



Daily Imbalance Trading

presented by
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Background

- Each NGDC is responsible for operating its system in a safe and reliable manner, including balancing its system daily through utilization of its unique set of assets.
- This responsibility requires each NGDC to balance all Sales Service, Choice and Transportation nominations versus consumption on a daily basis on its system.
- Choice and Sales Service customers, as firm customers, are an NGDCs first priority for gas deliveries.



Background

- Sales Service customers on an NGDC's system pay for assets to cover a peak day.
- Choice customers also pay for assets to cover a peak on Columbia's system.
- On non-peak days, those assets may be utilized to balance the difference between Transportation deliveries and consumption on an "interruptible" basis, i.e. when not needed to provide least cost service to those customers paying for these assets.



Background

- Imbalance trading is a means in which market participants are able to buy, sell and/or trade gas supply for financial benefit, including the ability to mitigate penalties or limit the impact of daily imbalances.
- This market feature is appropriate, but a market participant's economic benefit should not be at the expense of NGDC's Sales Service customers or negatively impact the reliability of natural gas service to those customers.
- Each NGDC has a unique system with Choice and Transportation programs designed around their individual system characteristics.

Columbia's Operations

- Columbia's gas supply for its Choice and Sales Service customers is delivered into its system on firm interstate capacity contracted by Columbia with six interstate pipelines.
- Columbia receives gas supply equal to the Choice Daily Delivery Requirement from Choice NGSs delivered on firm interstate capacity.
- Gas supplies from NGSs serving Transportation customers are nominated daily for delivery to Columbia. Columbia must consistently monitor these nominations to ensure these nominated amounts do not cause excessive utilization of Sales Service Customer assets or cause Columbia to violate pipeline operational orders or tariffs.
- The majority of meters on Columbia's system do not have telemetering. Therefore, the amount of natural gas being used in homes, businesses and manufacturing companies on a daily basis is unknown.

Gas Nominations ≠ Customer Usage

Columbia Balances...

- Choice customer usage and nominations.
- Sales Service customer usage and nominations.
- Transportation nominations and usage (excess and deficient nominations are managed on an interruptible basis).

How?

- Choice service - daily balancing is managed using gas in storage and firm capacity assets.
- Sales Service - daily balancing is managed using gas in storage and firm capacity assets.
- Transportation Service – small daily imbalances are managed using transportation gas previously “banked” under EBS, while larger imbalances are managed with gas in storage and capacity assets paid for by Sales and Choice customers.

Daily Imbalance Trading – Commission Proposal

- Imbalance trading between and among Choice and Transportation programs on a daily basis at the NGDC level
- Potential Choice and Transportation program changes such as aligning tolerance bands or penalty structures to accommodate imbalance trading
- Use the NGDC electronic bulletin board as a general trading hub to facilitate trading



Daily Imbalance Trading – PUC Proposed Regulation

➤ 52 PA Code 62.225

(5) An NGDC shall provide the opportunity for imbalance trading on the day the imbalance occurred. Capacity may be traded between market participants provided that either:

(i) The trade improves the position of both parties.

(ii) The trade improves the position of one party and is agreed to by the second party but does not negatively impact the second party's imbalances.

Daily Imbalance Trading – Columbia’s Response

1. Columbia’s programs are not built for trading between Choice and Transportation

- Choice has a Daily Delivery Requirement.
- Transportation has the ability to deliver its gas supply for an entire month in as little as one day under normal conditions.

Implementing Daily Imbalance Trading between these two Columbia programs provides an NGS the financial incentive to under deliver supply when market prices are high and over deliver supply when market prices are low.

- When market prices are high, it makes financial sense for a NGS to sell its gas at the highest price it can get, which is very often in another market outside Columbia’s system placing a larger call upon the assets paid for by Sales and Choice customers.
- When market prices are low, it makes financial sense to over deliver in order to capitalize on the highest possible margin, especially when the market price is lower than the supply price the customer is paying again placing a larger call upon the assets paid for by Sales and Choice customers.
- Placing a larger call on assets paid for by Sales and Choice customers reduces the Company’s opportunities to manage Sales and Choice customer assets to achieve a least cost gas supply.

Daily Imbalance Trading – Columbia’s Response

2. Implementation and monitoring of a Daily Imbalance Trading Program will be costly and time-consuming from an IT perspective.

- Functionality for an NGS to post an imbalance they would like to trade and for another NGS to accept that trade would require the cost of in-house development or a third party provided system that is integrated into Columbia’s existing Electronic Bulletin Board.
- Usage information will be needed on a daily basis to determine whether or not a NGS is in balance.
- Implementing access to daily usage for all Columbia’s customers will cost > \$30,000,000.00
- What value will it bring to all customers?
- Who will pay for it?
- Who benefits?
- Who determines whether the trade improves the position of one or both trading parties?

Daily Imbalance Trading – Columbia’s Response

3. The frequency of Operational Orders will increase

- If the amount of gas being delivered on a daily basis for Choice is unknown, Columbia’s planning process for keeping its system in balance on the interstate pipeline and fulfilling its service obligation to Sales Service and Choice customers is negatively impacted.
- Such uncertainty will cause Columbia to take steps to ensure that enough gas supply is available on a daily basis, including the issuance of Operational Orders.
- Retaining additional costly resources, paid for by Sales Service customers, will be necessary to compensate for the unknown level of NGS supply coming into Columbia’s system on a daily basis.
- With the unknown level of Choice NGS supply coming into Columbia’s system on a daily basis, Columbia will be obligated to compensate by retaining additional costly resources that will be paid for by Sales Service customers.
- This added retention reduces Columbia ability to provide Sales customers a least cost gas supply.

Daily Imbalance Trading – Columbia’s Response

4. Columbia currently offers a form of daily imbalance trading

- Columbia’s Transportation program offers “Gas Transfer Service” which provides the NGS an opportunity to reallocate gas supply, previously delivered on the same gas day, from one customer or aggregation group to another.
- Pre-billing imbalances can be determined by viewing customer usage which is normally available by 5:00 P.M. Eastern Time on the second business day following the end of the previous calendar month.
- A Gas Transfer must be fully executed by 5:00 P.M. Eastern Time on the third business day following the end of the previous calendar month.

Summary