

# Borrego Avian & Bat Impact Mitigation

Reducing impact to the environment is core to Borrego's mission. Therefore, impacts to the natural habitat are thoroughly reviewed and minimized to the extent possible. The wind energy industry takes avian and bat impacts seriously, and in the last couple decades, the industry as a whole has made strides to minimize impacts to wildlife. Per NYS Energy Research & Development Authority, "Surveys of scientific literature have shown that, overall, the negative impacts of wind energy on wildlife are significantly less than those of fossil fuel and nuclear generation. Wind energy impact is also significantly smaller than other factors, including predation by cats and collisions with other structures and vehicles. Songbird populations number in the millions, and there is no evidence that fatalities from existing wind facilities are causing measurable changes in bird populations in the U.S.". To further minimize impacts, Borrego performs the following diligence:

Prior to pursuing permitting on any wind development project, Borrego consults with state and federal agencies including the New York Natural Heritage Program, and US Fish and Wildlife regarding the potential presence of state or federally listed threatened or endangered species on site. This initial information sets the course for further investigative efforts.

## Bat Impact Mitigation

Studies of bat activity show that most activity occurs during summer or early fall on nights with lower wind speeds. Activity decreases during windy weather. Based on these studies the New York State Department of Environmental Conservation (NYSDEC) has developed guidelines to mitigate or eliminate impacts to bat populations, specifically the Northern Long Eared Bat. The sophisticated control systems in modern wind turbines allow the operation of the turbine to be curtailed based on the time of year, time of day, and wind speed, therefore shutting the turbine down when these parameters are favorable for bat activity. The exact parameters and wind speed are defined during consultation with NYSDEC. Borrego incorporates curtailment as part of our wildlife impact reduction strategy.

## Avian Impact Mitigation

New York State requires both pre-and post-construction studies of birds in the project area, and mitigating measures when appropriate. Significant impacts are often avoided through effective wind turbine siting practices that discourage development in locations with highest risk to wildlife; for instance, locations in close proximity to bat hibernation sites should be avoided. In some cases, operational mitigation may be implemented to limit impacts to acceptable levels.

We follow NYSDEC guidelines on every wind project to help determine potential impacts, which includes the following:

- Consistent and predictable methodologies, based on the latest scientific knowledge, to assist in the planning, development, and monitoring process

- Standards for rigorous pre-construction surveys and impact studies to estimate potential impacts in the project area

Borrego has partnered with avian specialists at Environmental Design & Research (EDR) to perform pre-construction surveys as part of the consultation process with NYSDEC. These findings are currently being reviewed with the NYSDEC. Prior to commencement of any construction, the following steps will be performed in coordination with NYSDEC:

1. Based on the site information including habitat and avian survey results, NYSDEC will make a determination of whether there exists occupied habitat on site
2. If occupied habitat is present, impacts from the proposed facility to that habitat will be determined.
3. Appropriate avoidance, minimization, and mitigation measures will be recommended and implemented

Consultation with NYSDEC for the Reynolds Road wind project is currently ongoing. Borrego will provide the town of Glen with documentation of the determination from NYSDEC upon completion of this consultation.