MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

400 North Fourth Street
Bismarck, ND 58501
(701) 222-7900

November 4, 2015

Mr. Will Rosquist
Utility Division
Montana Public Service Commission
1701 Prospect Avenue
Helena, MT 59620

Re: General Electric Rate Application
Docket No. D2015.6.51

Dear Ms. Whitney:

Enclosed please find Montana-Dakota Utilities Co.'s responses to the Montana Public Service Commission data requests dated October 20, 2015 and October 21, 2015, with the exception of PSC-071 and PSC-072 that were received on October 26, 2015.

Sincerely,

Tamie A. Aberle
Director of Regulatory Affairs

Attachments
cc: Service List

Montana-Dakota Utilities Co.
Docket No. D2015.6.51
Service List

Mr. Will Rosquist
Utility Division
Montana Public Service Commission
1701 Prospect Avenue
PO Box 202601
Helena, MT 59620-2601
kwhitney@mt.gov

Robert Nelson
Monica Tranel
Montana Consumer Counsel
111 N. Last Chance Gulch, Suite 1B
PO Box 201703
Helena, MT 59620-1703
robnelson@mt.gov
mtranel@mt.gov

Mike Green
900 N. Last Chance Gulch
Suite 200
Helena, MT 59601
mgreen@crowleyfleck.com

Charles Magraw
501 8th Ave
Helena, MT 59601
c.magraw@bresnan.net

Thorvald A. Nelson
Holland & Hart LLP
6380 South Fiddlers Green Circle
Suite 500
Greenwood Village, CO 80111
tnelson@hollandhart.com

David Wooley
Keyes, Fox & Wiedman LLP
436 14th Street, Suite 1305
Oakland, CA 94612
dwooley@kfwlaw.com

Nikolas S. Stoffel
Holland & Hart LLP
6380 South Fiddlers Green Circle
Suite 500
Greenwood Village, CO 80111
nsstoffel@hollandhart.com

Kelly Crandall
Keyes, Fox & Wiedman LLP
1400 16th St
16 Market Square, Suite 400
Denver, CO 80202
kcrandall@kfwlaw.com

Albert Clark
142 Buccaneer Drive
Leesburg, FL 34788
aclark154@yahoo.com

Jack Pous
14 Shell Avenue SE
Ft. Walton Beach, FL 32548
jpous@ducinc.net

John Wilson
J W Wilson & Associates Inc.
1601 N. Kent Street, Suite 1104
Arlington, VA 22209-2105
john@jwwa.com

Electronic Service Only:
ppenn@hollandhart.com
aclee@hollandhart.com
crmayers@hollandhart.com

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-033
Regarding: Electric and Common Plant Depreciation
Witness: Robinson

Is the consultant or the Company proposing any phase in period for the new depreciation adjustments to common and electrical plant? If not, please explain your reasoning.

Response:

No. The proposed depreciation rates, as developed in the depreciation studies and set forth in supporting testimony, is the level of depreciation that is required to recover the Company's unrecovered costs from customers, who benefit from the service provided, over the remaining life of property. The requested increase in depreciation expense is not significant and the delay in depreciation cost recovery would not provide a benefit to customers. Deferred recovery actually results in higher levels of rate base being retained in service with the result that customers pay an overall higher cost for service as a result of any such deferral.

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MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
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PSC-034
Regarding: Electric Plant Depreciation
Witness: Robinson

a. **Please provide a list of all physical site inspections conducted on the various representative properties.**

b. **Please indicate the person responsible for inspecting the sites.**

c. **Please provide the inspection reports from all site visits.**

Response:

a. Physical site tours were completed in conjunction with the completion of prior depreciation studies. Site tours were not completed with the present studies. During the completion of the most recent prior depreciation study, sites visited included the Turnpike Avenue Substation, Northeast Bismarck Substation, Bismarck East 26th Substation, Mandan Missouri River Crossing, and Diamond Willow Wind Farm. During the earlier depreciation study, visits were made to the major generating stations including Heskett, and Lewis and Clark as well as various additional substations.

   The depreciation study project was completed over a period starting during 2014 with completion on or about the end of April, 2015. Initially, extensive detailed accounting information was provided to enable the assembly of the depreciation databases for both Electric and Common Plant. The Fixed Asset Accounting department staff maintains and has access to all such historical records which are assembled and maintained via the use of the PowerPlan system. Different fixed asset systems were used to maintain earlier records, which were transitioned to the present property record system.

   During the analysis and depreciation development phase of the study one or more conference calls were held with the Fixed Asset Accounting Manager to clarify accounting data items, as well as ultimately discussions were held with senior management responsible for the Company's various operating areas. The various individuals participating in the conference call/s have been:

   Jay Skabo – Vice President, Electric Supply
   Allan Welte – Director, Generation
   Rob Frank – Director, Electric Transmission Engineering

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Pat Darras – Vice President, Operations
Daryl Anderson – Director, Distribution Engineering
Garret Senger – Executive Vice President of Regulatory Affairs & Chief Accounting Officer
Paul Bienek – Manager, Fixed Asset Accounting
Jeffery Hauff - Supervisor, Fixed Asset Accounting

Topics covered related to operations of the properties within the major investment accounts, the recent focus which has been more on growth and how the current and future activity is moving more towards increased replacement of property, particularity with regard to transmission and distribution facilities.

With regard to production facilities, management has review, analyzed and provided estimated probable year of retirement and/or major rehabilitation dates (PYR's) for each of the operating plants. In the process of that task, consideration including but not limited to, the original construction periods, current plant investments, future investment requirements, plant operations capabilities, operating demands/loads, ever changing regulatory/environmental requirements and their impact on the cost effectiveness of current and future investments, and operating plans of unit partners. The PYR's are set forth in the depreciation table summaries and the detailed depreciation calculations within the electric depreciation study report.

b. Mr. Earl M. Robinson was the consultant responsible for completing the site tour.

c. Please see Response No. MCC-157 for photos of the most recent prior depreciation study site tour. Unfortunately, some files were inadvertently destroyed and the photos, etc. from the earlier site tour no longer exist.

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PSC-035
Regarding: Electric Plant Depreciation
Witness: Robinson

For the following accounts, 312.0, 315.0, 353.0 and 358.0, please identify other utilities that the Company or the consultant are aware of that have original life estimate margins greater than 15 years from the original to the updated life spans.

Response:

The information is not known by either the Company or its consultant.

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PSC-036
Regarding: Electric Plant Depreciation
Witness: Robinson

a. **Of the numerous methods and combinations available to recover property investment, did you conduct any side by side comparison studies using other SPR methods, such as the Equal Life Group with the Average Remaining Life Technique?**

b. **If other side by side comparisons were conducted, please provide a summary of those results and any supporting workpapers and excel sheets.**

Response:

a-b. With the completion of a comprehensive depreciation study there are methods used to complete the historical analysis phase of the study, and there are methods used to calculate annual depreciation rates once depreciation parameters are estimated.

The two most common Methods used to complete service life analysis for the determination/estimation of life are the Retirement Rate Method and Simulated Plant Record Method with the method used dependent upon the Company's available source records. If aged data (the transaction and installation year is known) the Retirement Rate Method is used. If only un-aged data (only the transaction year is known) the Simulated Plant Record Method is used. Aged data was available for the Montana-Dakota investment information, accordingly, the Retirement Rate Method was used for the service life analysis phase of the depreciation study.

With regard to the development of the proposed average remaining lives and related annual depreciation rates, the calculations were developed using the Straight Line Method, Broad Group Procedure, and Average Remaining Life Technique. The depreciation rates were developed use that approach inasmuch as that is the same approach underlying the current depreciation rates.

No other alternatives were used to prepare proposed depreciation rates. Equal Life Group (ELG) procedure based depreciation rates would be more appropriate given its more exact recovery in conjunction with the actual consumption of property. Depreciation rates, under the ELG scenario were not calculated or presented since the approach would

produce a higher level of proposed depreciation expense, which most likely would be opposed by Staff and others.

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PSC-037
Regarding: Electric Plant Depreciation
Witness: Robinson

Please reconcile the statement on page 1-4 of the Electric Plant study, "[i]n addition, consideration is given to current and anticipated events which are anticipated to impact the Company's ability to recover its fixed capital costs related to utility plant in service utilized to provide service to the Company's customers," with the statement on page 3-1, "[a]ll average service lives set forth in this report are developed based upon plant in service as of December 31, 2014." These statements could be considered at odds with each other.

Response:

There is no conflict nor are the above referenced statements at odds with each other.

The statement on page 1-4 is indicating that all known and anticipated factors that will impact the useful life of the current plant in service must be considered to arrive at the appropriate average service life over which to depreciate the plant in service investment.

The statement on page 3-1 is indicating that the depreciation analysis and estimates were prepared for plant that is currently in service as of December 31, 2014, as opposed to some future or past date.

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PSC-038
Regarding: Electric Plant Depreciation
Witness: Robinson

a. **As the component being scrapped is removed from the overall investment, does the overall investment receive a debit/credit for the negative/positive salvage value?**

b. **How is the overall investment's life adjusted to accommodate the removal and possible updated component?**

c. **Are customer rates adjusted or is a true up provided to reconcile the time period an expense is being charged while the overall investment is awaiting the new component?**

d. **Please provide a list of all such interim salvage components removed and any workpapers supporting the interim salvage.**

Response:

a. No. All fixed capital accounting entries are booked in accordance with the use of Group Depreciation practices. That is, as plant is retired from service, the original cost amount of the property being retired is credited to the applicable plant account and debited to the corresponding depreciation reserve account. Any items related to cost of removal (a debit to the book depreciation reserve) or gross salvage (a credit to the book depreciation reserve) are recorded as experienced.

b. At the time of the completion of each comprehensive depreciation study, applicable depreciation parameters (average service lives and net salvage factors) are developed/estimated for each depreciable property group. The applicable depreciation parameters are used together with the corresponding plant in service and book depreciation reserves (using the Broad Group Procedure and Average Remaining Life Technique) to develop average remaining lives and applicable depreciation rates. The resulting applicable depreciation rates, as approved, continue to be used by the Company to depreciate the Company's plant in service until such time that a new depreciation study is completed and the subsequent depreciation rates are approved. Adjustments are not made to any depreciation rates in the interim period.

c. See the response to item b.

d. See the response to items a. and b.

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PSC-039
Regarding: Common and Electric Depreciation Study
Witness: Robinson

a. **Please confirm that the consultant implemented the Straight Line Method overall and explain any deviation from that method.**

b. **Please confirm that the consultant implemented the Broad Group Method Procedure overall and explain any deviation from that method.**

c. **Please confirm the consultant implemented the Average Remaining Life Technique overall and explain any deviation from that method.**

Response:

a. Confirmed.

b. Confirmed.

c. Confirmed.

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DATED OCTOBER 20, 2015
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PSC-040
Regarding: Electric Plant Depreciation
Witness: Robinson

a. **In reference to various accounts, please explain why such large jumps were required between ASL survivor curves. Why was a more intermediate survivor curve not used, or at least provided for comparison? The reference accounts are accounts: 312.0, 314.0, 315.0, 353.0, and 358.0.**

b. **If alternate survivor curves were used for the above accounts please provide the output of any alternate ASL curves you may have used in determining Average Remaining Life. The information should be provided in electronic format when possible.**

Response:

a. Relative to Accounts 312, 314, and 315 the average service lives and curves are applicable to interim retirements, as opposed to total life curves, that are used with life span applications to define the overall life of each of the property groups. Life Span accounts (related to generation facilities) are different from full mortality property groups such as Poles or Conductors. With full mortality property groups each individual retirement unit has the opportunity to live the full life estimated for the property group. That is, for Account 364 Distribution Poles, the average service life is 45 years. While within the property group, each of the items experience a dispersion of life (some retire early and some retire later, but on average the total account investment lives to 45 years). Furthermore, each and every unit within the property group has the opportunity to live 45 years, but just as human mortality not everyone lives to the same age, even though statistically there is an average life.

   Conversely, with life span property groups, such as generating plants, this category of property experiences a different type of life characteristic than full mortality type property. That is, the primary driver behind the life of individual components is driven by the life of the total plant. Just because a subsequent addition is installed at a date subsequent to the initial installation does not afford it the opportunity to live a longer life. If it is determined that the operating production plant can no longer function, any and all investments related to the property will be retired, irrespective of what year the property was installed. Hence, as noted, the retirement of the operating facility will limit the life of individual components.

