

January 30, 2013

Executive Secretary  
North Dakota Public Service Commission  
State Capitol Building  
Bismarck, ND 58505-0480

Re: Case No. PU-10-124  
Compliance with Settlement Agreement  
dated November 8, 2010

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., herewith submits the Cost Allocation Study prepared by Concentric Energy Advisors, pursuant to the Settlement Agreement dated November 8, 2010 and approved on June 8, 2011 in the above referenced case.

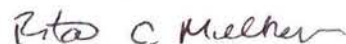
The Cost Allocation Study was performed pursuant to Section II of the Settlement Agreement, which provided that Montana-Dakota meet with the Staff to discuss a potential study to be conducted by a mutually agreeable independent consultant and completed before the next general rate case. The Company and Staff agreed to retain Concentric Energy Advisors (Concentric) to perform study of the method used by MDU Resources Group, Inc. (MDU Resources) to allocate administrative and general expenses to Montana-Dakota and the other companies within MDU Resources and to evaluate the reasonableness of the corporate capitalization factor utilized by MDU Resources.

Concentric concluded that the corporate capitalization factor used by MDU Resources was prudent and an effective means of allocating common costs.

If you have any questions regarding the study, please contact me at (701)222-7854.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope.

Sincerely,



Rita A. Mulkern  
Director of Regulatory Affairs

cc: Dan Kuntz

216 PU-10-124 Filed 01/30/2013 Pages: 27

Cost Allocation Study  
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc.  
Rita Mulkern



## Cost Allocation Study

Prepared for  
Montana-Dakota Utilities Co.

September 14, 2012

## **I. Executive Summary**

Concentric Energy Advisors (“Concentric”) was retained by Montana-Dakota Utilities Co. (“Montana-Dakota” or the “Company”), a division of MDU Resources (“Resources”), on June 11, 2012 to perform a study of the method used by Resources to allocate Administrative and General (“A&G”) costs to Montana-Dakota and Resources’ subsidiaries (collectively, Montana-Dakota and Resources’ subsidiaries are referred to herein as the “business units”). Specifically, Concentric was asked to evaluate and determine the reasonableness of the Corporate Capitalization Factor, which is based on total invested capital at the business units and has been used since 2006. This report presents the analyses and findings of the study (the “Cost Allocation Study”).

Concentric performed a survey of allocation methodologies in place at a number of U.S. regulated utilities. While there is a significant diversity of allocation practices across the U.S., corporate service allocation generally follows cost causation principles for the purpose of determining accurate business unit costs. In order for cost allocation to be effective, it must be fairly determined and consistently applied, with fairness being determined by the degree to which allocated costs reflect the benefits received by a parent company’s business units. Cost allocation also inherently involves some degree of judgment.

Concentric reviewed and evaluated the reasonableness of the Corporate Capitalization Factor and the appropriateness of that factor given Resources’ corporate organization and the way in which Resources’ manages its business units. Concentric also reviewed and considered other possible allocation methods based on Concentric’s understanding of practices used within the U.S. regulated utility industry. Based on our review, Concentric concluded the following regarding the Corporate Capitalization Factor:

- Given the mix of companies within the Resources family, the Corporate Capitalization Factor is an effective means by which to allocate common costs that cannot be direct charged or allocated based upon usage;
- The Corporate Capitalization Factor has produced reasonable allocation results as compared to other available allocation methods;
- Based on Concentric’s analyses and other considerations discussed in this report, we conclude that the Corporate Capitalization Factor approach is reasonable and appropriate for Resources.

- In addition to these conclusions, Concentric has made additional observations and recommendations in Section IX of this report.

## **II. Background**

Montana-Dakota filed a general electric rate case in North Dakota in April 2010 (Case No. PU-10-124). In that proceeding, the North Dakota Public Service Commission (“PSC” or the “Commission”) approved three settlement agreements between the Company and the PSC Advocacy Staff (“Staff”). As part of a November 8, 2010 Settlement Agreement, Montana-Dakota agreed to perform certain studies before filing its next general rate case and such studies were to be conducted by a mutually agreeable independent consultant. One of the agreed upon studies was a Cost Allocation Study of the method by which Resources allocates A&G costs to Montana-Dakota. The Cost Allocation Study was to entail a review of the corporate allocation process and the affiliate transactions used to allocate costs associated with Resources and other affiliates to Montana-Dakota. The focus of the Cost Allocation Study was the Corporate Capitalization Factor employed by Resources to allocate unassigned (*i.e.*, not directly assigned or allocated based on a usage-based factor) A&G costs.

This report summarizes the Cost Allocation Study performed by Concentric. The remainder of this report is organized as follows: Section III provides the scope of the Cost Allocation Study; Section IV summarizes Concentric’s approach to conducting the review; Section V provides an overview of Resources’ corporate structure; Section VI summarizes Resources’ corporate departments and provides a summary of Resources’ current allocation method, as well as the method by which Montana-Dakota’s affiliates allocate costs to the Company; Section VII provides an overview of utility industry allocation practices; Section VIII contains an analysis of Resources’ allocation practices; and Section IX contains Concentric’s opinion regarding the reasonableness of Resources’ allocation practices, as well as our conclusions.

## **III. Cost Allocation Study Scope**

The Cost Allocation Study includes the following three components:

1. Review and summary of the current method of corporate (*i.e.*, Resources) and affiliate allocations or assignment to Montana-Dakota, with a focus on the Corporate Capitalization Factor;
2. Review of methodologies used by other utility companies; and

3. Analysis of whether the Company's corporate cost allocation (*i.e.*, the allocation using the Corporate Capitalization Factor) is fair and reasonable when compared to other generally accepted cost allocation methodologies used in the utility industry.

The Cost Allocation Study's scope includes a review of costs allocated by Resources to Montana-Dakota, and did not further consider any re-allocation of those amounts to Montana-Dakota's various jurisdictions or between gas and electric services. The Cost Allocation Study's scope also did not include a financial audit of the amounts recorded as corporate services costs or the allocations themselves. In addition, while Concentric undertook to understand Resources' allocations under methods other than the Corporate Capitalization Factor (*i.e.*, direct assignment and usage-based allocations), we did not analyze alternatives to those methods other than to note they appear to be reasonable and consistent with industry practice. Similarly, Concentric did not undertake to assess alternatives to inter-company charges between Montana-Dakota and its affiliated business units. Rather, Concentric focused on the Corporate Capitalization Factor, evaluated U.S. utility industry alternatives for allocation of general corporate costs, and analyzed the *pro forma* effect on Montana-Dakota if different allocation practices were in place. The results of the Cost Allocation Study are informational, and are not suggestive of any over- or under-collection of costs by the Company over the period of review (*i.e.*, 2006 to 2011).

