**2011State Damage Prevention Program Grants Progress Report**

**Funding Opportunity Number: DTPH56-11-SN-0001**

**CFDA Number: 20.720**

**Award Number:**DTPH56-11-G-PHPS17

**Project Title:**Virginia Utility Protection Service State Damage Prevention

**Date Submitted:**October 25, 2011

**Submitted by:** *Rick Pevarski, President & CEO, Virginia Utility Protection Service, Inc.*

**Specific Objective(s) of the Agreement**

Under this grant agreement, VUPS will:

* Foster and promote the use of Improving Technologies

**Workscope**

Under the terms of this grant agreement, the Grantee will address the following elements listed in 49 USC §60134 through the actions it has specified in its Application.

* Element (8): A process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, underground pipeline locating capability, and gathering and analyzing information about the accuracy and effectiveness of locating programs.

**Accomplishments for this period (Item 1 under Article IX, Section 9.01 Progress Report: “A comparison of actual accomplishments to the objectives established for the period.**”)

This pilot is a proof of concept in enhancing the technologies available for pipeline right of way monitoring by providing an increased frequency of patrols. The PRCI has conducted initial research on obtaining the satellite imagery. This proof of concept incorporates the data available within a one-call center to be matched with the data received from the satellite imagery.

This project will correlate the identification of excavating equipment within the pipeline one-call registration area with a valid one-call ticket. Any identification of equipment that is found within the pipeline right of way without a valid ticket will trigger an alarm with immediate notification to the pipeline operator.

The satelliteradar imagery will be acquired for a period of six months within the Fairfax County corridor. A thirty mile by thirty mile satellite tile will be monitored with six pipeline companies operating within this single tile. VUPS will encourage the participation of all six pipeline operators. VUPS will also determine if other critical utility infrastructure exists within this thirty mile by thirty mile tile such as electric transmission, water transmission and critical fiber. Metrics will be developed at the start of the project. It is anticipated to incorporate “mock” scenarios to determine the level of effectiveness throughout the project.

A final project report will be developed to identify the value of this proof of concept.

Incorporating a pilot of satellite imagery right of way monitoring meets the intent of Element 8 – Technology.

Status of Project:

* VUPS has signed a six month contract with Visitless Integrity Assessment (VIA) to obtain the satellite imagery for a 30 X 30 mile square in Fairfax County, Virginia.
  + VUPS has accomplished the following:
    - VUPS has solicited the following pipeline operators to participate in the pilot project:
      * Colonial Pipeline Companies
      * Columbia Gas Transmission Corporation
      * Dominion Transmission Corporation
      * Plantation Pipeline Company
      * Washington Gas
      * Williams Company
      * Possible participant - Virginia Natural Gas
    - Completed the development of processes to analyze the data received from VIA and process right of way encroachment notifications to participating pipeline operators.
    - VUPS received satellite imagery from VIA
    - Member notifications to participating pipeline operators began on October 24, 2011.
    - VUPS has developed a feedback form that will be transmitted with each notification to tract metrics on the effectiveness of the pilot project.

**Quantifiable Metrics/Measures of Effectiveness(Item 2 under Article IX, Section 9.01 Project Report: “Where the output of the project can be quantified, a computation of the cost per unit of output.”)**

The actual right of way encroachment notifications began on October 24, 2011. With each notification, a form will be distributed to each participating pipeline operator to collect metrics on the following:

* Was notification area investigated?
* Did you find the target of the notice?
* What type of target was found?
  + If no target found, was there any evidence of a target being at the notification area and if so can you determine the target type?

**Issues, Problems or Challenges (Item 3 under Article IX, Section 9.01 Project Report: “The reasons for slippage if established objectives were not met. “)**

No issues, problems or challenges to date.

**Mid-term Financial Status Report**

The mid-term financial report has been sent as a separate attachment to the AA.

**Plans for Next Period (Remainder of Grant)**

VUPS will be:

* Receiving satellite data for the remaining period (approximately 5 months),
* Processing the data received
* Sending the encroachment notifications to participating pipelines
* Receiving and processing feedbacks for the metrics report.

**Requests of the AOTR and/or PHMSA**

No actions requested at this time.