MUNICIPAL POWER ADVANTAGE

Barnesville Municipal Utilities

The Benefits of Having a Municipal Electric Utility

July 2013

BARNESVILLE MUNICIPAL UTILITIES
MUNICIPAL POWER ADVANTAGE REPORT
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This Municipal Power Advantage report was completed by Missouri River Energy Services and its member, Barnesville Municipal Utilities. In completing this report, Missouri River Energy Services has relied on the data and materials provided by Barnesville and others to be accurate, and has not independently verified their accuracy. The analysis, conclusions, and recommendations contained in this report constitute the opinions of Missouri River Energy Services based on the data and materials provided.

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MUNICIPAL POWER ADVANTAGE

Municipal Power Advantage Report

The Municipal Power Advantage report provided by Missouri River Energy Services (MRES) highlights the value and benefits of the municipally-owned Barnesville electric utility. The electric utility provides several benefits and supports the community in many ways beyond providing reliable power. Many of the benefits may not be known and understood by the public and the governing boards in Barnesville. The goals of the Municipal Power Advantage program are the following:

- To determine the value of the benefits the electric utility has to the community
- To develop a communication plan, including a presentation to the City Council
- To educate policymakers and the customers about the financial and non-financial benefits of the electric utility
- To increase the public's awareness and perception of the utility

Barnesville Municipal Utilities is one of approximately 2,000 publicly-owned electric utilities operating in the United States today. Publicly-owned electric utilities are mostly owned by the local city; however, some utilities are organized as public power districts, counties, or states. For example, the State of Nebraska provides only public power.

This report highlights the benefits that the local municipal electric utility brings to the community of Barnesville. Some of the benefits have a significant positive financial impact to the community while other benefits are hidden gems that will be uncovered. The local municipal electric utility is an outstanding asset to the community of Barnesville.

A Snapshot of Barnesville, Minnesota

Located on Interstate 94 only 25 miles east of the Fargo-Moorhead metropolitan area, Barnesville is a small, agricultural based community. Barnesville prides itself on being a full service community with a K-12 school system, bountiful parks, and a wide range of businesses. With more than 150 new homes constructed since 2000, Barnesville is a growing community. This family friendly place has a strong sense of community and high quality of life for the 2,588 people who call Barnesville home.

Barnesville Municipal Utilities provides a one-stop shop for most utility services. Those services not only include electricity but also water, sanitary sewer, telecommunications, cable TV, internet, garbage, and a recycling center. With municipally-owned utilities, customers are the owners and elect or appoint the decision makers. The charges for services are based on the costs of operating each utility, not for shareholder profits. Net income is also reinvested into infrastructure and equipment upgrades or placed into reserves for future expenditures rather than being paid out to shareholders who are expecting a return.

Barnesville Municipal Utilities' Electric System

Barnesville Municipal Utilities was established in 1899 when the electric light plant was finished with an 80 horse power engine. Today, the utility only provides local distribution services and serves approximately 1,050 Residential customers and 125 commercial and industrial customers. Approximately 50 percent of the distribution system is underground.

