Oil Forecast Tool Town Hall Meeting Jan 23, 2017

Questions & Answers from the Meeting

A. Why is the Oil Forecast Tool needed and how is it an improvement on what we do currently?

Poor forecasting has cost the Crown (and non-Crown stakeholders) millions of dollars on a monthly basis. While many schedulers put considerable focus on forecasting the Gross volume that will be delivered to pipelines each month, statistics show that less attention is paid to accurately forecasting the Crown (APMC) royalty share of that volume. And when the Crown share is "off" significantly, the non-Crown share is "off" by an equal and opposite amount.

Statistics suggest that forecasters often "template" forward the previous month's percentage splits going to the Crown and other shippers. Given that the Crown share is based on well-level formulae and is significantly impacted by changes to the monthly Par Price (which is known at the time forecasts are being generated), production levels and dynamic royalty "programs"…the template forward approach is not appropriate…particularly during times of high price volatility.

The Petrinex Forecast Tool calculates the Crown royalty share at the well level using the correct Par Price and other royalty inputs. The tool then "rolls-up" the well-level results to the production battery and View List (Group). Analysis of historical periods has clearly demonstrated that the Oil Forecast Tool approach will yield significantly better results than current practice.

B. How is the Oil Forecast Tool different from the Oil Forecast Report that has been available from the APMC?

Alberta Energy and the APMC have made several tools available in the past to help operators improve their forecasts.

The Alberta Energy website has a Royalty Model that lets operators do accurate Crown share calculations on a well-by-well basis. Use of this model is not practical for operators managing a large number of wells.

An Oil Forecast Report has been made available by the APMC (through Petrinex Ministry Invoices and Statements) since January 2016. This Report is generated using the most recently available Gross actual production data and performing detailed calculations using the current Par Price. This report generates significantly better forecast results because it uses the right Par Price in its calculations…but it is "static" in the sense that operators cannot update their Gross forecasts to reflect operational changes (e.g. new wells coming on, declines, workovers).

The Oil Forecast Tool allows operators to dynamically change their Gross forecasts…and then does the math (using the correct Par Price and other factors) to generate the Crown's share. The Oil Forecast Tool also allows forecasters to modify the complement of producing batteries flowing to (included in) a View List (group) which may be potentially organized by delivering (Form A) batteries.

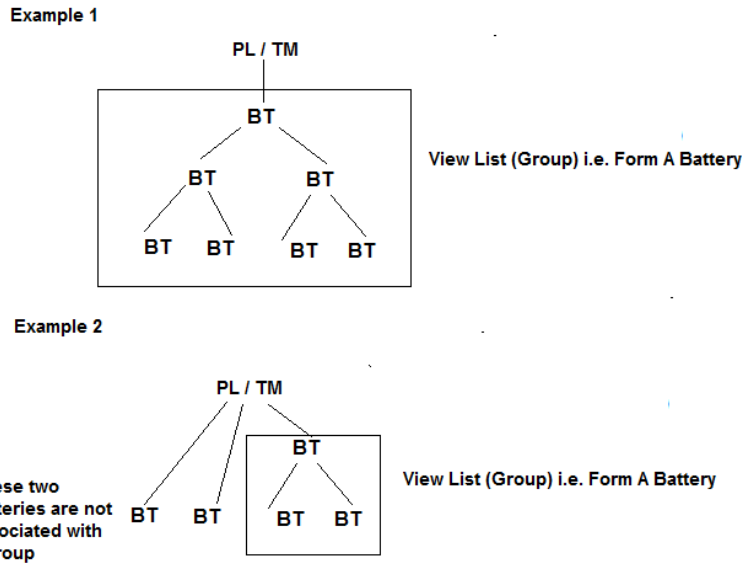
C. This seems complicated and seems to involve more work for forecasters. Do we have to enter the numbers twice (into the forecast tool and then again into the Form A/C)?

The Oil Forecast Tool requires forecasters who do not report at the producing battery level to initially "set-up" the hierarchy [View List (Group)] of producing batteries that deliver to a delivering (Form A) battery. This process does require additional work, but once in place requires minimal attention. Once the View List (Group) is established forecasters simply:

1. Review the report generated automatically at the beginning of the forecast cycle (which is based on historical Gross production)…and
2. Update the Gross forecast (if required) to reflect anticipated changes to Gross deliveries. Petrinex will then generate a new Crown forecast applicable to the revised Gross forecast.
3. As is the case today, schedulers must enter forecasts by shippers into Form A systems.

It is recommended that forecasters also take advantage of other functionality built into the Oil Forecast Tool to help maintain good results:

1. Since the hierarchy of producing batteries delivering to Form A batteries can change, it is recommended that the "View List" be reviewed periodically to ensure it still reflects your operations. Petrinex has a report which identifies producing batteries that are "orphaned" (i.e. not associated with a View List (Group)). This report should be reviewed periodically and changes to the "View List" should be made as appropriate. Note not all batteries need to be included in a View List (Group) if the producing battery is the battery on the Form A.



2. The Oil Forecast Tool has another report that compares the most recent Crown and Gross forecast in the Oil Forecast Tool (the one originally generated by Petrinex or the Crown forecast based on an updated Gross forecast entered by the operator)…to the Actual volume delivered to the Crown's shipper account and the actual production (reported by your Production Accounting group via Pipeline Splits and Volumetrics in Petrinex). This report identifies variances and allows sorting of largest to smallest variances. Forecasters can investigate variances that they feel are material and make adjustments to improve their forecasting over time. Note that the Oil Forecast Tool must "make assumptions" in several detailed areas (e.g. whether a royalty program is expiring). The Tool has a variety of mechanisms to highlight where these assumptions are being made and for schedulers to make changes if they wish to do so.

In summary: Once the "View List" hierarchy is set up, the tool is easy to use. Tool results can be enhanced if forecasters use the Variance report and make adjustments as appropriate. Like any new tool use of the Oil Forecast Tool requires learning and practice. Petrinex Training Resources and the Petrinex Service Desk are available to assist in the process.

D. When can we start using the tool and when can my BA USA set me up with access?

The forecasting tool functions are now live in Petrinex and available for User set-up and the creation of Facility View Lists. The first forecast report will be available in Petrinex by request on February 27, 2017. For the dates for all other months, refer to the AB Reporting Calendar "Initiate Forecast Month and Generate Forecast Data".

E. Is use of the tool mandatory?

No. Use of the tool is not mandatory. However the APMC will be monitoring the Crown forecasts and will be analysing if the forecast tool values are better than the forecasts reported. Companies that forecast significantly different than the tool and where the forecast variance would have been smaller if the tool was used will be contacted by the APMC and encouraged to use the tool.

F. Comment from a small producer at the meeting

As a smaller company using a spreadsheet provided by APMC this new tool will save time and be easier to use than the spreadsheet or the DOE online royalty calculator both of which require the producer to input the Par price, well ids and other information. The Petrinex tool will include the updated Par price and identify all the well ids and their royalty attributes.

G. Clarification regarding marketing vendor systems

It was stated that marketing system vendors, given current economic pressures, are not currently planning to build interfaces to the Oil Forecast Tool. This statement was not correct.

Petrotranz is actively developing functionality that will seamlessly interface with Petrinex. This functionality will be available in the Petrotranz fall 2017 release. We apologize for this error.

Please contact your specific marketing system vendor to find out their status related to implementing or building an interface with the Petrinex Oil Forecast Tool.