UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Terra-Gen Dixie Valley, LLC) Docket No. ER11-2127-000

AFFIDAVIT OF
WILLIAM STEVEN SEELYE

Q. Please state your name and business address.

A. My name is William Steven Seelye, and my business address is The Prime Group, LLC, 6001 Claymont Village Dr., Suite 8, Crestwood, Kentucky, 40014.

Q. By whom are you employed?

A. I am a senior consultant and principal for The Prime Group, LLC, a firm located in Crestwood, Kentucky, providing consulting and educational services in the areas of utility marketing, regulatory analysis, cost of service, rate design and depreciation studies.

Q. On whose behalf are you submitting this affidavit?

A. I am submitting this affidavit on behalf of Green Borders Geothermal, LLC ("Green Borders").

Q. What is the purpose of your affidavit?

A. The purpose of this affidavit is to evaluate the transmission rates proposed by Terra-Gen Dixie Valley, LLC ("Terra-Gen") for the Dixie Valley Transmission Line ("DVTL").

Q. Based upon your review of the filing in this proceeding, what is your opinion of the proposed transmission rates submitted by Terra-Gen?

A. My opinion is that the transmission rates proposed by Terra-Gen are not supported and appear to be significantly overstated. My affidavit points out numerous errors, inconsistencies, and unverifiable inputs in the calculation of the Monthly Rate for Transmission Service ("Transmission Service Rate"). The calculation of the proposed Transmission Service Rate is shown in Schedule 1 of Exhibit No. TGP-3 ("Terra-Gen's Schedule 1" or "Schedule 1"), which is included in Attachment D of the Compliance Filing submitted on November 15, 2010, by Terra-Gen in Docket No. ER11-2127-000. Schedule 1 is supported by an Affidavit submitted by Alan C. Heintz. In Schedule 1, Terra-Gen presents a basic non-levelized revenue requirement calculation. However, there is either an error, inconsistency, utterly unsupported number, or unverifiable input on each line of the revenue requirement calculation. Simply correcting the errors and inconsistencies would significantly reduce the Transmission Service Rate.

Q. Please describe your educational background and prior work experience.

A. I received a Bachelor of Science degree in Mathematics from the University of Louisville in 1979. I have also completed 54 hours of graduate level course work in Industrial Engineering and Physics. From May 1979 until July 1996, I was employed by Louisville Gas and Electric Company ("LG&E"). From May 1979 until December 1990, I held various positions within the Rate Department of LG&E. In December 1990, I became Manager of Rates and Regulatory Analysis. In May 1994, I was given additional responsibilities in the marketing area and was promoted to Manager of Market Management and Rates. I left LG&E in July 1996 to form The Prime Group, LLC, with another former employee of the Company. Since then, we have performed cost of service studies, developed revenue requirements and designed rates for over 150 investor-owned, cooperative and municipal utilities across North America. A more detailed description of my qualifications is included in Exhibit No. GBG-2.

Q. Have you ever testified before any state or federal regulatory commissions?

A. Yes. I have testified in over 60 regulatory proceedings in 12 different jurisdictions. A listing of my testimony in other proceedings is included in Exhibit No. GBG-2.

Q. Please describe the revenue requirement calculation shown on Terra-Gen's Schedule 1?

A. Terra-Gen's Schedule 1 is a basic non-levelized revenue requirement calculation. As mentioned earlier, Schedule 1 is included in Terra-Gen's Exhibit No. TGP-3. For ease of reference, a copy of Exhibit No. TGP-3 is included in Exhibit No. GBG-3. Terra-Gen's Schedule 1, Annual Transmission Revenue Requirement, includes the following components: (i) Return on Rate Base (Line 8); (ii) Income Tax (Line 9); Operation and Maintenance Expense (Line 10); Depreciation (Line 11); and Taxes Other Than Income Taxes (Line 12). In this calculation, Return on Rate Base is determined by applying a "weighted cost of capital" to Net Rate Base. Net Rate Base is calculated as follows: (a) Plant in Service (Line 1); less (b) Accumulated Depreciation (Line 2); less (c) Accumulated Deferred Income Taxes (Line 3); plus (4) Materials and Supplies (Line 4);

plus (5) Prepaids (Line 5); plus (6) Cash Working Capital. The Monthly Rate for Transmission Service is calculated by dividing the Annual Transmission Revenue Requirement (Line 13) by the Firm Load (Line 15).

