



## **NETWORK SERVICE PEAK LOAD**

Under the PJM Open Access Transmission Tariff, a transmission customer's Network Service requirement is based on its load at the time of the Virginia Electric and Power Company's (Dominion) annual peak transmission system load. Dominion, as the Electric Distribution Company (EDC) in the Dominion Zone, has the responsibility for collecting and reporting to PJM certain load data pertaining to the end-use customer's (Customer) Network Service requirements. This load data is used by PJM to determine the Network Service requirements and related charges for the transmission customers and the Load Serving Entities (LSE) who contract for transmission service on behalf of those Customers to whom the LSE is supplying energy within the Dominion Zone.

This manual is intended to describe the procedures and methodologies that Dominion uses to determine the Network Service Peak Load (NSPL) for each Customer, which is ultimately used to determine the LSE NSPL. An example of the Customer NSPL calculation and the LSE NSPL determination is contained in the Attachment.

Customer NSPLs are updated annually, in the fourth quarter of each year, and apply for the following calendar year. Customer NSPL values are summed at the LSE level to determine the LSE NSPL. Dominion reports the Network Service Peak Loads for each LSE in the Dominion Zone electronically to PJM through eCapacity on a daily basis. These Network Service Peak Loads are available for LSE viewing via the PJM eCapacity.

Customer NSPLs are based on the annual single highest transmission peak load experienced on the Dominion Transmission System for the twelve month period ending October 31 each year. The methodology for determining a Customer's load at the time of the Dominion transmission peak load is based on: 1) the type of metering used by Dominion to record the Customer's load and, 2) the load profile assigned to the Customer which are explained below.

Type of Metering:

The type of metering determines the level of Customer load detail available for the transmission peak load hour. There are three metering types:

Non-Interval Monthly-Meter - sometimes referred to as a kWh meter, simply records the Customer's total kWhs for a billing cycle. There is no record of the amount of load on an interval basis.

Non-Interval Demand-Meter - is similar to Non-Interval Monthly-Meter in that it also records the Customer's total kWhs for a billing cycle, but in addition, it records the highest kW demand measured over a 30-minute period for the billing cycle. Again, there is no record of the amount of load on an interval basis.

Interval Meter - records the Customer's kWhs on an interval basis for each billing cycle. The interval kWhs are used to determine hourly load values, and the hourly loads are also summed to determine the Customer's total kWhs for the billing cycle.

## **NETWORK SERVICE PEAK LOAD**

### Customer Class Load Profile:

A Customer Class is a group of customers that have a similar kWh usage pattern but different energy consumption characteristics. Since historical interval data is not available for Non-Interval Meter Customers, Class Profiles have been developed from a random sampling of interval recording meters that have been installed at Customer locations for load research purposes. These load research meters provide hourly load values that represent the average Customer's usage pattern in the designated Customer Class (Class Profile Load). The sum of the hourly load values in a Class Profile is the representative total kWh for the average customer that fits that Class Profile. Each Non-Interval Meter Customer account is assigned to a Customer Class load profile (Class Profile). An overview of Dominion's [load profiling methodology](#) can be found on the Dominion supplier web site.

Interval Meter Customers have a historical record of hourly load data and therefore, each Interval Meter Customer is assigned its own historical load data as its Class Profile. Each Interval Meter Customer account is treated as a unique Class Profile in the methodology for determining NSPL.

Dominion's methodology for determining Customer NSPL consists of four primary steps, which are outlined below:

#### 1. Determining Unreconciled Customer Class Transmission Peak Loads

- Determine the Transmission Peak Hour Customer Loads

The first step in determining the Unreconciled Customer Class Transmission Peak Load is to retrieve the Customer loads coincident with the Dominion Zone transmission peak load. The loads for Non-Interval Meter Customers are determined from the assigned Class Profile. These loads are representative loads and do not reflect the Customer's actual current kWh load values. The loads for Interval Meter Customers are retrieved for the transmission peak load hour from the Customer's actual recorded interval data.

- Determine the Unrestricted Load for Interval Meter Customers

Class Profile data for Interval Meter Customers must include any load curtailed as a result of Active Load Management (ALM) initiated during the transmission peak load hour. Active Load Management refers to the ability of the LSE to reduce Customer's metered load through direct control or by requesting the Customer to manually reduce load. The Interval Meter Customer Unrestricted Load is the sum of the interval load, plus the amount of load reduced through ALM for the transmission peak hour.

