



PPDM™

# Foundations

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**1st Place** Foundations Photo Contest Winner; *“Encountered Many Defeats But Still Not Defeated.”*  
(Vikrant Lakhanpal)

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**From National Data Repository to Data Energy Cloud** Working with a Regulator. (Page 23)

**PLUS PHOTO CONTEST:**

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# Achieving Success in Developing Regulatory Standards



By Yogi Schulz, Corvelle Consulting

**T**

## he Regulatory Data

Standards Committee of the PPDM Association stands

before a huge opportunity to enhance and harmonize the data standards for regulatory reporting to, and data management practices of, oil & gas industry regulatory agencies.

The development of Directive PNG017: *Measurement Requirements for Oil and Gas Operations* provides an excellent case study of how representatives from regulators, operators, vendors and service suppliers can collaborate to enhance and harmonize all types of standards. The regulatory standards work was sponsored by the Ministry of the Economy (ECON) of the Government of Saskatchewan, a province in Canada, and was completed earlier in 2016. A branch of ECON is responsible for the regulation of the oil and gas industry in Saskatchewan. These new requirements have been introduced without noisy conflict and have been welcomed, or at least accepted, by all stakeholders.

The measurement requirements described in PNG017, a 400 page document, elaborate on the following topics:

1. What and how volumes must be measured or calculated.
2. What, where and how volumes

3. Accounting procedures related to calculated volumes.
4. What data must be kept for audit purposes.
5. What volumes must be reported.
6. Standards of accuracy for measured and estimated volumes.
7. Under what circumstances deviations from base requirements are allowed.

Here's a summary of the learning from collaboratively developing PNG017 that will help the Regulatory Data Standards Committee achieve success in moving toward its ambitious regulatory data standards goals.

## ADDRESSING MEASUREMENT SHORTCOMINGS

ECON wanted to introduce new measurement requirements to:

1. Reduce long-standing measurement noncompliance.
2. Improve accuracy and completeness of production volumes being reported.
3. Correct under-reporting of flare and vent volumes.
4. Raise the level of assurance over accuracy and completeness for crown royalty purposes.

5. Respond to environmental and safety concerns.

## BUILDING ON EXISTING STANDARDS

The first decision of ECON was to build on an existing, well-established standard. For the PNG017 development that was the Alberta Energy Regulator (AER) Directive 017: *Measurement Requirements for Oil and Gas Operations*. AER generously contributed this document and actively participated in the consultation process. All the stakeholders easily agreed that harmonizing the Saskatchewan requirements with the Alberta requirements offered the following significant benefits:

1. Easiest, fastest and lowest cost standards development for ECON, the regulator.
2. Easiest and lowest cost implementation and adoption for operators.
3. Proven, established measurement requirements that:
  - a. Minimize ambiguity.
  - b. Simplify achieving reasonable compliance for operators.
  - c. Reduce the cost of monitoring compliance for ECON, the regulator.
4. A long list of small improvements to



the AER Directive 017 requirements that AER was pleased to adopt.

As a result, the PNG017 standards development process:

1. Leveraged widely-adopted and proven best practices for measurement.
2. Demonstrated the ability of typically cautious regulators to collaborate.
3. Avoided the introduction of yet another, slightly different standard.
4. Produced the first ever multi-jurisdictional, harmonized set of oil & gas regulatory requirements in Canada.

### CONSULTING WITH INTEGRITY

At the outset, the participating ECON staff announced that they were genuinely interested in comments and viewpoints of other stakeholders. Initially, that statement was received with polite skepticism by some stakeholders. However, the ECON staff adhered to that statement of principle for the duration of the standards development process.

This ECON behavior quickly built trust among all the participants. The trust led to many candid exchanges about the implications, costs and benefits of many detailed technical standards proposals during the series of consultation meetings. These frequent candid exchanges by all the participants demonstrated that no one was holding back thinking that raising questions might turn into a disadvantage later. The combination of technical expertise and trust ensured that the new requirements met operator and regulator needs.

As a result, the standards development process avoided conflict and produced a high-quality deliverable that is being widely adopted.

