# iPIPE 2.0

## Submitted by:

**Energy & Environmental Research Center (EERC)** 

☐ Total Funding Request - \$400,000 Total Project Costs - \$1,450,000

**Project Duration: 2 years** 

# PROJECT DESCRIPTION

iPIPE has vetted over 110 technologies, completed nine technology projects, and is achieving commercial impact. The initial membership of five has grown, and iPIPE has been recognized with two awards and over 100 media mentions. iPIPE 2.0 will build on the previous success, with seven members committed to the new program and a flood of emerging technologies waiting to compete in the next technology selection event. iPIPE 2.0 will further advance technologies that can detect integrity anywhere within a pipeline system and improve the accuracy, resolution, and frequency for monitoring pipelines from space with satellites that are streamlined for the industry. Duration: The duration of the proposed program is January 2022 through December 2023.

The goal of the program is to advance technologies that reduce the frequency and duration of pipeline releases. The objectives to achieve the program goal are as follows:

- Select at least two projects for demonstration from the technology-scouting efforts.
- Grow industry membership.
- Foster industry collaboration through monthly member meetings and an annual member forum.
- Advance technology to commercial application and demonstrate commercial deployment.

#### TECHNICAL REVIEWERS' RATING SUMMARY

Technical Reviewer

Statement	Weighting Factor	<u>G-55-04A</u>	G-55-04B	<u>G-55-04C</u>	Average Weighted Score
Objectives	9	4	4	5	36
Achievability	7	3	4	4	25
Methodology	8	3	4	5	32
Contribution	8	4	5	5	37
Awareness / Background	5	4	5	4	21
Project Management	3	3	4	4	11
Equipment / Facilities	2	3	3	5	7
Value / Industry- Budget	4	5	4	5	18
Financial Match – Budget	4	5	5	5	20
Average Weighted Score		188	215	235	212
Maximum Weighted Score				250 possible points	

# TECHNICAL REVIEWER TOTALS

G-55-04A

Average Weighted Score: 188 out of 250

### **FUND**

G-55-04B

Average Weighted Score: **215 out of 250** 

### **FUND**

• G-55-04C

Average Weighted Score: **235 out of 250** 

### **FUND**

## **TECHNICAL REVIEWER COMMENTS**

#### **Reviewer G-55-04A**

"This project is well worth funding by the ND OGRP. It has the potential to put North Dakota, and its oil and gas producers and service vendors, particularly in areas like drone surveillance of pipeline and associated facilities, directly in the forefront of the spill prevention technology, and in the spotlight of the entire country and world. The complementary aspects of this project, with other new and emerging technologies are undeniable, and likely to help create business opportunities within North Dakota."

**Recommendation: FUND** 

#### Reviewer G-55-04B

"The general public has very little tolerance for incidents in the pipeline industry, making it a top priority to keep striving for ways to improve on the safe operation of these critical infrastructure systems. Given the success of the original iPIPE program, I recommend proceeding with funding the grant application as an important step to keeping North Dakota a leader in safe pipeline operation and monitoring. The industry support, testing, feedback, and verification offered to technology providers is simply not available outside of iPIPE. A continuation of the program is highly likely to continue yielding very positive results towards meeting several of the objectives of the OGRP."

**Recommendation: FUND** 

#### Reviewer G-55-04C

"This project is focused on addressing a major challenge for the ND oil and gas industry which is the public's concerns for pipeline safety. Governor Burgum has challenged the industry to achieve zero leaks from pipelines by 2030. The first phase of this activity has had good success in moving forward with new technologies to address this challenge. Progress has been made but the challenge remains. This project will help the state in moving toward that goal. I strongly recommend this activity for funding."

**Recommendation: FUND** 

## **Director's Recommendation:**

Fund in the amount of \$400,000.