Direct Testimony and Schedules
Phillip J. Zins

Before the North Dakota Public Service Commission
State of North Dakota

In the Matter of the Application of
Northern States Power Company, a Minnesota Corporation

For Authority to Increase Rates for
Electric Service in North Dakota

Case No. PU-07-___
Exhibit___

Class Cost of Service Analysis
and
Selected Rate Design

December 7, 2007

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Phillip J. Zins. My business address is 414 Nicollet Mall, 5th Floor, Minneapolis, Minnesota, 55401.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Xcel Energy Services Inc., which is the service company subsidiary of Xcel Energy Inc. My title is Manager, Pricing and Planning.

Q. FOR WHOM ARE YOU TESTIFYING?

A. I am providing testimony on behalf of Northern States Power Company, a Minnesota corporation ("Xcel Energy" or the "Company"), operating in North Dakota.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. A statement of my qualifications and experience is provided in Schedule 1, of Exhibit____(PJZ-1).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the Company's proposed class cost of service study ("CCOSS"), the Company's rate design objectives, and selected portions of the Company's proposed rate design. Mr. Steve Huso will present the remainder of the Company's proposed rate design changes.

With respect to the CCOSS, the Company has provided two versions. The first is that proposed by the Company for use as the guide to designing rates

and is described in more detail below. The second version is essentially the same as the first except the "Demand-Billed Commercial and Industrial" class is separated into "small" and "large" sub-groups. Small is defined as all customers with a maximum demand of less than 1.0 MW and large is defined as all customers with maximum demand of 1.0 MW or greater.

This second version of the CCOSS is provided in response to the North Dakota Public Service Commission's ("NDPSC" or "Commission") Finding number 172 on page 33 of its December 15, 1992 Order in Case No. PU-400-92-399.

Q. MR. ZINS, PLEASE LIST EACH OF THE COST OF SERVICE AND RATE DESIGN TOPICS YOU WILL ADDRESS IN YOUR TESTIMONY.

A. The topics I will address are as follows:

- Rate Design Objectives
- Class Cost of Service Studies
  - Proposed Version
  - Compliance Version
- Selected Rate Design Revisions
  - Voltage Discounts
  - Fuel Clause/Cost Rider ("FCR")
  - Miscellaneous Tariff Consolidations or Eliminations
  - Distributed Generation Interconnection Procedures
  - General Rules and Regulations

Q. WHAT EXHIBIT AND SCHEDULES ARE YOU SPONSORING IN THIS FILING?

A. I'm sponsoring Exhibit____(PJZ-1), which contains the following Schedules:

Schedule 1, Statement of Qualifications and Experience

Schedule 2, Proposed Class Cost of Service Study

Schedule 3, Guide to Embedded Class Cost of Service Study

Schedule 4, Compliance Class Cost of Service Study

Schedule 5, Voltage Discount Cost Analysis

Schedule 6, One-Part Fuel Clause Rider – Class Ratio Calculation

Schedule 7, Distributed Generation Interconnection Manual

Schedule 8, General Rules & Regulations – Cost Analysis

II. RATE DESIGN OBJECTIVES

Q. WHAT ARE THE COMPANY'S OBJECTIVES WHEN DEVELOPING ITS ELECTRIC RATE STRUCTURE?

A. The Company's basic electric rate design objectives can be summarized as follows:

1. Yield total revenues equal to the test year ("TY") revenue requirements and thereby, provide a reasonable opportunity for the Company to earn its authorized return on investment.
2. Accurately reflect the resource costs of providing service and where appropriate, reflect the market value of the service provided.
3. Provide sufficient flexibility in pricing and associated service-conditions so the Company's electric service remains competitive in the broader energy market.
4. Achieve the associate objectives of maintaining reasonable rate-continuity, customer understanding, revenue stability and administrative practicality.

III. CLASS COST OF SERVICE STUDIES

A. Proposed Class Cost Study

Q. PLEASE INTRODUCE THE CLASS COST OF SERVICE STUDY THAT THE COMPANY PROPOSES FOR USE IN THIS RATE CASE?

A. The Company has prepared a CCOSS, which is included as Schedule 2, of Exhibit___(PJZ-1). Page 1 of this Schedule is a top-sheet summary of the detailed results of the CCOSS, which follows on the subsequent pages.

Q. ARE THERE DIFFERENCES BETWEEN THIS CCOSS AND THE CCOSS THE COMPANY FILED IN ITS LAST GENERAL RATE CASE?

A. The CCOSS filed with this case is essentially the same as that approved by the Commission in the previous case but it incorporates updates and refinements in the following areas:

- Sub-Group Consolidation
- Interruptible Capacity-Cost Accounting
- Energy Cost Allocation
- Seasonal Split of Generation Capacity Costs
- Secondary ***Distribution*** Cost Allocation
- Secondary ***Service*** Cost Allocation
- General and Common Plant Allocation

<u>Sub-Group Consolidation</u>

Q. PLEASE EXPLAIN WHY THE COMPANY IS CONSOLIDATING CERTAIN SUB-GROUPS OF CUSTOMER CLASSES.

A. Historically, the Company's CCOSS included a number of "sub-group" categories within the classes of service. The substantial additional complexity and detail associated with these several sub-groups is not useful in developing the basic rate structure so the Company has simplified the CCOSS by consolidating them into their respective primary classes of service.

The Company's rate structure has been, and continues to be developed around four primary cost of service classes. They are Residential, Small Commercial Non-Demand, Commercial & Industrial ("C&I") Demand and Street Lighting. Within the C&I Demand class, where there are service-voltage options, the distribution-system cost differences are accounted for in the design through rate discounts for customers served at primary or higher voltages. These service-voltages options are secondary, primary (which includes transmission transformed service) and transmission.

Q. MR. ZINS, PLEASE DESCRIBE THE SPECIFIC SUB-GROUP CONSOLIDATIONS THAT HAVE BEEN MADE.

A. The Residential class is a consolidation of the former "With" and "Without" space-heating sub-groups, as well as the specialized Residential "Load Management" rates. The Commercial Non-Demand class remains the same except it includes the non-demand Small Municipal Pumping Service. The C&I Demand class is a consolidation of the "Small" and "Large" as well as the "Firm" and "Interruptible" sub-groups. It also includes the demand-billed Municipal Pumping Service. Finally, Street & Area Lighting, which had been made up of three sub-classes (Leased, Purchased and Automatic Protective Lighting), has been consolidated into one class

Interruptible Capacity-Cost-Accounting

Q. WHAT CHANGE WAS MADE REGARDING INTERRUPTIBLE CAPACITY-COST-ACCOUNTING?

A. In this revised CCOSS, the rate discounts associated with interruptible rates are accounted for differently from past practice for the following reasons.

The economic essence of a utility's "obligation to serve" is to provide low-cost reliable firm service. The "interruptible service" is in reality, firm service with an after-the-fact contract provision, through which the utility has the option to buy back (from willing customers) all or part of their "regulatory entitlement" to firm service. The resulting capacity purchase transactions occur when, and if, doing so is a cost-effective source of peaking capacity. This means the "interruptible rate discounts" are really power supply costs, and should be recognized as such in the CCOSS.

Q. HOW WAS THIS CHANGE REFLECTED IN THE CCOSS?

A. To accomplish the change in interruptible capacity-cost-accounting, the Company has added two more lines to the CCOSS format. Line 6, labeled "Firmed Up Revenue," shows the difference between the firm and interruptible rates, which identifies the amount of the discounts and the classes from which they originate. And, Line 7, labeled "Interruptible Capacity Cost," shows how this interruptible-capacity cost is allocated to the classes, using the applicable capacity cost allocation factor.

Energy Cost Allocation

Q. PLEASE DESCRIBE THE REFINEMENT IN THE ENERGY COST ALLOCATION.

A. The energy cost allocator used in this CCOSS is conceptually the same as has been used in previous cases but has been refined to more precisely reflect class cost responsibilities.

The energy allocator from the Company's previous studies (referred to as "E20") was based on the system on- and off-peak marginal energy cost ratio as well as the class on- and off-peak use percentages. It was calculated using the time-variant data then available, which was simple two-period (on- and off-peak) marginal cost and class use data. Now, however, we have more detailed marginal cost data for the system and corresponding load pattern data by class. We also have better computer capabilities, so it is now practical to develop a similar allocator but one that makes use of data from all 8,760 hours of the year as compared to the previous two-period method. The result is a more precise version of the previous "E20" allocator, which has been labeled "E8760."

