

1 **BEFORE THE PUBLIC UTILITIES COMMISSION**
2 **OF THE STATE OF CALIFORNIA**
3

4 Order Instituting Investigation Into Implementation)
5 of Assembly Bill 970 Regarding the Identification of)
6 Electric Transmission and Distribution Constraints,) Investigation 00-11-001
7 Actions to Resolve Those Constraints, and Related)
8 Matters Affecting the Reliability of Electric Supply.)
9 _____)

10 **PREPARED DIRECT TESTIMONY OF TODD PETERSON**
11 **ON BEHALF OF THE CALIFORNIA ENERGY COMMISSION**
12

13
14 Todd Peterson presents this testimony. Mr. Peterson's qualifications are attached in
15 Exhibit A.
16

17 Q. On whose behalf are you submitting this testimony?

18 A. I am submitting this testimony on behalf of the California Energy Commission
19 (CEC).
20

21 Q. What is the purpose of your testimony?

22 A. The purpose of my testimony is to describe how the CEC obtained the natural gas
23 price forecast data that was used in completing the Economic Section of the
24 Southern California Long-Term Transmission Study for Investigation 00-11-001.
25

26 Q. What is the natural gas price forecast?

27 A. The natural gas price forecast is the summation of estimated future spot market
28 natural gas prices and transportation and regulatory costs. The price forecast
29 begins by calculating the spot market price, or the commodity. This price includes
30 the wellhead gas cost, processing and gathering at the wellhead, and interstate
31 transportation.
32
33
34
35

1 The price forecast data used in the Economic Section also utilized
2 coralconnect.com's¹ monthly southern California (Topock) basis differential data
3 for Friday, April 20, 2001, as well as the monthly Henry Hub settlement futures
4 contract prices for April 20, 2001. This natural gas price forecast is used as an
5 input of relative costs to determine the future prices of electricity produced in the
6 southwest U.S and Baja, Mexico.

7
8 Q. How did you derive the natural gas price forecast data for the years 2001 to 2006?

9 A. The year 2001 natural gas price estimate is the average of monthly historic
10 southern California border prices from enerfax.com and forecasted prices from
11 southern California basis differential data and Henry Hub settlement futures
12 contract prices.

13
14 For the years 2002 and 2003, the price forecast uses twice the growth rate
15 (negative) of the monthly Henry Hub futures prices during May 2002 to April 2003,
16 to discount the previous month's basis differential. This basis differential is then
17 added to the monthly Henry Hub futures prices.

18
19 The use of doubling the growth rate is used to bring into play new supply side
20 actions by the market, such as pipeline operators' proposed expansions
21 (especially those serving California), and changes in demand.

22
23 The years 2004 through 2006 assumes a continuance of monthly Henry Hub
24 futures prices experienced in the last 12 contract months with the same discount
25 rate applied to the previous month's basis differential.

26
27
28
29

¹ The brokerage firm coralconnect.com provides public information and data about commodity markets to help clients mitigate price risk.

1 The price forecast for southern Nevada uses regression analysis on the Henry
2 Hub spot market prices and prices in the San Juan and Permian basins. Using the
3 coefficients found in the regression analysis, they are applied to the Henry Hub
4 futures market prices for San Juan and Permian basin prices.

5

6 From May 2004 to 2006, the price forecast applies the continuance of monthly
7 Henry Hub futures prices experienced in the last 12 monthly contracts. The
8 regression coefficients are then used to calculate the prices. These two basins
9 are averaged because consumers have access to buy gas from either of these
10 basins. A fixed transportation cost is added on last. These monthly calculations
11 are then averaged to find the annual prices.

12

13 Q. Does this complete your testimony?

14 A. Yes, it does.

15

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

Exhibit A
Statement of Qualifications
Todd Peterson

Todd Peterson is an Economist with the California Energy Commission (CEC). For the past year, Mr. Peterson has worked in the Systems Assessment and Facility Siting Division of the CEC. In his capacity as an Economist, Mr. Peterson’s responsibilities include forecasting natural gas supplies and prices in North America, and specifically in California.

Before joining the CEC, Mr. Peterson worked at the California Department of Finance, Economic Research Unit for about two years estimating tax revenues using a General Equilibrium Model and forecasting California price inflation and economic performance. Before working at the California Department of Finance, Mr. Peterson worked at the CEC for about five years forecasting fuel supplies and prices. He also analyzed California transportation policy options.

Mr. Peterson’s educational background includes a BA degree in Economics from California State University, Sacramento and a MA degree in Economics from the California State University, Sacramento.