## NETWORK SERVICE PEAK LOAD

- Calculate Customer Class Usage Factors

Customer Usage Factors are calculated for each Customer. The Customer Usage Factor is the ratio of the Customer's actual total kWh for a billing cycle to the Class Profile total kWh. The Customer Usage Factors are then summed for each Non-Interval Meter Customer Class (Customer Class Usage Factor). The Customer Class Usage Factor is applied to the Class Profile Load values to calculate a Class Profile Load that reflects the respective Customer Class current loads for the specified transmission peak hour (Customer Class Load). Usage Factors are calculated annually for each Non-Interval Meter Customer.

$$\text{Non-Interval Meter Customer Usage Factor} = \text{Total Metered Customer kWh} / \text{Total Class Profile kWh}$$

It should be noted that since the Interval Meter Customer is assigned its own historical interval data as its Class Profile, the Customer Usage Factor algorithm results in a Customer Usage Factor value of 1.00 for such customers. Therefore, Interval Meter Customers are assigned a default Customer Usage Factor of 1.00.

$$\text{Interval Meter Customer Usage Factor} = 1.00$$

- Loss Expansion Factor

Each Customer is assigned a Loss Expansion Factor. Application of the Loss Expansion Factor is intended to gross-up the Customer loads to reflect transmission and distribution line energy losses attributable to the Customer's load. The Loss Expansion Factor assignment is determined by the Customer's delivery service voltage level. Generally, Non-Interval Meter Customers are served at secondary voltage levels and those Customers are assigned a secondary distribution Loss Expansion Factor. Interval Meter Customers are assigned either a primary distribution Loss Expansion Factor or a transmission Loss Expansion Factor, as may be applicable based on service characteristics. Dominion's [Loss Expansion Factors](#) can be found on the Dominion Supplier Web Site.

- Calculate Unreconciled Customer Class Transmission Peak Load

To complete the Unreconciled Customer Class Transmission Peak Load calculation, the Class Profile Load for the peak hour is multiplied by:

- a) the Customer Class Usage Factor, and
- b) the applicable Loss Expansion Factor.

$$\text{Unreconciled Customer Class Transmission Peak Load} = \text{Class Profile Load} * \text{Customer Class Usage Factors} * \text{Loss Expansion Factor}$$



## NETWORK SERVICE PEAK LOAD

### 2. Determining Reconciled Customer Class Transmission Peak Loads

The Unreconciled Customer Class Transmission Peak Load is then reconciled to the coincident Dominion Zone Transmission Peak Load.

- Determine Dominion Zone Transmission Peak Load

Dominion Zone Transmission Peak Load is the total of all energy in the zone, both generated and zone net interchange, for the transmission peak load hour. This is the composite of the Customers' loads that require Network Service.

Dominion Zone Transmission Peak Load = Dominion Zone Generation MWH + Dominion Zone Net Metered Interconnection Ties MWH

- Determine Unreconciled Dominion Zone Transmission Peak Load

All Unreconciled Non-Interval Customer Class Transmission Peak Loads from Step 1 are summed for the transmission peak load hour, including Interval Meter Customer Peak Loads to determine the Unreconciled Dominion Zone Transmission Peak Load.

Unreconciled Dominion Zone Transmission Peak Load = Sum of All Unreconciled Non-Interval Meter Customer Class Transmission Peak Loads + Interval Meter Customer Peak Loads

- Determination of Transmission Peak Load Reconciliation Adjustment

The Transmission Peak Load Reconciliation Adjustment value is allocated only to the Non-Interval Meter Customer Classes since Class Profile Loads provide an estimate of the Customer loads that are used to determine the peak hour loads for the Customers in these Customer Classes. Transmission Peak Load Reconciliation Adjustment values are not allocated to Interval Meter Customers since actual peak loads are available and are the Customer's load for the transmission peak load hour. The Transmission Peak Load Reconciliation Adjustment is the difference between the Dominion Zone Transmission Peak Load and the Unreconciled Dominion Zone Transmission Peak Load.

Transmission Peak Load Reconciliation Adjustment = Dominion Zone Transmission Peak Load – Unreconciled Dominion Zone Transmission Peak Load

## NETWORK SERVICE PEAK LOAD

- Allocate Transmission Peak Load Reconciliation Adjustment to Non-Interval Meter Customer Classes

The Transmission Peak Load Reconciliation Adjustment is allocated to each Customer Class by Meter Type, on a load ratio share basis.

