**Daniel OCS –4SR**

**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

| | | |
|---|---|---|
| | ) | |
| Application of Dominion Energy Utah to | ) | **Docket No. 19-057-02** |
| | ) | |
| Increase Distribution Rates and Charges | ) | **Phase II Surrebuttal Testimony of** |
| | ) | **James W. Daniel** |
| and Make Tariff Modifications | ) | **On behalf of the** |
| | ) | **Office of Consumer Services** |

**January 6, 2020**

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**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is James W. Daniel. My business address is 919 Congress Avenue, Suite 1110, Austin, Texas, 78701.

**Q. ARE YOU THE SAME JAMES DANIEL THAT PROVIDED PHASE II DIRECT AND REBUTTAL TESTIMONY ON BEHALF OF THE OFFICE OF CONSUMER SERVICES ("OCS")?**

A. Yes.

**Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

A. The purpose of my surrebuttal testimony is to respond to certain claims made in the Phase II rebuttal testimony of Dominion Energy Utah ("DEU"). More specifically, I address issues raised in the Phase II rebuttal testimony of DEU witness Austin Summers.

I have limited my surrebuttal testimony to issues related to DEU's design day/throughput allocation factor and to DEU's allocation of general plant depreciation expenses. While I disagree with other issues in rebuttal testimony filed by the parties, my direct and rebuttal testimony adequately addresses those issues.

***Design Day/Throughput Allocation Factor***

**Q. PLEASE DESCRIBE DEU'S DESIGN DAY/THROUGHPUT ALLOCATON FACTOR.**

A. For purposes of allocating intermediate high pressure ("IHP") system related costs, DEU uses an allocation factor that is based on a 60% weighting of the design day allocation factor and a 40% weighting of the throughput allocation factor. Both the design day allocation factor and the throughput allocation factor used for developing the weighted design day/throughput allocation factor only include customers that utilize the IHP facilities.

**Q. HAS DEU PROPOSED USING THE SAME 60% AND 40% WEIGHTING FACTORS IN PRIOR RATE CASES?**

A. Yes. As stated in its response to DPU data request 1.3, the allocation factors used in DEU's cost of service study ("COSS") are "the same factors that have been used in the Company's recent general rate cases." A copy of DEU's response to DPU data request 1.3 is provided as Exhibit OCS-4.1 SR.

**Q. IN ITS REBUTTAL TESTIMONY, DOES DEU CHANGE ITS POSITION REGARDING THE DESIGN DAY/THROUGHPUT ALLOCATION FACTOR?**

A. Yes. As discussed on line 45 through line 81 of his rebuttal testimony, DEU witness Austin Summers is changing his use of the 60%/40% weighting factors to 68%/32%.

**Q. WHAT IS THE BASIS FOR MR. SUMMERS' 68%/32% WEIGHTING FACTORS?**

A. The 32% weighting factor is equal to the test year system load factor. This load factor use was proposed by intervenors representing Transportation Service ("TS") customers. Mr. Summers also claims using the load factor is "a nationally-recognized standard."

**Q. DOES MR. SUMMERS PROVIDE ANY SUPPORT FOR HIS CLAIM THAT USING THE SYSTEM LOAD FACTOR PERCENTAGE IS A NATIONALLY-RECOGNIZED STANDARD?**

A. No. Also, I am unaware of any support for this claim. If Mr. Summers is relying on the NARUC Gas Distribution Rate Design Manual ("NARUC Manual") for this claim, then I believe it is incorrect. First, the NARUC Manual does not even discuss an allocation factor for allocating demand-related cost that includes a weighting of a design day allocation factor and a throughput (or volumes) allocation factor. As pointed out in my rebuttal testimony, the Company's proposed design day/throughput allocation factor is different from the average and peak ("A&P") demand allocation method described in the NARUC manual.[1] I would also note that the "peak" component in the A&P method described in the NARUC manual is not a design day allocation factor but rather a class coincident peak at the time of system peak allocation factor. The system peak should be the test year peak not a design day peak to be consistent with the NARUC manual. The parties proposing to use the 32% load factor as a weighting factor use that component of the A&P method but fail to apply the test year system peak component of the method.

