

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Portland Natural Gas Transmission System

Docket No. RP08-_____

**Prepared Direct Testimony
of
Alan R. Lovinger**

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

2 A.1 My name is Alan R. Lovinger, and my business address is 1155 15th Street, N.W.,
3 Suite 400, Washington, D.C. 20005.

4 **Q.2 By whom are you employed and in what capacity?**

5 A.2 I am a vice president with the firm of Brown, Williams, Moorhead & Quinn, Inc., and
6 have been employed by the firm since March 1, 1998.

7 **Q.3 What are the services offered by Brown, Williams, Moorhead & Quinn, Inc.
8 (“BWMQ”)?**

9 A.3 “BWMQ” is a leading energy consulting firm that has been providing advice and
10 assistance to clients for over twenty years. “BWMQ” provides comprehensive energy-
11 related services on business and regulatory matters to over one hundred clients, including
12 gas and oil pipelines, electric transmission providers, local distribution companies,
13 energy producers, energy trade associations, pipeline shippers and federal and state
14 agencies.

15 **Q.4 Please briefly describe your education and prior employment.**

16 A.4 I graduated from Bryant University in 1965 with a B.S. degree in Business Management.
17 In 1966, I enrolled in an MBA program at Texas Tech University majoring in

1 Accounting. Prior to joining Brown, Williams, Moorhead & Quinn, I was employed by
2 the Federal Energy Regulatory Commission (the "Commission") as a senior accountant.
3 I was employed by the Commission for twenty-five years, from 1966 to 1969 and from
4 1976 to 1998. My work at the Commission was primarily related to cost of service issues
5 with an emphasis on income tax matters, gas storage accounting, allocation of shared
6 services and rate base matters. I provided accounting and tax advice on the rate treatment
7 of storage gas in rate proceedings and participated in proceedings involving the
8 determination of purchased gas costs in PGA matters. I also represented the Commission
9 in dealings with the Internal Revenue Service on income tax issues that arose in various
10 rate proceedings and assisted the Commission on rulemakings on various cost of service
11 matters such as tax normalization, cash working capital, and post retirement benefits
12 other than pensions. Between 1970 and 1976, I was employed as an Internal Revenue
13 agent. As an agent, I was involved in the auditing of individuals, partnerships and
14 publicly held corporations.

15 **Q.5 Have you testified previously in proceedings before the Commission and state**
16 **regulatory commissions?**

17 A.5 Yes. While employed at the Commission, I presented expert testimony on cost of service
18 matters, accounting and accounting-related policy matters on behalf of the Commission's
19 Trial Staff. Since beginning my employment with Brown Williams Moorhead & Quinn,
20 Inc., I also have testified extensively before the Commission and several state regulatory
21 commissions on behalf of our clients. I have testified in a number of proceedings on the
22 accounting and rate treatment related to a levelized cost of service. My previous
23 testimony is listed in Appendix A to this Exhibit No. PNG-19.

1 **Q.6 What is the purpose of your testimony?**

2 A.6 I have been retained by Portland Natural Gas Transmission System (“PNGTS”) to assist
3 in the preparation of the cost of service to present in this proceeding, including
4 levelization.

5 **Q.7 Please describe the levelization model PNGTS is using.**

6 A.7 The levelization model used in the prior proceeding (the “RP02-13 Model”) was
7 cumbersome, opaque and impractical. Further, the RP02-13 Model contained circular
8 references and a number of macros that were either not needed or proved to be
9 unworkable. Thus, rather than going through a significant undertaking of at best uncertain
10 value, PNGTS requested that we replicate the model and streamline it so that it is easier
11 for both intervener and company personnel to use and understand.

12 **Q.8 Did you test the results you achieved with the levelized cost of service generated by
13 the RP02-13 Model?**

14 A.8 Yes. I tested the version sponsored by PNGTS in this case against the RP02-13 Model. I
15 used the Docket No. RP02-13 model’s output as the baseline against which to compare
16 results. I have included the RP02-13 Model output in Exhibit No. PNG-20 By using the
17 same values for accumulated depreciation, equity AFUDC, accumulated deferred income
18 taxes (“ADIT”), and the regulatory asset reflected in the RP02-13 Model, I was able to
19 duplicate the same levelized cost of service. I have included the results of this
20 comparison as Exhibit No. PNG-21.