Q. Do you have any general concerns about the determination of Terra-Gen's Monthly Rate for Transmission Service?

A. Yes. There is a general absence of source data for the revenue requirement calculation. In most instances, Terra-Gen provides cost data without any supporting documentation whatsoever. Terra-Gen simply provides an assortment of cost figures without any backup documentation or supporting calculations. It is therefore impossible to verify independently the inputs that are entered in the revenue requirement calculation. When a traditional Commission-regulated utility submits a revenue requirement calculation, the information can be verified on a Form 1, which would typically correspond to audited financial results for the utility. Terra-Gen is essentially asking us to accept unverifiable figures that could be based on assumptions rather than actual costs.

Q. Please discuss the problems with the Return on Rate Base shown on Line 8 of the revenue requirement calculation.

A. As mentioned above, Return on Rate Base is determined by applying a "weighted cost of capital" to Net Rate Base. The "weighted cost of capital" used in the calculation is based on a series of completely unsupported numbers which appear to have no relation to Terra-Gen. In calculating the "weighted cost of capital," an imputed capital structure consisting of 50 percent equity and 50 percent debt is utilized. On page 5, paragraph 11 of his Affidavit, Mr. Heintz states that "Dixie Valley does not issue publicly traded stock and is not subject to traditional rate regulation. The Capital Structure reflects a 50 percent equity and 50 percent debt capital structure and the cost of debt reflects 300 basis points above the 30 year US Treasury bonds." It should be emphasized, however, that simply because "Dixie Valley does not issue publicly traded stock" in no way implies that Terra-Gen's capital is not financed with both equity and debt. Just like a traditional utility, Terra-Gen would be financed with a combination of equity capital and debt. If Terra-Gen is like many independent power producers ("IPPs"), then its capital structure would consist of a significantly higher percentage of debt. IPP projects are often highly leveraged. As long as its capital structure does not consist of too much equity, Terra-Gen should use its actual capital structure rather than one that is simply fabricated. While the Commission has on rare occasion allowed a transmission service provider to use a "proxy" capital structure, it is incumbent on the service provider to (i) provide evidence showing its actual capital structure; (ii) demonstrate that a proxy capital structure is warranted; and (iii) provide evidence in support of what the proxy capital structure would be for a company with a similar risk profile. Terra-Gen has not performed any of these tasks.

Q. What effect does using an overstated equity percentage have on the determination of revenue requirements?

A. Certainly, the cost of equity is higher than the cost of long-term debt. Terra-Gen assumes that its cost of long-term debt is 6.75 percent and assumes that its cost of common equity is 10.5 percent. Consequently, to the extent that Terra-Gen's calculations rely upon capital structure with an overstated equity percentage, Terra-Gen increases the weighting of the equity component of the capital structure which has the higher cost. Using an overstated equity percentage also increases the associated income taxes included in revenue requirements. Using an overstated equity percentage significantly impacts the amount of income taxes included in revenue requirements. Because only the return on equity is "grossed up" for income taxes in Terra-Gen's revenue requirement calculation, using an overstated equity percentage has a major effect on the amount of income taxes included in revenue requirements. (See Schedule 2 of Exhibit No. TGP-3 reproduced in Exhibit No. GBG-3). Assuming an *overstated* equity percentage thus results in *overstated* income taxes.

Q. Is there any basis for calculating the cost of debt by adding 300 basis points to the rate for 30-year U.S. Treasury bonds

A. No. Again, without any evidence demonstrating that Terra-Gen's debt is structured around adding 300 basis points to the 30-year U.S. Treasury bond rate, one can only conclude that this is an arbitrary determination of debt cost. Furthermore, considering the current, historically low cost of debt, it is unreasonable to assume that Terra-Gen's cost of debt is 6.75 percent. Currently, the embedded cost of debt for many utilities is significantly lower than 6.75 percent. Earlier this year I testified on behalf of three utilities with debt cost considerably lower than what is being proposed by Terra-Gen. For example, Louisville Gas and Electric Company's cost of long term debt was 4.61

percent; Kentucky Utilities Company's cost of long-term debt was 4.68 percent; and Sierra Pacific Power Company (a utility with a lower credit rating than the other two) has a cost of long-term debt of 5.90 percent. (See Volume 4 of Direct Testimony and Exhibits of Louisville Gas and Electric Company filed January 29, 2010 with the Kentucky Public Service Commission; see Volume 4 of Direct Testimony and Exhibits of Kentucky Utilities Company filed January 29, 2010 filed with the Kentucky Public Service Commission; and see Volume 10, Statement F of Sierra Pacific Company's Application filed in Docket No. 10-06001 with the Public Utilities Commission of Nevada.) Furthermore, Sierra Pacific Power Company's capital structure consisted of far less than 50 percent equity. Thus, if it is Terra-Gen's unstated purpose to use 300 basis points above the 30-year U.S. Treasury rate as a proxy, then it has chosen a rate that is excessive.

