

**REPORT ON THE IMPACT OF THE SUNZIA SOUTHWEST
TRANSMISSION PROJECT ON CURRENT AND FUTURE
CAPABILITIES OF WHITE SANDS MISSILE RANGE, NEW MEXICO**

Pursuant to pages 327-330 of the Joint Explanatory Statement accompanying the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015



Office of the Under Secretary of Defense
for Acquisition, Technology, and Logistics

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Report on the Impact of the SunZia Transmission Project on Current and Future Capabilities of White Sands Missile Range, New Mexico

Requirement for this Report:

The Joint Explanatory Statement (JES) accompanying the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) directs the Secretary of Defense to submit a report to the congressional defense committees that assesses the potential impact of the SunZia Project on the current and future capabilities of White Sands Missile Range, New Mexico (WSMR). The report was requested concurrent with the completion of the Bureau of Land Management (BLM) Environmental Assessment (EA) on the *SunZia Southwest Transmission Project Mitigation Proposal*. On January 23, 2015, BLM finalized the EA and signed a Finding of No New Significant Impact, and the Assistant Secretary of the Interior for Land and Minerals Management signed a Record of Decision associated with the SunZia Environmental Impact Statement.

Background and Basis for Department of Defense (DoD) Objection to BLM-Proposed Route:

The SunZia Project is a 500-mile electrical transmission line project that would transfer renewable energy from north-central New Mexico to load centers in southern Arizona. The project developer plans to construct up to two transmission lines that would transit non-DoD lands directly north of WSMR. This area is designated the Northern Extension Area (NEA) and is overlaid by restricted and special use airspace. DoD controls this entire air space by formal agreement with the Federal Aviation Administration (FAA). The NEA is used frequently by WSMR for test activities, and WSMR has contractual agreements with ranchers and residents in the NEA to evacuate their premises during potentially hazardous DoD activities.

The SunZia Project was analyzed by BLM in an Environmental Impact Statement (EIS). After the draft EIS was published in May 2012, DoD conveyed to BLM in November 2012 its serious concerns regarding the portion of the BLM’s preferred alternative that would traverse the NEA and offered mitigation options. In March 2013, the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) objected to the routing in the NEA and offered mitigation options. As a result of DoD’s objection, and in collaboration with the BLM, a Technical Working Group (TWG) was convened in April 2013 to consider DoD’s concerns and examine viable mitigation options.

Notwithstanding DoD’s objection and the ongoing TWG effort, BLM published the Final EIS in June 2013 and retained the route through the NEA. In August 2013, the TWG, composed of subject matter experts from DoD and the Department of Energy’s Idaho and Pacific Northwest National Laboratories technical experts, reported on the feasibility of burying a portion of the transmission lines located within the NEA. Burial and other potential mitigations would preserve all of the restricted and special use airspace and allow the power line to be constructed without jeopardizing current and known future DoD mission requirements. The SunZia applicant was briefed on the results and claimed that the line burial was technically infeasible.

From November 2013 through April 2014, the Massachusetts Institute of Technology Lincoln Laboratory (MIT-LL) performed an independent assessment of DoD's mission-related concerns. MIT-LL validated DoD's concerns and concluded that the transmission lines could present an obstruction to some low-altitude flight tests, in particular tests involving threat-representative cruise missile target drones. The MIT-LL report also concluded that test activities using drones could result in transmission line damage.

Informed by DoD's experts and the independent assessment by MIT-LL, and after a series of interagency meetings with the Department of the Interior (DOI), the Secretary of Defense determined on May 27, 2014, that a portion of the SunZia Project needed to be buried. In his letter to Secretary of the Interior Jewell, Secretary Hagel committed to provide detailed mitigation proposal to DOI. On June 4, 2014, the USD(AT&L) informed DOI that burial of three identified segments of the proposed transmission lines, totaling at least five miles of buried line, is necessary to ensure that some low-altitude flight operations within the NEA could continue to occur. On July 24, 2014, the applicant agreed in writing to the Secretary's proposal (including the burial provision), and the BLM took action to conduct an EA to assess any new environmental impacts attributable to the burial of the transmission line.

In accordance with the JES, this report addresses the differences between the Under Secretary's mitigation proposal and the recommendations made previously by the TWG and MIT-LL, and explains how the proposed mitigations will enable WSMR to continue to meet its key mission requirements while accommodating the SunZia Project. The following sections address the specific requirements of the JES:

1. How the Proposed Mitigation Proposal Addresses Concerns Identified by the TWG:

The Under Secretary's letter to DOI stated that at least five miles of the transmission lines be buried in three geographically separated areas of the NEA. This is sufficient to allow for continuation of current and known future low-altitude flight activities.

- a. Line Burial: Transmission line burial, totaling at least five miles in three different areas of the NEA, will permit some low-altitude flights within the NEA to continue. This includes planned test events for Programs of Record referenced in the TWG report.
- b. Electromagnetic Interference (EMI): The TWG and MIT-LL reports acknowledged that the introduction of high-voltage transmission lines would raise the background electromagnetic "noise" level and create a heat signature that would be detected during infrared sensor testing. However, the DoD decision to accept the presence of the SunZia Project across the NEA was based on analyses that showed that EMI and heat signature issues would not adversely affect ground test equipment and flight vehicle electronics if at least 200 feet of separation is maintained from the above-ground transmission lines and if the transmission lines were properly maintained and operated within standards.

- c. Test Mission Profiles: Test missions using the restricted airspace above the NEA will continue to be accomplished in accordance with DoD safety standards. With the introduction of transmission lines into this area, low-altitude flight profile adjustments will have to be made to use only the airspace above the buried segments of the transmission lines.
- d. Multiple and Simultaneous Engagements of Aerial Targets: The three buried segments of the transmission lines will support known near-term flight activities in the vicinity of the areas where the transmission lines are buried. Multiple and simultaneous target engagements will be evaluated on a case-by-case basis to assess risk and implement prudent mitigations options, if any.