**Q. IS THERE ANOTHER INDUSTRY GAS RATEMAKING MANUAL THAT DISCUSSES VARIOUS ALLOCATION METHODS FOR ALLOCATING FIXED COSTS SUCH AS DISTRIBUTION PLANT?**

A. Yes. The American Gas Association's text, Gas Rate Fundamentals, discusses the three demand allocation factors that it says have received the most consideration. The A&P method is not even one of the three demand allocation

[1] I note UAE witness Kevin Higgins also incorrectly referred to DEU's factor as an average and peak allocation factor. See UAE Exhibit 2.0 Confidential Direct Testimony of Kevin C Higgins pages 7-8, lines 123-156.

methods discussed in this manual. I have provided the relevant pages from this manual as Exhibit OCS-4.2 SR.

***Allocation of General Plant Depreciation Expenses***

**Q. PLEASE SUMMARIZE DEU'S REBUTTAL TESTIMONY REGARDING THE ALLOCATION OF GENERAL PLANT DEPRECIATION EXPENSES?**

A. DEU witness Austin Summers discusses this issue on pages 4 through 6 of his rebuttal testimony. This rebuttal testimony attempts to make two points. First, Mr. Summers claims that the Company's use of a total system gross plant allocation factor to allocate general plant depreciation expenses is similar to my proposed use of a general plant only allocation factor. Second, he states that if general plant depreciation expenses are allocated using the general plant allocation factor, then the Company will seek recovery of any cost shift to the NGV rate class as a rate discount, i.e., the cost shift will be allocated back to the other rate classes.

**Q. DO YOU AGREE WITH MR. SUMMERS' CLAIM THAT THERE IS NO SIGNIFICANT DIFFERENCE BETWEEN USING A TOTAL GROSS PLANT ALLOCATION FACTOR AND A GENERAL PLANT ONLY ALLOCATION FACTOR?**

A. No. Mr. Summers attempts to support this claim by stating that "most" of the general plant accounts are already allocated using a total gross plant allocation factor. However, Mr. Summers ignores the fact that there are two general plant accounts, FERC Account Nos. 393 and 394, that are not allocated using a total gross plant allocator and that one of these accounts is substantial. If the depreciation expenses for the plant in these accounts is allocated differently than how the general plant amounts are allocated, as proposed by Mr. Summers, then there is a mismatch in how the plant investment and the related depreciation expenses are allocated. The result is that some customer classes will be subsidizing the depreciation expenses related to plant investment caused by another customer class. Mr. Summers' argument supports an inaccurate allocation of costs and should be rejected.

**Q. IF COSTS ARE PROPERLY ALLOCATED TO THE NGV CLASS SHOULD DEU'S REBUTTAL PROPOSAL TO PROVIDE A RATE DISCOUNT FOR THE NGV CLASS BE APPROVED?**

A. Utah Code 54-4-13.1 allows the Commission to approve a rate discount for NGV service. However, DEU has not shown that a discount is necessary to preserve the NGV class and one should not be approved. If the Commission is concerned about whether correcting the total gross plant allocation would have an immediate adverse impact on the NGV class, it could use gradualism in implementing the change. Under any circumstance, the Commission should not allow an allocation factor known to be incorrect to be used as a disguised method of providing a rate discount for one class.

**Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

A. Yes.

P.S.C.U. Docket No. 19-057-02
DPU Data Request No. 1.03
Requested by Division of Public Utilities
Date of DEU Response August 5, 2019

DPU 1.03: Please provide any sensitivity analysis performed by DEU regarding alternative classification and/or allocation factors, and the effect of such alternative factors on the outcomes of inter-class and intra-class results.