Q. Is there any basis for assuming a cost of equity of 10.50 percent?

A. No. Once again, Terra-Gen provides no basis for this assumption.

Q. You indicated that in Terra-Gen's revenue requirement calculation, Return on Rate Base is calculated by applying the "weighted cost of capital" to Rate Base. Are there any problems with Terra-Gen's rate base calculation?

A. Yes, there are numerous problems. Plant in Service (Line 1 of Schedule 1) appears to be overstated. As shown on Schedule No. 3a of Exhibit No. TGP-3 (see Exhibit No. GBG-3), Terra-Gen Power acquired the transmission assets in December 7, 2007, at a cost of $18,449,590. However, when a valuation study ("Caithness valuation study") was performed in connection with another acquisition in 2000 the facilities were valued at $12,497,000. It is unclear why the plant value from the Caithness valuation study was not used to determine the gross plant. Another potential problem is with Accumulated Depreciation (Line 2). It appears that over the life of the assets an assortment of depreciation rates have been used to determine Accumulated Depreciation. Apparently a 3.33 percent depreciation rate was originally used (1 ÷ 30 years). (See the second line of Schedule No. 3a.) Then, after the Caithness acquisition on June 15, 2000, until the acquisition by Terra-Gen Power on December 7, 2007, a depreciation rate of 5.56 percent (1 ÷ 18 years) was used. Then, beginning December 7, 2007 until December 31, 2009, a depreciation rate of 9.38 percent was used (1 ÷ [10 years, 8 months]). But, yet in another change, Terra-Gen is now proposing to use a depreciation rate 0.93 percent applied to the net asset value as of December 31, 2009 (1 ÷ 28 years). (See Schedule 3 of Exhibit No. TGP-3.)

Furthermore, it appears that the depreciation rates were inconsistently applied over the life of the investment. For example, the original depreciation rate of 3.33 percent was apparently applied to the original construction cost of $33,960,339 until June 15, 2000. But from June 15, 2000, until December 7, 2007, the depreciation rate appears to have been applied to the acquisition amount of $12,497,000. Then, beginning on December 7, 2007, the depreciation rates were again applied to the original construction cost of $33,960,339. (See Schedule 3a.) Yet, after December 31, 2009, the depreciation rate would be applied to a net investment of $8,954,419. (See Schedule 3.)

With all of these changes in depreciation rates it impossible to determine whether the asset value or the proposed depreciation expenses included in revenue requirement is reasonable based on the limited information that was provided in the Terra-Gen's filing.

Q. Do you have any comments concerning Accumulated Deferred Income Taxes?

A. Yes. The Net Tax Balance used to calculate Accumulated Deferred Income Taxes on Schedule 3 cannot be validated. Furthermore, Mr. Heintz provides no information in his Affidavit about the methodology used by Terra-Gen to determine Accumulated Deferred Income. Specifically, he does not indicate whether a 20-MACR rate for tax depreciation or some other methodology was utilized, nor does he provide a tax depreciation schedule supporting the Net Tax Balance. As mentioned earlier, when a traditional FERC-regulated utility submits a revenue requirement calculation, the information can be verified on a Form 1, which would typically correspond to audited financial results for the utility. Since a Form 1 cannot be utilized to verify Accumulated Deferred Income Taxes for Terra-Gen, it should be incumbent upon Terra-Gen to provide detailed information concerning the accounting values used in its filing. Without additional information, it is possible that a number of inappropriate assumptions or non-standard accelerated depreciation methodologies were used by Terra-Gen to determine its Net Tax Balance.

Q. Do you have any comments concerning Operation and Maintenance Expenses (Line 12 of Schedule 1)?

A. Yes. It is impossible to verify any of the figures shown on Schedule No. 4. Of particular concern is the inclusion of a Management Operations Fee of $785,028. It is unclear whether it is appropriate for these costs to be included in revenue requirements. Furthermore, it is also unclear whether any of these costs are related to the transmission service function and to whom these charges were paid, including whether these payments were made to an affiliate organization of Terra-Gen.