Seasonal Split of Generation Capacity Costs

Q. MR. ZINS, PLEASE EXPLAIN WHAT GENERATION CAPACITY COSTS ARE, AND DESCRIBE HOW THEY HAVE BEEN SEASONALIZED?

A. As in previous CCOSSs, the fixed generation costs have been "stratified" into "capacity-related" and "energy-related" portions. The capacity-related portion is then "split" into summer and winter components and allocated to the classes based on their respective contributions to the system's seasonal-peak loads.

In the Company's last CCOSS this seasonal split was based on a ratio of summer-to-winter system loads and was calculated as follows. The twelve

monthly system loads were grouped into the four-month summer season and the eight-month winter season. Then the lowest of the twelve monthly peak loads was subtracted from each of the monthly loads. The average of these adjusted monthly loads, for each season, were used to develop the seasonal load ratio, which is used to "split" the capacity-related portion to the seasons.

Applying that method in this case, would result in a much heavier summer weighting than occurred in the previous rate case. For this case, that method would yield a summer-to-winter ratio of more than 5.8 to 1.0. That means 85% of capacity costs would be assigned to the four-month summer season and just 15% assigned to the eight-month winter season.

Q. PLEASE EXPLAIN HOW THE COMPANY PROPOSES TO ADDRESS SEASONAL COST ALLOCATION IN THIS CASE?

A. The choice of an appropriate method for allocating costs to seasons is perhaps more problematic than other cost allocation questions, which are already difficult. The challenge of this seasonal cost allocation issue is to isolate the portion of monthly system loads that determines the capacity portion of fixed generation costs. Then develop from that data the system's seasonal pattern and finally, calculate the class contributions to the seasonal pattern.

Because the method used in the last rate case would assign an inappropriately low 15% of the costs to winter peaks, the Company is proposing a refinement to the method, which mitigates the problem. The Company is proposing to subtract the <u>average annual load</u> (rather than the previously used <u>minimum monthly load)</u> from each of the system's twelve monthly peaks. Using the

average annual load is consistent with the Company's "stratification" process, which is the basis for identifying the "capacity-related" portion of fixed production costs. This refined method yields a ratio of about 2.96 to 1.00, which means approximately 75% of peaking capacity cost is assigned to the summer season instead of 85%.

Secondary *Distribution* Cost Allocation

Q. MR. ZINS, PLEASE EXPLAIN WHY YOU MADE A CHANGE TO THE ALLOCATOR APPLIED TO SECONDARY DISTRIBUTION COSTS?

A. In the Company's previous cost studies, all distribution costs were allocated based on individual class shares of the total of all class peak loads (as distinguished from system peak loads). This method for allocating distribution costs is very common and is generally considered appropriate for distribution system cost allocation, especially the costs of substations and primary distribution facilities. The substations and primary facilities are at the "up-stream" end of the distribution system where their size (and corresponding cost) is driven by the total load of the classes (i.e. sum of class peaks).

However, the appropriateness of this allocator for allocating secondary transformers and secondary distribution lines is not as clear as it is for the substations and primary facilities. Secondary facilities are at the "down-stream" end of the system closer to the customer, where their size and cost become driven by individual customer peak loads (sometimes referred to as non-coincident peaks), as well as by the class peak loads.

Therefore, the Company is proposing to use a modified allocator for secondary lines and secondary transformers. This modified allocator is a 50%

weighting of the class peak allocator and a 50% weighting of a customer peak allocator. The customer peak allocation for a class is the sum of the individual customer peak loads (billing demands) from that class, relative to the sum of customer peak loads for all the classes.

Secondary *Service Line* Cost Allocation

Q. DESCRIBE THE PROPOSED CHANGE IN THE SECONDARY SERVICE ALLOCATOR.

A. This service cost allocation modification is a direct extension of the modification of the secondary distribution cost allocation discussed above. The traditional class peak allocator has also been used historically to allocate the "capacity" portion (not the "customer" portion) of service line costs. A service line is the conductor that extends from the secondary transformer (or in some cases secondary distribution line) to the customer's meter. For these service line facilities, it is clear that the individual customer peak load determines its size and associated cost. Therefore, in this cost study, the Company is proposing to allocate the capacity cost portion of customer service line facilities, based solely on the customer peak allocator described above.

General and Common Plant Allocation

Q. PLEASE EXPLAIN THE REASON FOR THE CHANGES IN THE ALLOCATION OF GENERAL AND COMMON PLANT.

A. Recent changes in the Company's accounting system require a minor modification in the way General and Common Plant is allocated. In the past, both General and Common Plant were subdivided into System and Local sub-components. Therefore, in an electric rate case, General Plant refers to plant investment related only to the electric utility but which may be

associated with more than one of the service functions of production, transmission, and distribution. Common Plant refers to the electric utility's portion of investment that is common to both the electric and gas utilities but likewise is associated with more than one of the functions of service. In the past, the System and Local sub-categories were used to identify whether the asset served the entire electric (and gas) system(s) or just local needs.

The Company's accounting system no longer distinguishes between System and Local, and as a result, the allocation of General and Common plant will change slightly. In the case of Common Plant, there is actually no effect because the previous CCOSS individually allocated System and Local costs with the same allocator that will now be applied to the total cost. That allocator is the "internally generated" "PTD" factor, which is the sum of the already allocated production, transmission & distribution original plant costs. In the case of General Plant, the impact will be small. Previously the Local portion of General Plant, which was nearly 70% of the total cost, was allocated on the same PTD factor. Only the System portion, which was about 30% of the total, was allocated with the system peak factor (D10). Now the total will be allocated on PTD.

Q. MR. ZINS HAS THE COMPANY PROVIDED ANY OTHER DOCUMENTS, WHICH EXPLAINS HOW ITS CCOSS IS DEVELOPED?

A. Yes. The Company has provided a document titled "Guide to Embedded Class Cost of Service Study." This document is included as Schedule 3 of Exhibit No._____(PJZ-1). It provides a useful primer on how the CCOSS was conducted, including the processes of cost functionalization, classification and allocation. These basic processes are common to all embedded cost

studies. This Guide also describes how each of the cost allocation factors were developed and identifies which cost items each allocator is applied to.

Q. PLEASE SUMMARIZE THE RESULTS OF THE COMPANY'S PROPOSED CCOSS.

A. Table 1 below contains a summary of the information from the Company's proposed CCOSS contained in Schedule 2, of Exhibit___(PJZ-1). It indicates the cost responsibilities by class and the rate increase that would be necessary to provide an equal rate of return from each class.

Table 1

Summary of Proposed Class Cost of Service Study

UNADJUSTED	Total	Residential	Non-Demand	Demand	Street Ltg
Total Operating Revenues	167,714	65,649	11,874	88,367	1,825
Incr Late Pay & Misc Chrg	78	37	9	31	1
Retail Revenue Reqt	167,636	65,611	11,865	88,336	1,824
Present Rates	147,179	57,724	10,436	77,139	1,881
Deficiency	20,457	7,888	1,429	11,197	(56)
Defic / Pres	13.9%	13.7%	13.7%	14.5%	-3.0%
Ratio: (Class % / Total %)	**1.00**	**0.98**	**0.99**	**1.04**	**-0.22**
ADJUSTED					
Total Operating Revenues	171,498	66,890	12,153	90,620	1,835
Incr Late Pay & Misc Chrg	78	37	9	31	1
Retail Revenue Reqt	171,420	66,853	12,144	90,589	1,834
Present Rates	150,963	58,141	10,455	80,487	1,881
Deficiency	20,457	8,712	1,690	10,102	(46)
Defic / Adj Pres	13.6%	15.0%	16.2%	12.6%	-2.5%
Ratio: (Class % / Total %)	**1.00**	**1.11**	**1.19**	**0.93**	**-0.18**

Q. WHY HAVE YOU REFERRED TO "UNADJUSTED" AND "ADJUSTED" COST RESPONSIBILITIES?

A. The unadjusted cost responsibilities are those that have historically been indicated in the results of a CCOSS. The adjusted cost responsibilities are those reflecting the Interruptible Capacity-Cost-Accounting Adjustment I discussed earlier, which treats the interruptible rate discounts as a "capacity-related power supply cost." Doing so results in a "conceptual" increase in the total revenue requirement for the "adjusted" CCOSS. This is the case because these discounts (lost revenues) are a direct substitute for the peaking generation costs that would otherwise have been incurred.

Q. MR. ZINS, HAS MARGINAL COST INFORMATION BEEN USED IN THE COMPANY'S CCOSS AND/OR IN THE COMPANY'S PROPOSED RATE DESIGN IN THIS CASE.

A. Yes, there are two significant refinements in the Company's CCOSS that reflect the application of marginal costing concepts. The two refinements are the "stratification" of fixed production costs and the application of the Company's "E8760" energy cost allocator.