Answer: The allocation factors used in the cost of service studies (inter-class results) are the same factors that have been used in the Company's recent general rate cases. The rate case model is dynamic and allows the user to make changes to COS allocation factors and view the resulting impact. In the GS class, a change was proposed in the rate design (intra-class results) to move the block break from 45 Dth to 30 Dth. The electronic model provided in DEU Exhibit 4.18 includes rate design results for both of these scenarios. Also see DEU Exhibit 4.10.

Prepared by: Austin Summers, Regulatory Affairs Manager, Dominion Energy

# Exhibit OCS-4.2 SR

# Docket 19-057-02

## Gas Rate Fundamentals

## Fourth Edition

## 1987

## Excerpt

## Pages 141-146

# GAS RATE FUNDAMENTALS

**Fourth Edition**
1987

American Gas Association Rate Committee
1515 Wilson Boulevard, Arlington, VA 22209

associated expenses of this lateral should be assigned directly to the industrial class.

## REARRANGING COSTS INTO FUNCTIONAL GROUPS

Although the system of accounts generally follows functional groups, a cost allocation study will require rearranging many costs into functional groups that are more descriptive of their origin. Such groups combine costs incurred for a similar purpose. A relatively small number of groups – 20 to 30 – is often adequate (see Table 7–4). Thus, each functional group can be treated as a unit in the assignment to the cost components.

## ALLOCATION FACTORS

With all of the costs assigned to the major cost components, the next step is to determine suitable allocation factors. These are used to apportion the major cost components to classes of service. For gas utility operations, the three basic allocators are capacity, commodity, and customer, as explained earlier in this chapter. The allocation of the commodity and customer components poses no real problem because the quantities are the sum of the class totals. Capacity cost allocations, however, are more difficult because of the difference in demands of the various groups and their relation to the system demand and capacity. Nevertheless, three capacity cost allocation methods have received considerable attention: coincident demand, noncoincident demand, and average and excess demand, as described below.

### Coincident Demand (CP)

The CP method, also called peak responsibility, allocates capacity-related costs based on the demands of the various classes of service at the time of the system peak. The rationale for the CP method is that the utility's costs associated with its maximum load should be divided among the customers causing that peak. The magnitude of those customers' demands at other times of the day, month or year or the length of those demands is not a consideration. Under this method, the "allocator" for capacity costs is the ratio of the demand of the various classes of service at the time of the system peak to the total demand at that time. An example is shown in Table 7–5.

Thus, the residential and industrial classes would each bear 40 percent of the capacity costs, commercial customers would bear 20 percent, and the interruptible class would not be allocated any of the capacity costs. The CP method has the following characteristics:

**TABLE 7-4**
**Cost of Service Study**
**Functional Service Levels**

| Item | Demand | Classification with Allocation Methods: Commodity | Customer | Specific | Revenue |
|---|---|---|---|---|---|
| Production & Gas Supply | | | | | |
| 1. Gas Supply | CP | Mcf or Therms | | | |
| 2. Storage | CP | Seasonal Mcf or Th | | | |
| 3. Liquefied Nat Gas | CP | Seasonal Mcf or Th | | | |
| 4. Propane | CP | Seasonal Mcf or Th | | | |
| Transmission | | | | | |
| 5. Compressor Stations | CP | Mcf or Th | | Spec Assign | |
| 6. Mains | CP | Mcf or Th | | Spec Assign | |
| 7. Regulatory Stations | CP | Mcf or Th | Spec Assign | | |
| Distribution | | | | | |
| 8. Compressor Stations | NCP | | | | |
| 9. Mains | NCP | | No. of Cust. | Spec Assign | |
| 10. M&R Stations | NCP | | No. of Cust. | Spec Assign | |
| 11. Services | NCP | | No. of Cust. | | |
| 12. Meter & Install | | | Wgt. Cust | | |
| 13. House Reg & Install | | | Wgt. Cust | | |
| 14. Imd M&R Stations | | | | Spec Assign | |
| 15. Cust. Install | | | | Spec Assign | |
| Other | | | | | |
| 16. Customer Accts | | | Wgt. Cust | | |
| 17. Sales Expense | | | Wgt. Cust | | |
| Revenue | | | | | |
| 18. Revenue from Sales | | | | | Revenue |
| 19. Revenue Taxes | | | | | Revenue |