#### **IV. Approach**

Concentric's approach to the Cost Allocation Study included the following steps:

1. Concentric reviewed Resources' policy statement regarding the allocation of administrative costs and general overheads to Resources' business units (*see*, Attachment A, Policy No. 50.9, *Allocation of Administrative Costs*).
2. Concentric sent initial written data requests to the Company seeking background information and preliminary data to assist in our understanding of the Company's allocation practices.
3. Concentric met with key individuals from Resources, Montana-Dakota, and Staff in a kick-off meeting held at Resources' corporate office on July 9, 2012. The purpose of the kick-off meeting was to review and clarify the scope of the Cost Allocation Study, gain an understanding for the impetus for the study, and obtain a summary-level understanding of the Company's cost allocation methodology.

4. Following the kick-off meeting, Concentric met with key individuals from Resources and Montana-Dakota to gain a deeper understanding of the Company's allocation calculations, to ask follow-up questions, and review data provided by the Company in response to Concentric's initial data requests. The in-person meetings were followed by a second set of written data requests. Through the course of the review, Concentric also generated two more sets of data requests, and held additional interviews to further our understanding of the data responses.
5. Concentric next consolidated our internal knowledge regarding industry allocation practices, and supplemented that knowledge with research regarding utility allocation methods.
6. Concentric narrowed U.S. utilities' diverse allocation practices into three representative categories for purposes of performing our *pro forma* analyses.
7. Concentric's *pro forma* analyses involved performing cost allocation calculations using methods other than the Corporate Capitalization Factor based on historical data from 2006 to 2011. Those analyses provided a range of outcomes based on allocation alternatives. Concentric evaluated each outcome to understand why it resulted in differing allocation percentages, and then assessed where the Corporate Capitalization Factor allocation fell in relation to the range of alternatives.
8. Concentric also assessed the reasonableness of the Corporate Capitalization Factor given the corporate organizational structure of Resources, as well as the circumstances currently faced by the Company.
9. The evaluation described in steps 6 and 7 formed the basis for Concentric's conclusions regarding the fairness and reasonableness of the Company's corporate allocation practices.

## **V. Corporate Overview**

Resources is a diversified natural resource company with capital intensive business units. Montana-Dakota is a regulated division of Resources that generates, transmits, and distributes electricity and distributes natural gas in jurisdictions in North Dakota, Montana, South Dakota, and Wyoming. Resources has another regulated division (Great Plains Natural Gas Company), and its wholly owned subsidiaries include (1) MDU Energy Capital, LLC, parent of Cascade Natural Gas Corporation, and Intermountain Gas Company, and (2) Centennial Energy Holdings, Inc., parent of

WBI Holdings, Inc. (pipeline, energy services, exploration and production), Knife River Corporation (construction materials and contracting), MDU Construction Services Group, Inc. (construction services), and Centennial Energy Resources LLC and Centennial Holdings Capital LLC. Centennial Holdings Capital LLC is in turn the parent company of FutureSource Capital Corp. (“FutureSource”), which, along with Montana-Dakota, is the joint owner of Resources’ corporate office building and land, as well as the corporate aircraft and hangar.

As of December 31, 2011, Resources’ had 8,021 employees, although that number typically fluctuates over the course of the year depending on the construction programs at Resources’ business units. Montana-Dakota serves approximately 127,000 electric customers and 245,000 gas customers. The Company has interests in approximately 521 MW of generating capacity.<sup>1</sup>

## **VI. Current Allocation Methods**

This sections contains a review and summary of the services provided by Resources to the utility division and Resources’ subsidiaries (*i.e.*, the business units), a review of the purpose of cost allocation, and an overview of the current method of corporate (*i.e.*, Resources) and affiliate allocations or assignments to Montana-Dakota, with a focus on the Corporate Capitalization Factor.

### Resources’ Corporate Departments and Services

Resources has the following departments that provide services to the business units: (1) Communications and Public Affairs; (2) Corporate Accounting and Planning; (3) Enterprise Technology Services; (4) Human Resources (“HR”); (5) Internal Auditing; (6) Investor Relations; (7) Legal; (8) Payroll Shared Services; (9) Procurement Shared Services; (10) Risk Management; (11) Tax and Compliance; (12) Travel; and (13) Treasury Services. In addition, as stated above, Resources’ corporate offices and the corporate aircraft and hangar are co-owned by FutureSource and Montana-Dakota.

Resources’ corporate departments that provide services to the business units are similar to those that are centralized within other U.S. utility holding companies.<sup>2</sup> While U.S. utility companies

---

<sup>1</sup> MDU Resources Group Inc., SEC Form 10-K for the period ended December 31, 2011, filed February 24, 2012.

<sup>2</sup> The services are also consistent with the types of services offered by a “service company” and a “centralized shared service company”, as codified in the U.S. Code of Federal Regulations. Specifically, 18 CFR 366.1 defines a service company as, “any associate company within a holding company system organized specifically for the purpose of providing non-power goods or services or the sale of goods or construction work to any public utility in the same holding company system.” 18 CFR 367.1(a)(7) defines a centralized shared service

have implemented various organizational structures to centralize common services, the objective of such structures is to minimize duplication of effort and reduce costs. In general, the benefits of shared services are the efficiencies and cost advantages that can be achieved by centralizing certain functions as opposed to distributing those functions among individual affiliated companies. Centralizing functions allows for better standardization of processes, reduced duplication of services, and provides for the potential of more efficient specialization.

#### Cost Allocation Overview

Cost allocation is the process by which costs are assigned from one cost pool to another in order to reflect shared benefits that are received by the entity to which costs are allocated. Cost allocation serves several strategic purposes, including the determination of accurate business unit costs. Cost allocation also supports executive management in managing, evaluating, and making decisions regarding its business units. For an owner of rate-regulated utility operations, cost allocation also serves to provide a utility with information regarding the utility's total cost of providing service. Regulated utilities generally seek to recover corporate allocations through rates.

In order for cost allocation to be effective, it must be fairly determined and consistently applied. In the case of the allocation of corporate overhead to business units and subsidiaries, *fairness* is often determined by a measure of corporate benefits received by the business units. Effective cost allocation is also transparent and reasonably automated, and results in relatively stable levels of assigned costs. Cost allocation also inherently involves some degree of judgment.

#### Resources/Montana-Dakota Cost Allocation

Resources uses a formal, automated approach to allocating its costs to its business units. In general terms, Resources' approach involves the accumulation of costs within its accounting system using a detailed accounting code block, followed by a monthly allocation and account clearance process. Within its allocation approach, Resources employs three methods to allocate costs: (1) direct assignment, (2) usage-based allocation, and (3) the use of a Corporate Capitalization Factor to allocate any costs not allocated by one of the first two methods.