Q. EXPLAIN WHAT "STRATIFICATION" OF FIXED PRODUCTION COSTS MEANS AND HOW IT REFLECTS MARGINAL-COSTING CONCEPTS IN THE CCOSS.

A. Stratification is a reference to the technique the Company uses to separate ("stratify") fixed production costs into "capacity-related" and "energy-related" portions, as I described above. The capacity-related portion includes all the fixed costs of peaking plants but also a "peaking-plant-equivalent" portion of the base-load plant costs. This "peaking-plant-equivalent" portion of base-load plant costs is 15% to 30% of the total fixed costs of base-load plants.

After fixed generation costs are stratified, the capacity-related portion is allocated using a traditional system demand ("D10C") factor. But the "energy-related" portion is allocated using the E8760 energy allocator described above. This stratification and allocation process is "marginal-cost-based" because the resulting class-cost-responsibilities and the corresponding rates developed from these costs are comparable to those that would result from a marginal-cost-based study.

Q. HOW ARE MARGINAL-COSTING CONCEPTS REFLECTED IN THE "E8760" AND ITS APPLICATION TO ENERGY-RELATED COSTS?

A. The E8760 energy allocator, which I discussed earlier, is based on the system's marginal energy cost pattern and each class's time-varying load pattern. Its application to the "energy-related" fixed productions costs, as well as the fuel and purchased energy costs, produces class cost responsibilities (and resulting energy charges) that are comparable to those that would result from a marginal-cost-based study.

Q. HOW HAS THE COMPANY USED MARGINAL COSTS DIRECTLY IN DESIGNING ITS RATES?

A. The most significant direct application of marginal costs in the design of the proposed rates can be seen in the proposed time of day (TOD) rates and the high load factor energy charge credit, both of which Mr. Huso discusses in his testimony. The Company relied on an analysis of the system hourly marginal energy costs in developing both of these rate design features. For purposes of background information, it is also useful to understand that the Company has historically always used marginal cost analysis as a primary guide in developing interruptible rate

programs and for evaluating their cost-effectiveness. The Company has also used marginal cost information in establishing purchase power rates offered to customers who are also small power producers.

B. Compliance Class Cost Study

C.

Q. HOW IS THE COMPLIANCE CCOSS DIFFERENT FROM THE COMPANY'S PROPOSED CCOSS?

A. As I indicated earlier, the Compliance CCOSS is essentially the same as the Company's Proposed CCOSS except the Demand-Billed C & I class, is separated into "small" and "large" sub-groups. Small was defined as customers with a maximum demand of less than 1.0 MW and large was defined as customers with maximum demand of 1.0 MW or greater.

The rates available to Demand C & I customers have service provisions designed to reflect differences in costs associated with (1) service voltage; (2) time-of-use; (3) load factor; and (4) firm vs interruptible. The rates do not (and need not) differentiate between customers based on size or type (i.e. small vs. large or commercial vs. industrial). Therefore, any sub-group break down, of the Demand C & I class in the CCOSS, such as small vs. large, is neither necessary nor useful.

Q. PLEASE EXPLAIN HOW THE COMPANY CHOSE THE SMALL VS. LARGE SPLIT FOR PURPOSES OF THIS COMPLIANCE CCOSS.

A. One of the problems associated with a sub-group break down based on size, is deciding what is "small" and what is "large." For purposes of this compliance CCOSS, the Company used 1.0 MW as the division point. This

number was chosen because it is the size-split used for statistical reporting in the Company's FERC Form No. 1 Annual Report. However, it is important to understand that there is no correct/best "small vs. large" division point. Dividing the C & I Demand class using any size/load level (or by Commercial vs. Industrial) is an arbitrary distinction, which does not reasonably reflect any cost-of-service difference. A customer's maximum load level is not a service characteristic that determines a difference in the cost per unit (kWh or kW), cost-of-service. Therefore, is not a useful distinction for purposes of developing appropriate rate design or for setting inter-class revenue responsibilities.

Q. WHAT ARE THE RESULTS OF THE COMPLIANCE CCOSS, YOU ARE PROVIDING IN RESPONSE TO THE COMMISSION'S FINDING NUMBER 172 OF ITS DECEMBER 15, 1992 ORDER IN CASE NO. PU-400-92-399.

A. The results of the Compliance CCOSS are contained in Schedule 4, of Exhibit___(PJZ-1). Here again, Page 1 of this Schedule 4 is a top-sheet summary of the detailed results of the Compliance CCOSS, which follows on the subsequent pages. This Compliance CCOSS is essentially the same as that of the Proposed CCOSS except the C & I Demand class is divided into two sub-groups, Small (less than 1.0 MW) and Large (1.0 MW or greater).

IV. SELECTED RATE DESIGN REVISIONS

A. Voltage Discounts

Q. WHAT REVISIONS ARE BEING PROPOSED TO THE VOLTAGE DISCOUNTS IN THE C&I DEMAND TARIFFS?

A. The proposed revisions to the voltage discounts are a direct result of the test year 2008 CCOSS results. The results of the CCOSS indicate that both the demand and energy charge discounts should be increased to reflect current costs. Table 2 below compares the present and proposed voltage discounts. This Table is a summary of the cost analysis provided in Schedule 5 of Exhibit____(PJZ-1).

Table 2			
C&I Demand Voltage Discounts			
Rate	Primary	Transmission Transformed	Transmission
Present	$0.55	$1.10	$1.65
Proposed	$0.85	$1.45	$1.85
C&I Voltage Discounts - Energy			
Rate	Primary	Transmission Transformed	Transmission
Present	0.05¢	0.06¢	0.09¢
Proposed	0.07¢	0.10¢	0.15¢

B. Fuel Clause/Cost Rider

Q. MR. ZINS IS THE COMPANY PROPOSING CHANGES TO ITS FUEL CLAUSE RIDER TARIFF?

A. Yes the Company is proposing a number of revisions to its Fuel Clause Rider ("FCR") tariff. To begin, you will notice that the tariff title has changed from Fuel Clause Rider to Fuel Cost Rider. The name change by itself is not significant but was made to make it a clearer description of this Rider tariff. Additional more substantive changes to the FCR mechanism are described in

detail below. The proposed changes are driven by the following changes in market circumstances:

1. The growing need to more accurately allocate to and recover from customers, their respective shares of the costs of fuel and purchased energy costs, particularly as those costs change over time.

2. Growing interest in a one-part (zero-base) fuel cost charge that is "unbundled" from the energy charge and stated as a stand-alone total fuel cost item on customer bills. That is, no fuel costs would be recovered through "base" energy charges.

3. The Company's new method for sharing with retail customers the margins resulting from intersystem sales transactions on a current actual basis rather than a fixed test year basis.

4. The need to refine and clarify the language of the FCR tariff to make it easier to understand what costs are included and the basic "mechanics" of the tariff.

Q. PLEASE SUMMARIZE HOW XCEL ENERGY'S CURRENT FCR TARIFF WORKS.

A. As a part of general rate case filings, such as this one, the test year costs of fuel and purchased energy are established, and the method for allocating these costs to the classes (i.e. the proposed E8760 energy-cost allocator) is also established.

The energy-cost allocator is applied to the test year costs, which yields class-specific responsibilities for the test year level of fuel and purchased energy costs. These allocated costs are built into the "energy charge" of each tariff, along with other energy-related costs. Also during the general rate case, the system-average cost per kWh for fuel and purchased energy ("base" cost) is determined by dividing total test year fuel and purchased energy costs by test year sales. This "base" cost is specified in the FCR tariff and is the unit-cost number from which future deviations from the test year costs are measured.

Going forward from a test year, actual fuel and purchased energy costs (using a rolling 4 month average) are compared to the test year "base" cost, and the difference becomes the primary element in the Fuel Clause Adjustment ("FCA") charge for the next month. The other element in the FCA is the "true-up" factor, which captures any small over- or under-recovery of costs from previous months.

Q. IS THERE A CONCERN ASSOCIATED WITH THIS CURRENT METHOD?

A. For decades this FCR mechanism has worked very well. However, in recent years fuel costs have escalated rapidly, and in the recent past, the time period between rate cases (when the "base" cost is re-set and re-allocated) has become extended. The result has been high monthly FCAs that, because they were not designed to reflect the different class usage-patterns, have given rise to concerns about imprecise recovery of fuel and purchased energy costs between rate cases.

Q. COULD YOU ELABORATE ON THIS CONCERN?

A. Let me begin by explaining what is not the problem. The problem is not with the "base" costs of fuel and purchased energy. Historically, this component of the FCR recovered the bulk of total fuel and purchased energy costs because the monthly FCAs were small. Furthermore, this "base" cost is appropriately allocated to classes, based on the different class use patterns as well as the on- and off-peak marginal cost ratio. The classes' cost responsibilities resulting from this approach were then built into the energy charges of each tariff.

