



State Energy Workforce Committee

Consortium Name: Minnesota Energy Workforce Consortium

Committee Name: Core Curriculum/DOL Grant Project

Committee Co-Chair: Gail O’Kane, Minnesota State Colleges and Universities
651-282-5514, gail.okane@so.mnscu.edu

Committee Co-Chair:

Please provide brief descriptions and additional contact information for project lead if appropriate.

Top 3 Accomplishments:

With state funding:

1. Development of Energy Core Skills Study which we believe is unique because of the level of detail on occupational skills and because it compares technician skills for 7 industries (natural-gas fired electric generation, coal-fired electric generation, natural gas distribution, wind power, solar power, biodiesel production, & ethanol production)

With U.S. DOL grant funding:

2. Development and delivery of a stackable credentials model for energy training consisting of:
 - a. Energy Technical Specialist A.A.S. degree based on an Energy Core Skills industry study.
 - b. four specialty certificates in: solar (Century College) and ethanol, biodiesel and wind (Minnesota West Community & Technical College)
3. Development of the Minnesota Energy Careers website (www.mnenergycareers.org)

Top 3 Activities or Plans:

1. Expansion of Energy Technical Specialist degree to include a nuclear specialty, using curriculum aligned with the Nuclear Energy Institute. Led by Xcel Energy, St. Cloud Technical College, and Dakota County Technical College.
2. Creation of a bridge program to prepare workers for entry into the Energy Technical Specialist degree and the certificates funded by the U.S. DOL grant. Project is a partnership between St. Paul Adult Basic Education, Ramsey County Workforce Center, and Minnesota State Colleges and Universities, funded through a state grant.
3. Coordination with Minnesota’s recently awarded \$6M U.S. DOL State Energy Sector Partnership grant.

Best Practice to Share:

- Consortium members from industry and education developed concept of a Core Curriculum for technicians that could deliver skills/knowledge common to multiple energy sectors plus specialty areas to deliver skills/knowledge specific to a single energy sector. The industry sectors included in the curriculum are coal-fired electric generation, natural gas-fired electric generation, wind power generation, natural gas

distribution, ethanol production, biodiesel production, and solar power generation. Colleges in the consortium then partnered with industry to pursue and receive a 1 million U.S. Department of Labor grant to help fund this project. The resulting Energy Technical Specialist A.A.S. degree is being delivered as a shared degree by a partnership of 10 colleges in the Minnesota State Colleges and Universities system, with funding from the U.S. Department of Labor. Combined with specialized certificates offered by partner colleges, this represents a stackable credentials model.

Issues We Struggle With:

- Expanding student awareness of the Energy Technical Specialist program, and working through the challenges of delivering a collaborative degree with multiple partner colleges