#### Gas and In-Stream Component Reference Prices

Gas Reference Price		\$2.63 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$2.690 /GJ	
Pipeline Fuel/Loss Factor	0.978	
Price Before Amendments	\$2.631 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$2.631 /GJ	
Reference Price	\$2.63 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(2.946 - 0.256) \times 0.978 + 0.000 + 0.000 = 2.631$ 

Methane ISC Reference Price		\$2.63 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$2.690 /GJ	
Pipeline Fuel/Loss Factor	0.978	
Price Before Amendments	\$2.631 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$2.631 /GJ	
Reference Price	\$2.63 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP = (2.946 - 0.256) x 0.978 + 0.000 + 0.000 = 2.631

Methane ISC Par Price \$2.63 /GJ

Note: Calculations may not agree due to rounding.



### Gas and In-Stream Component Reference Prices

Ethane ISC Reference Price		\$2.63 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$2.690 /GJ	
Pipeline Fuel/Loss Factor	0.978	
Price Before Amendments	\$2.631 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$2.631 /GJ	
Reference Price	\$2.63 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(2.946 - 0.256) \times 0.978 + 0.000 + 0.000 = 2.631$ 

Propane ISC Reference Price	\$2.	63 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$2.690 /GJ	
Pipeline Fuel/Loss Factor	0.978	
Price Before Amendments	\$2.631 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$2.631 /GJ	
Reference Price	\$2.63 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(2.946 - 0.256) \times 0.978 + 0.000 + 0.000 = 2.631$ 

Note: Calculations may not agree due to rounding.



### Gas and In-Stream Component Reference Prices

Butanes ISC Reference Price		\$2.63 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$2.690 /GJ	
Pipeline Fuel/Loss Factor	0.978	
Price Before Amendments	\$2.631 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$2.631 /GJ	
Reference Price	\$2.63 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(2.946 - 0.256) \times 0.978 + 0.000 + 0.000 = 2.631$ 

Pentanes ISC Reference Price	\$2.63 /GJ
Breakdown:	
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$2.946 /GJ
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ
Price Before Pipeline Factor	\$2.690 /GJ
Pipeline Fuel/Loss Factor	0.978
Price Before Amendments	\$2.631 /GJ
Special Amendments	\$0.000 /GJ
Prior Period RP Amendments	\$0.000 /GJ
Calculated RP (Price Before Rounding)	\$2.631 /GJ
Reference Price	\$2.63 /GJ
Adjusted Intra-Alberta Transportation Deduction	\$0.250 /GJ

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(2.946 - 0.256) \times 0.978 + 0.000 + 0.000 = 2.631$ 

Note: Calculations may not agree due to rounding.



### Gas and In-Stream Component Reference Prices

#### Intra-Alberta Transportation Deduction (IATD) Calculation

Average Firm Service Receipt Rate on NOVA Gas Transmission Limited (NGTL)	\$315.29	/1000m³
Average Number of Days in a Month	30.500	days
Average Heat Content on all NGTL Receipt Meter Stations	40.40	/GJ/1000m <sup>3</sup>
Intra-Alberta Transportation Deduction (IATD)	\$0.256	/GJ

#### **Pipeline Fuel/Loss Factor Calculation**

Alberta Fuel Usage and Measurement Variance on NGTL	2.20	%
Pipeline Fuel/Loss Factor	0.978	

#### Adjusted Intra-Alberta Transportation Deduction (AIATD) Calculation

Intra-Alberta Transportation Deduction (IATD)	\$0.256	/GJ
Pipeline Fuel/Loss Factor	0.978	
Adjusted Intra-Alberta Transportation Deduction (AIATD)	\$0.250	/GJ



### Gas and NGL Reference Prices

Natural Gas Liquids Reference Prices and Par Prices		
Ethane Reference Price	\$2.63	/GJ
Ethane Par Price	\$2.63	/GJ
Propane Spec Reference Price	\$235.38	/m³
Propane Mix Reference Price	\$168.96	/m³
Butanes Spec Reference Price	\$277.25	/m³
Butanes Mix Reference Price	\$229.06	/m³
Pentanes Plus Spec Reference Price	\$575.69	/m³
Pentanes Plus Mix Reference Price	\$576.90	/m³
Pentanes Plus Par Price	\$575.69	/m³
Sulphur Default Price	\$1.57	/tonne

Note: Calculations may not agree due to rounding.



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