21 **Q.9 Please explain the levelization theory applied by PNGTS.**

22 A.9 The levelized rate is designed to recover plant investment through depreciation over the
23 levelization period in an amount that will equal the depreciation recovery which would

1 have occurred over the same period had a traditional method of computing cost of service
2 been utilized. Using a traditional cost of service method, net rate base associated with a
3 particular asset declines over time with the accumulation of depreciation and deferred
4 income taxes. As a general matter, as rate base declines, the annual cost of service
5 likewise decreases. The levelized rate design method spreads depreciation in a manner
6 that results in the cost-of-service allowance being the same for each year of the
7 levelization period. The resulting cost-of-service over the 20-year levelization period will
8 produce, on a net present value basis, the same amount of revenue as that realized using a
9 traditional cost-of-service method. This is so because the levelized method produces a
10 lower cost of service in the initial years of its utilization but a higher cost-of-service in
11 later years, when compared to a computation of cost-of-service utilizing a more
12 traditional method. This effect is caused by the deferral of depreciation expense from
13 early years to later years. Under levelization, rates in the initial years would incorporate
14 less depreciation, and rates in later years would incorporate greater depreciation, than
15 would traditional rates.

16 **Q.10 Please describe the input used in the levelization model to reflect the test period**
17 **ending September 30, 2008.**

18 A.10 The data that are used to populate the model come from PNGTS' books and records. The
19 first step was to establish the specific length of time for the levelization to be applied in
20 the development of rates. The applicable levelization schedule was identified in Docket
21 No. RP02-13.

22 Next, I incorporated certain plant retirements from the plant facility cost reflected by
23 PNGTS in the RP02-13 Rate Model. The accumulated book depreciation and the

1 levelized regulatory asset recorded on PNGTS' books at the end of base period were
2 projected through the end of the test period. In calculating the amount of accumulated
3 depreciation in the levelization model, I begin with the projected accumulated
4 depreciation of \$118.099 million, provided in Statement D to PNGTS Docket RP08-____.
5 This number is reduced by the projected levelized regulatory asset of \$97.092 million for
6 a net beginning accumulated depreciation number to be used in the levelization model of
7 \$21.007 million.

8 **Q.11 Please explain why the accumulated depreciation was netted by the levelized**
9 **regulatory asset.**

10 A.11 The difference between authorized annual depreciation expense and the depreciation
11 expense recovered in the levelization model in computing rates is recorded as a
12 regulatory asset in FERC Account No. 182.3, Other Regulatory Assets. The regulatory
13 asset notionally represents the amount of uncollected, or deferred, book depreciation
14 expense. By netting the deferred depreciation and the accumulated book depreciation
15 expense, PNGTS will recognize its unrecovered depreciation expense in rate base.

16 **Q.12 Please provide an overview of the levelization model as shown on Exhibit No. PNG-**
17 **20.**

18 A.12 Page 1 shows the cost input data used in the model and the computation of the pre-tax
19 rate of return. The return on debt and equity are reflected in Exhibit No. PNG-20. The
20 data included on page 1 will be discussed below. Page 2, Column (a) shows the
21 computation of the levelization cost components determined using a traditional method.
22 Column (b) is the net present value of the annual cost components from Column (a).
23 Column (c) calculates the net present value of the levelized cost of service components

1 and annuitizes these costs to create a levelized cost of service. Column (d) proves that
2 the total levelized cost of service over the same period on an NPV basis equals the
3 amount shown in Column (b).

4 Page 3 presents a cost of service computation using a traditional methodology. The
5 operation and maintenance expense and ad valorem taxes related to the plant investment
6 included in the levelization model are reflected in Exhibit No. PNG-20 and the dollar
7 amounts are supported in the testimony of PNGTS witness, Sieppert. The O&M reflected
8 on Line 1 reflects the level of increase experienced under PNGTS' Service Agreements
9 as those Agreements are described in the testimony of PNGTS witness, Sieppert. Line 2,
10 depreciation and amortization expense, is based upon the testimony of PNGTS witness
11 Sullivan. Income taxes, return, the computation of equity AFUDC and taxes other than
12 income, are supported later in this testimony.