Non-Interval Monthly-Meter Customer Class Transmission Peak Load Reconciliation Adjustment =  
{Transmission Peak Load Reconciliation Adjustment \* (Unreconciled Non-Interval Monthly-Meter Customer Class Transmission Peak Load / Total Unreconciled Non-Interval Meter Customer Transmission Peak Load)}

Non-Interval Demand-Meter Customer Class Transmission Peak Load Reconciliation Adjustment =  
{Transmission Peak Load Reconciliation Adjustment \* (Unreconciled Non-Interval Demand-Meter Customer Transmission Peak Load / Total Unreconciled Non-Interval Meter Customer Transmission Peak Load)}

- Calculate Reconciled Non-Interval Meter Customer Class Transmission Peak Load

The allocated Transmission Peak Load Reconciliation Adjustment is added to the respective Unreconciled Non-Interval Meter Customer Class Transmission Peak Load to derive the Reconciled Non-Interval Meter Customer Class Transmission Peak Load.

Reconciled Non-Interval Meter Customer Class Transmission Peak Load = Unreconciled Non-Interval Meter Customer Class Transmission Peak Load + Non-Interval Meter Customer Class Allocated Transmission Peak Load Reconciliation Adjustment

- Calculate Reconciled Dominion Zone Transmission Peak Loads

The total of all Non-Interval Meter Reconciled Customer Class Transmission Peak Loads is combined with the Interval Meter Customer Transmission Peak Loads to determine the total Reconciled Dominion Zone Transmission Peak Load.

Reconciled Dominion Zone Transmission Peak Load = Sum of Reconciled Non-Interval Meter Customer Class Transmission Peak Loads + Interval Meter Customer Transmission Peak Loads

## **NETWORK SERVICE PEAK LOAD**

### 3. Calculate Customer Transmission Peak Load Factors

- Determination of the Customer TPL Factors for each Customer by Meter Type, by Customer Class

Customer Transmission Peak Load Factors (Customer TPL Factor) represent the average reconciled Customer Network Service load for a Class Profile Customer. The Customer TPL Factor is determined by dividing the Reconciled Customer Class Transmission Peak Load by the respective Customer Class Weighting Factor for the Transmission peak load hour.

Non-Interval Monthly-Meter Customer TPL Factor = Non-Interval Monthly-Meter Reconciled Customer Class Transmission Peak Load / Non-Interval Monthly-Meter Customer Class Weighting Factor

Non-Interval Demand-Meter Customer TPL Factor = Non-Interval Demand-Meter Reconciled Customer Class Transmission Peak Load / Non-Interval Demand-Meter Customer Class Weighting Factor

Interval Meter Customer TPL Factor = Interval Meter Customer Class Weighting Factor

Where:

- Non-Interval Monthly-Meter Customer Class Weighting Factor for each Customer Class = Customer Class Usage Factor
- Non-Interval Demand-Meter Customer Class Weighting Factor for each Customer Class = Sum of the metered kW demands for all customers in each respective Customer Class.
- Interval Meter Customer Class Weighting Factor = Default value of 1.0.

### 4. Calculation of the Annual Customer Network Service Peak Load (NSPL)

To determine the annual Customer NSPL, the individual Customer Usage Factor is multiplied by the Customer TPL Factor. The Customer NSPL is the hourly value resulting from this calculation.

Monthly-Meter Customer NSPL = (Customer Transmission Peak Load Factor \* Customer Usage Factor)

Demand-Meter Customer NSPL = (Customer kW Demand \* Customer Transmission Peak Load Factor)

Interval-Meter Customer NSPL = Customer Transmission Peak Hour Load



## **NETWORK SERVICE PEAK LOAD**

### LSE Level NSPL

The LSE NSPL is determined not only on an annual basis, but also daily to accommodate the Customers who switch energy suppliers under retail choice programs. Once the Customer NSPL has been determined each year, the Customer is assigned that NSPL value for the following twelve months beginning with the month of January. The sum of the Customer NSPL for the LSE is used by PJM to determine the LSE Network Service charge. If a Customer switches to a new LSE, that NSPL value goes with the Customer and contributes to the newly selected LSE's NSPL resulting in a revised Network Service charge.