Q. What concerns do you have about Taxes Other Than Income Taxes (Line 12 of Schedule 1)?

A. Terra-Gen's proposed Taxes Other Than Income Taxes are considerably out of line with those of other transmission service providers in the region. The Taxes Other Than Income Taxes for Terra-Gen represent 3.62 percent of gross plant and 13.76 percent of net plant. Based on cost information filed in Docket No. ER07-1371-000 by Sierra Pacific Power Company in support of transmission service charges under its Open Access Transmission Tariff ("OATT"), transmission-related Taxes Other Than Income Taxes for Sierra Pacific Power Company represent only 0.558 percent of gross transmission plant and 0.7745 percent of net transmission plant. Based on cost information filed in Docket No. ER09-1534-000 by Southern California Edison Company in support of transmission service charges under its OATT, transmission-related Taxes Other Than Income Taxes for Southern California Edison represent only

0.6807 percent of gross transmission plant and 0.9879 percent of net transmission plant. Sierra Power Company operates in northern and central Nevada and Southern California Edison operates in southern California. On a net cost basis, the Taxes Other than Income Taxes that Terra-Gen is proposing to charge are thus approximately 18 times those currently charged by Sierra Pacific Power Company (approximately *1,700 percent higher!)*; and the Taxes Other than Income Taxes that Terra-Gen is proposing to charge are approximately 14 times those currently charged by Southern California Edison Company (approximately *1,300 percent higher!)*.

Furthermore, this is the only instance where Terra-Gen uses projected costs for a subsequent test year. It is unclear whether Terra-Gen is contesting these large projected tax increases with the taxing authority or if it has any plans to protest these shocking increases. It should also be noted that Terra-Gen proposes to use proxy costs rather than actual costs when using proxy costs increases its revenue requirements. Whereas, Terra-Gen proposes to utilize its own overstated costs in every other instance. For example, Terra-Gen proposes to use a proxy capital structure that is heavily weighted toward equity capital, which increases the return and income tax components of revenue requirements, but proposes to use its own projected cost estimates for Taxes Other than Income Taxes, which are excessive in comparison to other utilities in the region.

Q. In calculating its proposed Monthly Rate for Transmission Service, Terra-Gen divides its Transmission Revenue Requirement by 64 MW. Do you have reason to believe that the 64 MW divisor is incorrect?

A. Yes. Based on a number of statements made by Terra-Gen, the 64 MW divisor is almost certainly understated. In the Compliance Filing of Terra-Gen Dixie Valley, LLC and Request for Expedited Treatment ("Compliance Filing") included in Attachment E of its November 15, 2010 filing in Docket Nos. EL10-29-000 and EL10-36-000, Terra-Gen states as follows:

> For instance, the 60 MW (net) Dixie Valley [geothermal] plant is connected to the thermally-rated 400 MW 230-kV Dixie Valley Line into the CAISO at the Control substation. (*Compliance Filing of Terra-Gen Dixie Valley, LLC and Request for Expedited Treatment* at 9.)

In the same Compliance Filing, Terra-Gen also states:

> The evidence show that Dixie Valley's parent company planned in 2000 to develop an additional 300 MW (net) of geothermal generating capacity in phases, either directly or through subsidiaries and affiliates, to take advantage of the more than 300 MW of surplus transmission capacity in the Dixie Valley Line. (*Id.* at 3.)

It is therefore inappropriate to assume that the capacity of the line is only 64 MW for purposes of determining the Monthly Charge for Transmission Service when, based on Terra-Gen's own representations, the capacity of the line is equal to 400 MW. Since no other party currently has access to the Dixie Valley line it is inappropriate to use Terra-Gen's current geothermal capacity as the transmission capacity for determining the

Monthly Charge for Transmission Service. At the very least, Green Borders' transmission requirements should be included in the divisor.

Q. What impact would using a higher capacity rating for the transmission line have on the Monthly Rate for Transmission Service?

A. Certainly, using a more representative capacity rating would lower the charge. Using the full 400 MW rating of the line to calculate the Monthly Charge would *ceteris paribus* lower the rate from \$3,660/MW/Month to \$586/MW/Month (\$2,810,709 ÷ 400 MW ÷ 12 Months = \$586/MW/Month). Correcting the other errors in the determination of Terra-Gen's Annual Transmission Revenue Requirement would lower the charge even further.

