

EQUALIZATION STEERING COMMITTEE

To: All Shippers Participating in the Equalization Process
From: Equalization Steering Committee
Date: December 5, 2018
Subject: **Allowance Oil Price Changes - Condensate EQ Density Penalty Model**

On September 20, 2018, the Equalization Steering Committee advised that the Shippers had approved a change in the calculation of the condensate density penalty. While the revised model that will take effect for January 2019 production (penalty to be issued in February 2019) has been published on the www.industryeq.ca website, there have been a number of questions about the details of the revised calculation of the heavy oil allowance price.

To allow interested parties to do their own forecasting of the effect of the change in allowance oil price, the Equalization Steering Committee has approved the release of additional data on the effect the change will have on the allowance oil price.

In the updated model the heavy allowance oil price will be calculated by:

- **HEAVY ALLOWANCE OIL PRICE_{Thermal}**: For the calculation, the thermal heavy allowance oil price will be calculated from the volume weighted heavy allowance price for the Enbridge Dilbit pool in Edmonton (currently the volume weighted price for AWB, BHB, CDB, KDB, SH, and WDB) and Cold Lake.
- **HEAVY ALLOWANCE OIL PRICE_{Conventional}**: For the calculation, the conventional heavy allowance oil price will be calculated from the volume weighted average of the allowance oil price for the LLB, LLK, and Fosterton streams.
- **NEW Heavy Allowance Oil Price**: will be calculated by averaging the price for a conventional heavy allowance oil price and a thermal heavy allowance oil price based on 84% of the thermal heavy price and 16% of the conventional heavy price. This ratio was previously developed based on the western Canadian shipped heavy crude oil volumes and it is consistent with other applications of the thermal to conventional ratio within the model:

$$\begin{aligned} \text{NEW Heavy Allowance Oil Price} \\ = (\text{Heavy allowance oil price}_{\text{THERMAL}}) * 0.84 \\ + (\text{Heavy allowance oil price}_{\text{CONVENTIONAL}}) * 0.16 \end{aligned}$$

Using the above inputs, the heavy allowance oil price has been backcast and compared to the current heavy allowance oil price. Results of this analysis are shown in the following table.

Month	Current Heavy Allowance Oil Price	Heavy Allowance Oil Price using New Formula
2017		
Jan	303.84	296.29
Feb	319.61	313.18
Mar	295.41	288.13
Apr	307.08	300.24

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Month	Current Heavy Allowance Oil Price	Heavy Allowance Oil Price using New Formula
May	328.71	322.36
Jun	294.02	288.30
Jul	285.85	279.95
Aug	301.66	295.53
Sep	305.11	299.81
Oct	313.89	306.57
Nov	361.93	355.00
Dec	349.27	340.54
2018		
Jan	328.06	317.60
Feb	295.01	283.14
Mar	285.46	272.40
Apr	318.27	307.46
May	428.33	416.65
Jun	427.05	416.94
Jul	432.46	422.78
Aug	398.74	386.51
Sep	329.34	313.42

If you have any questions about these changes, please contact

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or

any Equalization Committee Member

see Committee Member list at www.industryeq.ca

On Behalf of the Equalization Steering Committee

Nitesh Patel and Matthew Dixon

Co-Chairs