# ATTACHMENT

## NSPL SAMPLE CALCULATION INPUT DATA

Dominion Transmission System Peak Load Hour		
<u>Date:</u>		<u>8/27/2006</u>
<u>Hour:</u>		<u>18:00</u>
Dominion Zone Transmission System Peak Load		<u>8,875.00</u>
RES CUSTOMER-1 -		
ASSIGNED LOSS FACTOR -	S	
METER TYPE -	Non-Interval Monthly	
CLASS PROFILE	RESVA	
BILLING CYCLE TOTAL KWH -		1,244.00
CLASS PROFILE LOAD (kWh) -		4.90
CLASS PROFILE TOTAL KWH -		1,300.00
LOAD SERVING ENTITY (LSE) -	ServCo	
RES CUSTOMER-2 -		
ASSIGNED LOSS FACTOR -	S	
METER TYPE -	Non-Interval Monthly	
CLASS PROFILE	RESVA	
BILLING CYCLE TOTAL KWH -		1,795.00
CLASS PROFILE LOAD (kWh) -		4.90
CLASS PROFILE TOTAL KWH -		1,300.00
LOAD SERVING ENTITY (LSE) -	ServCo	
RES CUSTOMER-3 -		
ASSIGNED LOSS FACTOR -	S	
METER TYPE -	Non-Interval Monthly	
CLASS PROFILE	RESVA	
BILLING CYCLE TOTAL KWH -		1,169.00
CLASS PROFILE LOAD (kW) -		4.90
CLASS PROFILE TOTAL KWH -		1,300.00
LOAD SERVING ENTITY (LSE) -	ServCo	

**NSPL SAMPLE CALCULATION INPUT DATA**

<u>DOMINION TRANSMISSION SYSTEM PEAK HOUR:</u>		
<u>DATE:</u>		<u>8/27/2006</u>
<u>HOURL:</u>		<u>18:00</u>
GS1 CUSTOMER-4 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Non-Interval Demand	
CLASS PROFILE -	GS1	
BILLING CYCLE TOTAL KWH -		4,160.00
BILLING CYCLE Demand (kW) -		27.75
CLASS PROFILE LOAD (kWh) -		10.60
CLASS PROFILE TOTAL KWH -		2,825.00
LOAD SERVING ENTITY (LSE) -	ServCo	
GS1 CUSTOMER-5 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Non-Interval Monthly	
CLASS PROFILE	GS1	
BILLING CYCLE TOTAL KWH -		1,491.00
CLASS PROFILE LOAD (kWh) -		10.60
CLASS PROFILE TOTAL KWH -		2,825.00
LOAD SERVING ENTITY (LSE) -	ServCo	
GS2 CUSTOMER-6 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Non-Interval Demand	
CLASS PROFILE -	GS2	
BILLING CYCLE TOTAL KWH -		17,840.00
BILLING CYCLE DEMAND (kW) -		38.60
CLASS PROFILE LOAD (kWh) -		75.00
CLASS PROFILE TOTAL KWH -		27,000.00
LOAD SERVING ENTITY (LSE) -	Acme	

**NSPL SAMPLE CALCULATION INPUT DATA**

GS2 CUSTOMER-7 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Non-Interval Demand	
CLASS PROFILE -	GS2	
BILLING CYCLE TOTAL KWH -		19,600.00
BILLING CYCLE DEMAND (kW) -		68.90
CLASS PROFILE LOAD (kW) -		75.00
CLASS PROFILE TOTAL KWH -		27,000.00
LOAD SERVING ENTITY (LSE) -	Acme	
<u>DOMINION TRANSMISSION SYSTEM PEAK HOUR:</u>		
<u>DATE:</u>		<u>8/27/2006</u>
<u>HOOR:</u>		<u>18:00</u>
GS3 CUSTOMER-8 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Interval	
CLASS PROFILE -	GS3	
BILLING CYCLE TOTAL KWH -		681,120.00
BILLING CYCLE DEMAND (kW) -		1,180.00
CLASS PROFILE LOAD (kW) -		1,180.00
CLASS PROFILE TOTAL KWH -		681,120.00
LOAD SERVING ENTITY (LSE) -	Utilico	
GS3 CUSTOMER-9 -		
ASSIGNED LOSS FACTOR -	S	
METERING TYPE -	Interval	
CLASS PROFILE -	GS3	
BILLING CYCLE (kWh)		580,200.00
BILLING CYCLE DEMAND (kW) -		1,090.00
CLASS PROFILE LOAD (kW) -		1,090.00
CLASS PROFILE TOTAL KWH -		580,200.00
LOAD SERVING ENTITY (LSE) -	Acme	

