

Cascabel Working Group  
6520 N. Cascabel Road  
Benson, AZ 85602

***Submitted electronically and by U.S. Mail December 17, 2014***

Mr. Adrian Garcia, SunZia Project Manager  
Bureau of Land Management  
New Mexico State Office  
P.O. Box 27115  
Santa Fe, NM 87502-0115

Dear Adrian:

I have reviewed the Environmental Assessment (EA) for the burial of SunZia lines across the Northern Call-Up Area for the White Sands Missile Range and have one substantive comment to submit for the Cascabel Working Group. As you know, our area of concern is the San Pedro Valley and Aravaipa region of southeastern Arizona, which makes commenting on how the environment of the call-up area would be affected somewhat difficult. The following comment is technical and concerns the time required to complete burial of the lines.

Section 2.3.8 on page 2–11 of the EA addresses the construction duration of the Mitigation Proposal and says that burial can be completed in the same period as the Project as a whole, or approximately two years. While it is correct that the manufacture, delivery and installation of the underground cables can be completed in this time, the EA does not include the required prequalification time for testing of the cables, which must be fulfilled before manufacture begins.

Installations of 500-kilovolt underground cable are extremely rare, which raises the question of whether the cable used for this particular application will have to undergo prequalification testing before manufacture. This testing must be done in compliance with EIC Standard 62087 and requires at least one year's time. The cable must be subjected to a minimum of 180 load cycles lasting two days each. This testing must be followed by a lightning-impulse voltage test, making the total testing time someone longer than one year at a minimum.

The schedule for the 2009 study for the Heartland Project in Alberta for burying two 500-kilovolt lines includes a prequalification and testing period of ~22 months prior to manufacture and installation. This prequalification time is preceded by a 6-month set-up and design period. The total time required to bury two 10-kilometer-long lines in this example is ~52 months. This length of burial compares with 8.85 kilometers (5.5 miles) for SunZia's two lines.

No North American company (indeed, no Western Hemisphere company) has made 500-kilovolt cable before, while it has been made by Japanese, Chinese, and European companies. While two major applications (Japan and China) were undertaken before the Heartland feasibility study was completed, the Heartland study included the prequalification time in the project schedule. Previous manufacturing by foreign companies was not used as a reason to decrease the time.

The EA should note whether the cable needed for this underground installation can be procured from a provider who has fulfilled the prequalification tests for 500-kilovolt cable. If not, the full period required to complete burial should include the prequalification time. That time will determine when the project will be completed, which is critical to know for any utility that might purchase New Mexico wind-generated electricity and any company that might provide it.

Thank you for addressing my question and comment.

Sincerely,

A handwritten signature in black ink that reads "Norm 'Mick' Meader". The signature is written in a cursive, slightly slanted style.

Norm "Mick" Meader  
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