The estimated interim retirement curves for the generating plant in service property groups, 312, 314, and 315, were based upon a detailed analysis in recent historical experience and are the period of time over which property needs to be recovered to enable full recovery of the cost of the property by the estimated end of life of the property group. To artificially use some other life, would be inconsistent with the basis principals of depreciation recovery.

Relative to Account 353 and 358, the proposed average service live are those which are estimated to best represent the life that the property will achieve. Again, to artificially use some other life, would be inconsistent with the basis principals of depreciation recovery.

b. None were calculated.

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PSC-041
Regarding: Common Plant Depreciation
Witness: Robinson, Common Plant Study, 1-5

Account 392.20 increases an expense of 4.11% to 6.65%, while at the same time increasing the service life of the property from seven to nine years. Please provide the excel spreadsheet that reconciles the increase in depreciation expense while also assuming the extended service life.

Response:

The proposed depreciation rate for Account 392.20, as with all other plant accounts, was calculated using Straight Line, Broad Group Procedure, and the Average Remaining Life Technique. While depreciation rates within Table 1 of Sec 1 of the Common Plant report were calculated on a component level basis, following is the same calculation on a total component basis.

Original Cost 12-31-14	$7,053,425.86	
Net Salvage %	20%	
Calculated Net Salvage	1,410,685.17	
O.C. Adjusted for NS	5,642,740.69	
Book Depr Resr 12-31-14	3,344,198.87	
Net O.C. Less Salvage	2,300,390.28	
ASL/Curve	9-R3	(See Sec 5 of Depr Report)
Average Rem Life (Yrs)	4.9	(See Sec 6 of Depr Report)
Annual Depr Expense	469,090.17	
Annual Depr Rate	6.65%	

Section 5, page 5-7 is a plot of the historical life analysis result for Account 392.20. The life analysis identifies that the 9 year average service life is an excellent fit to what has been experienced by the Company. While the Company policy is to replace vehicles of this class at 8 years or 95,000 miles, the actual use of the vehicles are modestly exceeding the proposed 8 year period replacement. Contributing to the longer period of time might be that fewer miles are being driven per year than anticipated.

The contributing factor to the increase in the resulting proposed depreciation rates notwithstanding that the average service life was lengthened from the present 7 years to the proposed 9 years, is the fact that the book depreciation reserve of $3,344,198 is lower than the theoretical depreciation reserve of $3,448,756 (OC $7,053,425 minus Future Annual Accruals 3,604,425 (page 6-5 of depreciation report)) for this property group. With the book depreciation reserve being lower than the theoretical depreciation, the average remaining life

depreciation rate must increase to make up the short fall over the remaining life of the property.

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DATED OCTOBER 20, 2015
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PSC-042
Regarding: Common Plant Depreciation
Witness: Robinson Pre-Filed Testimony, p. 5

a. **Please provide a list of all physical site inspections conducted on the various representative properties.**

b. **Please indicate the person responsible for inspecting the sites.**

c. **Please provide the inspection report for each site investigated.**

Response:

a-c. Inspection site tours were not performed on the Common Plant properties.

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DATED OCTOBER 20, 2015
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PSC-043
Regarding: Common Plant Depreciation
Witness: Robinson Account 390

a. **Please provide a detailed description (e.g., physical location, type of construction, square footage, when built, etc.) for each of the 8 largest investments into Account 390 – General Structures Common Plant.**

b. **Indicate if the eight largest investments were leased or owned.**

Response:

a-b. Please see Response No. MCC-145.

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PSC-044
Regarding: Common Plant Depreciation
Witness: Robinson Account 390

a. **Please identify each time in the last 20 years that the company retired one of its general office structures in Account 390 Common Plant, or terminated a lease and moved to a new location.**

b. **For each instance identified above, identify the dollar level of retirements, a description of what was retired, along with corresponding cost of removal and net salvage.**

Response:

a-c. Please see Response No. MCC-146.

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PSC-045
Regarding: Common Plant Depreciation
Witness: Robinson

Please provide a detailed list of the investments classified in the Miscellaneous Equipment Account 398.

Response:

Please see Attachment A.

Response No. PSC-045
Attachment A

Net Value (Life Only) Detailed Report By Major Location, Asset Location and Asset Id for 12/2014

MDU Utilities Groups

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
Billings District-MT				
Billings				
114938	Sony Digital Camera	$741.08	$567.75	$173.33
151737	Automatic External Defibulator	$2,120.18	$836.76	$1,283.42
160207	Metal Shelving	$3,231.71	$975.33	$2,256.38
161304	Toshiba Overhead Projectors	$7,353.69	$2,219.35	$5,134.34
203894	Ge Refrigerator	$1,735.42	$604.33	$1,131.09
203895	Ge Gas Range	$1,229.41	$428.12	$801.29
327442	Bb-Miscellaneous-Billings	$0.00	$0.00	$0.00
	Asset Location Total:	$16,411.49	$5,631.64	$10,779.85
	Major Location Total:	$16,411.49	$5,631.64	$10,779.85
Bismarck District-ND				
Bismarck				
112411	Sony Digital Camera With Case & Battery Charger	$748.63	$505.55	$243.08
131929	Grasshopper Lawn Mower	$0.00	$0.00	$0.00
327537	Bb-Miscellaneous-Bismarck	$0.00	$0.00	$0.00
16640390	Unit of Operating Equipment	$22,479.80	$1,301.19	$21,178.61
	Asset Location Total:	$23,228.43	$1,806.74	$21,421.69
Bismarck Service Center				
105599	Portable Water Cooler	$288.89	$288.89	$0.00
109020	Meter & Strainer For Pcb Tank At Bismarck Service Center	$2,029.43	$2,006.47	$22.96
115123	Oil Filtration System	$3,612.59	$3,185.59	$427.00
121368	Pallet Rack Loc @ Bismarck Service Center	$0.00	$0.00	$0.00
127927	Passport Portable Sound System Loc @ Bismarck Service Center W/Speaker Stan	$1,559.44	$1,125.10	$434.34
140481	Bunn Automatic Coffee Brewer	$773.85	$434.24	$339.61
151218	Automatic Extrnl Defibrillator Addn S/N B06k00090	$2,140.90	$972.53	$1,168.37
151219	Automatic Extrnl Defibrillator	$2,140.90	$972.53	$1,168.37
159878	Ice-O-Matic Ice Maker W/Storage Bib S/N 07091280010419	$4,057.81	$1,626.45	$2,431.36
327593	Bb-Miscellaneous-Bismarck Serv	$0.00	$0.00	$0.00

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description		Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.					
Bismarck District-ND					
Bismarck Service Center					
37251905	Purchase T1 test equipment for MDU communications department		$3,508.39	$93.75	$3,414.64
		Asset Location Total:	$20,112.20	$10,705.55	$9,406.65
Mandan					
329484	Bb-Miscellaneous-Mandan		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$43,340.63	$12,512.29	$30,828.34
Dickinson District-ND					
Beach					
327302	Bb-Miscellaneous-Beach		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Belfield					
327327	Bb-Miscellaneous-Belfield		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Bowman					
327713	Bb-Miscellaneous-Bowman		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Dickinson					
115374	Agfa Digital Camera Loc @ Badlands Region		$618.70	$498.26	$120.44
149805	Panasonic Data Projector		$1,964.48	$910.89	$1,053.59
154954	Automatic Externl Defibrilator		$2,220.84	$921.36	$1,299.48
328059	Bb-Miscellaneous-Dickinson		$0.00	$0.00	$0.00
		Asset Location Total:	$4,804.02	$2,330.51	$2,473.51
Dickinson Div. Off/Ser. Center					
141324	Cornelius Cuber Ice Machine		$932.93	$523.51	$409.42
214425	Ice Machine		$3,321.60	$443.79	$2,877.81

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description		Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.					
Dickinson District-ND					
Dickinson Div. Off/Ser. Center					
328102	Bb-Miscellaneous-Dickinson Div		$0.00	$0.00	$0.00
		Asset Location Total:	$4,254.53	$967.30	$3,287.23
Hebron					
328883	Bb-Miscellaneous-Hebron		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Hettinger					
103433	Mod Vt1322 Tv/Vcr Comb-Hetting		$330.55	$330.55	$0.00
328935	Bb-Miscellaneous-Hettinger		$0.00	$0.00	$0.00
		Asset Location Total:	$330.55	$330.55	$0.00
Killdeer					
329154	Bb-Miscellaneous-Killdeer		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Mott					
329776	Bb-Miscellaneous-Mott		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
New England					
329844	Bb-Miscellaneous-New England		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Richardton					
330308	Bb-Miscellaneous-Richardton		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$9,389.10	$3,628.36	$5,760.74

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description		Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.					
General Office-AS					
MDU Company (90)					
16027371	Rpl Mobile Dock - Cf31		$0.00	$0.00	$0.00
16640378	Unit of Operating Equipment		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$0.00	$0.00	$0.00
General Office-ND					
Call Centr/Mobile Services					
118709	Refrigerator 3rd Floor Annex - Call Center		$671.88	$575.97	$95.91
151221	Lg 42" Flat Panel Tv		$2,130.38	$1,001.51	$1,128.87
151222	Lg 42" Flat Panel Tv		$2,130.38	$1,001.51	$1,128.87
151223	Lg 23" Flat Panel Tv		$878.80	$413.13	$465.67
151224	Lg 23" Flat Panel Tv		$878.79	$413.13	$465.66
		Asset Location Total:	$6,690.23	$3,405.24	$3,284.99
G.O. Airport					
130975	Automatic Extrnl Defibrillator		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
G.O. Annex					
107603	Dukane Overhead Projector		$492.55	$495.98	($3.43)
114637	Portable Platform Deck Located @ Marketing Dept.		$644.16	$587.83	$56.33
118249	Panasonic Time Laspe Recorder Loc @ Annex Building		$1,311.10	$1,123.95	$187.15
151697	Automatic Extrnl Defibrillator		$2,194.90	$1,031.84	$1,163.06
331502	Bb-Miscellaneous-General Offic		$0.00	$0.00	$0.00
		Asset Location Total:	$4,642.71	$3,239.59	$1,403.12
G.O. Utility Main					
103917	3m Ef5000 Rotary 16 Mm Microfilm Camera - Gen. Office Micrographics Dept.		$8,265.96	$8,323.49	($57.53)
104687	Gen. Off. Museum - Cabinets, Photos, Signs, Posts And (Old Wo74-900-15814)		$22,987.54	$23,147.55	($160.01)
107698	Model #Id-Ntu114-0 Remote Line Driver W/Model Id-Ntu102-0 Network Terminal & L		$1,218.25	$1,226.73	($8.48)
118338	Display Booths Loc @ Marketing Dept.		$8,988.98	$7,705.84	$1,283.14

Company
Major Location
Asset Location

Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
General Office-ND				
G.O. Utility Main				
118340	Automatic Paycheck Folder Loc @ Payroll Dept.	$877.67	$752.39	$125.28
118472	T-51 Print Head Loc @ Printing Dept. G.O.	$3,002.79	$2,574.15	$428.64
118473	Nikon 950 Digital Camera Loc @ Art Dept. G.O.	$1,346.35	$1,154.16	$192.19
121569	Kodak Digital Camera	$967.80	$776.12	$191.68
121968	Cabinet @ 831 Club 2nd Floor	$1,575.93	$1,263.81	$312.12
126004	Leopold Spotting Scope	$800.91	$642.29	$158.62
126008	Floor Display Booth 10'X 8' Loc @ Marketing Dept. G.O.	$3,778.55	$2,821.22	$957.33
126009	Table Top Display Booth 6'X 5' Loc @ Marketing Dept. G.O.	$1,697.61	$1,267.50	$430.11
126335	Hamada Superb Offset Press W/Accel Tempest Hot Air Dryer	$41,710.61	$31,142.84	$10,567.77
127422	Pitney Bowes Folder/Inserter	$9,528.91	$7,114.67	$2,414.24
127562	Hamada Superb Offset Press W/Accel Tempest Hot Air Dryer	$41,710.61	$31,142.84	$10,567.77
127695	Optical Power Meter	$745.59	$556.69	$188.90
127696	Optical Light Source	$639.82	$477.72	$162.10
127697	2dual Singlemood Light Source	$2,413.00	$1,801.64	$611.36
128095	Indoor Air Quality Monitor	$2,504.75	$1,870.15	$634.60
130728	Multistack Cleaning Kit	$1,473.76	$1,018.86	$454.90
130974	Automatic Extrnl Defibrillator	$3,277.67	$2,265.96	$1,011.71
131263	Baum Folder W/Pile Feeder	$22,339.86	$15,444.30	$6,895.56
131517	Noyes Optical Refectometer Time Domain	$18,462.52	$12,763.77	$5,698.75
131518	Noyes Fiber Box	$654.44	$452.44	$202.00
131538	Docufold Suction Feed Folder	$2,936.92	$2,030.39	$906.53
135702	Refrigerator	$971.65	$618.00	$353.65
135939	Bacharach Combustion Analyzer	$1,524.30	$969.50	$554.80
136438	Kompac Water Dampening System	$1,968.99	$1,252.33	$716.66
136504	Water Distiller	$1,048.39	$666.80	$381.59
136562	Plastikoil Paper Punch System Loc @ Printing	$6,136.27	$3,902.83	$2,233.44
140444	Ups Batteries	$10,426.69	$6,054.99	$4,371.70
140615	Gbc Electric Punch Machine	$985.10	$572.07	$413.03
141329	Electrical Safety Demnstrn Kit	$4,046.39	$2,349.82	$1,696.57
144548	Duplo Pocket Collator	$7,517.56	$3,949.83	$3,567.73