Direct assignment is used for incremental costs incurred by Resources that are expended for purposes that benefit one or more specific business units. For example, if Internal Auditing

---

company as, "a service company that provides services such as administrative, managerial, financial, accounting, recordkeeping, legal or engineering services, which are sold, furnished, or otherwise provided (typically for a charge) to other companies in the same holding company system."

performed an internal audit specific to Montana-Dakota, any incremental costs (*e.g.*, travel) associated with the internal audit would be charged directly to Montana-Dakota.

Usage-based allocations are used for Resources' Shared Services functions. Those functions include: Payroll Shared Services; Procurement Shared Services; Time Entry Shared Services; Accounts Payable Shared Services; and Enterprise Technology Services ("ETS"). For example, Procurement Shared Services costs are allocated to the business units using five equally-weighted allocation factors based on each business unit's: (1) number of VISA cards; (2) amount of expenditures paid for with VISA cards; (3) total national account spend (which represents each business unit's participation in bulk purchases); (4) number of construction equipment acquisitions; and (5) number of fleet acquisitions. A summary of Resources' methodologies by which it allocates its Shared Service functions is provided as Attachment B to this report.

The Corporate Capitalization Factor is used for all other Resources' costs that are budgeted for accounting purposes at the parent company level, and is used for those departments for which a specific usage-based driver may not be clearly identifiable or practicably applied.<sup>3</sup> Resources' business units also receive an allocation of FutureSource costs.<sup>4</sup> As previously mentioned, the focus of this Cost Allocation Study is the Corporate Capitalization Factor as applied to corporate department costs.

Costs are accumulated for allocation in Resources' and Montana-Dakota's JD Edwards accounting system through the use of a detailed coding system. The basic accounting structure consists of three main items: (1) the department incurring the cost; (2) the type of cost (*e.g.*, straight time, materials, *etc.*); and (3) a work order, which is used to accumulate costs for large O&M projects and for allocation purposes. For instance, payroll for an employee in the Legal department would be coded to 980-7110-00029995, with 980 representing the Legal Department, 7110 representing straight time, and 00029995 representing corporate costs to be allocated using the Corporate Capitalization Factor. That system of cost recording allows for automation in the process of accumulation and allocation of costs.

---

<sup>3</sup> Note, certain costs that are managed by Resources departments but that are directly charged for accounting purposes to MDU cost centers (*e.g.*, insurance coverage and treasury services costs) bypass the corporate allocation process but are in effect directly assigned to MDU.

<sup>4</sup> As stated previously, Montana-Dakota is a part owner of the corporate office and corporate aircraft and hangar. Thus, any allocations to the Company from FutureSource are adjusted to reflect that ownership share. For example, if the allocation from FutureSource in a given allocation period were to be less than the MDU's ownership interest in the corporate office and corporate aircraft and hangar, then the Company would receive a credit to reflect the difference between its allocation share and its ownership share.

At each month end Montana-Dakota downloads the costs accumulated in those accounts that are to be allocated into an Excel spreadsheet, and performs the allocation. Journal entries are created in Excel and then uploaded to the accounting system. The result of Resources' allocation process (*i.e.*, direct charging, usage-based allocation, and allocation based on the Corporate Capitalization Factor), is that all costs are cleared from Resources' books and allocated among the business units.

The Corporate Capitalization Factor is based on total invested capital at each business unit. Total invested capital is defined as total equity plus preferred stock and current and non-current long-term debt (including capital lease obligations). Since January 1, 2008, Resources has calculated the Corporate Capitalization Factor at two times during the year using the average twelve month balance of invested capital at each business unit: as of September 30<sup>th</sup> of the preceding year to be used for January through June; and as of March 31<sup>st</sup> of the current year to be used for July through December.

Resources instituted the Corporate Capitalization Factor in 2006. Prior to 2006, Resources' costs were allocated based on an equally weighted two factor formula consisting of (1) the three-year average of net property, plant, and equipment, and (2) the three year average of the number of full time employees. However, Montana-Dakota requested a review of the allocation policy in 2005 to evaluate its appropriateness and fairness. In performing its evaluation of the two-factor method, the Company noted the following:

- Net property, plant, and equipment excluded the broader range of assets used in Resources' diversified businesses; and
- The definition of a full time employee excluded part-time and seasonal employees that potentially made up a significant portion of the workforce at Resources' non-utility subsidiaries.

Both of those factors resulted in Montana-Dakota bearing a disproportionate percentage of corporate costs. As a result, Resources switched to the use of the Corporate Capitalization Factor.

Resources has made two modifications to the Corporate Capitalization Factor since its inception. The first modification, which was made in 2008 and is described above, was to make a change from an annual factor to a semi-annual factor. The second modification, which was made in 2011, changed the term "business segment" to "business unit." Neither change had a material effect on the allocation of Resources' costs to Montana-Dakota.

The following table shows the allocations from Resources to Montana-Dakota for the period 2006 to 2011. The table provides details on costs allocated under the three allocation methods, as well as the percentage of Resources' total that was allocated to Montana-Dakota under each method. Table 1 represents the final result of all allocations from Resources to Montana-Dakota in the review period. As stated previously, Concentric's focus in the Cost Allocation Study was on the allocation of corporate department costs (*e.g.*, HR, Treasury, Legal, *etc.*) using the Corporate Capitalization Factor.

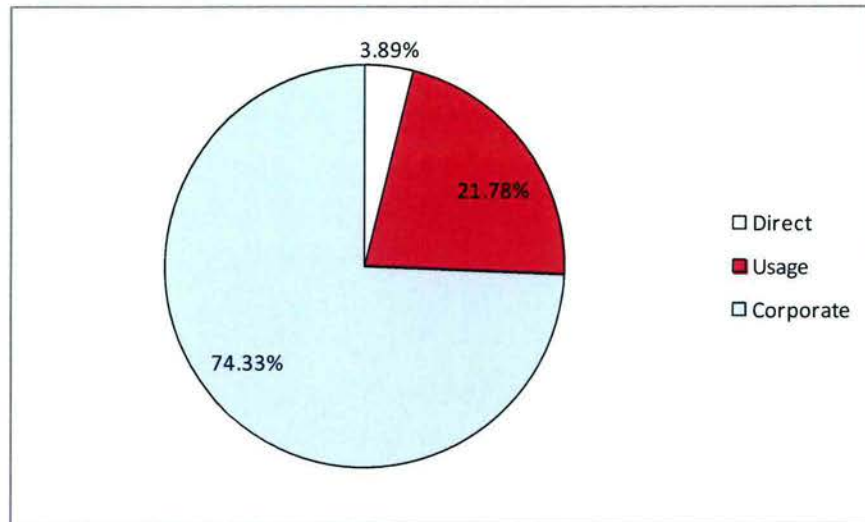
**Table 1: Corporate Allocations from Resources to Montana-Dakota, 2006 – 2011**

