



Air Emissions Reduction Request for Technologies (RFT)

Date: June 24, 2016

Purpose

PTAC is seeking voluntary responses for new and innovative technologies related to oil and gas production to address areas of concern, as indicated in the scope section of this document. Interested parties are invited to submit proposals according to the specifications provided herein.

There is no pre-assigned budget for resourcing the proposals received under this RFT. The proposals may however become part of a Dragon's Den style workshop where organizations who prepared successful proposals, as decided by the Technology for Emissions Reduction and Eco-Efficiency (TEREE) RFT committee, will be asked to present their technology to a panel of Canadian oil and gas producers to encourage open communication between both parties. The proposals may also form part of recommendations for future funding as part of PTAC's Innovation Roadmap and other opportunities.

Background

Since 2003, over 40 projects were funded through the efforts of the TEREE Committee. TEREE projects have made a significant contribution industry through the transfer of technologies used in the oil and gas industry, specifically in consideration of emissions reduction and energy efficiency. These project efforts are an imperative element of the R&D currently taking place within the oil and gas industry, fundamentally working to reduce environmental impact, improve performance, and establish the sustainable development of the hydrocarbon industry¹.

In addition, during 2015 and 2016, PTAC is facilitating the development of an Innovation Roadmap as a source of knowledge for industry, government, and academia to address current and anticipated challenges and opportunities related to the development of unconventional tight oil and shale gas resources by hydraulic fracturing. Specifically, the Roadmap focuses on issues related to production and recovery, greenhouse gas and other air emissions, and water management. The Roadmap was informed by a thorough review of needs, gaps, challenges, and opportunities performed by subject matter experts, in consultation with industry and government stakeholders. The final text of the Roadmap is still being reviewed in committees and will become available later in 2016.

¹ <http://www.ptac.org/networks/teree?page=overview>



Objective

This RFT reflects the current priorities of the TERE Committee and of the Innovation roadmap, and aims to respond to industry and government needs in respect of new air emissions reduction technologies, particularly reduction of methane emissions.

Air Emissions - Technology Needs

1. Technologies that aim to improve the following:
 - NOx reduction
 - Vented methane reduction
 - Benzene reduction
 - Operating cost reduction
 - Reliability improvements
 - Product recovery improvements
2. Mobile, temporary utilization (power generation or bi-fuel pump truck) systems to deal with flow-back or high initial production flow rates that can be moved to other sites after the initial high decline.
3. Mobile, temporary separation/compression skids to deal with initial production rates.
4. Nitrogen membrane separation of flow back fluids to meet pipeline quality specifications.
5. Solar electrification security measures to reduce theft of solar equipment and improve perception of reliability of solar equipment.
6. Chemical additives/acid optimization that may reduce the need for nitrogen or carbon dioxide or total horsepower required to achieve an equivalent stimulation of reservoir.
7. Canadian low-cost/high-reliability compressor packing vent meters
8. Non-selective catalytic reduction (NSCR) technologies
9. "Area" fugitive emission surveys with "hot-spot" program focus (e.g. truck-mounted, drone-based, or other cost effective platforms.)

Scope

RFT submissions should be short responses and are invited for new technologies in areas mentioned above.

Contents of Proposals

Proposals should be brief, approximately 2 to 4 pages, in a PDF format. All proposals should be composed of non-confidential information only, including:

- Company name, address, and contact name;
- Title;
- Description of technology solution;



- Benefits of the technology, specifically to the key messages and needs indicated in the 'Objective' and 'Technology Needs' sections of this document;
- State of development;
- Summary development plan;
- Estimated technology development or demonstration cost.

The deadline for submission is: July 20, 2016

Proposals should be submitted to Kristie Martin by email: kmartin@ptac.org

RFT Schedule

June 24, 2016	RFT issued
July 20, 2016	Deadline for receipt of proposals by PTAC
August 15, 2016	Feedback on proposals based on responses received from relevant PTAC committees.

Contact Information

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