BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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IN THE MATTER OF THE APPLICATION OF QUESTAR GAS COMPANY FOR APPROVAL OF THE CANYON CREEK ACQUISITION AS)	DPU EXHIBIT 1.0 DIR DOCKET NO. 15-057-10
A WEXPRO II PROPERTY)	

Pre-filed Direct Testimony

Of

Douglas D. Wheelwright

On Behalf of

Utah Division of Public Utilities

October 8, 2015

- 1 Q: Please state your name, title, and business address.
- 2 A: My name is Douglas D. Wheelwright. I am a Technical Consultant with the Division of
- Public Utilities (Division). My business address is 160 East 300 South, Salt Lake City, Utah
- 4 84114.
- 5 Q: On whose behalf are you testifying?
- 6 A: I am testifying on the Division's behalf.
- 7 **Q:** Please describe your position and duties with the Division.
- 8 A: As a Technical Consultant, I examine public utility financial data and review and analyze
- 9 filings for compliance with existing programs as well as applications for rate increases. I
- research, analyze, document, and establish regulatory positions on a variety of regulatory
- matters. I review and analyze operational reports and evaluate compliance with laws and
- regulations. I provide written and sworn testimony in hearings before the Public Service
- 13 Commission of Utah (Commission) and assist in case preparation and analysis of testimony.
- 14 Q: Did you participate in the analysis and recommendation for approval of the Wexpro II
- 15 Agreement in Docket No. 12-057-13 (Wexpro II Docket)?
- 16 A: Yes. I was the Division witness in the Wexpro II Docket and recommended approval of the
- Wexpro II Agreement. The Commission's order, issued March 28, 2013, approved the
- Wexpro II Agreement as filed. That docket created a mechanism or a framework allowing
- 19 Questar Gas Company (Questar Gas or Company), through subsequent filings, to present
- specific properties¹ to the Commission for consideration and possible inclusion as Cost-of-
- Service gas production under the Wexpro II Agreement. Under the terms of the Wexpro II
- Agreement, before any property may be presented for consideration, Wexpro must have
- completed its analysis and purchased the property.

Q. Was the application in this docket filed pursuant to the Wexpro II Agreement?

¹ I am not an attorney, and am not using the term "property," "properties," or "Canyon Creek" in the technical "real property" legal sense.

25 A. Yes. Questar Gas filed its application for approval to include the Canyon Creek Acquisition 26 in the Cost-of-Service gas purchased by Questar Gas pursuant to the Wexpro II Agreement. O: Is the information filed in this docket consistent with what the Company represented 27 would be submitted in future filings? 28 29 A: Yes. As part of the approval of the Wexpro II Agreement, the Company identified the items that would be included with future specific property applications.² Exhibits A through P of 30 31 the Application provide the details of the assumptions used in the analysis and the model 32 used to evaluate the Canyon Creek Acquisition. 33 Q. Can you provide a brief summary of the Canyon Creek Acquisition? 34 Yes. On December 19, 2014, Wexpro Company purchased an additional in the 35 Canyon Creek Acquisition area. Prior to this acquisition, Wexpro already owned in the Canyon Creek area under the Wexpro I Development Drilling area. 36 37 Wexpro is required to present this property to the Utah and Wyoming Commissions for possible inclusion under the 38 Wexpro II Agreement.³ The purchase included an increased ownership in 39 40 41 Q. Has the hydrocarbon monitor provided an analysis of the Canyon Creek Acquisition? 42 A: Yes. According to the terms of the Wexpro II Agreement, the Hydrocarbon Monitor is to 43 review the underlying assumptions including the proved producing reserves, production, geology, undeveloped reserves, developments costs and operating costs.⁴ Mr. David Evans, 44 45 the Hydrocarbon Monitor has completed an independent analysis of the assumptions used by the Company to evaluate the property. Consistent with the Wexpro II Agreement, Mr. Evans 46 47 does not provide a recommendation regarding the inclusion of the proposed property.⁵ It is 48 my understanding that Wexpro employees have worked closely with Mr. Evans and have

² Wexpro II Agreement, Section IV.

³ Wexpro II Agreement, Section IV-1(a).

⁴ Wexpro II Agreement, Section IV-4.