**NSPL SAMPLE CALCULATION INPUT DATA**

GS4 CUSTOMER-10 -		
ASSIGNED LOSS FACTOR -	P	
METERING TYPE -	Interval	
CLASS PROFILE -	Customer -10	
BILLING CYCLE TOTAL KWH -		2,217,600.00
BILLING CYCLE DEMAND (kW) -		4,350.00
CLASS PROFILE LOAD (kW) -		4,350.00
CLASS PROFILE TOTAL KWH -		2,217,600.00
LOAD SERVING ENTITY (LSE) -	Utilico	
GS4 CUSTOMER-11 -		
ASSIGNED LOSS FACTOR -	T	
METERING TYPE -	Interval	
CLASS PROFILE -	Customer -11	
BILLING CYCLE TOTAL KWH -		1,357,200.00
BILLING CYCLE DEMAND (kW) -		1,821.00
CLASS PROFILE LOAD (kW) -		1,821.00
CLASS PROFILE TOTAL KWH -		1,357,200.00
LOAD SERVING ENTITY (LSE) -	Utilico	

Retrieve the Customer Transmission Peak Hour Loads from Class Profile:

<u>Dominion Transmission System Peak Load Hour</u>			
<u>Date:</u>			<u>8/27/2006</u>
<u>Hour:</u>			<u>18:00</u>
			<u>Class Profile</u>
<u>Customer</u>	<u>Class Profile</u>	<u>Meter Type</u>	<u>Peak Load</u>
RES Customer-1	RESVA	Monthly	4.90
RES Customer-2	RESVA	Monthly	4.90
RES Customer-3	RESVA	Monthly	4.90
GS1 Customer-4	GS1	Demand	10.60
GS1 Customer-5	GS1	Monthly	10.60
GS2 Customer-6	GS2	Demand	75.00
GS2 Customer-7	GS2	Demand	75.00
GS3 Customer-8	GS3 Customer-8	Interval	1,180.00
GS3 Customer-9	GS3 Customer-9	Interval	1,090.00
GS4 Customer-10	GS4 Customer-10	Interval	4,350.00
GS4 Customer-11	GS4 Customer-11	Interval	1,821.00

Calculate Customer Usage Factors and Customer Class Usage Factors:

Customer Usage Factor = Customer Billing Cycle Total kWh / Class Profile Total kWh

Customer Class Usage Factor = Sum of Customer Usage Factor in Customer Class

<u>Meter Type / Customer Class</u>	<u>Class Profile</u>	<u>August Billing Cycle Class Profile kWh</u>	<u>August Billing Cycle Customer kWh</u>	<u>August Billing Cycle Customer Usage Factor</u>
<u>Monthly Meter Type:</u>				
RESVA Customer-1	RESVA	1,300.00	1,244.00	0.95692
RESVA Customer-2	RESVA	1,300.00	1,795.00	1.38077
RESVA Customer-3	RESVA	1,300.00	1,169.00	0.89923
RESVA Customer Class Usage Factor				3.23692
GS1 Customer-5	GS1	2,825.00	1,491.00	0.52779
GS1 Customer Class Usage Factor				<b>0.52779</b>
<u>Demand Meter Type:</u>				
GS1 Customer-4	GS1	2,825.00	4,160.00	1.47257
GS1 Customer Class Usage Factor				1.47257
GS2 Customer-6	GS2	27,000.00	17,840.00	0.66074
GS2 Customer-7	GS2	27,000.00	19,600.00	0.72593
GS2 Customer Class Usage Factor				1.38667
<u>Interval Meter Type:</u>				
GS3 Customer-8	GS3 Customer-8	681,120.00	681,120.00	1.00000
GS3 Customer-8 Class Usage Factor				1.00000
GS3 Customer-9	GS3 Customer-9	580,200.00	580,200.00	1.00000
GS3 Customer-9 Class Usage Factor				1.00000
GS4 Customer-10	GS4 Customer-10	2,217,600.00	2,217,600.00	1.00000
GS4 Customer-10 Class Usage Factor				1.00000
GS4 Customer-11	GS4 Customer-11	1,357,200.00	1,357,200.00	1.00000
GS4 Customer-11 Class Usage Factor				1.00000

