MONTANA-DAKOTA UTILITIES CO.

A Division of MDU Resources Group, Inc.

Before the Public Service Commission of North Dakota

Case No. PU-17-295

Rebuttal Testimony

of

Travis R. Jacobson

Q. Would you please state your name and business address?

A. Yes. My name is Travis R. Jacobson and my business address is 400 North Fourth Street, Bismarck, North Dakota 58501.

Q. What is your position with Montana-Dakota Utilities Co.?

A. I am the Regulatory Analysis Manager for Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc.

Q. Are you the same Travis R. Jacobson that previously offered direct testimony in this proceeding?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to address certain analysis and recommendations proposed by Mr. Dante Mugrace, Senior Consultant of PCMG and Associates, LLC., testifying on behalf of the North Dakota Public Service Commission Advocacy Staff, and Ms. Sara Cardwell, Public Utility Analyst with the North Dakota Public Service Commission, testifying on behalf of the North Dakota Public Service Commission Advocacy Staff.

119 PU-17-295 Filed 03/23/2018 Pages: 66
Prefiled Rebuttal Testimony of Mr. Travis R. Jacobson
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc.

Also, on December 22, 2017, the 2017 Tax Cuts and Jobs Act (Tax Act) was signed into law. A major provision of the Tax Act was a change in the Federal corporate tax rate from 35 percent to 21 percent. I will provide an updated revenue requirement including the effects of the Tax Act.

Q. Please summarize Mr. Mugrace's recommendations you will address.

A. I will address the following income statement adjustments recommended by Mr. Mugrace's:

- A decrease in labor expense of $662,136 relating to premium time, incentives and bonuses;
- Medical/dental insurance and insurance expense were held at the 2017 projected level pending Company support for the 2018 projection for a reduction of $88,737 and $30,398, respectively;
- A reduction of $135,296 to the Company's expenses associated with vehicles and work equipment;
- Several adjustments, resulting in a decrease of $175,814, associated with projected costs based on an inflation factor [subcontract labor - $37,569, materials - $33,623, software maintenance - $10,835, building rental - $21,057, and all other O&M - $63,104] or the Consumer Price Index (CPI) [postage - $9,626];

- Disallowance of MDU Resources, FutureSource, and aircraft costs of $650,616 (including building rental of $33,980); and
- Eliminations of advertising and industry dues totaling $73,895.

In addition, I will also address the following rate base adjustments:

- 100 percent exclusion of the funding projects for mains and services replacement projects for 2018 totaling $5,553,154, along with associated depreciation, accumulated reserve and DITs;
- Reduction of $1,333,095 to the Company's vehicle and work equipment additions;
- Removal of aircraft equipment of $786,486, along with the associated expenses; and
- Disallowance of a rate case addition of $774,487 for losses on manufactured homes used to provide housing for employees in areas affected by the rapid expansion associated with oil development in North Dakota.

In addition to the above noted adjustments, Mr. Mugrace included an adjustment supported by another witness which impacts the overall revenue requirement. Specifically, he computed his recommended revenue requirement based on the Company's filed capital structure with a reduced return on equity, which will be addressed by Dr. S. Gaske.

Q. Mr. Mugrace recommended three adjustments to labor. Do you agree with his recommendations?

A. No. Mr. Mugrace recommended the Company's premium time and bonuses and incentives should be reduced. I will address each separately.

Premium Time – Mr. Mugrace noted that premium time expenses vary from year to year. However, Mr. Mugrace indicated that the expenses were declining but looked only at two full years of data. When looking at a longer, more representative time frame, the Company was conservative in its projected 2018 amount of $469,373. As shown in the table below, for the five-year period 2013 – 2017 premium time expense was significantly higher than the projected premium time in this case.

Year	Amount
2013	$659,569
2014	557,437
2015	506,090
2016	441,401
2017	586,893
Average	$550,278

Based on this table, the Company's projected premium time expense is reasonable and Mr. Mugrace's recommendation to reduce premium time by $7,370 should be rejected.

<u>Bonuses and Incentive Compensation</u> – Mr. Mugrace recommended the exclusion of 60 percent of the Company's requested bonuses and incentive compensation.

As noted in the rebuttal testimony of Mr. Kaiser, Montana-Dakota applies a 'Total Rewards' philosophy to determine the appropriate level of employee compensation. Within this philosophy are three components: base pay, incentive (at-risk) pay, and benefits. Bonus and incentive pay is "pay-at-risk" and is one of three components used by the Company to remain competitive in the industry. It is also part of the Company's total employee expense for the test year. If the Company did not provide this item of compensation, it would have to increase the other components. As a result, removing one component of the Company's aggregate compensation expense without a corresponding adjustment to another component is inappropriate and Mr. Mugrace's recommendation should be rejected.

On page 12 of his testimony, Mr. Mugrace opined that the Company has not provided evidence whether incentive payouts have benefited ratepayers. Employee incentives are based on customer service and O&M goals. Clearly, ratepayers benefit from superior customer service and maintaining O&M at an acceptable level. Montana-Dakota has achieved its customer service goals for both 2016 and 2017 and the results have been attached as Exhibit No.__(TRJ-8).

Mr. Mugrace arrived at a 60 percent exclusion in reliance on a Commission decision in Case No. PU-10-124. First, the Settlement Agreement dated March 11, 2011 and approved by the Commission on June 8, 2011, specifically states “the Agreement does not establish any principle or precedent, nor adopt or recommend any specific type or amount of expense or rate base.” Second, while the exclusion was required to be included in the next electric interim request, the exclusion was never identified by any of the parties to the settlement in development of the final revenue requirement that was approved by the Commission. Mr. Mugrace’s reliance on the Settlement in Case No. PU-10-124 is misplaced and he has provided no evidence to support a 60 percent reduction in bonuses and incentive compensation costs amounting to $654,766. His recommendation should be ignored.

Q. Mr. Mugrace eliminated the Company’s adjustment to medical/dental benefits and insurance expense until support for the Company’s 2018 projection was available. Does the Company have documentation to support the adjustment?

A. Yes. Please see Exhibit No.___(TRJ-4), page 1 and 2, for an update to the Company's medical/dental expense. The projected 2018 amount reflects the actual increase in medical/dental premiums for 2018 which were effective January 1, 2018. The 2018 medical/dental expense is an increase of $65,919 over 2017. Page 2 provides the Company's analysis in support of the 5.20% increase in premiums.

Likewise, insurance notices for 2018 premiums have been received and the premiums have been reflected in Exhibit No.__(TRJ-4), page 3 and 4. The 2018 insurance expense as shown on page 1 is an increase of $53,464 over 2017 and is slightly higher than submitted in the Company's initial filing.

Q. Do you agree with the recommendation to reduce vehicle and work expense?

A. No. Mr. Mugrace indicated that his adjustment was made, in part, due to the change in the way the Company accounts for its vehicles and work equipment. However, the Company did not propose to change the accounting method for vehicles and work equipment. The Company's proposed adjustment to vehicles and work equipment expense was based entirely on the change in the depreciation rates. In his direct testimony on page 14, beginning on line 9, Mr. Pavlovic states that the Company's "depreciation rates….are reasonably well supported by the depreciation studies' life, net salvage, and remaining life analyses." Mr. Mugrace did not recommend a change in the depreciation rates either. Therefore, the Company's adjustment, again based only on the change in depreciation expense, should be accepted as filed and Mr. Mugrace's recommendation reducing expense by $135,296 should be rejected as it is not consistent with the Company's account method or proposed adjustment which is based on the change in depreciation rates. Additionally, the use of a three-year average does not account for changes in plant in service due to purchases or disposals of vehicles and work equipment resulting in a mismatch.

Q. Mr. Mugrace argues that the Company's proposal to include cost increases based on inflation or CPI, in the case of postage, should not be allowed. Do you agree?

A. No. The Company prepared its revenue requirement in a consistent manner with previous gas and electric rate filings, all of which included reasonable estimates of inflation or other supportable estimates. The Company's inflation estimate was based on the following six inflation estimates published by reputable sources.

2018 Forecasted Inflation

Source	Forecasted Rate 1/
Congressional Budget Office	1.97
Organisation for Economic Co-operation and Development	2.20
International Monetary Fund	2.60
PricewaterhouseCoopers	2.50
Federal Reserve Economic Data 2/	1.95
Economist Intelligence Unit	2.10
Average	**2.22**

1/ Inflation rate shown as year-over-year percent change.
2/ FRED uses Personal Consumption Expenditures rather than the Consumer Price Index.

The list of these sources was also provided in the Company's Statement Workpapers, page K96. The six estimates were very consistent indicating consensus amongst the sources.

The use of an inflation factor is a reasonable means of estimating cost increases for the broad areas containing many small expenses incurred by numerous vendors, including subcontract labor, materials, software maintenance, and building rents. Mr. Mugrace's recommendation to disallow the use of an inflation factor is not consistent with prior North Dakota filings and should be rejected.

The Company's projection for postage increase was tied to the Consumer Price Index (CPI). Mr. Mugrace disagreed with the Company's use of the CPI. However, the Postal Regulatory Commission sets rates based on changes in the average of twelve monthly CPI (urban consumers) figures. The Company has appropriately used the CPI in its postage adjustment. Mr. Mugrace's adjustment to postage of $9,626 should be rejected.

Q. Mr. Mugrace recommended disallowance of MDU Resources charges and the elimination of FutureSource charges and revenue charged to MDU Resources subsidiaries. Do you agree with his recommendations?

A. No. Regarding MDU Resources charges, Mr. Mugrace has recommended an overall reduction of $169,840 related to MDU Resources charges. He has calculated an adjustment in the amount of $182,790 related to bonuses and incentive compensation. However, Mr. Mugrace has failed to understand that the bonuses and incentive compensation provided in Data Response No. 6.2 is a component of the Company's overall labor adjustment. Therefore, while the bonus and incentive compensation disallowance has not been supported by Mr. Mugrace, this additional adjustment is duplicative and must be rejected.

Regarding FutureSource, Mr. Mugrace had recommended the disallowance of all expenses of $446,796, revenue of $462,280 and $774,487 related to the investment in rate base associated with aircraft equipment. I disagree with his recommendations for a number of reasons.

First, he indicates that employees should be able to drive within North Dakota; however, he has not considered the broader uses for the Company owned aircraft. Montana-Dakota is part of a publicly traded company. The Company owned aircraft supports a number of associated functions, including debt and equity analyst meetings and board of director meetings to name a few. Additionally, North Dakota gas customers are not charged for the use of aircraft for trips that are specifically related to business conducted in other states. Also, removing all air travel costs without considering like costs of commercial air travel would unfairly harm Montana-Dakota.

Finally, in spite of the fact that the Company provided its Cost Allocation Manual in Response No. 2.11, Mr. Mugrace has mistakenly identified non-aircraft related costs and revenue associated with FutureSource as aircraft expenses in his eliminations. FutureSource holds ownership of the corporate campus and shared service assets that are not associated with the aircraft. FutureSource costs that were included in Mr. Mugrace's adjustment as aircraft related costs are the corporate shared services, which provides integral payroll, procurement and enterprise technology support, and to which Mr. Mugrace has not lodged an objection. Therefore, Mr. Mugrace’s recommended disallowances of rate base, revenue and expenses included in the

Company's computation is in error, and would unfairly harm the Company and should be rejected in its entirety.

Q. Do you agree with Mr. Mugrace's recommendation to eliminate 50% of advertising expense?

A. No. Mr. Mugrace recommends an arbitrary disallowance of 50 percent based on the fact that there are many entries that are not specific to the Company's gas service operations on the workpapers the Company provided. However, when the Company prepared its adjustment, all entries that were not applicable to the Company's North Dakota gas operations were eliminated. Therefore, his rationale to eliminate 50 percent, a $67,051 reduction, of advertising expenses is duplicative, is not well supported, and is without merit. His recommendation should be rejected.

Q. Do you agree with Mr. Mugrace's recommendation to eliminate $6,844 from Industry Dues?

A. No. Mr. Mugrace claims that the items that he chose to eliminate do not reflect or provide a benefit to natural gas customers. Some of the organizations listed by Mr. Mugrace promote conservation or compliance with state and federal regulations applicable to gas service in North Dakota. In addition, Montana-Dakota is an important part of each community in which it provides service. It is important to each community to have

Montana-Dakota’s presence in order to retain a strong community focus and attract businesses. A strong community is a benefit to all residents of those communities and Montana-Dakota’s small contribution and involvement should remain in the Company’s projected expenses. Mr. Mugrace’s recommendation should be rejected.

Q. Mr. Mugrace has recommended removing the 100 percent of the proposed mains replacements of $2,866,799 and the proposed services replacements of $2,666,355 from the projected gas plant in service. Do you agree with this recommendation?

A. No. Montana-Dakota has always had and will always have replacement projects. In this case, Montana-Dakota proposed a new mechanism that would allow the Company to recover the costs of future investments in replacement projects on a more timely basis. As noted in the testimony of Mr. Darras, the Company's proposal is a more aggressive and efficient approach to replacing identified pipe for the purpose providing safe and reliable service. As mentioned earlier, the Company has always had replacement projects and now Montana-Dakota has proposed to track projects falling under the parameters of the SSIP; however, if the Commission does not approve the SSIP mechanism, the Company should still be allowed to include the costs of the replacement projects in its rate base.

Q. Mr. Mugrace has recommended disallowance of losses on manufactured homes. Do you agree with his recommendation?

A. No. It appears Mr. Mugrace does not understand the environment in which the Company operated in and the importance of the manufactured homes in order for Montana-Dakota to provide safe and reliable service in areas impacted by the rapid expansion in oil development. Montana-Dakota didn't begin purchasing manufactured homes until it had exhausted other options and was unable to maintain staffing levels required to perform the work in the affected areas. While Mr. Mugrace points to prior oil boom/bust cycles, he seems to lack an appreciation of the circumstances which forced the Company into purchasing manufactured homes.

Mr. Mugrace suggested the Company could have rented manufactured homes, which were readily available, and indicated that "MDU should have known that the housing stock would catch up with demand…". Montana-Dakota was fully aware the supply of available housing would catch up with demand; however, its obligation to provide safe and reliable service as a public utility was severely impacted because rental units were not available or were too expensive relative to Montana-Dakota's salary structure. This is contrary to Mr. Mugrace's statements, but one must only look to published articles about the region. I have included examples below.

A Bloomberg.com article published February 20, 2013 had the following headline "Oil Boom Forces Employers to Be Landlords in North Dakota" and went on to say:

"To house a commercial lender and a residential loan processor, McKenzie County Bank in Watford City purchased two, 1,800-square-feet townhouses for about $200,000 each, said Patten, the bank's president.

"It's either we purchase these, or we didn't have any employees to fill the holes," said Patten…."; and

"The city government has raised wages 10 percent a year for the past two years and topped it with at least a $350 a month housing allowance for all its 200 employees. Williston also invested in apartment buildings which will have units for about 45 employees."

