



1 responsible for the design and administration of electric rates for the Company. I  
2 assumed my current position in March 2005. In this capacity, I am responsible  
3 for the development and administration of unbundled rates for ACE and  
4 Delmarva Power & Light Company.

5 **4. Q: Have you filed testimony in any other proceedings?**

6 A: Yes. I have previously presented and/or filed testimony as a witness  
7 before the Delaware Public Service Commission (referred to herein as the  
8 "Commission" or "PSC"), the Maryland Public Service Commission, the New  
9 Jersey Board of Public Utilities and the State Corporation Commission of  
10 Virginia.

11 **5. Q: What is the purpose of your testimony?**

12 A: The purpose of my testimony is to introduce a decoupling mechanism to  
13 the Company's natural gas delivery rate structure which is intended to better  
14 levelize and stabilize recovery of delivery-related costs from all customer classes  
15 over the course of each year. The major objective of this approach is to eliminate  
16 the relationship between Delmarva's delivery revenue and the level of customer  
17 gas consumption.

18 **6. Q: What is the basis for filing for a modified rate design at this time?**

19 A: In Order No. 7420 in PSC Regulation Docket No. 59, the Commission  
20 approved the potential adoption of a modified fixed variable rate design for  
21 electric and gas distribution utilities within the context of a rate case proceeding.  
22 However, the Order further provided the Commission with the flexibility to

1 address rate design changes outside of a base rate case “if the situation is  
2 warranted”.

3 **7. Q: Is the modified fixed variable rate design considered a form of decoupling?**

4 A: Yes, in that the purpose of decoupling is to separate (or “decouple”) the  
5 amount of a utility’s revenues from the amount of its sales. Under the current rate  
6 design, the more natural gas or electricity customers use, the more revenue the  
7 Company realizes on the delivery portion of the bill. At the same time, the  
8 customer will also pay significantly more for the supply/commodity portion of the  
9 bill. While a volumetric charge is clearly the appropriate mechanism for recovery  
10 of supply and commodity-related costs, it is not necessarily appropriate for  
11 delivery service, the costs of which are essentially fixed. The modified fixed  
12 variable rate design breaks that link between a customer’s energy consumption  
13 and the Company’s delivery-related revenues. Additionally, with the delivery-  
14 related rate design proposed by the Company, disincentives related to the  
15 promotion of conservation and demand response programs are removed, better  
16 aligning the interests of customers, utilities, the environment, and the State of  
17 Delaware in the areas of energy conservation and emissions reduction.

18 **8. Q: What current situation warrants the filing of the rate design change at this**  
19 **time?**

20 A: The state of Delaware is embarking on several initiatives such as the  
21 launching of a state wide Sustainable Energy Utility and the establishment of a  
22 statewide Energy Efficiency Resource Standards (EERS) through a working-  
23 group approach to hit aggressive goals set by the Governor. The Company will

1 play a large roll in the roll out of these initiatives as well as the roll out of the  
2 company's own programs designed to promote more efficient use energy by our  
3 customers. Because decoupling helps to align the interests of the company with  
4 those of the state regarding these types of programs, now is a critical time to put  
5 decoupling in place. In addition, we believe the implementation of decoupling  
6 will be looked upon favorably as Delaware competes to obtain Federal stimulus  
7 funds. Therefore, for all these reasons, the Company is filing at this time within  
8 the parameters established by PSC Order No. 7420.

9 **9. Q: Please explain what the Company is seeking through this Application.**

10 **A:** The Company is seeking approval of the mechanics of the proposed rate  
11 design, which are described further in my testimony. The Company, however, is  
12 not asking for approval of the specific rates proposed in this Application. The  
13 Company anticipates that the rate design itself will be reviewed in this  
14 Application, and it is envisioned that actual rates would be effective only after a  
15 proceeding designed to implement rates.

