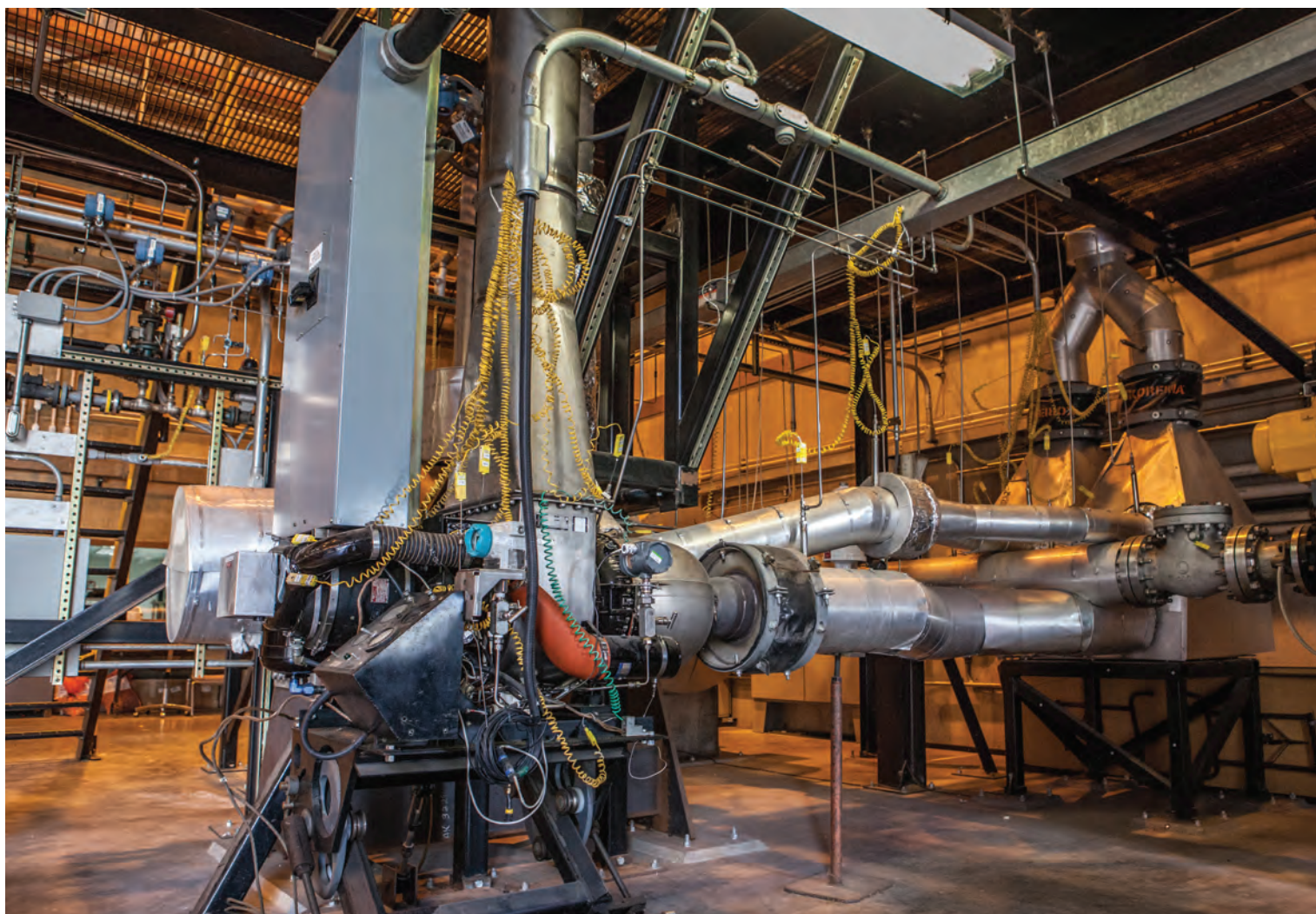


NEW R&D INITIATIVE FOR EXISTING COAL-FIRED POWER PLANTS

Concentrating on dynamic performance and reliability; materials; sensors, controls, and diagnostics; and power plant component improvements

IMPROVING THE RELIABILITY, RESILIENCE, AND VIABILITY OF THE EXISTING FOSSIL-BASED FLEET



NETL RIC IS DEVELOPING NEW TECHNOLOGIES

- R&D program that **focuses on new, early stage concepts** leveraging NETL's and its academic partners' capabilities.
- Using **real-time analysis of existing data streams**, NETL RIC developed a **new concept to identify the maintenance condition** of power plants. The process was demonstrated on a lab-scale turbine at NETL and is **being discussed with coal plant operators for potential use**.