An article published in August 2011 by Governing.com had this to say in regards to housing:

"The biggest struggle in the region, though, is the shortage of housing. When people in other parts of the country talk about a "housing shortage," they don't mean it literally. There are usually still plenty of available places for residents making decent money. But when people in western North Dakota discuss the housing shortage, they're serious. There's literally no place to sleep."

These are but two examples which point to the fact the Company had few options regarding housing and acted in a prudent and responsible manner.

Mr. Mugrace's recommendation to disallow losses on manufactured homes used to provide housing for employees in areas affected by the rapid oil expansion should be rejected.

The Commission approved the amortization of the loss on employee housing in its most recent electric rate case (Case No. PU-16-666) following the same approach as requested in this proceeding. The manufactured housing units are generally the same units requested in that hearing.

Q. Will you now address the recommendations of Ms. S. Cardwell?

A. Yes. Ms. Cardwell has recommended two items that I will address. They are:

- The Company explore purchasing a software package such as MetrixND; and
- Deny the Company's request to change the minimum filing threshold for its Rate 88 – Cost of Gas and Rate 99 – Cost of Gas Propane (PGA) from 10 cents to 25 cents.

The Company is open to exploring the purchase of a software package. An initial inquiry has been sent to Itron, the developer of MetrixND, and the Company has requested information to evaluate if the software will provide value in meeting Montana-Dakota's needs and is cost effective.

The Company respectfully disagrees with Ms. Cardwell's position regarding changing the minimum filing requirement of its PGA from 10 cents to 25 cents. While it is true the Company will need to determine the change to know whether the change will be less than the threshold established in the PGA, the Company will reduce the administrative burden and will reduce the number of rate changes the customers experience over a period of time resulting in less customer confusion. The amount paid by customers will not change over time as the Company defers the difference between the tariff rate and the actual cost of gas incurred and will continue to do that process regardless of the minimum threshold established. Montana-Dakota monitors its deferred balances on a monthly basis and would request a variance from the provisions of the tariff to file for an out-of-period change in the surcharge should the deferred balance get too large. Montana-Dakota's customers will benefit with greater efficiency, lower administrative cost and burden and will be accountable for the same level of gas costs if the Company's proposal is approved. Mr. Cardwell's recommendation should be rejected.

Q. Do you have further issues to address regarding the testimony of Mr. Mugrace or Ms. Cardwell?

A. No, I have no further issues. To summarize, Mr. Mugrace has recommended the disallowance of SSIP capital expenditures, MDU Resources and FutureSource costs and recovery of the loss on employee housing. As demonstrated, each of these costs is prudent and has been incurred in the delivery of safe and reliable service and each disallowance should be rejected. Mr. Mugrace's recommendations regarding labor and incentives have been shown to be inappropriate and the Company has included adequate support for the projected medical expense. The use of an inflation factor is consistent with prior cases and has been fully supported within the Company's workpapers.

Ms. Cardwell's recommendation to reject the Company's proposed PGA threshold is without merit.

Q. Has Montana-Dakota considered the impact of the Tax Cuts and Jobs Act (TCJA) and reflected the effects in its revenue requirement?

A. Yes. The TCJA was signed into law on December 22, 2017 and incorporated a number of changes which will impact Montana-Dakota's North Dakota gas operations. The primary impact of the TCJA is the reduction in the corporate income tax rate from 35 percent to 21 percent. The rate reduction has a two-fold effect:

1. A reduction in prospective income taxes on the Company's income statement beginning January 1, 2018; and
2. The Company was required to remeasure utility-related deferred taxes based on the 21 percent tax rate with a regulatory liability established representing the difference between the old and new tax rate referred to as the excess deferred income taxes

(EDITs). The EDIT balance must be amortized over a period of time, beginning in 2018, resulting in a decrease to income tax expense.

Another provision of the TCJA was the elimination of bonus tax depreciation during 2018 and 2019. The Company had included bonus tax depreciation in its initial filing and the elimination of bonus tax depreciation partially offsets the tax rate changes discussed earlier.

Incorporating these items results in an overall revenue requirement shortfall of $3,575,388, representing a reduction of $2,287,809 to the Company's initial filing. See Exhibit No.___(TRJ-5).

Q. How will other provisions of the TCJA impact the Company?

A. There are a number of other changes resulting from the TCJA that may impact Montana-Dakota, but to a much smaller and less certain degree. Montana-Dakota continues to review the TCJA and work with its outside tax professionals to determine the full impact of the tax act.

The elimination of bonus tax depreciation for 2018 and 2019 and the 'flow back' of EDITs will impact the Company's cash flow as they will result in less cash collected from customers relative to the level of federal income taxes paid when compared to the previous tax laws. This reduced cash flow will place more importance on the recovery of other non-cash expenditures, such as depreciation and amortization, to maintain the Company's strong balance sheet.

At this time, the Company has not identified any other items that will have a material impact on North Dakota's gas operations or the revenue requirement in this case.

Q. Will you discuss the impact of the reduction in the federal income tax rate on prospective income taxes first?

A. Yes, the reduction in prospective income taxes is reasonably straightforward. Because North Dakota state income tax is deductible, Montana-Dakota's statutory rate in North Dakota changes from 37.8015 to 24.4049 percent. The information in Exhibit No.___(TRJ-5) has been revised to reflect the calculation of federal income taxes at 21 percent, when federal tax has been computed independent of state tax, and using the statutory rate when state and federal tax have been combined.

Q. Will you discuss the impact of the reduction in the federal income tax rate on deferred income taxes now?

Yes, the reduction in federal income tax rate results in an excess deferred tax as the Company has reflected a 35 percent federal tax expense in the year the deferred tax was established. However, when the deferred tax reverses and the actual tax expense is calculated, the Company will pay based on the rate in effect at that time – currently 21 percent. The EDITs are separated into two groups – plant and non-plant.

Q. Please describe the impact on plant related EDITs.

A. Of the total EDITs recorded as a regulatory liability, the plant related EDITs are the most significant. The plant related EDITs established at the end of 2017 are to be amortized over the average remaining life of the assets, referred to as the Average Rate Assumption Method (ARAM). Consistent with the Internal Revenue Service's guidelines, ARAM is used because the plant related EDITs may not be returned any faster than over the remaining lives of the underlying assets. The annual amortization begins in the period when tax depreciation for each asset is less than book depreciation for the same asset. With that in mind, the ARAM amortization will vary from year to year.

Montana-Dakota identified the annual EDITs that will reverse in 2018 for North Dakota gas operations and has determined the credit to tax expense will be $406,254. The impact to rates and the expected amortization in future years is currently being analyzed. The annual fluctuations are not expected to be material; however, if the variances are of a significant nature the Company may propose a smoothing mechanism to ensure the appropriate amount is reflected in customers' rates.

Q. Please describe the impact on non-plant related EDITs.

A. Non-plant EDITs are associated with a number of assets and liabilities with differing lives, and are not subject to ARAM. The largest item is pension and post-retirement benefits, which have an estimated life of 20 years, and the next largest contributor is customer advances with a five-year life. Montana-Dakota has prepared an analysis of the non-plant deferred tax balances, included as Exhibit No.___(TRJ-7), and has estimated the average life of the assets and liabilities to which they are associated. Based on that analysis, the Company is proposing to recognize those EDITs over a 10-year period. A 10-year period represents a reasonable time period, based on the weighted average life, in which deferred taxes as of December 31, 2017 will be realized. The annual amortization of $65,417, which increases income tax expense and partially offsets the plant EDITS, has been reflected in the attached exhibits.

Q. Please describe Exhibit No.___(TRJ-5) and explain how the above noted adjustments have been incorporated.

A. Exhibit No.___(TRJ-5) contains all changes to the Company's initial filing. The corresponding pages from the initial filing have been included as Exhibit No.___(TRJ-6) for convenience.

Page 1 shows the calculation of the revenue deficiency of $3,575,388 based on the assumptions included in the Company's initial filing adjusted to reflect the effects of the TCJA, including the plant and non-plant EDIT amortizations and the elimination of bonus tax depreciation. Page 2 provides support for page 1 and presents the projected 2018 income and returns prior to additional revenue.

Page 3 is the income tax calculation based on the combined state and federal rate of 24.4049 percent which includes the 21 percent federal tax rate effective January 1, 2018. The plant amortization (ARAM) of ($406,254) and $65,417 have also been included to reflect the effect of excess deferred taxes on total tax expense.

As noted earlier, the elimination of bonus tax depreciation results in an increase in the rate base due to a lower deferred tax as well as lower federal tax rate. Page 4 presents the interest expense that is deductible for tax purposes. The interest expense is based on the overall rate base presented on page 5. The calculation of the deferred income tax balances is presented on pages 6 through 8.

Q. Does this conclude your testimony?

A. Yes.

MONTANA-DAKOTA UTILITIES CO.
MEDICAL/DENTAL EXPENSE
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017 - 2018

	Per Books	Projected	
	2016	2017	2018
Medical/Dental 1/	$1,182,526	$1,267,668	$1,333,587

1/ Reflects an increase of 7.20% and 5.20% for 2017 and 2018, respectively, based on effective 2017 and 2018 medical premiums.

2018 Health Plans Renewal

Current Cost		**Jul-17 Enrollment**	**2017 Rates**	**Monthly Income**	**Annual Funding**	**Total Cost w/o Funding**
PPO						
	Single	446	$ 535.00	$ 238,610	$ -	
	Ee + Child	58	$ 908.00	$ 52,664	$ -	
	Ee + Children	65	$ 1,122.00	$ 72,930	$ -	
	Ee + Spouse	324	$ 1,229.00	$ 398,196	$ -	
	Family	421	$ 1,680.00	$ 707,280	$ -	
	Total	1314		$ 1,469,680	$ -	$ 17,636,160
H S A 1						
	Single	1345	$ 373.00	$ 501,685	$ 538,000	
	Ee + Child	192	$ 634.00	$ 121,728	$ 153,600	
	Ee + Children	152	$ 783.00	$ 119,016	$ 121,600	
	Ee + Spouse	478	$ 857.00	$ 409,646	$ 382,400	
	Family	985	$ 1,172.00	$ 1,154,420	$ 788,000	
	Total	3152		$ 2,306,495	$ 1,983,600	$ 27,677,940
H S A 2	Single	277	$ 347.00	$ 96,119	$ 138,500	
	Ee + Child	92	$ 590.00	$ 54,280	$ 92,000	
	Ee + Children	86	$ 728.00	$ 62,608	$ 86,000	
	Ee + Spouse	238	$ 797.00	$ 189,686	$ 238,000	
	Family	408	$ 1,090.00	$ 444,720	$ 408,000	
	Total	1101		$ 847,413	$ 962,500	$ 10,168,956
TOTAL						
	Single	2068		$ 836,414	$ 676,500	
	Ee + Child	342		$ 228,672	$ 245,600	
	Ee + Children	303		$ 254,554	$ 207,600	
	Ee + Spouse	1040		$ 997,528	$ 620,400	
	Family	1814		$ 2,306,420	$ 1,196,000	
	Total	5567		$ 4,623,588	$ 2,946,100	$ 55,483,056
2018 Projected Cost			**2018 Rates**			
PPO			**(+12%)**			
	Single	290	$ 599.20	$ 173,708	$ -	
	Ee + Child	38	$ 1,016.96	$ 38,339	$ -	
	Ee + Children	42	$ 1,256.64	$ 53,093	$ -	
	Ee + Spouse	211	$ 1,376.48	$ 289,887	$ -	
	Family	274	$ 1,881.60	$ 514,900	$ -	
	Total	854		$ 1,069,927	$ -	$ 12,839,124
H S A - 1			**(+10%)**			
	Single	1367	$ 410.30	$ 560,716	$ 409,980	
	Ee + Child	193	$ 697.40	$ 134,668	$ 115,860	
	Ee + Children	160	$ 861.30	$ 137,420	$ 95,730	
	Ee + Spouse	544	$ 942.70	$ 512,452	$ 326,160	
	Family	1034	$ 1,289.20	$ 1,332,839	$ 620,310	
	Total	3297		$ 2,678,095	$ 1,568,040	$ 32,137,146
H S A - 2			**(+5%)**			
	Single	412	$ 364.35	$ 149,930	$ 205,750	
	Ee + Child	111	$ 619.50	$ 68,888	$ 111,200	
	Ee + Children	101	$ 764.40	$ 77,357	$ 101,200	
	Ee + Spouse	286	$ 836.85	$ 239,172	$ 285,800	
	Family	507	$ 1,144.50	$ 579,689	$ 506,500	
	Total	1416		$ 1,115,037	$ 1,210,450	$ 13,380,440
Total						
	Single	2068		$ 884,354	$ 615,730	
	Ee + Child	342		$ 241,896	$ 227,060	
	Ee + Children	303		$ 267,871	$ 196,930	
	Ee + Spouse	1040		$ 1,041,510	$ 611,960	
	Family	1814		$ 2,427,429	$ 1,126,810	
	Total	5567		$ 4,863,059	$ 2,778,490	$ 58,356,710
					% Change:	5.2%

MONTANA-DAKOTA UTILITIES CO.
INSURANCE EXPENSE
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017 - 2018

	Per Books	Projected		
Insurance Expense	2016	2017 1/	2018 2/	
Director's & Officer's Liability Insurance	$45,936	$50,004	$48,635	
Excess Liability				
Fiduciary & Employee Benefits Liability	9,831	10,954	11,211	
Public Liab. & Property Ins. Damage of Others	276,198	299,556	333,921	
Public Liab. & Property Ins. Damage of Others			17,229	
Employee Practice Liability	5,822	0	0	3/
All Risk	196,354	187,215	190,845	
Blanket Crime	2,349	2,608	2,813	
Special Contingency	158	152	151	
Self Insurance	12,548	57,465	56,613	
Total Insurance Expense	$549,196	$607,954	$661,418	

1/ Projected 2017 reflects insurance expense at the current levels.
2/ Projected 2018 reflects actual premiums for 2018.
3/ Employee Practices Liability was reported with general Public Liability & Property Insurance Damage of Others insurance effective 2017.

MONTANA-DAKOTA UTILITIES CO.
SUMMARY OF INSURANCE EXPENSE
PROJECTED 2018

Description	Expiration	Annual Premium	Quarterly & Other Gas	Total	2018 % Gas	Gas Utility	North Dakota Gas 1/	
Directors & Officer's Liability Insurance	10/31/2018	$299,863	$13,496	$313,359	40.10%	$125,657	$48,635	3/
Excess Liability								
Fiduciary & Employee Benefits Liability	10/31/2018	47,407	3,858	51,265	56.50%	28,965	11,211	3/
Public Liab. & Property Insurance Damage of Others	12/31/2018	2,063,270	88,210	2,151,480	40.10%	862,743	333,921	5/
Public Liab. & Property Insurance Damage of Others	2/28/2018	111,008		111,008	40.10%	44,514	17,229	4/
Employee Practice Liability		0		0		0	0	
All Risk	12/31/2018	1,176,642	52,984	1,229,626	40.10%	493,080	190,845	5/
Blanket Crime	10/31/2018	17,337	785	18,122	40.10%	7,267	2,813	3/
Special Contingency	5/1/2018	971		971	40.10%	389	151	
Self Insurance 2/	N.A.	146,269		146,269		146,269	56,613	
		3,862,767	159,333	4,022,100		1,708,884	661,418	

1/ North Dakota Factor No. 27 - O&M excluding Cost of Gas and A&G: 38.704628%

2/ Annual premium based on five year average, years 2012-2016.

