**F. Project Manager Qualifications and Organization Description**

**Project Manager:**

Joel Tallaksen, Renewable Energy Scientist

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University of Minnesota

Morris, MN 56267

**Background:** My current research is focused on agricultural production, energy use, and energy systems, with a focus on improving environmental sustainability in agriculture. I am using life-cycle analysis (LCA) as a tool to determine the amount of energy needed and greenhouse gases emitted in a variety of livestock and cropping systems. My goal is to reduce or optimize energy use in farm production to create systems that are very productive, but use less fossil energy resources. However, the optimization doesn’t simply focus on enhancing energy use, but also considers sustainable harvesting/soil health and economic.

**Recent Grant Funded Activity:** (Project title, funding agency, and funds awarded)

Breaking barriers to organic swine transition: Utilizing cover crops as feed ingredients to reduce feed cost. USDA-NIFA $500,000

Host meetings and visit organic swine systems to examine, discuss, and summarize the initial barriers to wider adoption of organic swine production. USDA-NIFA $50,000

Evaluate different energy sources for renewable ammonia fertilizer production using life cycle methods. LCCMR $250,000

*Integration of renewable and efficient energy technologies to green energy consumed in agricultural production systems-* U of M IREE- $350,000

*Sustainable nitrogen fertilizers based on renewable resources-* Swedish Energy Agency- $40,000

**Organization Description:** The University of Minnesota is a world class educational and research institution with campuses and research centers throughout the state. The combination of exceptional faculty and staff knowledge with the latest in research facilities and equipment gives the University of Minnesota the ability to consistently conduct ground-breaking research.