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## NDIC Website One-page Summary

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**Project:**        **FY20-XCI-225**

**Title:**            Wastewater Recycling Using a Hygroscopic Cooling System

**Submitted By:** Energy and Environmental Research Center (EERC)

**PM/PI:**            Chris Martin

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**Purpose:**        The Energy & Environmental Research Center (EERC) is teaming with Great River Energy and a product provider – Baltimore Aircoil Company – on a proposed three-year study to reduce water usage at power plants. Hygroscopic cooling has been developed at EERC and would be demonstrated at a coal-based generation station to improve the plant’s overall water efficiency, thus reducing costs and the amount of water required for cooling purposes. While Great River Energy’s Coal Creek Station will be the host site for the study, the technology would be applicable to all North Dakota power plants. The primary benefits to the state and industry is the reduced amount of water used by the power plants, which helps both with costs and reduced regulatory burdens.

**Duration:**      3 years / 18-month budget periods

**Participants & Cost Share:**

US Dept of Energy (DOE) cash match	\$655,675
Baltimore Aircoil Company (BAC) in kind	\$ 65,000
NDIC	<u>\$100,000</u>
Total	\$820,675

**Project Deliverables:**        Status Reports  
                                                  Q1 2020 report-complete, Q2 2020 report-complete