13 **Q.13 Please explain the computation for equity AFUDC income tax allowance as shown**
14 **on Line 5.**

15 A.13 AFUDC recognizes the incurrence of capital costs (including debt and equity costs) by
16 the utility during construction. AFUDC is made up of a debt and an equity component
17 and both are added to depreciable plant investment and accordingly, included in the
18 computation of rate base. PNGTS has \$23.929 million of equity AFUDC on its books,
19 which was reflected in the RP02-13 Model. To ensure recovery of a depreciation
20 allowance after income taxes, the Commission allows a separate income tax allowance
21 (the income tax allowance is provided because income tax returns reflecting the income
22 from public utility activities would not recognize equity AFUDC).

1 The rate treatment for equity AFUDC in the context of levelization presents additional
2 considerations. This is so because the concept of levelization is based on deferring the
3 recognition of depreciation in the rate model which many times reflects negative
4 depreciation allowances in the initial years. The RP02-13 Model reflected negative
5 depreciation and accordingly, computed a negative depreciation amount for equity
6 AFUDC in the early years and, of course, in later years reflected a larger depreciation
7 number to offset the early year treatment. Accordingly, I have carried forward the Docket
8 No. RP02-13 treatment of equity AFUDC.

9 **Q.14 How have PNGTS' recent plant additions been treated for purposes of deriving the**
10 **cost of service?**

11 A.14 The levelization schedule in Docket No. RP02-13 was applied to the balance of gross
12 plant in service stipulated in that proceeding. Accordingly, the \$2.57 million of
13 additional plant investment since the settlement in Docket No. RP02-13 has not been
14 added to the agreed-upon levelization schedule.

15 **Q.15 Please discuss the computation for the deferred regulatory asset beginning on Line**
16 **8 of Page 3.**

17 A.15 The computation reflects the yearly level of the regulatory asset that PNGTS will include
18 to recognize its deferred revenue.

19 **Q.16 Please provide an explanation of Page 4.**

20 A.16 Page 4, Rate Base and Return Allowance, reflects the rate base and return allowance for
21 the remaining levelization period. Gross plant on Line 1 is supported on Page 5.
22 Accumulated Depreciation, Depletion and Amortization ("DD&A"), on Line 2, is
23 supported on Page 6 and Accumulated Deferred Income Taxes ("ADIT") is supported on

1 Page 7. Page 4, Line 6 shows the rate base, and Line 8 shows the computation of the
2 overall pretax return allowance.

3 **Q.17 Please provide an explanation of Pages 5 and 6.**

4 A.17 Page 5 provides plant investment separated by transmission, land and land rights, and
5 general plant. Page 6 reflects depreciable plant separated by respective rates of
6 depreciation. The \$21.007 million shown below the column labeled "Starting Balance" is
7 determined by netting accumulated depreciation with the deferred depreciation
8 regulatory asset. Both numbers are projected through the end of the test period. Line 10
9 represents the computation of negative salvage, which is supported by PNGTS witness,
10 Taylor.

11 **Q.18 Please provide an explanation of pages 7 and 8, Accumulated Deferred Income**
12 **Taxes.**

13 A.18 The accumulation of Deferred Income Taxes begins after the ninth year of operations.
14 The tax depreciation rates on Line 1 are taken from Page 8, the federal income tax
15 Depreciation Rate Table used by the IRS, which shows depreciation rates for four
16 quarters of a year. Under IRS requirements, the tax depreciable life is 15 years. The in-
17 service date will dictate the appropriate quarter to be used. Based on PNGTS' in-service
18 date of March 10, 1999, first quarter rates were used. The starting depreciation rate of
19 5.91% on Line 1 is the tax depreciation rate for the first quarter of year 9. Taxable
20 depreciable plant on Line 3 comes from data input on Page 1, Line 17, transmission plant
21 netted by equity AFUDC, Line 21. Equity AFUDC is not deductible for tax purposes and
22 does not create book/tax timing differences. Thus, book and tax depreciable plant are the
23 same as shown on Lines 3 and 4 of Page 7, under the heading "Starting Balance."