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
General Office-ND				
G.O. Utility Main				
146415	Portable Air Condition Unit Bought From Knife River	$2,386.00	$1,253.64	$1,132.36
150132	Hamada Offset Press	$38,959.98	$18,315.36	$20,644.62
150488	Model 51 Envelope Opener Mach	$19,830.75	$9,322.57	$10,508.18
150489	Mpe7.5 Envelope Opener Machine	$98,033.47	$46,086.22	$51,947.25
150490	Mpe7.5 Orienter	$30,987.14	$14,567.27	$16,419.87
150545	Cold Tech Cooler	$1,688.18	$793.63	$894.55
150742	Pitney Bowes Inserter	$16,512.39	$7,762.59	$8,749.80
151724	Alpha Card Id System	$5,110.18	$2,402.33	$2,707.85
154924	Custom Area Rug	$2,244.13	$930.87	$1,313.26
155433	Scotmen Icemaker	$5,820.38	$2,414.29	$3,406.09
160457	Dibipack Shrink Wrap Machine	$2,751.88	$989.28	$1,762.60
160866	Baum 3.4 Paper Cutter	$43,375.63	$15,593.27	$27,782.36
198150	Rhino Tuff Punch	$4,115.53	$1,024.27	$3,091.26
201841	Duster 3000 Air Filter W/Fume Control Air Purificatn System	$6,935.22	$1,726.04	$5,209.18
202390	Duplo 2000 Booklet Maker	$36,117.55	$8,988.94	$27,128.61
202994	Pitney Bowes Inserter	$23,723.31	$5,904.26	$17,819.05
207208	Video Switcher/Amplifier Incl Speakers, Controller & Video Projectors	$31,820.28	$6,159.56	$25,660.72
214160	Bell & Howell Bh2000 Inserter	$257,824.52	$35,648.56	$222,175.96
214220	Duplo Dc645 Docutter	$35,435.49	$4,899.55	$30,535.94
215408	25" Premier 4 Roll Laminator	$2,637.66	$364.70	$2,272.96
216157	Hi-Cap Document Feeder	$6,418.37	$887.45	$5,530.92
216349	Screen Ctp Platemaker	$57,553.46	$7,957.73	$49,595.73
218537	Lg Tv W/Cart	$0.00	$0.00	$0.00
218539	Polycom Video Conf Equip	($0.53)	($0.07)	($0.46)
218650	Lg Tv W/Tv Cart	$2,088.23	$288.73	$1,799.50
218651	Polycom Video Conf Equip	$12,802.68	$1,770.19	$11,032.49
331473	Bb-Miscellaneous-General Offic	$0.00	$0.00	$0.00
8599810	Pur Varn Compac Unit	$0.00	$0.00	$0.00
13564839	Unit of Operating Equipment	$108.46	$15.00	$93.46
13565174	Unit of Operating Equipment	$2,455.20	$203.68	$2,251.52

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
General Office-ND				
G.O. Utility Main				
16630923	Purchase a Optical Loss Test Kit for testing fiber.	$0.00	$0.00	$0.00
19317900	Unit of Operating Equipment	$2,939.51	$243.86	$2,695.65
20381024	REPLACE THE GENERAL OFFICE BASEMENT UPSThe basement UPS is 14 years	$0.00	$0.00	$0.00
20417203	PURCHASE 10 AED UNITS FOR THE GENERAL OFFICE AND 3 ADDITIONAL AED U	$0.00	$0.00	$0.00
23532599	Unit of Operating Equipment	$23,216.41	$642.01	$22,574.40
23636785	PURCHASE TESTO 320 COMBUSTION ANALYZER TO REPLACE EXISTING ANALY:	$0.00	$0.00	$0.00
28027333	Unit of Operating Equipment	$1,260.85	$34.87	$1,225.98
34078183	PURCHASE J75M2 COLOR COPIER TO REPLACE EXISTING NUVERA 100 LOCATE	$0.00	$0.00	$0.00
37255997	Unit of Operating Equipment	$87,234.32	$2,412.33	$84,821.99
	Asset Location Total:	$1,100,918.77	$379,676.67	$721,242.10
G.O. Vault Building				
37260394	PURCHASE AN AED UNIT FOR THE TITLE BUILDING.	$1,550.43	$42.87	$1,507.56
	Asset Location Total:	$1,550.43	$42.87	$1,507.56
G.O. Vehicle Maintenance				
136104	Ge Refrigerator	$713.51	$453.81	$259.70
136109	Wood Cabinet Includes Sink In Cabinet	$1,427.36	$907.84	$519.52
214804	Aed	$1,929.15	$266.74	$1,662.41
331518	Bb-Miscellaneous-General Offic	$0.00	$0.00	$0.00
	Asset Location Total:	$4,070.02	$1,628.39	$2,441.63
	Major Location Total:	$1,117,872.16	$387,992.77	$729,879.39
Glendive District-MT				
Baker-MT				
118337	G.E. Air Conditioner Loc @ Baker, Mt Shop	$571.78	$491.76	$80.02
327206	Bb-Miscellaneous-Baker	$0.00	$0.00	$0.00
	Asset Location Total:	$571.78	$491.76	$80.02

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
Glendive District-MT				
Forsyth				
328410	Bb-Miscellaneous-Forsyth	$0.00	$0.00	$0.00
	Asset Location Total:	$0.00	$0.00	$0.00
Glendive				
103434	Mod Tvr1920 Tv-Vcr Comb-Glendv	$493.81	$493.81	$0.00
127244	Sony Digital Camera	$557.70	$417.76	$139.94
155427	Ice Machine	$2,698.71	$1,123.07	$1,575.64
328587	Bb-Miscellaneous-Glendive	$0.00	$0.00	$0.00
17203052	THIS WORK ORDER WAS CREATED TO PURCHASE VIDEO CONFERENCING EQU	$0.00	$0.00	$0.00
21008326	Unit of Operating Equipment	$5,423.05	$150.46	$5,272.59
	Asset Location Total:	$9,173.27	$2,185.10	$6,988.17
Miles City				
103435	Mod Tvr1920 Tv/Vcr-Miles City	$493.81	$493.81	$0.00
136021	Fuji Digitl Camera/Printer Set Co # For Printer Is 37387 S/N Printer My2bcf526h C8	$791.13	$504.82	$286.31
329579	Bb-Miscellaneous-Miles City	$0.00	$0.00	$0.00
	Asset Location Total:	$1,284.94	$998.63	$286.31
Sidney				
330605	Bb-Miscellaneous-Sidney	$0.00	$0.00	$0.00
	Asset Location Total:	$0.00	$0.00	$0.00
	Major Location Total:	$11,029.99	$3,675.49	$7,354.50
MDU Schuchart Building(Retired)				
MDU Schuchart Building(Retired)				
107606	Model #2000 3m Overhead Projector	$0.00	$0.00	$0.00
107607	Model #2000 3m Overhead Projector	$0.00	$0.00	$0.00
107609	Jvc Pro Time Base Corrector - Part Of Co.30077 A Jvs S-Vhs Edit/Record System V	$0.00	$0.00	$0.00
107610	Jvc Pro Time Base Corrector - Part Of Co.30078 A Jvs S-Vhs A/B Roll Source Syste	$0.00	$0.00	$0.00
107611	Model #2000 3m Overhead Projector	$0.00	$0.00	$0.00
107612	Model #2000 3m Overhead Projector	$0.00	$0.00	$0.00

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
MDU Schuchart Building(Retired)				
MDU Schuchart Building(Retired)				
107901	Model Fr2 Montage Multi Scan Ditital Slide Shooter	$0.00	$0.00	$0.00
107902	Winsted Corner Rack For Use In The Video Editing System	$0.00	$0.00	$0.00
107903	Model #V470 Galaxy Chisholm Lcd Video/Computer Projector	$0.00	$0.00	$0.00
111174	Model Dcr Vx-1000 Sony Camcorder	$0.00	$0.00	$0.00
111176	Model Gy-Xbu Jvc Camcorder W/13:1 Cannon Lens & Tripod Plate	$0.00	$0.00	$0.00
111537	Teleprompter System Located In Corp. Communication At Schuchart Building	$0.00	$0.00	$0.00
112321	Sharp Video-Data Projector Loc At Corp. Communications	$0.00	$0.00	$0.00
112322	Elmo Visual Presenter Loc At Corp. Communications	$0.00	$0.00	$0.00
112323	Dalite Brdroom Elctrol Screen Loc At Corp. Communications	$0.00	$0.00	$0.00
112324	Amx Wireless Control System Loc At Corp. Communications	$0.00	$0.00	$0.00
112326	Extron 6 Line Input Switcher Located At The Schuchart Bldg	$0.00	$0.00	$0.00
112327	Buhl Lens Located At The Schuchart Bldg	$0.00	$0.00	$0.00
115626	Refrigerator Loc @ Schuchart Bld Asset Broke Out From 112406	$0.00	$0.00	$0.00
115627	Dishwasher Loc @ Schuchart Bld Asset Broke Out From 112406	$0.00	$0.00	$0.00
121700	Sony Dsr300 Camcorder Loc @ Corporate Communications	$0.00	$0.00	$0.00
121701	Sony Dcrvx1000 Camcorder Loc @ Corporate Communications	$0.00	$0.00	$0.00
123137	Dsr-40 Dvcam Recorder	$0.00	$0.00	$0.00
123138	Pnch-1 Tecnec Switcher	$0.00	$0.00	$0.00
123398	Nikon N80 35mm Camera W/Lens S/N 901192	$0.00	$0.00	$0.00
125940	Mackie Audio Mixer	$0.00	$0.00	$0.00
125941	Sony 9" Monitor	$0.00	$0.00	$0.00
125942	Sierra Audio/Video Router W/Accessories	$0.00	$0.00	$0.00
125943	Winstead Editstation Desk	$0.00	$0.00	$0.00
125944	Sony Dvcam Editor/Recorder	$0.00	$0.00	$0.00
125945	Sony 20" Video Color Monitor	$0.00	$0.00	$0.00
	Asset Location Total:	$0.00	$0.00	$0.00
	Major Location Total:	$0.00	$0.00	$0.00

Company / Major Location / Asset Location / Asset Id	Asset Description		Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.					
Mobridge District-ND					
Linton					
329367	Bb-Miscellaneous-Linton		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$0.00	$0.00	$0.00
Mobridge District-SD					
Gettysburg					
328508	Bb-Miscellaneous-Gettysburg		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Mobridge					
151220	Automatic Extrnl Defibrillator		$2,140.81	$840.17	$1,300.64
329702	Bb-Miscellaneous-Mobridge		$0.00	$0.00	$0.00
		Asset Location Total:	$2,140.81	$840.17	$1,300.64
Selby					
330443	Bb-Miscellaneous-Selby		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$2,140.81	$840.17	$1,300.64
Sheridan District-WY					
Sheridan					
118175	Canon Copier		$1,105.76	$840.80	$264.96
118176	Ricoh 4015 Copier		$0.00	$0.00	$0.00
145006	Ge Compact Refrigerator		$233.86	$120.46	$113.40
145007	Ge Range Stove		$672.62	$346.47	$326.15
145008	Ge Microwave Oven		$319.75	$164.70	$155.05
145009	Ge Dishwasher		$324.93	$167.37	$157.56
145010	Ge Profile Refrigerator		$713.33	$367.44	$345.89
154896	Automatic Externl Defibrilator		$2,120.18	$884.08	$1,236.10
202350	Ice Machine		$3,908.07	$862.73	$3,045.34