The concern arises from the recent high monthly FCAs. The FCAs are the difference between the average-system-cost per kWh and the test year "base" cost. The FCAs are applied on a direct kWh-use basis, which means the FCA component of fuel cost recovery does not account for differences in class use-patterns or the system on- and off-peak cost-pattern.

Historically, this method of recovering the future deviations from test year "base" costs was reasonable and appropriate because the deviations were small, and because frequent rate cases provided timely re-allocation of any sustained cost deviations from the previous test year "base" cost. Furthermore, the simplicity of the method made it easy to understand and efficient to administer.

However, in recent years market-driven fuel and purchased energy costs have escalated rapidly, and the interval between rate cases has been more extended. The result has been that customer classes that use relatively more energy during the off-peak, pay too much through these FCAs. Conversely, classes with relatively more on-peak use pay too little.

Q. WHAT CHANGES IN THE FCR TARIFF DOES THE COMPANY PROPOSE, TO ADDRESS THIS CONCERN?

A. The Company's proposed changes can be summarized as follows:

1. Eliminate the current two-part FCR structure, which includes a test year "base" cost and a monthly FCA, which tracks cost deviations from the "base" cost.

2. Replace it with a one-part FCR structure where each month, total fuel and purchased energy costs are determined and divided by sales, to yield a system average Fuel Cost Factor (FCF).

3. Apply "Service Category Ratios" (specific to the six service categories described below) to this system average FCF, to obtain service-category-specific FCFs.

4. Apply the service category specific FCFs to individual customer kWh use to obtain a total Fuel Cost Charge shown on the customers' bill.

The "Service Category Ratios" for 3 of the 4 primary classes (i.e. Residential, C & I Non-Demand and Outdoor Lighting), are the same as the "Class Ratios," which are developed directly from the Commission-approved energy-cost allocator (e.g. the proposed "E8760 energy allocator").

For the 4th primary class (C & I Demand), the E8760-derived "Class Ratio," is further de-averaged into three separate "Service Category Ratios," one each

for the "Service Categories" of: (1) Non-TOD; (2) On-Peak TOD; and (3) Off-Peak TOD. This de-averaging of the C & I Demand "Class Ratio" is based on the on- and off-peak use-patterns of the Non-TOD and TOD customer groups and the on- and off-peak energy charge ratio that has been approved by the Commission and built into the TOD tariff.

Q. PLEASE ELABORATE ON HOW THESE ELEMENTS WOULD BE APPLIED TO PRODUCE THE SERVICE-CATEGORY-SPECIFIC FCFS.

A. This mechanism sounds more complex than it really is. The essence is a monthly allocation (de-averaging) of the total average system fuel costs, using service category ratios, which in turn reflect the time-differentiated cost pattern for each service category. The Service Category Ratios are simply a mathematical conversion of the Commission approved energy allocator, into "ratios" that when applied to the monthly average system fuel cost per kWh, yields the appropriate service-category-specific cost per kWh.

This monthly allocation of total system fuel costs is equivalent to a test year allocation, of "base" fuel costs. The advantage of this mechanism is that going forward from the test year there will no longer be a monthly FCA that assigns (allocates) to classes the old FCA portion of fuel costs (the deviations from the test year base fuel costs) using an "un-weighted" kWh usage basis.

The best way to obtain a good working understanding of the mechanics of this method is to review the numerical calculations. I have provided this in Schedule 6 of Exhibit___(PJZ-1). It illustrates how the E8760 energy allocator, the C & I Demand class use pattern and the ratio of on- to off-peak TOD energy charges, are used to develop the six "Service Category Ratios."

Q. DOES THIS NEW ONE-PART FCR MECHANISM RESULT IN A DIFFERENT PRESENTATION OF FUEL COSTS UNDER PROPOSED RATES AS COMPARED TO PRESENT RATES?

A. Yes. For example, in the past the Residential tariff included a customer charge, an energy charge (that included among other costs, the test year "base" fuel cost) and a FCA charge, which included fuel cost deviations from the "base" cost. Under our proposed FCR tariff, the energy charge will not include fuel costs. All fuel and purchased energy costs are presented in one separate component in the tariffs and on customers' bills.

Q. MR. ZINS, WHAT COMMISSION AURTHORIZATIONS ARE NECESSARY TO IMPLEMENT THE COMPANY'S PROPOSED FCR MECHANISM?

A. Generally, the Commission would need to approve the method described above and illustrated in Schedule 6 of Exhibit___(PJZ-1). The specific approvals would include: (1) Authorization to eliminate the current two-part FCR mechanism (i.e. "base" cost with FCA deviations from the "base"); and (2) Authorization to implement the proposed one-part FCR mechanism, which includes the use of six service category FCFs, which are derived from the average system costs of fuel and purchased energy.

Q. MR. ZINS, IS THE COMPANY REQUESTING A WAIVER OF ANY NORTH DAKOTA RULES IN ORDER TO IMPLEMENT THE PROPOSED CHANGES TO THE FCR?

A. It is not clear that a waiver of North Dakota Rules is necessary. That would depend on how the language in N.D. Admin. Rule § 69-09-02-39 ("ND Rule"), governing Automatic Adjustment Clauses is interpreted. However, if the Commission's interpretation of the ND Rules is such that it believes a

waiver is necessary, then in accordance with ND Rule § 69-02-01-11, the Company requests such a waiver.

Such a waiver of ND Rule § 69-09-02-39 would not prejudice the public interest. To the contrary, for all the reasons indicated above, the public interest would be advanced as a result of the waiver and approval of the Company's proposed new FCR tariff.

Q. MR. ZINS ARE THERE OTHER TARIFF REVISIONS NEEDED TO ACCOMMODATE THE COMPANY'S PROPOSED NEW FCR MECHANISM?

A. Yes. First, each of the tariffs to which the FCR applies has a provision titled "Fuel Clause," indicating that bills calculated under that tariff are subject to the Fuel Clause Rider. This provision on each tariff has been reworded to reflect the changes in FCR, including the new FCR title, which is Fuel Cost Rider.

Second, as I indicated earlier, the "energy charge" components of all the current tariffs include the "base" costs of fuel. And the monthly FCAs are a second separate rate component. However, under the Company's proposed tariffs, this "base" cost and the monthly FCAs, are added together and this total is charged as a separate one-part fuel cost charge ("FCC"). This change in the FCR structure gives rise to the need for minor language changes in the: (1) Residential Controlled Air Conditioning & Water Heating Rider and the; and (2) Purchase and Sale Billing Service & Time of Day Purchase Service.

Q. PLEASE DESCRIBE THE LANGUAGE CHANGE IN THE RESIDENTIAL CONTROLLED AIR CONDITIONING & WATER HEATING RIDER?

A. The Residential Controlled Air Conditioning & Water Heating Rider (Saver's Switch) has a provision that refers to the Saver's Switch discount applying to the "energy charge" of a corresponding service tariff. The current "energy charge" includes the "base" FCR cost. In order for the Saver's Switch discount to function as intended, the language must be modified to make it clear that the discount now applies to energy and fuel cost charges.

Q. WHAT CHANGE IS NEEDED FOR THE PURCHASE AND SALE AND TIME OF DAY PURCHASE SERVICE RATES?

A. Each of these tariffs specifies payments from the Company to customers for energy supplied from customers' small generators. These two tariffs include a "Fuel Clause" provision. The effect of this provision is to add the FCA (FCC under proposed tariffs) to the purchased energy payment that is separately listed. The purchased energy payment is based on the Company's avoided costs (marginal costs) and as such is already fully compensatory.

Therefore, to avoid significant over-payment for energy purchased under these contracts, the current FCA or the proposed FCC payment should be eliminated. Leaving this provision in place, especially with the new FCC, would result in substantial over-payment for energy purchased under these tariffs. The resulting payment would include the Company's total average fuel and purchased energy costs on top of the avoided cost payment. The proposed language changes for these tariffs (as well as all others discussed below), are shown in redline format in Schedule 7 of Proposed Tariffs in the Company's Notice of Change in Rates ("Notice Schedule 7").

Q. YOU INDICATED EARLIER THE NEED TO MAKE SOME LANGUAGE REVISIONS IN THE FCR TARIFF TO MAKE IT EASIER TO UNDERSTAND. DOES THE COMPANY'S PROPOSED FCR TARIFF INCLUDE THESE ADDITIONAL LANUGUAGE CHANGES?

A. Yes, the Notice Schedule 7 contains the Company's proposed new FCR tariff shown in red line format. It includes the changes necessary to implement the proposed new one-part FCR mechanism and the new method for sharing intersystem sales margins. These two significant revisions account for the bulk of the language changes. The Company has also made other less substantive language changes, the purpose of which is to make the inherently complex FCR tariff a little easier to understand.