Q. Do you have any other concerns about Terra-Gen's rate calculation?

A. Yes. Terra-Gen is proposing to use a non-levelized carrying charge without updating revenue requirements on an annual basis. As a general matter, the Commission favors a levelized methodology for calculating revenue requirements for rates that are not updated on a regular basis. See, for example, *Chehalis Power Generating*, L.P., Docket No. ER05-1056-002, 118 FERC ¶ 63,009. In *Jersey Central Power & Light*, Docket No. ER86-684-001, 38 FERC ¶ 61,275, the Commission stated as follows:

> We believe that a levelized approach is preferable. A levelized charge is not time sensitive and thus establishes an appropriate benchmark for rates which will be in effect over an indefinite period. It thus promotes rate stability without regard to the customer or the time of the transaction. A nonlevelized rate, however, must be revised periodically, since it front-loads the recovery of capital costs,

> i.e., over time, depreciation reduces the investment basis, and the rate necessary to provide a reasonable contribution to the seller's fixed costs decline. (*Jersey Central Power & Light*, 38 FERC ¶ 61,275 at 61,927.

It is inappropriate for Tera-Gen to use a non-levelized carrying charge calculation without annually updating its revenue requirements and without also updating the MW divisor used to calculate the Monthly Rate for Transmission Service.

Q. Does this conclude your affidavit?

A. Yes.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Terra-Gen Dixie Valley, LLC) Docket No. ER11-2127-000

Commonwealth of Kentucky

County of Oldham

I, William Steven Seelye, being first duly sworn, hereby certify that the foregoing questions and answers were prepared by me, and that the facts contained in the answers are true and correct to the best of my knowledge, information and belief.

William Steven Seelye

Subscribed and sworn to before me, the undersigned notary public, this 8th day of December 2010.

Christa K McCormick
Notary Public

My Commission expires on: 4-25-2013

EXHIBIT NO. GBG-2

QUALIFICATIONS OF WILLIAM STEVEN SEELYE

Summary of Qualifications

Provides consulting services to numerous investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service and wholesale and retail rate designs; and develops revenue requirements for utilities in general rate cases, including the preparation of analyses supporting pro-forma adjustments and the development of rate base.

Employment

Senior Consultant and Principal
The Prime Group, LLC
(July 1996 to Present)

Provides consulting services in the areas of tariff development, regulatory analysis revenue requirements, cost of service, rate design, fuel and power procurement, depreciation studies, lead-lag studies, and mathematical modeling.

Assists utilities with developing strategic marketing plans and implementation of those plans. Provides utility clients assistance regarding regulatory policy and strategy; project management support for utilities involved in complex regulatory proceedings; process audits; state and federal regulatory filing development; cost of service development and support; the development of innovative rates to achieve strategic objectives; unbundling of rates and the development of menus of rate alternatives for use with customers; performance-based rate development.

Prepared retail and wholesale rate schedules and filings submitted to the Federal Energy Regulatory Commission (FERC) and state regulatory commissions for numerous of electric and gas utilities. Performed cost of service or rate studies for over 150 utilities throughout North America. Prepared market power analyses in support of market-based rate filings submitted to the FERC for utilities and their marketing affiliates. Performed business practice audits for electric utilities, gas utilities, and independent transmission organizations (ISOs), including audits of production cost modeling, retail utility tariffs, retail utility billing practices, and ISO billing processes and procedures.

Manager of Rates and Other Positions
Louisville Gas & Electric Co.
(May 1979 to July 1996)

Held various positions in the Rate Department of LG&E. In December 1990, promoted to Manager of Rates and Regulatory Analysis. In May 1994, given additional responsibilities in the marketing area and promoted to Manager of Market Management and Rates.

Education

Bachelor of Science Degree in Mathematics, University of Louisville, 1979
54 Hours of Graduate Level Course Work in Industrial Engineering and Physics.

Associations

Member of the Society for Industrial and Applied Mathematics

Expert Witness Testimony

Alabama: Testified in Docket 28101 on behalf of Mobile Gas Service Corporation concerning rate design and pro-forma revenue adjustments.

Colorado: Testified in Consolidated Docket Nos. 01F-530E and 01A-531E on behalf of Intermountain Rural Electric Association in a territory dispute case.

FERC: Submitted direct and rebuttal testimony in Docket No. EL02-25-000 et al. concerning Public Service of Colorado's fuel cost adjustment.

Submitted direct and responsive testimony in Docket No. ER05-522-001 concerning a rate filing by Bluegrass Generation Company, LLC to charge reactive power service to LG&E Energy, LLC.

Submitted testimony in Docket Nos. ER07-1383-000 and ER08-05-000 concerning Duke Energy Shared Services, Inc.'s charges for reactive power service.

Submitted testimony in Docket No. ER08-1468-000 concerning changes to Vectren Energy's transmission formula rate.