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description		Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.					
Sheridan District-WY					
Sheridan					
330502	Bb-Miscellaneous-Sheridan		$0.00	$0.00	$0.00
16640381	Unit of Operating Equipment		$2,677.80	$197.06	$2,480.74
		Asset Location Total:	$12,076.30	$3,951.11	$8,125.19
Sheridan Service Center					
330550	Bb-Miscellaneous-Sheridan Serv		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
		Major Location Total:	$12,076.30	$3,951.11	$8,125.19
Williston District-ND					
Ray					
330238	Bb-Miscellaneous-Ray		$0.00	$0.00	$0.00
		Asset Location Total:	$0.00	$0.00	$0.00
Tioga					
330882	Bb-Miscellaneous-Tioga		$0.00	$0.00	$0.00
16640384	Unit of Operating Equipment		$1,530.18	$122.66	$1,407.52
		Asset Location Total:	$1,530.18	$122.66	$1,407.52
Watford City					
331021	Bb-Miscellaneous-Watford City		$0.00	$0.00	$0.00
16640373	Unit of Operating Equipment		$1,530.18	$122.66	$1,407.52
		Asset Location Total:	$1,530.18	$122.66	$1,407.52
Williston					
118401	Grainger Ice Machine Model #4cz79 Loc @ Williston, Nd		$693.48	$531.89	$161.59
122995	Sony Digital Camera		$777.98	$558.21	$219.77
161294	Ice Machine		$2,092.85	$673.15	$1,419.70
215993	Automatic External Defibulator		$1,961.87	$242.70	$1,719.17
331123	Bb-Miscellaneous-Williston		$0.00	$0.00	$0.00
16640387	Unit of Operating Equipment		$8,415.96	$624.67	$7,791.29

Note: This report is filtered.

Company / Major Location / Asset Location / Asset Id	Asset Description	Accum Cost	Alloc Reserve	Net Value
00001-Montana Dakota Utilities Co.				
Williston District-ND				
Williston				
37256198	Unit of Operating Equipment	$1,742.32	$43.11	$1,699.21
	Asset Location Total:	$15,684.46	$2,673.73	$13,010.73
	Major Location Total:	$18,744.82	$2,919.06	$15,825.76
Wolf Point District-MT				
Wolf Point				
127671	Ice Machine	$795.63	$595.98	$199.65
135053	Sony Digital Camera	$587.58	$407.54	$180.04
215510	Cuber Icemaker	$3,601.23	$499.55	$3,101.68
331236	Bb-Miscellaneous-Wolf Point	$0.00	$0.00	$0.00
18800863	THIS WORK ORDER WAS CREATED TO PURCHASE VIDEO CONFERENCING EQU	$0.00	$0.00	$0.00
21008331	Unit of Operating Equipment	$2,742.53	$228.26	$2,514.27
	Asset Location Total:	$7,726.97	$1,731.33	$5,995.64
	Major Location Total:	$7,726.97	$1,731.33	$5,995.64
	Company Total:	$1,238,732.27	$422,882.22	$815,850.05
	Grand Total:	$1,238,732.27	$422,882.22	$815,850.05

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-046
Regarding: Common Plant Depreciation
Witness: Robinson 3-13

Please provide a more detailed narrative explaining how annual inflation is built into the forecasted net salvage amount as employed in the development of net salvage parameters. Was future inflation discounted back to the net present value so that current customers would not be paying current rates at future inflated costs?

Response:

The utilized net salvage estimation process is consistently applied across all studied property groups.

While shown in the net salvage analysis, Sec 8 of the Electric study and Section 7 of the Common Plant study, the analysis of net future inflation has not been specifically included or requested within the net salvage estimates. The information is included within the studies to identify the levels of ultimate future net salvage percents that are anticipated to be experienced throughout the remaining life of the property groups. This circumstance will occur inasmuch as the historical retirements that produced the level of net salvage experienced to date occurred in conjunction with retirements of property that was of far younger ages than the estimated average service life of each of the applicable studied property groups. Accordingly, future retirements will need to occur at far older ages to achieve the estimated average service life, therefore, far higher levels of negative net salvage, much of which is related to labor cost, will result with the occurrence of the older aged retirement amounts. Accordingly, the experienced historical net salvage likely significantly understates the overall net salvage that will be experienced as the property groups continue to age.

The net salvage forecast analysis is simply an additional tool used to provide information about the level of net salvage anticipated to occur relative to the current plant in service through the end of its life. Lastly, the historical component of net salvage is what has transpired for the smaller portion of the Company's property that has been retired to date. As noted, such retirements have routinely occurred at ages far younger than the average service of the various property groups which can be anticipated to result in an understatement of the level of future negative net salvage that will occur over the remaining life of the current plant in service.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-047
Regarding: Pre-Filed Testimony
Witness: Robinson p. 7

In reference to Mr. Robinson's pre-filed testimony on page 7, lines 10-11, please define specifically how long "a period of years" is.

Response:

The Company has aged retirements available for analysis for a period of 20 years, from 1995 through 2014.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-048
Regarding: Pre-Filed Testimony
Witness: Robinson p. 20

a. **In reference to Mr. Robinson's pre-filed testimony page 20, please describe and provide all contingent casualties the Company has experienced in the last 10 years.**

b. **Please provide all workpapers and excel sheets detailing the inclusion of these events into the depreciation study.**

Response:

a. Please see Response No. PSC-048 Attachment A on the enclosed CD.

b. Please see Response No. PSC-048 Attachment A on the enclosed CD.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-049
Regarding: Inter-company agreements
Witness: Appropriate

Please provide a narrative description of Montana-Dakota Utilities and MDU Resources' short term debt financing agreements, as well as inter-company borrowing agreements between Montana-Dakota Utilities and MDU Resource Group.

Response:

Montana-Dakota has a commercial paper program that is supported by a revolving credit agreement with various banks. The facility limit is $175.0 million and is applicable only to borrowings for Montana-Dakota and Great Plains, both divisions of MDU Resources.

There are no intercompany borrowing agreements between Montana-Dakota and any other subsidiary of MDU Resources.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-050
Regarding: Customers
Witness: Gaske

a. **Please describe Montana-Dakota Utilities ten largest customers, the percent of power flowing through to these customers, and the customer's ability to bypass the MDU system.**

b. **Of the chosen proxy companies, do any of the companies share the same characteristics as Montana-Dakota Utilities regarding customer mix and ability to bypass the utilities system?**

Response:

a. Ten largest customers in Montana:

Customer Rank	% of Total Montana	Description
1	31.66%	Oil & Natural Gas Production
2	2.08%	Processing Facility
3	1.93%	Pipeline Company
4	0.84%	Pipeline Company
5	0.65%	Medical
6	0.57%	Medical
7	0.56%	Grocery Stores
8	0.54%	Medical
9	0.54%	Exploration and Production Company
10	0.52%	Pipeline Company

The oil and gas production, processing, and pipeline customers may have the ability to use flare gas or compressor station facilities to generate or cogenerate their own electricity. Montana-Dakota does not have sufficient information on the economic characteristics of each of these customers to quantify the probability that they will bypass the system.

b. Tables 1 and 2 below show the customer mix of Dr. Gaske's proxy group and Montana-Dakota's Montana electric operation. As shown, only one of the 16 proxy companies derives a higher percentage of its revenues from industrial customers than Montana-Dakota. Similarly, only two of the 16 companies have a higher percentage of their sales associated with industrial customers.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

Table 1: Proxy Group Customer Mix by Revenues

Company Name	Residential Electric Revenue as a % of Total	Commercial Electric Revenue as a % of Total	Industrial Electric Revenue as a % of Total	Other Electric Revenue as a % of Total
Montana-Dakota - MT Division	31.31%	35.63%	33.06%	0.00%
ALLETE, Inc.	17.43%	17.76%	63.77%	1.04%
Alliant Energy Corporation	40.21%	26.61%	32.31%	0.87%
Ameren Corporation	49.09%	36.29%	13.58%	1.05%
American Electric Power Company,	48.03%	26.07%	24.04%	1.86%
Duke Energy Corporation	48.93%	30.27%	16.87%	3.94%
Empire District Electric Company	46.48%	33.86%	16.66%	3.00%
Great Plains Energy Inc.	45.35%	43.79%	9.97%	0.89%
IDACORP, Inc.	43.84%	39.79%	16.01%	0.36%
OGE Energy Corp.	43.21%	27.23%	19.27%	10.29%
Pinnacle West Capital Corporation	51.27%	42.19%	5.88%	0.66%
PNM Resources, Inc.	43.46%	43.50%	10.49%	2.55%
Southern Company	41.68%	35.17%	22.30%	0.85%
TECO Energy, Inc.	51.51%	30.78%	8.41%	9.30%
Westar Energy, Inc.	40.68%	37.32%	21.28%	0.72%
Xcel Energy Inc.	35.77%	41.05%	21.44%	1.75%
SCANA Corporation	45.98%	33.16%	18.35%	2.51%
Source: SNL Financial				

Table 2: Proxy Group Customer Mix by MWh

Company Name	Residential Electric MWh as a % of Total	Commercial Electric MWh as a % of Total	Industrial Electric MWh as a % of Total	Other Electric MWh as a % of Total
Montana-Dakota - MT Division	24.88%	33.41%	41.71%	0.00%
ALLETE, Inc.	11.85%	13.70%	73.71%	0.73%
Alliant Energy Corporation	29.47%	24.69%	45.26%	0.57%
Ameren Corporation	34.54%	36.29%	28.30%	0.87%
American Electric Power Company,	39.43%	24.50%	33.98%	2.10%
Duke Energy Corporation	39.25%	32.06%	24.39%	4.29%
Empire District Electric Company	41.55%	33.74%	21.98%	2.73%
Great Plains Energy Inc.	38.81%	46.84%	13.85%	0.50%
IDACORP, Inc.	35.23%	41.71%	22.83%	0.23%
OGE Energy Corp.	34.78%	26.67%	26.87%	11.68%
Pinnacle West Capital Corporation	46.54%	44.73%	8.23%	0.51%
PNM Resources, Inc.	34.74%	37.28%	25.93%	2.05%
Southern Company	33.00%	32.94%	33.49%	0.56%
TECO Energy, Inc.	46.72%	33.15%	10.26%	9.86%
Westar Energy, Inc.	33.26%	38.01%	28.30%	0.43%
Xcel Energy Inc.	27.73%	40.19%	30.85%	1.23%
SCANA Corporation	36.45%	33.01%	27.86%	2.68%
Source: SNL Financial				

Montana-Dakota's relatively high percentage of industrial sales, and the large exposure of the local economy to the volatile oil and gas industry, suggests greater risk of bypass or sudden loss of load than most of the proxy companies. However, Montana-Dakota does not have access to sufficient information to quantify the ability of customers of the proxy companies to bypass their local utilities' systems.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-051
Regarding: Pre-Filed Direct Testimony p. 30
Witness: Gaske

a. **You state on page 30, lines 8-13, that Montana-Dakota Utilities must compete within the MDU organization for equity capital and therefore should be evaluated as a stand-alone entity. That being said, is it appropriate to use the internal rates of return to evaluate the levels of appropriate risk and return required by the MDU organization?**

b. **Can you provide an example of an inter-company agreement to support the return on equity you are recommending in this proceeding?**

Response:

a. Projected internal rates of return are often used to determine whether to invest in projects. The appropriate required internal rate of return for investing in Montana-Dakota's Montana electric utility operations at this time can be calculated in part from Dr. Gaske's study of the required cost of common equity.

b. Dr. Gaske's analysis of the return required by investors was done independently of MDU Resources. There is no signed, written inter-company agreement between affiliates of Montana-Dakota Utilities that commits any affiliates to support Dr. Gaske's recommendation in this proceeding. Dr. Gaske has never heard of such an agreement in connection with a regulatory proceeding and, thus, cannot provide an example.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-052
Regarding: Proxy Group
Witness: Gaske

a. **Please provide the names of all proxy companies originally included in your list of 46. Please provide the companies in electronic format in a schedule such as Schedule 4, on page 5 of your pre-filed direct testimony.**

b. **Of the proxy companies selected how many of the companies reach Montana-Dakota's mark of 92 percent generation from coal-fired power plants?**

Response:

a. Please refer to the worksheet labeled "Screening" in the Excel file submitted in response to MCC-086.

b. None of the 12 companies in the proxy group reach the 92 percent of generation from coal-fired power plants. See Gaske Direct, page 31, lines 10-13. All of the proxy companies have more than 50 percent of generation from coal-fired power plants.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-053
Regarding: Bond Rating
Witness: Gaske

Does the Company expect that decreasing the common equity ratio from 51.77% to 49.52% will lower the Company's bond rating?

