

P.S.C.U. Docket No. 19-057-13
Data Request No. 3.17
Requested by Division of Public Utilities
Date of DEU Response July 16, 2019

DPU 3.17: Please provide an annual Gas Supply Management Plan at 55% Cost-of-Service Production levels to show the estimated source of gas supply for the months when the proposed LNG facility would be filled during the first year of operation. The response should be in a similar format to QGC Exhibit 1.05 in Docket No. 13-057-13.

Answer: A proposed Gas Supply Management Plan to show the sources of gas supply for the months when the proposed LNG facility would be filled during the first year of operation is provided in DPU 3.17 Attachment 1.

This plan includes the forecasted demand and cost-of-service production starting in December of 2022 when the LNG facility is proposed to go into service. Once in service, the Company will put as much LNG into the facility in order to provide supply reliability for the 2022-2023 heating season. Though it is unlikely that the Company will be able to completely fill the facility prior to the first heating season, by mid-February when there is a much lower likelihood of a Design Day occurring, the Company will reduce or eliminate LNG liquefaction until summer in order to take advantage of low prices. The actual timing for when the facility will resume liquefaction will be determined by the SENDOUT model.

It is important to note the level of cost-of-service production is low enough to allow purchases in the summer, then purchased gas will likely be used to help fill the facility.

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Annual Demand 120,804,401

Month	Daily Firm Sales (Dth)	Daily Cost of Service Production (Dth)	Daily Demand and Storage (Dth)	Required Purchases or (Cuts) (Dth)	Daily Purchased Gas (Dth)	Daily Required Cuts (Dth)	Daily LNG Liquefaction (Injection) (Dth)	Daily LNG Vaporization (Withdrawal) (Dth)	Daily LNG (Dth)	Daily Clay Basin Injection (Dth)	Daily Clay Basin Withdrawal (Dth)	Daily Clay Basin storage (Dth)	Daily Aquifer Injection (Dth)	Daily Aquifer Withdrawal (Dth)	Daily Aquifer Storage (Dth)	Total Daily Storage (Dth)
December	640,019	156,558	537,646	381,088	381,088	0	(8,528)		(8,528)		110,901	110,901			0	102,373
January	692,460	157,758	590,088	432,330	432,330	0	(8,528)		(8,528)		110,901	110,901			0	102,373
February	648,799	154,285	533,163	378,878	378,878	0	(4,264)		(4,264)		110,901	110,901			9,000	115,637
March	463,833	151,281	334,933	183,652	183,652	0			0		110,901	110,901		18,000	18,000	128,901
April	317,775	148,617	317,775	169,158	169,158	0			0		0	0			0	0
May	189,586	146,220	255,776	109,556	109,556	0			0	(72,929)		(72,929)		6,740	6,740	(66,189)
June	117,326	144,017	198,783	54,766	54,766	0	(8,528)		(8,528)	(72,929)		(72,929)			0	(81,457)
July	90,306	141,990	171,763	29,774	29,774	0	(8,528)		(8,528)	(72,929)		(72,929)			0	(81,457)
August	82,852	140,071	159,670	19,599	19,599	0	(3,888)		(3,888)	(72,929)		(72,929)			0	(76,818)
September	99,142	141,517	178,812	37,295	37,295	0			0	(72,929)		(72,929)	(6,740)		(6,740)	(79,669)
October	223,125	145,789	305,054	159,265	159,265	0			0	(72,929)		(72,929)	(9,000)		(9,000)	(81,929)
November	425,437	148,342	443,361	295,019	295,019	0			0		0	0	(17,925)		(17,925)	(17,925)

Month	Monthly Firm Sales (Dth)	Monthly WexPro Production (Dth)	Monthly Demand and Storage (Dth)	Monthly Required Purchases	Monthly Required Cuts	Monthly LNG	Monthly Clay Basin	Monthly Spire	Monthly Aquifer	Monthly Storage
December	19,840,579	4,853,292	16,667,021	11,813,729	0	(264,368)	3,437,926	0	0	3,173,558
January	21,466,274	4,890,490	18,292,716	13,402,226	0	(264,368)	3,437,926	0	0	3,173,558
February	18,166,382	4,319,973	14,928,551	10,608,578	0	(119,392)	3,105,223	0	252,000	3,237,831
March	14,378,838	4,689,698	10,382,912	5,693,215	0	0	3,437,926	0	558,000	3,995,926
April	9,533,250	4,458,508	9,533,250	5,074,742	0	0	0	0	0	0
May	5,877,175	4,532,816	7,929,045	3,396,229	0	0	(2,260,810)	0	208,940	(2,051,870)
June	3,519,766	4,320,504	5,963,486	1,642,982	0	(255,840)	(2,187,880)	0	0	(2,443,720)
July	2,799,479	4,401,678	5,324,657	922,979	0	(264,368)	(2,260,810)	0	0	(2,525,178)
August	2,568,414	4,342,192	4,949,759	607,567	0	(120,536)	(2,260,810)	0	0	(2,381,345)
September	2,974,269	4,245,509	5,364,349	1,118,840	0	0	(2,187,880)	0	(202,200)	(2,390,080)
October	6,916,875	4,519,466	9,456,685	4,937,218	0	0	(2,260,810)	0	(279,000)	(2,539,810)
November	12,763,100	4,450,264	13,300,840	8,850,576	0	0	0	0	(537,740)	(537,740)
Yearly Total	120,804,401	54,024,391	122,093,273	68,068,882	0	(1,288,872)	0	0	(0)	(1,288,872)

	Lerov	Coalville	Chalk Creek
Winter	836,000	692,000	256,000
Pre Test	627,000	346,000	0
Summer	418,000	346,000	0

	mil gallons	mmcf(mmcf/d)	Dth(Dth/d)
LNG Storage	15	1,239	1,288,872
LNG 30%	5	372	386,662
LNG Liquefaction		8.2	8,528