

**NEW YORK STATE BOARD ON ELECTRIC  
GENERATION SITING AND THE ENVIRONMENT**

**IN THE MATTER**

**of the  
Application by TransGas Energy Systems LLC for a  
Certificate of Environmental Compatibility and Public Need to  
Construct and Operate a 1,100 Megawatt Combined Cycle  
Generating Facility  
in the Borough of Brooklyn, New York**

**Case 01-F-1276**

**Rebuttal Testimony of**

**David A. Schlissel**

**and**

**Geoffrey L. Keith**

**On behalf of**

**The Brooklyn Borough President**

**and the**

**Greenpoint Williamsburg Waterfront Task Force**

**October 27, 2003**

1    **Q.    Mr. Schlissel, please state your name, position and business address.**

2    A.    My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy  
3        Economics, Inc, 22 Pearl Street, Cambridge, MA 02139.

4    **Q.    Mr. Keith, please state your name, position and business address.**

5    A.    My name is Geoffrey L. Keith. I am an Associate at Synapse Energy Economics,  
6        Inc., 22 Pearl Street, Cambridge, MA 02139.

7    **Q.    Have you previously submitted testimony in this case?**

8    A.    Yes. We filed direct testimony on September 29, 2003.

9    **Q.    What is the purpose of this rebuttal testimony?**

10   A.    In this rebuttal testimony we will respond to statements and information presented  
11        in the testimony filed by City of New York witness Chan and OCER witness  
12        Pechman.

13   **Q.    Are you reserving the right to supplement this rebuttal testimony?**

14   A.    Yes. Brooklyn/GWWTF submitted discovery to the General Contractors  
15        Association (“GCA”) based on the testimony that GCA filed on September 29,  
16        2003. The responses to this discovery were due on or about October 13, 2003.  
17        However, those responses we not provided until October 22, 2003. Therefore, we  
18        have not had any opportunity to review the answers and documents provided by  
19        GCA to support the statements in its direct testimony. If necessary, we will file  
20        rebuttal testimony to GCA by no later than Friday October 31, 2003. Counsel for  
21        GCA, Mr. Gerrard, has said that he has no objection if Brooklyn/GWWTF seeks  
22        an extension of the filing date.

1            **City of New York witness Joe Chan**

2    **Q.    Please comment on Mr. Chan’s statement the construction of new capacity is**  
3            **necessary to meet the City’s growing energy needs.**<sup>1</sup>

4    A.    The question that Mr. Chan should be addressing is not whether new generating  
5            capacity is needed in New York City. The real question for this proceeding is  
6            whether the additional capacity that would be provided by the proposed TGE  
7            facility is necessary to meet New York City’s energy needs. As we have discussed  
8            in detail in our September 29, 2003 Direct Testimony the answer to that question  
9            is no. There is a substantial amount of new generating capacity that is already  
10           under construction in New York City or that is likely to be built by 2008.<sup>2</sup> When  
11           these facilities are completed and available there will be more than enough  
12           generating capacity to meet New York City’s energy needs in 2008 and  
13           subsequent years even if the TGE facility is not built.

14           In addition, the Siting Board and DEC power plant approval processes don’t  
15           permit parties, like Brooklyn/GWWTF, to present evidence on renewable or  
16           demand-side alternatives for meeting New York City’s energy needs. Therefore,  
17           we are not able to examine the extent to which these alternatives can meet New  
18           York City’s energy needs or to compare the environmental and economic benefits  
19           of such alternatives against the benefits claimed for TGE’s proposed facility.

20   **Q.    If additional capacity is needed in New York City, beyond that already**  
21           **certified by the Siting Board, is Mr. Chan correct that the proposed TGE**  
22           **facility “has been proposed for the wrong location”?**<sup>3</sup>

23   A.    Yes. We believe that the repowering existing older facilities should be the first  
24           priority for new generating capacity in New York City. Such power plant

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<sup>1</sup> Direct Testimony of Joe Chan, at page 3, lines 11-13.

<sup>2</sup> Direct Testimony of David Schlissel and Geoffrey Keith, at pages 38, 39, and 41-45.

<sup>3</sup> Direct Testimony of Joe Chan, at page 3, lines 14-16.

