

STATE OF MARYLAND
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of the Application of)
Baltimore Gas and Electric Company)
for Revisions in its Electric and Gas)
Base Rates)

Case No. 9230

SURREBUTTAL TESTIMONY OF
PAUL CHERNICK
ON BEHALF OF
THE OFFICE OF PEOPLES COUNSEL

Resource Insight, Inc.

AUGUST 30, 2010

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1 **I. Introduction**

2 **Q: Are you the same Paul Chernick who filed direct and rebuttal testimony in**
3 **this case?**

4 A: Yes.

5 **Q: What are the subjects of your surrebuttal testimony?**

6 A: I respond to the testimony of other parties on three subjects:

- 7 • Mr. Pleat's and Mr. Phillips's rebuttal testimonies on the allocation of the
8 cost of the Spring Gardens environmental remediation.
- 9 • Mr. Phillips's testimony regarding the allocation of gas mains using the
10 minimum system approach.
- 11 • Mr. Phillips's rebuttal to my direct testimony regarding the adjustments
12 necessary to other mains allocations if customers served by a subset of gas
13 mains are exempted from paying for a load-based share of all mains.

14 **II. Environmental Remediation**

15 **Q: What did your direct testimony propose for the allocation of the Spring**
16 **Gardens environmental remediation?**

17 A: I observed that these costs are the result of BG&E's past gas production, and is
18 therefore energy-related. I also explained the following points:

- 19 • Mr. Pleat's recommended gas COSS would allocate these costs in pro-
20 portion to allocated distribution plant, which is the sum of accounts
21 allocated on NCP (mostly mains) and various accounts assigned to customer

1 classes based on the number and type of attachment equipment (mostly
2 services and meters).¹

- 3 • The Company's current proposal differs from the allocation in Case No.
4 7036, BG&E's previous rate case, which allocated the cleanup costs only
5 on NCP.
- 6 • The cleanup costs are not related to peak loads, past or present.
- 7 • Meters, services, and the other customer-classified costs have nothing to do
8 with the costs of Spring Gardens remediation.

9 **Q: What is the significance of the different approaches to allocation of the**
10 **Spring Gardens remediation costs?**

11 A: The Company's cost of service includes \$1,184,940 in amortization of Spring
12 Gardens costs and \$4,972,884 of rate base for the unamortized balance of those
13 costs. While these amounts are small in the context of the Company's total
14 claimed \$44 million in depreciation and amortization and \$842 million rate
15 base, they are not trivial.

16 The differences among the allocators used or proposed for these costs are
17 also significant, as shown in Table 1S. Compared to the NCP allocator used in
18 Case No. 7036, the allocators proposed by BG&E in this case would shift even
19 more of the cleanup costs to residential customers.

¹This description in my direct inadvertently conflated the somewhat different allocators BG&E used for the unamortized plant in rate base (allocated on distribution plant) and the amortization (allocated on total plant, which also includes buildings, computers and other assets).

1 **Table 1S: Past and Proposed Allocators for Spring Gardens Cleanup Costs**

Allocator	Used by	Residential D	General Service C	Interruptible ISS+IS	Point SP
<i>NCP</i>	BG&E Case 7036	0.54396	0.30342	0.10403	0.04856
<i>Total Throughput</i>	OPC Case 9230	0.41846	0.28283	0.20698	0.09164
<i>Total Gas Plant in Service</i>	BG&E Case 9230, Amortization	0.62940	0.28281	0.06041	0.02735
<i>Total Distribution Plant</i>	BG&E Case 9230, Rate Base	0.62095	0.28598	0.06486	0.02819

2 **Q: How does Mr. Pleat’s rebuttal respond to your direct testimony on the**
 3 **allocation of the cost of the Spring Gardens environmental remediation?**

4 A: Mr. Pleat (rebuttal p. 16) argues, “As there are no natural gas fuel related stocks
 5 included in these accounts, there is no basis to classify and allocate these cost
 6 components as energy-related.” He also says (ibid.), “The BGE Recommended
 7 Gas Cost of Service Study allocates these environmental cleanup cost com-
 8 ponents in similar fashion as its maintenance costs, and that is on corresponding
 9 distribution plant allocations.”

