

Lignite Research Program- Grant Round 108- Application Summaries						
Application Number	Application Title	Applicant	Project Duration	Summary of Project	Funding Requested	Total Project Cost
LRC-108-A	Enhance, Preserve, Protect the North Dakota Coal Industry	Lignite Research Council	36 Months	The Enhance, Preserve and Protect (EPP) Project supports the long-term sustainability of North Dakota's lignite industry by addressing regulatory and policy challenges, guiding technology development, and supporting advanced energy initiatives. The project aims to preserve existing lignite resources, promote new opportunities for lignite utilization, and support reliable, low-cost energy production while strengthening the state's economy.	\$3,316,695	\$3,316,695
LRC-108-B	Pilot Expansion and Testing for Improving Lignite Fuels and REE Processing	University of North Dakota	24 Months	This project will enhance UND's pilot-scale rare earth elements and critical minerals facility by improving extraction processes, expanding pilot capabilities, and demonstrating production of premium lignite fuel from coal cleanings. The project will support commercialization of rare earth recovery technologies, create higher-value products from North Dakota Lignite, and prepare for a future commercial-scale demonstration.	\$1,100,000	\$2,200,000
LRC-108-C	Efficient Refining of Germanium Metal from Fly Ash-Derived Concentrates	Microbeam Technologies, Inc.	24 Months	This project will demonstrate an efficient process for producing high-purity germanium metal from germanium-rich concentrates derived from lignite fly ash. The process is designed to reduce production costs and environmental impacts while strengthening the domestic supply of this critical mineral.	\$400,000	\$1,200,000
LRC-108-D	Feasibility Study: CO2 Free Coal Liquefaction, and Germanium and Rare Earths	C2XX Corporation	18 Months	This project will advance the development of a commercial-scale facility that converts North Dakota lignite into premium diesel, jet fuel, and gasoline with technology designed	\$600,000	\$1,200,000

	Recovery from Coal Liquefaction Byproducts			to minimize carbon emissions. The project also supports the development of lignite-based industries for critical minerals, emissions reduction, and other value-added products to strengthen North Dakota's economy.		
LRC-108-E	Hydraulic Wellbore Mining for Rare Earths in North Dakota Lignites	JetCav LLC	12 Months	This project will demonstrate JetCav's hydraulic wellbore mining technology to recover rare earth elements (REEs) from North Dakota Lignite that is beyond the reach of conventional mining methods. The project aims to expand domestic REE production through a lower-cost, lower-impact mining approach while strengthening U.S. supply chain security and supporting economic development in North Dakota.	\$300,000	\$600,000