1            repowerings can provide definitive environmental benefits for the communities  
2            around the older, inefficient generating units, as well as for the city, state, and  
3            region.

4            For example, according to Con Edison, the Hudson Avenue Station can be  
5            expected to emit 836 tons of NO<sub>x</sub> and 678 tons of SO<sub>2</sub> in a typical year.<sup>4</sup> By way  
6            of contrast, based on TGE's projected emissions for its proposed project, a new  
7            500 MW combined cycle facility installed as part of a repowering of the Hudson  
8            Avenue Station could be expected to emit only about 85 tons of NO<sub>x</sub> and 36 tons  
9            of SO<sub>2</sub> per year, even if it operated for all 8,760 hours of the year.<sup>5</sup>

10           Thus, a repowered Hudson Avenue Station could operate at a much higher  
11           capacity factor (e.g., 70 percent versus 21 percent), and thereby generate  
12           significantly more power than the existing Hudson Avenue Station, while  
13           reducing NO<sub>x</sub> emissions into the local community by 90 percent and SO<sub>2</sub>  
14           emissions by 96 percent. The repowered Hudson Avenue Station also could be  
15           expected to produce additional emission reductions in other locations through the  
16           displacement of power that would otherwise be produced at older, less efficient  
17           and dirtier generating facilities.

18           **Q.    Are you formally proposing the site of the existing Hudson Avenue Station as**  
19           **an alternative location for the TGE facility?**

20           A.    No. We attempted to develop information about the possible repowering of the  
21           Hudson Avenue Station but Con Edison refused to answer any of our questions.  
22           We also don't want to suggest that a power plant be built or repowered in another  
23           community without input from the residents of that community. Nevertheless, the  
24           fact that new generating capacity, beyond that already certified by the Siting  
25           Board, is not needed to satisfy reliability concerns in New York City until after  
26           2010, allows the Siting Board the opportunity to require TransGas to explore the

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<sup>4</sup>           *Projected Emissions from the Con Edison Steam System*, March 23, 2001, filed as Exhibit Kurtz-1  
in Siting Board Case No. 99-F-1314, at Table 3-1.

<sup>5</sup>           Data taken from Table B-1 in the TGE Air Permit Application and scaled to reflect a 500 MW  
facility.

1            possible repowering the Hudson Avenue Station as a potential site for its  
2            proposed facility.

3            **Testimony of OCER witness Pechman**

4            **Q.    Does the Direct Testimony of OCER witness Pechman offer any insights into**  
5            **the likely impact that the proposed TGE facility would have on capacity**  
6            **prices in New York City?**

7            A.    Yes. The Table on page 25 of Dr. Pechman’s testimony offers significant insight  
8            into the magnitude of the capacity savings that the proposed TGE facility can be  
9            expected to produce.

10           When considering the potential capacity cost savings presented on this Table,  
11           however, it is important to remember three facts: (1) at present 950 MW of new  
12           generating capacity is under construction in New York City and will be in service  
13           before the proposed TGE facility<sup>6</sup>; (2) another 1,000 MW of additional capacity  
14           from the Astoria Energy facility is likely to be completed and in operation before  
15           TGE – this means that a total of 1,950 MW of additional capacity is likely to be  
16           on-line before TGE<sup>7</sup>; and (3) at present, 92.5 percent of the capacity requirements  
17           are under contract – therefore, only 7.5 percent of those requirements are eligible  
18           for any price reductions resulting from the availability of additional capacity and  
19           changes in prices along the demand curve.

20           Dr. Pechman’s Table on page 25 of his testimony shows that the annual capacity  
21           cost savings from TGE during summer months would be only \$6 to \$9 million if  
22           you consider that (a) 90% to 100% of requirements are under contract and (b)  
23           another 1,500 MW of capacity, beyond TGE, is available.

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<sup>6</sup>           East River Repowering Project, Ravenswood Cogeneration facility, and NYPA Poletti Expansion facility.

<sup>7</sup>           Astoria Energy, LLC, the developer of the proposed facility has entered into a long-term contract to sell 500 MW of power to Con Edison beginning in 2006. In addition, on October 1, 2003, Astoria Energy submitted a compliance filing schedule to the Siting Board that clearly stated that it “intends to construct a 1000 MW facility, as described in the [Siting Board’s] Order, pursuant to the construction schedule set forth in the Application.”

