

GALLAGHER & KENNEDY

P.A.

ATTORNEYS AT LAW



0000110347

RECEIVED

MICHAEL M. GRANT
DIRECT DIAL: (602) 530-8291
E-MAIL: MMG@GKNET.COM

2010 APR 22 P 4: 38

2575 EAST CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
PHONE: (602) 530-8000
FAX: (602) 530-8500
WWW.GKNET.COM

ORIGINAL

AZ CORP COMMISSION
DOCKET CONTROL
April 22, 2010

Arizona Corporation Commission
DOCKETED

APR 22 2010

HAND DELIVERED

Docket Control
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, AZ 85007

DOCKETED BY *MMG*

Re: *Workshop on NOI Regarding Utility Disincentives and Potential Decoupling for Arizona Utilities; Docket Nos. G-00000C-08-0314 and E-00000J-08-0314*

Dear Sir or Madam:

As discussed at last week's workshop on Utility Disincentives and Potential Decoupling and as requested by Commissioner Newman, enclosed are the original and 15 copies of the following:

1. Pages 5-6 of the Direct Testimony of Dr. Daniel Hansen on behalf of the Arizona Investment Council ("AIC") filed in the 2008 Southwest Gas rate case.
2. Pages 8-10 of the Rejoinder Testimony of Dr. Hansen on behalf of AIC filed in the same docket.

In this testimony, Dr. Hansen discusses how a revenue decoupling mechanism has no negative effect on the individual customer's incentive to conserve and, in fact, may actually increase the customer's conservation incentive.

Very truly yours,

GALLAGHER & KENNEDY, P.A.

By:

Michael M. Grant

MMG/plp
18762-1/2434130
Enclosures

Original and 15 copies filed with Docket Control this 22nd day of April, 2010.

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

IN THE MATTER OF THE APPLICATION OF
SOUTHWEST GAS CORPORATION FOR THE
ESTABLISHMENT OF JUST AND REASONABLE
RATES AND CHARGES DESIGNED TO REALIZE
A REASONABLE RATE OF RETURN ON THE
FAIR VALUE OF ITS PROPERTIES
THROUGHOUT ARIZONA.

DOCKET NO. G-01551A-07-0504

Direct Testimony of

Daniel G. Hansen, Ph.D.

on Behalf of

Arizona Investment Council

April 11, 2008

1 **Q. HOW DOES DECOUPLING AFFECT THE RATEPAYERS' INCENTIVE TO**
2 **ENGAGE IN CONSERVATION OR ENERGY EFFICIENCY?**

3 A. Decoupling has essentially no effect on an individual ratepayer's incentive to conserve
4 energy and may actually increase the customer-level incentive to conserve. To see this,
5 consider what happens to a residential customer's bill when they conserve energy with
6 and without decoupling. Suppose a G-5 customer would typically consume 35 therms in
7 January, but is assessing the benefits (under current rates) of reducing usage to 30 therms.
8 Whether decoupling is present or not, the reduction in usage would reduce the customer's
9 January non-gas bill by \$2.71 (= \$0.542 per therm x 5-therm reduction). With a
10 decoupling mechanism in place, the \$2.71 bill reduction goes into the RDAP BA to be
11 recovered in the following year. However, this \$2.71 will be paid by *all* G-5 customers
12 in the following year, so that the bills for the conserving customer will be essentially
13 unchanged by the presence of decoupling.

14
15 **Q. DOES THE EXAMPLE ABOVE STILL WORK IF MORE THAN ONE**
16 **RATEPAYER AT A TIME CONSERVES ENERGY?**

17 A. Yes. The only thing that a ratepayer can control is whether he or she engages in
18 conservation or energy efficiency activities. Because the "true-up" of non-gas revenue
19 through the decoupling mechanism is almost entirely paid by other ratepayers, the
20 individual-level incentive to conserve is not affected. If many or most of the ratepayers
21 also decide to conserve energy, decoupling could lead to an increase in rates in the
22 following year. However, that higher rate only *increases* the customer-level incentive to
23 engage in long-term conservation and energy efficiency activities.

1 Q. IT SEEMS COUNTER-INTUITIVE THAT DECOUPLING COULD INCREASE
2 THE CUSTOMER-LEVEL INCENTIVE TO CONSERVE. COULD YOU
3 PLEASE EXPLAIN THIS IN MORE DETAIL?

4 A. Yes. Consider an example in which a conservation program causes 20% of the customers
5 to reduce usage by 20% each, which would lead to a 4% decrease in total usage ($= 0.2 \times$
6 0.2). Assume that this leads to a reduction in non-gas revenue of 4% (it will actually be
7 less than that because some non-gas revenue comes from the fixed monthly charge). All
8 of the customers, including the 20% who conserve and the 80% who do not, will pay the
9 standard tariff rates in the current year. In the following year, the non-gas rate increases
10 by approximately 4% for all customers. This rate increase actually *increases* an
11 individual customer's incentive to conserve in the following year.

12 While it may seem counter-intuitive that decoupling increases the customer-level
13 incentive to conserve, consider the decision-making process for one customer. Suppose
14 that this customer knows that (1) the conservation program is in place, (2) it will likely
15 lead others to reduce their usage levels and (3) therefore the program will cause an
16 increase in the non-gas rate in the following year. The customer in this example will pay
17 the higher rate in the following year regardless of whether he or she chooses to conserve.
18 Therefore, the customer will evaluate the benefits of conserving energy by considering
19 the full non-gas rate in the current year and a higher non-gas rate in the following year
20 (due to the effects of the conservation program combined with the decoupling
21 mechanism). This *increases* the incentive (relative to current rates in the absence of
22 decoupling) to engage in long-term conservation activities, such as investing in a more
23 efficient furnace.

