



Request for Proposals

PARSC 011 – Potential Impact of Power Lines on Corrosion of Abandoned Pipelines

Date: May 12, 2016

Purpose

On behalf of the Pipeline Abandonment Research Steering Committee (PARSC), PTAC wishes to retain the services of a research organization or consulting firm (the Contractor) to provide the services described in this document. Interested parties are invited to submit full proposals according to the specification provided herein.

Background

High-voltage power lines generate an electromagnetic field that may impact the rate of corrosion in pipelines that are within range. In operating pipelines, protection systems such as cathodic protection are designed to protect the pipeline from corrosion. However, it is possible that pipelines that will be abandoned in place will not benefit from the maintenance of corrosion protection systems. It is possible that pipelines that will be abandoned and left in place near high-voltage power lines may become impacted.

Project Objective

The objective of this project is to review the technical literature and the state of knowledge concerning the influence of electromagnetic fields from power lines on corrosion in pipelines abandoned in place that do not benefit from corrosion protection systems such as cathodic protection.

Project Scope

This project will involve a literature review and a paper study by a recognized expert in pipeline corrosion of the influence of electromagnetic fields generated by high-voltage power lines on the corrosion rate of pipelines abandoned in place. It is not expected that laboratory work will be required.

Reporting and Payment Milestones

The Contractor will provide short monthly status reports and will be available to teleconference with PARSC during its meetings, which are generally held every 6 weeks. The applicant will also propose major project milestones when the Contractor will provide a progress report about deliverables and PTAC will make progress payments.



Deliverables

1. Literature review and analysis
2. Status and progress reviews with PARSC
3. Draft reports at each project milestone
4. Final report and presentation to PARSC

Budget

The applicant will indicate the cash budget and any other resources required to complete the project.

Confidentiality

The Contractor will be required to sign a confidentiality agreement related to the project. Disclosure of any project information will be at the discretion of PARSC. It is the intention of PARSC that key results and outcomes will eventually be made public.

Intellectual Property

All intellectual property rights and publication rights for the deliverables and reports produced by the Contractor in this project (but not including Contractor models and tools) will be the property of the funding organizations in PARSC.

RFP Schedule

May 12, 2016	RFP issued
June 3, 2016	Deadline for receipt of Full Proposals by PTAC
June 10, 2016	Invitation to a short list of applicants to present and discuss their full proposal with PARSC
June 17, 2016	Meeting of shortlisted applicants with PARSC
June 24, 2016	Selection of the best value proposal by PARSC

Contents of Full Proposals

The requested full proposal should contain a detailed project description, budget and schedule which would be used as the basis of a contract. A 5 to 10 page document addressing the following elements must be delivered electronically or by mail to PTAC by the deadline stated above:

- Scope of work
- Methodology



- Deliverables
- Schedule
- Personnel assigned to the project
- Qualifications
- Budget and costs, including information on breakdown by major scope element and allocation of personnel and applicable rates
- Milestone payment information

The page count does not include any attachment such as CVs, company description or literature references that the applicant may wish to include.

Contact Information

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Attachment 1 - PARSC Program Background

Pipeline abandonment refers to the permanent removal from service of a pipeline. Depending on a number of factors, sections of pipeline may be abandoned in place or removed.

CEPA, the National Energy Board (NEB), the Alberta Energy and Utilities Board (AEUB) and the Canadian Association of Petroleum Producers (CAPP) have collaborated on technical and environmental issues associated with pipeline abandonment, which issues were discussed in the documents referenced below. In 1996, the NEB published a review document titled "[Pipeline Abandonment – A Discussion Paper on Technical and Environmental Issues](#)". In 2007, CEPA published a report titled "[Pipeline Abandonment Assumptions](#)" which discussed technical and environmental considerations for development of pipeline abandonment strategies. A comprehensive review was undertaken by the NEB as part of the Land Matters Consultation Initiative (LMCI) which involved four discussion papers on the different topic areas, 45 meetings and workshops in 25 communities across Canada, and written submissions from 13 parties. The [final LMCI report](#)¹, published in 2009 recommended that knowledge gaps on the physical issues of pipeline abandonment be addressed. Thus, Det Norske Veritas (DNV) was commissioned to conduct a literature review regarding the current understanding worldwide with respect to the physical and technical issues associated with onshore pipeline abandonment and use the results of the literature review to critically analyze and identify gaps in current knowledge, and make recommendations as to potential future research projects that could help to fill those gaps. DNV published this [Scoping Study](#) in November 2010.

CEPA and PTAC have established the Pipeline Abandonment Research Steering Committee (PARSC) as a framework for collaboration to guide and direct innovation and applied research, technology development, demonstration, and deployment in order to address knowledge gaps summarized in the DNV Scoping Study.

Research findings from the PARSC projects will be shared on a broad scale throughout the pipeline industry, the oil and gas industry, as well as with regulators, government agencies, and other stakeholders.

¹ Online at http://publications.gc.ca/collections/collection_2010/one-neb/NE23-152-2009-eng.pdf