16 **10. Q: Please describe the proposed changes to the gas delivery rate design.**

17 **A:** The basic concept involves modifying the gas delivery rate design for  
18 Residential Gas Sales (Service Classification RG), General Gas Sales Service  
19 (Service Classification GG) and General Volume Firm Transportation (Service  
20 Classification GVFT) to a two-part rate structure, consisting of a customer related  
21 charge and a demand-related charge. In order to illustrate the development of the  
22 new rate design, this filing includes a rate design structure which yields rates  
23 which are revenue neutral, on an overall and individual rate class basis, when

1 compared to revenue requirements approved by the Commission in its Order No.  
2 7152 in Docket No.06-284. A summary of the approved revenue requirements is  
3 provided in Schedule JFJ-1.

4 Because the Company is only seeking approval of the details of the rate  
5 design mechanism and not the actual rates, the new rate structure has been  
6 developed in this filing using test year data from Docket No. 06-284. This allows  
7 development of comparative analyses to the current rate structure to be performed  
8 on an appropriately equivalent level.

9 Under the proposed approach, the level of costs to be recovered through  
10 the customer charge and demand charge, respectively, would be based completely  
11 on the results of the cost of service study functional allocations. The details of the  
12 proposed cost recovery levels for the customer and demand charges by service  
13 classification are provided in Schedule JFJ-2.

14 Service classifications MVG, LVG, MVFT, and LVFT, which consist of  
15 the large industrial and commercial users, currently have a customer and demand  
16 structure and the lighting service classification GL currently has a fixed monthly  
17 charges. The new rate design approach is not being proposed for these service  
18 classifications at this time. However, the Company may consider modifications  
19 to the rate design for these service classifications in future proceedings.

20 **11. Q: Please explain the mechanism proposed for developing a demand factor for**  
21 **Service Classifications RG, GG and GVFT.**

22 **A:** A new billing determinant will be developed and referred to as the Design  
23 Day Contribution (“DDC”) Factor. The DDC Factor is designed to align

1 customers delivery rates with the underlying costs associated with overall design  
2 of the delivery infrastructure. The DDC is intended to provide a measure of an  
3 individual's contribution to the Design Day usage. The Design Day reflects the  
4 Company's investment in gas mains, distribution lines, valves and other  
5 supporting equipment.

6 On aggregate, a DDC Factor will also be developed for each service  
7 classification. The DDC Factor will be based on customer sales activity for the  
8 prior January and February billing months, as well as sales from the previous  
9 August. A detailed development of the DDC is provided in Schedule JFJ-3.

10 The DDC will also be developed for each customer premise using  
11 information available in the Company's Customer Information System and the  
12 same calculation method delineated in Schedule JFJ-3. The final step in the  
13 process is to reconcile the sum total of the individually developed customers DDC  
14 factors with the aggregate DDC. A customer moving into a new premise will be  
15 assigned the class average DDC.

16 The DDC charge will be developed as an annual rate. Workpapers  
17 detailing the development of the proposed new rate design are provided in  
18 Schedule JFJ-4. For Service Classification RG, in an effort to continue to provide  
19 customers with a seasonal pricing signal, the charge will be recovered on a  
20 monthly basis with increased weighting to the winter months. The detailed  
21 recovery weighting is provided on page 1 of Schedule JFJ-4. For Service  
22 Classifications GG and GVFT, the charge will be recovered equally in each  
23 month.

1 **12. Q: Have you performed any billing comparisons?**

2 A: Yes. Based upon rates that are currently in effect, a frequency distribution  
3 of the bill impact of the proposed rate design on Service Classification RG is  
4 provided in Schedule JFJ-5. The results of this analysis show that 77% of  
5 residential customers would experience average overall monthly bill impacts of  
6 between -5% and 5%. Additionally, 89% of customers would experience a bill  
7 impact of between -10% and 10%.

8 Historically, there is a large difference between the level of winter heating  
9 season gas bills and bills during non-heating seasons. The rate design proposed  
10 does tend to have a levelizing effect on monthly bills throughout the course of  
11 the year. To some extent, this is offset by the proposed seasonal weighting  
12 factors. However, monthly bills will be more level throughout the course of the  
13 year than under the current rate design.

14 This levelization effect can result in a potentially misleading message if  
15 the current bill impact representation, which focuses on only typical winter usage,  
16 is maintained. For a typical residential customer, while the total of the monthly  
17 bills during the winter heating season would actually decrease, the total of the  
18 non-heating bills would increase. Therefore, focusing on the overall annual  
19 impact is most appropriate. In general, with this rate design, some customers will  
20 see a modest increase in the annual amount they are billed, while others will see a  
21 modest decrease in the annual amount they are billed. This rate design is revenue  
22 neutral for the Company.