### MAINTAINING MOMENTUM

Standards development initiatives are at risk of losing momentum and bogging down. ECON recognized that:

1. The longer the standards development process takes, the more it will cost and the more likely some participants will drop out due to fatigue or changing circumstances.
2. Operator and supplier participants are constrained in how much effort they can allocate to the consultation process.
3. They did not have the subject matter expertise to manage the diverse content of the discussion.
4. They did not have the capacity to facilitate the discussion and manage the development process.

As a result, ECON engaged a consultant to manage the standards development process to ensure project momentum, the planned schedule and deliverable quality were maintained.

### ENCOURAGING SUPPORTERS

To ensure reasonableness and clarity in the new requirements, representatives were requested from AER, Canadian Association of Petroleum Producers (CAPP), Explorers and Producers Association of Canada (EPAC), Industry Measurement Group (IMG) and Saskatchewan Headquartered Oil Producers (SHOP) to participate in the consultation process.

These representatives became supporters for the new requirements in their own organizations and at industry events such as the Canadian School of Hydrocarbon Measurement (CsHm), IMG meetings, CAPP committee meetings and Petrinex committee meetings. Petrinex is the organization that operates the production reporting system for Alberta and Saskatchewan.

As a result, the organizations that would be impacted by the new requirements became well aware of what was required of them and the timeline during which they needed to take action.

### DRIVING TO A CONSENSUS

Every consultation encounters

objections from specific individuals and stakeholders that can place the standards development project at risk and hinder driving to a consensus. During this project, the facilitators ensured that objections and different perspectives were heard thoroughly. Frequently, the requirements were tuned or clarified to address the concerns.

In most cases the ECON staff made decisions to accept or not accept the consensus of the participating representatives in real time in the consultation meetings.

In rare cases the ECON staff wanted to consult with other Ministry staff before accepting a consensus. On these occasions, the topic was always resolved during the next consultation meeting.

This decisiveness kept the standards development project on schedule and made the government position unambiguous throughout the project.

### OVERCOMING RESISTANCE TO CHANGE

Not surprisingly, many Saskatchewan operators, large and small, were happy with the previous situation of little or no measurement requirements with sporadic enforcement at best. In particular, most small, local operators were oblivious to the:

1. Low compliance of their operation.
2. ECON's unhappiness with their poor compliance.
3. Higher expectations of industry performances desired, or sometimes loudly demanded, by external stakeholders.

To these small operators, the new measurement requirements constituted huge change to current processes and will require some capital investment to improve measurement.

To build awareness of the new measurement requirements, compliance expectations, and overcome resistance to change, ECON:

1. Held multiple communication events for all stakeholders and for their own staff.
2. Created new web pages for measurement on its website.
3. Provided regular updates at

measurement community meetings and conferences.

4. Formally communicated the availability of the new requirements with their effective date to every operator in Saskatchewan.

As a result, awareness of the new measurement requirements became high, adoption is growing and publicly voiced opposition by Saskatchewan operators is non-existent.

### ADDRESSING IMPLEMENTATION COSTS

Naturally, Saskatchewan operators were concerned about implementation costs for the new measurement requirements and about subsequent operating costs. The participants in the standards development process were highly aware of this concern and addressed it by:

1. Harmonizing the new requirements with existing AER

requirements to leverage Alberta implementation expertise and experience among operator staff, vendors and consultants.

2. Offering the Compliance Reporting Tool for Directive PNG017 to help operators plan their implementation and report progress in a comprehensive way.
3. Providing a four-year implementation period to allow time for orderly change management and to spread costs.

As a result, implementation costs for the new standard have been contained while measurement accuracy and completeness is improving.

### CONCLUSION

The experience gathered from the successful development and ongoing implementation of the Directive PNG017 standard can help the Regulatory Data Standards Committee address these same

concerns that will undoubtedly arise during its standards development work. More specifically the benefits include:

1. Harmonizing standards across jurisdictions produces lower, shared implementation and operating costs.
2. Comprehensive consultation produces a superior quality standard.
3. A higher quality standard leads to wider adoption and therefore more value.

Most regulators can experience these benefit by participating in the Regulatory Data Standards Committee. 

### About the Author

Mr. Schulz has over 30 years of Information Technology experience in various industries, including serving on the PPDM Board of Directors for 20 years.

*For more about regulatory standards, visit the Committees menu at [www.ppdm.org](http://www.ppdm.org).*

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