Response:

Montana-Dakota targets a 50 percent Common Equity ratio. However, timing of equity additions, earnings and debt issuances can impact the actual ratio slightly.

Companies with the same bond ratings often have different debt costs because, although ratings agencies cluster issuers in discrete categories, the market judges the issuers on a continuum of risks. All else being equal, setting rates using an artificially low common equity ratio would reduce interest coverage ratios and also suggest to investors and rating agencies that a regulatory climate is unsupportive of the cost of capital. The incremental effect of such a decision would be to reduce credit quality and raise the costs of both debt and equity capital for the company. However, it is unclear whether that action alone would be enough to trigger a ratings downgrade at this time.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-054
Regarding: Pre-Filed Testimony
Witness: Gaske

a. **Throughout your testimony you allude to the idea that Montana-Dakota Utilities faces significant risk because of the system's reliance on coal generation. Please explain how this was taken into account in your DCF analysis.**

b. **If the Company faces such great risk from coal generation, why would you assume a sustainable indefinite growth rate?**

Response:

a. The risks related to coal generation were partially accounted for in the selection of proxy companies (see Gaske Direct, pages 19-20), and then in the placement of Montana-Dakota's risks relative to the proxy companies (see Gaske Direct, page 31, lines 10-22).

b. The DCF analysis of proxy companies reflects investors' expected growth rate for each of the proxy companies and pairs that growth rate with each proxy company's dividend yield. The analysis does not make any assumption regarding the growth rate of Montana-Dakota Utilities itself.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-055
Regarding: Flotation Costs
Witness: Gaske

a. **What have been the flotation costs of MDU Resource Group over the last five years for issuing new common equity capital?**

b. **If the flotation costs of MDU Resource Group are used as the flotation cost adjustment in the Montana-Dakota Utility calculation, what is the new common equity cost of capital?**

Response:

a. MDU Resources Group, Inc. ("MDU Resources") has not issued common stock to the general public since 2004. Attachment A shows all new stock issuances during the past five years.

   On May 20, 2013, the Company entered into an Equity Distribution Agreement with Wells Fargo Securities, LLC with respect to the issuance and sale of up to 7.5 million shares of the Company's common stock. The common stock may be offered for sale, from time to time, in accordance with the terms and conditions of the agreement. Sales of such common stock may not be made after February 28, 2016. The fee for these transactions is 1.0 percent of proceeds.

b. As shown on Schedule 2 of Exhibit No. ___ (JSG-2), public issuances of common stock by Montana-Dakota Utilities reasonably would be expected to be equal to the 3.5 percent flotation costs used in Dr. Gaske's testimony. If one were to use the 1.0 percent fee that MDU Resources has paid to Wells Fargo, the resulting DCF results would be those shown on Attachment B.

MDU RESOURCES GROUP INC.
EQUITY (COMMON STOCK) ISSUANCE - 2010 - 2014

	Acquisition			Equity Draw Down			Employee Stock Exercise/Awards			401(k)			DRIP			
Period	Shares	Dollars	Flotation Costs	Shares	Dollars	Underwriter fees	Shares	Dollars	Flotation Costs	Shares	Dollars	Flotation Costs	Shares	Dollars	Flotation Costs	Shares Outstanding
Jan-10							12,600	166,552								188,401,865
Feb-10	56,149	1,017,372					134,929	(902,793)								188,592,943
Mar-10	29,355	547,671					33,714	760,088								188,656,012
Apr-10							13,410	177,265								188,669,422
May-10							450	306,848								188,669,872
Jun-10							2,660	35,164								188,672,532
Jul-10							34,205	452,124								188,706,737
Aug-10							14,050	389,315								188,720,787
Sep-10							11,413	150,874								188,732,200
Oct-10							64,674	854,889								188,796,874
Nov-10							40,416	534,235								188,837,290
Dec-10							64,089	847,207								188,901,379
Jan-11							265,572	3,512,715								189,166,951
Feb-11	7,515	140,976					158,019	2,230,605								189,332,485
Mar-11																189,332,485
Apr-11																189,332,485
May-11																189,332,485
Jun-11																189,332,485
Jul-11																189,332,485
Aug-11																189,332,485
Sep-11																189,332,485
Oct-11																189,332,485
Nov-11																189,332,485
Dec-11																189,332,485
Jan-12																189,332,485
Feb-12	11,222	215,711					25,743	557,851								189,369,450
Mar-12																189,369,450
Apr-12																189,369,450
May-12																189,369,450
Jun-12																189,369,450
Jul-12																189,369,450
Aug-12																189,369,450
Sep-12																189,369,450
Oct-12																189,369,450
Nov-12																189,369,450
Dec-12																189,369,450
Jan-13																189,369,450
Feb-13																189,369,450
Mar-13																189,369,450
Apr-13																189,369,450
May-13																189,369,450
Jun-13																189,369,450
Jul-13																189,369,450
Aug-13																189,369,450
Sep-13																189,369,450
Oct-13																189,369,450
Nov-13																189,369,450
Dec-13				499,330	14,701,759	147,273										189,868,780

MDU RESOURCES GROUP INC.
EQUITY (COMMON STOCK) ISSUANCE - 2010 - 2014

	Acquisition			Equity Draw Down			Employee Stock Exercise/Awards			401(k)			DRIP			
Period	Shares	Dollars	Flotation Costs	Shares	Dollars	Underwriter fees	Shares	Dollars	Flotation Costs	Shares	Dollars	Flotation Costs	Shares	Dollars	Flotation Costs	Shares Outstanding
Jan-14													1,624	$ 50,961		189,870,404
Feb-14							326,122			123,703	$ 4,186,908		9,792	329,804		190,330,021
Mar-14				1,500,000	50,583,787	506,825							8,699	294,043		191,838,720
Apr-14				225,000	7,625,970	76,428				31,733	1,104,308		46,128	1,574,775		192,141,581
May-14				448,467	15,018,217	150,514				32,771	1,141,742		9,074	313,667		192,631,893
Jun-14				1,500,000	50,448,000	505,595							6,761	227,108		194,138,654
Jul-14				225,000	7,748,235	77,654				32,727	1,092,182		45,020	1,561,059		194,441,401
Aug-14										90,564	2,846,288		8,593	265,281		194,540,558
Sep-14													7,831	230,752		194,548,389
Oct-14										37,984	1,035,444		59,485	1,637,482		194,645,858
Nov-14										36,772	944,857		11,328	292,525		194,693,958
Dec-14										34,787	794,883		26,067	604,007		194,754,812
	104,241	1,921,731	-	4,397,797	146,125,968	1,464,290	1,202,066	10,072,940	-	421,041	13,146,612	-	240,402	7,381,463	-	

1/ Flotation costs including underwriter fees are recorded to capital stock expense, which is a contra- equity account (Ferc account 214).

Montana-Dakota Utilities Co.

Selected Electric Distribution Companies
Retention Growth DCF Calculation

Company	Ticker	Dividend Yield	Dividend Yield x (1 + 0.625g)	Expected Growth Rate (g)	Secondary Market: Investor Required Return	Flotation Cost Adjustment	Primary Market: Cost of Capital
ALLETE, Inc.	ALE	3.71%	3.80%	3.80%	7.60%	1.0100	7.68%
Alliant Energy Corporation	LNT	3.34%	3.42%	3.95%	7.37%	1.0100	7.44%
Ameren Corporation	AEE	3.76%	3.86%	4.09%	7.95%	1.0100	8.03%
American Electric Power Company, Inc.	AEP	3.60%	3.69%	4.32%	8.01%	1.0100	8.09%
Empire District Electric Company	EDE	3.82%	3.88%	2.67%	6.55%	1.0100	6.62%
Great Plains Energy Inc.	GXP	3.58%	3.65%	3.00%	6.65%	1.0100	6.72%
OGE Energy Corporation	OGE	2.94%	3.01%	3.42%	6.43%	1.0100	6.49%
Otter Tail Corporation	OTTR	3.91%	4.04%	5.70%	9.74%	1.0100	9.84%
PNM Resources, Inc.	PNM	2.68%	2.76%	4.85%	7.61%	1.0100	7.69%
TECO Energy, Inc.	TE	4.45%	4.54%	3.31%	7.85%	1.0100	7.93%
Westar Energy, Inc.	WR	3.56%	3.65%	4.28%	7.93%	1.0100	8.01%
Xcel Energy Inc.	XEL	3.49%	3.58%	4.20%	7.78%	1.0100	7.86%
High					9.74%		9.84%
3rd Quartile					7.93%		8.01%
2nd Quartile (Median)					**7.70%**		**7.78%**
1st Quartile					7.19%		7.26%
Low					6.43%		6.49%

Montana-Dakota Utilities Co.

Selected Electric Distribution Companies
Basic DCF Calculation

Company	Ticker	Dividend Yield	Dividend Yield x (1 + 0.625g)	Expected Growth Rate (g)	Secondary Market: Investor Required Return	Flotation Cost Adjustment	Primary Market: Cost of Capital
ALLETE, Inc.	ALE	3.71%	3.85%	6.00%	9.85%	1.0100	9.95%
Alliant Energy Corporation	LNT	3.34%	3.45%	5.35%	8.80%	1.0100	8.88%
Ameren Corporation	AEE	3.76%	3.93%	7.08%	11.00%	1.0100	11.11%
American Electric Power Company, Inc.	AEP	3.60%	3.71%	5.09%	8.80%	1.0100	8.89%
Empire District Electric Company	EDE	3.82%	3.89%	3.00%	6.89%	1.0100	6.96%
Great Plains Energy Inc.	GXP	3.58%	3.71%	5.65%	9.36%	1.0100	9.45%
OGE Energy Corporation	OGE	2.94%	3.03%	4.50%	7.53%	1.0100	7.60%
Otter Tail Corporation	OTTR	3.91%	4.05%	6.00%	10.05%	1.0100	10.15%
PNM Resources, Inc.	PNM	2.68%	2.84%	9.38%	12.22%	1.0100	12.34%
TECO Energy, Inc.	TE	4.45%	4.68%	8.15%	12.83%	1.0100	12.95%
Westar Energy, Inc.	WR	3.56%	3.63%	3.29%	6.92%	1.0100	6.99%
Xcel Energy Inc.	XEL	3.49%	3.59%	4.64%	8.23%	1.0100	8.32%
High					12.83%		12.95%
3rd Quartile					10.29%		10.39%
2nd Quartile (Median)					**9.08%**		**9.17%**
1st Quartile					8.06%		8.14%
Low					6.89%		6.96%

Montana-Dakota Utilities Co.