	2006	2007	2008	2009	2010	2011
<b>Direct Assigned</b>	\$1,311,417	\$1,565,715	\$471,011	\$305,011	\$397,956	\$206,080
<b>Montana-Dakota % of Resources' Total</b>	23.12%	22.78%	18.00%	9.72%	19.20%	11.35%
<b>Usage-Based</b>	\$1,440,455	\$1,744,886	\$1,103,608	\$1,120,731	\$1,113,690	\$1,152,739
<b>Montana-Dakota % of Resources' Total</b>	42.24%	31.14%	21.32%	21.84%	20.42%	20.74%
<b>Corporate Capitalization Factor</b>	\$3,849,208	\$3,565,869	\$2,750,092	\$2,351,350	\$2,928,317	\$3,934,780
<b>Montana-Dakota % of Resources' Total</b>	13.62%	11.97%	9.25%	9.89%	14.26%	15.54%
<b>Total</b>	\$6,601,080	\$6,876,470	\$4,324,711	\$3,777,092	\$4,439,963	\$5,293,599
<b>Montana-Dakota % of Resources' Total</b>	17.68%	16.27%	11.52%	11.79%	15.82%	16.19% <sup>5</sup>

In addition, the following chart provides the breakdown of the percentage of the total costs allocated to Montana-Dakota from Resources.

<sup>5</sup> Per the Company, the total pool of costs to be allocated increased in 2011 due to factors that included increases in employee benefit costs due to decreases in the underlying value of assets. In addition, the allocation percentages for Montana-Dakota have increased from 2008-2009 to 2010-2011 due to factors that include the addition by Montana-Dakota of new generating capacity, which required additional capitalization.

**Chart 1: Breakdown of Costs Allocated to Montana-Dakota by Resources, 2011**



*Affiliate Allocations*

Montana-Dakota’s affiliates provide a number of services to the Company. Those services include: natural gas purchases; transportation and storage of natural gas; construction services; purchase of affiliate companies’ surplus equipment, when economically beneficial; and cost sharing of training, *etc.*, when economically beneficial. In general, Montana-Dakota employs competitive processes for the services its sources from its affiliates. Charges for those services are, for the most part, direct charged to Montana-Dakota.

**VII. Utility Industry Allocation Practices**

It is common in the U.S. for services to be provided by and for regulated utilities by affiliated companies. In the past, where affiliated regulated utilities operated in multiple jurisdictions, it was common to see the affiliated utilities operate as stand-alone utilities. In today’s business environment, it is common for these multi-jurisdictional companies to consolidate like functions either at the holding company level or within a centralized shared services company organized specifically to provide such services in an effort to reduce costs and achieve organizational efficiencies. The same is true of companies that own and operate both regulated utilities and other, non-regulated subsidiaries. Where there are common functions, the opportunity exists to consolidate the functions, thereby reducing costs.

There is no single approach by which shared services costs are assigned to the recipients of such services. Companies typically adhere to cost-causation principles that state that the company that derives a benefit from a service should bear the cost of such service in direct proportion to the benefit derived from such service. To adhere to cost causation principles, companies generally employ three methodologies by which costs are allocated: (1) direct assignment, (2) usage-based costing (sometimes referred to “activity-based” costing), and (3) the use of general allocators. Companies typically use some combination of all three methodologies. While direct assignment is the most accurate method by which to allocate costs, that method is not always practical or effective. Specifically, if a corporate department offers services that are not associated with an identified business unit, or are not readily assigned using the direct method, then indirect assignment through usage-based allocators or general allocators is appropriate.

As discussed previously in this report, the selection of an indirect allocation method serves several strategic purposes, including the determination of accurate business unit costs. The allocation factor selected should result in each business unit receiving a fair and reasonable amount of allocated costs that is reasonably reflective of the benefits derived by each business unit.

Across the U.S. utility industry, there is significant diversity among the allocation methods employed. There are two key sources of differences among U.S. utility allocation practices: (1) the level of detail at which costs are accumulated for allocation purposes (*i.e.*, by company, by department, by service, *etc.*); and (2) the allocation factor applied to the accumulated costs.

In terms of the level at which costs are accumulated, a more detailed level, such as by department, is only required if the costs of different departments will be allocated using different factors. Some U.S. utilities use that approach to corporate cost allocation, choosing allocation methods on a department-by-department basis. Thus, for example, costs in the HR department are allocated based on one factor, Communications department costs are allocated based on a different factor, Treasury services on another factor, *etc.* In those instances, corporate department costs would need to be accumulated separately for allocation purposes. If HR, Communications, and Treasury services, in this example, were all allocated using the same factor, then there would be no need to break out the costs of each department for allocation purposes.<sup>6</sup>

---

<sup>6</sup> As a practical matter, most utility holding companies, including Resources, capture costs at the department level and further capture costs by cost type and other characteristics, such as by work order. The process of cost accumulation referred to in this report relates to the accumulation of costs specifically for allocation purposes.

Allocation factors for A&G costs that are not directly allocated (also referred to as “residual allocation methods”) also vary significantly across U.S. utilities. Variants include the use of one versus multi-factored allocators, as well as the allocators themselves. There are also several allocation methods that have been used by the Federal Energy Regulatory Commission (“FERC”) and adopted by non-FERC regulated utilities, but those approaches are simply additional variants of residual allocation methods. Examples of FERC allocation methods include the Massachusetts Formula (based on ratios of gross plant, gross revenues, and labor), the Modified Massachusetts Formula (based on ratios of net plant and labor), and the Distrigas Method (based on ratios of gross plant, net operating revenues, and labor) (those approaches are collectively referred to herein as the “FERC Methods”). Lastly, there are U.S. utilities that allocate residual costs using weightings based on the percentage of direct and usage-based allocations that the utility receives from the corporate parent or shared services organization (referred to herein as the “Pro Rata Method”).

Information regarding allocation practices for U.S. utilities can be found in various informational filings and rate proceeding filings. Regulated utilities that receive services from a centralized shared service company are required to file a Form 60 Annual Report with the FERC. That report provides information regarding the nature of the services provided by the shared services companies and the costs of such services. It also provides information regarding the allocation factors used by the filing company. In addition, some state regulators, such as Illinois and Maryland, require that utilities file their cost allocation manuals with the regulator at defined periods or when changes to the manuals are made. Furthermore, some utilities disclose their allocation methods as part of rate proceedings.

Attachment C provides the allocators used for indirect A&G expenses by a sample of U.S. utilities. As shown in the attachment, there is significant diversity in practice among U.S. utilities in terms of the allocation factors used. It is important to note that this attachment represents utilities’ residual allocators, such as the Corporate Capitalization Factor, not the usage-based allocators that utilities may apply. General allocators are those that are usually applied to A&G departments in which employees provide services across business units and for which a usage-based allocator is not readily identifiable or reasonable to apply. Of the companies and methods surveyed, more than 80% used multi-factored allocators to allocate residual costs, while the remaining companies used a one-factor approach. The most commonly used allocation factors among the companies and methods surveyed were (1) measures of assets or property, plant, and equipment (*e.g.*, assets, gross plant, and

net plant); (2) measures of labor (*e.g.*, payroll expense and number of employees); and (3) measures of revenue.