2. How the SunZia Project and Proposed Mitigation Plan Could Impact Future Training and Test Events at WSMR:

The compromise mitigation plan, including burial of three segments of the proposed transmission lines, will support testing for currently planned low-altitude tests for the Navy's NIFC-CA program. The three buried segments will impose currently acceptable limitations on planned and known future NIFC-CA tests. The series of planned NIFC-CA missile intercept tests was the driver for the analysis to develop the transmission line burial portion of the mitigation plan. This test had a known profile/script in terms of needed NEA restricted and special use airspace. The presence of the transmission lines is not expected to have any substantial effect on DoD training activities.

Due to evolving threats, DoD must continually assess its testing needs and configure tests to realistically evaluate its weapons systems. As other programs of record mature – for example, the Army's Integrated Air and Missile Defense program – DoD will identify operationally realistic test requirements. If these and other future test requirements cannot be accommodated within the NEA considering the three buried segments of transmission lines identified in the mitigation proposal, DoD will consider a full spectrum of mitigation options to achieve required test capabilities.

3. Identification of Additional Mitigation Measures that may be Necessary in the Future to Protect the Unique Capabilities of WSMR should new Training or Testing Requirements Arise:

Both the letter from the Secretary of Defense to the Secretary of the Interior dated May 27, 2014, and the subsequent Under Secretary of Defense letter to the Director of the Bureau of Land Management dated June 4, 2014, cited four specific mitigation actions, as listed below:

- a. Burial of a portion of the transmission lines to allow some low-altitude flight activities to occur;

- b. Adoption of a hold harmless of the government for any claims for damage to the transmission lines or damage caused from the construction, operation, or power disruption of the transmission lines;
- c. Adoption of a Memorandum of Agreement between DoD and the Applicant to allow for DoD testing during line construction and operation; and
- d. Micro siting structures and termination stations to minimize operational impact.

The applicant agreed in writing on July 24, 2014, to these mitigations in a letter to Secretary Hagel, and DoD and SunZia achieved final wording on a hold harmless agreement to be incorporated in BLM's right of way agreement on January 16, 2015.

If, in the future, there are test profiles that are adversely affected by the SunZia Project, then DoD will alert the appropriate federal agencies and the Congress of the new test requirements and the associated mitigations. Because of the evolving nature of threats to which DoD must respond, weapons systems planned to be used for multiple decades are periodically upgraded for enhanced operational and maintenance capabilities. These upgraded weapon systems must then be realistically tested and those tests could, in the future, be constrained by the SunZia Project. For example, new classified threat information became available in November 2014 that could lead to new low-altitude cruise missile test requirements. DoD is evaluating the implications of this emergent threat and will consider a full spectrum of mitigation options to achieve required test capabilities.

4. Assessment by the Secretary of the DoD Siting Clearinghouse (Clearinghouse) Process as it Relates to the SunZia Project

- a. *The extent to which the DoD Siting Clearinghouse identified and communicated potential negative impacts of the SunZia Project to WSMR in a timely manner.*

Since the standup of the Clearinghouse in 2010, it has worked closely with the Departments of the Army and Air Force to identify the potential impacts of the SunZia Project on DoD's test activities in New Mexico and Arizona. DoD relayed its concerns to BLM, including classified information, as soon as various route information from BLM became available. This included meetings at BLM's Washington, D.C. headquarters and the BLM State Directors' offices in New Mexico and Arizona.

- b. *Recommend Legislative and Policy Changes to Improve the Ability of the Clearinghouse to advocate for and Protect DoD Equities.*

The Department acknowledges that section 358, *Study of Effects of New Construction of Obstructions on Military Installations and Operations*, of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383) does not fully protect military equities from encroachment that affect the national security of the United States. For example, a determination of hazard issued by the FAA under its

obstruction evaluation authority in response to a DoD objection does not bar construction by a developer of a project. Further, FAA may determine that a particular military testing event, in already-identified restricted airspace, does not constitute an impact to the safe navigation to air commerce, which is the threshold standard used by the FAA to make a determination.

In the case of the SunZia Project, DoD relied on its status as a Cooperating Agency under the National Environmental Policy Act (NEPA) process to raise its mission compatibility concerns and proposed mitigation options. The use of NEPA was not envisioned by the framers of section 358. As the lead federal agency, BLM has broad latitude to consider comments from a Cooperating Agency and may be required to balance the needs of multiple Cooperating Agencies and other stakeholders. Finally, a more timely and collaborative inter-agency dispute resolution process is necessary when issues between agencies cannot be resolved. To this end, the Department of Energy is drafting policies to streamline the federal transmission permitting process, which include methods for better inter-agency coordination and collaboration. DoD would welcome the opportunity to work with the Congress to develop appropriate legislation to improve the governing processes to adequately address issues of national security. We believe such legislation would be necessary in order to acknowledge DoD as an essential stakeholder and ensure that the Warfighter mission and protection of the Nation are given appropriate consideration.

Conclusion

The mitigations proposed by the Secretary of Defense will allow WSMR to continue with current and known future test activities for the foreseeable future. DOI and the applicant have agreed to the four mitigations proposed by the Secretary of Defense. As this report states, there may be test requirements not currently foreseeable that cannot be accommodated within the NEA using these four mitigations. Should new mitigation options be required in the future, DoD will alert appropriate federal agencies and the Congress of new requirements as they arise so weapon systems can be realistically tested against these currently unknown but emerging threats.