Submitted testimony in Docket No. ER08-1588-000 concerning a generation formula rate for Kentucky Utilities Company.

Submitted testimony in Docket No. ER09-180-000 concerning changes to Vectren Energy's transmission formula rate.

Florida: Testified in Docket No. 981827 on behalf of Lee County Electric Cooperative, Inc. concerning Seminole Electric Cooperative Inc.'s wholesale rates and cost of service.

Illinois: Submitted direct, rebuttal, and surrebuttal testimony in Docket No. 01-0637 on behalf of Central Illinois Light Company ("CILCO") concerning the modification of interim supply service and the implementation of black start service in connection with providing unbundled electric service.

Indiana: Submitted direct testimony and testimony in support of a settlement agreement in Cause No. 42713 on behalf of Richmond Power & Light regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

Submitted direct and rebuttal testimony in Cause No. 43111 on behalf of Vectren Energy in support of a transmission cost recovery adjustment.

Submitted direct testimony in Cause No. 43773 on behalf of Crawfordsville Electric Light & Power regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

Kansas: Submitted direct and rebuttal testimony in Docket No. 05-WSEE-981-RTS on behalf of Westar Energy, Inc. and Kansas Gas and Electric Company regarding transmission delivery revenue requirements, energy cost adjustment clauses, fuel normalization, and class cost of service studies.

Kentucky: Testified in Administrative Case No. 244 regarding rates for cogenerators and small power producers, Case No. 8924 regarding marginal cost of service, and in numerous 6-month and 2-year fuel adjustment clause proceedings.

Submitted direct and rebuttal testimony in Case No. 96-161 and Case No. 96-362 regarding Prestonsburg Utilities' rates.

Submitted direct and rebuttal testimony in Case No. 99-046 on behalf of Delta Natural Gas Company, Inc. concerning its rate stabilization plan.

Submitted direct and rebuttal testimony in Case No. 99-176 on behalf of Delta Natural Gas Company, Inc. concerning cost of service, rate design and expense adjustments in connection with Delta's rate case.

Submitted direct and rebuttal testimony in Case No. 2000-080, testified on behalf of Louisville Gas and Electric Company concerning cost of service, rate design, and pro-forma adjustments to revenues and expenses.

Submitted rebuttal testimony in Case No. 2000-548 on behalf of Louisville Gas and Electric Company regarding the company's prepaid metering program.

Testified on behalf of Louisville Gas and Electric Company in Case No. 2002-00430 and on behalf of Kentucky Utilities Company in Case No. 2002-00429 regarding the calculation of merger savings.

Submitted direct and rebuttal testimony in Case No. 2003-00433 on behalf of Louisville Gas and Electric Company and in Case No. 2003-00434 on behalf of Kentucky Utilities Company regarding pro-forma revenue, expense and plant adjustments, class cost of service studies, and rate design.

Submitted direct and rebuttal testimony in Case No. 2004-00067 on behalf of Delta Natural Gas Company regarding pro-forma adjustments, depreciation rates, class cost of service studies, and rate design.

Testified on behalf of Kentucky Utilities Company in Case No. 2006-00129 and on behalf of Louisville Gas and electric Company in Case No. 2006-00130 concerning methodologies for recovering environmental costs through base electric rates.

Testified on behalf of Delta Natural Gas Company in Case No. 2007-00089 concerning cost of service, temperature normalization, year-end normalization, depreciation expenses, allocation of the rate increase, and rate design.

Submitted testimony on behalf of Big Rivers Electric Corporation and E.ON U.S. LLC in Case No 2007-00455 and Case No. 2007-00460 regarding the design and implementation of a Fuel Adjustment Clause, Environmental Surcharge, Unwind Surcredit, Rebate Adjustment, and Member Rate Stability Mechanism for Big Rivers Electric Corporation in connection with the unwind of a lease and purchase power transaction with E.ON U.S. LLC.

Submitted testimony in Case No. 2008-00251 on behalf of Kentucky Utilities Company and in Case No. 2008-00252 on behalf of Louisville Gas and Electric Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Submitted testimony in Case No. 2008-00409 on behalf of East Kentucky Power Cooperative, Inc., concerning revenue requirements, pro-forma adjustments, cost of service, and rate design.

Submitted testimony in Case No. 2009-00040 on behalf of Big Rivers Electric Corporation regarding revenue requirements and rate design.

Submitted testimony on behalf of Columbia Gas Company of Kentucky in Case No. 2009-00141 regarding the demand side management program costs and cost recovery mechanism.