1            Unfortunately, Dr. Pechman's Table only considers the effect of adding another  
2            1,500 MW capacity, in addition to TGE, on capacity prices, not the full 1,950  
3            MW of new capacity that can reasonably be expected to be available by 2008.  
4            The capacity costs on the current demand curve, used by Dr. Pechman and TGE  
5            witness Younger, clearly show that the additional capacity from the proposed  
6            TGE facility really can not be expected to provide any further capacity cost  
7            savings during summer months beyond those that will result from the 1,950 MW  
8            of capacity from the other new generating facilities that will be added in New  
9            York City ahead of TGE. Consequently, even the \$6 to \$9 million figures on Dr.  
10           Pechman's Table overstate the potential capacity savings that would be  
11           attributable to the proposed TGE facility.

12    **Q.    Is it reasonable to believe that the proposed TGE facility would reduce**  
13           **capacity prices in winter months?**

14    A.    No. There is even more generating capacity available in winter months than in  
15           the summer. Therefore, it is less likely that the capacity from the proposed TGE  
16           facility would reduce capacity prices during winter months.

17    **Q.    Is Dr. Pechman's analysis of the likely impact of TGE on future capacity**  
18           **prices in New York City more reasonable than the estimates presented by**  
19           **TGE witness Younger?**

20    A.    Yes. The Table on page 25 of Dr. Pechman's testimony reflects (1) that there will  
21           be other generating units added to the electric system in New York City before  
22           TGE and (2) that not all of the capacity in the City would be affected by changes  
23           in the capacity values along the Demand Curve. However, Mr. Younger merely  
24           looks at the existing Demand Curve and calculates the impact that TGE's 1,100  
25           MW of capacity would have if it were the only new facility added to the existing  
26           capacity in New York City. He completely ignores the additional capacity that  
27           will be added in New York City by 2008.

28           Mr. Younger also assumes that the \$/kw-month capacity price reduction he  
29           calculates will be applied to all of the capacity in New York City. In so doing, he  
30           completely ignores the fact that, at present, more than 90 percent of requirements

1            in New York City are under contract or are met by capacity from the facilities  
2            divested by Con Edison. Consequently, less than ten percent of the capacity in  
3            New York City would be affected by his claimed changes in the prices along the  
4            Demand Curve due to TGE.

5    **Q.    Please comment on Dr. Pechman’s claim that “over time, the proportion, of**  
6    **capacity transactions that reflect the Demand Curve Mechanism will**  
7    **increase, and will likely reach 100% of all transactions at some point in the**  
8    **future.”<sup>8</sup>**

9    A.    It is certainly correct that “over time” more capacity transactions will reflect the  
10       Demand Curve Mechanism. However, “over time” may be a very long time. In  
11       fact, there is no evidence that this will happen at any time in the foreseeable  
12       future.<sup>9</sup>

13       First, the more than 5,000 MW of capacity divested by Con Edison is subject to a  
14       \$105/kw-year price cap. There is no evidence when, if ever, this cap will be  
15       removed.

16       At the same time, some of Con Edison’s contracts for power are very long term.  
17       For example, Con Ed’s contract for approximately 750 MW of power from the  
18       Linden Cogen facility is not due to expire until 2017. Con Ed’s recent contract  
19       for power from the Astoria Energy facility is due to begin in 2006 and will be in  
20       effect for ten years. Con Ed also has a long-term contract for power from the  
21       Brooklyn Navy Yard facility.

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<sup>8</sup> Direct Testimony of Carl Pechman, at page 25, lines 7-10.