Selected Electric Distribution Companies
Basic DCF Calculation

Company	Ticker	Dividend Yield	Dividend Yield x (1 + 0.625g)	Expected Growth Rate (g)	Secondary Market: Investor Required Return	Flotation Cost Adjustment	Primary Market: Cost of Capital
ALLETE, Inc.	ALE	3.71%	3.85%	6.00%	9.85%	1.0100	9.95%
Alliant Energy Corporation	LNT	3.34%	3.45%	5.35%	8.80%	1.0100	8.88%
Ameren Corporation	AEE	3.76%	3.93%	7.08%	11.00%	1.0100	11.11%
American Electric Power Company, Inc.	AEP	3.60%	3.71%	5.09%	8.80%	1.0100	8.89%
Empire District Electric Company	EDE	3.82%	3.89%	3.00%	6.89%	1.0100	6.96%
Great Plains Energy Inc.	GXP	3.58%	3.71%	5.65%	9.36%	1.0100	9.45%
OGE Energy Corporation	OGE	2.94%	3.03%	4.50%	7.53%	1.0100	7.60%
Otter Tail Corporation	OTTR	3.91%	4.05%	6.00%	10.05%	1.0100	10.15%
PNM Resources, Inc.	PNM	2.68%	2.84%	9.38%	12.22%	1.0100	12.34%
TECO Energy, Inc.	TE	4.45%	4.68%	8.15%	12.83%	1.0100	12.95%
Westar Energy, Inc.	WR	3.56%	3.63%	3.29%	6.92%	1.0100	6.99%
Xcel Energy Inc.	XEL	3.49%	3.59%	4.64%	8.23%	1.0100	8.32%
High					12.83%		12.95%
3rd Quartile					10.29%		10.39%
2nd Quartile (Median)					**9.08%**		**9.17%**
1st Quartile					8.06%		8.14%
Low					6.89%		6.96%

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-056
Regarding: De-Commissioning Costs
Witness: Appropriate

a. **Please provide any study completed by MDU or an outside consultant employed by MDU comparing de-commissioning costs of the plants affected by the MATS Rule.**

b. **If a comparison study was not completed to determine the feasibility of mothballing the existing plants in favor of power purchase agreements, please explain why such a study was not completed.**

c. **Please provide any study completed by MDU or an outside consultant employed by MDU comparing de-commissioning costs of the plants affected by the regional haze rules.**

d. **If a comparison study was not completed to determine the feasibility of mothballing the existing plants in favor of open market purchases, please explain why such a study was not completed.**

Response:

a. Please see the Statement Workpapers, Statement G, pages I-18 through I-31. See PSC-056 Attachment A – Decomm Study on the enclosed CD for the full study.

b. In the 2013 Integrated Resource Plan (IRP), the Company compared the costs of installing the MATS equipment at Lewis and Clark versus shutting down the plant or firing it on natural gas fuel only.

c. Please see the Statement Workpapers, Statement G, pages I-32 through I-34.

d. The 2011 and 2013 IRPs looked at alternatives for the Big Stone AQCS project and Lewis & Clark MATS project which included other alternatives including plant closures.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-057
Regarding: De-Commissioning Costs
Witness: Appropriate

If a de-commissioning study was completed, please provide a side by side comparison of the new revenue requirement, taking into account all costs subject to such a change. Depreciation expense as an example may change if new equipment is not added to depreciate.

Response:

Plant de-commissioning costs were not included in any analysis performed for the IRP process.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 20, 2015
DOCKET NO. D2015.6.51

PSC-058
Regarding: On Site Examination Documents
Witness: Aberle

a. **Please provide copies of all rate decisions for all regulated divisions and subsidiaries of MDU issued from January1, 2010 to January 1, 2015.**

b. **Please provide a narrative detailing any and all efforts undertaken by MDU and its operating divisions to contain the costs of company provided medical insurance.**

c. **Please provide a copy of the testimony filed by MDU on rate of return, cost of capital, and capital structure, in its two most recent rate applications to the North Dakota and South Dakota Commissions, and any other Public Utilities Commissions.**

d. **Please provide work papers, memos and other supporting documentation as to the funding status of the pension plan.**

e. **Please provide a detailed description of the Company's efforts to take advantage of the currently historically low interest rates to refinance existing debt issue.**

Response:

a. Please see the folder 'PSC-058 (a)' on the enclosed CD for the following rate decisions on Montana-Dakota's general electric and natural gas filings since January 1, 2010:
   - Montana Electric Docket No. D2010.8.82
   - Montana Natural Gas Docket No. D2012.9.100
   - Montana Natural Gas Dakota No. D2014.8.72
   - North Dakota Electric Case No. PU-10-124
   - North Dakota Natural Gas Case No. PU-13-803
   - South Dakota Natural Gas Docket No. NG12-008
   - Wyoming Natural Gas Docket No. 30013-297-GR-14

b. The medical plans for active employees continue to change to maintain a sustainable benefit under the new healthcare legislation. The Company has restructured and priced the medical benefit plans in a manner that encourages employees to strongly consider a higher deductible medical plan paired with a Health Savings Account (HSA). The migration of employees to a high deductible medical plan encourages employees to be

wise consumers of medical services and allows employees to build HSA accounts that may be used into retirement. The high deductible plan also decreases the medical liability of the Company under the self-insured plans because first dollar coverage is limited to preventative care.

c. Please see the folder 'PSC-058(c)' on the enclosed CD for the following testimony filed by Montana-Dakota on rate of return, cost of capital and capital structure:
   - Docket No. D2014.8.72 – Montana natural gas, 2014.
   - Docket No. D2012.9.100 – Montana natural gas, 2012.
   - Docket No. D2007.7.79 – Montana electric, 2007.
   - Docket No. D2010.8.82 – Montana electric, 2010.
   - Case No. PU-15-090 – North Dakota natural gas, 2015.
   - Case No. PU-13-803 – North Dakota natural gas, 2013.
   - Case No. PU-10-124 – North Dakota electric, 2010.
   - Docket No. NG15-005 – South Dakota natural gas, 2015.
   - Docket No. NG12-008 – South Dakota natural gas, 2012.
   - Docket No. EL15-024 – South Dakota electric, 2015.
   - Docket No. 30013-297-GR-14 – Wyoming natural gas, 2014.
   - Docket No. 20004-75-ER-08 – Wyoming electric, 2008.
   - Docket No. 20004-81-ER-09 – Wyoming electric, 2009.

d. Please see Attachment A for Note 11 – Employee Benefit Plans from the Company's 2014 FERC Form 1.

e. Since 2006 the company has refinanced all of its long term debt with interest rates ranging today from 4.24% to 6.66%. Early retirement of existing long-term debt agreements can result in significant make whole penalties which are required to be paid at the time of retirement. The company has increased its commercial paper line from $125 million to $175 million to take advantage of the low cost borrowings.

For the years ended December 31, 2014 and 2013, the Company recognized approximately $70,000 and $8,000, respectively, in interest expense. Penalties were not material in 2014 and 2013. The Company recognized interest income of approximately $108,000 and $102,000 for the years ended December 31, 2014 and 2013, respectively. The Company had accrued assets of approximately $667,000 and $526,000 at December 31, 2014 and 2013, respectively, for the receipt of interest income.

Note 11 - Employee Benefit Plans
Pension and other postretirement benefit plans
The Company has noncontributory defined benefit pension plans and other postretirement benefit plans for certain eligible employees. The Company uses a measurement date of December 31 for all of its pension and postretirement benefit plans. Other postretirement plans presented here include certain of the Company's subsidiaries.

Defined pension plan benefits to all nonunion and certain union employees hired after December 31, 2005, were discontinued. In 2010, all benefit and service accruals for nonunion and certain union plans were frozen. Effective June 30, 2011, all benefit and service accruals for an additional union plan were frozen. These employees will be eligible to receive additional defined contribution plan benefits.

Effective January 1, 2010, eligibility to receive retiree medical benefits was modified at certain of the Company's businesses. Employees who had attained age 55 with 10 years of continuous service by December 31, 2010, will be provided the current retiree medical insurance benefits or can elect the new benefit, if desired, regardless of when they retire. All other current employees must meet the new eligibility criteria of age 60 and 10 years of continuous service at the time they retire. These employees will be eligible for a specified company funded Retiree Reimbursement Account. Employees hired after December 31, 2009, will not be eligible for retiree medical benefits.

In 2012, the Company modified health care coverage for certain retirees. Effective January 1, 2013, post-65 coverage was replaced by a fixed-dollar subsidy for retirees and spouses to be used to purchase individual insurance through an exchange.

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MDU Resources Group, Inc.	(1) X An Original (2) _ A Resubmission	12/31/2014	2014/Q4

NOTES TO FINANCIAL STATEMENTS (Continued)

Changes in benefit obligation and plan assets for the years ended December 31, 2014 and 2013, and amounts recognized in the Comparative Balance Sheet at December 31, 2014 and 2013, were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2014	2013	**2014**	2013
		(In thousands)		
Change in benefit obligation:				
Benefit obligation at beginning of year	$ **230,279**	$ 262,910	$ **43,206**	$ 49,593
Service cost	—	—	**787**	906
Interest cost	**10,056**	9,240	**1,862**	1,700
Plan participants' contributions	—	—	**817**	830
Actuarial (gain) loss	**45,308**	(24,667)	**10,155**	(5,998)
Benefits paid	**(16,060)**	(17,204)	**(3,824)**	(3,825)
Benefit obligation at end of year	**269,583**	230,279	**53,003**	43,206
Change in net plan assets:				
Fair value of plan assets at beginning of year	**190,935**	177,801	**48,661**	43,411
Actual gain on plan assets	**14,001**	20,324	**4,367**	7,944
Employer contribution	**12,202**	10,014	**103**	301
Plan participants' contributions	—	—	**817**	830
Benefits paid	**(16,060)**	(17,204)	**(3,824)**	(3,825)
Fair value of net plan assets at end of year	**201,078**	190,935	**50,124**	48,661
Funded status – (under) over	$ **(68,505)**	$ (39,344)	$ **(2,879)**	$ 5,455
Amounts recognized in the Comparative Balance Sheet at December 31:				
Other deferred debits (credits)	$ **(68,505)**	$ (39,344)	$ **(2,879)**	$ 5,455
Net amount recognized	$ **(68,505)**	$ (39,344)	$ **(2,879)**	$ 5,455
Amounts recognized in accumulated other comprehensive (income) loss/regulatory assets (liabilities) consist of:				
Actuarial loss	$ **114,805**	$ 74,036	$ **14,638**	$ 6,776
Prior service credit	—	—	**(11,156)**	(12,132)
Total	$ **114,805**	$ 74,036	$ **3,482**	$ (5,356)

Employer contributions and benefits paid in the preceding table include only those amounts contributed directly to, or paid directly from, plan assets. The above table includes amounts related to regulated operations, which are recorded as regulatory assets (liabilities) and are expected to be reflected in rates charged to customers over time. For more information on regulatory assets (liabilities), see Note 3.

Unrecognized pension actuarial losses in excess of 10 percent of the greater of the projected benefit obligation or the market-related value of assets are amortized on a straight-line basis over the expected average remaining service lives of active participants for non-frozen plans and over the average life expectancy of plan participants for frozen plans. The market-related value of assets is determined using a five-year average of assets.

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The pension plans all have accumulated benefit obligations in excess of plan assets. The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for these plans at December 31 were as follows:

	2014	2013
	(In thousands)	
Projected benefit obligation	$ **269,583**	$ 230,279
Accumulated benefit obligation	$ **269,583**	$ 230,279
Fair value of plan assets	$ **201,078**	$ 190,935

Components of net periodic benefit cost for the Company's pension and other postretirement benefit plans for the years ended December 31 were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2014	2013	**2014**	2013
	(In thousands)			
Components of net periodic benefit cost (credit):				
Service cost	$ **—**	$ —	$ **787**	$ 906
Interest cost	**10,056**	9,240	**1,862**	1,700
Expected return on assets	**(12,177)**	(11,438)	**(2,603)**	(2,546)
Amortization of prior service credit	**—**	—	**(976)**	(976)
Recognized net actuarial loss	**2,716**	4,028	**529**	961
Net periodic benefit cost (credit)	**595**	1,830	**(401)**	45
Other changes in plan assets and benefit obligations recognized in accumulated other comprehensive (income) loss/regulatory assets (liabilities):				
Net (gain) loss	**43,485**	(33,553)	**8,391**	(11,396)
Amortization of actuarial loss	**(2,716)**	(4,028)	**(529)**	(961)
Amortization of prior service credit	**—**	—	**976**	976
Total recognized in accumulated other comprehensive (income) loss/regulatory assets (liabilities)	**40,769**	(37,581)	**8,838**	(11,381)
Total recognized in net periodic benefit cost and accumulated other comprehensive (income) loss/regulatory assets (liabilities)	$ **41,364**	$ (35,751)	$ **8,437**	$ (11,336)

The estimated net loss for the defined benefit pension plans that will be amortized from accumulated other comprehensive loss or regulatory asset(liability), as applicable, into net periodic benefit cost in 2015 is $4.0 million. The estimated net loss and prior service credit for the other postretirement benefit plans that will be amortized from accumulated other comprehensive loss or regulatory asset(liability), as applicable, into net periodic benefit cost in 2015 are $1.4 million and $1.2 million, respectively. Prior service cost is amortized on a straight line basis over the average remaining service period of active participants.

