number of common paths during migration. Data from Franklin Mountain raises interesting possibilities about this behavior. Several significant one-day events at Franklin Mountain were followed 3 days later by very similar events at Allegheny Front in Pennsylvania 250 miles distant. The most noteworthy are November 20 and 23, 2003 and November 11 and 14, 2005. These events suggest the use of common migration paths by many birds. However, there is no knowledge of any route followed by birds between these two sites due to a lack of observation

effort. The same effect very likely applies north of our survey site through the Adirondacks into Canada.

It is known from records at Franklin Mountain that significant flights of Golden Eagles can occur at a site on a small number of days. Even if the surveys were timed correctly, it would be easy to misjudge a site given only a small amount of data.

Spring surveys were conducted on April 19, 21 and 28, 2006. At the nearby Eagle Crossing Hawk Watch only 6% of their Golden Eagles were recorded after mid-April. This species needed to be surveyed in March and early April.

Fall surveys were conducted on September 16 and 18, and October 24 and 26, 2006. Two of those days it rained. (Rain typically shuts down any raptor migration.) Over the past five years at Franklin Mountain, only 13% of Golden Eagles passed the site by October 26.

**Surveys specifically for Golden Eagles should have been conducted from the first of March to the middle of April, and from the middle of October into early December, to adequately assess their use of the project area. These surveys should have included every day without rain.**

It may be noteworthy that a Golden Eagle was seen in the project area at the late date of April 21. Only a few immature birds should still be moving north that late in the season. This bird must not be dismissed as a "*very rare transient*." It was likely a late, but expected, migrant.

The assessment notes that the studies were similar to what was expected by NYSDEC at other nearby projects. In a personal communication, NYSDEC staff denied making any such recommendation for projects in this area. We were not aware of those nearby projects during the planning stages. If those surveys were as limited and poorly timed as these, they were as deficient in surveying for raptors as this project, especially Golden Eagles. The suggestion that 3 days of surveys per season are somehow adequate is disturbing. It is contrary to everything we have learned over many years of surveying hawks and eagles.

**Thorough surveys for migrating raptors need to be done in the project area in spring and fall through 2 complete migration cycles. These surveys must be timed so they include all species, including Golden Eagle, a New York State Endangered Species.**

Regarding the references to gross numbers of birds at the Eagle Crossing Hawk Watch, 25 miles distant: this is meaningless when related to the risk to Golden Eagles. In his article "Wind Power Development and Raptor Migration in the Central Appalachians" (*Hawk Migration Studies, volume XXXI, No.2*), Dr. David Brandes of Lafayette College examines risk factors that different raptor species face from turbine impacts. These risk assessments are based on how birds migrate, forage and their relative abundance. The highest number of risk factors have been assigned to Golden Eagle. David Brandes states "Golden Eagle appears to be at the highest risk." The data we have gathered and reviewed suggests that virtually the entire population of this species recorded in the Appalachians during the winter crosses the U. S. border in northern New York during both spring and fall migrations.

The terrain in the project may not concentrate migrating raptors. Even so, we expect that Golden Eagles leave the Adirondacks in the spring in a concentrated, narrow corridor. These birds would then disperse slightly as they move north through the project area. A similar, but reversed effect may take place in the fall. This possibility would result in a much higher density of Golden Eagles in the area than would be otherwise expected.

Recently reported impacts to White-tailed Eagles at Smola, Norway where a number of birds have been killed by collisions with wind turbines, and breeding success has dropped since construction of a wind farm, is an example of how a species at risk, even though low in

numbers, can be affected by modern wind turbines.

## Potential Cumulative Impacts

Apparently, the Noble Clinton, Ellenburg and Altona Projects, and the Horizon Marble River Project did not adequately address the raptor migration through the project areas. They did not consider or acknowledge the real possibility of a significant Golden Eagle Migration through the region. **Assumptions about cumulative impacts from multiple projects in the region need to be re-evaluated. Concerns about impacts on Golden Eagles need to be addressed in any assessment of cumulative impacts.**

## Post-construction studies

We are pleased that post-construction mortality surveys are recommended in the risk assessment. However, we would like to see the FEIS state that Noble has committed to conducting these surveys. The DEIS does not make this clear to our satisfaction.

The documents state "the studies are a complement to pre-construction radar studies and field surveys that were conducted in spring and fall of 2006 and are designed to quantify the bird and bat collision impact.....during migratory periods." Noble is proposing the search effort take place between April 15 and October 15. This time frame misses the bulk of raptors that migrate in early spring and late fall. **Enough evidence of a concentrated Golden Eagle migration exists to extend the length of these surveys so they include all of March and early April in the spring and all of October, November and the first week of December in the fall.**

Regarding the methods used in the surveys, if DEC does not provide guidelines, Noble should ask DEC for their recommendation. The timing of such surveys will be critical. It is important that they be conducted during the migration cycles and during nesting seasons of all species that may be impacted.

During migration season, all days are not equal. Ideal migration conditions for Golden Eagles are closely related to weather factors. Weather conditions may cause passerines to fly at low elevations. Since conditions that could result in high mortality during migration may only occur on a small number of days each season, randomly selecting dates could easily result in data that suggest a lower than actual numbers of bird kills. **Surveys should be done immediately following conditions that would be expected to put birds at risk.**

Noble intends to consult with DEC on these studies. It does not state its intention to make the final reports on the surveys public. **Before approving the project, the co-Lead Agencies should require the developer to release the final reports on the post-construction mortality surveys to the public.**

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