1 Book/tax timing differences on Line 7 represent the annual book/tax timing difference.

2 The annual provision for ADIT on Line 8 is determined by the product of the annual

3 book/tax timing difference and the composite federal and state income tax rate of

4 40.65%.

5 **Q.19 Please explain the starting balance of Accumulated Provision for ADIT shown on**
6 **Line 9, for 2008, of \$127.77 million.**

7 A.19 The \$127.77 million is taken from PNGTS books projected through the end of the test
8 period, as calculated on Schedule B-1, Exhibit No. PNGTS-20. Page 7 continues

9 calculating the ADIT through the end of the levelization period.

10 **Q.20 Why have you prepared a pro forma levelization model?**

11 A.20 Exhibit No. PNGTS-22 incorporates the rate of depreciation calculated by PNGTS
12 witness, Sullivan, that reflects the remaining economic life of PNGTS.

13 **Q.21 Does your pro forma rate model include additional pages that were not included in**
14 **your sponsored Exhibit No. PNGTS-22.**

15 A.21 Yes. I have included the additional cost of service information that would be needed to
16 compute FT service using the pro forma cost of service. Page 9 provides all of the

17 necessary cost data necessary to compute a cost of service that can be used in Schedule

18 J-2 to design rates.

19 **Q.22 Does that conclude your direct testimony in this proceeding?**

20 A.22 Yes.

**Appendix A
Testimony and Exhibits**

**Presented before the FERC
(While Employed by FERC)**

National Gas Storage Corporation	CP76-492
Natural Gas Pipeline Company of America	RP77-98 & RP78-78
South Texas Natural Gas Gathering Company	RP77-59 & RP78-58
Tennessee Gas Pipeline Company	RP77-62
Consolidated Gas Supply Corporation	RP77-7 & RP78-88
Florida Gas Transmission Company	CP74-142
Cities Service Gas Company	RP79-76
Consolidated Gas Supply Corporation	CP80-346
Columbia Gulf Transmission Company	RP75-105, et al.
United Gas Pipe Line Company	RP82-57 & RP83-52
Mountain Fuel Resources	CP80-274
Ozark Gas Transmission System	RP84-53
Trunkline Gas Company	RP83-93
High Island Offshore System	RP85-37
Pacific Offshore Pipeline Company	RP85-34
Overthrust Pipeline Company	RP85-60
Trailblazer Pipeline Company	RP85-66
Williston Basin Interstate Pipeline	RP86-10
Southern Natural Gas Company	RP86-63
Transcontinental Gas Pipe Line Corporation	RP87-07-000
ANR Pipeline Company	RP89-161-000
Carnegie Natural Gas Company	RP88-131-000
Williston Basin Interstate Pipeline	RP89-34-000
Southern Natural Gas Company	RP92-134-000
Equitrans, Inc.	RP93-62 & RP93-187
Gaviota Terminal Company	IS94-23-000
Northern Natural Gas Company	RP95-189
Northern Border	RP96-45
Williams Natural Gas Company	RP96-173, et al.

**Appendix A (Continued)
Testimony and Exhibits**

**Presented before the FERC
(While Employed by BWMQ)**

Northern Natural Gas Company	RP98-203
California Power Exchange Corporation	ER98-210, et al,
Kansas Pipeline Company	RP99-485-000,
Dominion Transmission, Inc.	RP00-632-000
Viking Gas Transmission Company	RP02-132
Portland Natural Gas Transmission	RP02-013
Suburban Propane, L.P.	IS02-464-000
Midwest Independent Trans. Operator, Inc.	EL02-111-000
Dominion Cove Point, LLC	RP06-417
Texas Gas Transmission, LLC	RP05-317
Orion Power MidWest, L.P.	ER06-993
PSEG Energy Resources & Trade, LLC	ER05-644
Michigan Electric Transmission Co., LLC	ER06-56-000
Norwalk Power, LLC	ER07-799-000
ANR Pipeline Company	RP07-439

**Testimony and Exhibits
Presented before Other Agencies
(While Employed by BWMQ)**

Public Service Commission of D.C.	Formal Case No. 945
Arkansas Public Service Commission	02-024-U
Atmos Energy Incorporated	GUD No. 9796
SourceGas Distribution LLC	Docket No. 08S__G