**TABLE 7–5**
**Cost Allocation by Coincident Demand**

| Class of Service | Demand at Time of System Peak (Mcf/Day) | Ratio to System Peak |
|---|---|---|
| Residential | 4,000 | 0.40 |
| Commercial | 2,000 | 0.20 |
| Industrial | 4,000 | 0.40 |
| Interruptible | – | 0.00 |
| Total (System Peak) | 10,000 | 1.00 |

- It may produce radically different results if the time of the system peak shifts.
- It requires a determination of class demands at the time of the system or sub-system peaks.
- It may require a load study.
- It allocates no capacity costs to off-peak or curtailed customers, as illustrated by the interruptible class in Table 7–5. The CP allocation may be appropriate if off-peak operations result from control by the customer or the utility, as in the case of interruptible service, or if off-peak use stems from natural characteristics as, for example, air conditioning.

### Noncoincident Demand (NCP)

This method, also called class demand, is based on the maximum demands of the individual classes of service regardless of when those demands occur. Under the NCP method, the effects of diversity are apportioned in equal proportions to each class. Thus, the allocator for capacity costs is the ratio of each of the class maximum demands to the sum of all the class maximum demands irrespective of time of occurrence. An illustration is shown in Table 7–6.

Each class pays part of the total capacity costs. Under the NCP method, this includes the interruptible class, which bore no capacity costs under the peak responsibility method. The NCP method has the following characteristics:

- It assumes that the cost of joint facilities to serve the various classes should be allocated in proportion to the facilities necessary to serve each class as though it were served alone.
- It is not affected by shifts in the time of maximum class demands.

- It allocates costs to all groups of customers whether or not they create any demand at the time of the system peak. For this reason, the NCP method is inappropriate for incremental cost studies.
- It leads some analysts to contend that interruptible customers are charged for "too much" capacity because the capacity used by them is that "released" by others. Whether an interruptible customer should receive less than its proportional share of capacity costs or even no capacity costs depends on the *philosophy* of the cost analyst.

### Average and Excess Demand Method (A&E)

Under the A&E method, also called "used and unused capacity," capacity costs are allocated by a two-part formula.[1] It recognizes both the average use of capacity and responsibility for the capacity required to meet the maximum system load. Used capacity costs are calculated by multiplying total capacity costs by the system load factor. These costs are allocated to the various classes in proportion to their respective use (Mcf sold). System load factor is the ratio, expressed as a percent, of used capacity (Mcf sold) to total capacity. The remainder of the capacity costs represent the costs associated with the unused portion of capacity (i.e., that portion above *average* requirements). These costs

**TABLE 7-6**
**Cost Allocation by Non-Coincident Demand**

| Class of Service | Maximum Class Demand (Mcf/Day) | Ratio to Sum of Class Demands |
|---|---|---|
| Residential | 4,500 | 0.375 |
| Commercial | 2,700 | 0.225 |
| Industrial | 4,000 | 0.333 |
| Interruptible | 800 | 0.067 |
| Total (Non-Coincident) | 12,000 | 1.000 |

[1] "Used capacity" is the minimum capacity needed to deliver the total gas used. Hence, it is numerically equal to the average deliveries. "Unused capacity" is the difference between average (used) capacity and peak capacity. Used, unused, or peak capacity may be expressed in terms of hours, days, year, or any other period. Peak capacity is usually expressed in terms of the peak hour or day.

are allocated to the various classes in the ratio that the individual group demands, in *excess* of used demands, bear to the summation of such excess demands. A simplified example is shown in Table 7–7.

Use of the A & E method has the following effects:

- Shifts in the time of the system peak do not greatly affect the cost allocations.
- The allocation of unused capacity is similar to the non coincident demand method except that it is applied only to the excess of class demands above the average.
- The load factor of the various classes is recognized.