10 **Q: What is your response to Mr. Pleat’s rebuttal testimony on this issue?**

11 A: Mr. Pleat implies that only current “natural gas fuel related stocks” should be
 12 allocated on energy. That assertion makes no sense. BG&E’s recommended
 13 COSS allocates Account 871 (Distribution Load Dispatching) and the Franchise
 14 Therm Tax on total throughput, even though neither of those accounts is a
 15 natural-gas fuel-related stock. Costs should be allocated based on causation:
 16 dispatching costs, the therm tax and the environmental cleanup all result from
 17 energy use and should be allocated on energy. The environmental cleanup is a
 18 deferred fuel cost resulting from commodity send-out. Those costs have been
 19 deferred for decades, but they all originated with BG&E’s commodity send-out.

20 Similarly, Mr. Pleat’s claim that the environmental cleanup costs are some-
 21 how similar to the Company’s costs of maintaining its distribution plant is

1 specious. The environmental contamination was caused by production, not by
2 distribution. While distribution maintenance is mostly related to preserving the
3 ability to meet peak loads, the environmental contamination was caused by the
4 amount of commodity produced at the site over more than a century of operation.

5 Nothing in Mr. Pleat's rebuttal refutes the simple fact that the environment-
6 al cleanup costs result entirely from total commodity consumption of BG&E
7 customers over time and should thus be allocated on throughput.

8 **Q: Is Mr. Phillips's response on this point any more compelling?**

9 A: No. He argues, "There is no showing that current gas usage is in anyway related
10 to distilling coal decades ago... environmental damage is not associated with
11 current gas usage" (rebuttal, p. 20). While that is true, *no* current customer
12 activities are directly related to gasifying coal decades ago. Certainly, *current*
13 peak demands and number of customers did not determine the amount of coal
14 gasified or the extent of the contamination. Mr. Phillips's argument does not
15 establish that any other customer characteristic is more related to the clean-up
16 cost than current energy is. Nor does he dispute that past energy use caused the
17 contamination and hence the costs.

18 Mr. Phillips also complains (rebuttal, p. 20) that "Current consumers of gas
19 were most likely not even customers of BGE when the Spring Garden facility
20 was in operation." That criticism is equally applicable to any allocation to
21 current customers, based on energy, peak use, the costs of meters or any other
22 measure. Unfortunately, there is no way to back-bill the customers served by
23 coal gasification in the years 1855 through 1970, so Mr. Phillips's argument can
24 only lead to the conclusion that no current customer should pay for the cleanup.
25 I doubt that BG&E would appreciate that outcome.

1 In any case, the Sparrows Point facility (then owned by Bethlehem Steel)
2 was almost certainly a customer of BG&E prior to 1970. Just as Severstal is
3 liable for a share of regulatory assets and deferrals created before it purchased
4 Sparrows Point in 2008, it is liable for a share of the Spring Gardens cleanup
5 costs. The same is true for all customers, whether they were taking gas service
6 in 1970 or not.

7 **Q: What is your final recommendation regarding the allocation of the Spring**
8 **Gardens cleanup?**

9 A: Those costs should be allocated on throughput.

10 **III. Minimum-System Mains Allocation**

11 **Q: What is your response to Mr. Phillips’s testimony regarding the allocation**
12 **of gas mains using the minimum-system approach?**

13 A: My response comprises the following four points:

- 14 • Mr. Phillips’s proposed minimum-system allocation could and should have
15 been presented in his direct testimony.
- 16 • The minimum-system approach is inherently inappropriate and unreliable
17 and does not reasonably track the causes of distribution costs, as I
18 explained in my rebuttal testimony (pp. 6–11).
- 19 • Mr. Phillips’s selection and pricing of the minimum-size main for his
20 analyses contain various errors, overstating the costs of the minimum
21 system.
- 22 • The 2-inch mains assumed in Mr. Phillips’s proposed minimum-system
23 allocation could supply the vast majority of residential load, but only a
24 small portion of other class loads, leaving the remaining costs to be
25 allocated overwhelmingly to the classes with greater load per customer.