Submitted testimony in Case No. 2009-00548 on behalf of Kentucky Utilities Company and in Case No. 2009-00549 on behalf of Louisville Gas and Electric Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Submitted testimony in Case No. 2010-00116 on behalf of Delta Natural Gas Company concerning cost of service, temperature normalization, year-end normalization, depreciation expenses, allocation of the rate increase, and rate design.

Nevada: Submitted direct and rebuttal testimony in Case No. 03-10001 on behalf of Nevada Power Company regarding cash working capital and rate base adjustments.

Submitted direct and rebuttal testimony in Case No. 03-12002 on behalf of Sierra Pacific Power Company regarding cash working capital.

Submitted direct and rebuttal testimony in Case No. 05-10003 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

Submitted direct and rebuttal testimony in Case No. 05-10005 on behalf of Sierra Pacific Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case Nos. 06-11022 and 06-11023 on behalf of Nevada Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case No. 07-12001 on behalf of Sierra Pacific Power Company regarding cash working capital for an electric general rate case.

Submitted direct testimony in Case No. Docket No. 08-12002 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.
Submitted direct testimony in Case No. Docket No. 10-06001 on behalf of Sierra Pacific Power Company regarding cash working capital for an electric general rate cases.

Maryland	Submitted direct testimony in PSC Case No. 9234 on behalf of Southern Maryland Electric Cooperative regarding a class cost of service study.
Nova Scotia:	Testified on behalf of Nova Scotia Power Company in NSUARB – NSPI – P-887 regarding the development and implementation of a fuel adjustment mechanism.
	Submitted testimony in NSUARB – NSPI – P-884 regarding Nova Scotia Power Company's application to approve a demand-side management plan and cost recovery mechanism.
	Submitted testimony in NSUARB – NSPI – P-888 regarding a general rate application filed by Nova Scotia Power Company.
	Submitted testimony on behalf of Nova Scotia Power Company in the matter of the approval of backup, top-up and spill service for use in the Wholesale Open Access Market in Nova Scotia.
	Submitted testimony in NSUARB – NSPI – P-884 (2) on behalf of Nova Scotia Power Company's regarding a demand-side management cost recovery mechanism.
Virginia:	Submitted testimony in Case No. PUE-2008-00076 on behalf of Northern Neck Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.
	Submitted testimony in Case No. PUE-2009-00029 on behalf of Old Dominion Power Company regarding class cost of service, jurisdictional separation, allocation of the revenue increase, general rate design, time of use rates, and excess facilities charge rider.
	Submitted testimony in Case No. PUE-2009-00065 on behalf of Craig-Botetourt Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.

EXHIBIT NO. GBG-3

Summary
Annual Transmission Revenue Requirement
Dixie Valley Transmission Line
Twelve Months ended December 31, 2009
50 % Equity Share @ ROE = 10.5 %

Ln	Cost Item	Source	Amount
	(a)	(b)	(c)
	Rate Base		
1	Plant In Service	Sch 3	$ 34,217,160
2	Accumulated Depreciation	Sch 3	($25,207,469)
3	Accumulated Deferred Income Taxes	Sch 3	(1,302,245)
4	Materials and Supplies	Sch 3	-
5	Prepaids	Sch 3	70,222
6	Cash Working Capital (one-eighth O&M)	Line 10 * 12.5%	33,434
7	**Net Rate Base**		$7,811,102
	Revenue Requirement		
8	Return on Rate Base (Schedule 2 for ROR)	Sch 2 * Line 7	$ 673,708
9	Income Tax (Schedule 2 for CIT & Equity Rate)	Sch 2 * Line 7	282,040
10	Operations & Maintenance	Sch 4	267,471
11	Depreciation	Sch 3	347,437
12	Taxes Other Than Income Taxes	Sch 4	1,240,054
13	**Annual Transmission Revenue Requirement**		$ 2,810,709
15	**Firm Load (MW)**		64
15	**Monthly Rate ($/MW/Month)**		$ 3,660

Development of Cost of Capital and Income Taxes

		Ratio	Cost	WtdCost
1	Long-term Debt	50.0%	6.75%	3.38%
2	Common Equity	50.0%	10.50%	5.25%
3	Total			8.63%
4	Tax on Equity			3.61%
5	Pre-tax Cost of Capital			12.24%
6				

	Income Tax Rates	
7	State	8.84%
8	Federal	35.00%
9	CIT	40.75%

Schedule No. 3

Development of Depreciation Expense, Accumulated Depreciation and Accumulated Deferred Income Taxes

