

PROJECT
OneStop



BEST ACHIEVEMENT IN OPERATIONAL
EXCELLENCE TO DELIVER AN
OUTSTANDING VALUE CREATION OR
INNOVATION EXECUTION PROJECT

BTOES 2019

NOMINEE:



PREPARED BY:



The Alberta Energy Regulator (AER) ensures the safe, efficient, orderly, and environmentally responsible development of oil, oil sands, natural gas, and coal resources over their entire life cycle. For AER, the old way of thinking about regulating energy development was disjointed and inefficient. Companies would submit applications one at a time and then the AER would assess those separate applications in isolation.

Problem: AER’s previous manner of regulating energy development was disjointed and inefficient. Companies submitted an application one at a time for AER to assess each application in isolation.

Challenge: Find a new approach for regulating energy development; considering the big-picture perspective

Goals: (1) Improve efficiencies in how to regulate Alberta’s energy industry through the automation of low-risk activities, and allowing individual applications to be grouped as a project (2) Increase Transparency to both the energy industry and the public by providing relevant information through maps, reports and within the OneStop application

The strategic objective and scope of the Operational Excellence project

The AER’s solution, OneStop, is a totally new regulatory system. It focuses on the user’s experience and how it could be improved. The administrative burden on companies is significantly reduced. Instead of submitting information into multiple systems, each with a limited scope, operators submit into one digital platform that amalgamates the development activities. Building the new regulatory system is being completed over time through a series of concurrent projects.

The OneStop Solution Platform is a strategic foundational component of the AER’s transformational program, Integrated Decision Approach (IDA) which is currently changing the

way in which energy is regulated within the province of Alberta. The OneStop solution is changing the regulatory processes and technologies utilized at the AER. In alignment with their Strategic Plan, they have focused on building a new system with the capabilities of attaining the AER’s strategic direction which is to be:

- **Protective** – by developing an integrated lifecycle-based regulatory approach
- **Effective** – by strengthening risk-informed regulation
- **Efficient** – by transforming AER’s regulatory systems to improve efficiency
- **Credible** – by increasing trust and confidence in how energy is developed in Alberta

The digital strategy “Onestop” was designed to support this and was based upon a TOGAF architecture methodology. Key principles of the reference architecture included: business agility, reusability, scalability, innovation, and geospatial integration. To test our strategy, AER began with one project to transform the reclamation process. Within 120 days they were able to eliminate a multi-year application backlog, automate 80% of low-risk decisions, integrate data from 11 systems to 1 and provide full transparency to citizens and stakeholders. This led to a full executive endorsement for an organizational-wide digital transformation and communications were integrated into specific outcomes within our strategic plan. AER communicates with their internal customers and external stakeholders who share measurable results and outcomes on a quarterly basis which aligns with their release schedule.

Project Implementation Process and Timeline

Direction Setting

The AER is changing the way they regulate—the processes, decision making, and how they communicate with stakeholders—by looking at the entire life cycle (from start to finish) of an

energy project. This transformation starts by changing the way companies submit their applications. Instead of submitting several separate applications for each project activity, companies will submit one integrated application that covers activities over the life of the project. The AER will review all aspects of a proposed development at the same time and make one decision. One application, one review, one decision. The AER is implementing integrated decision making across the organization, with full implementation expected to take several years. Over time, OneStop continues to evolve, and take over all critical areas of regulation. Here are some of the past and future releases:

| OneStop Component | Scheduled Production Go Live Date |
|--|-----------------------------------|
| Reclamation Certification Applications – new release | July 2018 |
| Activity Based Closure | August 2018 |
| AEP Water Act Approvals | September 2018 |
| Methane Emissions Reporting | September 2018 & March 2019 |
| Public Lands | March 2019 |
| Well Licensing | June 2019 & December 2019 |

Test Strategy and Implementation

To test the strategy, AER began with one project to transform the reclamation certification process

Within 120 days AER was able to:

- Eliminate a multi-year application backlog
- Automate 80% of low-risk decisions
- Integrate data from 11 systems to 1
- Provide full transparency to citizens and stakeholders

Currently, AER has up to 7667 external users of OneStop based on the number of authentication accounts which have been set up. They also have 809 internal AER staff that has been provisioned access to OneStop.

| OneStop Component | Production Go Live Date | Number of Records received |
|--|-------------------------|---|
| AER Reclamation Certification Applications | June 2015 | 7,665 |
| AER Pipeline Applications and Amendments | June 2017 | 6300 |
| AER Water Approvals | December 2017 | 78 Applications 273 Notifications |
| AER Inspections | March 2018 | 270 Submissions 58 Notifications 48 Tests |

Diversity of Projects

The OneStop platform is now in production for several key functional areas. As an integrated platform, AER is continually adding pieces to the overall solution on a regular basis. Below are some of the key milestone projects:

Reclamation Certification - released in summer 2016 was the first component of OneStop and allows industry to notify the AER when the land has been remediated to a state where payments to landowners can cease.

Pipeline Applications - released in summer 2017, this component allows industry to apply for new pipeline construction.

Pipeline Amendments - released in fall 2017, allows industry to notify the AER of pipeline changes post construction

AER Water Applications - released in winter 2017, provides industry with the ability to notify the AER of water usage

Inspections - released in March 2018, this new component will allow industry to submit TOUR reports electronically. It will also provide functionality to AER Inspectors to access information across multiple legacy systems directly in OneStop.