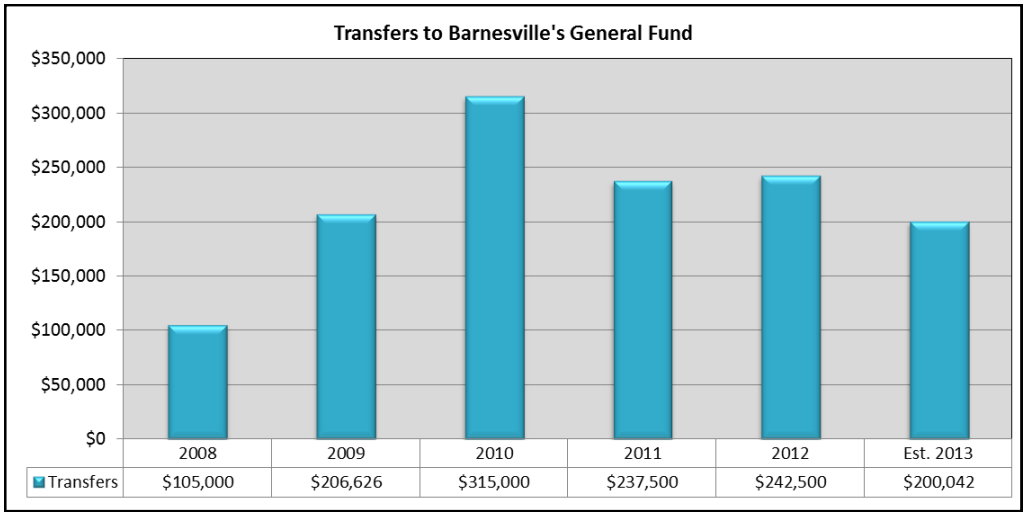
BENEFITS TO BARNESVILLE BY HAVING A LOCALLY-OWNED ELECTRIC UTILITY

Tangible Financial Benefits

The City of Barnesville, its residents and businesses receive many benefits by being serviced by a public power system. One of the many benefits includes the transfer to the city's general fund to support other city services. Another tangible financial advantage includes overall lower wholesale power supply and transmission costs compared to the average cost of 18 regional suppliers.

Transfer to the City of Barnesville's General Fund

The operating transfer of monies to the city's general fund, also known as a payment in lieu of taxes, is typically considered as a rate of return to the city for investing in the municipal electric utility. In recent years, due to reduced revenue resources for many Minnesota cities, including various local taxes and the State of Minnesota's Local Government Aid, the city has looked to other revenue resources to fulfill the general fund's budget shortfall. In many cases the electric utility was able to transfer additional funds to provide financial support to the city in order to maintain its current level of services. In Barnesville, the transfer increased from $105,000 in 2008 to $315,000 in 2010 and then it has gradually decreased to about $200,000 in 2013. The historical transfers to the city's general fund are shown in the graph at the top of the next page.



If the transfer was not available and locally controlled by the City Council, the Council would have likely needed to look elsewhere for general fund revenue sources. The electric utility's transfer to the General fund is not earmarked towards specific services; therefore, the transfer is considered to be supporting a portion of every service the City of Barnesville provides. In the past, the electric utility has supported the Potato Days Festival. The Public Works Department, which is partly funded through the electric utility transfer, uses five men and several pieces of equipment including trucks, a trailer, and the pay loader to set up for the festival. The crew provides support while the festival is in progress and also assists with the teardown and cleanup. The estimated cost for labor and equipment is $15,000 per year. In addition to supporting the festival, the electric utility provides free electric service to the entire festival grounds during the celebration each year.

In April 2013, the Barnesville City Council approved a formula to determine the annual transfer to the general fund as a result of the 2013 MRES rate study recommendations. The formula is $0.0095 per kWh sold to the residential, general service, large power, dual fuel, and off-peak heating classes and excludes donated usage. The transfer policy allows both the utility and the city's general fund to better plan for their annual budgets. The policy also allows the ability to plan for long-term major capital expenditures and provide reserves available to support the expenditures. The predictable transfer will help the utility determine a retail rate plan that ensures revenue requirements, including the transfer and the cost of donated usage and labor, are recovered through rates. The transfer to the City will increase over time as the utility energy sales increase resulting in a win-win for both entities.

The table at the top of the following page shows the annual transfer to the City of Barnesville from 2010 through 2012, the 2010-2012 average, and the estimated 2013 transfer based on the newly adopted transfer policy. The transfer as a percentage of operating revenues has been between 12.4 percent and 16.3 percent of operating revenues, and it is estimated to be 9.9 percent of operating revenues in 2013. Due to the new transfer policy, the transfer as a percentage of revenues is projected to average 9.6 percent of operating revenues from 2013 through 2017.

Transfer to the City of Barnesville and the Transfer as a Percentage of Revenues					
	2010	2011	2012	2010-2012 Average	Estimated 2013
Transfer to the General Fund	$315,000	$237,500	$242,500	$265,000	$200,042
Operating Revenues	$1,935,774	$1,904,417	$1,953,755	$1,931,315	$2,023,742*
% of Operating Revenues	16.3%	12.5%	12.4%	13.7%	9.9%

* 2013 projected revenues are based on the implementation of the 2.8 percent overall rate increase in July 2013.

Value of Donated Electric Service

In addition to the cash transfer to the general fund, the electric utility contributes to the city and other utility funds in several other ways. The contributions primarily include free electric service and donated labor.

The electric utility donates energy usage to other utility funds including water, sanitary sewer, and the telephone, cable, and TV utility. The retail value of the electric service has averaged almost $38,400 per year from 2010 to 2012. The donated electric usage results in lower operating expenses for these utilities, which is likely reflected in lower charges for these services.

