Southern Star 2019 Planned Service Outage					Outage	9	Historical Average ID3 Sch	eduled Volume
Work Activity						Operational Capacity Information		
Status	Projected Start Date	Projected Return to Normal Date	Location(s)	Type of Work	Мар	Capacity After Reduction	% Reduction from Normal Operational Capacity	Constraint Area(s)
	July 30, 2019	July 31, 2019	Lincoln, OK	Pipeline Maintenance	<u>Map</u>	0 Dth/d DCP Carney (Location 180) 0 Dth/d Superior Perkins (Location 16862)	100% Reduction - (Location 180) 100% Reduction - (Location 16862)	Edmond-Drumright
UPDATE	July 22, 2019	July 31, 2019	Welda C/S	Welda Station Modifications	<u>Map</u>	305,000 Dth/d Hesston CS (Location 445536) 440,000 Dth/d Blackwell CS (Location 445511) 20,000 Dth/d TIGT Glavin (Location 16593) 10,000 Dth/d TIGT Sugar Creek (Location 16592) Interruptible Services Will be Impacted	57% Reduction - (Location 445536) 34% Reduction - (Location 445511)	Kansas Hugoton, Rawlins Hesston, Straight Blackwell, Canadian Blackwell, Blackwell Edmond, South Edmond, Oklahoma Other
	August 22, 2019	August 24, 2019	Cleveland Co, OK	Modernization HDD for Pipeline Exposure	<u>Map</u>	0 Dth/d Cement System Receipt (443403) 0 Dth/d Cement System Delivery (443400) This is a net zero constraint - Receipts and Deliveries Must Balance 0 Dth/d Oklahoma Cogeneration Plant (Location 41)	100% Reduction - (Location 41)	South of Edmond
	September 3, 2019	September 27, 2019	St. Francis and Otis C/S	St. Francis Unit Maintenance and Modernization St. Francis / Otis NEC Panel Replacement	<u>Map</u>	165,000 Dth/d Levant Station (Location 445577)	15% Reduction - (Location 445577)	Rawlins Hesston
	September 9, 2019	September 14, 2019	Saginaw C/S	Saginaw Unit Maintenance	<u>Map</u>	200,000 Dth/d Saginaw Station (Location 444550)	17% Reduction - (Location 444550)	Springfield, Jane
	September 9, 2019	September 14, 2019	Riner C/S	Modernization AMOT Temperature Control Valve Installation and Echo Springs OPP Installation	<u> Map</u>	85,000 Dth/d Riner Station (Location 445569) 0 Dth/d Echo Springs (Location 16294)	56% Reduction - (Location 445569) 100% Reduction Echo Springs - (Location 16294)	Rawlins Hesston
	September 16, 2019	September 21, 2019	Peculiar C/S	Peculiar Unit Maintenance	<u>Map</u>	200,000 Dth/d Sedalia @ Ottawa (Location 442350)	13% Reduction - (Location 442350)	Sedalia, Carrollton
	September 17, 2019	September 26, 2019	Edmond C/S	Edmond Unit Maintenance	Map	100,000 Dth/d Edmond Station (Location 445535)	23% Reduction - (Location 445535)	South of Edmond, Oklahoma Other
	October 1, 2019	November 1, 2019	Saginaw C/S	Saginaw Turbine Maintenance and Modernization Upgrades	<u>Map</u>	150,000 Dth/d Saginaw Station (Location 444550)	37% Reduction - (Location 444550)	Springfield, Jane
	September 24, 2019	November 1, 2019	Levant C/S and Yuma C/S	Levant Unit Maintenance, Modernization NEC Panel Replacement, Painting and Yuma Unit Maintenance, Modernization Install of Electronic Fuel Checks	<u>Map</u>	165,000 Dth/d Levant Station (Location 445577)	15% Reduction - (Location 445577)	Rawlins Hesston
	October 1, 2019	October 8, 2019	Blackwell C/S	Blackwell Unit Maintenance	<u>Map</u>	420,000 Dth/d Blackwell West (Location 449000) 100,000 Dth/d Edmond Blackwell (Location 443800) (If turbine is in service, posting will be removed due to no impact to customers)	15% Reduction - (Location 449000) 23% Reduction- (Location 443800)	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, Oklahoma Other

