**Aeroacoustic Assessment of Wind Plant Control**

**Project Impacts**

*The purpose of this section is to identify and document how this newly planned/created project will impact the target audiences.*

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| **Deliverable/Product or "output" Description:**  Primary outputs of the Aeroacoustic Assessment project are a detailed dataset of field observations contrasting acoustic emissions of the DOE 1.5MW turbine on site operating under nominal and yawed conditions, an updated aeroacoustics model designed to interface with current release of OpenFAST, and a journal article describing the methods used and insights derived from field testing. |
| **Audience/Customer:**  DOE, National Renewable Energy Laboratory, Lawrence Berkeley National Lab, International Energy Agency |
| **Audience Use: (Outcome, or Impact, what is the intended use of "output" by Audience/Customer)**  Guidance on expected addition acoustic noise produced during wind plant control strategy implementation |
| **Communications/Outreach Strategy (to reach target audience):**  Journal articles detailing scientific advancement of understanding of aeroacoustic emissions, announcement of updated OpenFAST aeroacoustics module to be published in x journal |
| **Does this project involve significant industry engagement?**  *(Significant industry engagement is defined as any direct contact, input, or collaboration with)* |
| **Description of Engagement:**  Interaction with International Energy Agency (IEA) Wind Task 39: Quiet Wind, reporting of field observations at NREL, assessment of observational data following suggested methods by IEA working groups |