⁵ Wexpro II Agreement, IV-4, pages 14-15.

- provided access to information to aid in his evaluation process. On September 10, 2015, Mr.
- Evans filed a report with the Division outlining his findings for the Canyon Creek
- Acquisition.

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Q. What have you been able to determine from Mr. Evans' report and analysis?

A. In the Risk Analysis section of the report Mr. Evans stated the following;



- Based on the independent review of the acquisition, the information presented by the Company and the assumptions used in the analysis appear to be reasonable.
 - Q. What is the Division's recommendation regarding the inclusion of the Canyon Creek Acquisition under the Wexpro II Agreement?
- A. After independent review and analysis, described in detail below, the Division is satisfied that Wexpro has done a thorough analysis of the Canyon Creek property and recommends that the property be included under the Wexpro II agreement with the suggested modifications,
- Wexpro has experience with drilling wells in this field and is familiar with the geology, current production levels, and has an opportunity to develop additional long-term assets.
 - Q: Do you have any concerns about the information included in the Application?

A: I do have a concern that review of the information in isolation could potentially lead to the wrong conclusions. The majority of the analysis looks at the initial acquisition cost and future drilling potential for this specific property. While this type of analysis is critical to review the risks and possible benefits of the acquisition, this property represents only a portion of the total cost-of-service gas production from Wexpro. If approved, the production from this property will be included with production from other existing and future wells to calculate the total cost-of-service gas production for Ouestar Gas. Therefore, in addition to looking at the individual aspects of this particular property, the risks and possible benefits should be examined for the potential impact on the total production and the weighted average cost of gas. In order to review the impact of this acquisition, a cost comparison of the combined weighted average cost of gas has been included later in my testimony. Furthermore, this property was acquired by Wexpro last December at the Company's own risk but was not presented to the Commission for inclusion in the Wexpro II agreement until August 31, 2015. From the acquisition date in December until a decision is made by both the Utah and Wyoming Commissions, the gas flowing from these wells, is being sold on the market and the revenue has been retained by Wexpro. The purchase price is being adjusted down for depreciation and the depletion of the gas from the date of the purchase.

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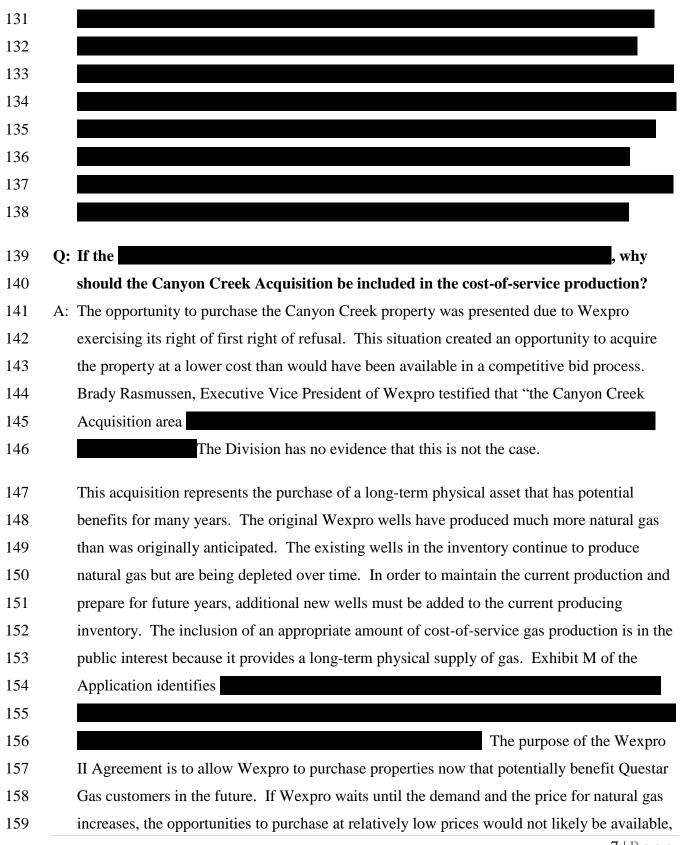
Q: Do you know how much of the Questar Gas total gas supply will be provided from the proposed Canyon Creek Acquisition?

