

	2013 HTY	2018 HTY
Wheeling Transactions		
Four Corners-Craig 188	\$ - *	\$7,211,132
WAPA: NITS	\$3,632,223	\$5,387,761
PRPA: NITS	\$1,473,895	\$1,729,788
La Plata: Ames/Tacoma	\$ 51,916	\$ 22,791
Tri-State: Ames Hydro	\$ 81,304	\$ -
Tri-State: Berthoud	\$ 425,215	\$453,362
Tri-State: Lamar to	\$ -	\$1,938,184
Tri-State: Burlington	\$ -	\$348,451
Tri-State: Point to point	\$ -	\$191,392
Loveland: Distribution	\$ 255,332	\$ 277,008
Holy Cross: Battlement	\$ 586,311	\$ 650,148
Holy Cross: TIE	\$	\$(2,369,029)
Mountain Parks:	\$ 139,524	\$ 139,524
Morgan County: Bijou	\$ -	\$ 4,783
Pacificorp	\$ -	\$(56)
Public Service Company	\$ -	\$3,759
Southwest Power Pool	\$ -	\$272,966
Basin Electric Power Coop	\$ -	\$4,239
SPP: Lamar DC Tie NITS	\$ 3,521	\$ -
Total Base Rate Wheeling Expense	\$6,438,139	\$16,266,203

		Known and measurable adjustments						
Wheeling Transactions	2018 Actuals	Economic Purchases	Trading Activity	Sales for Resale	Penalty Distributions	Prior-Year True-Ups	Rate Updates	2018 HTY (Normalized)
Four Corners-Craig 188MW PTP	7,211,132	-	(61,405)	-	317,691	(266,966)	322,608	7,523,060
WAPA: NITS	5,387,761	(61,161)	(29,544)	-	-	-	112,620	5,409,676
PRPA: NITS	1,729,788	(4,728)	-	-	-	-	48,556	1,773,616
La Plata: Ames/Tacoma	22,791	-	-	-	-	-	-	22,791
Tri-State: Berthoud	453,362	-	-	-	-	-	48,959	502,321
Tri-State: <i>Burlington</i>	348,451	-	-	(348,451)	-	-	-	-
Tri-State: Lamar to Midway	1,938,184	-	-	-	-	-	77,616	2,015,800
Tri-State: Point-to-Point	191,392	(191,392)	-	-	-	-	-	-
Loveland: Distribution	277,008	-	-	-	-	-	-	277,008
Holy Cross: Battlement Mesa	650,148	-	-	-	-	-	-	650,148
Holy Cross: TIE Agreement	(2,369,029)	-	-	-	-	416,808	-	(1,952,221)
Mountain Parks: Henderson Mine	139,524	-	-	-	-	-	-	139,524
Morgan County Mijou	4,783	-	-	-	-	-	-	4,783
PacifiCorp	(56)	56	-	-	-	-	-	-
Public Service Company of New Mexico	3,759	-	(3,759)	-	-	-	-	-
Southwest Power Pool	272,966	(265,307)	(7,459)	-	-	-	-	200
Basin Electric Power Cooperative	4,239	(4,035)	(204)	-	-	-	-	-
Total Base Rate Wheeling Expense	16,266,203	(526,567)	(102,371)	(348,451)	317,691	149,842	610,359	16,366,706

Summary of 2018 HTY Wheeling Transactions

- *Four Corners-Craig 188 MW PTP*: The Four Corners-Craig 188 MW PTP Transmission Reservation is a firm PTP transmission service reservation at the rate derived under Public Service's FERC-approved transmission formula rate that Public Service has entered into over the Four Corners to Craig transmission path to access the Four Corners market hub.¹ Public Service utilizes this reservation to improve its Loss of Load Probability ("LOLP") calculation by creating an option for alternative supply in case of an outage, resource unavailability, or other event(s) that would require the use of external system generation supply. By utilizing this transmission reservation, Public Service is able to lower its reserve margin requirements – thereby potentially offsetting the need to construct or acquire additional native generation.
- *WAPA – NITS*: Network Integration Transmission Service ("NITS") is purchased under the WAPA OATT to serve several Public Service retail electric customers in Sterling, Greeley and other communities in northeastern Colorado where Public Service's local distribution system is not directly interconnected to its transmission system.
- *Platte River Power Authority ("PRPA") – NITS*: NITS purchased under the PRPA OATT to serve several retail load pockets in the Longmont / Loveland / Fort Collins area where Public Service's local distribution system is not directly interconnected to its transmission system.

