## **OCS Exhibit-1.1S**

P.S.C.U. Docket No. 17-057-09 OCS Data Request No. 4.03 Requested by the Office of Consumer Services Date of DEU Response August 7, 2017

## OCS 4.03: Reference Exhibit 1.3, Excel file data tab:

- a. Please explain why the deliveries (1740) in excess of peak hour demands during hours 0-5 cannot be used to pack the DEU system and reduce the need for 310 of peak hour service during hour 8;
- b. Please explain why total peak hourly demands for the hours 0 23 exceed the total peak day deliveries for hours 0 23 by 303; and
- c. Please explain why the Company couldn't begin packing its system prior to hour 0 in anticipation of a peak day.
- Answer: a. The Company already uses system pack to feed peak-hour needs. The figure below shows the pressure at Hunter Park along with some of the key points in the same area of the high-pressure (HP) system. The pressures at Hunter Park reach the maximum allowable operating pressure (MAOP) in the early morning, which indicates the system is as packed as is physically possible. When the system is at the peak-hour, the pressures in West Jordan are near operational minimums.



Additionally, if the system were not utilizing any line pack to feed peak-hour needs, the amount of peak-hour service required would be closer to 450 MMcfd. The vast majority of Sales customers are heating load. Heating load typically has approximately 35% more volume flowing during the peak-hour. The 2017 Sales customer total is 1,337 MDth/day or about 1,283 MMcfd. The peak-hour flow required without pack would therefore equal 1,732 MMcfd or approximately 139 MMcfd more than the 310 MMcfd that the peak-hour services are expected to cover.

b. The hourly flow is calculated using a Synergi model of the system and is built up customer by customer for the entire system. The peak-day estimate is created using system sendout along with other factors such as temperature, wind gust speed, average sustained wind speed, weekday factor, etc. When these two models are combined, there are always marginal differences. The difference in terms percentage is less than 1% (0.72% to be exact).

c. Regardless of when the system begins to be packed, when the pressures reach MAOP, additional volumes can no longer be safely accepted into the system. In the figure provided above, the MAOP is reached at Hunter Park prior to the peak-hour indicating that the system is fully packed.

In real scenarios, the Company begins to pack the system as soon as feasible. In the peak-day/peak-hour analysis, all the critical gate stations are either feeding at MAOP, or at the maximum pressure available prior to the peak-hour.

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