1 **A. *Timing of Mr. Phillips's Proposal***

2 **Q: Is there any reason that Mr. Phillips could not have introduced his**
3 **minimum-system proposal in his direct testimony?**

4 A: Not that I can identify. The data he uses to derive the minimum in his Exhibit
5 NP-23 is from DR OPC 5-10, Attachment 1, and from DR SP 1-16. Both of
6 these responses were available before the filing of intervenor direct testimony; I
7 cited both of them in my direct testimony.

8 The only other utility-specific information Mr. Phillips relied on in his
9 minimum-system proposal was a pair of discovery responses to Sparrows
10 Point's fourth set of questions to BG&E, on which Mr. Phillips bases his choice
11 of the minimum main size. I do not see why he could not have requested that
12 information earlier if he wanted to conduct a minimum-system analysis.

13 Nor did Mr. Phillips's offer his gas-minimum-system proposal in response
14 to other information or proposals filed in the direct testimony of other inter-
15 venors. Rather, Mr. Phillips inappropriately uses Mr. Campbell's conceptual dis-
16 cussion of a minimum-system allocation for electric distribution to introduce his
17 much-more-specific proposal for a minimum-system allocation for gas
18 allocation.

19 **Q: What problems are created by Mr. Phillips's introduction of the minimum-**
20 **system allocation in the rebuttal phase of this case?**

21 A: Had Mr. Phillips proposed his minimum-system analysis in his direct, the
22 schedule would have allowed for sufficient time for discovery and analysis. The
23 minimum-system approach raises a wide range of issues regarding the history of
24 the system, the origin of its current configuration (such as the reasons for the
25 various parallel configurations I discuss on page 10), the conditions under which
26 mains of less than 2 inches diameter are inadequate and must be replaced or

1 supplemented, the distribution of customers on the various parts of the system,
2 the load-carrying capacity of various size lines for various pressures and
3 distances, the extent to which BG&E would have extended mains to serve
4 minimal-size customers, the length of mains funded by customer contributions,
5 annual escalation in the costs of mains materials and installation, and anomalies
6 in the cost differences between mains of different sizes. Fully responding to Mr.
7 Phillips's proposal would have required discovery (in some cases, multiple
8 rounds) on BG&E regarding each of these items.

9 Correcting Mr. Phillips's analysis would require a large number of
10 adjustments, using the data from BG&E's responses and other sources. The
11 compressed schedule between rebuttal and surrebuttal simply does not provide
12 enough time for that analysis.

13 Mr. Campbell's discussion of the use of a minimum-system approach for
14 electricity and Mr. Baudino's discussion of the use of a minimum-system
15 approach for gas were conceptual, suggesting the direction of biases in the
16 various COSS results, and that the COSS results should be used as only "a very
17 rough guide" to revenue allocation (Baudino Direct, p. 17). Mr. Campbell also
18 indicated that he might file minimum system computations in his rebuttal
19 testimony, but ultimately he elected not to do so.²

²Mr. Campbell also could have filed a full minimum-system analysis in his direct testimony. Were such an analysis to be presented by Mr. Campbell in his surrebuttal testimony, it will be effectively unreviewable and thus useless to the Commission.

1 **B. *Conceptual Basis of a Minimum System***

2 **Q: What are the basic conceptual problems with the minimum-system**
3 **approach?**

4 A: There are a number of conceptual problems with the minimum system approach,
5 of which I will highlight just a few. First, the minimum-system approach
6 assumes that the number of feet of main is determined by the number of
7 customers. In reality, the length of the area-spanning system is not caused by or
8 proportional to class customer number.

9 Second, the method assumes that a minimum-size main can be meaning-
10 fully identified. As I said in my rebuttal testimony (p. 15), “The minimum gas-
11 distribution system is a propane tank.”

12 Third, the minimum-system approach assumes that mains costs, in dollars
13 per foot, vary only with diameter. In fact, the average cost of smaller mains on
14 BG&E’s system is frequently higher than that of larger mains. For example, ¾-
15 inch mains are more expensive than 1¼-inch mains, 3-inch mains cost more
16 than 10-inch mains, and 2-inch mains cost more than both 3-inch and 10-inch
17 mains. (See Table 2 of my direct testimony for the costs per foot in nominal
18 dollars.) These anomalies are likely to represent differences in vintage, system
19 pressure, and locational differences in installation costs (e.g., soil consistency,
20 amount of other underground equipment), rather than size-related cost
21 differences.³

³At least some of these differences survive the simple inflation adjustments I have been able to make under the current time constraints.