Calculate the Unreconciled Customer Class Transmission Peak Loads

Transmission System Peak Load Hour:						
Date:				<u>8/27/2006</u>	<u>8/27/2006</u>	
Hour:				<u>18:00</u>	<u>18:00</u>	
				<u>August</u>	<u>Unreconciled</u>	
		<u>Delivery</u>	<u>Loss</u>	<u>Billing Cycle</u>	<u>Class Profile</u>	<u>Customer Class</u>
<u>Meter Type / Customer Class</u>	<u>Class Profile</u>	<u>Voltage</u>	<u>Expansion Factor</u>	<u>Usage Factor</u>	<u>Load (kWh)</u>	<u>Load (kWh)</u>
<u>Monthly Meter Type:</u>						
RESVA Customer Class	RESVA	S	1.059964	3.23692	4.90	16.81
GS1 Customer Class	GS1	S	1.059964	0.52779	10.60	5.93
<u>Demand Meter Type:</u>						
GS1 Customer Class	GS1	S	1.059964	1.47257	10.60	16.55
GS2 Customer Class	GS2	S	1.059964	1.38667	75.00	<u>110.24</u>
Total Non-Interval Meter Load						149.52
<u>Interval Meter Type:</u>						
GS3 Customer-8	GS3 Customer-8	P	1.031968	1.00	1,180.00	1,217.72
GS3 Customer-9	GS3 Customer-9	P	1.031968	1.00	1,090.00	1,124.85
GS4 Customer-10	GS4 Customer-10	T	1.023947	1.00	4,350.00	4,454.17
GS4 Customer-11	GS4 Customer-11	T	1.023947	1.00	1,821.00	<u>1,864.61</u>
Total Interval Meter Load						<u>8,661.34</u>
Total Unreconciled Dominion Zone Transmission Peak Load						8,810.87

Line Loss Expansion Factors:

Transmission Voltage -	T	1.023947
Primary Distribution Voltage -	P	1.031968
Secondary Distribution Voltage -	S	1.059964

Calculate the Transmission Peak Load Reconciliation Adjustment

Peak Load Reconciliation Adjustment = Dominion Zone Peak Load - Unreconciled Dominion Zone Zonal Load

Step 1 - Zone Transmission Peak Load Differential

Transmission System Peak Load Hour:	
Date:	<u>8/27/2006</u>
Hour:	<u>18:00</u>
Dominion Zone Peak Loads	8,875.00
Unreconciled Dominion Zone Peak Loads	<u>8,810.87</u>
Peak Load Reconciliation Adjustment (kW)	64.13

Step 2 - Calculate Allocation Percentages

	<u>Average of</u>	
	<u>Unreconciled</u>	<u>Customer Class</u>
	<u>Customer Class</u>	<u>Allocation</u>
<u>By Meter Type / Customer Class</u>	<u>Loads (kWh)</u>	<u>Percentage</u>
Monthly Meter Type:		
<u>RESVA Customer Class</u>	16.81	11.24%
<u>GS1 Customer Class</u>	5.93	3.97%
Demand Meter Type:		
<u>GS1 Customer Class</u>	16.55	11.07%
<u>GS2 Customer Class</u>	<u>110.24</u>	<u>73.73%</u>
Total Non-Interval Meter Customer Classes	149.52	100.00%

Step 3 - Allocate Peak Load Reconciliation Adjustment

Transmission System Peak Load Hour:	
Date:	<u>8/27/2006</u>
Hour:	<u>18:00</u>
Dominion Zone Peak Load Reconciliation Adjustment	64.13
Peak Load Adjustment By Meter Type / Customer Class:	
<u>Monthly-Meter Customer Classes</u>	
RES Customer Class	7.21
GS1 Customer Class	2.54
<u>Demand-Meter Customer Classes</u>	
GS1 Customer Class	7.10
GS2 Customer Class	47.28
<u>Total Non-Interval Meter Customer Adjustment</u>	64.13
Peak Load Adjustment By Customer Class	
RES Customer Class	7.21
GS1 Customer Class	9.64
GS2 Customer Class	<u>47.28</u>
<u>Total Non-Interval Meter Customer Adjustment</u>	64.13

Reconciliation of Dominion Zone Transmission Peak Load:

Unreconciled Non-Interval Meter Customer Class Load	149.52
Total Peak Load Reconciliation Adjustment	64.13
Interval Meter Customer Class Load	<u>8,661.34</u>
Total Reconciled Dominion Zone Transmission Peak Load	8,875.00

Determine Reconciled Customer Class Network Service Peak Load:

