

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for the Approval of the Conservation Enabling Tariff Adjustment Option and Accounting Orders	Docket No. 05-057-T01
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SUPPLEMENTAL SURREBUTTAL TESTIMONY OF BARRIE L. MCKAY
TO SUPPORT THE CONTINUATION OF THE CONSERVATION ENABLING TARIFF
FOR QUESTAR GAS COMPANY

September 26, 2007

1 **Q. Please state your name and business address.**

2 A. My name is Barrie L. McKay. My business address is 180 East First South Street, Salt Lake
3 City, Utah.

4
5 **Q. Are you the same Barrie L. McKay who filed two rounds of Direct, Rebuttal, and**
6 **Surrebuttal Testimony in this docket?**

7 A. Yes I am.

8
9 **Q. What is the purpose of your testimony today?**

10 A. The purpose of my testimony is to address an issue raised by Questar Gas Company (Questar
11 Gas or Company) and the Division of Public Utilities (Division) during the hearings in this
12 docket held on September 18 and 19, 2007 regarding price elasticity studies filed by Dr.
13 David Dismukes, the witness for the Committee of Consumer Services (Committee), in his
14 surrebuttal testimony filed on August 31, 2007.

15
16 As the Commission is aware, Questar Gas and the Division sought to exclude this testimony
17 on the ground that it was improper surrebuttal because it responded to direct testimony of Dr.
18 Daniel Hansen, one of the witnesses for the Division, filed on June 1, 2007, rather than to
19 any rebuttal testimony of any of the parties filed on August 8, 2007. The Company and the
20 Division argued that they should not have to respond to this new evidence that they believed
21 was improperly introduced in surrebuttal testimony. The Commission overruled these
22 objections, but stated that Questar Gas and the Division could attempt to respond to the late-
23 filed studies in live surrebuttal or to file supplemental testimony after the hearing if they were
24 unable to fully respond during the hearing.

25
26 Because discovery responses from the Committee (which Questar Gas acknowledges were
27 expedited by the Committee) which were not received until the Friday afternoon preceding
28 the hearing, Questar Gas was unable to determine the source of the data used in Dr.
29 Dismukes' analysis. Therefore, the Company was limited to attempting to determine the

30 source of the data and trying to understand what appeared to be an obvious error in the data
31 on price information through cross examination of Dr. Dismukes. Now that the Committee
32 has specifically identified the source of the data and what Dr. Dismukes did with it, Questar
33 Gas is able to respond and explain to the Commission why the data was used improperly.

34

35 **Q. Did Questar Gas receive information regarding the source of the information used by**
36 **Dr. Dismukes following the hearing?**

37 A. Yes. On September 20, 2007 the Committee provided a “Response to Post-hearing Data
38 Request” (Response). The Response is attached as QGC Exhibit SSR 5.1.

39

40 **Q. Please describe the price data that was used by Dr. Dismukes in developing his GS-1**
41 **use per customer model.**

42 A. As explained by the Committee in its Response, the information was taken from the
43 Company’s responses to CCS Data Requests 7.01 and 7.04 in this docket. The response to
44 CCS Data Request 7.01 contains the backup data and regressions “used to statistically
45 estimate residential usage and total number of customers” in the Company’s Integrated
46 Resource Planning (IRP) forecast. The response to CCS Data Request 7.04, without its
47 voluminous attachments, is attached to this testimony as QGC Exhibit SSR 5.2. The
48 response to CCS Data Request 7.04 contained the backup data and regressions “used to
49 statistically estimate commercial usage and total number of customers” in the Company’s
50 IRP forecast. The methods used to forecast the residential and commercial usage and
51 customers in the IRP were different. For the residential sector, an end-use model that
52 estimates appliance installations, building code changes, and new customer growth, was the
53 primary driver of the final model in which a monthly price term was not used. For the
54 commercial sector, a multiple regression model was developed to forecast the commercial
55 usage per customer that included a monthly price term. The Committee explained in the
56 Response that Dr. Dismukes used the term that was labeled as “Retail Total \$/Dth Lag 12
57 months” from the Company’s response to CCS Data Request 7.04 as the price input for his
58 model.

59

60 As can be observed from QGC Exhibit Cross 3, this price term does not reflect that actual
61 monthly price for natural gas. That price would remain stable over several months except
62 when changed periodically pursuant to passthrough proceedings. Rather, the price included
63 in the Company's IRP forecast for commercial usage is a 12-month moving total price per
64 Dth for the GS-1 typical customer for the time period from December 1992 through
65 December 2005. The IRP model uses 12-month moving totals to match up with the 12-
66 month moving total commercial usage per customer in the regression analysis. It is not used
67 to attempt to determine the price elasticity of usage for commercial or residential customers.

68

69 **Q. Did the Committee adjust this price term to use in their model?**

70 A. Yes. The Committee explained in the Response, "While the title in the spreadsheet
71 references dollars per decatherm, the prices appear to be denominated in dollars per therm.
72 Thus, the decimal point on prices in this file were assumed to be in the wrong location and
73 was changed for modeling purposes."

74

75 **Q. Was this a correct adjustment?**

76 A. No. This data is a 12-month moving total price per Dth. Converting it to a price per therm is
77 incorrect.

78

79 **Q. What is the result of this error?**

80 A. Dr. Dismukes did not use actual price data in his model and he made an incorrect adjustment
81 to the price data he used. I understand that Dr. Hansen will explain the impact of correction
82 of these errors on the price elasticity study run by Dr. Dismukes.

83

84 **Q. Could this problem have been addressed previously in this case?**

85 A. Yes. As can be seen from QGC Exhibit SSR 5.2, the response to CCS Data Request 7.04
86 was provided to the Committee on February 23, 2007. This data was available and could
87 have been used by Dr. Dismukes in his rebuttal testimony to Dr. Hansen's model that was
88 filed on June 1, 2007. Whether Dr. Dismukes would have chosen to run his model using
89 correct price data inputs or simply have withdrawn the model is unknown. What we do

90 know now is that his model results are unreliable because they did not use correct data
91 inputs.

92

93 **Q. Does this conclude your testimony?**

94 **A. Yes.**

State of Utah)
) ss.
County of Salt Lake)

I, Barrie L. McKay, being first duly sworn on oath, state that the answers in the foregoing written testimony are true and correct to the best of my knowledge, information and belief. Except as stated in the testimony, the exhibits attached to the testimony were prepared by me or under my direction and supervision, and they are true and correct to the best of my knowledge, information and belief. Any exhibits not prepared by me or under my direction and supervision are true and correct copies of the documents they purport to be.

Barrie L. McKay

SUBSCRIBED AND SWORN TO this 26th day of September 2007.

Notary Public