Two additional cost-allocation approaches deserve discussion: the Seaboard and United methods. While generally referred to as allocation methods, they are really cost classification methods. These two approaches have been used in FERC proceedings involving pipeline cost allocation studies. Recent FERC decisions, however, have moved towards a modified fixed-variable approach, which will be discussed later. Some analysts argue that such cost allocation methods are actually pricing mechanisms.

The Seaboard method assigns 50 percent of the fixed (demand) costs to the commodity classification and the other 50 percent to the demand classification. These costs are allocated to the various classes by the appropriate demand and commodity-allocation factors. The Seaboard method shifts capacity-related costs from classes with lower load factors (e.g., seasonal heating requirements) to classes with a more uniform or stable year-round (i.e., higher) load factor.

The United method (sometimes called the "Modified Seaboard" method) assigns 75 percent of the fixed costs to the commodity classification and the rest to the demand classification. Again, capacity-related costs are shifted from low to high load factor customers. Cost causation is not the rationale.

In recent FERC proceedings, the modified fixed-variable approach has been used. This allocation method permits all fixed costs to be classified in the demand component, except for return on equity and associated taxes. These are placed in the commodity component. Then the demand costs are allocated 50 percent on the basis of historical Average Peak Day and 50 percent on the customer's Annual Volume.

## ALLOCATION OF SPECIAL COSTS

### Taxes

Taxes are levied by federal, state, and local authorities. Taxes can be classified on the basis of assessment (i.e., income, revenue, property,

TABLE 7-7
**Cost Allocation by Average and Excess Demand**

| Class of Service | Annual Use (Mcf) | System Peak (Mcf/Day) | Class Max Demand (Mcf/Day) |
|---|---|---|---|
| | (1) | (2) | (3) |
| Residential | 365,000 | N/A | 3,000 |
| Commercial | 182,500 | N/A | 1,250 |
| Industrial | 146,000 | N/A | 1,100 |
| Interruptible | 219,000 | N/A | 3,000 |
| Total | 912,500 | 4,167 | 8,350 |

| Class of Service | Class Max Demand (Mcf/Day) | Average Demand (Mcf/Day) | Process Demand Alloc. Basis (Mcf/Day) |
|---|---|---|---|
| | (4) | (5) | (6) |
| Residential | 3,000 | 1,000 | 2,000 |
| Commercial | 1,250 | 500 | 750 |
| Industrial | 1,100 | 400 | 700 |
| Interruptible | 3,000 | 600 | 2,400 |
| Total | 8,350 | 2,500 | 5,850 |

| Class of Service | Average Demand (Mcf/Day) | Excess Demand (Mcf/Day) | A & E Demand (Mcf/Day) |
|---|---|---|---|
| | (7) | (8) | (9) |
| Residential | 1,000 | 570 | 1,570 |
| Commercial | 500 | 214 | 714 |
| Industrial | 400 | 199 | 599 |
| Interruptible | 600 | 684 | 1,284 |
| Total | 2,500 | 1,667 | 4,167 |

Column
1: Total annual consumption by class. This is equivalent to the commodity allocation factor.
2: Actual (estimated) peak day(s) demands of the system. The individual class values are not shown because they are not used in the calculation.
3: The sum of the individual class maximum demands (class NCP). Each class maximum demand may occur at a different time.
4: The sum of the individual class maximum demands (class NCP). Each class maximum demand may occur at a different time.
5: Calculated by dividing each element in Column 1 by 365 days.
6: Column 4 less Column 5.
7: Calculated by dividing each element in Column 1 by 365 days.
8: Calculated by multiplying the ratio of each to the total in Column 6 times the system excess demand. The system excess demand is defined as the system peak less the total system average demand. For example:

*System* excess demand would be

$$4{,}167 \text{ less } 2{,}500 = 1{,}667$$

*Residential* class excess demand would be

$$\frac{2{,}000}{5{,}850} \times 1{,}667 = 570$$

9: Sum of Column 7 and Column 8.