

R017-B: Distributed Nitrogen Fertilizer Plant - Engineering and Development
Submitted by Progressive Nutrient Systems LLC
Principal Investigator: Dan Olson
Request for \$500,000; Total Project Costs \$1,000,000

Technical Advisor Comments

- Two reviewers recommended fund, one recommended funding may be considered.
- The 50% cash match comes from the applicant.
- One reviewer felt that the proposed project did not align very well with the programs goals.
 - This project is proposing to utilize a renewable energy coproduct, and is therefore an eligible project.
- All 3 reviewers felt the project was achievable.
- 1 reviewer commented, “The only concern is regarding the economic feasibility of the fertilizer production. Will the applicants’ production of bio-fertilizer be cost-competitive with fertilizer produced by larger manufacturers? Will local farmers be willing to pay a slightly higher price for fertilizer produced by PNS/AGREBON compared to fertilizer prepared by larger manufacturers?”
- One reviewer stated, “There is a management plan in the proposal. However, the milestones are not clearly set or not obviously measurable.”
- None of the reviewers had significant concerns regarding the methodology.
- 2 reviewers felt the scientific contribution of the proposal was high.

Technical Advisor Recommendations

Funding may be considered. Two of the reviewers strongly endorsed the proposal. Strengths of the proposal include the advanced stage of the project and the match from industry.

The concern regarding economic feasibility is valid, and the proposal would be strengthened with additional information in the presentation to the Council. The applicant has received an award from APUC to conduct a feasibility study. The Council may wish to review those results prior to funding. It should be noted, however, that the applicant has already commenced work on the engineering portion.

This proposal has the potential to commercialize research performed by the EERC, stabilize fertilizer costs for ND’s ag industry, and assist a ND ethanol plant in lowering its carbon footprint. A lower carbon footprint will help the plant meet RFS2 standards and sell to other markets that have adopted low carbon fuel standards.

Suggested Contingencies If Funded

- Award amount is reduced to \$431,000 to be consistent with program policies. The following costs are ineligible expenses: permit fees, legal fees, and accounting and tax costs. Additionally, it should be noted that match used for the APUC award is not eligible to be used as match for REC award.
- Applicant provides a letter of support from EERC verifying that technology to be used is ready for this scale.
- A letter of commitment/support is provided by Tharaldson Ethanol.
- Funding is contingent on a successful feasibility study that is approved by the Council.