1 **C. Identification of the Minimum System**

2 **Q: Has Mr. Phillips properly identified the minimum BG&E's main system?**

3 A: No. Mr. Phillips assumes that the minimum system would consist of the existing
4 37,362,882 feet of mains, but all with a 2-inch diameter. He bases this assump-
5 tion on the observations that 2 inches "is by far the most commonly installed
6 pipe size on the system" (Phillips rebuttal, p. 8), that ¾-inch "is no longer used
7 as part of standard installations, and that "1¼" main is used primarily in specific
8 situations, such as dead-end streets, where future expansion of that particular
9 main segment is highly unlikely and the customer load is limited" (ibid., p. 9).
10 Mr. Phillips has overstated both the length and the diameter of mains for a
11 minimum system.

12 **Q: How did Mr. Phillips overstate the length of the minimum system?**

13 A: The actual BG&E system is designed to carry actual demands (as well as past
14 and sometimes forecasted demands) and to provide economic access to low-cost
15 gas supply. Hence, the BG&E system includes the following infrastructure:

- 16 • About 14 miles (or 75,000 feet) of OHP line from the Tuscarora gate station
17 on the Dominion transmission pipeline (BG&E's only connection to
18 Dominion) to BG&E's territory.
- 19 • Loops, such as that across the Patapsco River, to allow transfers of
20 volumes between parts of the system.
- 21 • At least 50 miles (250,000 feet) of situations in which mains (of the same
22 pressure or others) parallel one another, apparently to increase capacity.
- 23 • Many miles of OHP lines from various gate stations that appear primarily to
24 inject gas into the integrated system, do not connect to other mains for
25 miles from the gate station, and may not be directly connected to any
26 customers.

1 **Q: How did Mr. Phillips overstate the size of the minimum-system mains?**

2 A: Mr. Phillips overstates the diameter of the hypothetical minimum-system mains
3 in three ways. First, he applies the 2-inch diameter to all mains, including those
4 smaller than 2 inches. It makes no sense to define the minimum mains on the 6.2
5 million feet of streets with ½ to 1½ inch mains as being larger than what is
6 currently in place.

7 Second, Mr. Phillips's choice of the 2-inch diameter as the current
8 minimum-diameter main is arbitrary. He quotes BG&E's statement that "1¼"
9 main is used primarily...where...customer load is limited" (SP DR 4-16). That
10 same response cites to SP DR 2-4, a 2004 Gas Distribution Standard, which
11 states that 1¼-inch "is the smallest size main to be installed" on the OHP system
12 and that 1¼-inch main can carry "the demand of 45 individual houses or 60
13 apartments for main lengths not to exceed 1,000 feet" on the HP system. In
14 other words, at least since 2004, 1¼-inch main has been BG&E's minimum
15 main.

16 Third, the minimum main at the time much of the existing mains were
17 installed was even smaller. Mr. Phillips also cites SP DR 4-14, which states that
18 "Historically, BGE used ¾" main as its minimum diameter main on the gas
19 distribution system. The majority of ¾" main was installed in the 1960s."
20 Indeed, SP DR 1-16 indicates that BG&E's investments in ¾-inch main
21 exceeded that in 1¼-inch main in almost every year through 1973, as shown in
22 Table 2S below.

1 **Table 2S: Cost of Small Mains Installed by Diameter and Year**

	0.75-Inch	1.25-Inch
1964	\$237,943	\$57,871
1965	138,339	37,450
1966	129,299	49,008
1967	155,834	47,455
1968	157,675	92,615
1969	136,730	115,243
1970	99,771	92,978
1971	132,011	139,736
1972	184,621	126,263
1973	233,673	183,192

2 **Q: How do these length and size errors affect Mr. Phillips's estimate of the cost**
3 **of the minimum system?**

4 A: To determine how much the length error overstates the cost of the system, Mr.
5 Phillips would need to redesign his hypothetical system to eliminate demand-
6 related redundancy. This process would be conceptually complex, given
7 historical contingencies and the fact that some customers are probably
8 connected to facilities that would never have been built but for demand
9 considerations.