Transmission System Peak Load Hour:	
Date:	<u>8/27/2006</u>
Hour:	<u>18:00</u>
<u>Meter Type By Customer Class</u>	<u>Customer Class</u> <u>Load (kW)</u>
<u>Non-Interval Meter Customer Loads:</u>	
<u>Monthly-Meter Customer Loads</u>	
Unreconciled RESVA Class Load	16.81
RESVA Peak Load Reconciliation Adjustment	<u>7.21</u>
Total Reconciled RESVA Class Load	24.02
Unreconciled GS1 Class Load	5.93
GS1 Peak Load Reconciliation Adjustment	<u>2.54</u>
Total Reconciled GS1 Class Load	8.47
<u>Demand Meter Type Customer Loads</u>	
Unreconciled GS1 Class Load	16.55
GS1 Peak Load Reconciliation Adjustment	<u>7.10</u>
Total Reconciled GS1 Class Load	23.64
Unreconciled GS2 Class Load	110.24
GS2 Peak Load Reconciliation Adjustment	<u>47.28</u>
Total Reconciled GS2 Class Load	<u>157.52</u>
<u>Total Non-Interval Meter Customer Loads:</u>	213.66
<u>Interval Meter Customer Loads:</u>	
GS3 Customer-8 Class Load	1,217.72
GS3 Customer-9 Class Load	1,124.85
GS4 Customer-10 Class Load	4,454.17
GS4 Customer-11 Class Load	<u>1,864.61</u>
<u>Total Interval Meter Customer Loads:</u>	8,661.34
Total Unreconciled Dominion Zonal Peak Loads	8,810.87
Total Reconciled Dominion Zonal Peak Loads	<u>8,875.00</u>
Dominion Zone Peak Load Reconciliation Adjustment	64.13

Determine Customer Class Weighting Factors

Non-Interval Monthly Meter Class Profile Weighting Factor = Non-Interval Monthly Meter Customer Class Usage Factor

Non-Interval Demand Meter Class Profile Weighting Factor = Sum of Non-Interval Demand Meter Customer Class Demand kW

Interval Meter Class Profile Weighting Factor = 1.00

<u>By Meter Type / Customer Class</u>	<u>Class Profile</u>	<u>Meter Type</u>	<u>August Billing Cycle Metered Demand KW</u>	<u>August Billing Cycle Customer Usage Factor</u>
<u>Monthly Meter Type:</u>				
RESVA Customer-1	RESVA	Monthly		0.95692
RESVA Customer-2	RESVA	Monthly		1.38077
RESVA Customer-3	RESVA	Monthly		0.89923
RESVA Customer Class Weighting Factor				3.23692
GS1 Customer-5	GS1	Monthly		0.52779
GS1 Customer Class Weighting Factor				0.52779
<u>Demand Meter Type:</u>				
GS1 Customer-4	GS1	Demand	27.75	
GS1 Customer Class Weighting Factor			27.75	
GS2 Customer-6	GS2	Demand	38.60	
GS2 Customer-7	GS2	Demand	68.90	
GS2 Customer Class Weighting Factor			107.50	
<u>Interval Meter Type:</u>				
GS3 Customer-8 Class Weighting Factor	GS3 Customer-8	Interval	Default Value -	<b>1.00000</b>
GS3 Customer-9 Class Weighting Factor	GS3 Customer-9	Interval	Default Value -	<b>1.00000</b>
GS4 Customer-10 Class Weighting Factor	GS4 Customer-10	Interval	Default Value -	<b>1.00000</b>
GS4 Customer-11 Class Weighting Factor	GS4 Customer-11	Interval	Default Value -	<b>1.00000</b>

Determine Customer Network Service Peak Load Factor (Customer NSPL Factor):

Non-Interval Monthly-Meter Customer NSPL Factor = Non-Interval Monthly-Meter Reconciled Customer Class Loads /  
Non-Interval Monthly-Meter Customer Class Weighting Factor

Non-Interval Demand-Meter Customer NSPL Factor = Non-Interval Demand-Meter Reconciled Customer Class Load /  
Non-Interval Demand-Meter Customer Class Weighting Factor

Interval Meter Customer NSPL Factor = Interval Meter Customer Class Load / Interval Meter Customer Class Weight