### **VIII. Analysis of Resources' Allocation Practices**

Concentric's evaluation of Resources' allocation practices involved the following steps:

1. Interviews with Resources' and Montana-Dakota's management to gain an understanding of the allocation methodology and Corporate Capitalization Factor, as well as the underlying factors that led Resources to adopt its current methodology;
2. Independent performance of Resources' allocation methodology for the period from 2006 through 2011 to enhance our understanding of the allocation calculations and to set a baseline for comparative analyses;
3. Evaluation of the clarity of the Resources' allocation approach, the consistency with which it has been applied, and the appropriateness of the approach given Resources' corporate organization and the specific circumstances faced by Resources and its business units; and
4. Analysis of other allocation methodologies to determine the reasonableness of Resources' approach vis-à-vis alternative approaches.

Concentric's understanding of Resources' allocation practices is provided in Section VI. The results of Concentric's independent performance of Resources' allocation methodology for corporate department costs for the period 2006 through 2011, is provided below in Table 2. Those percentages are consistent with those used by Resources' to allocate corporate costs over the study period.

**Table 2: Montana-Dakota Corporate Capitalization Factor and Corporate Allocations, 2006 – 2011<sup>7</sup>**

	2006	2007	2008	2009	2010	2011
<b>Montana-Dakota Corporate Capitalization Factor</b>	13.6%	11.7%	12.0%	11.9%	13.4%	15.3%

Concentric’s evaluation of the appropriateness of Resource’s allocation approach given Resources’ corporate organization and the specific circumstances faced by Resources and its business units involved a review of both the organizational structure of Resources and the nature of its business units. As discussed above, Resources’, of which Montana-Dakota is a division, is the parent of capital-intensive subsidiaries such as pipelines, energy services, exploration and production services, construction materials and contracting, and construction services. Resources’ non-utility business units are not widely found in other U.S. utility holding companies, suggesting that the application of industry-wide allocation practices to Resources may not be practical or reasonable. Total invested capital (*i.e.*, the basis of the Corporate Capitalization Factor) is indicative of the relative size of each business unit, and is the basis on which Resources’ executive management manages, evaluates, and makes decisions regarding its business units. In that regard, the Corporate Capitalization Factor provides a reasonable basis upon which to allocate costs to each business unit.

In addition, Concentric found that the allocation policies and procedures are clearly established, straight forward, transparent, and consistently applied. Specifically, Resources provides its allocation policy and procedures in Policy No. 50.9, *Allocation of Administrative Costs* (see, Attachment A). As described in Section VI, Resources uses its accounting system to automatically accumulate costs into pools to be allocated. In addition, as shown in Table 2, above, the Corporate Capitalization Factor has resulted in a reasonably stable percentage of costs being allocated to Montana-Dakota over the period in which that allocator has been in effect.

However, it is generally recognized that there is no “correct” way to allocate costs that are not directly assigned, and multiple methods and allocators can produce fair and reasonable results. In addition, while total invested capital is a reasonable basis upon which to allocate costs based on

<sup>7</sup> The allocation factors included in the table differ from those presented in Table 1. The reason for the difference is that while Resources calculates separate factors for Montana-Dakota (including Great Plains) and MDU Energy Capital, LLC (parent of Cascade Natural Gas Corporation and Intermountain Gas Company) (collectively, the “Utility Group”), the Utility Group is treated as one entity and re-allocates the total Utility Group corporate overhead to the three companies based on year end capitalization in order to reflect more current data in the allocation. As stated previously, Concentric’s focus was on Resources’ allocation of costs, not on any further re-allocation of those costs.

Resources' organizational structure and the businesses it operates, it is not necessarily the primary driver of the degree to which each business unit benefits from Resources' corporate services. For instance, business units may benefit from corporate HR services based on the number of employees or total payroll at each business unit. In that example, to the extent that a business unit's relative total invested capital significantly diverges from its relative number of employees or total payroll, then that business unit may receive an under or over-allocation of corporate HR costs.

To test the reasonableness of the Corporate Capitalization Factor versus other allocation methods and factors that are currently used by other U.S. regulated utilities, Concentric first collected data from the Company regarding alternative allocators. Those allocators, along with Montana-Dakota's respective percentage of Resources' total for that allocator, are provided in Table 3:

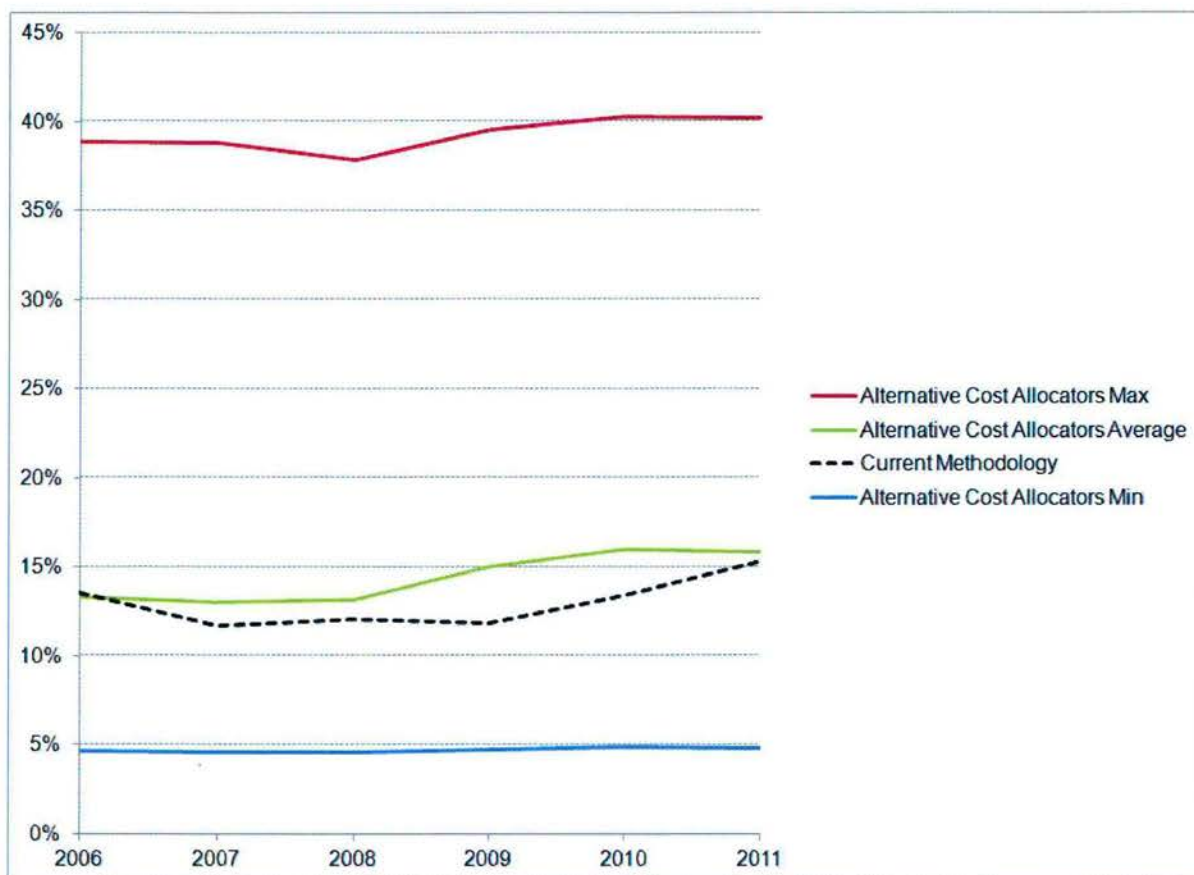
**Table 3: Alternative Cost Allocators, 2006 – 2011<sup>8</sup>**