3/ New premium for 2018, effective 11/1/2017.

4/ New premium for pollution liability effective 3/1/2017, inadvertently excluded due to timing of work paper calculation.

5/ New premium for 2018, effective 1/1/2018.

Case No. PU-17-295
Statement J
Page 3 of 3
Revised for TCJA

MONTANA-DAKOTA UTILITIES CO.
PROJECTED OPERATING INCOME AND RATE OF RETURN
REFLECTING ADDITIONAL REVENUE REQUIREMENTS
PROJECTED 2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Before Additional Revenue Requirements 1/	**Additional Revenue Requirements**		Reflecting Additional Revenue Requirements
Operating Revenues				
Sales	$106,410,946	**$3,575,388**		$109,986,334
Transportation	2,197,896			2,197,896
Other	3,527,788			3,527,788
Total Revenues	112,136,630	3,575,388		115,712,018
Operating Expenses				
Operation and Maintenance				
Cost of Gas	70,913,006			70,913,006
Other O&M	21,532,698			21,532,698
Total O&M	92,445,704			92,445,704
Depreciation	9,206,297			9,206,297
Taxes Other Than Income	2,039,599			2,039,599
Income Taxes	825,727	872,570	2/	1,698,297
Total Expenses	104,517,327	872,570		105,389,897
Operating Income	$7,619,303	$2,702,818		$10,322,121
Rate Base	$136,861,858			$136,861,858
Rate of Return	**5.567%**			**7.542%**

1/ Exhibit No.__(TRJ-5), Page 2.
2/ Reflects state and federal taxes at 24.4049%.

MONTANA-DAKOTA UTILITIES CO.
INCOME STATEMENT
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017 - 2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Per Books 2016	Projected 2017	Projected 2018	Reference
Operating Revenues				
Sales	$85,592,333	$104,625,055	$106,410,946	
Transportation	2,147,629	2,197,896	2,197,896	
Other	4,146,114	3,524,931	3,527,788	
Total Revenues	91,886,076	110,347,882	112,136,630	
Operating Expenses				
Operation and Maintenance				
Cost of Gas	51,338,373	69,713,908	70,913,006	
Other O&M	20,248,295	20,995,685	21,532,698	
Total O&M	71,586,668	90,709,593	92,445,704	
Depreciation and Amortization	7,630,836	8,738,259	9,206,297	
Taxes Other Than Income	1,901,169	1,960,214	2,039,599	
Current Income Taxes	3,985,618	2,138,370	825,727	Page 3
Deferred Income Taxes	(1,249,456)			
Total Expenses	83,854,835	103,546,436	104,517,327	
Operating Income	$8,031,241	$6,801,446	$7,619,303	
Rate Base	$126,663,497	$131,843,291	$136,861,858	
Rate of Return	6.341%	5.159%	5.567%	
Return on Equity	7.756%	5.388%	6.128%	

MONTANA-DAKOTA UTILITIES CO.
CALCULATION OF INCOME TAXES
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017 - 2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Projected 2017	Projected 2018
Operating Revenues		
Sales Revenues	$104,625,055	$106,410,946
Transportation Revenue	2,197,896	2,197,896
Other Revenues	3,524,931	3,527,788
Total Operating Revenues	110,347,882	112,136,630
Operating Expenses		
Operation and Maintenance		
Cost of Gas	$69,713,908	$70,913,006
Other O&M	20,995,685	21,532,698
Total O&M	90,709,593	92,445,704
Depreciation and Amortization Expense	8,738,259	9,206,297
Taxes other Than Income	1,960,214	2,039,599
Total Operating Expenses	101,408,066	103,691,600
Gross Operating Income	$8,939,816	$8,445,030
Adjustments to Taxable Income:		
AFUDC Equity Add Back	$59,300	$59,300
Permanent Additions	37,500	37,500
Interest 1/	(3,108,865)	(3,342,167)
Total Adjustments to Taxable Income	(3,012,065)	(3,245,367)
Taxable Income	$5,927,751	$5,199,663
Federal & State Income Taxes	2,240,779	1,268,973
ARAM Amortization		(406,254)
Amortized Excess - DIT		65,417
Full Normalization	(102,409)	(102,409)
Total Income Taxes	$2,138,370	$825,727

1/ Page 4.

MONTANA-DAKOTA UTILITIES CO.
INTEREST EXPENSE
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017 - 2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Projected	
	2017	2018
Rate Base 1/	$131,843,291	$136,861,858
Weighted Cost of Debt	2.358%	2.442%
Interest Expense	$3,108,865	$3,342,167

1/ Page 5.

MONTANA-DAKOTA UTILITIES CO.
AVERAGE RATE BASE
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDED DECEMBER 31, 2016
PROJECTED 2017-2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Per Books	Projected		
	2016	2017	2018	Reference
Gas Plant in Service	$245,350,306	$256,028,189	$268,555,021	
Accumulated Reserve for Depreciation	88,119,207	93,344,204	99,474,551	
Net Gas Plant in Service	$157,231,099	$162,683,985	$169,080,470	
Additions:				
Materials and Supplies	$2,109,464	$2,070,029	$2,070,029	
Fuel Stock	101,812	95,174	95,174	
Prepayments	232,480	229,229	249,029	
Unamortized Loss on Debt	638,319	529,332	470,255	
Unamort. Redemption Cost of Preferred Stock	0	31,000	59,934	
Gain on Sale of Building	(316,643)	(299,079)	(281,515)	
Loss on Sale of Employee Housing	0	397,173	774,487	
Total Additions	$2,765,432	$3,052,858	$3,437,393	
Total Before Deductions	$159,996,531	$165,736,843	$172,517,863	
Deductions:				
Accumulated Deferred Income Taxes	$20,608,456	$19,935,410	$19,640,679	Page 6
Customer Advances	12,724,578	13,958,142	16,015,326	
Total Deductions	$33,333,034	$33,893,552	$35,656,005	
Total Rate Base	$126,663,497	$131,843,291	$136,861,858	

MONTANA-DAKOTA UTILITIES CO.
ACCUMULATED DEFERRED INCOME TAXES
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017-2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Per Books	Projected 2017			Projected 2018		
	2016	Changes	Balance	Average	Changes	Balance	Average
Accumulated Deferred Income Taxes							
Liberalized Depreciation	$26,340,077	$41,364	$26,381,441	$26,381,441	$133,896 1/	$26,515,337	$26,515,337
Full Normalization	492,426	(102,409)	390,017	441,222	(102,409)	287,608	338,813
Contribution in Aid of Construction	(1,504,053)	0	(1,504,053)	(1,504,053)	0	(1,504,053)	(1,504,053)
Customer Advances	(5,259,322)	(775,211)	(6,034,533)	(5,646,928)	(150,893)	(6,185,426)	(6,109,980)
Unamortized Loss on Debt	215,217	(22,332)	192,885	204,051	(22,332)	170,553	181,719
Unamort. Redemption Cost of Pref. Stock	0	23,437	23,437	11,719	(1,562)	21,875	22,656
Gain on Sale of Building	(116,816)	6,665	(110,151)	(113,484)	6,665	(103,486)	(106,819)
Loss on Sale of Employee Housing	0	300,275	300,275	150,138	(15,014)	285,261	292,768
Acquisition Adjustment	11,837	(1,066)	10,771	11,304	(1,066)	9,705	10,238
Balance	$20,179,366	($529,277)	$19,650,089	$19,935,410	($152,715)	$19,497,374	$19,640,679

1/ Page 7.

MONTANA-DAKOTA UTILITIES CO.
LIBERALIZED DEPRECIATION
GAS UTILITY - NORTH DAKOTA
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017-2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

Month	Weighting For Projection	Monthly Increments	Balance/ Increments	Balance
December 2016	100.00%			$26,340,077
January 2017	91.78%	$7,441	$6,829	26,346,906
February	84.11%	7,441	6,259	26,353,165
March	75.62%	7,441	5,627	26,358,792
April	67.40%	7,441	5,015	26,363,807
May	58.90%	7,441	4,383	26,368,190
June	50.68%	7,441	3,771	26,371,961
July	42.19%	7,441	3,139	26,375,100
August	33.70%	7,441	2,508	26,377,608
September	25.48%	7,441	1,896	26,379,504
October	16.99%	7,441	1,264	26,380,768
November	8.77%	7,441	653	26,381,421
December	0.27%	7,440	20	26,381,441
Total		$89,291	$41,364	
December 2017	100.00%			$26,381,441
January 2018	91.78%	$24,087	22,107	26,403,548
February	84.11%	24,087	20,260	26,423,808
March	75.62%	24,087	18,215	26,442,023
April	67.40%	24,087	16,235	26,458,258
May	58.90%	24,087	14,187	26,472,445
June	50.68%	24,087	12,207	26,484,652
July	42.19%	24,087	10,162	26,494,814
August	33.70%	24,087	8,117	26,502,931
September	25.48%	24,087	6,137	26,509,068
October	16.99%	24,087	4,092	26,513,160
November	8.77%	24,087	2,112	26,515,272
December	0.27%	24,090	65	26,515,337
Total		$289,047	$133,896	

	Projected 2017	Projected 2018
Prior year December ADIT balance	$26,340,077	$19,650,089
Projected additions 1/	89,291	289,047
Projected ADIT	$26,429,368	$19,939,136
Change in DITs	89,291	289,047
Monthly Increment	$7,441	$24,087

1/ Page 8.

MONTANA-DAKOTA UTILITIES CO.
CHANGES IN ACCUMULATED DEFERRED INCOME TAXES
RELATED TO PLANT IN SERVICE
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017-2018
REVISED TO REFLECT 21% FEDERAL TAX RATE

	Projected 2017	Projected 2018	
Plant related tax deductions			
Book depreciation	($9,328,725)	($9,829,631)	
Tax Depreciation	9,564,936	11,014,011	1/
Total tax deductions	$236,211	$1,184,380	
Change in ADIT	$89,291	$289,047	2/

1/ Reflects the absence of bonus tax depreciation.
2/ Effective state and federal tax rate of 24.4049%.

MONTANA-DAKOTA UTILITIES CO.
PROJECTED OPERATING INCOME AND RATE OF RETURN
REFLECTING ADDITIONAL REVENUE REQUIREMENTS
PROJECTED 2018

	Before Additional Revenue Requirements 1/	**Additional Revenue Requirements**		Reflecting Additional Revenue Requirements
Operating Revenues				
Sales	$106,410,946	**$5,863,197**		$112,274,143
Transportation	2,197,896			2,197,896
Other	3,527,788			3,527,788
Total Revenues	112,136,630	5,863,197		117,999,827
Operating Expenses				
Operation and Maintenance				
Cost of Gas	70,913,006			70,913,006
Other O&M	21,532,698			21,532,698
Total O&M	92,445,704			92,445,704
Depreciation	9,206,297			9,206,297
Taxes Other Than Income	2,039,599			2,039,599
Income Taxes	1,876,170	2,216,376	2/	4,092,546
Total Expenses	105,567,770	2,216,376		107,784,146
Operating Income	$6,568,860	$3,646,821		$10,215,681
Rate Base	$135,450,558			$135,450,558
Rate of Return	**4.850%**			**7.542%**

1/ Statement K, Page 1.
2/ Reflects state and federal taxes at 37.8015%.

MONTANA-DAKOTA UTILITIES CO.
INCOME STATEMENT
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017 - 2018

	Per Books 2016	Projected 2017	Projected 2018	Reference
Operating Revenues				
Sales	$85,592,333	$104,625,055	$106,410,946	Page 2
Transportation	2,147,629	2,197,896	2,197,896	Page 2
Other	4,146,114	3,524,931	3,527,788	Page 2
Total Revenues	91,886,076	110,347,882	112,136,630	
Operating Expenses				
Operation and Maintenance				
Cost of Gas	51,338,373	69,713,908	70,913,006	Page 12
Other O&M	20,248,295	20,995,685	21,532,698	Pages 8 & 10
Total O&M	71,586,668	90,709,593	92,445,704	
Depreciation and Amortization	7,630,836	8,738,259	9,206,297	Page 30
Taxes Other Than Income	1,901,169	1,960,214	2,039,599	Page 33
Current Income Taxes	3,985,618	2,138,370	1,876,170	Page 36
Deferred Income Taxes	(1,249,456)			
Total Expenses	83,854,835	103,546,436	105,567,770	
Operating Income	$8,031,241	$6,801,446	$6,568,860	
Rate Base	$126,663,497	$131,843,291	$135,450,558	
Rate of Return	6.341%	5.159%	4.850%	
Return on Equity	7.756%	5.388%	4.722%	

MONTANA-DAKOTA UTILITIES CO.
CALCULATION OF INCOME TAXES
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017 - 2018

	Projected	
	2017	2018
Operating Revenues		
Sales Revenues	$104,625,055	$106,410,946
Transportation Revenue	2,197,896	2,197,896
Other Revenues	3,524,931	3,527,788
Total Operating Revenues	110,347,882	112,136,630
Operating Expenses		
Operation and Maintenance		
Cost of Gas	$69,713,908	$70,913,006
Other O&M	20,995,685	21,532,698
Total O&M	90,709,593	92,445,704
Depreciation and Amortization Expense	8,738,259	9,206,297
Taxes other Than Income	1,960,214	2,039,599
Total Operating Expenses	101,408,066	103,691,600
Gross Operating Income	$8,939,816	$8,445,030
Adjustments to Taxable Income:		
AFUDC Equity Add Back	$59,300	$59,300
Permanent Additions	37,500	37,500
Interest 1/	(3,108,865)	(3,307,703)
Total Adjustments to Taxable Income	(3,012,065)	(3,210,903)
Taxable Income	$5,927,751	$5,234,127
Federal & State Income Taxes	2,240,779	1,978,579
Full Normalization	(102,409)	(102,409)
Total Income Taxes	$2,138,370	$1,876,170

1/ Page 37.

MONTANA-DAKOTA UTILITIES CO.
INTEREST EXPENSE
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017 - 2018

	Projected	
	2017	2018
Rate Base 1/	$131,843,291	$135,450,558
Weighted Cost of Debt 2/	2.358%	2.442%
Interest Expense	$3,108,865	$3,307,703

1/ Statement L, page 1.
2/ Statement D, page 1.