The electric utility also donates electric service to the city hall building and other city facilities. The retail value has averaged about $97,650 from 2010 to 2012. Meanwhile, the utility also donates street lighting, which includes the energy usage and maintenance of the fixtures. Street lighting has an average annual value of over $35,900 from 2010 through 2012. Lastly, the donated value for electric service to the recreational facilities increased from $4,263 in 2010 to $6,300 in 2012. The average retail value for these donated services to the city's general fund was $139,048 per year from 2010 through 2012. The electric utility expects to donate an estimated $181,578 in total electric service in 2013. As electric rates increase, the retail value of donated services will also increase.

Retail Value of Donated Electric Service					
	2010	2011	2012	2010-2012 Average	Estimated 2013
Utility Department Funds					
Water Utility	$12,253	$12,517	$12,517	$12,498	$12,903
Sanitary Sewer Utility	$9,583	$10,508	$11,250	$10,447	$11,408
Telephone, Cable, TV	$16,386	$14,584	$15,300	$15,423	$15,514
Subtotal: Utility Funds	**$38,222**	**$37,608**	**$39,275**	**$38,368**	**$39,825**
City's General Fund					
City Hall & City Facilities	$101,267	$94,181	$97,500	$97,649	$98,865
Street Lighting	$35,655	$35,655	$36,416	$35,909	$36,500
Recreational Facilities	$4,263	$5,906	$6,300	$5,490	$6,388
Subtotal: City Fund	**$141,185**	**$135,742**	**$140,216**	**$139,048**	**$141,753**
Total Donated Electric Service	**$179,406**	**$173,350**	**$179,491**	**$177,416**	**$181,578**

Contribution Margin

The wholesale power supply and transmission cost of providing the donated electric service to the city and utility departments averaged $95,151 per year from 2010 through 2012, which is the cash expenditure of providing the donated electric services. For 2010 through 2012, the difference between the average retail value of donated electric services of $177,416 and the average wholesale power supply cost is $82,266. This is referred to as the contribution margin, or the retail revenues less wholesale power supply and transmission costs. The contribution margin pays for the local costs that include the operation and maintenance of the distribution system, metering, billing, debt service obligations, transfers, and other non-power supply costs. The utility incurs these same costs for the donated electric services as they do for the retail rate classes.

Wholesale Power Supply Cost of Donated Electric Service and Contribution Margin					
	2010	2011	2012	2010-2012 Average	Estimated 2013
Power Supply Cost / kWh	$0.0573	$0.0554	$0.0561	$0.0563	$0.0559
Total Donated kWh	1,712,072	1,649,954	1,710,210	1,690,745	1,710,210
Cost of Power Supply	$98,102	$91,407	$95,943	$95,151	$95,601
Total Retail Value of Donated Electric Services	$179,406	$173,350	$179,491	$177,416	$181,578
Contribution Margin (CM)	**$81,304**	**$81,943**	**$83,548**	**$82,265**	**$85,977**

Value of Donated Labor

In addition to donated energy service, the electric utility provides tree trimming labor for other utilities at an estimated value $1,250 per year. The utility also provides labor to install and take down holiday lights, which has an annual labor value of $750 to the city's general fund.

Value of Donated Labor					
Service Provided	**2010**	**2011**	**2012**	**2010-2012 Average**	**Estimated 2013**
Utility Funds					
Tree Trimming	$1,250	$1,250	$1,250	$1,250	$1,288
City's General Fund					
Installing Holiday Lights	$750	$750	$750	$750	$773
Total Donated Labor	**$2,000**	**$2,000**	**$2,000**	**$2,000**	**$2,060**

The table at the top of the following page summarizes the total amount of the transfer to the city's general fund and the donated electric service and labor provided by the electric utility. **From 2010 through 2012, the total averaged $444,416 per year, or 23 percent of operating revenues. At the bottom of the same table, the total transfer and donated service and labor averaged $20.70 per 1,000 kWh sold from 2010 through 2012. This value is estimated to decrease to $18.20 per 1,000 kWh in 2013.**

If the utility did not provide the transfer to the city's general fund and donated services and labor, the City of Barnesville would need to use alternative funding sources to maintain the high standard of services provided to its citizens and businesses.