10 As shown in Table 2 of my direct testimony, the embedded cost per foot of
11 the 1½-inch mains is \$1.30, about one eighth of the cost of the 2-inch mains.
12 Using the nominal cost of the smaller mains would reduce Mr. Phillips's
13 customer-related plant by 87%.

14 **Q: Did Mr. Phillips make other errors related to the cost of his hypothetical**
15 **minimum system?**

16 A: Yes. He failed to correct for the differing vintages of the actual mix of mains and
17 the 2-inch mains on the BG&E system. As shown in Table 2 of my direct
18 testimony, the dollar-weighted average vintage of the 2-inch mains is August

1 1995, more than three years later than the average vintage of the mains overall.⁴
2 Inflation from 1992 to 1995 was about 9%; assuming that the average foot of 2-
3 inch main was installed three years after the average foot of actual main, and
4 that the 1992–1995 inflation is representative of inflation during that lag, the
5 vintage-adjusted cost of 2-inch main would be about \$9.50/ft.

6 **Q: What are the effects of Mr. Phillips’s errors on the percentage of plant that**
7 **would be allocated on customer number in a minimum-system approach?**

8 A: Mr. Phillips would classify 60% of mains plant as customer-related. Using the
9 inflation-adjusted cost of 2-inch mains, rather than nominal cost, would reduce
10 that classification to 55%. Using the inflation-adjusted costs of the less-than-2-
11 inch mains just for the existing length of those smaller mains cuts the customer
12 percentage to 48%. Using the cost of 1¼-inch mains rather than 2-inch mains as
13 the minimum system for all mains would reduce that classification to 8%.⁵

14 ***D. Demand Served by the Minimum System***

15 **Q: Does Mr. Phillips properly reflect the demand-serving capacity of the lines**
16 **whose costs he allocates on customer number?**

17 A: No. He ignores the fact that 2-inch mains (or even 1¼-inch mains) carry a
18 substantial amount of gas. As I noted above, BG&E plans for the 1¼-inch mains
19 to carry the demand of 45 houses or 60 apartments for up to 1,000 feet on the
20 HP system. The larger 2-inch mains would serve more customers over a longer
21 distance, especially at OHP or higher pressures.

⁴In my direct testimony, I inadvertently mislabeled the table as length-weighted. I do not believe the length of mains by vintage and diameter is available in the record.

⁵The average dollar of 1¼-inch main was installed in January 1992, just a few months before the system average of June 1992. (See Table 2 of my direct.)

1 **Q: How would the demand-serving capacity of the lines allocated on customer**
2 **number affect the allocation of mains costs by class?**

3 A: Any load that would be served by the mains allocated to a class on the basis of
4 customer number should be netted out of the class demand used in allocating the
5 above-minimum demand-classified portion. Hence, if the minimum-system
6 approach is applied logically (or as much so as possible given its inherently
7 arbitrary nature), the classes with many customers (D and to a lesser extent C)
8 will be allocated less of the above-minimum system, while those with few
9 customers (particularly SP) will be allocated more of the above-minimum
10 system.

11 Determining how much average demand the hypothetical minimum system
12 could carry to the actual distribution of customers at hypothetical pressure levels
13 would be difficult.⁶ The minimum system would carry a large amount of load of
14 some customers (all the load of many residential customers) close to pipelines
15 and some of the load of customers further away.

16 If the minimum system is based on the costs of the inflation-adjusted 1¼-
17 inch mains and if those mains would carry just 0.053 therms/hour (less than
18 14% of the average residential NCP), the mains allocation under a minimum-
19 system analysis would be essentially the same as BG&E's recommended COSS,
20 as shown in Table 3S below. If the minimum-system load-carrying capacity is
21 greater than 0.053 therms/hour, then following the logic of the minimum-system
22 approach that would result in a smaller mains allocation to residential customers
23 and greater allocations to SP than does BG&E's preferred COSS.

⁶I certainly cannot perform that analysis on the schedule allowed for surrebuttal.