¹ The assets utilized to facilitate service along the Four Corners to Craig transmission path are jointly owned by PSCo, Tri-State and WAPA.

- *La Plata – Ames/Tacoma:* See Tri-State – Ames Hydro, below.
- *Tri-State – Ames Hydro:* As a result of the resolution of the Colorado Ute bankruptcy, Public Service owns and operates the Ames hydroelectric facility in San Miguel County, Colorado, which is interconnected to Tri-State's 115-kV transmission system. To deliver Ames' output to Public Service's transmission system, the power must be wheeled across Tri-State's 115-kV line from Ames to the Cascade substation, where Tri-State's line dead ends into the system of La Plata Electric Association ("La Plata"), a Tri-State member. The power is then wheeled across La Plata's system to Tri-State's Bodo substation, and then once again on Tri-State's system from Bodo to Hesperus, where it connects to Public Service's system. Through a series of agreements, Public Service obtains this wheeling service at preferential rates.
- *Tri-State – Berthoud:* NITS is purchased under the Tri-State OATT to serve Public Service's customers in the area of the Berthoud substation, which is interconnected to Tri-State's 115-kV Boyd to Berthoud line.
- *Tri-State: Lamar to Midway:* Public Service purchases the output of the Colorado Green and Twin Buttes wind farms under long-term power purchase agreements. Colorado Green and Twin Buttes are interconnected to the 230-kV side of the Lamar substation jointly owned by Public Service and Tri-State. Since Public Service's capacity requirements to import wind energy along the Lamar to Midway line exceed the currently rated capacity of its share of line ownership, Public

Service procures additional capacity on the line via PTP transmission service under the Tri-State OATT.

- *Loveland – Distribution:* Public Service has pockets of customers interconnected to the 12.47 kV distribution system of Loveland Water and Power (“Loveland”). Public Service takes wheeling service from Loveland to serve these customers.
- *Holy Cross – Battlement Mesa:* Under an agreement dating back to March 2, 1982, Public Service serves distribution loads in the Holy Cross Electric Association (“Holy Cross”) service area for customers whose demand exceeds 100 kW, and is required to pay Holy Cross to wheel power across its distribution system to such customers.
- *Holy Cross – TIE Agreement:* Under the Transmission Integration and Equalization Agreement (“TIE Agreement”) between Public Service and Holy Cross (dated December 23, 1993), Public Service and Holy Cross have integrated their transmission facilities, creating an integrated transmission system, with costs for the integrated system shared on a load ratio share basis. Annually, each party’s investment and load ratio share responsibility are calculated, with the deficient party making a net payment to the other party to equalize system cost on a load ratio share basis. In recent years, Holy Cross has been the deficient party, resulting in payments to Public Service, which are credited against wheeling costs.
- *Mountain Parks Henderson Mine:* Under an agreement dated January 25, 1971, Public Service pays a wheeling charge to Mountain Parks Electric,

Inc. ("Mountain Parks") to wheel power across a 115-kV transmission line built to deliver power from Public Service's 115-kV transmission system to a large industrial load served by Public Service but located within Mountain Parks' certificated service territory. The monthly charge is based on kWhs delivered or a percentage of the book costs of Mountain Parks' 115-kV line, whichever is greater, and continues as long as Public Service continues to serve this industrial load.

- *Morgan County – Bijou:* Public Service has retail load interconnected to the 12.5 kV distribution system of Morgan County Electric Association. Under a Wheeling Agreement dated February 17, 1986, Morgan County receives a wheeling payment based on kWhs delivered.
- *Other:* Represents other wheeling service arrangements required to serve Public Service's retail load. Amounts in 2018 primarily comprised PTP transmission service procured from the Southwest Power Pool during elevated conditions on the Public Service system.