P.S.C.U. Docket No. 18-057-03 OCS Data Request No. 2.16 Requested by Division of Public Utilities Date of DEU Response July 31, 2018

- OCS 2.16: With respect to Slide 11 of DEU's June 19, 2018 tech conference slide presentation, for the twenty days with the coldest mean temperatures, please describe:
 - a. the nature of the problem or issue that caused the gas supply shortfall,
 - b. the location of the incident that resulted in the gas supply shortfall,
 - c. the pipeline interconnection with DEU that may have been affected by the gas supply shortfall,
 - d. what portion of the DEU system (if any) experienced any outage(s) as a result of the shortfall,
 - e. a description of how the shortfall was resolved, and
 - f. the time it took to resolve the shortfall.

Answer:

Additional details on the data used to create slide 11 was provided as part of the response to DPU 4.01. This information is also attached as OCS 2.16 Attachment 1. None of these reductions have resulted in any system outages. Had similar reductions occurred during a Design Peak Day or a very cold day, there likely would have been outages. Most of these shortfalls were resolved using storage withdrawals and/or additional purchases. These options would likely already be maxed out on a Design Peak Day.

Prepared by: Will Schwarzenbach III, PE, Manager, Gas Supply

Α	В	С	D	Ε	F	G	Н	1	1	K
Date	CYCLE	CAPACITY CONSTRAINT- Confirming party's capacity constraint	CONFIRMING PARTY REDUCTION- Seconfirming party's quantity is reduced	GAS QUALITY SPECIFICATIONS B NOT MET-The gas quality is not consistent with posted tariff limits.	PATH BALANCING-Path balanced due to an upstream or downstream cut.	CONFIRMING PARTY REDUCTION AT DELIVERY LOCATION	CONFIRMING PARTY REDUCTION AT RECEIPT LOCATION	UNDERPERFORMANCE OF CONF PARTY AT REC LOC-Nominatinon as is reduced because Confirming party at Receipt Location is physically unable to flow the Scheduled quantity.	Total Cuts Per Cycle	Mean Temp
1/7/2011	1	CAI	21,383	uqs	PDL	FRU	2,150	OFK	23,533	16
1/7/2011	2		21,381						21,381	21
1/11/2011	1		29,935		10,177				40,112	17
1/11/2011 1/11/2011	3 4		18,868			1,667			20,535	17
1/12/2011	2		23,935 20,530						23,935 20,530	17 20
2/1/2011	1		20,297				25		20,322	13
2/2/2011	1		24,173						24,173	15
3/30/2011	3		27,928						27,928	46
3/30/2011 3/31/2011	4		27,844						27,844	46
3/31/2011	2		41,893 41,893						41,893 41,893	53 53
3/31/2011	3		41,893						41,893	53
5/19/2011	1				49,518				49,518	50
1/10/2012	1		33,711						33,711	28
3/31/2012 3/31/2012	1 2	21,989 21,989							21,989	68 68
3/31/2012	3	21,989							21,989 21,989	68
3/31/2012	4	21,989							21,989	68
4/6/2012	1		25,537						25,537	43
9/4/2012 1/19/2013	2 1				21,603				21,603	77
7/6/2013	4		20,921		30,221				30,221 20,921	12 81
10/1/2013	1		,		34,187				34,187	71
11/24/2013	4		20,103						20,103	37
12/5/2013 12/5/2013	3 4		74,759				3,864		78,623	15
12/9/2013	1		41,751 26,705						41,751 26,705	15 12
12/10/2013	1		15,419				5,245		20,664	15
12/10/2013	2		24,249						24,249	15
12/17/2013	3		44,968						44,968	21
12/17/2013 12/18/2013	4 3		52,822 27,776						52,822 27,776	21 22
12/18/2013	4		27,776				27		27,776	22
12/19/2013	1		23,645						23,645	32
12/19/2013	2		22,345						22,345	32
12/20/2013 12/20/2013	2		38,645 23,645						38,645 23,645	25 25
12/20/2013	3		23,645						23,645	25
12/20/2013	4		23,645						23,645	25
1/6/2014	3		47,145						47,145	23
1/6/2014 1/7/2014	3		47,145 47,145						47,145 47,145	23 26
1/7/2014	4		38,640						38,640	26
2/6/2014	4		23,617						23,617	26
2/25/2014	1		27.770		201,885				201,885	52
3/9/2014 8/29/2014	4		27,370 23,959						27,370 23,959	52 72
10/9/2014	1		20,555		120,099				120,099	65
10/15/2014	2				97,835				97,835	59
11/11/2014	1		30,000						30,000	43
11/13/2014 11/14/2014	2		3,362		63,555		25,000		28,362 63,555	30 28
12/25/2014	1		20,812		03,333				20,812	28 38
12/30/2014	1		10,300		129,493				139,793	23
6/18/2015	4		20,771						20,771	78
6/22/2015 6/28/2015	1		21 004	42,021					42,021	81
12/11/2015	4		21,894					25,840	21,894 25,840	87 47
2/4/2016	1				389,435			25,040	389,435	23
2/4/2016	4		20,541						20,541	23
2/28/2016	3		22,820						22,820	51
2/28/2016	4		22,820						22,820	51

5/2/2016	3		20,000		20,000	57
9/17/2016	1		39,998		39,998	61
10/18/2016	3		1	23,377	23,378	51
10/18/2016	4		1	23,377	23,378	51
10/18/2016	6		1	23,377	23,378	51
10/19/2016	1			29,530	29,530	49
11/16/2016	1		29,999		29,999	59
12/8/2016	6	38,329	8,569		46,898	25
12/19/2016	4	25,101			25,101	21
12/19/2016	6	25,101			25,101	21
1/6/2017	2	26,456			26,456	13
1/6/2017	3	49,079		63,157	112,236	13
1/6/2017	4	60,186		54,635	114,821	13
1/6/2017	6	101,277			101,277	13
5/7/2017	3		22,195		22,195	75
5/7/2017	4	36,206			36,206	75
5/7/2017	6	45,514			45,514	75
6/1/2017	4	21,183			21,183	79
6/2/2017	1	33,893			33,893	76
6/2/2017	2	33,893			33,893	76
6/2/2017	3	33,893			33,893	76
6/2/2017	4	33,893			33,893	76
10/24/2017	3	28,824			28,824	56
10/24/2017	4	28,824			28,824	56
10/24/2017	6	28,824			28,824	56
2/21/2018	3	26,336			26,336	22
2/21/2018	4	25,772	72		25,844	22
2/21/2018	6	29,438	72		29,510	22
2/22/2018	3	24,192			24,192	24