Table 3S: Allocation of Mains, using 1¼ -Inch Minimum System and Excess Demand

1

		Total Company	Total Residential D	General Service C	Small Interruptible ISS	Large Interruptible IS	Sparrows Point SP
<i>Distribution Allocator—NCP (Therms per Hour)</i>	NCP	430,628	234,245	130,662	3,788	41,011	20,910
<i>Average Annual Number of Customers</i>	CUST	650,174	606,230	43,777	62	104	1
<i>Mains Investment, Account 376</i>	NCP	\$625,453,639	\$340,222,623	\$189,776,381	\$5,501,775	\$59,565,284	\$30,370,147
<i>“Minimum” Customer Component</i>	8%	\$50,036,291	\$46,654,435	\$3,369,004	\$4,771	\$8,004	\$77
<i>NCP Net of 0.053 Therm/Hour per Customer from Minimum System</i>		396,169	202,115	128,342	3,785	41,005	20,910
<i>Remaining Cost Allocated on Excess Demand</i>	92%	\$575,417,348	\$293,562,679	\$186,410,725	\$5,497,127	\$59,558,629	\$30,370,758
<i>Minimum + Excess Demand</i>			\$340,217,115	\$189,779,729	\$5,501,898	\$59,566,632	\$30,370,835
<i>Difference from BGE</i>			-\$5,508	\$3,348	\$123	\$1,348	\$689

1 **Q: What do you recommend regarding the use of a minimum-system allocation of gas mains?**
2

3 A: As I explained in my direct testimony, the minimum-system is not a logical,
4 appropriate, or consistent method for allocating distribution costs, whether gas
5 or electric. As I explain above, Mr. Phillips selected the wrong minimum mains
6 size and failed to account for the demand-related lengths of mains, for inflation
7 and for the load-carrying capacity of the hypothetical minimum system.

8 The minimum system should not be used in allocating distribution costs.
9 Were it to be used, however, considerable effort would be required (mostly by or
10 with the cooperation of the utility) to deal with issues of demand-related mains
11 footage, configuration of the minimum system, correcting prices to reflect the
12 vintaging of mains investment, and estimating the average customer load that
13 could be met by the hypothetical minimum system. The Commission should not
14 accept an ad hoc minimum-system analysis, such as that introduced by Mr.
15 Phillips in his rebuttal testimony.

16 **Q: What is your recommendation regarding the use of the minimum system approach for classifying and allocating the costs of gas mains?**
17

18 A: The Commission should reject the use of the minimum-system allocation for gas
19 distribution (and for electric distribution too).

20 If, however, the Commission sees any merit in the minimum-system
21 approach, it should instruct BG&E to study the approach and file the most
22 reasonable version of a minimum-system allocation as an alternative cost-
23 allocation study in BG&E's next rate case. That timing would allow the
24 Commission and the parties to fully analyze the results and review the options.

1 **IV. The Implications of Selective Allocation**

2 **Q: Please describe this issue.**

3 A: In essence, Mr. Phillips claims that Sparrows Point uses and benefits from only
4 one kind of main and should be allocated zero of all other mains. In various
5 places, Mr. Phillips makes that claim with respect to mains of less than 12
6 inches in diameter, with pressures below the HP level, or not located on a direct
7 path from the Manor Gate Station to Sparrows Point.⁷

8 All of Mr. Phillips's proposed approaches (at least as he would implement
9 them) would reduce the costs allocated to Sparrows Point and increase the costs
10 allocated to all other customers.

11 Mr. Phillips asks for special treatment only for Sparrows Point, which in
12 itself is unfair and unreasonably discriminatory. As I explained in my direct
13 testimony, were Sparrows Point to be charged only for the mains or types of
14 mains that directly serve Sparrows Point, other customers should be allowed to
15 pay only for various mains to the extent that they use those mains. As I noted in
16 my rebuttal testimony, customers in Manchester, Hampstead, Perryville, or even
17 Baltimore could present the Commission with arguments similar to those
18 advance by Mr. Phillips, often with stronger factual basis.

19 The approach taken by Mr. Phillips flies in the face of the long-standing
20 concept of postage-stamp delivery rates, under which the costs charged to an
21 individual customer is not dependent on its location, and all plant serving a
22 particular purpose, such as mains, is allocated among classes without regard to
23 the location of particular customers on the system or the historical accidents that
24 determined the specific layout of the current system.