	2006	2007	2008	2009	2010	2011
<b>Gross Plant</b>	21.0%	18.3%	16.7%	18.9%	19.2%	19.0%
<b>Net Plant</b>	16.2%	15.5%	14.8%	18.4%	19.6%	19.8%
<b>Total Assets</b>	38.8%	38.8%	37.8%	39.6%	40.3%	40.2%
<b>Total Equity</b>	9.9%	9.9%	10.3%	13.0%	13.8%	14.1%
<b>Total Long-term Debt</b>	14.6%	15.7%	17.2%	18.6%	19.6%	18.5%
<b>Gross Revenues</b>	13.0%	11.8%	12.1%	12.1%	12.7%	12.5%
<b>Gross Margin</b>	5.7%	5.8%	5.7%	6.5%	7.3%	7.2%
<b>O&amp;M Expense</b>	4.7%	4.6%	4.6%	4.7%	4.9%	4.8%
<b>Net Revenues</b>	6.9%	8.4%	10.2%	[1]	17.6%	16.7%
<b>Employees</b>	8.6%	7.8%	8.3%	10.1%	11.5%	12.1%
<b>Payroll</b>	7.4%	6.9%	6.8%	8.3%	9.0%	9.0%
<b>Corporate Capitalization Factor</b>	13.6%	11.7%	12.0%	11.9%	13.4%	15.3%

[1] Resources' total net revenues were negative in 2009, and thus have been excluded from Concentric's calculations.

<sup>8</sup> The alternative allocators were calculated using annual data, as opposed to an average of monthly data as is used for the Corporate Capitalization Factor. In Concentric's opinion, annual data provided results that were sufficiently comparable to the Corporate Capitalization Factor for purposes of our evaluation.

Chart 2: Alternative Cost Allocations, 2006-2011



Concentric next developed an allocation model and performed a series of *pro forma* allocation analyses using allocation methods and factors that are representative of approaches used in the U.S. regulated utility industry. Those allocation methods and factors are described below:

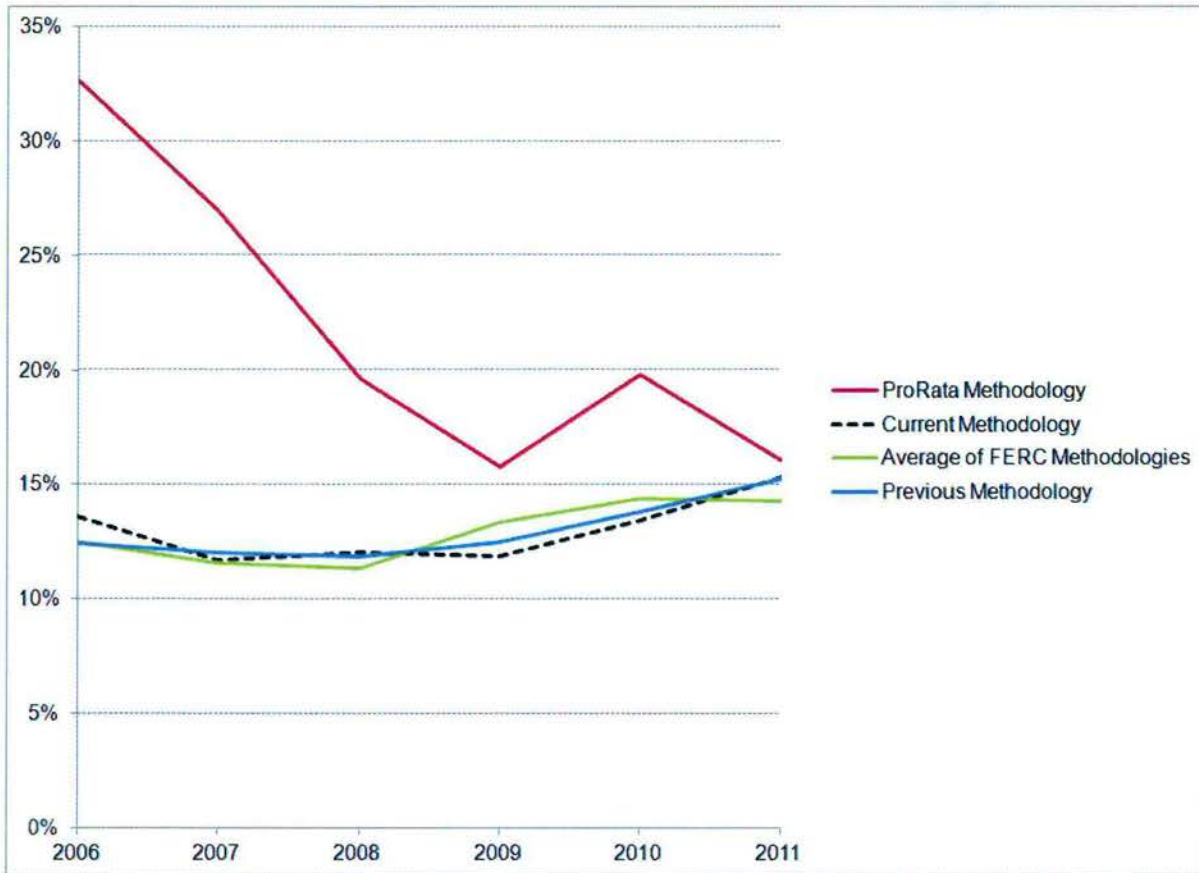
1. *FERC Methods (average of the following):*
  - a. Massachusetts Formula
  - b. Modified Massachusetts Formula
  - c. Distrigas Method
2. *Average of net plant and employees* – this method is an approximation of Resources’ two-factor allocation approach prior to the adoption of the Corporate Capitalization Factor.
3. *Pro Rata Method* – this methodology allocates residual A&G expenses based on the proportion of direct and usage-based costs that are allocated to the Company.