A: Exhibit M and M-1 of the Application include projections of the IRP gas supply requirement for 2015 through 2020 and identify the volume of gas purchases and production from the

106 various fields. The Company has provided a revised Exhibit M-1 to include the Pinedale 107 volume, which was inadvertently left out of the original analysis.⁶ 108 Exhibit M indicates that the highest production from 109 the Canyon Creek property will be of the total requirement in 2016 followed by a 110 normal production decline in future years. 111 Exhibit M-1 UPDATED indicates that the highest production from the Canyon Creek property will be of the total requirement in 112 113 2017 after 114 115 Since the natural gas from this field represents only a fraction of the total cost-of-116 service production, it is important to look at how this acquisition could impact the total cost-117 of-service price that will be paid by Questar Gas. 118 O: How does the projected price of the cost-of-service gas from the Canyon Creek 119 Acquisition compare with the forecasted market price for natural gas? 120 A: The cost of gas produced from the Canyon Creek Acquisition has been identified in Exhibit 121 L and L-1 of the Application. Each of these Exhibits include 16 pages of information with 122 four separate cost projections. In order to avoid confusion, I will be referring to the prices 123 identified in Exhibit L-1, Annual Cost-of-Service Projections with (Incremental G&A), pages 124 14 – 16. This is the same forecast used in the hydrocarbon monitor report produced by David 125 Evans and the same report used by the Company in the total cost-of-service calculation for all Wexpro production for years 2015 through 2020.⁷ 126 Gas from the existing producing wells purchased in Canyon Creek will have a cost of 127 128 beginning in 2015. New wells that are projected to be drilled and completed in 129 . The projected combined price for both the existing wells and the projected wells is 130

⁶ Response to DPU Data Request 1.8.

⁷ Technical Conference, September 17, 2015, page 27.



or may be available only at a much higher price. The consistent addition of property is likely to prove more beneficial over time than adding property only at selected times.

Q: Have you been able to determine how the approval of the Application will affect the total price of the cost-of-service gas from Wexpro?

A: In response to DPU Data Request 1.01 and 1.03, the Company provided an estimate of the impact to the cost-of-service gas for 2015 through 2020. Wexpro does not provide a forecast beyond five years since a drilling schedule has not been determined more than five years in advance.

A comparison of the projected cost-of-service for all properties was included in the September 17, 2015 technical conference and is provided in Table 1 below. Column A represents the forecast cost-of-service price for all existing properties without the Canyon Creek acquisition. Column B represents the cost-of-service for Canyon Creek and includes the price of the existing wells and future wells that are projected to be drilled. Column C represents the projected cost-of-service price for the combined production from all existing and the proposed new wells included in Wexpro I and Wexpro II. Column D is the forecast market price for natural gas provided in Exhibit A-1.

177 **Table 1** Forecasted Cost-of-Service

		1 Ofecusion Cost of	2 D 01 1 1 0 0	
	A	В	C	D
			Wexpro I & II	
	Wexpro I & II		with Future	
	w/o Canyon	Canyon Creek	Drilling In All	Forecast
Year	Creek	Acquisition ¹⁰	Fields	Market Price

⁸ Technical Conference, September 17, 2015, page 27.

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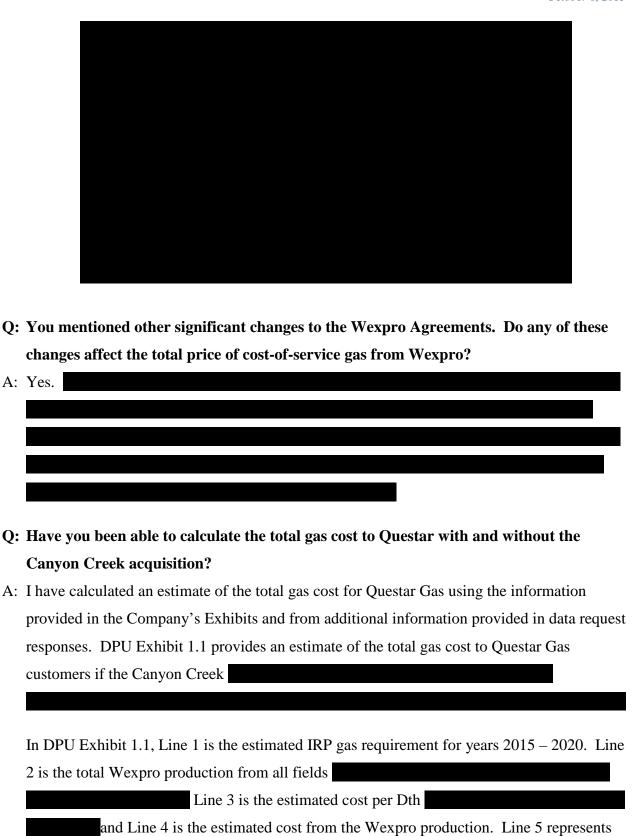
⁹ DPU Data Request 1.07