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

IN THE MATTER OF THE APPLICATION OF
SOUTHWEST GAS CORPORATION FOR THE
ESTABLISHMENT OF JUST AND REASONABLE
RATES AND CHARGES DESIGNED TO REALIZE
A REASONABLE RATE OF RETURN ON THE
FAIR VALUE OF ITS PROPERTIES
THROUGHOUT ARIZONA.

DOCKET NO. G-01551A-07-0504

Rejoinder Testimony of

Daniel G. Hansen, Ph.D.

on Behalf of

Arizona Investment Council

June 9, 2008

1 Q. THAT WAS A VERY SIMPLE EXAMPLE. DOES IT ACTUALLY
2 DEMONSTRATE HOW WNAP WOULD WORK?

3 A. Yes, the example contains all of the basic features of volumetric non-gas rates and
4 WNAP: weather conditions that make one party better off make the other party worse off
5 and a mechanism that makes customer-specific adjustments to the non-gas portion of the
6 bill. The details of WNAP are more complicated because of the need to accommodate a
7 broader range of weather conditions and customers.

8 WNAP reduces weather risk for both the Company and its ratepayers. The
9 Company will experience reduced variability of non-gas revenues and customers will
10 experience reduced variability in the non-gas portion of their bills. Another customer
11 advantage is the WNAP adjustments affect the *current* bill, so that relief from the effects
12 of a cold winter month are provided immediately. Also, the WNAP adjustments are
13 based on customer-specific data, so that the size of the adjustment is appropriate given
14 each customer's weather sensitivity.

15
16 Q. MS. DIAZ CORTEZ CLAIMS THAT UNDER RDAP "THE PRICE MESSAGE
17 AS IT RELATES TO INCENTING CONSERVATION IS DILUTED SO THAT
18 THE CUSTOMER WILL NOT SEE AS COMPELLING OF A CONSERVATION
19 PRICE MESSAGE UNDER THE PROPOSED RDAP AS THEY OTHERWISE
20 WOULD ABSENT THE RDAP."⁴ DO YOU AGREE?

21 A. No. Ms. Diaz Cortez appears to be confusing the effect of RDAP on *all* customers with
22 the effect of RDAP on the incentives for *any one* customer. That is, when customers

23
24 ⁴ Diaz Cortez Surrebuttal, p. 6.

1 conserve under RDAP, the applicable customer group as a whole will “repay” the
2 Company for the associated reduction in non-gas revenue. Therefore, it may appear that
3 RDAP reduces the customers’ incentive to engage in conservation by the amount of the
4 non-gas rate.

5 However, that’s not the case. Any *one* customer who conserves energy promptly
6 receives the full reduction and corresponding conservation signal in non-gas revenue on
7 his or her current bill. It’s only in the next year that customer “repays” an imperceptibly
8 small portion of it through the RDAP deferral. This means that the customer-level
9 incentive to conserve is essentially unchanged by the presence of RDAP.

10
11 **Q. HAVE OTHER GROUPS RECOGNIZED THAT DECOUPLING DOES NOT**
12 **SIGNIFICANTLY ALTER THE CUSTOMER-LEVEL INCENTIVE TO**
13 **CONSERVE?**

14 A. Yes. The Natural Resources Defense Council (“NRDC”) supports using decoupling to
15 sever the link between sales and revenues, but does not support the use of high fixed
16 charges. In their article, “Breaking the Consumption Habit”, which appeared in The
17 Electricity Journal in December 2001, the NRDC concludes that high fixed charges
18 should not be used as a substitute for decoupling because “We should not make a bad
19 situation worse by reducing customers’ rewards for using less electricity, which is
20 precisely what would happen if we raised their fixed charges and cut their usage-based
21 distribution charges by a corresponding amount.” While this article was written from the
22 electricity perspective, the same argument applies to the natural gas industry. That’s
23 evidenced by the NRDC’s support for natural gas decoupling mechanisms in their joint
24

1 statement with the AGA. (This joint statement has been included as Exhibit A to
2 Mr. Miller's direct testimony.)
3

4 **Q. CAN RDAP INCREASE THE CUSTOMER-LEVEL INCENTIVE TO**
5 **CONSERVE?**

6 A. Yes. For example, suppose that a customer anticipates that other customers will
7 conserve—perhaps because of the introduction of a new DSM program. Based on this,
8 the customer expects a rate increase in the following year through the RDAP deferral.
9 The expectation of the higher rate will increase the benefits the customer perceives in
10 engaging in conservation and energy efficiency. That example is described in greater
11 detail on page 6 of my direct testimony.
12

13 **Q. IS IT FAIR FOR RDAP TO REQUIRE THE CUSTOMER GROUP AS A WHOLE**
14 **TO PAY FOR THE REDUCTIONS IN NON-GAS REVENUES FROM**
15 **CONSERVING CUSTOMERS?**

16 A. I believe that it is. For example, it is no different from the use of regulatory surcharges
17 collected from all customers to fund DSM programs. Like RDAP deferrals, these rates
18 are paid by all ratepayers, but the direct benefits of the DSM programs are limited to
19 participating customers. However, there are indirect benefits—potentially associated
20 with environmental improvements or reductions in commodity costs—that are shared
21 with all customers.
22
23
24