MONTANA-DAKOTA UTILITIES CO.
AVERAGE RATE BASE
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDED DECEMBER 31, 2016
PROJECTED 2017-2018

	Per Books	Projected		
	2016	2017	2018	Reference
Gas Plant in Service	$245,350,306	$256,028,189	$268,555,021	Page 2
Accumulated Reserve for Depreciation	88,119,207	93,344,204	99,474,551	Page 10
Net Gas Plant in Service	$157,231,099	$162,683,985	$169,080,470	
Additions:				
Materials and Supplies	$2,109,464	$2,070,029	$2,070,029	Page 12
Fuel Stock	101,812	95,174	95,174	Page 13
Prepayments	232,480	229,229	249,029	Page 14
Unamortized Loss on Debt	638,319	529,332	470,255	Page 15
Unamort. Redemption Cost of Preferred Stock	0	31,000	59,934	Page 16
Gain on Sale of Building	(316,643)	(299,079)	(281,515)	Page 17
Loss on Sale of Employee Housing	0	397,173	774,487	Page 18
Total Additions	$2,765,432	$3,052,858	$3,437,393	
Total Before Deductions	$159,996,531	$165,736,843	$172,517,863	
Deductions:				
Accumulated Deferred Income Taxes	$20,608,456	$19,935,410	$21,051,979	Page 20
Customer Advances	12,724,578	13,958,142	16,015,326	Page 19
Total Deductions	$33,333,034	$33,893,552	$37,067,305	
Total Rate Base	$126,663,497	$131,843,291	$135,450,558	

MONTANA-DAKOTA UTILITIES CO.
ACCUMULATED DEFERRED INCOME TAXES
GAS UTILITY - NORTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017-2018

	Per Books	Projected 2017			Projected 2018		
	2016	Changes	Balance	Average	Changes	Balance	Average
Accumulated Deferred Income Taxes							
Liberalized Depreciation	$26,340,077	$41,364 1/	$26,381,441	$26,381,441	$1,545,196 1/	$27,926,637	$27,926,637
Full Normalization	492,426	(102,409)	390,017	441,222	(102,409) 2/	287,608	338,813
Contribution in Aid of Construction	(1,504,053)	0	(1,504,053)	(1,504,053)	0	(1,504,053)	(1,504,053)
Customer Advances	(5,259,322)	(775,211)	(6,034,533)	(5,646,928)	(150,893)	(6,185,426)	(6,109,980)
Unamortized Loss on Debt	215,217	(22,332) 2/	192,885	204,051	(22,332) 3/	170,553	181,719
Unamort. Redemption Cost of Pref. Stock	0	23,437 3/	23,437	11,719	(1,562) 4/	21,875	22,656
Gain on Sale of Building	(116,816)	6,665 4/	(110,151)	(113,484)	6,665 5/	(103,486)	(106,819)
Loss on Sale of Employee Housing	0	300,275 5/	300,275	150,138	(15,014) 6/	285,261	292,768
Acquisition Adjustment	11,837	(1,066)	10,771	11,304	(1,066)	9,705	10,238
Balance	$20,179,366	($529,277)	$19,650,089	$19,935,410	$1,258,585	$20,908,674	$21,051,979

1/ Page 21.
2/ Page 15.
3/ Page 16.
4/ Page 17.
5/ Page 18.

MONTANA-DAKOTA UTILITIES CO.
LIBERALIZED DEPRECIATION
GAS UTILITY - NORTH DAKOTA
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2016
PROJECTED 2017-2018

Month	Weighting For Projection	Monthly Increments	Balance/ Increments	Balance
December 2016	100.00%			$26,340,077
January 2017	91.78%	$7,441	$6,829	26,346,906
February	84.11%	7,441	6,259	26,353,165
March	75.62%	7,441	5,627	26,358,792
April	67.40%	7,441	5,015	26,363,807
May	58.90%	7,441	4,383	26,368,190
June	50.68%	7,441	3,771	26,371,961
July	42.19%	7,441	3,139	26,375,100
August	33.70%	7,441	2,508	26,377,608
September	25.48%	7,441	1,896	26,379,504
October	16.99%	7,441	1,264	26,380,768
November	8.77%	7,441	653	26,381,421
December	0.27%	7,440	20	26,381,441
Total		$89,291	$41,364	
December 2017	100.00%			$26,381,441
January 2018	91.78%	$277,968	255,119	26,636,560
February	84.11%	277,968	233,799	26,870,359
March	75.62%	277,968	210,199	27,080,558
April	67.40%	277,968	187,350	27,267,908
May	58.90%	277,968	163,723	27,431,631
June	50.68%	277,968	140,874	27,572,505
July	42.19%	277,968	117,275	27,689,780
August	33.70%	277,968	93,675	27,783,455
September	25.48%	277,968	70,826	27,854,281
October	16.99%	277,968	47,227	27,901,508
November	8.77%	277,968	24,378	27,925,886
December	0.27%	277,965	751	27,926,637
Total		$3,335,613	$1,545,196	

	Projected 2017	Projected 2018
Prior year December ADIT balance	$26,340,077	$19,650,089
Projected additions 1/	89,291	3,335,613
Projected ADIT	$26,429,368	$22,985,702
Change in DITs	89,291	3,335,613
Monthly Increment	$7,441	$277,968

1/ Page 22.

MONTANA-DAKOTA UTILITIES CO.
CHANGES IN ACCUMULATED DEFERRED INCOME TAXES
RELATED TO PLANT IN SERVICE
GAS UTILITY - NORTH DAKOTA
PROJECTED 2017-2018

	Projected	
	2017	2018
Plant related tax deductions		
Book depreciation	($9,328,725)	($9,829,631)
Tax Depreciation	9,564,936	18,653,655
Total tax deductions	$236,211	$8,824,024
Change in ADIT @ 37.8015%	$89,291	$3,335,613

MONTANA-DAKOTA UTILITIES CO.
ANALYSIS OF NON-PLANT DEFERRED INCOME TAXES
FOR THE PERIOD ENDING DECEMBER 31, 2017

Description	Total	Life (in years)	DIT %	Weighted Life
ABANDONED POWER PLANT COST RECOVERY	$392,198	10	2.21%	0.22
BAD DEBTS EXPENSE	75,502	1	0.42%	0.00
BOARD OF DIRECTORS RETIREMENT BENEFITS	214,361	10	1.21%	0.12
BONUS & 401K PROFIT SHARING	274,608	1	1.54%	0.02
CONTINGENCY RESERVE-BEULAH, ND LAND	959	10	0.01%	0.00
CONTINGENCY RESERVE-RAPID CITY, SD LAND	65,181	10	0.37%	0.04
CUSTOMER ADVANCES	3,217,151	5	18.10%	0.91
DEFERRED COMPENSATION - DIRECTORS	321,319	10	1.81%	0.18
DEFERRED MEDICARE PART D	107,703	10	0.61%	0.06
DEFERRED PENSION / POST RETIREMENT EXPENSE	5,974,895	20	33.61%	6.72
GAIN ON BUILDING SALE-REG LIABILITY	155,054	20	0.87%	0.17
LOSS ON BUILDINGS-REG ASSET	380,282	20	2.14%	0.43
MANAGEMENT INCENTIVE	574,771	10	3.23%	0.32
MANUFACTURED GAS PLANT SITE - BILLINGS	63,175	10	0.36%	0.04
MISO MVP RESERVE	55,995	1	0.31%	0.00
MN DECOUPLING REG ASSET	68,931	1	0.39%	0.00
MN INFRASTRUCTURE RIDER	50,360	1	0.28%	0.00
MOR-GRAN-SOU CAPACITY REVENUE	201,343	18	1.13%	0.20
MT AD VALOREM TAX TRACKER	158,558	1	0.89%	0.01
MT DECOMMISSIONING	603,585	4	3.40%	0.14
MT PSC/MCC TAX DEFERRAL - CURRENT	9,696	1	0.05%	0.00
MT PSC/MCC TAX DEFERRAL - NONCURRENT	45,330	1	0.25%	0.00
ND ENVIRONMENTAL COST RECOVERY RIDER	333,267	1	1.87%	0.02
ND GENERATION RESOURCE RECOVERY RIDER	206,167	1	1.16%	0.01
ND TRANSMISSION TRACKER	461,842	1	2.60%	0.03
PCB RELATED INCOME	13,074	10	0.07%	0.01
PERFORMANCE SHARE PROGRAM	390,894	2	2.20%	0.04
PREF STK REDEMPTION AMORT-REG ASSET	80,431	10	0.45%	0.05
PREPAID DEMAND CHARGE	485,989	1	2.73%	0.03
PREPAID EXPENSES	74,300	1	0.42%	0.00
PROPERTY INSURANCE RECOVERY	2,959	1	0.02%	0.00
PROPERTY INSURANCE RESERVE	38,227	1	0.22%	0.00
PURCHASED GAS ADJUSTMENT	368,545	1	2.07%	0.02
REGULATORY COMMISSION EXPENSE - RATE BASE	38,746	4	0.22%	0.01
REGULATORY COMMISSION EXPENSE	157,327	5	0.88%	0.04
RETIRED POWER PLANT	33,544	9	0.19%	0.02
SD INFRASTRUCTURE RIDER	9,217	1	0.05%	0.00
SD TRANSMISSION COST RECOVERY RIDER	8,616	1	0.05%	0.00
SUNDRY RESERVES	48,369	1	0.27%	0.00

MONTANA-DAKOTA UTILITIES CO.
ANALYSIS OF NON-PLANT DEFERRED INCOME TAXES
FOR THE PERIOD ENDING DECEMBER 31, 2017

Description	Total	Life (in years)	DIT %	Weighted Life
UNAMORTIZED LOSS ON REACQUIRED DEBT	642,565	9	3.61%	0.32
UNIFORM CAPITALIZATION	129,082	1	0.73%	0.01
UNIFORM CAPITALIZATION-PROPANE	219	1	0.00%	-
VACATION PAY	1,169,182	1	6.58%	0.07
WAPA FIBER DEMAND REVENUE	73,809	11	0.42%	0.05
Total (Absolute Value)	$17,777,328		100.00%	10.32

Exhibit No.__(TRJ-8)

J.D. Power Gas Utility Customer Satisfaction Survey Results

2016 & 2017

J.D. POWER

Press Release

Gas Utility Customer Satisfaction Improves for Sixth Straight Year, J.D. Power Finds

Industry's Focus on Safety and Regular Customer Communications Drive Steady Improvement

COSTA MESA, Calif.: 13 Sept. 2017 — Industry-wide efforts to improve safety through a combination of multimedia direct customer outreach and residential safety inspections are having a positive effect on residential gas utility customer satisfaction. According to the J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study,℠ released today, customer satisfaction has increased for the sixth consecutive year on a nationwide basis.

"The residential gas utility industry has committed significant resources to customer engagement, dramatically increasing the number of communication channels they use and consistently positioning themselves as advocates of safety who are here to help customers," said **Carl Lepper, Utility Industry Analyst at J.D. Power**. "That work is paying off in the form of consistently improving customer satisfaction scores that are being driven by perceptions of increased safety and reliability."

Following are some key findings of the study:

- **Customer satisfaction trending significantly higher:** Overall satisfaction in the 2017 study is 29 index points higher (on a 1,000-point scale) than in the 2016 study. This is the sixth consecutive year of customer satisfaction performance improvement for the residential gas utility industry.

- **Perception of safety is key to customer satisfaction:** Gas utility efforts to advocate for safety have a positive impact on customer satisfaction, with satisfaction 88 index points higher among customers who had a safety inspection conducted by their utility than among those who did not receive an inspection. Likewise, satisfaction among customers who say their gas utility was "very helpful" or "somewhat helpful" in preparing for a safety issue is 150 points higher than among those who say their utility was "not very helpful" or "not at all helpful."

- **Digital communication channels and alerts drive customer engagement:** Digital customer alerts from the utility addressing everything from usage to severe weather to emergencies, such as a natural gas leak, are being adopted widely by utility customers. Communication satisfaction among customers who indicate receiving one of these alerts is 104 index points higher than among those who did not receive an alert.

- **Proactive communications regarding service interruptions improve customer satisfaction:** Overall customer satisfaction scores are higher when residential customers experience an interruption but are alerted to it in advance than when they do not experience any service interruptions at all.

Study Rankings

The study, now in its 16th year, ranks large and midsize utility companies in four geographic regions: East, Midwest, South and West. Companies in the midsize utility segment serve between 125,000 and 399,000 residential customers, and companies in the large utility segment serve 400,000 or more residential customers.

The following utilities rank highest in customer satisfaction in their respective regions:

- East Large: **New Jersey Natural Gas**
- East Midsize: **Elizabethtown Gas**
- Midwest Large: **MidAmerican Energy**
- Midwest Midsize: **Alliant Energy**
- South Large: **Atmos Energy/CenterPoint Energy**
- South Midsize: **TECO Peoples Gas**
- West Large: **NW Natural**
- West Midsize: **Intermountain Gas Company**

The 2017 Gas Utility Residential Customer Satisfaction Study is based on responses from more than 61,000 online interviews conducted between September 2016 and July 2017 among residential customers of 85 large and midsize gas utility brands across the continental United States.

For more information about the Gas Utility Residential Customer Satisfaction Study, visit http://www.jdpower.com/resource/us-gas-utility-residential-customer-satisfaction-study.

See the online press release at http://www.jdpower.com/pr-id/2017150.

J.D. Power is a global leader in consumer insights, advisory services and data and analytics. These capabilities enable J.D. Power to help its clients drive customer satisfaction, growth and profitability. Established in 1968, J.D. Power is headquartered in Costa Mesa, Calif., and has offices serving North/South America, Asia Pacific and Europe. J.D. Power is a portfolio company of XIO Group, a global alternative investments and private equity firm headquartered in London, and is led by its four founders: Athene Li, Joseph Pacini, Murphy Qiao and Carsten Geyer.