Other Projects - There are four additional projects currently in development which will be released in the fall of 2018, which include Alberta Environment & Parks (AEP) Water Applications, Methane Emission Reporting (MMR), Water Licensing and Public Land Act, in the winter of 2019.

The Impact of the Operational Excellence Project

Industry Results

Cost savings of over \$9,000,000 to Industry for reclamation certificates, pipeline applications, and Tour submission process, verified by the Canadian Association of Petroleum Producers (CAPP)

Automation of 10,752 low-risk transactions:
Decision time savings (annually):

Reclamation certificate applications:

365 to 90 days for high risk, 1,600 applications
180 to 31 days for low risk, 400 applications

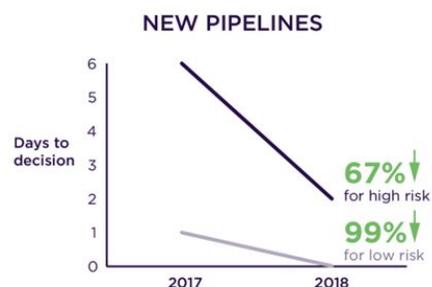
New pipeline license applications:

6 to 2 days for high risk, 1,750 applications
1 day to 15 minutes for low risk, 250 applications

Pipeline license amendment applications:

6 to 2 days for high risk, 12,000 applications
1 day to 15 minutes for low risk, 3,000 applications

Service level improvements by function for industry



Internal Results

- Integration of information from multiple systems into one technology and automation of low-risk activities, allows staff to focus on those that require more attention.
- Annual savings of 10,000 man hours for inspections pre-planning, increasing time spent in the field on high-risk activities.
- Focused reviews and decision time savings enables resource reallocation across the organization to provide support in different areas.
- Continuous improvement of regulation and regulatory oversight across the lifecycle of development.

Stakeholders Results

- Enhanced transparency and information sharing.
- Technology components such as the User Interface, GIS Mapping, Decision Engine, Workflow, Middleware, Analytics, and Data are integrated seamlessly to improve the user experience.
- The mapping tool generates real-time reports on pending, active and historical activities including information about the industry operator, performance and detailed permit documents.
- Public notice reporting allows stakeholders to review activities and issue a statement of concern.
- A clear authorization process and the integration of applications via OneStop to enable AER decisions and regulatory actions is a benefit internally, for industry and the public.

Business Impact

AER Business experts are a critical component of OneStop success and are embedded into every project. For example, risk rules have been defined by AER subject matter experts, which allow certain activities to be approved without staff intervention. By removing the need to review low-risk applications, AER business staff now focus more of their time on higher-risk applications.

To date, several of the components of OneStop have been very successful in automating work on low-risk applications. As seen in the following Statistics:

| OneStop Component | Production Go Live Date | Low Risk Pass Rate |
|--|-------------------------|--------------------|
| Reclamation Certification Applications | June 2015 | 80% |
| Pipeline Applications and Amendments | June 2017 | 55% |
| Water Approvals | December 2017 | 51% |
| Inspections | March 2018 | |

Major Benefits

Some of AER's improvements include:

70% of applications submitted via OneStop have been automated through OneStop: ~ 4800 as of Jan. 19/18

Reduction in staff hours, enabling AER to put resources towards high-value work field audits
Faster manual reviews of high-risk applications
Over \$90M in industry savings

Organizational Learning

As part of AER's transformation to Regulatory Excellence, the AER completed significant work on regulatory excellence and the pillars identified within this research were foundational to their transformation:

Utmost Integrity: This is about much more than just a lack of corruption; it is also about the regulator's commitment to serving the public interest, respect the law, and to work with duly elected representatives.

Empathic Engagement: This is about transparency and public engagement, but also about how respectfully the regulator and its personnel treat regulated entities, affected

landowners, and all other concerned individuals.

Stellar Competence: This is about the actual delivery of outcomes that maximize public value and the capacities built and actions taken to achieve a high level of performance. This culture of excellence underpinned AER's work and their digital transformation is recognized as a tangible example of regulatory excellence. The integrated, cross-functional teamwork that takes place between their business operations and technology teams and the enterprise first approach has allowed for increased innovation, agility and empowerment for the AER staff. These high performing teams, the passion, and enthusiasm they bring to the program is perhaps the greatest benefit we have realized from AER's work.

OneStop Projects are run following a program framework. Individual project teams, consisting of business and technical experts, report weekly to the program level on progress. They also follow a consistent agile methodology, which aligns key deliverable dates and sprint timelines across projects. This approach has led to greater consistency in deliverables across projects, and the ability to move resources when necessary, as teams follow consistent processes. By improving the way we handle applications, notifications, and submissions, AER staff are now able to dedicate more resources to ensuring that high-risk areas and higher-risk reclamation certificate, pipeline, and Water Act applications receive stronger oversight, including inspections and compliance audits.

AER is able to focus the right people at the right time in the right place to protect public safety, environment, and water. AER continues to make significant organizational changes when new components of OneStop are implemented. AER focuses their attention on the highest risk. This shift has led to organizational changes to reflect the new approach to regulation.