1 **13. Q: For residential customers who fit into the category of having an increase of**  
2 **more than 10%, please address their bill impact.**

3 A: While the percentage impact is a typical measure of the change in bill  
4 levels, it is also important to consider the impact in terms of absolute dollars.  
5 First, the analysis summarized in Schedule JFJ-5 shows that the average monthly  
6 bill impact for the most adversely impacted residential customers is a modest  
7 increase of \$5.45. As always, the Company will retain our customer friendly  
8 policies and will work with customers on a case by case basis if they are  
9 adversely impacted by this rate redesign.

10 **14. Q: Are you proposing any tariff changes in this Application?**

11 A: No, because the Company is seeking approval of the rate design  
12 mechanism and not the rates themselves, tariffs with updated rates are not  
13 included in this Application.

14 **15. Q: Does this conclude your testimony?**

15 A: Yes, it does.



**Delmarva Power & Light Company - Delaware**

**DDC Based Gas Delivery Rates**

Approved Gas Delivery Revenue per DE PSC Case 06-284

**Schedule JFJ-1**

<u>Service Classification</u>	<u>Approved Delivery Revenue</u>	<u>Test Year Number of Customers</u>
Residential	\$ 43,533,327	1,318,177
GG + GVFT	\$ 16,567,364	110,186

**Delmarva Power & Light Company - Delaware**  
 DDC Based Gas Delivery Rates  
 Development of Revenue Classification  
 Per Cost of Service Study Filed in DE PSC Case 06-284

**Schedule JFJ-2**

TOTAL COMPANY (1)	RESIDENTIAL HEATING (2)		RESIDENTIAL HEATING (3)		RESIDENTIAL + RESIDENTIAL HEATING (4)		GENERAL SERVICE (5)		MEDIUM VOLUME GENERAL (6)		LARGE VOLUME GENERAL LIGHTING (7)		(8)
\$ 31,512,690	\$ 328,422	\$ 17,198,816	\$ 17,527,238	\$ 8,711,552	\$ 2,379,195	\$ 2,894,268	\$ 436						
\$ 3,848,600	\$ 54,819	\$ 2,259,846	\$ 2,314,665	\$ 1,158,081	\$ 229,593	\$ 146,194	\$ 67						
\$ 23,063,672	\$ 1,796,767	\$ 16,282,708	\$ 18,078,476	\$ 4,477,781	\$ 344,435	\$ 161,938	\$ 1,043						
\$ 58,424,962	\$ 2,179,009	\$ 35,741,370	\$ 37,920,379	\$ 14,347,414	\$ 2,953,223	\$ 3,202,400	\$ 1,546						
	15.07%	48.12%	46.22%	60.72%	80.56%	90.38%	28.22%						
	2.52%	6.32%	6.10%	8.07%	7.77%	4.57%	4.31%						
	82.41%	45.56%	47.67%	31.21%	11.66%	5.06%	67.46%						

**1 Summary Analysis of COSS Results**

- 2 Demand Rev Req (\$)
- 3 Commodity Rev Req (\$)
- 4 Customer Rev Req (\$)
- 5 Total Base Rev Req (\$)
- 6
- 7 Demand Rev Req (%)
- 8 Commodity Rev Req (%)
- 9 Customer Rev Req (%)