Q. DOES THE PROPOSED FCR TARIFF INCORPORATE THE INTERSYSTEM SALES MARGIN SHARING MECHANISM PROPOSED BY THE COMPANY IN THIS GENERAL RATE CASE PROCEEDING?

A. Yes. The Direct Testimony of Mr. Allen D. Krug describes the Company's proposal for sharing with retail customers the margins resulting from intersystem sales transactions. A description of, and the rationale for, this proposal are included in Mr. Krug's testimony, and the specific tariff language is shown in red line format in the Notice Schedule 7.

C. Miscellaneous Tariff Consolidation of Elimination

Q. PLEASE DESCRIBE THE TARIFF CONSOLIDATIONS AND ELIMINATIONS THE COMPANY IS PROPOSING.

A. The separate tariffs that the Company is proposing to consolidate and/or eliminate are as follows:

1. Residential Service - Underground (Sheet 4) consolidated with Residential Service (Sheet 1)
2. Residential Time Of Day Service – Underground (Sheet 5) consolidated with Residential Time Of Day Service (Sheet 2)
3. Direct Current Service (Closed) (Sheet 24) consolidated with Small General Service (Sheet 19)
4. Down Town Grand Forks Redevelopment Business Incentive Rider eliminated.

Q. PLEASE EXPLAIN THE COMPANY'S REASONS FOR CONSOLDIDATING OR ELIMINATING THESE TARIFFS.

A. The two Residential underground tariffs (Non-TOD and TOD) are identical to the corresponding overhead tariffs except the customer charge is $2.00 per month more under the underground tariff. By adding another Customer Charge line to the corresponding standard tariffs, the two separate underground versions can be eliminated. The Company proposes this consolidation for efficiency and simplicity.

The reason for consolidating the Direct Current tariff with Small General Service is essentially the same. The Direct Current tariff is identical to the Small General Service tariff except it includes a small additional kW demand charge to recover the cost of the special device used to convert standard alternating current service to direct current. Direct current is required to operate older elevator motors in some buildings. This separate direct current charge has been added as a separate line item on the Small General Service tariff, and the "availability" provision has been modified to include this

special service. These changes in the standard Small General Service tariff make it possible to eliminate the separate Direct Current tariff.

Finally, the Grand Forks Redevelopment Rider has been eliminated because its authorized application period specified in the tariff expired a number of years ago so it is no longer available for use.

D. Distributed Generation Interconnection Procedures

Q. MR. ZINS WHAT IS THE COMPANY'S PROPOSAL WITH RESPECT TO DISTRIBUTED GENERATION FACILITIES?

A. Because of the growing interest in distributed generation (DG) facilities that are owned and operated by non-utility developers, the Company has developed a document titled "Distributed Generation Interconnection Manual." Its purpose is to provide potential DG developers with technical, contractual and administrative information concerning the interconnection of their DG facilities to the Company's electric distribution system.

This Interconnection Manual is provided in this filing as Schedule 7 of Exhibit No._____(PJZ-1). However, because of its length (sixty five pages), technical nature and because it is of interest to only a very small number of customers, the Company is not proposing to include it in the Rate Book. However, to assure that any potential DG developer is aware of its availability, the Company is proposing to add a new tariff titled Interconnection Procedures and Technical Requirements, Sheet No. 13 of Section 9 to its Rate Book. This new tariff indicates the availability of the

Distributed Generation Interconnection Manual upon request from a customer.

E. General Rules and Regulations

Q. MR. ZINS WHAT REVISIONS ARE BEING PROPOSED IN THE GENERAL RULES AND REGULATIONS TARIFFS?

A. The Company is proposing a number of revisions to tariff language and/or service charges contained in its General Rules and Regulations, Section 6 of its Rate Book. Below I provide a description of the proposed revisions and provide the reasons for the revisions.

Where indicated below, some of the tariff revisions are made to assure consistency with the ND Rules, Chapter 69-09-02, Standards of Service – Electric (the "ND Rules") or the North Dakota Century Code (the "ND Statutes").

A redline version of the revised General Rules tariffs is provided in the Notice Schedule 7. Also, where applicable, supporting cost analysis for proposed changes in service charges is provided in Schedule 8 of Exhibit___(PJZ-1).

Application for Service, Section 1.1

The Company is proposing to modify this tariff language to make it consistent with the Company's corresponding gas tariff. The relevant portions, of the proposed language read as follows:

"The Company may refuse an applicant or terminate service to a customer who fails or refuses to furnish information requested by the Company for the establishment of a service account. Any person who uses electric service in the absence of application or contract shall be subject to the Company's rates, rules and regulations, and shall be responsible for payment of all service used.

When required by governmental authority, a customer desiring new service or expanded service must first make application for and receive written approval from the Company.

Subject to its rates, rules, and regulations, the Company will continue to supply electric service until notified by customer to discontinue the service. The Customer will be responsible for payment of all service furnished through the date of the discontinuance."

(Note: The underlined text indicates added language. This format of underlining added text is used in all the discussion General Rules and Regulations changes below. A complete view of the entire proposed tariffs, is provided in redline format in the Notice Schedule 7.)

Service Processing Charges, Sections 1.2

Q. WHAT ARE THE PROPOSED REVISIONS TO THE SERVICE PROCESSING CHARGE TARIFF?

A. The Company is proposing to increase the Service Processing Charge from $12.00 to $15.00. It is also proposing language changes to help clarify the service initiation processes. In this regard, the Company is proposing to add the following language, which will also make this electric tariff consistent with the Company's corresponding gas utility tariff:

"*If a customer requests reestablishment of service at a location where the same customer discontinued the same service within the preceding 12 month period, an additional reconnection fee will be assessed equal to the sum of the monthly minimum charges applicable during the period service was not taken.*"

Q. WHAT IS THE REASON FOR THE PROPOSED INCREASE IN THE SERVICE PROCESSING CHARGE?

A. The Company is proposing to increase the charge from $12.00 to $15.00 to reflect current costs and also to make it equivalent to the corresponding gas tariff. A consistent service processing charge is important for application to the Company's combination (electric & gas) customers. The new monthly minimum monthly charge language for the period of non-use reflects the Company's ongoing customer-related costs incurred during that period.

Q. PLEASE EXPLAIN THE LANGUAGES MADE TO CLARIFY THE SERVICE PROCESSING CHARGE?

A. First, the term "*Tenant Change*" was eliminated, as it is redundant to the "*New Account*" language. See the redline version of the proposed tariff in the Notice Schedule 7 for details.

Second, the Company is proposing to include a "*Description*" section to clarify the "*New Account*" item as follows:

"*The Company will assess a $15.00 processing charge for the initial establishment of service for each customer.*"

The "*Service Reconnection*" item has the following added language:

"*The Company will assess $15.00 for reconnecting service that has been disconnected for non-payment.*".

The last language modification is as follows:

"If any combination of electric or gas services requested by a customer and furnished by the Company is established or reestablished at the same time and location, only one $15.00 charge will be made."

Again, this change is consistent with the corresponding language in the Company's gas tariff.

Optional Metering Service, Section 1.5

The Company proposes to modify the language to read:

"The customer's utilization equipment has a total rated capacity of 250 kW or less and an estimated usage of 186,000 kWh or less per month."

This is a change from the existing criteria of 10 kW and 2,500 kWh, which has not been updated since 1984 and is consistent with the types of qualifying equipment in use today. See the redline version of the tariff in the Notice Schedule 7 for details.

Deposits and Guarantees, Section 1.6

To assure consistency with ND Rules: 69-09-02-01(1)(g), 69-09-02-03(2), 69-09-02-04(1), 69-09-02-04(2), 69-09-02-04(3), and 69-09-02-05.1(1), the Company is proposing to delete the entire existing Deposits and Guarantees section language and replace with the text indicated below. The new language makes clear the requirements and circumstances where customer deposits may be used for settlement of a delinquent bill. The new replacement language is as follows:

"A. General: The Company may require a customer or an applicant for service to make a deposit to ensure payment before making a service connection.

B. New Service: The Company may require an applicant for service to make a deposit sufficient to cover the estimated charge for furnishing service. If a deposit is required, the Company shall issue a receipt to the depositor showing the amount of the deposit, the date the deposit was made, and the depositor's name.

C. Existing Service: The Company may require a deposit from an existing customer before reconnection is made due to disconnection for nonpayment of a bill. The Company may require a deposit if all or part of the previous deposit was used in settlement of the delinquent bill.

D. Deposit Amount: If a deposit is required, the amount of the deposit shall cover the estimated charge for furnishing service to the customer for a sixty-day period.