Transfer and the Retail Value of Donated Electric Service and Labor					
	2010	2011	2012	2010-2012 Average	Estimated 2013
Transfer to City	$315,000	$237,500	$242,500	$265,000	$200,042
Donated Electric	$179,406	$173,350	$179,491	$177,416	$181,578
Donated Labor	$2,000	$2,000	$2,000	$2,000	$2,060
Total Transfers and Donated Services & Labor	**$496,406**	**$412,850**	**$423,991**	**$444,416**	**$383,680**
Total Transfers and Donated Service & Labor as a Percentage of Revenues					
Operating Revenues	$1,935,774	$1,904,417	$1,953,755	$1,931,315	$2,023,742
% of Operating Revenues	25.6%	21.7%	21.6%	23.0%	19.0%
Total Transfers and Donated Service & Labor: $ per Retail kWh Sold					
Retail kWh Sold	21,979,595	21,123,955	21,158,711	21,420,754	21,057,015
$ per kWh Sold	$0.0226	$0.0195	$0.0200	$0.0207	$0.0182
Per 1,000 kWh	$22.60	$19.50	$20.00	$20.70	$18.20

Comparison of Barnesville's Transfers and Other Contributions to Other Utilities

The total dollar value of Barnesville's transfers, donated electric service to city facilities and other utilities, and donated labor had an equivalent value of 23 percent of the electric operating revenues from 2010 through 2012. The percentage of electric operating revenues is projected to decrease to 19 percent in 2013. According to the APPA report titled "Survey of Local Publicly Owned Electric Utilities Tax Payments and Contributions to State and Local Government", the average transfers, payments, and contributions by public power systems were 5.2 percent of operating revenues in 2010. Therefore, Barnesville Municipal Utilities' electric fund paid and donated on average 17.8 percent more of operating revenues than the median of other public power electric utilities from 2010 through 2012. MRES also monitors transfers and contributions of more than 65 regional municipal utilities, and the median percentage of transfers and contributions of these utilities is currently 5.8 percent of operating revenues.

Donated energy and other contributions are real operating costs to the electric utility, and those costs are recovered through the retail rates paid by other customers. On the other hand, most customers benefit through lower rates and fees for these services and utilities that are receiving donated electric service and labor. These benefits may or may not be equal to the amount customers pay on their electric bill to cover the cost of the donated services and labor. At times, these higher costs have had an impact on the competitiveness of Barnesville's electric rates. The following table calculates the 2013 transfer and donated services costs per bill for each rate class and usage level shown. The table also calculates Barnesville's bills less the 2013 estimated transfer amount and compares the bill to the Minnesota IOU/REC average bill. The results show the impact of the cost of the transfer and donated services to the competitiveness of Barnesville's customer bills.

In the following table, Barnesville's monthly bills are calculated based on the July 2013 rates and a typical level of usage for each rate class. Appendix B includes the comparison graphs for each class that are summarized in the table below. As shown, all of Barnesville's customer classes are higher than the average bill of the Minnesota investor-owned utilities (IOU) and the local rural electric cooperative (REC). The last column in the table indicates the percentage difference between Barnesville's bill with no transfer amounts and the average bill of the four IOU's and the REC, which is between about 14 percent and 20 percent lower.

Barnesville's Transfer & Donated Services per Bill and the Bill Less the 2013 Transfer Amount

Rate Class	Usage & Demand	Barnesville July 2013 Bill	2013 Transfer & Donated Services / Bill	Barnesville Bill Less 2013 Transfer Amt.	MN IOU/ REC Avg. Bill	Barnesville less IOU/ REC Avg.	% Differ-ence
Residential	1,000 kWh	$110.38	$18.20	$92.18	$107.47	($15.29)	(14.2%)
General Service Single-phase	1,400 kWh	$155.63	$25.48	$130.15	$151.80	($21.65)	(14.3%)
General Service Three-phase	3,000 kWh	$320.88	$54.60	$266.28	$299.39	($33.11)	(11.1%)
Large Power (Demand)	40,000 kWh 100 kW	$3,278.00	$728.00	$2,550.00	$3,220.95	($670.95)	(20.8%)

The cost of replacing all or a portion of the transfers and donated services provided by the electric utility would likely result in an increase of other local taxes collected by the city, such as sales and property taxes. Fees for some of the city services may need to be charged or increased, and in some cases, the services may be reduced or would no longer be provided. In addition, the operating costs of the other city-owned utilities would be higher as a result of paying for cost of electric service, which would likely result in higher retail rates for these services.