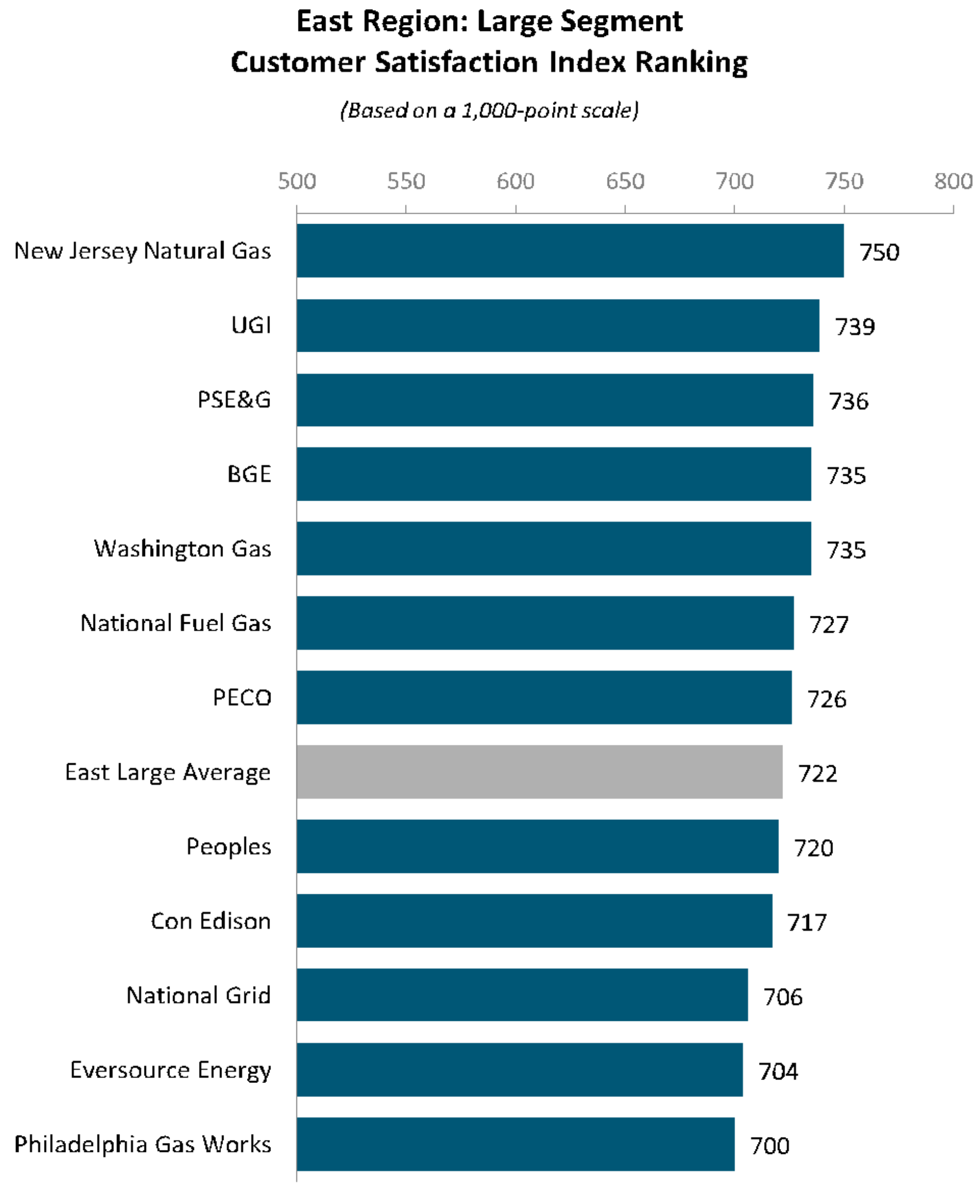
Media Relations Contacts
Geno Effler, J.D. Power; Costa Mesa, Calif.; 714-621-6224; media.relations@jdpa.com
John Roderick, JRoderick PR; St. James, N.Y.; 631-584-2200; john@jroderick.com

About J.D. Power and Advertising/Promotional Rules www.jdpower.com/about-us/press-release-info

# # #

NOTE: Eight charts to follow.

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study℠



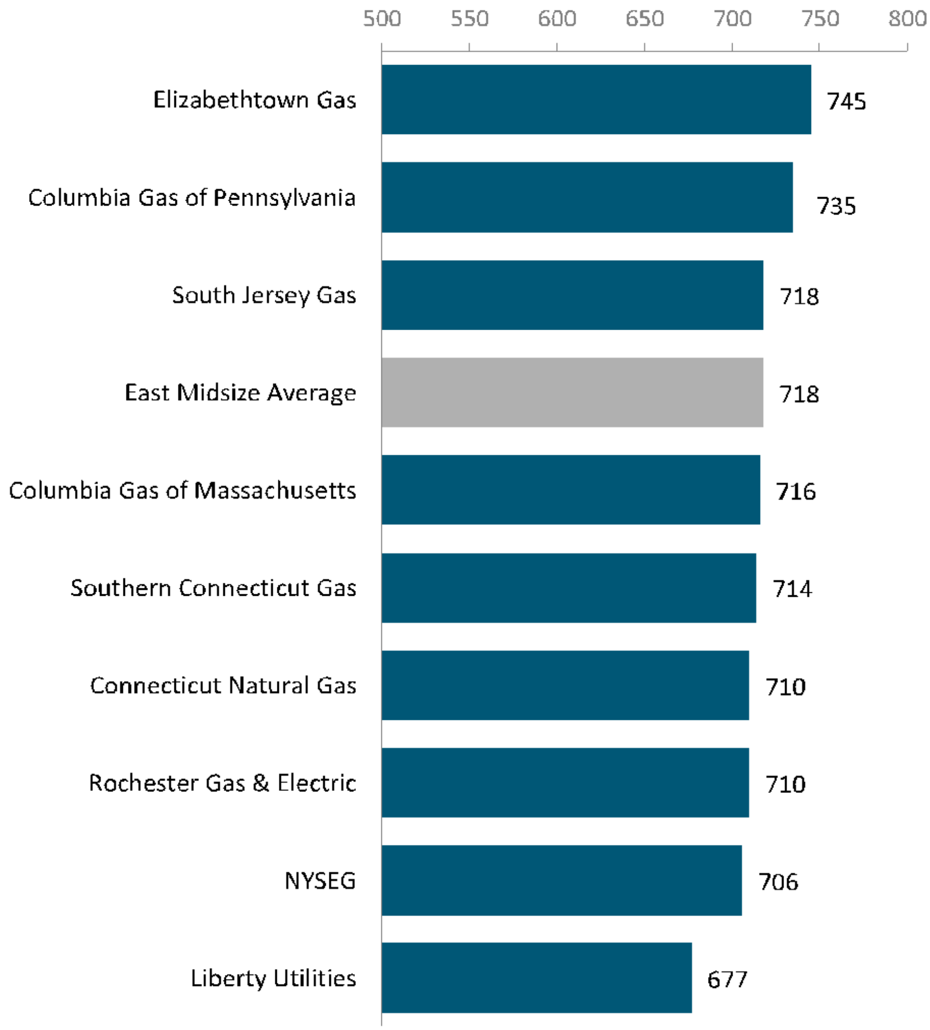
Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study℠

Charts and graphs extracted from this press release for use by the media must be accompanied by a statement identifying J.D. Power as the publisher and the study from which it originated as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study℠

East Region: Midsize Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

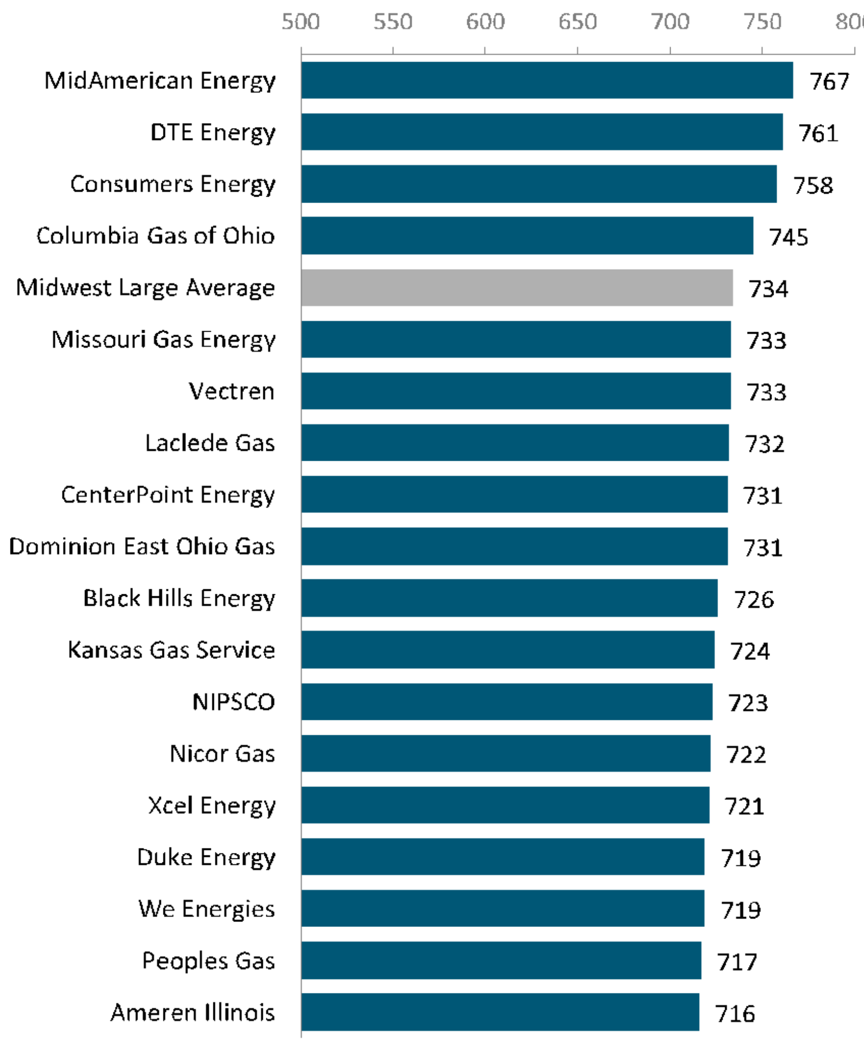


Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study^SM

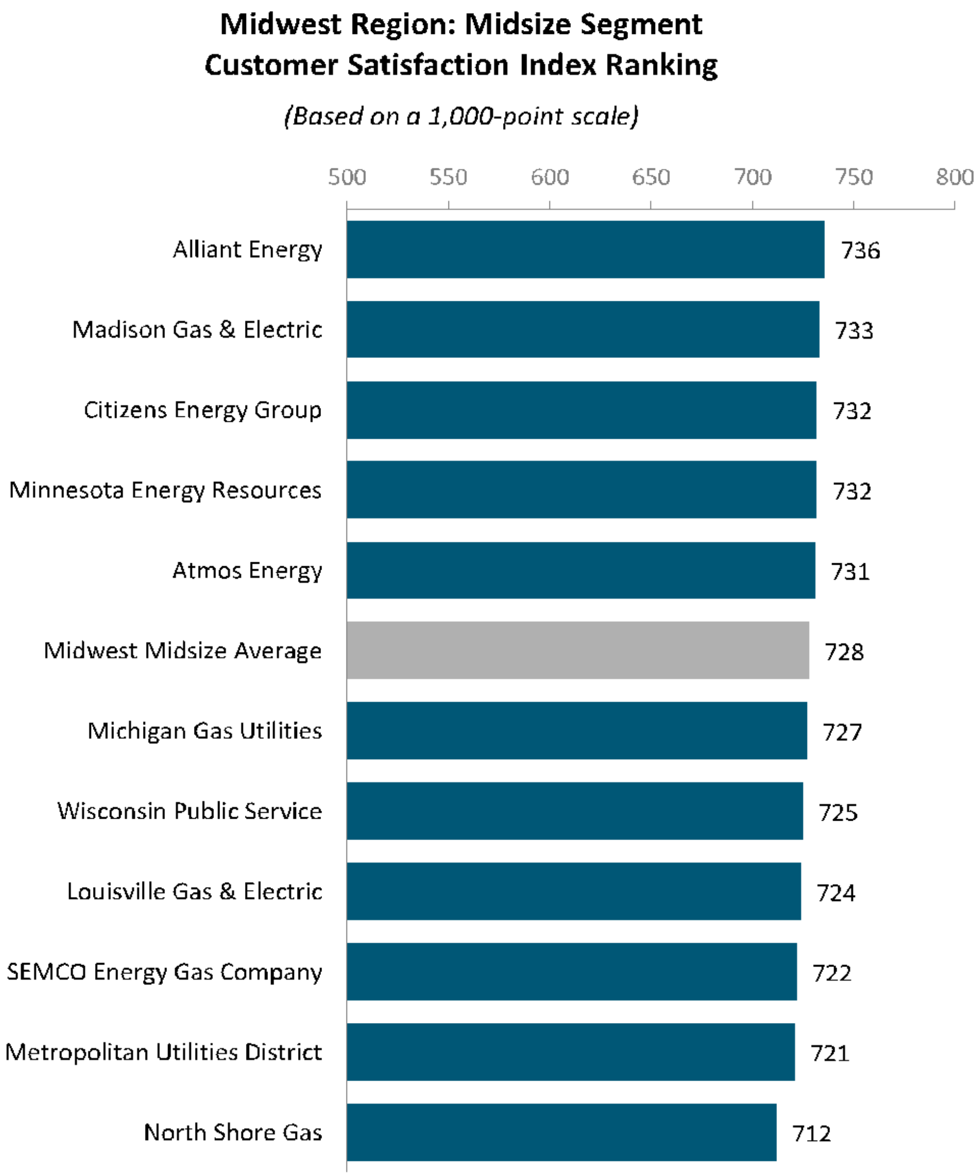
Midwest Region: Large Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)



Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study^SM

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study℠

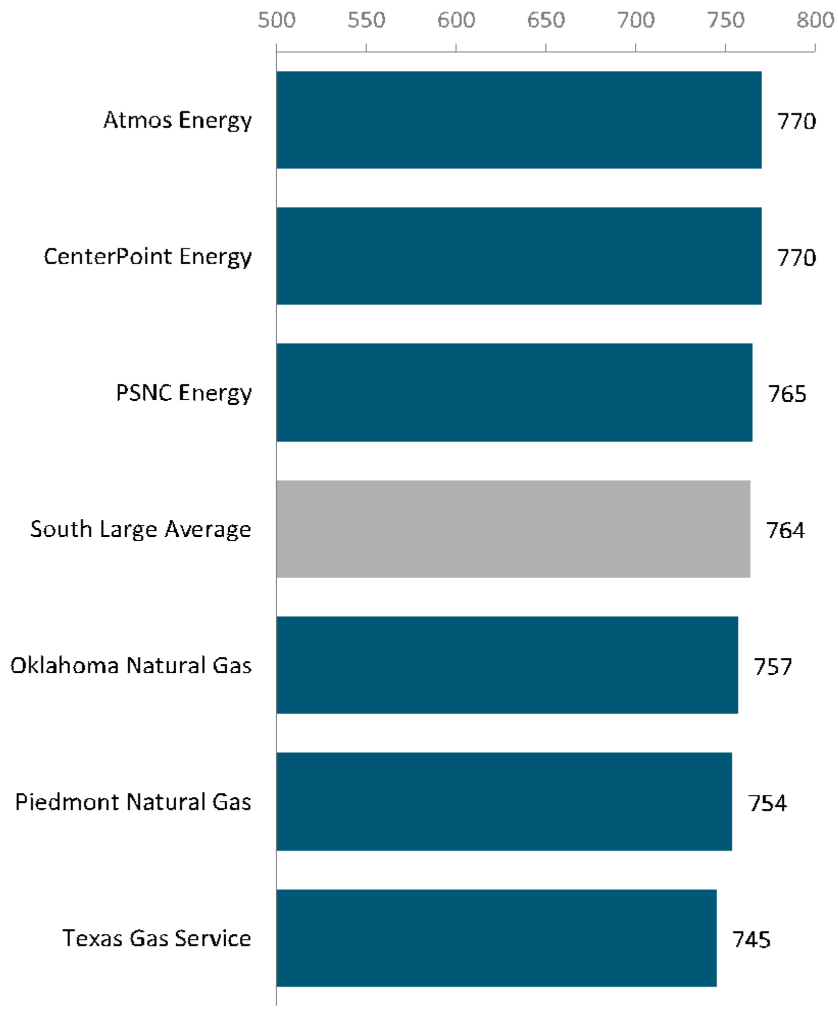


Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study[SM]

