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Thank you, Chairwoman Bowers and members of the Senate Selecte Comment thereform Steven Sample, Executive Director of the Department of Defense Military Aviation and Stiving Assurance Siting Clearinghouse. On behalf of the Department of Defense (DoD), I would like to thank the Kansas Senate Select Committee on Wind Turbine Lighting for the opportunity to provide comments at today's hearing. We appreciate your efforts to include impacts to military readiness in your energy siting processes.

I testified in January of this year before the Kansas Senate Committee on Local Government that considered another bill related to energy siting. I will try not to repeat everything I said then, but many of our concerns are the same. The mission of the Clearinghouse is to protect the DoD's military readiness and operational capabilities from incompatible energy development. The Clearinghouse does this by collaborating with DoD components and external stakeholders to prevent, minimize, or mitigate adverse impacts on military training, testing and operations. Congress established the Clearinghouse in section 358 of the National Defense Authorization Act (NDAA) for Fiscal Year 2011 and subsequently modified and codified these requirements in title 10 of the U.S. Code, which addresses the Armed Forces. This law gives DoD a voice within the Federal Aviation Administration (FAA) Obstruction Evaluation Airport and Airspace Analysis (OE/AAA) program and sets clear guidelines for DoD's interactions with the public on energy project proposals. Under this statute, DoD may only object to development of energy projects when unacceptable risks to national security cannot be feasibly and affordably mitigated. It is important to note that these objections are advisory only, and are not binding on FAA, the project proponent, or permitting authorities at the state or local level.

Legislation introduced and considered earlier this year in the Kansas Senate – Senate Bill 478 - would have required FAA approval of lighting plans before allowing state permitting. My concern with this legislation, as previously introduced, is that DoD's safety concerns may not be sufficiently considered in the process. If Aircraft Detection Lighting Systems are used to darken the turbines at night and to light them up when aircraft approach- can we be certain that they will light up in time- or at all- for fast moving military aircraft flying at a low altitude? We are working with the FAA to answer these questions and hope to have answers later in 2023.

When considering legislation that addresses wind turbine lighting, the DOD would ask that the state process include a request for a mission impact statement from the Clearinghouse so that we can review each project and provide you a thorough answer. We provide mission compatibility letters to other states and would be able to support a similar construct in Kansas.

In addition, we would prefer that the process allow DoD to inform the state of all concerns regarding military readiness and not confine the analysis to lighting. For example, wind turbines often pose the greatest impacts to military training, testing, and operations due to both their height and the effect that they can have on a wide variety of radar systems, in addition to potential lighting concerns.

We have found that this arrangement complements the federal processes and brings the state into the conversation in a productive and holistic way. It also encourages early engagement, which provides the best opportunity for a solution that is amenable to all. When we deal with issues early, while developers still have flexibility, the result is a successful wind project that does not degrade military readiness.

Since 2014, DoD has reviewed over 6,149 wind projects nationwide, the vast majority of which were found to have little to no impact. DoD has entered into approximately 365 mitigation discussions with wind energy developers. In 100 of those cases to date, the discussions resulted in a written mitigation agreement to address adverse impacts on military readiness and operations. In some instances, a less formal mitigation approach resolved DoD's concerns. In others, developers have cancelled projects in or moved to alternate sites.

DoD has a proven track record of supporting thousands of energy development projects that are compatible with our ability to test, train, and operate. Most projects are compatible or can become compatible with reasonable mitigation actions. Most wind energy developers are good partners with the DoD and work closely with us to find solutions that allow for energy development while allowing our military missions to continue.

As to wind projects within Kansas, we have reviewed 213 wind energy projects over the past 8 years. Of those, the Clearinghouse determined that 14 projects would pose an adverse impact to DoD missions, and established Mitigation Response Teams. One wind project was cancelled by the developer, and 11 projects were ultimately cleared by the Air Force and DoD. Discussions concerning the remaining wind energy proposals are ongoing, and officials from the Air National Guard operating out of Oklahoma, Kansas and Colorado (due to concerns with training conducted in multiple Military Training Routes within Kansas) and the North American Aerospace Defense Command (due to radar impacts to the Garden City Common Air Route Surveillance Radar) are involved in those discussions. The potential for significant expansion of wind energy development underscores the importance of a thoughtful and deliberative siting review process.

To conclude, in most cases, intermittent lighting of wind turbines will not be an issue for the Department of Defense. We do, however, ask that you consult the Clearinghouse in your review process to provide us the opportunity to affirm that safety assessment for wind energy development projects. The most efficient way to do that is to require a compatibility letter from the Clearinghouse, which would also alert you to any other concerns, beyond lighting, with any military mission.

DoD needs your support in the rare cases where an energy developer is unwilling to incorporate necessary impact mitigation measures. DoD has the ability to object to the project through FAA's OE/AAA process, but this objection by a federal agency does not prohibit construction and may not sufficiently consider DoD impacts. We support your efforts to conduct energy siting in a thoughtful manner that protects military missions in Kansas while allowing compatible energy development.

Thank you for providing me the opportunity to address this committee and for considering impacts to DoD missions as you plan for compatible energy development. We look forward to continuing the dialogue and supporting statewide approaches to ensure development of wind

energy is compatible with military activities in the State of Kansas. I would be glad to answer any questions.