@12/31/2009

Line	Plant in Service @ 12/31/2009 Property	Cost	Accumulated Book Depreciation	Life	Annual Depreciation Expense	Net Tax Balance	Average Remaining Life
	(a)	(b)	(c)	(d)	(e)	(f)	
1	Transmission Plant	34,078,980	25,124,561	2038	319,801	5,793,271	28 Yrs
2	T Line Study - 2007	138,180	82,908	2012	27,636	20,727	2 Yrs
3	General Plant						
4	Subtotal Depreciable	$34,217,160	$25,207,469		$347,437	$5,813,998	
5	Land	0	0		0	0	
6	Total	$34,217,160	$25,207,469		$347,437	$5,813,998	

Line	ADIT Calculation			
7	Net Tax Balance	(Line 10; col. e)	$ 5,813,998	(Line 6 Col. f)
8	Net Book Balance	(Line 10; col. d)	9,009,691	(Line 6 Col. b-c)
9	Difference		(3,195,692)	
10	Composite Tax Rate	Sch. 2	40.75%	
11	ADIT	(Line 14 * Line 15)	$ (1,302,245)	

Line		Amount	Labor Ratio (Sch 4 line 12)	Transmission Related
12	Materials & Supplies	0	8.44%	0

Line		Amount	Net Plant Ratio (Sch 3a line 4)	Transmission Related
13	Prepaids	543,206	12.93%	70,222

Terra-Gen Dixie Valley, LLC.

Transmission Line Financial Data

Schedule No. 3a

	TRANSMISSION LINE		Actual	Without Acquisition Adj	
	Cost Information:	Year	Amount	Gross Plant	Accum Depreciation
A	Original Construction Cost - 1988	1988	$ 33,960,339	$ 33,960,339	
	Estimated life at inception		30 years		
	Depreciation method		SL		
	Accum'd depr'n at time of acquisition by Caithness Energy - June 15, 2000		13,489,744		13,489,744
	Net book value at June 15, 2000	2000	$ 20,470,595		
B	Caithness acquisition cost valuation at June 15, 2000	2000	$ 12,497,000		
	SCADA system addition - 2005		118,641	118,641	
	T Line Study - 2007		138,180	138,180	
			$ 12,753,821		
	Estimated life for depreciation (based on term of first PPA, expiring June 30, 2018)		18 years		
	Depreciation method		SL		
	Accum'd depr'n at time of acquisition by TGP Dec 7, 2007		5,209,320		5,209,320
	Net book value at Dec 7, 2007	2007	$ 7,544,501		
C	Terra-Gen acquisition cost at Dec 7, 2007	2007	$ 18,449,590		
	Estimated life for depreciation (based on term of first PPA, expiring June 30, 2018)		10 Years, 8 mos		
	Depreciation method		SL		
	Accum'd depr'n at Dec 31, 2009		$6,425,497.37		6,425,497.37
	Net book value at Dec 31, 2009	2010	$ 12,024,093	34,217,160	25,124,561

1	Gross Plant	34,217,160
2	Accumulated Depreciation	25,124,561
3	Net Plant	9,092,599

Book Values without Acquisition Adjustments

		Gross	Accum Depr	Net	Net Plant Ratio
4	T Line	34,217,160	25,124,561	9,092,599	13%
5	Plant, Wells, Field	80,619,419	19,375,976	61,243,443	
6	Total			70,336,042	
7	Transmission Tax Basis with Acquistion Adj	18,449,590	6,425,497	12,024,093	
8	Transmission Tax Basis without Acquistion Adj	$ 6,859,012	$ 1,045,014	$ 5,813,998	

Schedule No. 4

Development of Expenses and Other Taxes

	Account		2009
	Transmission O&M		
1	6084	Business Travel	1,944
2	6162	General Repair & Maintenance	352,691
3	6638	Right of Ways	59,890
4	6715	Interconnection Fees & Facilities	178,250
5		Subtotal	592,775
	A&G		
6	7915	A&G	185,527
7	8153	Management Operations Fee	785,028
8		Total	970,555
9		Labor Allocator	8.44%
10		Transmission Related A&G	81,944
11	Total Transmission O&M and Transmission Related A&G		267,471

			Total W/O A&G	
12	Labor Transmisison	82,096	972,361	8.44%
13	Labor Production	890,265	1,313,540	67.78%
14	A&G Labor	341,179		
15	Total	1,313,540		

			2009	2010
16	6730	Property Tax	444,755	1,240,054