Weighted average assumptions used to determine benefit obligations at December 31 were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2014	2013	**2014**	2013
Discount rate	**3.68%**	4.50%	**3.73%**	4.49%
Expected return on plan assets	**7.00%**	7.00%	**6.00%**	6.00%

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Weighted average assumptions used to determine net periodic benefit cost for the years ended December 31 were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2014	2013	**2014**	2013
Discount rate	**4.51 %**	3.62%	**4.49 %**	3.65%
Expected return on plan assets	**7.00 %**	7.00%	**6.00 %**	6.00%

The expected rate of return on pension plan assets is based on a targeted asset allocation range determined by the funded ratio of the plan. As of December 31, 2014, the expected rate of return on pension plan assets is based on the targeted asset allocation range of 40 percent to 50 percent equity securities and 50 percent to 60 percent fixed-income securities and the expected rate of return from these asset categories. The expected rate of return on other postretirement plan assets is based on the targeted asset allocation range of 65 percent to 75 percent equity securities and 25 percent to 35 percent fixed-income securities and the expected rate of return from these asset categories. The expected return on plan assets for other postretirement benefits reflects insurance-related investment costs.

Health care rate assumptions for the Company's other postretirement benefit plans as of December 31 were as follows:

	2014	2013
Health care trend rate assumed for next year	**4.0 %**	6.0 %
Health care cost trend rate - ultimate	**6.0 %**	6.0 %
Year in which ultimate trend rate achieved	**1999**	1999

The Company's other postretirement benefit plans include health care and life insurance benefits for certain retirees. The plans underlying these benefits may require contributions by the retiree depending on such retiree's age and years of service at retirement or the date of retirement. The accounting for the health care plans anticipates future cost-sharing changes that are consistent with the Company's expressed intent to generally increase retiree contributions each year by the excess of the expected health care cost trend rate over six percent.

Assumed health care cost trend rates may have a significant effect on the amounts reported for the health care plans. A one percentage point change in the assumed health care cost trend rates would have had the following effects at December 31, 2014:

	1 Percentage Point Increase	1 Percentage Point Decrease
	(In thousands)	
Effect on total of service and interest cost components	$ 55	$ (49)
Effect on postretirement benefit obligation	$ 1,263	$ (1,125)

The Company's pension assets are managed by 15 outside investment managers. The Company's other postretirement assets are managed by one outside investment manager. The Company's investment policy with respect to pension and other postretirement assets is to make investments solely in the interest of the participants and beneficiaries of the plans and for the exclusive purpose of providing benefits accrued and defraying the reasonable expenses of administration. The Company strives to maintain investment diversification to assist in minimizing the risk of large losses. The Company's policy guidelines allow for investment of funds in cash equivalents, fixed-income securities and equity securities. The guidelines prohibit investment in commodities and futures contracts, equity private placement, employer securities, leveraged or derivative securities, options, direct real

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estate investments, precious metals, venture capital and limited partnerships. The guidelines also prohibit short selling and margin transactions. The Company's practice is to periodically review and rebalance asset categories based on its targeted asset allocation percentage policy.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the measurement date. The ASC establishes a hierarchy for grouping assets and liabilities, based on the significance of inputs.

The estimated fair values of the Company's pension plans' assets are determined using the market approach.

The carrying value of the pension plans' Level 2 cash equivalents approximates fair value and is determined using observable inputs in active markets or the net asset value of shares held at year end, which is determined using other observable inputs including pricing from outside sources. Units of this fund can be redeemed on a daily basis at their net asset value and have no redemption restrictions. The assets are invested in high quality, short-term instruments of domestic and foreign issuers. There are no unfunded commitments related to this fund.

The estimated fair value of the pension plans' Level 1 equity securities is based on the closing price reported on the active market on which the individual securities are traded.

The estimated fair value of the pension plans' Level 1 and Level 2 collective and mutual funds are based on the net asset value of shares held at year end, based on either published market quotations on active markets or other known sources including pricing from outside sources. Units of these funds can be redeemed on a daily basis at their net asset value and have no redemption restrictions. There are no unfunded commitments related to these funds.

The estimated fair value of the pension plans' Level 2 corporate and municipal bonds is determined using other observable inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers, future cash flows and other reference data.

The estimated fair value of the pension plans' Level 1 U.S. Government securities are valued based on quoted prices on an active market.

The estimated fair value of the pension plans' Level 2 U.S. Government securities are valued mainly using other observable inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers, to be announced prices, future cash flows and other reference data. Some of these securities are valued using pricing from outside sources.

Though the Company believes the methods used to estimate fair value are consistent with those used by other market participants, the use of other methods or assumptions could result in a different estimate of fair value. For the years ended December 31, 2014 and 2013, there were no transfers between Levels 1 and 2.

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The fair value of the Company's pension plans' assets (excluding cash) by class were as follows:

	Fair Value Measurements at December 31, 2014, Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2014
		(In thousands)		
Assets:				
Cash equivalents	$ —	$ 3,195	$ —	$ 3,195
Equity securities:				
U.S. companies	22,174	—	—	22,174
International companies	2,945	—	—	2,945
Collective and mutual funds *	75,130	43,947	—	119,077
Corporate bonds	—	33,746	—	33,746
Municipal bonds	—	5,936	—	5,936
U.S. Government securities	8,512	3,887	—	12,399
Total assets measured at fair value	$ 108,761	$ 90,711	$ —	$ 199,472

*Collective and mutual funds invest approximately 13 percent in common stock of large-cap U.S. companies, 13 percent in U.S. Government securities, 23 percent in corporate bonds, 33 percent in common stock of international companies and 18 percent in other investments.

	Fair Value Measurements at December 31, 2013, Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2013
		(In thousands)		
Assets:				
Cash equivalents	$ 1,454	$ 5,364	$ —	$ 6,818
Equity securities:				
U.S. companies	35,696	—	—	35,696
International companies	22,488	—	—	22,488
Collective and mutual funds *	66,296	24,225	—	90,521
Corporate bonds	—	24,360	—	24,360
Municipal bonds	—	4,311	—	4,311
U.S. Government securities	4,269	2,472	—	6,741
Total assets measured at fair value	$ 130,203	$ 60,732	$ —	$ 190,935

*Collective and mutual funds invest approximately 11 percent in common stock of mid-cap U.S. companies, 19 percent in common stock of large-cap U.S. companies, 12 percent in U.S. Government securities, 27 percent in corporate bonds, 13 percent in common stock of international companies and 18 percent in other investments.

The estimated fair values of the Company's other postretirement benefit plans' assets are determined using the market approach.

The estimated fair value of the other postretirement benefit plans' Level 2 cash equivalents is valued at the net asset value of shares held at year end, based on published market quotations on active markets, or using other known sources including pricing from outside sources. Units of this fund can be redeemed on a daily basis at their net asset value and have no redemption restrictions. The assets are invested in high-quality, short-term money market instruments that consist of municipal obligations.

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NOTES TO FINANCIAL STATEMENTS (Continued)

There are no unfunded commitments related to this fund.

The estimated fair value of the other postretirement benefit plans' Level 1 equity securities is based on the closing price reported on the active market on which the individual securities are traded.

The estimated fair value of the other postretirement benefit plans' Level 2 insurance contract is based on contractual cash surrender values that are determined primarily by investments in managed separate accounts of the insurer. These amounts approximate fair value. The managed separate accounts are valued based on other observable inputs or corroborated market data.

Though the Company believes the methods used to estimate fair value are consistent with those used by other market participants, the use of other methods or assumptions could result in a different estimate of fair value. For the years ended December 31, 2014 and 2013, there were no transfers between Levels 1 and 2.

The fair value of the Company's other postretirement benefit plans' assets (excluding cash) by asset class were as follows:

	Fair Value Measurements at December 31, 2014, Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2014
		(In thousands)		
Assets:				
Cash equivalents	$ —	$ 1,178	$ —	$ 1,178
Equity securities:				
U.S. companies	1,054	—	—	1,054
Insurance contract*	—	47,892	—	47,892
Total assets measured at fair value	$ 1,054	$ 49,070	$ —	$ 50,124

* The insurance contract invests approximately 54 percent in common stock of large-cap U.S. companies, 11 percent in U.S. Government securities, 10 percent in mortgage-backed securities, 10 percent in corporate bonds and 15 percent in other investments.

	Fair Value Measurements at December 31, 2013, Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2013
		(In thousands)		
Assets:				
Cash equivalents	$ 444	$ 756	$ —	$ 1,200
Equity securities:				
U.S. companies	1,060	—	—	1,060
Insurance contract*	—	46,401	—	46,401
Total assets measured at fair value	$ 1,504	$ 47,157	$ —	$ 48,661

* The insurance contract invests approximately 55 percent in common stock of large-cap U.S. companies, 12 percent in U.S. Government securities, 8 percent in mortgage-backed securities, 8 percent in common stock of mid-cap U.S. companies, 9 percent in corporate bonds, and 8 percent in other investments.

The Company expects to contribute approximately $2.2 million to its defined benefit pension plans in 2015. The Company does not expect to contribute to its postretirement benefit plans in 2015.

The following benefit payments, which reflect future service, as appropriate, and expected Medicare Part D subsidies are as follows:

Years	Pension Benefits	Other Postretirement Benefits	Expected Medicare Part D Subsidy
		(In thousands)	
2015	$ 14,152	$ 2,768	$ 173
2016	14,280	2,755	169
2017	14,476	2,794	164
2018	14,708	2,842	159
2019	14,949	2,850	154
2020 – 2024	77,548	14,304	664

Nonqualified benefit plans
In addition to the qualified plan defined pension benefits reflected in the table at the beginning of this note, the Company also has unfunded, nonqualified benefit plans for executive officers and certain key management employees that generally provide for defined benefit payments at age 65 following the employee's retirement or to their beneficiaries upon death for a 15-year period. The Company's net periodic benefit cost for these plans was $3.7 million and $4.1 million in 2014 and 2013, respectively. The total projected benefit obligation for these plans was $66.5 million and $61.9 million at December 31, 2014 and 2013, respectively. The accumulated benefit obligation for these plans was $61.6 million and $57.2 million at December 31, 2014 and 2013, respectively. A weighted average discount rate of 3.50 percent and 4.32 percent at December 31, 2014 and 2013, respectively, and a rate of compensation increase of 4.00 percent and 4.00 percent at December 31, 2014 and 2013, respectively, were used to determine benefit obligations. A discount rate of 4.32 percent and 3.45 percent for the years ended December 31, 2014 and 2013, respectively, and a rate of compensation increase of 4.00 percent and 3.00 percent for the years ended December 31, 2014 and 2013, respectively, were used to determine net periodic benefit cost.

The amount of benefit payments for the unfunded, nonqualified benefit plans are expected to aggregate $3.8 million in 2015; $3.6 million in 2016; $3.8 million in 2017; $4.0 million in 2018, $4.2 million in 2019 and $22.0 million for the years 2020 through 2024.

In 2012, the Company established a nonqualified defined contribution plan for certain key management employees. Expenses incurred under this plan for 2014 and 2013 were $17,000 and $5,000, respectively.

The Company had investments of $62.1 million and $60.4 million at December 31, 2014 and 2013, respectively, consisting of equity securities of $36.6 million and $35.6 million, respectively, life insurance carried on plan participants (payable upon the employee's death) of $18.6 million and $17.8 million, respectively, and other investments of $6.8 million and $7.0 million, respectively. The Company anticipates using these investments to satisfy obligations under these plans.

Defined contribution plans
The Company sponsors various defined contribution plans for eligible employees, and costs incurred under these plans were $10.5 million in 2014 and $11.1 million in 2013.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
DOCKET NO. D2015.6.51

PSC-059
Regarding: 'Minimum and Normal System Design' Method – Supporting Workpaper L-9
Witness: Cardwell

a. **Provide an itemized breakdown for the calculation of 'minimum system' costs and 'normal system' costs for Poles (Acct. 364), Overhead Conductors (Acct. 365), and URD Conductor (Acct. 367), on Supporting Workpaper L-9.**

b. **Does the cost of the 'minimum system' represent the marginal cost to rebuild the system with the minimum investment necessary to connect a customer using present day costs and modern equipment? Or is the cost of the 'minimum system' based on historical embedded costs? Please explain.**

c. **Does the cost of the 'normal system' represent the marginal cost to rebuild MDU's distribution system using present day costs and modern equipment? Or is the cost of the 'normal system' based on historical embedded costs?**

d. **Explain why MDU chose to aggregate accounts for Poles (364), Overhead Conductors (365), and URD Conductors (367) in its ECOS and use a weighted average to determine the customer component of those accounts, instead of including each account as a separate line item in the ECOS and determining the customer component of each account separately, considering MDU already determined the customer component share of each account.**

Response:

a. Please see the file previously provided and labeled MCC 124 Attachment B.

b. The minimum system cost represents the marginal cost to build a 1 mile section of a hypothetical minimum distribution system.

c. The normal system cost represents the marginal cost to build a 1 mile section of a more normal distribution system that Montana-Dakota will more normally see across its system.

d. The weighted average of the three components was deemed to be representative of the customer component in total.