E. Payment Guarantee Permissible: In lieu of a cash deposit, a guarantee satisfactory to the Company for a like amount will be acceptable. The Payment Guarantee will terminate when the customer gives notice to discontinue service, there is a change in the location covered by the Payment Guarantee, or thirty days after the Guarantor makes a written request to the Company for termination.

However, no Payment Guarantee may be terminated unless the customer has satisfactorily settled any balance owed to the Company. The Company may require a new Payment Guarantee or cash deposit after termination of a Payment Guarantee.

F. Interest on Deposits and Refunds: On such customer deposits, the Company will pay interest annually at the rate paid by the Bank of North Dakota on a six-month certificate of deposit with the smallest deposit required. The interest rate will be determined as of the first business day of each year. The Company will pay interest annually by direct payment or

as a credit on the customer's bill, at the option of the Company. The payment or deduction for interest must be made during each calendar year, or whenever a deposit is refunded or service discontinued."

Service Calls, Section 1.7

In the Service Calls section, the Company is proposing the following language to make it gender-neutral.

"When a customer calls and reports an electrical problem, the Company will, as soon as possible, send out service personnel to determine the necessary action to correct the problem.

If the electrical problem is in the customer's facilities, the service personnel will attempt to restore service by fuse replacement or minor temporary repair.

Storm conditions require the presence of service personnel in the customer's vicinity and the Company dispatcher notified the service personnel when dispatched to waive charges."

Classification of Customer, Section 2.1

The Company is proposing a number of modifications in this section, again, to assure compliance with ND Rules 69-09-02-14(1), 69-09-02-14(2), and 69-09-02-14(3) and to clarify the tariff intent.

Section 2.1A – Residential Customer will read:

"A residential customer is one using electric service for general household purposes in space occupied as living quarters such as single private residences, single apartments, fraternity houses, sorority houses, and for garages or other auxiliary buildings on the same premises used by the residential customer. General household purposes or uses are domestic lighting, heating, cooking and power service."

Section 2.1B – Farm Customer will read:

"A farm customer taking electric service for non-general household purposes only may be considered a general service customer for rate application purposes. A farm customer using electric service for general household and non-general household purposes jointly may combine such uses through one meter on such rates as are available to general service customers or farm customers. However, where such use is combined and the non-general household electric equipment totals less than one kilowatt of connected load, such farm customer shall be classified residential. Where electric equipment is used jointly for general household and non-general household purposes (such as a water pump), the major use of such equipment will determine whether it is classified for general household or non-general household uses."

Section 2.1C – General Service (Commercial) Customer will read:

"A general service customer is one using electric service for any non-general household purpose in space occupied and operated for commercial purposes, such as stores, offices, shops, hotel, garages, wholesale houses, filling stations, barber shops, beauty shops, and any other space occupied for commercial purposes."

Section 2.1D – "*Small Commercial and Industrial Customer*" is new and defines the application of this classification. The proposed language is as follows:

"A Small Commercial and Industrial Customer has an actual demand less than or equal to 100 kW."

Section 2.1E – "*Large Commercial and Industrial Customer*" is new and defines the application of this classification. The proposed language is as follows:

"A Large Commercial and Industrial Customer has an actual demand greater than 100 kW."

Availability of Service Under Rate Schedules, Section 2.2

The Company is proposing the following addition language to this provision to make it consistent with current Company practice:

"In areas served by the Company's alternating current, low voltage network systems, all new customers and any customers desiring to change the voltage or type of service will be supplied only alternating current at available secondary voltage."

Choice of Optional Rates, Section 2.3

The Company is proposing two minor modifications to correct a spelling error and to and to clarify the intent of the tariff. The first modification is:

"When more than one rate schedule is available for the same class of service as indicated by the complete copy of the Company's rates open to public inspection in the Company's office, the Company will assist the customer in the selection of the rate schedule or schedules that, in its judgment, will result in the lowest cost of projected consumption, based on twelve (12) months' service and on the information at hand."

The second modification is:

"The Company may not be required to change a rate schedule for any customer after a change more often than once in twelve months unless the rates are changed or there is a material change in the customer's load, or another change become necessary as a result of an order issued by the Public Service Commission or a court having jurisdiction."

Standby, Supplementary, Emergency, & Incidental Services, Section 2.4

The proposed changes are administrative language revisions to make it gender-neutral and to more accurately reflect how this service is provided to customers. The details of the language changes are shown in redlined format in Notice Schedule 7.

Metering and Testing, Section 3.1

The Company is proposing a number of changes to Section 3.1 Metering and Testing, to clarify the intent and provide consistency with current Company practices. The changes are shown in redline format in Notice Schedule 7 and do not represent any substantive change in the Company's current metering and testing process.

Although the Company's meter accuracy testing practices, described in this tariff are technically somewhat different from those described in the ND Rules § 69-09-02-26 (1 through 7), the Company believes its practices result in a level of meter accuracy that is greater than that which would result from the practices prescribed by the ND Rules. Therefore, because the Company's tariff and practice are different from that described by the ND Rules, it requests a waiver of these ND Rules and approval of its proposed tariff language.

Q. FOR WHICH OF THE ND RULES IS THE COMPANY REQUESTING A WAIVER?

A. Pursuant to ND Rule § 69-02-01-11, the Company is requesting a waiver of ND Meter Testing Rules § 69-09-02-26 (1 through 7) to accommodate the Company's metering and testing procedures as they are described in Section 3.1.

Q. MR. ZINS, YOU INDICATED THAT THE COMPANY'S METERING AND TESTING PROCESS MORE THAN MEETS THE ACCURACY STANDARDS OF THE ND RULES. COULD YOU BRIEIFLY EXPLAIN WHY THE COMPANY BELIEVES THIS IS THE CASE?

A. Yes. The Company employs system-wide, the meter testing procedure that is described in Section 3.1 of its General Rules and Regulations. It is based on the American National Standards Institute (ANSI) C12.1 standards, which is the Code for Electric Metering. The Company believes it more than fully addresses any meter accuracy concerns of the several jurisdictional regulatory commissions and its customers.

The Company, as well as other utilities, uses the statistical sample-testing methods and procedure as outlined by ANSI/ASQC Z1.9 (American Society of Quality Training, Certification, and Networks). Based on those standards, the Company removes, repairs, recalibrates (if possible), and/or retires those meters that do not fall within recognized standards.

Prior to installation, new meters are tested, calibrated, and verified by the vendor to be within a Company quality range of +/-0.5%, which is a greater accuracy than the current ND Rules.

In-service meters are sampled or periodically tested on a Company-wide schedule. Meters are placed in lots and tested for accuracy. If the test shows an error greater than +/- 0.5%, the meters may be re-programmed, calibrated, tested and returned to service. If any meter cannot be repaired and calibrated to +/- 0.5%, it is retired.

Q PLEASE EXPLAIN WHY THE PUBLIC INTEREST WILL NOT BE SUBSTANTIALLY PREJUDICED IF THE COMMISSION WAIVES THE METER TESTING RULES AND APPROVES THE COMPANY'S PROPOSED TARIFF.

A. The rigorous Metering and Testing format followed by the Company, detailed in Section 6.3.1. ensures that the following criteria is achieved:

a. Public confidence: The Company follows its established metering and testing standards to reinforce public confidence that the energy charges are accurately measured.

b. Meter errors: When a meter does fail to accurately measure load on a consistent basis, the public has a right to have the meter tested and/or replaced and to have access to the results for possible billing disputes. The metering and testing process used by the Company is objective, similar to processes used by other utilities, and is intended to provide non-biased results that validate the actual meter performance.

c. Quality assurance: The Company follows a routine testing procedure of new and existing meters to ensure the public the meters installed in the field accurately measures their consumption. Routine testing helps the Company manage its expenses by balancing the performance of existing meters to meter replacement mitigates metering errors.

d. Metering management: The routine testing process provides field data indicating the performance of the meters utilized by the Company. This data is shared with the manufacturers to improve production and field maintenance processes. The results also provide real-world applications when training new meter technicians.

e. Industry Standards: The Company's testing procedure follows the ANSI C12.1 standards.

Method of Determining Demand for Billing Purposes, Section 3.2

The Company is proposing two minor language changes (deletions of redundant words) to help clarify the intent. See the redline version of the language changes in the Notice Schedule 7 for details.

Monthly Billing, Section 3.3

The Company is proposing three modifications to assure compliance with ND Rules § 69-09-02-10(1), § 69-09-02-10(2), § 69-09-02-10(3), § 69-09-02-11(1), § 69-09-02-11(4), § 69-09-02-11(5), and to more precisely describe Company practice.