CONTACTS

HQ PROGRAM MANAGERS
ROBIE LEWIS
MARGARET SCHAUS

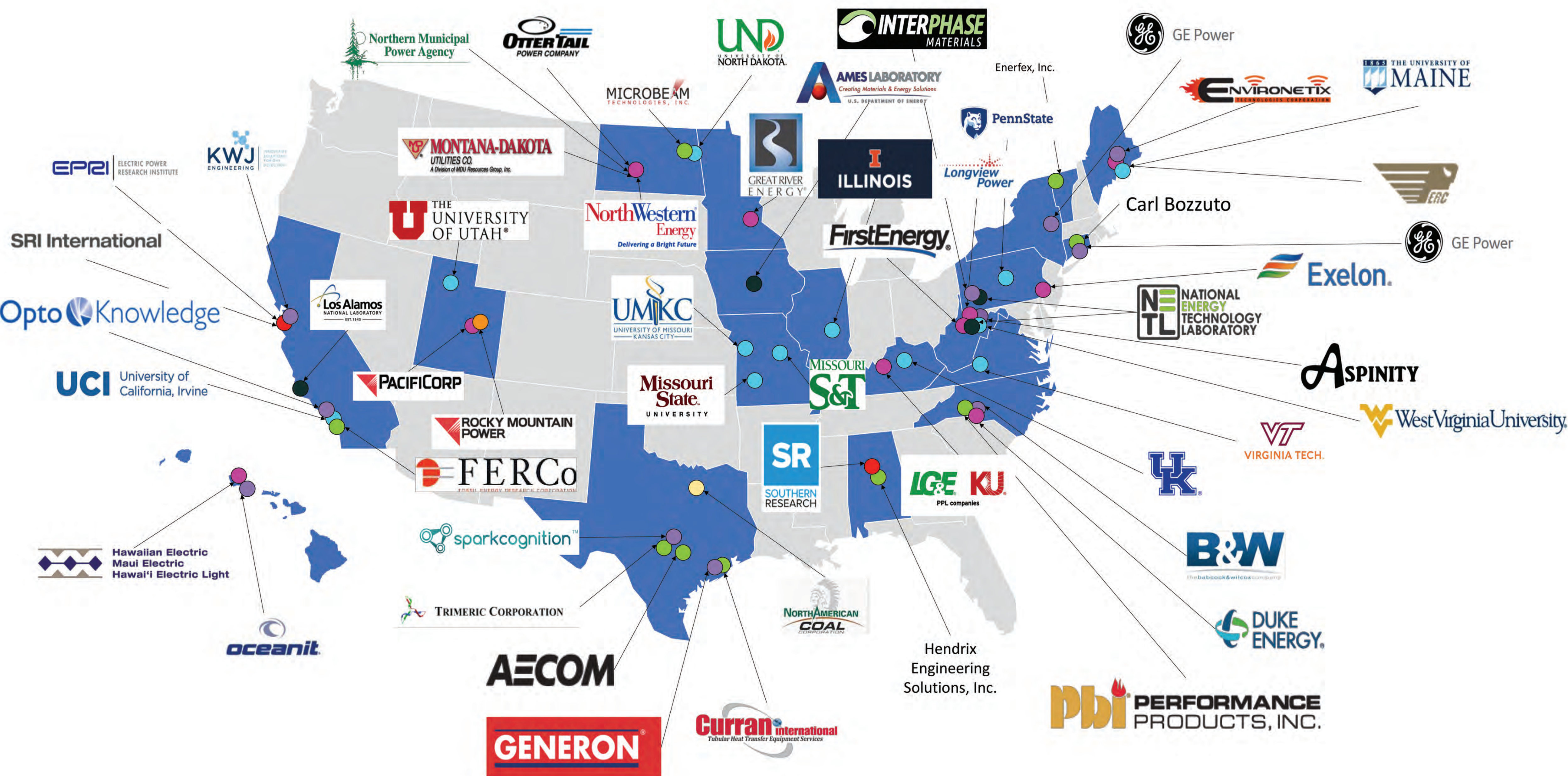
TECHNOLOGY MANAGERS
JOHN ROCKEY
BRIGGS WHITE



GE POWER IS ENABLING LOW-LOAD OPERATION AT COAL PLANTS

- **Developed sensor network** to monitor and facilitate low-load operation of the pulverizer and combustor.
- **Completed initial round of low-load pulverizer testing** with promising results.
- The project has been **extended to include field testing** to take place at the Cross Generating Station in Pineville, SC.

EXISTING PLANTS R&D INITIATIVE PARTNERS



ORGANIZATION CATEGORIES:

- | | | | |
|------------------------------|-----------------------------|------------------------|-------------------------|
| Utility — Generator (13) | Service Provider (9) | Coal Company (1) | University (13) |
| Utility — Power Provider (1) | Equipment Manufacturer (11) | Research Institute (4) | National Laboratory (2) |

INTERNATIONAL PARTNER:

China University of Mining and Technology