The polarity of having competitive electric rates and providing a reasonable rate of return to the city (transfers) results in a delicate balancing act. The City Council has the decision making and policy setting ability to determine and approve the best solution for the betterment of the community. Therefore, the City Council needs to consider the values and potential negatives of both poles when they are considering changes to the transfers and other contributions.

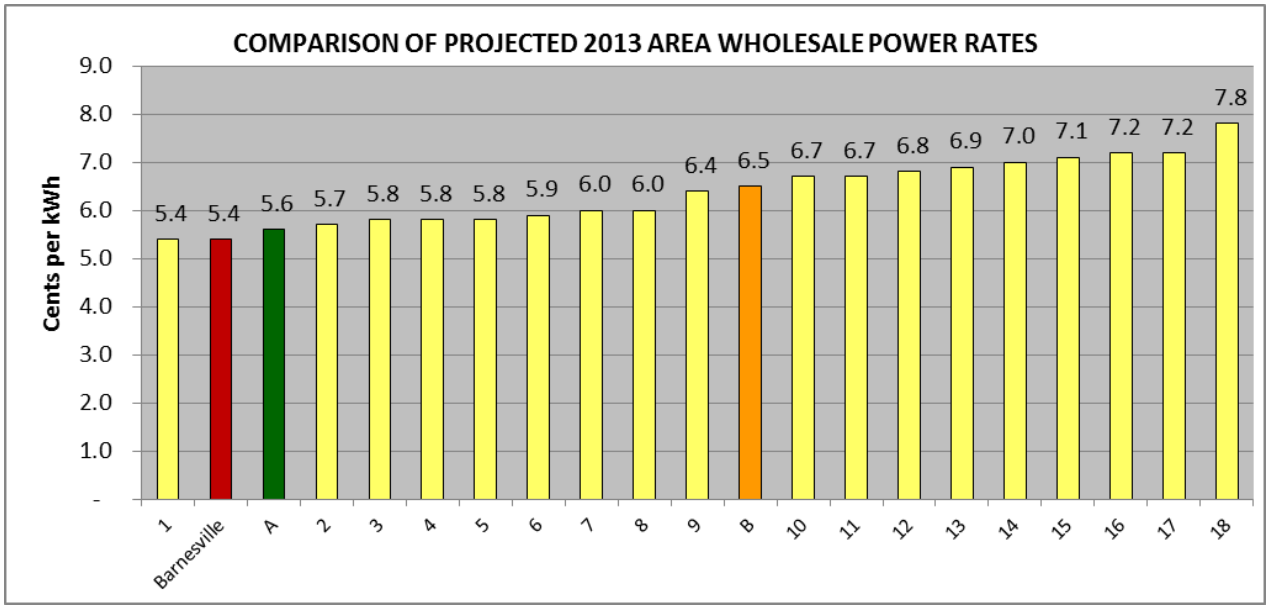
Wholesale Power Supply and Transmission Service

Barnesville Municipal Utilities receives a fixed monthly power allocation from the Western Area Power Administration (WAPA), which operates several hydroelectric plants along the Missouri River. In 2013, Barnesville is projected to receive about 50 percent of its power requirements from WAPA. Barnesville receives all requirements above the WAPA allocation from MRES. The utility has an S-1 purchased power agreement with MRES through 2046. Transmission service from the WAPA outlet to Barnesville's town gate is provided through the Northern Cities Group (NCG). NCG consists of 13 MRES members located in west-central Minnesota, eastern South Dakota, and eastern North Dakota.

WAPA's composite rate is 3.325 cents per kWh, which is cost-based. The composite rate is the total of the demand and energy charges divided by the kWh purchased. Due to the drought-related costs and deficits, WAPA gradually increased rates from an average composite rate of about 1.4 cents in 2003 to the current rate of 3.325 cents. WAPA's rates have been stable since 2010.

The MRES S-1 supplemental composite rate has been stable at approximately 5.6 cents per kWh since its last rate increase in 2009. Barnesville's blended wholesale power rate is projected to be 5.4 cents per kWh in 2013. The blended wholesale power rate is the sum of the costs from WAPA, MRES, and NCG transmission divided by the total kWh purchased from WAPA and MRES.

As shown in the next chart, the 2013 S-1 Supplemental rate of 5.6 cents per kWh (green bar) is projected to be 14 percent lower than the average wholesale composite rate of 18 area power suppliers at 6.5 cents per kWh (orange bar). From 2003 through 2013, the average wholesale rate of these 18 utilities increased by 70 percent. During that same time period, the MRES rate increased by 41 percent. Utilities have increased rates for a variety of reasons and all have seen significant cost pressures.