Transmission System Peak Load Hour :		
Date:		<u>8/27/2006</u>
Hour:		<u>18:00</u>
<u>Customer Class</u>	<u>August Billing Cycle Customer Class Weighting Factor</u>	<u>Customer Class Load (kW)</u>
<u>Monthly-Meter Type:</u>		
Reconciled RESVA Customer Class Load	3.23692	24.02
RESVA Customer Class NSPL Factor		7.42
<u>Demand-Meter Type:</u>		
Reconciled GS1 Customer Class Load	0.52779	8.47
GS1 Customer Class NSPL Factor		16.05
<u>Interval-Meter Type:</u>		
Reconciled GS1 Customer Class Load	27.75	23.64
GS1 Customer Class NSPL Factor		0.85
Reconciled GS2 Customer Class Load	107.50	157.52
GS2 Customer Class NSPL Factor		1.47
<u>Interval-Meter Type:</u>		
GS3 Customer-8 Load	1.00	
GS3 Customer-8 NSPL Factor		1,217.72
GS3 Customer-9 Load	1.00	
GS3 Customer Class NSPL Factor		1,124.85
GS4 Customer-10 Load	1.00	
GS4 Customer-10 NSPL Factor		4,454.17
GS4Customer-11 Load	1.00	
GS4Customer-11 NSPL Factor		1,864.61

Calculate Customer Network Service Peak Load (Customer NSPL)

Non-Interval Monthly Meter Customer NSPL = Non-Interval Monthly Meter Customer TPL Factor \*

Non-Interval Monthly Meter Customer Usage Factor

Non-Interval Demand Meter Customer NSPL = Non-Interval Demand Meter Customer Demand kW \*

Non-Interval Demand Meter Customer TPL Factor

Interval Meter Customer Class NSPL = Interval Meter Customer Transmission Peak Hour Load

Transmission System Peak Load Hour:			
Date:		<u>8/27/2006</u>	<u>8/27/2006</u>
Hour:		<u>18:00</u>	<u>18:00</u>
By Meter Type / Customer Class	<u>August Billing Cycle Customer Usage Factor</u>	<u>Customer TPL Factor</u>	<u>Customer NSPL</u>
<u>Monthly Meter Customers</u>			
RES Customer-1	0.956923077	7.42	7.10
RES Customer-2	1.380769231	7.42	10.25
RES Customer-3	0.899230769	7.42	6.67
GS1 Customer-5	0.527787611	16.05	8.47
<u>Demand Meter Customers</u>			
	<u>Customer Demand kW</u>		
GS1 Customer-4	27.75	0.85	23.64
GS2 Customer-6	38.60	1.47	56.56
GS2 Customer-7	68.90	1.47	100.96
<u>Interval Meter Customers</u>			
GS3 Customer-8	1.00	<b>1,217.72</b>	<b>1,217.72</b>
GS3 Customer-9	1.00	<b>1,124.85</b>	<b>1,124.85</b>
GS4 Customer-10	1.00	<b>4,454.17</b>	<b>4,454.17</b>
GS4 Customer-11	1.00	<b>1,864.61</b>	<b>1,864.61</b>
Dominion Zone Peak Loads			8,875.00

Determine LSE Network Service Peak Load

<u>By Meter Type / Customer Class</u>	<u>LSE</u>	<u>Customer PLC</u>
<u>Monthly Meter Customers</u>		
RES Customer-1	ServCo	7.10
RES Customer-2	ServCo	10.25
RES Customer-3	ServCo	6.67
GS1 Customer-5	ServCo	8.47
<u>Demand Meter Customers</u>		
GS1 Customer-4	ServCo	23.64
GS2 Customer-6	Acme	56.56
GS2 Customer-7	Acme	100.96
<u>Interval Meter Customers</u>		
GS3 Customer-8	UtiliCo	1,217.72
GS3 Customer-9	Acme	1,124.85
GS4 Customer-10	UtiliCo	4,454.17
GS4 Customer-11	UtiliCo	1,864.61

<u>LSE Network Service Peak Load</u>		
<u>SERVCO</u>		
	RES Customer-1	7.10
	RES Customer-2	10.25
	RES Customer-3	6.67
	GS1 Customer-5	8.47
	GS1 Customer-4	<u>23.64</u>
SERVCO Network Service Peak Load		56.14
<u>ACME</u>		
	GS2 Customer-6	56.56
	GS2 Customer-7	100.96
	GS3 Customer-9	<u>1,124.85</u>
ACME Network Service Peak Load		1,282.36
<u>UTILICO</u>		
	GS3 Customer-8	1,217.72
	GS4 Customer-10	4,454.17
	GS4 Customer-11	<u>1,864.61</u>
UTILICO Network Service Peak Load		7,536.50
Dominion Zone Network Service Peak Load		8,875.00