The first proposed modification addresses the requirement as stated in ND Rules § 69-09-02-10(3) for a meter reading at least once every three months as follows:

"The Company may read certain meters less frequently than once each billing month for customers under the Company's self meter reading procedure, or when the Company and customers otherwise mutually agree, except that a Company representative will read the meter at least once each three (3) months."

The second proposed modification clarifies current Company practice as follows:

"If the billing period is longer or shorter than the normal billing period by more than five days, the bill shall be prorated on a daily basis except for the November, December, and January billing periods whereby the bill shall be prorated on a daily basis whenever the billing period is less than 25 days or more than 40 days."

The third proposed modification is to delete the last sentence dealing with billing periods of less than a month, since it is redundant with the preceding language. See the redlined version of the tariff in the Notice Schedule 7 for the details.

Late Payment Charge, Section 3.5

The Company is proposing two changes to clarify the language and more accurately reflect current practice. The first proposed change is in the assessment of the late payment charge as indicated below. It makes the tariff consistent with the current billing system process.

"A late-payment charge of 1.0% of the unpaid balance will be added to the unpaid balance two working days after the date due."

The second proposed change clarifies the application of the Late Payment Charge and deletes the redundant *"Assessment Date"* table. The new language reads as follows:

"Customers under the Budget Helper Plan or a payment arrangement will be assessed late payment charge on the lesser of the outstanding scheduled payments or the outstanding account balance. All payments received will be credited against the oldest outstanding total account balance before application of the late payment charge. The late payment charge will be waived in instances where a Company error is involved or where complications arise with financial institutions in processing automatic electronic payments."

Bill Date Due, Section 3.6

The Company is proposing two changes to this Bill Date Due section. The first involves changes in the language that specifies the *"Date Due"* for bills so

as to more accurately reflect actual billing system practices. For the details, see the redlined version of the language in the Notice Schedule 7.

The second change is the following additional language that addresses requirements associated with the option for customers to modify their bill due date.

"Residential and Small General Service customers have the option of selecting a modified due date for paying their bill. The due date can be extended up to a maximum of 14 calendar days from the normal date. Customer selecting a modified due date will remain on that due date for a period not less than 12 months or may change back to the normal due date anytime."

Estimated Bills, Section 3.7

While it is not proposing any changes to this section, the Company believes a waiver of ND Rule § 69-09-02-11(3) Billing, is necessary for the Company's proposed Section 3.7 concerning Estimated Bills.

Q. PLEASE EXPLAIN WHY THIS WAIVER OF THE ND RULE IS NECESSARY.

A. ND Rule § 69-09-02-11(3) states the estimate *"....shall be the normal consumption for a corresponding period during the preceding year, or average consumption during the three preceding months."*

The Company's billing system uses the following comparable methodology for estimating bills:

1. The system will look for previous actual reading history that exists within the last 70-day period. If there are actual readings within the last 70-day period, the system will calculate the total consumption in the period and

divide by the number of days in the period to produce an average daily usage. This average is then applied to the number of days in the current billing period.

2. If there are no actual readings within the last 70 day period, the system will use the daily average from last month's billing period.
3. If there are no actual readings for the last 70 days or no usage from the last month, the bill will be manually estimated.

Q PLEASE EXPLAIN WHY THE ND BILLING RULE SHOULD BE WAIVED, AND WHY THE PUBLIC WILL NOT BE SUBSTANTIALLY PREJUDICED THEREBY.

A. As can be seen from the above description of the ND Rule and the Company's process, there isn't a material difference. The estimated bills that result there from will reasonably reflect the customer's historic usage level and the Company process provides a third option for a manual estimated bill calculation where little or no historical billing data is available. Therefore, in accordance with N.D. Rule § 69-02-01-11, the Company requests a waiver. A waiver of ND Rule § 69-09-02-11(3) would not prejudice the public interest. To the contrary, for all the reasons indicated above, the public interest would be advanced as a result of the waiver and approval of the Company's methodology for estimating bills should be granted.

Billing Adjustments, Section 3.8

The Company is proposing a number of changes to this section including addition of new language, and deletion of existing language and format changes so as to provide clarity and assure compliance with the ND Rules § 69-09-02-12 and § 69-09-02-13.

The proposed language changes describe how billing adjustments are handled for several different types of metering and billing problems. For a view of the details of the proposed language changes, please see the redlined version of the tariff in Notice Schedule 7.

Account History Charge, Section 3.10

The Company is proposing to increase this charge from $0.50 to $5.00 to reflect the actual costs of this service. The analysis included in Schedule 8 of Exhibit No.___(PJZ-1) shows the costs of $5.02 for an example of this type of activity.

Synchronized Bill Service, Section 3.11

The Company is proposing this new optional Synchronized Bill Service. It allows customers with multiple accounts to receive one consolidated bill for all of their accounts. See the red lined version of the proposed tariff in Notice Schedule 7 for details.

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Use of Service, Section 4.1

The Company is proposing a number of minor changes to the language of this tariff to assure compliance with the ND Rules § 69-09-02-15 and § 69-09-02-37, to clarify the tariff intent, provide consistency with current Company practice, and to correct spelling.

The first three language changes are found in 4.1A. Definitions as follows:

4.1A.2. "*Master Metering or Redistribution.*"

4.1.A3. "*The provision of metered electrical supply through a customer owned meter to a customer's tenants, cooperative or condominium owners....*"

4.1A.4. "*Resale*."

The fourth language change is found in the second paragraph of 4.1.B. General Rules:

"Electricity is supplied for use by customer's household or business, and Resale or Submetering of such service is not permitted. The Company permits master metering where allowed by law, but a landlord may not charge the tenants more than the landlord is charged by the Company."

There are additional language changes in 4.1B. to clarify the tariff intent. Please see the red lined version of the proposed tariff in the Notice Schedule 7 for details.

Customer's Wiring, Equipment, and Property, Section 4.2

The Company is proposing minor language changes to make this tariff gender-neutral and to clarify its intent. The modified portion of the tariff is proposed to read as follows:

"The Company may, however, at any time require a customer to make such changes in customer's electrical or non-electrical property or use thereof as may be necessary to eliminate any hazardous condition or any adverse effect which the operation of the customer's property or equipment may have on said customer, other customers of the Company, the public, or the Company's employees, equipment or service."

Q. WHAT REVISIONS ARE BEING PROPOSED TO THE COMPANY'S STANDARD INSTALLATION TARIFFS?

A. The Company is proposing a number of revisions to the language and service charges contained in its Standard Installation tariffs. The more important of

these revisions are discussed below. For a view of all the changes, see the redline version of this tariff in the Notice Schedule 7.

Standard Installation, Section 5.1.A

The Company is proposing two revisions to the language of this Section.

The first modification is in the last sentence of the second paragraph where it is modified to make it gender neutral as follows:

"The facilities installed by the Company shall be the property of the Company, and any payment by customer will not entitle the customer to any ownership interest or rights therein."

The second revision involves language changes in the third paragraph to clarify the tariff intent:

"Unless otherwise stipulated in the applicable agreement or service form, and prior to any installation by the Company, the customer is required to provide the necessary right-of-way for the installation of the Company's facilities...."

Standard Installation (continued), Section 5.1A.1.a.

The Company is proposing three modifications to this section to provide consistency with current Company practice and to clarify the tariff language.

The first change is to reinforce the fact that the allowable footage for residential extensions involves only the service lateral, not a distribution lateral, nor a combination of a service and distribution lateral.

"Company will extend, on private property, to a Company-designated service location, a service lateral a maximum distance of 100 feet."

The second change is to eliminate the language relating to the "three-times revenue" rule for determining the construction allowance since this provision does not apply in individual Residential service extensions. The Company proposes to replace this language with the following:

"When the necessary extension to a Company designated service location exceed these limits, the customer will be charged for the additional extension according to the Excess Footage Charge set below."

The proposed excess footage charge is $6.85 per-circuit-foot and is based on current costs as shown in Schedule 8 of Exhibit No.___(PJZ-1).

The third change is to clarify the application of the excess footage charge when the customer requests a preferred service location that is beyond the Company-designated service location as follows:

"Customers requesting a preferred service location will also be charged the Excess Footage Charge for each circuit foot Company extends the installation beyond Company's designated service location."

Standard Installation (continued), Section 5.1.A.1.b

The Company is proposing the following two modifications to the "*Other than Residential*" section of the service extension rules. See the redlined version of the proposed tariff in the Notice Schedule 7 for more details.

The first modification is to the language relating to the "three-times revenue" rule for determining the construction allowance for distribution lateral extensions. The relevant portion of the tariff has been modified to read:

"...must not exceed a sum equal to three and one half (3.5) times the customer's anticipated annual revenues, excluding the portion of the revenue representing fuel-cost recovery."

