

Engineering work begins on Leland Olds Station project

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A project to install selective non-catalytic reduction (SNCR) equipment at [Leland Olds Station](#) near Stanton, ND, is getting under way.

The equipment will help the power plant meet North Dakota's NO_x reduction standards. According to Jim Lund, Basin Electric senior project manager, the installation project will begin in August and plans are to begin testing in spring of 2016. The Leland Olds Station must be in compliance by April 2017.

Cris Miller, Basin Electric senior environmental project specialist, said SNCR is the last NO_x control technology to be installed to be fully compliant with the level of NO_x control that was identified in the [North Dakota Department of Health's](#) Regional Haze Implementation Program.

Lund said Headquarters staff is working closely with staff at Leland Olds Station on engineering efforts, which include computational fluid dynamic and combustion modeling of the both Unit 1 and Unit 2's boiler to determine the correct location for the urea-based reagent's injection locations. The overall NO_x reductions are based on the incorporation of several technology layers such as enhancements to burners, incorporation of separated over-fire air, relocation of vent return lines, incorporation of combustion, performance and sootblowing optimization software in the boiler control systems. The engineering studies, design and installation effort began several years ago.

Les Allery, plant engineer at Leland Olds Station, said the SNCRs will be comprised of several components, including a urea storage building, urea mixing equipment, piping to the injection ports to the boiler. Liquid urea will be injected into the boiler at newly installed injection ports in the area just above the fireball of the boiler. The NO_x in the gas in the boiler will combine with urea and oxygen, to create nitrogen, water vapor and carbon dioxide.

Both units at Leland Olds will be fitted with this equipment. The project will cost \$29 million for both units.