South Region: Large Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)



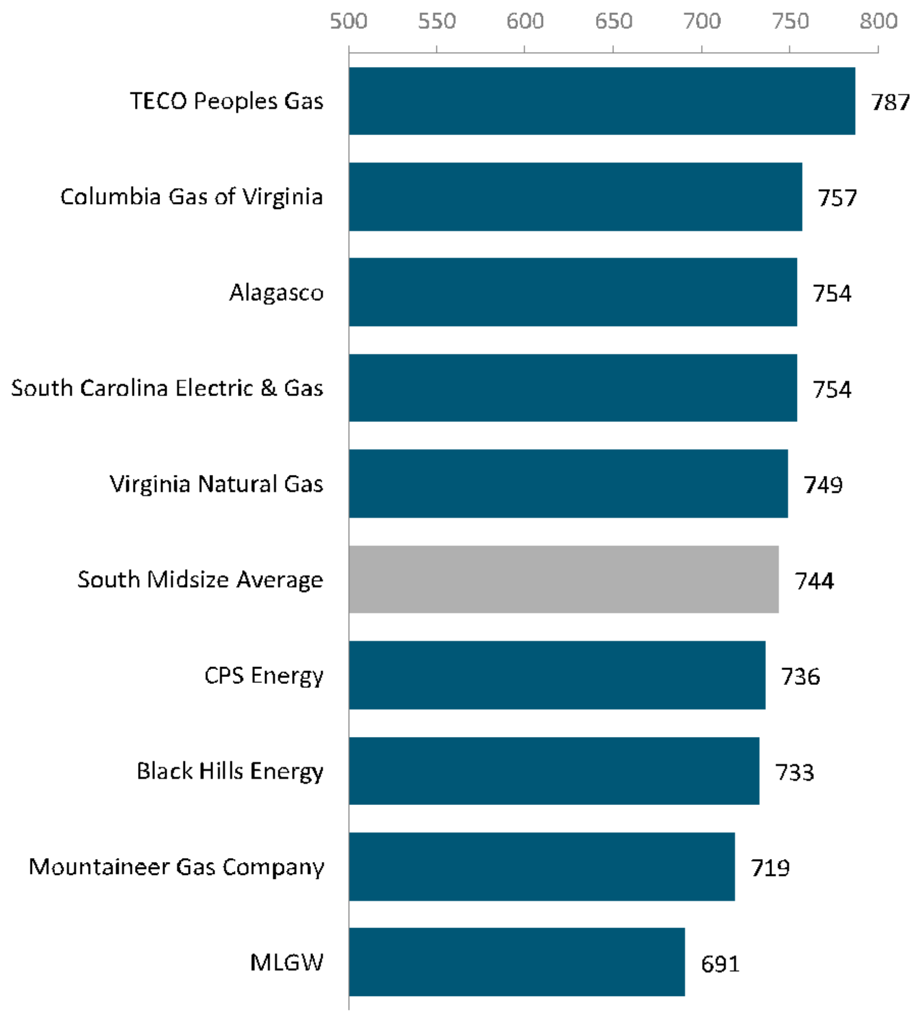
Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study[SM]

Charts and graphs extracted from this press release for use by the media must be accompanied by a statement identifying J.D. Power as the publisher and the study from which it originated as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study℠

South Region: Midsize Segment
Customer Satisfaction Index Ranking

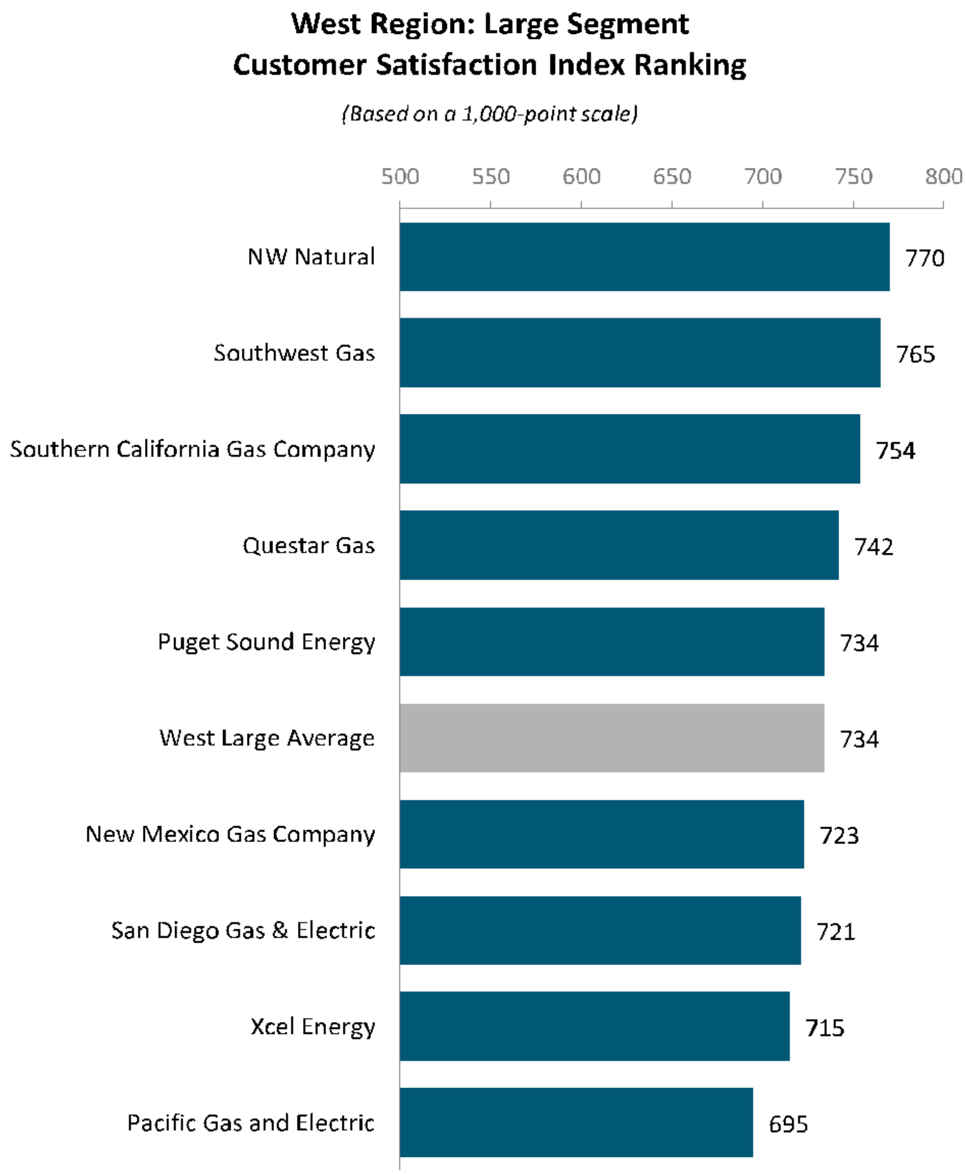
(Based on a 1,000-point scale)



Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study℠

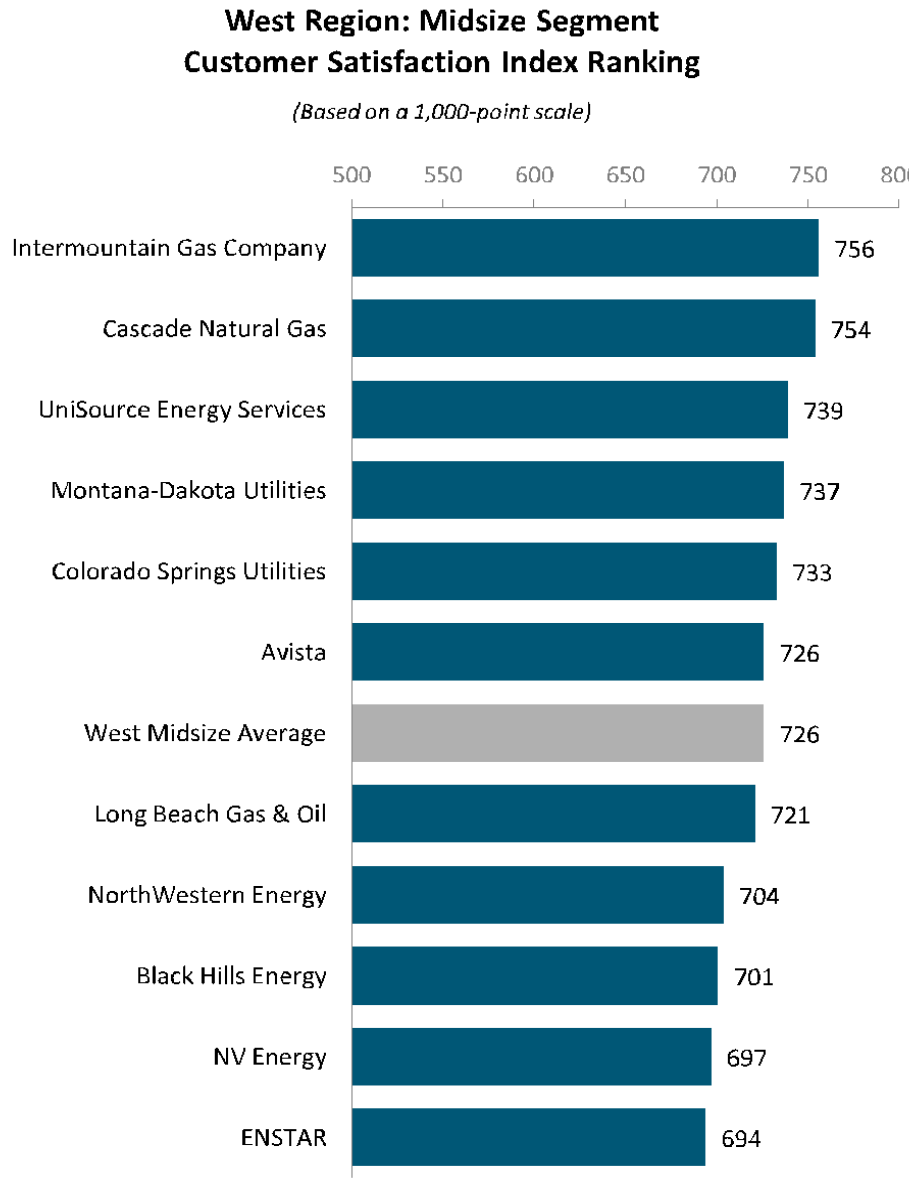
Charts and graphs extracted from this press release for use by the media must be accompanied by a statement identifying J.D. Power as the publisher and the study from which it originated as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study^{SM}



Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study^{SM}

J.D. Power
2017 Gas Utility Residential Customer Satisfaction Study℠



Source: J.D. Power 2017 Gas Utility Residential Customer Satisfaction Study℠

J.D. POWER

Press Release

Even After Headlines Fade from Natural Gas Accidents, Customer Perceptions of Gas Utility Safety Can Take Years to Recover

Safety and Reliability Play Biggest Roles in Customer Satisfaction with Residential Gas Providers

COSTA MESA, Calif.: 14 Sept. 2016 — In a year when a natural gas-related accident has made national news, customers' impressions of media stories about their gas provider are increasingly positive nationally. However, customer concerns regarding safety and reliability can linger for years after a major incident, according to the J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study,SM released today.

The study, now in its 15th year, finds that despite incidents such as the recent Aliso Canyon, Calif., methane gas leak that grabbed national media attention beginning in late 2015, the negative impact on customers' impressions of media news toward their utilities was fairly short-lived. Overall, 46% of customers of natural gas providers have a positive impression of media news toward their utility, up from 41% in 2015. While these positive impressions took a dip among customers surveyed during the spring when national media stories about the accident were at their height, they rebounded quickly.

Over the past six years, the study has found that customer recall of negative news stories fade approximately six months after big headline news about safety. However, the negative effect of those stories lingers in customers' minds for much longer in terms of their ratings for their utility's ability to maintain a safe gas system. For example, ratings plummeted after a gas explosion in San Bruno, Calif., in 2010 and have just now, in 2016, recovered to their 2010 levels.

"Perhaps gas providers can learn from the automotive industry—another industry where safety is paramount," said **Carl Lepper, industry analyst in the utility and infrastructure practice at J.D. Power.** "When safety issues arise that put customers' lives and property at stake, automakers proactively and publicly reach out to customers and media to communicate what they are doing to remedy the issue. Gas providers should consider taking a similar approach in communicating what they will do immediately following an incident to keep accidents from recurring."

Reflecting the importance gas customers place on issues surrounding safety, for the first time in this study all safety-related questions are measured as part of a dedicated safety and reliability factor. The study measures residential customer satisfaction with gas utility companies across six factors (in order of importance): safety and reliability; billing and payment; price; corporate citizenship; communications; and customer service. Satisfaction is calculated on a 1,000-point scale.

Customer satisfaction with residential gas utilities averages 706 index points. While the overall scores for 2016 cannot be directly compared to previous years due to a new study model, the current industry-wide average score represents a 17-point[1] overall increase from 2015. This increase is driven primarily by customer satisfaction with price—as the cost of natural gas has remained low—and communications.

[1] Adjusted to reflect the change in the study model

Following are some of the key findings of the study:

- **Average Monthly Bills Continue to Fall:** The average reported monthly bill amount continues on a downward trend, averaging $73 in 2016, down from $80 in 2015 and $81 in 2014. Satisfaction in the price factor is improving, averaging 652 index points in 2016, compared with 620 in 2015 and 590 in 2014.
- **Service Interruptions:** In 2016, 10% of customers say they had an interruption with their gas service; when providers proactively notify customers about the interruption, satisfaction in the safety and reliability factor remains fairly high, averaging 822 points. This compares with 775 when they are notified through mass media. Satisfaction in the factor drops to 699 among customers who are not notified at all.

Study Rankings
The study ranks large and midsize utility companies in four geographic regions: East, Midwest, South and West. Companies in the midsize utility segment serve between 125,000 and 399,000 residential customers, and companies in the large utility segment serve 400,000 or more residential customers.