Concentric developed the allocation factors in consideration of the fact that the majority of U.S. regulated utilities use multi-factor allocation methods rather than a single-factor method. In addition, while industry practice is diverse, Concentric found that the FERC Methods and variants thereof (including Resources' prior two-factor method) that include measures of assets, labor, and revenues, are the most widely employed allocation methods. Further, the Pro Rata Method puts additional emphasis on cost causation principles as it allocates residual costs using percentages that best represent the amount of benefits received by the utility for shared services allocated directly or by usage-based methods. Concentric's analysis thus provided a basis from which to evaluate whether Resources' allocation methodology and factors are fair and reasonable compared to alternative practices utilized across the U.S. utility industry and adequately adhere to cost causation principles.

*Pro Forma Allocation Model Results*

The results of the allocation model are presented in the chart below. Under each method, Concentric determined the total percentage of corporate department A&G costs that would be allocated to Montana-Dakota under that method. The results of each method are provided separately in the chart.

**Chart 3: Alternative Cost Allocation Methodologies, 2006-2011**



As shown in the chart above, the Corporate Capitalization Factor approximated the *pro forma* results of Resources' previous two-factor method, as well as an average of the FERC Methods in most of the years in Concentric's review period. The Corporate Capitalization Factor also fell significantly below the Pro Rata Method in every year except for 2011. Those results indicate that, compared to alternative allocation methods, the Corporate Capitalization Factor results in reasonable allocations to Montana-Dakota.

### **IX. Conclusion**

Based on the analyses performed by Concentric, as well as other considerations discussed above, Concentric reached the following conclusions regarding Resources' allocation practices and the Corporate Capitalization Factor:

- The provision of services by Resources to its business units is a prudent approach to providing common services within the Resources family of companies;
- Resources' allocation policies and procedures are clearly established, straight forward, transparent, and consistently applied;
- Given the mix of companies within the Resources family, the Corporate Capitalization Factor is an effective means by which to allocate common costs that cannot be direct charged or allocated based upon usage;
- For allocations of residual costs, other U.S. regulated utilities use from one to four-factor allocation methods. More than 80% of the regulated utilities surveyed employed multi-factor allocation methods;
- Allocation practices are company and circumstance-specific. While there is no consensus in terms of industry practice, the FERC Methods and variants thereof, which include measures of assets, labor, and revenues, are the most widely employed allocation methods;
- Despite the more prevalent use in the industry of multi-factor allocation methods that consider measures of assets, labor, and revenues, a recasting of the Corporate Capitalization Factor allocation process employing other commonly used allocation factors did not produce materially different results, with the exception of the Pro Rata method, which would have lead to significantly greater allocations of costs to Montana-Dakota in the review period;
- The resetting of the Corporate Capitalization Factor semi-annually is appropriate, and minimizes the lag between when changes in a business unit's capital funding requirements occur and the Corporate Capitalization Factor is updated;
- There is a practice among some U.S. utilities of allocating corporate costs on a department-by-department basis. While that approach may adhere more closely to cost causation principles than the use of a single allocation method for all corporate departments (which is also a common practice in the U.S.), it comes with a different level of administrative burden. In addition, for Montana-Dakota, Concentric does not believe that approach would have produced materially different results over the review period;

- Resources' should evaluate the continued reasonableness of the Corporate Capitalization Factor on a periodic basis or as circumstances warrant. Such an evaluation, performed every three-to-five years or as circumstances (*e.g.*, changes in corporate organization) dictate, will ensure the continued fairness and reasonableness of the current approach.

**POLICY STATEMENTS**  
**Policy No. 50.9****Allocation of Administrative Costs and General Overheads to Business Units**Effective Date:  
July 1, 2011**I. PURPOSE**

- A. It is the policy of the Company to allocate MDU Resources Group, Inc.'s (MDU) administrative costs and general expenses to MDU's business units.

**II. SCOPE**

- A. The allocation procedures described herein are intended to allocate only those MDU administrative and general expenses applicable to multiple business unit operations. In those instances where administrative and general expenses incurred relate only to a specific business unit, that expense will be assigned directly to the applicable business unit with no allocation to other business units.
- B. The allocation policy and procedure implemented by this Statement is intended to utilize those allocation methodologies which appropriately allocate MDU's general and administrative expenses to the applicable business units. General and administrative expenses shall also include the costs of the facilities and other property used in providing services to the business units. Ownership and operating costs for these facilities and other property shall be based on a cost of service calculation. Such cost of service methodology provides for an annual return on the value of property used and useful in providing service plus necessary and proper annual operating expenses, taxes and depreciation.

**III. PROCEDURE**

- A. The allocation factors developed to apportion MDU's unassigned general and administrative costs, including payroll, shall be based on the corporate capitalization factor which is based on 12 month average capitalization at March 31, effective July 1 and at September 30, effective January 1. Capitalization includes total equity and current and non-current long-term debt (including capital lease obligations).
- B. Business unit employees who perform services for affiliated business units on a noncompetitive basis shall determine the time devoted to those other business units and shall recover the payroll costs through an administrative fee to be charged to and recovered from such other business units.



**POLICY STATEMENTS**  
**Policy No. 50.9**

**Allocation of Administrative Costs and General Overheads to Business Units**

Effective Date:  
July 1, 2011

- C. As indicated in paragraph II.B., the ownership and operating costs related to providing services to the business units shall be assigned directly where so determinable or otherwise allocated using the appropriate factor. Facilities and other property utilized in providing services include the corporate office, computers, telephones and furniture and fixtures. Components included in cost of service for these facilities and other property include operation and maintenance expense, depreciation, property taxes, income taxes and a pretax return on the investment.
- D. MDU allocable general and administrative costs shall be charged to the business units on a monthly basis.

IV. ADMINISTRATION

- A. The President and Chief Executive Officer of MDU Resources Group, Inc. has the responsibility and authority for the overall administration of this policy and procedure. Establishment and implementation of procedures to administer the policy and procedure is the responsibility of MDU's Vice President, Controller and Chief Accounting Officer.

Prepared and  
Reviewed By: /s/ Nicole A. Kivisto  
Nicole A. Kivisto  
Vice President, Controller and  
Chief Accounting Officer

Approved By: /s/ Terry D. Hildestad  
Terry D. Hildestad  
President and Chief  
Executive Officer

Date: July 1, 2011

**MDU Resources Shared Services  
Pricing Methodology - Effective for 2012**

**Note: MDU Resources' use of Shared Services** – MDU Resources costs for each shared services function are charged based on the corporate allocation factor.