⁷For current purposes, I will ignore the fact that all these claims are factually incorrect, as demonstrated in my direct and rebuttal testimony, as well as that of Mr. Pleat.

1 **Q: Did Mr. Phillips correctly describe the comments in your direct testimony**
2 **regarding the allocation of mains costs in BG&E's alternative gas cost-of-**
3 **service study?**

4 A: No. His rebuttal testimony indicates that he misconstrued my point. As I
5 explained at page 8 of my direct testimony, were Sparrows Point to be allocated
6 only a part of a subset of mains, because it does not use other mains, the same
7 concept should be applied to other classes.

8 Let us abstract from Mr. Phillips's specific claims and just refer to the type
9 main to be allocated to Sparrows Point as Type A and all other mains as Type
10 B.⁸ Mr. Phillips's proposal amounts to the following:

	Type A	Type B
Percent of Sparrows Point supply	100%	0%
Percent of Sparrows Point NCP used in Allocation	100%	0%

11 If the allocation of Type-B mains to Sparrows Point should be 0% of
12 Sparrows Point NCP, because 0% of the lines serving Sparrows Point are Type B,
13 the same approach should be applied to other classes. And were this approach
14 applied to a class that takes 100% of its supply from Type A, it should also apply
15 to classes that are supplied less than 100% of its supply from Type-A mains.

16 Depending on the definition of the mains types, the following might reflect
17 the situation for the residential class, applying the logic Mr. Phillips uses for
18 Sparrows Point:

	Type A	Type B
Percent of Sparrows Point supply	20%	80%
Percent of Sparrows Point NCP used in Allocation	20%	80%

⁸Various customers might make similar claims based on diameter, pressure, or location, as Sparrows Point does, or on distance from the nearest gate station, main material (plastic or steel), or even geographic orientation (north-south versus east-west).

1 To be consistent with Mr. Phillips’s approach for Sparrows Point, the
2 percentage of residential mains service that is Type A might be computed from
3 the fraction of the distance to the average customer from the closest gate station
4 that is Type A.

5 **Q: Is Mr. Phillips correct that you assume “that if a residential customer’s**
6 **meter is connected to the gas distribution system via a 2” diameter main**
7 **then that is the only cost they should be allocated,” as he asserts at page 21**
8 **of his rebuttal testimony?**

9 A: No. My direct testimony (p. 8) pointed out that “only about 3% of Schedule D
10 customers are served directly from mains of 12 inches or more.... Only about
11 8% of BG&E’s service territory is served by such mains.” I said that I “weighted
12 the Schedule-D load by the percentage of main footage that is 12 inch or larger,”
13 and indeed the allocation for Schedule D in my Table 1 is 8.3%, based on the
14 length of mains, not the number of connections.⁹ For the other classes (C, ISS,
15 and IS), where more than 8.3% of customers are connected to the larger mains, I
16 used the percentage of connections, since the percentage of main service
17 provided by the larger mains must be at least as great as the percentage of
18 customers served directly off those larger mains.¹⁰

⁹That is only a rough estimate of the percentage of service to the average customer that flows through the larger mains. A more precise value would require a special study, including data on customer locations that I do not possess.

¹⁰This rough estimate almost certainly understates the percentages for these classes. Again, I do not have enough information on customer locations to be more precise.

1 **Q: What is your recommendation regarding the selective allocation of a subset**
2 **of mains to particular customers?**

3 A: Mr. Phillips's specific arguments for selectively allocating categories of mains to
4 Sparrows Point rely on an inaccurate description of the gas delivery system
5 serving that facility and should be rejected, even were his underlying theory
6 sound. The underlying theory is itself inconsistent with standard regulatory
7 practice, and its application would be unmanageable. While Mr. Phillips asks for
8 special treatment only for Sparrows Point, accepting the principles he espouses
9 would result in similar requests for all classes and take BG&E's gas cost
10 allocation down a rabbit's hole of complexity. I thus recommend that the
11 Commission reject the Sparrows Point's proposal to selectively allocate cate-
12 gories of mains to the various rate schedules.

13 **Q: Does this conclude your surrebuttal testimony?**

14 A: Yes.