¹⁰ Application Exhibit L-1, page 14.



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179 A comparison of the projected cost-of-service for Canyon Creek (Column B) with the 180 forecast market price (Column D) shows that A comparison of the 181 projected total cost-of-service price for all Wexpro properties (Column C) and the forecast 182 183 market price (Column D) shows that 184 185 186 187 188 189 Chart 1 below provides the same information as Table 1 but provides a visual comparison of 190 the cost-of-service price and the market price for the years under review. The projected all-in 191 price of gas from Canyon Creek 192 The top two lines of this chart 193 compare the total cost-of-service price with and without future drilling. The bottom two 194 lines compare the cost of gas from the Canyon Creek property compared to the market price. 195 The chart shows that the cost-of-service gas from the Canyon Creek property is projected to 196 be the same as or in some years more expensive than the forecast market price. 197 198 Chart 1



219	the volume of market purchase gas that will be necessary in each year to meet the total
220	projected Questar requirement. Line 6 is the estimated cost per Dth for market purchases. 11
221	Line 7 calculates the total cost for purchased gas and line 8 calculates the total gas cost for
222	Questar in each year. Line 9 is the average cost per Dth for the combined total gas
223	The result of this calculation
224	is an estimated total gas cost of in 2020
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226	Lines $10 - 17$ follow the same calculations using the assumptions in M-1 that the Canyon
227	Creek acquisition One
228	additional change to the market price calculation has been included on line 14.
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234	Lines 18 and 19 provide a comparison of the total cost of gas for Questar customers under
235	both pricing options. The cost comparison indicates that
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239	Q: How does Wexpro determine if future wells will be economic before drilling?
240	A: The Decision to drill today and with the proposed change is based on the average price of the
241	5-year forward price curve. 12 As with any price forecast, the further in time the price is
	11 Exhibit A
	Docket No. 13-057-13, Settlement Stipulation, page 4, paragraph 11. "The Parties acknowledge that Wexpro generally designs its annual drilling program to provide cost-of-service production that is, on average, at or

below the current 5-year Rockies-adjusted NYMEX price."

projected the less certainty there is surrounding the accuracy of the forecast. Chart 2 below shows the NYMEX forward price curve as of September 31, 2015 and the calculated average price of \$3.03 for the 5-year period. The monthly price forecast includes anticipated higher prices during the winter heating season in each year. The higher prices included in years 3 through 5 increase the average price. The 5-year average price of \$3.03 calculates to be significantly higher than the forecast market price in years 1 and 2.