**Delmarva Power & Light Company - Delaware**

DDC Based Gas Delivery Rates

Development of Aggregate Design Day Contribution Factor

**Schedule JFJ-3**

	<u>Residential</u>	<u>GG</u>
1 Sales Jan - Feb 2009 (MCF)	2,651,035	1,648,961
2 Customers Jan-Feb 2009	110,804	9,538
3 August 2008 Monthly Sales (MCF)	133,602	117,880
4 August Average Daily Usage (MCF) = Line 3/31	4,310	3,803
5 Customers - August 2008	109,225	9,364
6 Non-Heating Usage (MCF) = Line 4 / Line 5 x (31 + 28) x Line 2	257,965	228,546
7 Heating Usage (MCF) = Line 1 - Line 6	2,393,070	1,420,415
8 Heating Degree Days	1,589	1,589
9 Heating Usage per Degree Day per Customer (=Line 7/ Line 8 / Line 2)	0.01359	0.09372
10 Design Degree Days	65	65
11 Peak Day Heating Usage = Line 2 x Line 9 x Line 10	97,891	58,104
12 Peak Day Non Heating Usage = Line 6 / (31+ 28)	4,372	3,874
13 Design Day Contribution (MCF) = Line 11 + Line 12	<u>102,264</u>	<u>61,977</u>
14 Design Day Contribution per Customer (MCF) =Line 13 / Line 2	0.92293	6.49795

**Delmarva Power & Light Company - Delaware**  
 DDC Based Gas Delivery Rates  
 Residential Gas Service Rate Design

Total \$ 43,533,327  
 Customer \$ 20,754,439  
 Demand \$ 22,778,888

Rate Element	Existing Rate Design		Proposed Rate Design	
	Billing Determinants	Existing Rate	Billing Determinants	Recommended Rate
Customer Charge (\$ per month)	1,318,177 \$	9.56 \$	1,318,177 \$	15.74 \$
First 50 CCF Commodity Rate	40,539,430 \$	0.42101 \$		
Winter Over 50 CCF Commodity Rate	41,037,324 \$	0.33784 \$		
Design Day Contribution Rate (\$ per CCF of DDC per Year)			1,022,637 \$	22.27465 \$
<b>Total</b>		<u>\$ 43,533,327</u>		<u>\$ 43,533,331</u>

**Proposed DDC Recovery Schedule**

January	16.0%
February	16.0%
March	16.0%
April	2.9%
May	2.9%
June	2.9%
July	2.9%
August	2.9%
September	2.9%
October	2.9%
November	16.0%
December	16.0%

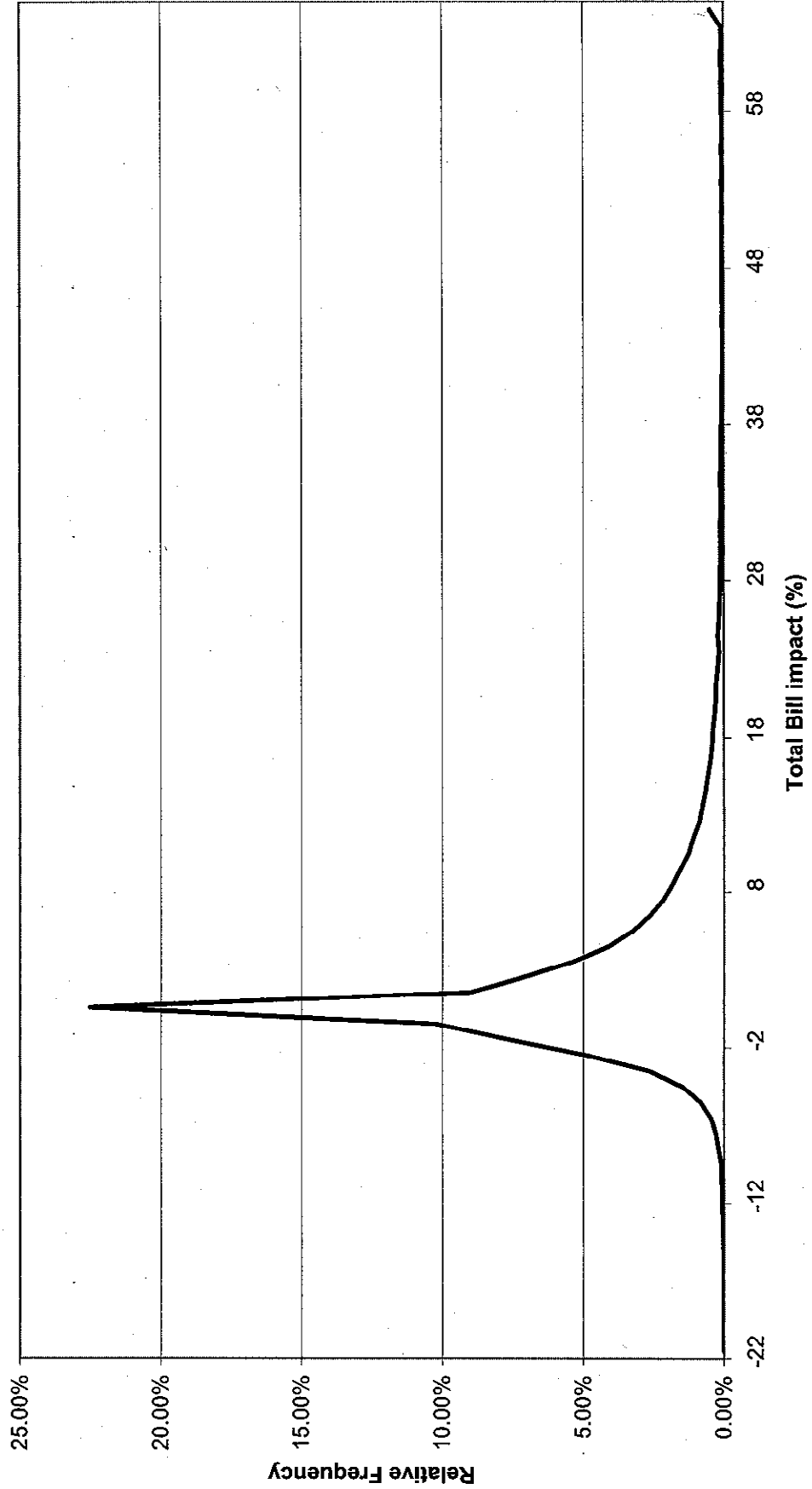
**Delmarva Power & Light Company - Delaware**  
 DDC Based Gas Delivery Rates  
 General Gas Service Rate Design