"A" – MRES S-1 Supplemental Power Composite Cost
"B" – Average composite rate of the 18 power suppliers located in Iowa, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin.

Barnesville's Wholesale Power Cost Savings

The wholesale power cost savings between the average rate of 6.5 cents per kWh for the 18 area utilities and Barnesville's average rate of 5.4 cents per kWh is 1.1 cents per kWh. Barnesville is projected to purchase approximately 26,167,200 kWh in 2013 from WAPA and MRES. **Therefore, the total projected savings to Barnesville is $287,839 in 2013.** The savings is a result of the City's WAPA allocation and the S-1 supplemental

power contract with MRES. For a typical residential customer using 1,000 kWh per month, the wholesale power cost savings reduces their electric bill by $11 per month.

2013 Estimated Wholesale Power Cost Savings	
Regional Average Cost	$0.065
Barnesville's 2013 Cost	$0.054
Cost Difference	$0.011
Times kWh Purchased	26,167,200
Estimated Savings	**$287,839**

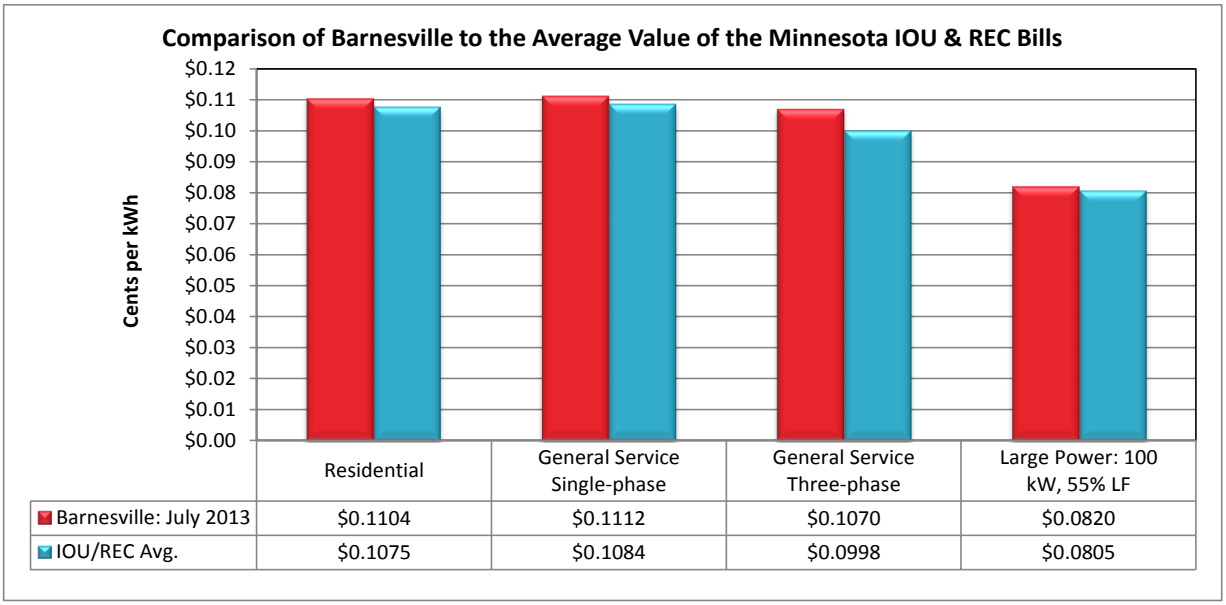
Competitiveness of Barnesville's Retail Rates to Investor-Owned Utilities (IOUs)

Each utility has unique revenue requirements that impact the competitiveness of its rates. The utility's rates competitiveness can fluctuate over time depending on its business operating cycles, transfers and donated services, among other expenditures that arise. During a cycle in which the utility is spending higher than average amounts on major capital improvements and equipment replacements, retail rates may likely be higher than other regional utilities in order to pay for additional debt service or to rebuild reserves that were spent to pay for the improvements. Barnesville's rates for 2013 are described in Appendix A at the end of the report.

The utility's average wholesale power and transmission costs greatly impact the competitiveness of the utility since power supply and transmission costs are usually between 60 percent and 80 percent of the total operating expenses. As previously discussed, Barnesville's wholesale power costs are significantly below the regional wholesale supplier's average cost. The level of transfers to the city's general fund along with other donated services and contributions that are paid for through electric rates, also have an impact on the overall competitiveness of the customer's bill. Barnesville's transfers and donated services as a percentage of operating revenues are higher than the regional average percentage.

