### TURN DATA REQUEST TURN-SCG-DR-11

### SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

1. Following up on TURN DR 10-1, please provide a complete print-out of your data base (including all dummy variables <u>and</u> all lagged and transformed variables) and statistical equations used to forecast residential, commercial, and industrial gas meters.

### **SoCalGas Response:**

Please see the attached files. They are the same except different formats. There are two tabs in each file:

- a) Variables: defines all the variables, and
- b) Data: the time series of all the variables.





TURN\_D11\_Q1.pdf TURN\_D11\_Q1.xls

Please see pages SRW-WP2 to SRW-WP6 of Exhibit SCG-30-WP workpapers for the statistical equations used to forecast residential, commercial, and industrial gas meters.

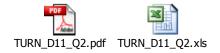
## TURN DATA REQUEST TURN-SCG-DR-11 SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

2. Following up on TURN DR 10-1, please provide a print-out of fitted and actual variables and residuals for each equation for the period of historical data.

## **SoCalGas Response:**

Please see the attached files.



They are the same except different formats.

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

3. Following up on TURN DR 10-1, please identify which method was used by SoCal to remove autocorrelation and explain the difference between that method and other methods commonly used such as Cochrane-Orcutt and Prais-Winsten.

### **SoCalGas Response:**

SoCalGas used the "Proc autoreg" function with its maximum likelihood (ML) estimation method from Statistical Analysis System (SAS).

Please see the attached file extracted from the Version 6, Second Edition of the SAS/ETS User's Guide for the explanations of the differences by using other estimation methods.



DATE RESPONDED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

4. Please explain why SoCal used data all the way back to 1980 to develop its relationships for forecasting meter additions in years starting 30 years later. Provide any analyses or tests that SoCal conducted to determine that a forecast over 28 years was better than a forecast that used a shorter and later period.

### **SoCalGas Response:**

For the last 30 years, SoCalGas residential and commercial customers have had fairly stable growth while the industrial market has shown a slight decline. SoCalGas has maintained data all the way back to 1980. By using all the last 30 years of available historical data to estimate these econometric models, SoCalGas has achieved good estimating results with reasonable forecasts.

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

5. The first two variables after the date in the pdf printout of Mr. Wilder's workpapers on page SRW-WP-8 are labeled "BldgSFO" and "BLdgMFO" respectively. In the spreadsheet attached to DR 10-1, the first two columns have the same numbers as on the pdf workpaper but are labeled "BldgMFO" and "BldgSFO" (i.e., in the opposite order). Which is correct?

### **SoCalGas Response:**

The data labels for BldgMFO and BldgSFO are correct in the spreadsheet attached to DR 10-1.

On workpaper page SRW-WP-8 as originally served, the labels are shown incorrectly and should be switched. This correction will be provided in an upcoming errata.

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

6. The description of the variable DUM0708 on SRP-WP-1 says it starts in the second quarter of 2007. The spreadsheet provided in response to TURN DR 10-1 starts the variable in the first quarter of 2007. Which is correct?

### **SoCalGas Response:**

DUM0708 is correct in both page SRW-WP-1 and the response to TURN DR 10-1. They both show that DUM0708 has a value of 1 starting with the 2<sup>nd</sup> quarter of 2007 and ending with the 4<sup>th</sup> quarter of 2008; it has a value of 0 when it is outside of that time range.

DATE RECEIVED: JUNE 9, 2011 DATE RESPONDED: JUNE 21, 2011

7. Following up on TURN DR 10-2, please update all recorded historical data on variables used to construct all econometric forecasts of meters and customers to first quarter of 2011. The data should include recorded data on active meters, connected meters, new sets, removes, reset seasonal, and resets.

### **SoCalGas Response:**

In response to TURN DR 10-2, SoCalGas updated recorded data through the 4<sup>th</sup> quarter of 2010. Data for the 1<sup>st</sup> quarter of 2011 are not available now.