Total \$ 16,567,364  
 Customer \$ 5,170,620  
 Demand \$ 11,396,744

Rate Element	Existing Rate Design		Proposed Rate Design	
	Billing Determinants	Existing Rate	Billing Determinants	Recommended Rate
Customer Charge (\$ per month)				
GG	110,067	\$27.31 \$ 3,005,930	110,067	46.63 \$ 5,132,346
GVFT	119	\$302.31 \$ 35,975	119 \$	321.63 \$ 38,274
				\$ 5,170,620
First 750 CCF Commodity Rate	20,840,431 \$	0.34975 \$ 7,288,941		
Over 750 CCF Commodity Rate	23,871,842 \$	0.26125 \$ 6,236,519		
Design Day Contribution Rate (\$ per CCF of DDC per Month)			619,775 \$	1.53238 \$ 11,396,765
Total		\$ 16,567,364		\$ 16,567,385



DPL Delaware - Gas Delivery Service  
Residential Service Classification  
Design Day Contribution (DDC) Based Delivery Rate Design  
Bill Impact Distribution



Delmarva Power & Light - Delaware Gas  
DDC Based Gas Delivery Rate Design  
Residential Gas Bill Impact

Range of Increase/Decrease (%)	Relative Frequency (%)	Number of Customers	Avg Monthly Bill Impact
<-10%	0.38%	423	\$(20.95)
-6% to -10%	1.76%	1,944	\$(9.51)
-5% to -6%	1.46%	1,612	\$(7.83)
-4% to -5%	2.65%	2,921	\$(6.27)
-3% to -4%	4.85%	5,341	\$(4.87)
-2% to -3%	7.64%	8,420	\$(3.31)
-1% to -2%	10.20%	11,234	\$(1.90)
-1% to 0%	22.52%	24,814	\$(0.05)
0% to 1%	9.05%	9,968	\$1.47
1% to 2%	7.14%	7,864	\$2.24
2% to 3%	5.39%	5,942	\$2.90
3% to 4%	4.09%	4,507	\$3.42
4% to 5%	3.21%	3,536	\$3.91
5% to 6%	2.60%	2,870	\$4.27
6% to 7%	2.15%	2,374	\$4.56
7% to 8%	1.81%	1,994	\$4.70
8% to 9%	1.53%	1,681	\$4.95
9% to 10%	1.24%	1,368	\$4.91
>10%	10.31%	11,363	\$5.45

77%

89%