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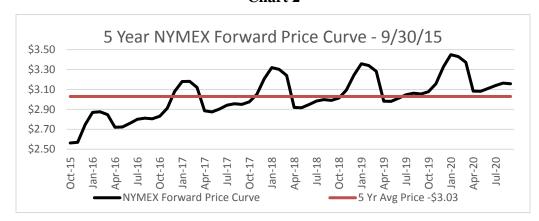
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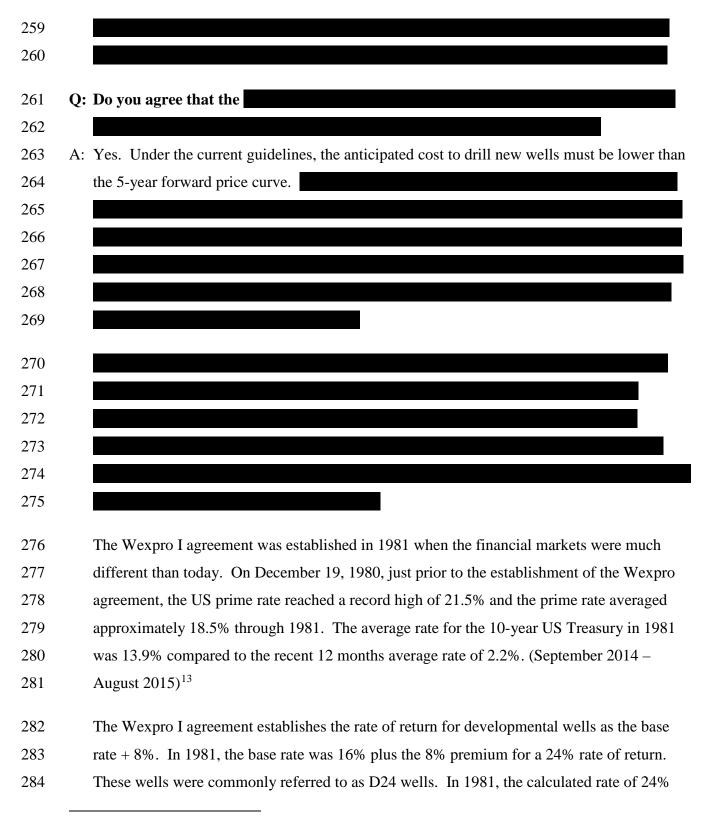
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Chart 2

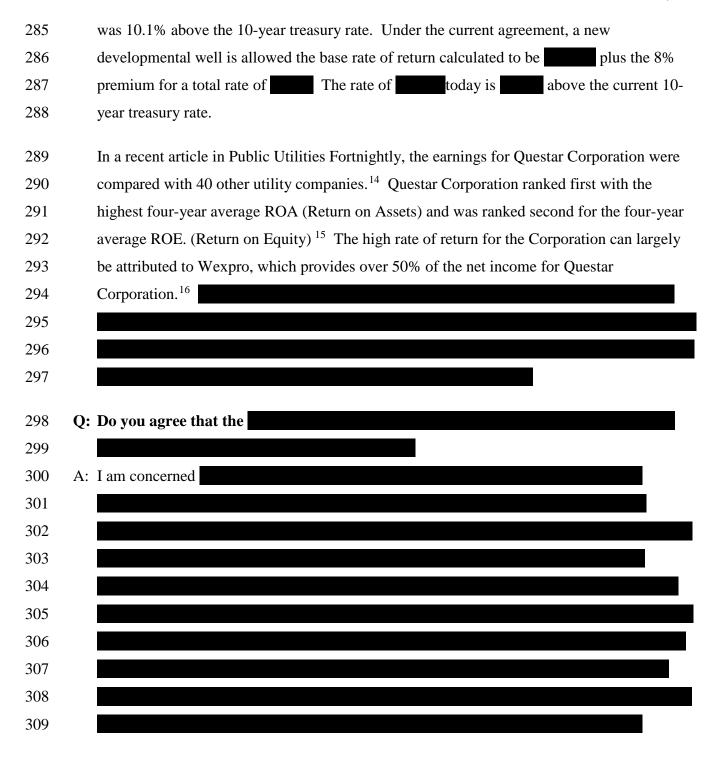


In this example, Wexpro would drill if the estimated cost-of-service price of a new well is less than or equal to \$3.03 even though the forecast monthly market price is projected to be below the average price for some time. The decision about whether the well is commercial will be made after drilling is complete and actual cost and production data is available.