<sup>9</sup> Dr. Pechman has acknowledged that only in the “long run” will all long-term and bi-lateral transactions reflect the expected value of the demand curve mechanism. (OCER responses to Interrogatories Brooklyn/GWWTF-5(b) and 6) He also has agreed that “it is impossible to forecast the year at which the proportion of capacity transactions that reflect the demand curve will reach 100%.” (OCER response to Interrogatory Brooklyn/GWWTF-7(b))

1    **Q.    Dr. Pechman has testified that over time, as the Demand Curve is modified,**  
2            **all else being equal, the estimates of capacity value would increase. Has he**  
3            **also acknowledged that there are circumstances in which the values on the**  
4            **Demand Curve could be decreased?**

5    A.    Yes. Dr. Pechman has agreed that the addition of new transmission lines into  
6            New York City should decrease the capacity values on the Demand Curve.<sup>10</sup> Dr.  
7            Pechman also explained that “Whether it actually does depends upon a number of  
8            factors including the effect of the new line on in-city capacity requirements, and  
9            the accounting of capacity on the other side of the transmission line.

10   **Q.    Have proposals been advanced to build new transmission lines into New**  
11           **York City?**

12   A.    Yes. We are aware of at least four proposals to add new transmission lines and  
13            increase the amount of capacity that can be transmitted into New York City.

14           Pegasus Power Systems’ Niagara Reinforcement Project would move 1,200 MW  
15           to 1,800 of power from northern New York, Ontario, or Quebec to New York  
16           City and another 1,200 MW to PJM.<sup>11</sup> Conjunction LLC also has proposed a  
17           2,000 MW transmission line, the Empire Connection, from Albany County, to  
18           New York City.<sup>12</sup> The proposed in-service date for this line would be 2006.  
19           Finally, proposals have been advanced to add cables that would carry 600 MW of  
20           power from Sayreville, NJ, to Con Edison’s West 49<sup>th</sup> Street Substation and  
21           another 600 MW of power to Long Island. The fourth proposal is PSEG Power’s  
22           Cross Hudson Project that already has been approved by the Public Service  
23           Commission.

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<sup>10</sup> OCER response to Interrogatory Brooklyn/GWWTF-7(c).

<sup>11</sup> “New proposed merchant line would move up to 3,000 MW to New York City, PJM,” Electrical Utility Week, October 13, 2003, at page 5.

<sup>12</sup> “New Merchant T-Line Unveiled in NY,” The Electricity Daily, September 15, 2003.



1    **Q.    Do you agree with Dr. Pechman that modeling local reliability requirements**  
2    **would have increased the modeled benefits from TGE?**

3    A.    Yes, but there probably would not be a significant impact. It may be true that  
4    modeling local reliability requirements (i.e., spinning reserve requirements,  
5    second order contingency commitment and thunderstorm alerts) based on today’s  
6    conditions would have “resulted in modeling an increased need for generation  
7    within NYC” that “would have resulted in increasing the modeled benefits from  
8    TGE.” However, by 2008, there will be substantially more capacity in New York  
9    City. In fact, as shown on Tables 5, 6 and 7 in our Direct Testimony, it is likely  
10   that there will be enough generating capacity in New York City by 2008 to meet  
11   90 percent or more of projected load requirements. At the same time, there may  
12   be additional transmission links with New Jersey, PJM, and, possibly, upstate  
13   New York. Under these changed circumstances, the modeling of local reliability  
14   requirements may not have a major effect on the results of the production  
15   simulation analyses.

16   **Q.    Has Dr. Pechman or OCER attempted to examine what the estimated**  
17   **benefits from the proposed TGE facility would be if the modeling reflected**  
18   **local reliability requirements?**

19   A.    No.<sup>13</sup>

20   **Q.    Has Dr. Pechman or OCER investigated, examined or quantified the**  
21   **operational benefits that the proposed TGE facility would provide for the**  
22   **electric and/or steam systems in New York City?**

23   A.    No.<sup>14</sup>

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<sup>13</sup> OCER response to Interrogatory Brooklyn/GWWTF-11.

<sup>14</sup> OCER response to Interrogatory Brooklyn/GWWTF-9.

1    **Q.    Has Dr. Pechman performed any analysis of whether TransGas Energy will**  
2            **be able to exercise market power in New York City if its proposed facility is**  
3            **built?**

4    A.    No.<sup>15</sup>

5    **Q.    Does this complete your rebuttal testimony at this time?**

6    A.    Yes. However, as we noted earlier, we intend to submit rebuttal testimony to the  
7            Direct Testimony of GCA's witnesses by October 31, 2003.

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<sup>15</sup> OCER response to Interrogatory Brooklyn/GWWTF-3(b).