The following utilities rank highest in customer satisfaction in their respective regions:

- East Large: New Jersey Natural Gas
- East Midsize: Elizabethtown Gas
- Midwest Large: MidAmerican Energy
- Midwest Midsize: Louisville Gas & Electric
- South Large: PSNC Energy
- South Midsize: TECO Peoples Gas
- West Large: NW Natural
- West Midsize: Cascade Natural Gas

The 2016 Gas Utility Residential Customer Satisfaction Study is based on responses from more than 62,000 online interviews conducted between September 2015 through July 2016 among residential customers of 82 large and midsize gas utility brands across the continental United States.

Media Relations Contacts
John Tews; Troy, Mich.; 248-680-6218; media.relations@jdpa.com

About J.D. Power and Advertising/Promotional Rules www.jdpower.com/about-us/press-release-info

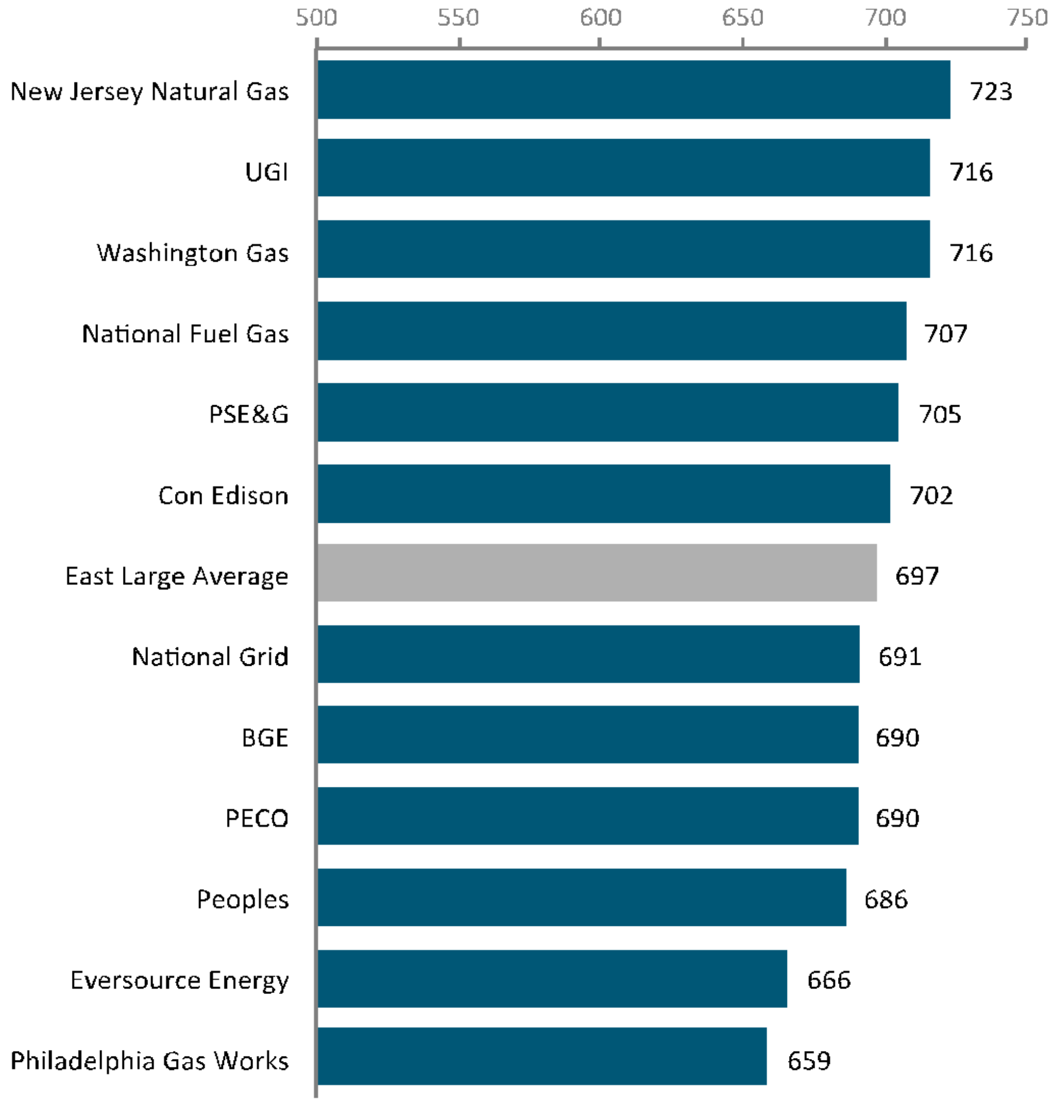
# # #

NOTE: Eight charts follow.

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

East Region: Large Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

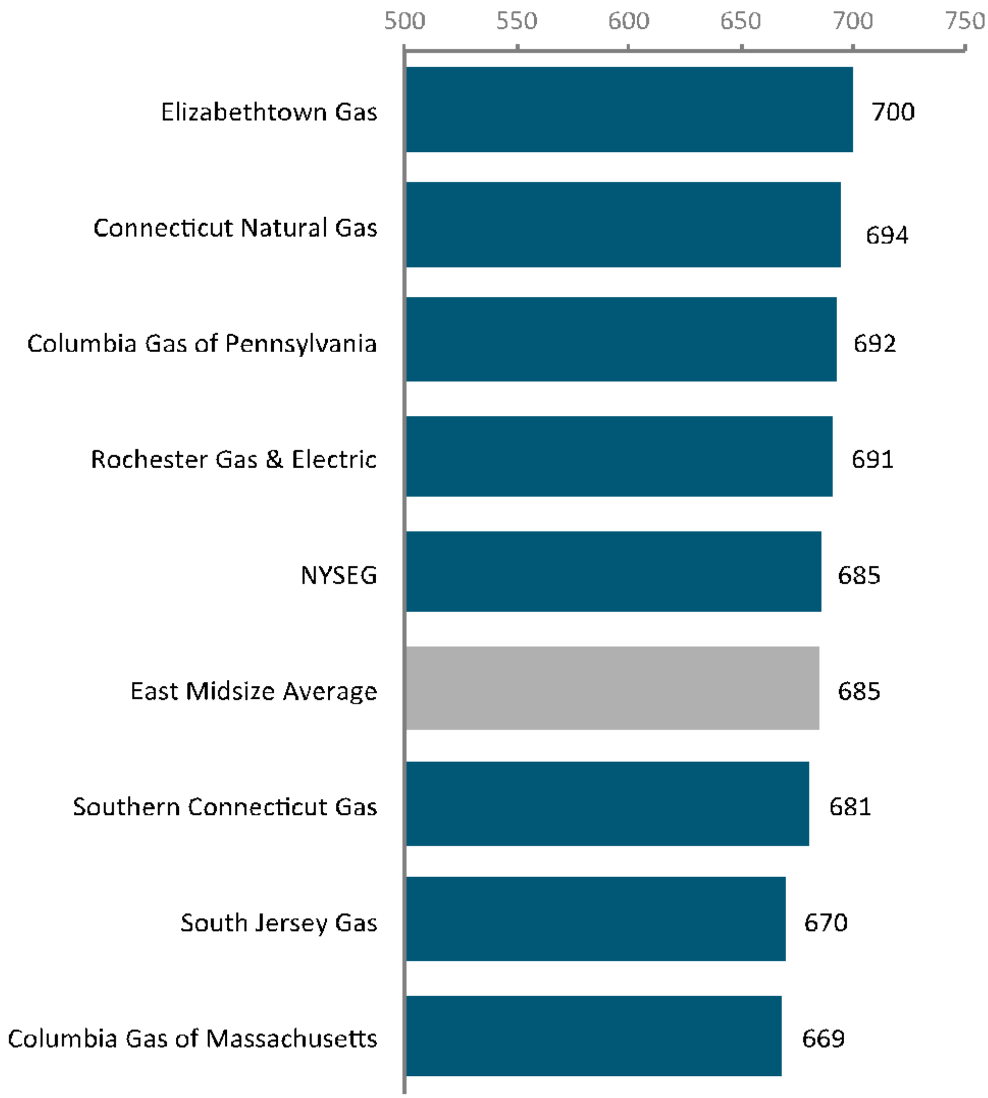


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

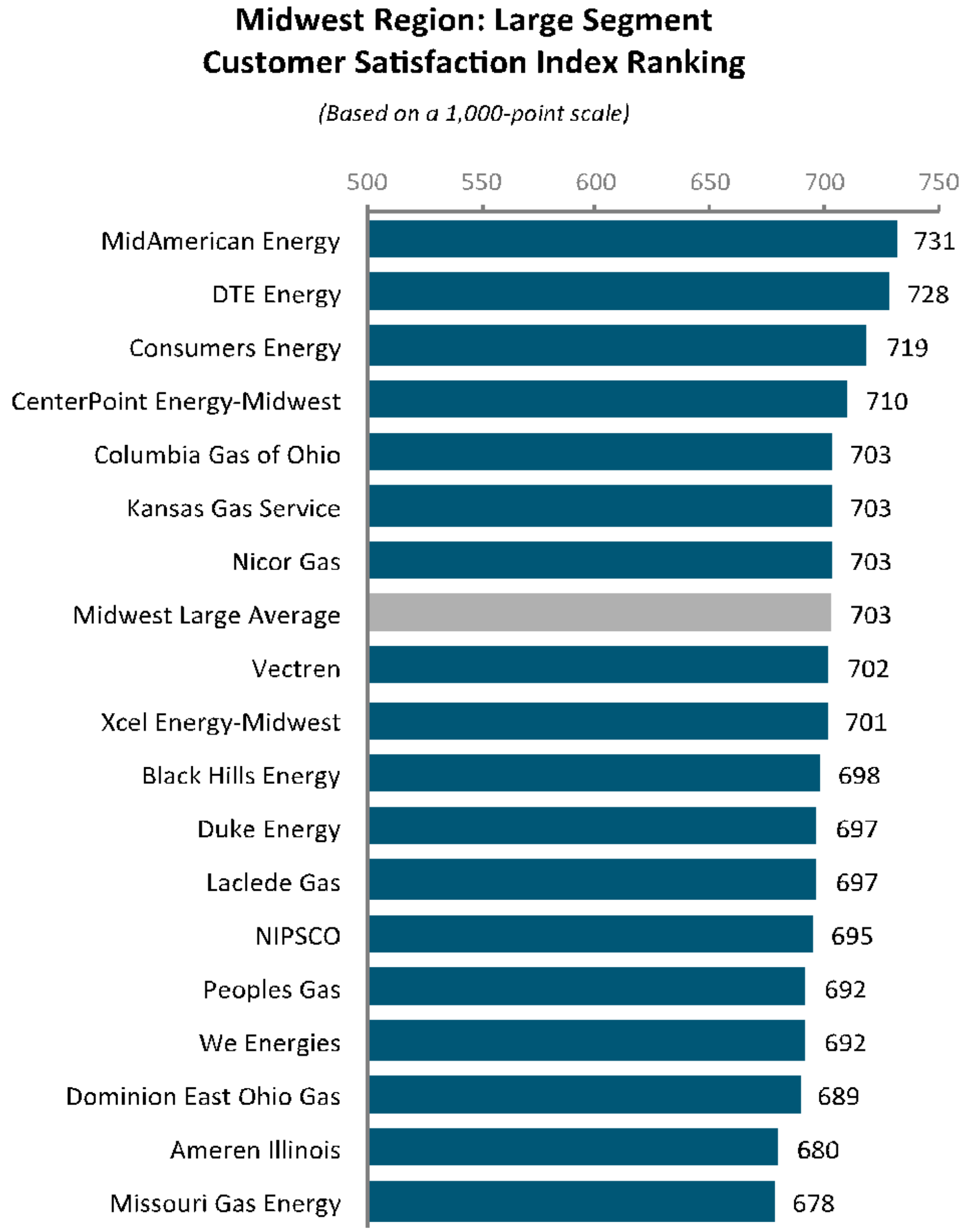
East Region: Midsize Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)



Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

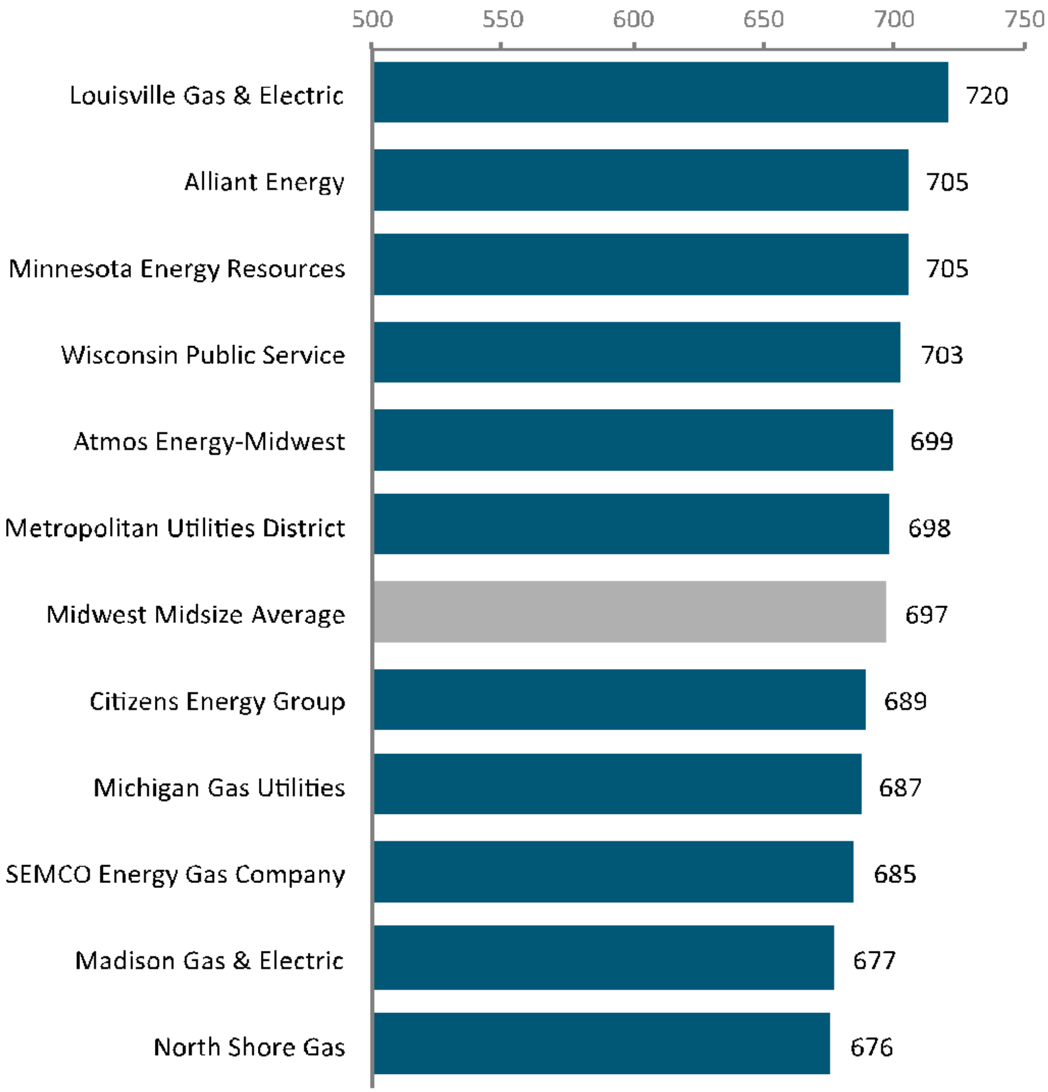


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

Midwest Region: Midsize Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

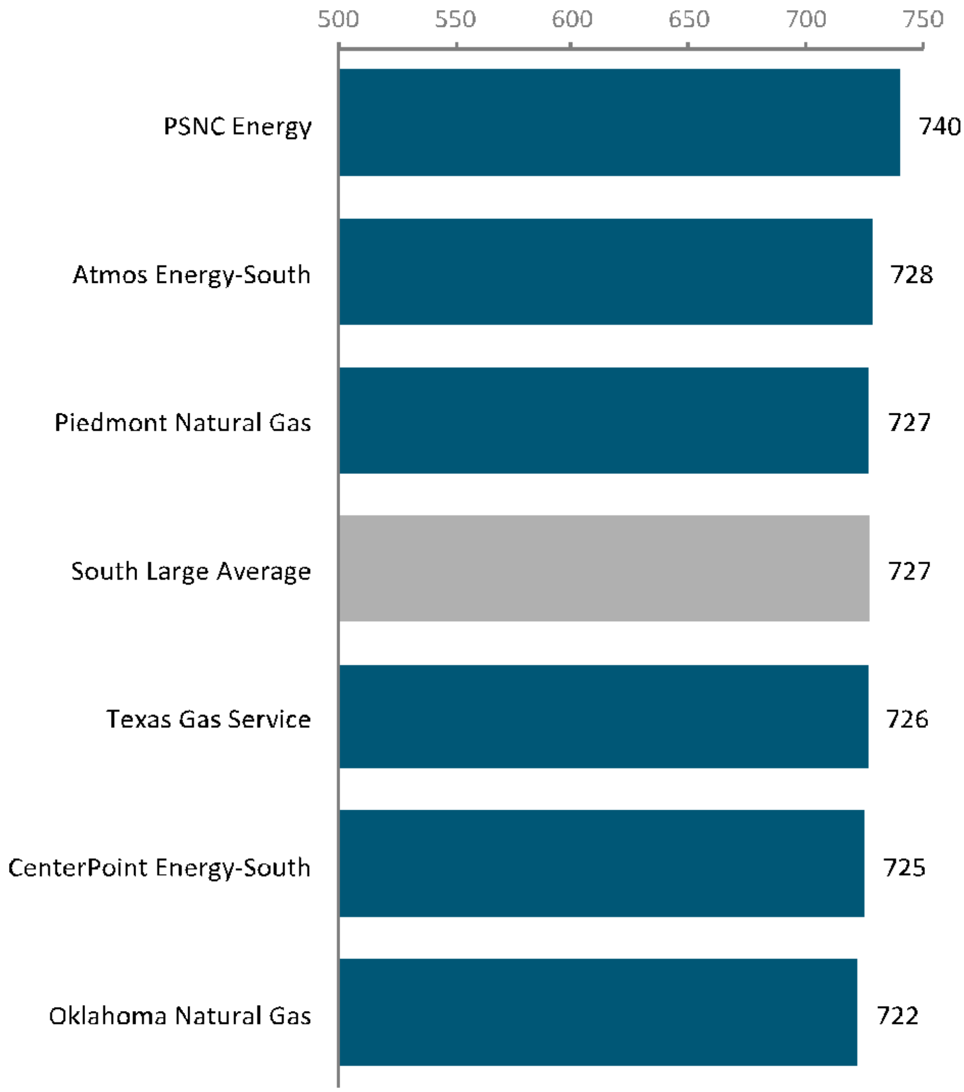


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

South Region: Large Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

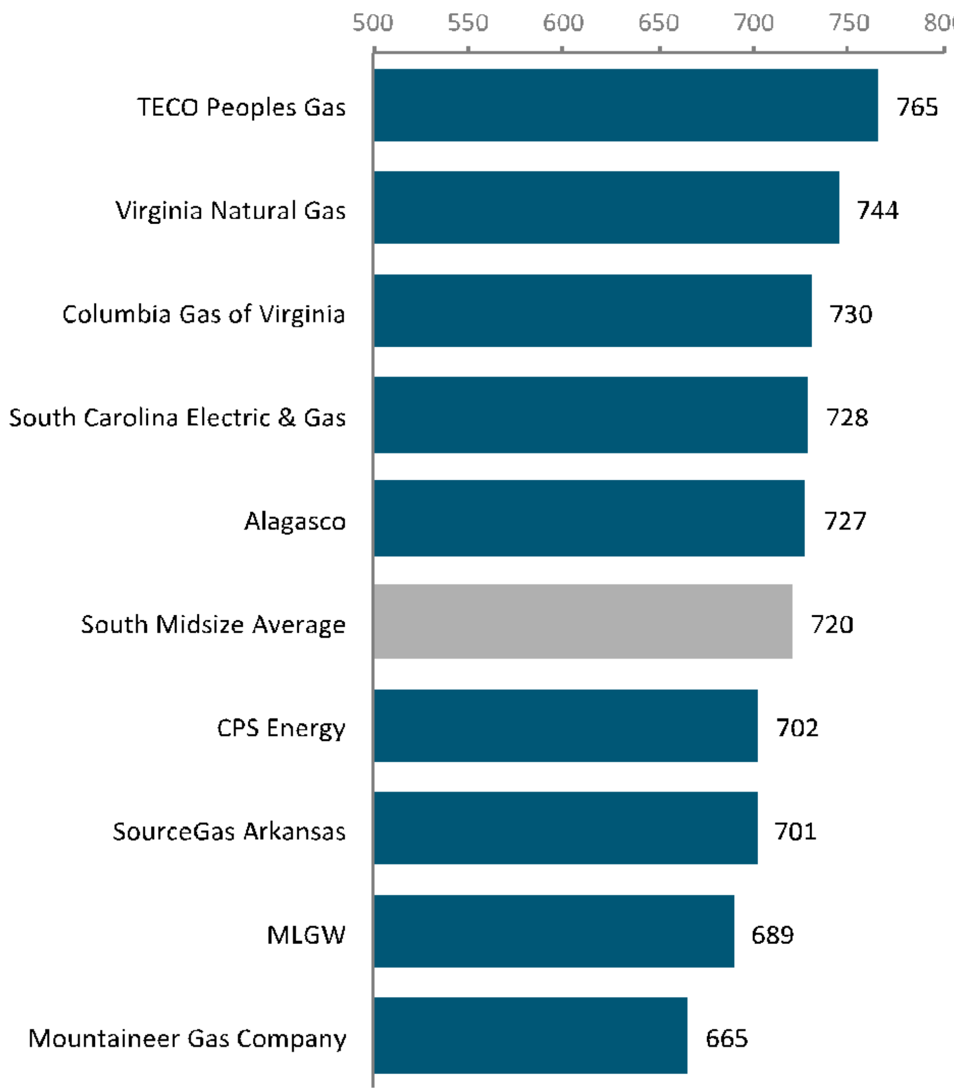


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study℠

South Region: Midsize Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

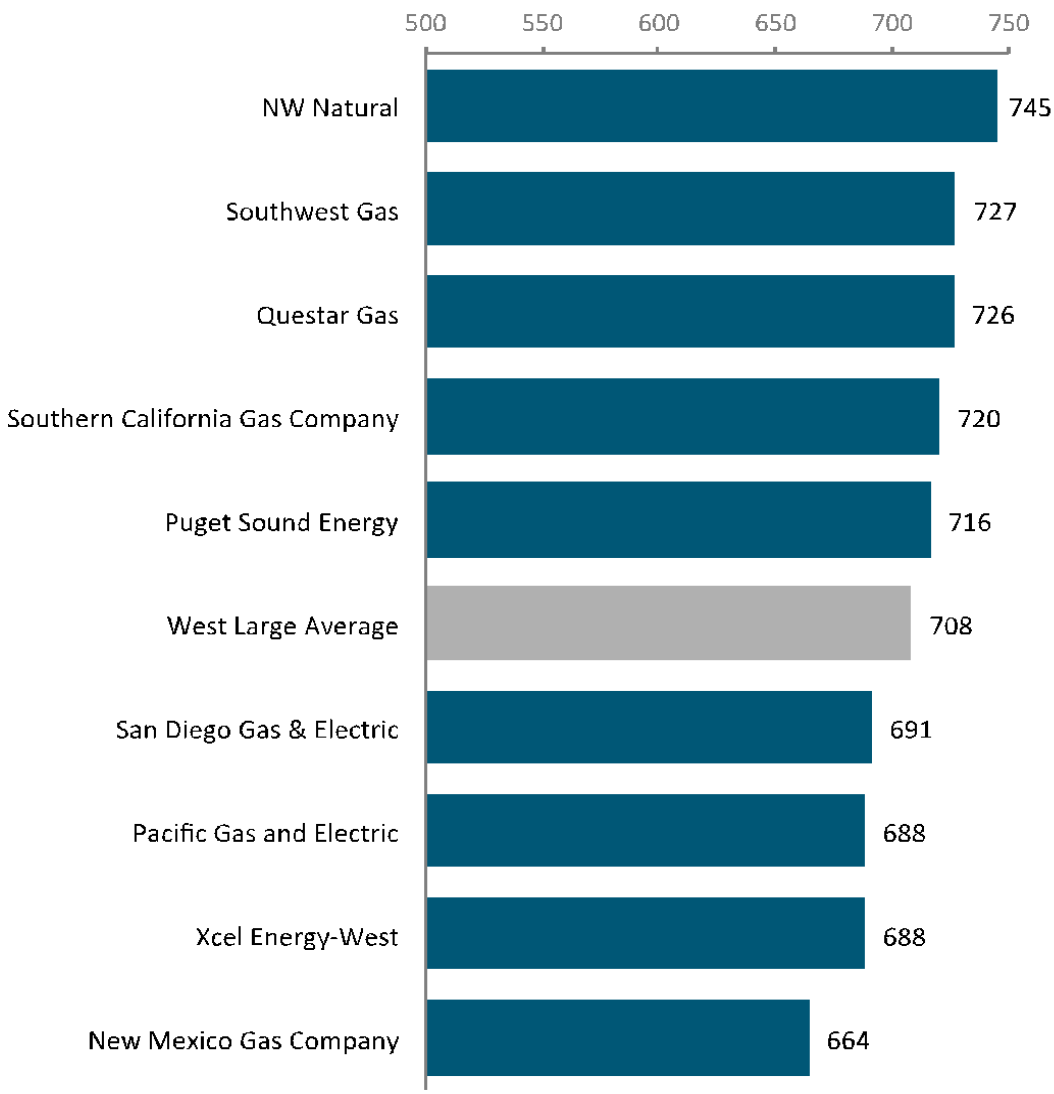


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study℠

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study^SM

West Region: Large Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)

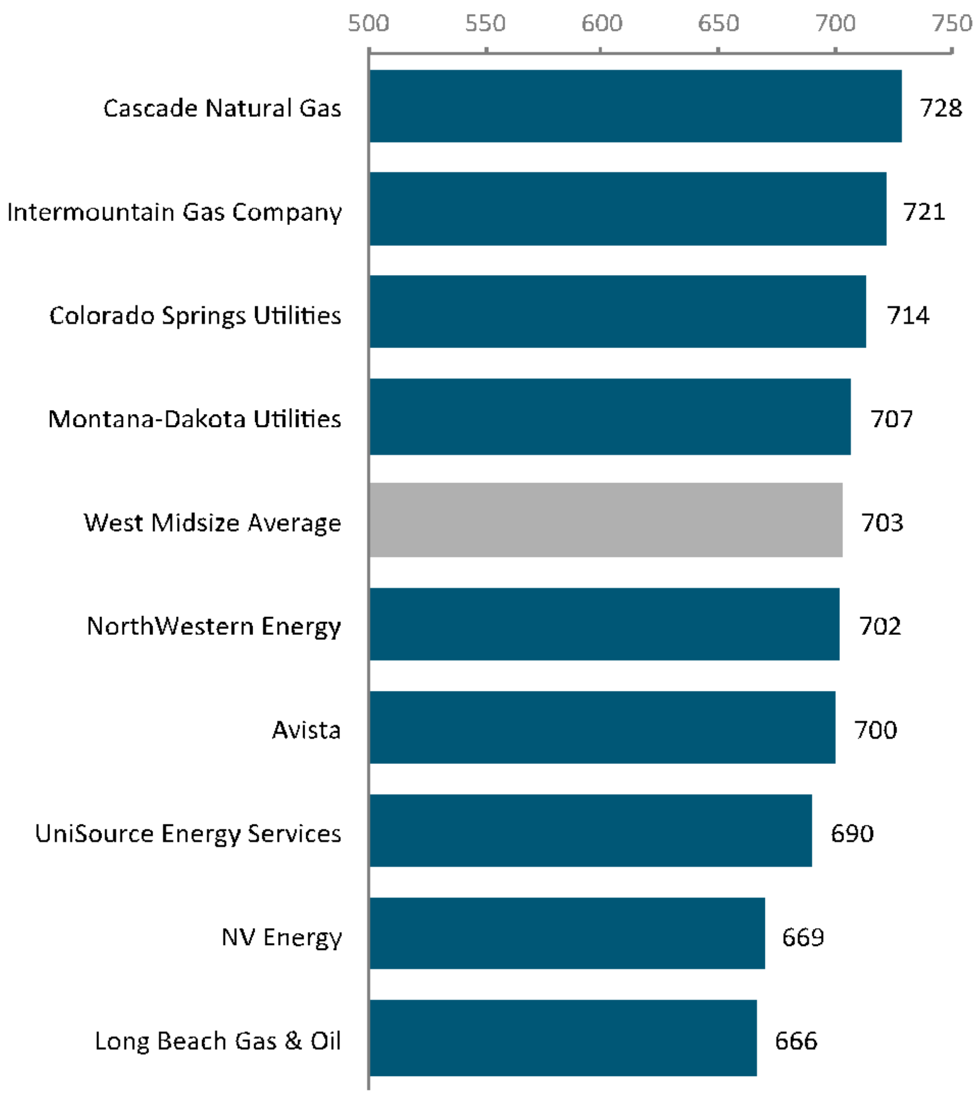


Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study^SM

J.D. Power
2016 Gas Utility Residential Customer Satisfaction Study^{SM}

West Region: Midsize Segment
Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)



Source: J.D. Power 2016 Gas Utility Residential Customer Satisfaction Study^{SM}