**761 – Payroll Shared Services**

Payroll Shared Services costs are invoiced based on the number of employees paid and stated as a cost per check. The word check, for this purpose, generically refers to paper paychecks, direct deposits and paycard transactions.

Checks are charged on a tiered structure, intended to recognize the fixed or baseline effort associated with maintaining a payroll cycle and associated reporting, regardless of number of people paid. It is also intended to reward consolidation of multiple pay groups and companies where possible and to align charges with the additional effort required to maintain multiple pay groups and pay cycles.

The monthly volume for this step pricing is accumulated individually for each pay cycle processed.

Checks for weekly pay cycles, cost per check based on the number of checks written per month:

- \$ 5.00 per check for the first 500 checks
- \$ 3.25 per check for the next 1000 checks
- \$ 0.75 per check for each additional check

Checks for non-weekly pay cycles, cost per check based on the number of checks written per month:

- \$ 5.00 per check for the first 1000 checks
- \$ 3.25 per check for the next 2000 checks
- \$ 0.75 per check for each additional check

There is a \$500 per month minimum charge for each operating company.

**762 – Procurement Shared Services**

Procurement Shared Services costs are invoiced based on five separate factors, all carrying an equal weight of 20%. The factors are:

- Number of Visa Cards as of 8/1/11
- Total Visa Spend for 2010
- National Account Spend for 2010
- Number of Construction Equipment Acquisitions in 2010
- Number of Fleet Acquisitions in 2010

**766 – Time Entry Shared Services**

Service provided 100% to the MDU Utility Group.

**767 – Accounts Payable Shared Services**

Accounts Payable Shared Services costs are invoiced based on three factors:

- Percentage of FTEs worked by MDUR AP Analyst (33.33%)
- Number of payments processed based on activity from 7/1/10 through 6/30/11 (20.83%)
- Number of vouchers processed by AP Shared Services staff based on activity from 7/1/10 through 6/30/11 (45.84%)

**Enterprise Technology Services (ETS)**

There are several ETS departments, and each is billed out based on its own criteria. They are as follows:

**Application Services (765)** There are three components to the invoicing structure for Applications Services, they are as follows:

1. MDU Resources costs specific to the AS/400 are invoiced upon the AS/400 allocation as agreed to by MDU and WBI. Approximately 17.7% of our costs will be invoiced this way.
2. MDU Resources costs specific to the Operations/Server Maintenance will be billed out based on the number of servers that are supported for a particular business unit. The servers are divided into two pools. Servers which are housed in the data center and are supported locally by the operations group (weighted 75%) and those servers which are located in the field and serviced remotely by the operations group (weighted 25%). Approximately 18.2% of our costs will be invoiced this way.
3. The remaining costs of Application Services will be invoiced to MDUR and will be further allocated based on the corporate factor. Approximately 64.1% of our costs will be allocated this way.

**Customer Relations (965)** – Two factors are used in the invoicing of the enterprise costs associated with customer relations. 87.5% of the costs are associated with the help desk. Those costs are invoiced based upon the number of devices supported by customer relations. The metric used to determine device counts is devices that have checked into active directory during a 60 day period in the summer of 2011. The remaining 17.3% of the costs are for the customer relations PC support group. These costs are invoiced based upon the actual time logged from 01/01/11 to 7/31/11 for this function.

**Communications (971)** – Enterprise charges for the communications group are invoiced using four separate factors. They and their estimated % of work are:

4. Wide Area Network/Local Area Network/Metropolitan Area Network- Number of business unit locations (35%)
5. Internet/Security – Number of user accounts (34%)
6. Voice – Number of Voice Gateways/Servers (30%)
7. Off Network Access (1%)

Each of these four areas is assigned a percentage (identified above). Those portions of the costs are invoiced via the above identified denominators.

**Operations (972)** – Enterprise costs for the operations group are invoiced based upon the number of servers that are supported for a particular business unit. The servers are divided into two pools. Servers which are housed in the data center and are supported locally by the operations group (weighted 75%) and those servers which are located in the field and serviced remotely by the operations group (weighted 25%).

**Security (977)** – Enterprise costs for the security group are distributed via the number of devices in active directory that have been on the network during a 60 day period in the summer of 2011.

**Finance and Administration (982)** –. Costs for the finance and administration group are invoiced based upon the combined methodologies of the five previously identified ETS groups.

Alternative Cost Allocation Methodologies

		Multi-Factor Methodology											
		ProRata	Assets	Payroll	Revenue	Employees	O&M Expenses	Gross Plant	Gross Margin	Equity	Capitalization	Net Plant	Net Income
<b>MDU Resources</b>	Current Methodology										X		
	Previous Methodology					X						X	
<b>FERC Methodologies</b>	Distrigas Method			X	X			X					
	Massachusetts Method			X	X			X					
	Modified MA Method			X								X	
<b>FERC Form 60's [1]</b>	Allegheny Energy Service Corp									X			
	Alliant Energy Corp Services Inc	X											
	Black Hills Service Company, LLC		X	X					X				
	CenterPoint Energy Service Company, LLC		X			X			X				
	Dominion Resources Services, Inc						X						
	Duke Energy Business Services, LLC			X				X	X				
	Exelon Business Services Company, LLC		X	X	X								
	FirstEnergy Service Company									X			
	Iberdrola USA Management Corp			X	X			X					
	Integrus Business Support, LLC		X				X						
	LG&E and KU Services Company		X		X	X							
	National Grid Corp Services		X		X	X							
	NiSource Corp Services Company			X									
	Northeast Utilities Service Company								X				X
	PHI Service Company						X	X					
	PNMR Services Company	X											
	PPL Services Company					X	X				X		
Progress Energy Service Company, LLC		X		X	X								
SCANA Services, Inc			X	X			X						
Xcel Energy Services Inc		X		X	X								
<b>Additional Concentric Research</b>	Ameren Corp [2]	X											
	Baltimore Gas and Electric Co (Exelon/Constellation) [3]		X			X			X	X			
	Northern Utilities, Inc (Unitil) [3]			X									
	PacificCorp Utah (Midamerican) [4]		X	X									
	Pacific Gas and Electric Company [5]		X			X	X						
	OtterTail Corp [6]		X	X	X								

Methodology Frequency:

3 12 12 10 8 6 7 4 3 2 2 1

Sources:

- [1] 2011 FERC Form 60 Schedule XXI - Methods of Allocation
- [2] Ameren General Services Agreement
- [3] 2009 Cost Allocation Manual
- [4] Direct Testimony of Michael Brosch, Docket No. 99-035-10
- [5] 2011 FERC Form 1
- [6] 2010 Cost Allocation Manual