Work Activity						Operational Capacity Information		
Status	Projected Start Date	Projected Return to Normal Date	Location(s)	Type of Work	Мар	Capacity After Reduction	% Reduction from Normal Operational Capacity	Constraint Area(s)
	October 1, 2019	October 3, 2019	Ratliff C/S	Ratliff Unit Maintenance	Map	40,000 Dth/d NGPL Carter County (Location 17069)	53% Reduction - NGPL Carter County (Location 17069)	South of Edmond
	October 1, 2019	October 3, 2019	Montezuma C/S	Modernization - Replace PLC's at Montezuma	<u>Map</u>	250,000 Dth/d Kansas Hugoton (441300)	35% Reduction - (Location 441300)	Kansas Hugoton
	October 8, 2019	October 9, 2019	Edmond C/S	Edmond ESD Testing	Мар	20,000 Dth/d Edmond CS (Location 445535) 0 Dth/d West Edmond CS (Location 444001) 0 Dth/d Oklahoma Cogen (Location 41)	85% Reduction - (Location 445535) 100% Reduction - (Location 444001) 100% Reduction - (Location 41)	South of Edmond, Oklahoma Other
	October 15, 2019	October 22, 2019	Blackwell C/S	Blackwell Unit Maintenance	<u>Map</u>	420,000 Dth/d Blackwell West (Location 449000) 100,000 Dth/d Edmond Blackwell (Location 443800) (If turbine is in service, posting will be removed due to no impact to customers)	15% Reduction - (Location 449000) 23% Reduction- (Location 443800)	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, Oklahoma Other
	October 23, 2019	October 24, 2019	Blackwell C/S & Grabham C/S	Blackwell North Station ESD Testing & Grabham Station ESD Testing	<u>Map</u>	320,000 Dth/d Blackwell CS (Location 445511)	49% Reduction - (Location 445511 )	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, South Edmond, Oklahoma Other
	October 24, 2019	October 25, 2019	Blackwell C/S	Blackwell South Station ESD Testing	<u>Map</u>	320,000 Dth/d Blackwell West (Location 449000) 100,000 Dth/d Edmond Blackwell (Location 443800)	35% Reduction - (Location 449000) 23% Reduction- (Location 443800)	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, Oklahoma Other
	November 4, 2019	November 12, 2019	Blackwell C/S	Blackwell Unit Maintenance	<u>Map</u>	290,000 Dth/d Blackwell West (Location 449000) 420,000 Dth/d Blackwell Station (Location 445511) (If turbine is in service, posting will be removed due to no impact to customers)	40% Reduction - (Location 449000) 28% Reduction - (Location 445511)	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, South Edmond, Oklahoma Other
	December 3, 2019	December 10, 2019	Blackwell C/S	Blackwell Unit Maintenance	<u>Map</u>	290,000 Dth/d Blackwell West (Location 449000) 420,000 Dth/d Blackwell Station (Location 445511) (If turbine is in service, posting will be removed due to no impact to customers)	40% Reduction - (Location 449000) 28% Reduction - (Location 445511)	Straight Blackwell, Canadian Blackwell, Blackwell Edmond, South Edmond, Oklahoma Other

July August Page 1997 - Page 1						
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31					
July August						
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31					

<sup>\*</sup> Shaded areas indicate a reduction in capacity

<sup>\*</sup> Shaded areas indicate a reduction in capacity

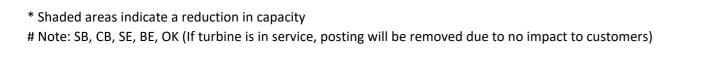
September October	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 2	22 23 24 25 26 27 28 29 30 31
September         October           1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29         30         1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29         30         1         2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19         20         21         22         23         24         25         26         27         28         29         30         1         2         3         4         5         6         7         8         9         10	22 22 24 25 26 27 29 20 20 20 21
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 3	22 23 24 25 26 27 28 29 30 31

<sup>\*</sup> Shaded areas indicate a reduction in capacity

<sup>#</sup> Note: SB, CB, BE, OK (If turbine is in service, posting will be removed due to no impact to customers)

November					
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 2	23 24 25 26 27 28 29 30 31				
###########					
# # # # # # # # #					
November December					
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 2	23 24 25 26 27 28 29 30 31				

<sup>\*</sup> Shaded areas indicate a reduction in capacity



\* Shaded areas indicate a reduction in capacity # Note: SB, CB, SE, BE, OK (If turbine is in service, posting will be removed due to no impact to customers)