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MONTANA PUBLIC SERVICE COMMISSION
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PSC-060
Regarding: Zero Intercept Analysis – Allocation of Transformer Costs
Witness: Cardwell

a. **Has the Montana Public Service Commission approved the zero intercept method to allocate MDU's transformer costs in the past? If so, please provide the appropriate order number.**

b. **Have any regulatory bodies approved the zero intercept method to allocate transformer costs among customer classes in any of the jurisdictions in which MDU operates? If so, please provide the jurisdiction and order number.**

c. **Supporting Workpaper L-10 indicates that a 15 kVA transformer is less expensive than a 10 kVA transformer. Explain why MDU would ever install a 10 kVA transformer if it would be less expensive to install a 15 kVA transformer.**

Response:

a. No recent Montana Commission order has addressed the allocation of transformer costs.

b. No recent Commission orders in the other jurisdictions where Montana-Dakota operates have addressed the allocation of transformer costs.

c. Montana-Dakota does not purchase many 10 KVA transformers under its current practice. There are a few reasons why the cost is still valid.
    a. Existing 10KVA pad mount transformers that fail in service are much cheaper to install a replacement 10KVA without having to change the base size for a 15KVA unit. So replacement units are a reason to keep some 10KVA's on hand.

    b. The actual life cost of a 10KVA pad mount transformer serving a load size smaller than 10KV is cheaper when considering the life cost of the unit including no-load and full load losses. So, for small loads it is still cheaper to purchase a 10KVA to match the small load when consideration of the total life cost of the unit considered losses. The cost that you see on this cost document is installation and purchase capital cost of the unit, not the full life consideration of costs including losses.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
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DATED OCTOBER 21, 2015
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PSC-061
Regarding: Service Lines – Supporting Workpaper L-22
Witness: Cardwell

a. **Please provide a detailed explanation of what is meant by the statement at the top of Workpaper L-22, "weighting for electric service lines is based on a ~80% model representation of the actual service lines."**

b. **For each rate number listed on Workpaper L-22, what percentage of service lines are based on actual service lines included in the Company's GIS, and what percentage of service lines are based on estimates, or are missing from the worksheet?**

c. **Confirm that the 'Sum of COST OF EACH SERVICE' column in L-22 represents the historical cost incurred to install the service lines for each rate number included on the worksheet. If not, please explain. If the answer is yes, have these costs been adjusted to 2014 dollars?**

Response:

a. For the purposes of creating weights to compare costs between classes 80% of all service lines are in the data set analyzed.

b. All service lines are based on actual services.

c. Montana-Dakota's analysis looks at the length and size of the service lines and applies current costs to those variables. Other variables included in the analysis are labor costs, transportation costs, contractor costs, and ES & GA costs.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
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DOCKET NO. D2015.6.51

PSC-062
Regarding: Marginal Energy Costs
Witness: Cardwell

a. **Please explain why the Excel sheet titled 'MCC-096 SJC-6 Energy Plexos Model' that MDU provided in response to MCC-096 shows no revenue from energy sales into the MISO market over the time period 2014-2024, except for year 2016.**

b. **Please explain why resources identified in the 2015 IRP as part of MDU's "optimal" plan going forward were not included in the PLEXOS model.**

c. **What are the reasons for and the reasons against including planned resources in the PLEXOS model?**

d. **Would including planned resources in the PLEXOS model increase or decrease the marginal energy cost?**

e. **MDU includes planned resources which have not yet come online into the EGEAS model when it is determining its optimal resource expansion plan. Is there a fundamental difference between the objective MDU is trying to achieve through EGEAS modeling compared to the objective being achieved through PLEXOS modeling, which would justify including planned resources in one exercise but not the other? Please explain.**

Response:

a. The amount shown in 2016 is in error and the value of sales should be zero.

b. The next planned resource as set forth in the Future Resource Plan is the large combined cycle resource to be online in 2020 with Montana-Dakota's potential ownership share at 200 Mw. Given this resource is nearly 5 years away and currently in the conceptual phase, the Company did not include this resource in the PLEXOS model runs.

c. Please see Response PSC-062 b. for the reasons why the resource was not included.

d. The energy costs would likely increase by adding a combined cycle in 2020 and eliminating potential retired units.

e. The EGEAS model is used for the resource expansion analysis that considers all planning resource options available to Montana-Dakota and produces a least-cost plan which satisfies the energy and capacity requirements to reliably serve Montana-Dakota's customers. If a resource is selected in the EGEAS model it shows Montana-Dakota is in need of capacity in that selected year, however, the planning resource selected isn't necessarily the resource built as Montana-Dakota takes into consideration customer impacts, market availability of capacity and energy and other factors such as environmental regulations. For example, the 2015 IRP identifies the need for a 37.3 MW simple cycle combustion turbine in 2017 while this unit is not included in the Future Resource Plan at this time. The PLEXOS model is primarily used for financial planning and identifying future energy costs.

MONTANA-DAKOTA UTILITIES CO.
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DATED OCTOBER 21, 2015
DOCKET NO. D2015.6.51

PSC-063
Regarding: Marginal Energy Costs
Witness: Cardwell

a. **Please confirm that demand response programs were built into the load forecast in the PLEXOS model, and that is why the output shows zero production for demand response programs.**

b. **Please explain what the following generation resources are that are listed in the Excel sheet 'MCC-096 SJC-6 Energy Plexos Model,' provided in response to MCC-096: Lewis and Clark pk, Ft. Peck Capacity, Heskett 3 Firm, ND State Capitol, WEPCO Purchase, Williston Water Plant.**

Response:

a. The demand response programs are built into the load forecast. The output shows zero as the resources were not called to run/interrupt in the PLEXOS models.

b. The referenced resources are demand resources or capacity purchases. The reason for two lines for the Lewis & Clark station is the cost running on coal and the cost when Lewis & Clark is co-fired with natural gas (Lewis & Clark pk).

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PSC-064
Regarding: Marginal Cost Study
Witness: Cardwell

In the Excel sheet titled "Marginal Cost Study Exhibit SJC1-SJC11," on the 'Peak Ranking' tab, what do the numbers in cells A1:A9 represent?

Response:

The referenced numbers represent integrated system 12 CP data used to determine the per unit cost of transmission. The peak load growth used in the marginal cost of service study represents the peak load growth based on the increase of the 2011-2013 average peak demand over the 2005-2010 average peak demand.

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PSC-065
Regarding: Revenue Allocation and Rate Design
Witness: Aberle

In your direct testimony on page 3, lines 21-26, you state: "A review of the embedded and marginal cost of service studies sponsored by Mrs. Cardwell indicated that all of the rate classes are below the requested overall rate of return with the majority of the customers well below the requested overall return on rate base based on the embedded class study. Because of this and because of the magnitude of the overall increase I applied an equal percentage increase to all customer classes."

a. **Should the Commission ultimately approve a method of cost allocation within the embedded cost or marginal cost studies that changes the results of either cost allocation study, would MDU change its recommendation of an equal percentage increase to all customer classes, or change any recommendations it has made with respect to rate design?**

b. **If the answer to part a is yes, to the best of your ability, please explain how the results of either cost study would need to change, or what cost responsibility or current return on rate base thresholds would need to be met for any particular customer class, in order for any of MDU's cost allocation or rate design recommendations to change.**

c. **Should the Commission ultimately approve an overall increase to MDU's revenue requirement that is less than what MDU has proposed in its application, would MDU's recommendation of an equal percentage increase to the revenue requirement of all customer classes also change?**

d. **If the answer to part c is yes, at what level of increase to the overall revenue requirement would MDU no longer recommend an equal percentage increase to all customer classes?**

Response:

The Company cannot speculate on the outcomes of the questions posed in this request. The degree to which the rate design proposal would change is dependent upon the degree of such changes described above.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
DOCKET NO. D2015.6.51

PSC-066
Regarding: Response to MCC-102
Witness: Cardwell

a. **Who prepared the per-mile cost estimate for a normal mile of OHD Three-Phase Line and normal mile of URD Three-Phase Line provided in MDU's response to MCC-102?**

b. **Do the estimates provided in response to MCC-102 reflect an average of the per-mile cost of previously deployed distribution projects that MDU has completed? If not, please explain.**

Response:

a. Montana-Dakota's Distribution Engineering department.

b. No, the costs represent the average per mile cost if the line were built today.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
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PSC-067
Regarding: Net Metering
Witness: Aberle

In response to PSC-006(a), you state "separately metering the generator would not address the issue associated with customers causing a demand on the system and not adequately paying for the costs associated with that demand." Please explain and show with supporting workpapers how MDU's proposal to install a demand meter and implement a demand charge allows net metering customers to adequately pay for the costs associated with the demand they impose on the system.

Response:

Montana-Dakota does not have a study indicating that the implementation of a demand charge would mean that net metering customers would adequately pay for the costs associated with demand that they impose on the system. However, the demand charge would recover fixed costs no longer recovered through the energy rate charged to such customers.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
DOCKET NO. D2015.6.51

PSC-068
Regarding: Rate Design
Witness: Aberle

a. **Explain why MDU believes its proposed residential basic service charge "strikes a good balance between reflecting the true costs of serving each customer and recognizing customer impacts," as stated on page 5, lines 17-20 of your direct testimony.**

b. **What factors did MDU take into account when it considered the customer impacts of its proposed basic service charge as referenced in part a.**

c. **Explain why MDU is proposing to increase the fixed basic service charge of the residential class by a greater percentage than the proposed increase to the overall revenue requirement.**

d. **After MDU determined a fixed basic service charge for a customer class which "struck a good balance..." (as referenced in part a to this question), please explain in detail the method MDU used to allocate the remaining revenue requirement to be collected from the energy charge between on-peak time periods and off-peak time periods. Please cite or include any supporting workpapers with your answer.**

e. **For each customer class that is subject to a demand charge in the proposed tariffs, please explain the method MDU used to calculate the proposed increase to the demand charge. Please cite any necessary workpapers for support.**

Response:

a. The proposed charge moves toward recovery of fixed costs providing a balance between full cost recovery and customer impacts.

b. Customer impact was the primary factor considered when proposing an increase to the Basic Service Charge. As shown on Statement M, Page 23, 92 percent of the customers in the data set are slightly above (25 percent increase) or below the average increase. Also, the proposed increase reflects a total increase of $25.55 on annual basis for a customer using 0 Kwh. This increase is offset by each Kwh used as the costs are moved from the energy charge to the Basic Service Charge. The proposed Basic Service Charge provides access to the electric grid for

approximately $91.00 per year increasing from the $65 cost applicable under current rates.

c. The percentage increase in the Basic Service Charge only was not considered as most customers utilize energy and therefore resulting in a misrepresentation of the true impact of the proposed rates to the majority of the customers.

d. The differentials between on and off peak periods were held at the differentials in place under current rates.

e. The embedded class cost of service study provided the basis for moving toward cost. The differentials between primary and secondary rates were held at the differentials in place under current rates.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
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PSC-069
Regarding: MDU Response to TASC-001
Witness: Aberle

Are there particular MDU tariffs or other public policies in place in Wyoming which could have caused the disproportionate growth in net metering customers in that state compared to the other states where MDU provides service? Please describe any factors which you believe could have contributed to the large number of net metering customers MDU serves in Wyoming compared to other states.

Response:

Wyoming's net metering policy is very similar to Montana's net metering policy with the exception customers are paid for the net energy delivered to the system at the end of the calendar year at the Company's avoided cost. However, payments for unused energy have been minimal to date. Montana-Dakota is not aware of what factors contributed in the number of customers participating in Wyoming versus the other states Montana-Dakota provides service.

MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED OCTOBER 21, 2015
DOCKET NO. D2015.6.51

PSC-070
Regarding: Net Metering
Witness: Aberle

a. **In response to PSC-006(c), MDU seems to indicate it is proposing to utilize the currently installed automated meter reading system to track demand for net metering customers. Is MDU proposing to install a demand meter on net metering systems, utilize AMR technology to track the demand of net metering customers, or both?**

b. **If not provided in part a, please explain exactly how MDU is proposing to track the energy usage and demand for net metering customers, including specifics about how it will utilize a demand meter or automated meter reading system.**

Response:

a. Montana-Dakota is evaluating the feasibility of utilizing the AMR system for billing the residential net metering customers.

b. Please see response a. above.