254 Q: Can you summarize the proposed change ?
255 A:
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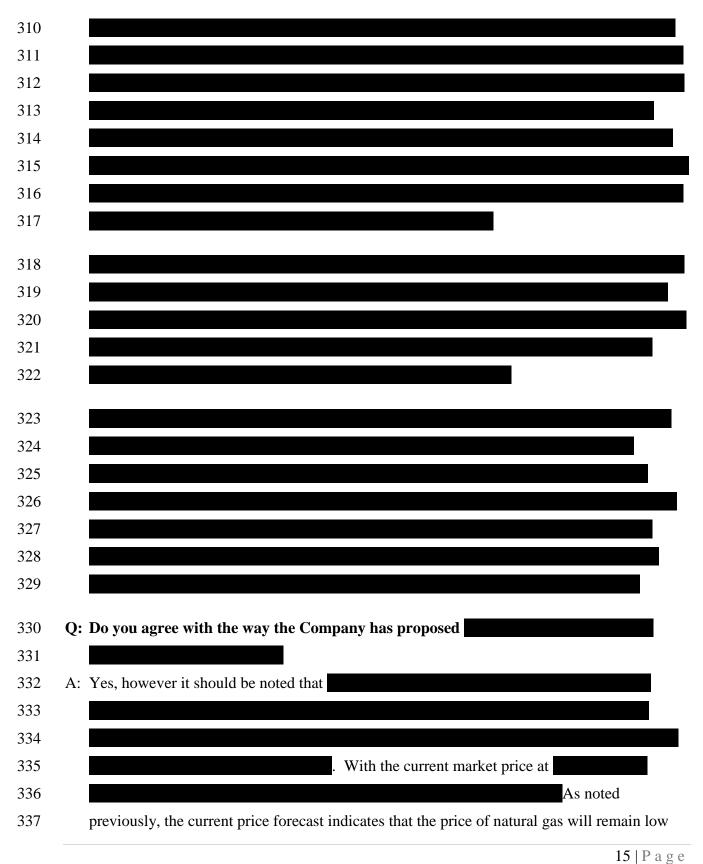
¹³ Board of Governors of the Federal Reserve System, 10 Year Treasury Constant Maturity Rate, Monthly Percent.