In the following table, Barnesville's monthly bills are calculated based on the July 2013 rates and a typical level of usage for each rate class. As shown, all of Barnesville's customer classes are higher than the average bill of the Minnesota IOU and REC. The last column in the table indicates the percentage difference between Barnesville's bill and the average bill of the four IOU's and the REC.

Comparison of Barnesville's Bill and the MN IOU/REC Average Bill					
Rate Class	**Usage & Demand**	**Barnesville's Bill**	**MN IOU/REC Average Bill**	**Barnesville less IOU/REC Avg.**	**% Difference**
Residential	1,000 kWh	$110.38	$107.47	$2.91	2.7%
General Service Single-phase	1,400 kWh	$155.63	$151.80	$3.83	2.5%
General Service Three-phase	3,000 kWh	$320.88	$299.39	$21.49	7.1%
Large Power (Demand)	40,000 kWh 100 kW & 55% LF	$3,278.00	$3,220.95	$57.05	1.8%



Comparison of Barnesville's Bill and the MN IOU/REC Average: Cents per kWh				
Class	**kWh**	**Barnesville $ / kWh**	**MN IOU/REC Avg. $/kWh**	**Barnesville less IOU/ REC Average**
Residential	1,000 kWh	$0.1104	$0.1075	$0.0029
General Service Single-phase	1,400 kWh	$0.1112	$0.1084	$0.0028
General Service Three-phase	3,000 kWh	$0.1070	$0.0998	$0.0072
Large Power (Demand)	40,000 kWh 100 kW & 55% LF	$0.0820	$0.0805	$0.0015

Barnesville's rates are slightly less competitive in all of the classes. This is partly due to the higher transfers and contributions the utility makes to the City of Barnesville and other utility funds compared to the transfers, contributions, and equivalent tax payments of other regional utilities. Barnesville's transfers to the general fund and the value of donated services and labor averaged 23 percent of operating revenues from 2010 through 2012. Transfers to the general fund are projected to remain fairly stable in the future due to the new transfer policy, which should help the competitiveness of Barnesville's rates.

Intangible Benefits

Intangible benefits have a real value to Barnesville Municipal Utilities. Some of the benefits may not be discernible; therefore, MRES and the Barnesville staff estimated the value of some of these benefits. For example, the City Council, with advisement from the Telephone, Electric, and Cable (TEC) Board, has control of the electric rates and the utility's policies and objectives. Other intangible benefits include donated electric service, donated labor, access to tax-exempt financing, local employee salaries, supplies and services purchased locally, support provided to the Barnesville Economic Development Authority, operational efficiencies, local customer service, environmental stewardship, and a high level of reliability. This list many not be all-inclusive to the electric utility, and the utility may provide many other benefits not included in this report.

Local Governance

In the MRES member states, municipal utilities are locally regulated either by the city council, a utility board of trustees, or a utility commission. The board or commission may be independent and are the authoritative decision makers for the utility, or it may only be an advisory board. Regardless of the form of governing body for the utility, the persons serving are either elected by or appointed by the same citizens served by the municipal electric utility. Therefore, the governing board is likely to have the best interests of the community and its citizens in mind when they make decisions regarding the electric utility, its operations, and future planning.

In Barnesville, the utility is under the direction of the city council with advisement from the TEC Board. According to the 2010 American Public Power Association (APPA) Governance Survey, 72 percent of public power utilities with less than 5,000 customers are governed by a city council.

Barnesville's City Council not only governs the electric utility but also the city-owned water, sanitary sewer, cable TV, and telephone utility services. The Council represents the customers when they make decisions on setting operating budgets, planning and funding capital improvement and equipment replacement plans, setting the general fund transfer level, and retail rate setting. The Council understands the impact of its decisions to the local community. Barnesville's City Council governance also provides transparency between the utility and the customer. The Council also is able to react quickly to customer concerns and changing conditions of the utility.

The electric customers are usually one link away from being able to reach out to their City Council members to voice concerns or to provide other feedback. Customers also have an opportunity to provide input at the City Council meetings each month. In contrast, a board of directors of an IOU may be more difficult to contact, and they may not always understand the local and customer impacts of their decisions since the territory is typically large and the board is somewhat removed from the customers. IOU boards also have to protect their shareholder's interest in their decision making process.

