

## **Project: Energy East Pipeline Project**

Energy East Pipeline project is a 4500 km pipeline to connect the oil fields in the West to the refineries in the East of Canada. The project scope is defined into three main criteria: Converting an existing natural gas pipeline into an oil transportation pipeline; extending the converted pipeline towards the refineries; and building of associated facilities, pump stations and tank terminals including marine facilities for easy access to other markets by sea.

*Status of the project: FEED Stage*

## **Client: TransCanada**

TransCanada is a Canadian company with more than 60 years of experience building pipelines, safely and reliably. A leader in the responsible development of energy infrastructure, it constructs and operates natural gas and oil pipelines, power generation stations and gas storage facilities across North America.

## **Project Management Consultant (PMC): CH2M Hill**

CH2M Hill is a global leader in consulting, design, design-build, operations and program management for government, civil, industrial and energy clients. CH2MHill is an industry-leading program management, construction management and design firm, as ranked by Engineering News-Record. CH2M Hill has been selected for the Energy East Pipeline project for their reputation of successfully completing pipeline projects in challenging and remote location with effective project management.

## **The need for Wrench:**

The PMC had already installed Wrench Enterprise in one of their other major project. The flexibility achieved while shifting from a manual process and the enhanced level of automation in Wrench, was the key pitching points for using Wrench in other projects also. The client's decision in selecting their Project Management Consultant was influenced by the PMC's reputation in Project Management and Wrench's ability to adapt and integrate with the existing systems.

### *Deliverable Management before Wrench*

The client was using SharePoint as their origin of document management and FileNet for the archival of their documents. Yet, life cycle of a document was managed and monitored manually.

### *Deliverable Management after Wrench*

The PMC manages all documents and drawings from the sub-contractors, for the client. Drawings from contractors are added in Wrench with metadata and under their discipline based genealogies.

Documents are sent through electronic workflows with defined stages and resources. Versions of the document are attached as read-only files along with the document. Attachments like comment files, mark-ups etc. are also stored along with the document.

PMC internal reviewers receive their To-Do list in Wrench. Wrench capability of setting alerts and notifications ensure progress to follow as planned.

The client has Subject Matter Expert's (SME's) located in offices around North and Central America. Documents sent to SME's for review has a turn-around cycle of 7 days. Multi-collaboration review in real-time ensure progress to remain within zero-float.

Expediting reports could be generated whenever (real-time monitoring) and wherever (SSRS reports) as required by the Project Manager.

Metadata capturing was standardised and automated in Wrench. This was helpful to the client when they archived their documents in FileNet. The authenticity of the details of a document was ensured with the automatic capture system in Wrench compared to the manual method employed earlier.

### *Online PDF commenting*

Wrench could convert any readable format into a non-editable format. Since the client only reviewed and commented on the documents, a further development was added so that the client could add comments within the non-editable format. After all the concerned resources had added their comments, the document controller could consolidate all the comments from various users into a single file and sent it to for modification.

### *Additional features*

- Mapping of custom characteristics generated in Wrench to a document.
- Electronic transmittals with the option of mapping transmittal details into the body of the MS Outlook mail.
- Older revisions and versions stored in a centralized location
- Correspondence management help to organize emails, letters, faxes and MOM's better

## **Implementation process**

1. Size of wrench implementation team
  - One project manager – onsite
  - One Implementation engineer – onsite
  - Two support engineer - offsite
2. Size of coordination team from the client for wrench implementation
  - Three
3. Time taken for deployment
  - 3 months
4. How was the training given to all users?
  - Onsite training based on the category of the person.