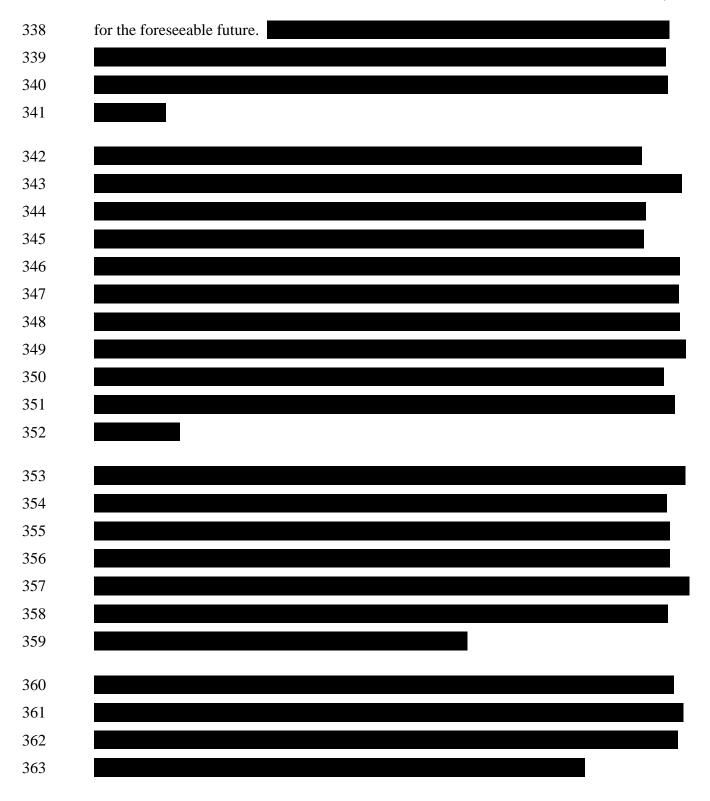


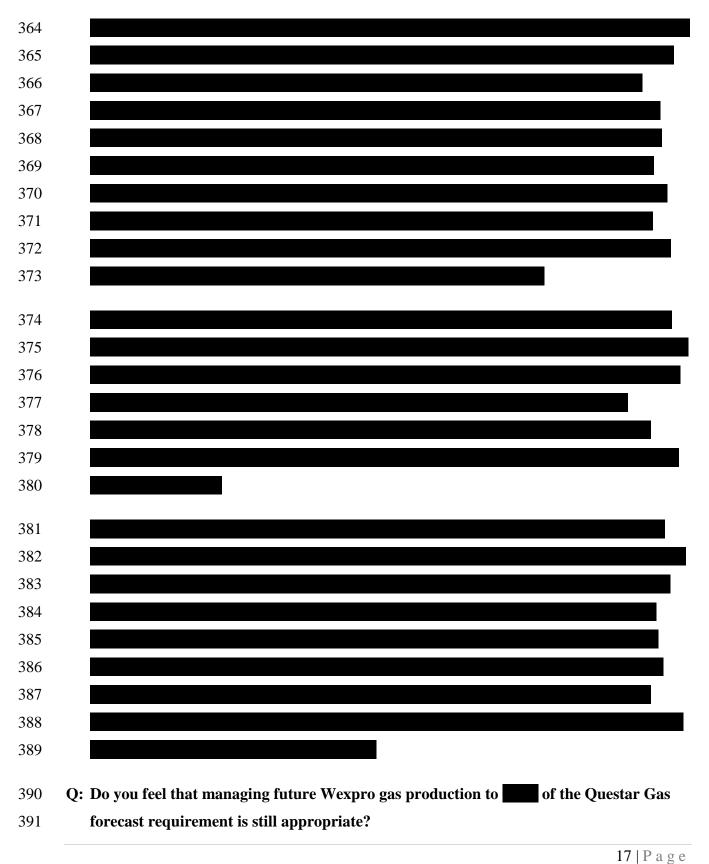
¹⁴ Questar Gas is a wholly owned subsidiary of Questar Corporation.

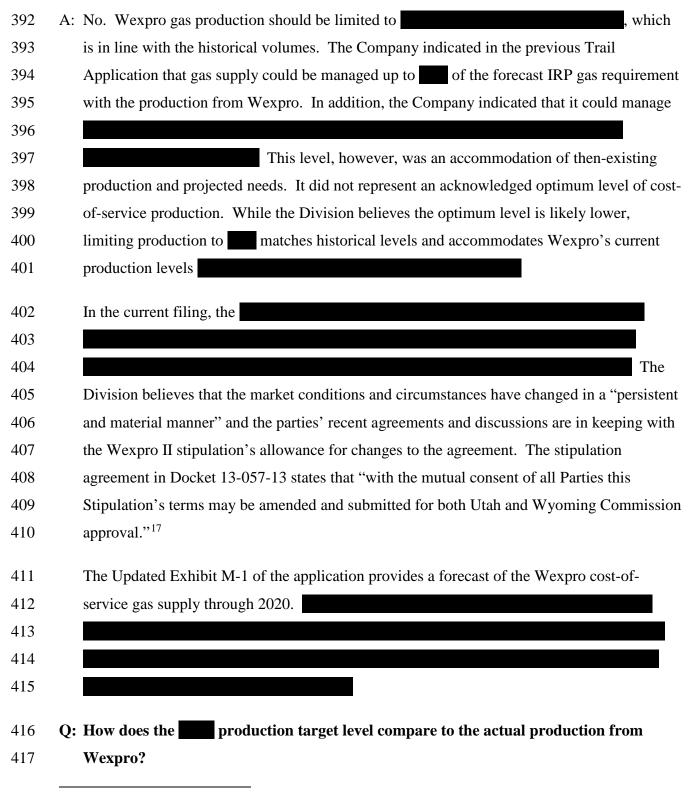
¹⁵ Public Utilities Fortnightly, September 2015, page 22.

¹⁶ Questar Corporation 2014 Form 10-K Annual Report, Operations by Line of Business, page 97.









 $^{^{\}rm 17}$ Docket No. 13-057-13, Settlement Stipulation, page 8, paragraph 17.

418 A: The production target is based on a forward-looking IRP forecast requirement and not 419 on the actual sales volumes for the subject year. The actual percentage of gas provided by 420 Wexpro will vary from the IRP forecast due to actual weather conditions and temperatures 421 that occur during the heating season. 422 The actual percentage of Wexpro production based on historical production and sales volume 423 has been summarized in Table 2 below. The actual sales volumes were taken from the 424 Company's results of operation report and the Wexpro production volumes were provided in 425 response to DPU Data request 1.24. 426 Table 2 427 428 429 430 431 432 Q. In addition to the 433 A. The projected costs provided in this Application include the 434 435 436 . In response to DPU Data request 1.07, the 437 Company presented the following 438 439 Table 3 440 441 442