The second change is to clarify the situation where the extension costs exceeds the 3.5 times revenue rule. The relevant portion of the tariff has been modified to read:

"When the cost of the necessary extension exceeds this limit, the customer will be charged the difference."

Q. WHAT IS THE RATIONALE FOR THIS REVISION TO THE THREE-TIMES REVENUE RULE?

A. Historically, applying the "three-times revenue" rule to total revenues (including fuel-cost recovery revenues) was reasonable because the fuel-cost recovery portion of total cost-of-service was relatively small and stable over time. In recent years, however, market-driven fuel and purchased energy costs have escalated rapidly and may continue to do so. Fuel cost recovery revenues were removed to prevent over charging, but that, in turn, requires an increase in the multiplier to 3.5 to reflect its application to a smaller revenue base. The purpose of this modification is to adjust the "three-times revenue" rule so that future construction-allowances for distribution extensions do not become out of proportion to what they have been historically. Without this modification, customers who should provide a contribution in aid of construction ("CIAC") would not be required to do so. As a consequence, the distribution rate base investment would grow faster than it should because unusually costly extensions where a CIAC would have been imposed would be absorbed into rate base, and all customers would pay for these excess extension costs.

Standard Installation (continued), Section 5.1A.2

The Company is proposing changes to its Winter Construction tariff to more accurately reflect current practice and the associated costs and to provide consistency with the Company's corresponding gas utility tariff. The proposed changes provide clarification to winter construction projects, both electric only and where it is a combination electric and gas winter construction project. The proposed language is as follows:

"When underground facilities are installed between October 1 and April 15, inclusive, because of failure of customer to meet all requirements of the Company by September 30, or because the customer's property, or the streets leading thereto, are not ready to receive the underground facilities by such date, such work will be subject to a Winter Construction Charge when winter conditions of ground frost and/or snow exist for the entire length of underground service. Winter construction will not be undertaken by the Company where prohibited by law or where it is not practical to install underground facilities during the winter season. The charges immediately below apply to frost depths of 18" or less. At greater frost depths, the Company will individually determine the job cost. The Company reserves the right to charge for any unusual winter construction expenses. If the Company's gas and electric facilities are installed in a joint trench for any portion, the Company will waive the lower of the gas and electric winter construction charges on the joint portion.

WINTER CONSTRUCTION CHARGE

Thawing	*$400.00 per frost burner*
Service, primary or secondary distribution extension	*$3.00 per trench foot"*

The cost support for these charges is included in Schedule 8 of Exhibit No.____(PJZ-1)

Standard Installation (continued), Section 5.1A.3.

The Company is proposing to change the section title to "*Unusual Installation Costs*" to clarify that this section addresses non-standard installation costs. In addition, the format has been changed to make it easier to understand. See the redlined version in Notice Schedule 7 for details.

Standard Installation (continued), Section 5.1A.4.

The Company is proposing to eliminate this section as it is redundant to Section 5.1A.3 above.

Standard Installation (continued), Section 5.1.B

The Company is proposing minor language modifications including moving the first paragraph from the previous page and combining it with the rest of the section, modifying the first paragraph text to make it gender neutral, modifying condition #3 to make it gender neutral, and capitalization changes in the last paragraph. These changes are shown in the redline version of the tariff in the Notice Schedule 7.

Standard Installation (continued), Section 5.2

The Company is proposing five changes to clarify the tariff intent and provide consistency with current Company practice and with the above-described changes in the three-times revenue rule.

The first change to the relevant portion of the first paragraph in Section 5.2 is as follows:

"....the Company will extend, enlarge, or change its distribution or other facilities for supplying electric service when the product of three and one half (3.5) times the anticipated

annual revenue, excluding the portion of the revenue representing fuel-cost recovery from the sale of additional service...."

The second change is in Section 5.2A. as follows:

"Pays to the Company the portion of the capital expenditure not justified by the product of three and one half (3.5) times the anticipated annual revenue, excluding the portion of revenue representing fuel-cost recovery (with or without provision for refund of all or part of such payment)...."

The third change is in the last paragraph and clarifies a non-refundable customer charge. It reads as follows:

"Non-refundable payments will be in the amount determined by subtracting from the total estimated installation cost the product of three and one half (3.5) times the anticipated annual revenue, excluding the portion of the revenue representing fuel-cost recovery as set forth in Section 5.1, STANDARD INSTALLATION." .

The fourth change is also found in the last paragraph and includes language to clarify the application of refundable payments and how the payments will be refunded. It reads as follows:

"Additional refundable payments may be required where service is extended and where customer occupancy is expected to be delayed. In such cases, for each additional customer served directly from the original contracted extension within five (5) years from the date of its completion, the person who made the advance payment will receive proportionate refunds as additional customers take occupancy. The total of such refunds will in no event exceed the total refundable advance payment. Refunds will be made only for line extensions on private property to a single customer served directly from the original contracted facilities."

The fifth proposed change is to reformat Section 5.2 for clarification. See the redlined version of the proposed tariff in the Notice Schedule 7 for details.

Special Facilities, Section 5.3

The Company is proposing two minor changes to this section. The first modification is to make the last sentence of the second paragraph gender neutral as follows:

"Any payment by a customer will not entitle the customer to any ownership interests or rights therein."

The second change is to reformat the last paragraph for clarification. See the redlined version of the proposed tariff the Notice Schedule 7 for details.

Replacement of Overhead with Underground and Service Connections, Sections 5.5 and 5.6 Respectively

The changes in this tariff are minor text changes to make the language gender-neutral. The changes in redline format are shown in the Notice Schedule 7.

Temporary Service, Section 5.7

The Company proposes a minor text addition to address advance payments related to customer-requested temporary service. The proposed additional language reads:

"*The Company may require the customer to make an advance payment sufficient to cover the estimated cost of service as described above.*"

Refusal or Discontinuance of Service, Section 6.1

The Company is proposing significant changes to the language of this section to comply with the ND Rules § 69-09-02-05.1(1), § 69-09-02-05.1(7), § 69-09-02-05.1(8), § 69-09-02-05.1(10), and ND Statues 49-04-07. The Company is also proposing language changes to make it gender-neutral as well as changes in format make the tariff easier to read.

The more substantive changes and additions in language are designed to clearly specify the conditions when the Company may disconnect service, when it may not disconnect service, the process to follow when a landlord or property management firm is delinquent in paying its utility bill, when the Company may refuse to connect service, and the actions the Company may initiate under emergency and hazardous conditions. Because the changes are numerous and voluminous, they are not reproduced here. They can be reviewed in redline format in the Notice Schedule 7.

Curtailment or Interruption of Supply, Section 6.2

The changes in this tariff are minor text changes to make the language gender-neutral. See the redline text in the Notice Schedule 7.

Residential Billing of Vacant Rental Property Agreement, Sheet 39

The Company is proposing to move this to Section 7, sheet 12.

Residential Properties Included in the Residential Billing of Vacant Rental Property Agreement, Sheet 40

The Company is proposing to move this to Section 7, sheet 13.

North Dakota Residential Tenant Authorization Form for Tenant or Landlord to Start Service, Sheet 41

The Company is proposing to move this to Section 7, sheet 14.

North Dakota Residential Tenant Authorization Form for Tenant or Landlord to Stop Service, Sheet 42

The Company is proposing to move this to Section 7, sheet 15.

Q. ARE THERE ANY OTHER CHANGES YOU WISH TO ADDRESS?

A. Yes. The Company made a change to Section No. 8 Customer Service Forms that eliminates the "Important Notice Bill" form. This form, which is a standard customer bill form with a notation in the customer message section reminding the customer that the account has a past due amount, is redundant to the Reminder Notice Bill form also included in this section. Elimination of this form does not reflect a change in our collection process, nor does it impact the amount of time a customer is allowed to pay their bill before service disconnection.

V. CONCLUSION

Q. MR. ZINS, DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

STATE OF NORTH DAKOTA
BEFORE THE
PUBLIC SERVICE COMMISSION

In the Matter of the Application of Northern States Power Company, a Minnesota Corporation For Authority to Increase Rates for Electric Service in North Dakota	))))	Case No. PU-07-___

AFFIDAVIT OF
Phillip J. Zins

I, the undersigned, being duly sworn, depose and say that the foregoing is the Direct Testimony of the undersigned, and that such Direct Testimony and the exhibits or schedules sponsored by me to the best of my knowledge, information and belief, are true, correct, accurate and complete, and I hereby adopt said testimony as if given by me in formal hearing, under oath.

Phillip J. Zins

Subscribed and sworn to before me, this 4 day of December, 2007.

Notary Public

NANCY A. HALEY
NOTARY PUBLIC • MINNESOTA
MY COMMISSION EXPIRES
JANUARY 31, 2010