The relationship between the city council and the utility staff will need to remain strong and they will need to work together during the changing times of the electric utility industry. Understanding both the city council and the utility staff's goals and objectives will strengthen the local message to the community while reducing any conflict. A council that is well-educated on the differences between operating an electric utility as a business entity and the city government that relies on taxes, transfers, and other funding resources is a key part in the success of both the utility and the city. It is the fiduciary responsibility of the city council to protect the utility assets.

Access to Tax-Exempt Financing

Municipal utilities have access to tax-exempt financing which typically carries reduced interest rates resulting in lower overall borrowing costs depending on the credit quality of the borrowing entity. Tax-exempt bonds issued by utilities usually finance large infrastructure or generation projects that increase reliability and safety among other benefits. The typical point spread between taxed and tax-exempt debt will vary based on credit quality. However, the increased cost for taxable bonds is between 200 and 300 basis points, or 2 percent to 3 percent. The current spread between taxable and tax-exempt financing is about 200 basis points and close to 300 points based on the 10 year average. Barnesville currently has an outstanding bond issuance that will be paid off in 2017. The tax-exempt interest savings has resulted in lower electric rates in Barnesville.

Bond rating agencies have provided high marks to MRES members due to their WAPA power supply allocation and a long-term supplemental power contract with MRES. Other strengths noted by the rating agencies are that the municipal utility has a monopoly on its service territory and the governing board has the ability to adjust rates quickly when needed.

Reliability

The first priority for most electric customers is reliability followed closely by reasonable rates. Many factors impact reliability including voltage, feeder length, the percentage of the distribution system being underground versus overhead, redundancy, conductor type and the age, along with the number of customers served by each feeder and transformer. Some outages also are caused by contractors, customers, or accidents, which are out of the control of the utility.

Reliability costs money and can impact rates. Long-term system improvement planning can reduce both the frequency and length of power outages. System planning also helps to stabilize retail rate increases and ensure reserves are available to fund the improvements. Investments in the system also should consider the cost and the incremental value of reliability the customers will receive.

Reliability reports can help the utility determine sections of the system that need closer attention including possible upgrades or replacement due to aging infrastructure. Reliability is measured by three industry

standards and the statistical trends over time can help the utility diagnose issues. The reliability standards are the following:

System Average Interruption Frequency Index (SAIFI) measures the average number of interruptions per customer during the reporting period.
SAIFI = (Total Number of Customer Interruptions / Total Number of Customers Served)

System Average Interruption Duration Index (SAIDI) measures the amount of time a customer is without power.
SAIDI = (Total of all Customer Interruption Durations / Total Number of Customers Served)

Customer Average Interruption Duration Index (CAIDI) measures the amount of time a customer can expect to be without power when they do lose power.
CAIDI = (Total of all Customer Interruption Durations / Total Number of Customers Interrupted)

The results of Barnesville's reliability standards for 2010 through 2012 along with the three-year average are shown in the next table. Barnesville uses the ReliaTrak software to track outages and outage causes, which are usually equipment failures or weather related. For all three of the measures, the lower the number the better the reliability, or fewer outages.

Barnesville's Historical Reliability Standards

Standards	2010	2011	2012	Average 2010-2012
SAIFI	0.033	0.365	0.013	0.137
SAIDI - Minutes	1.733	20.773	0.790	7.765
CAIDI - Minutes	53.17	56.96	60.00	56.71

In 2012, the only power interruption was weather related and 17 out of 1,050 customers lost power for one hour. The SAIFI index that measures the probability of a customer experiencing an outage and the probability was 0.137 from 2010 to 2012. The SAIDI average from 2010 through 2012 was 7.765 minutes per year, which results in customer having power available 99.9985 percent of the time. The TEC manager and the TEC Advisory Board reviews the statistics periodically to ensure Barnesville is meeting its customers' reliability expectations.

Comparison of Barnesville's Reliability Standards to Minnesota IOU's

Standards	Barnesville Average 2010-2012	Otter Tail Power MN Average 2010-2012	Xcel Energy MN 2012 Only
SAIFI	0.137	1.25	0.80
SAIDI – Minutes	7.765	78.20	83.42
CAIDI - Minutes	56.71	62.72	N/A

Barnesville's customers experienced greater reliability from 2010 through 2012 when compared to Otter Tail Power, which is the nearby investor-owned utility. Xcel Energy's 2012 results are also shown. The Minnesota Public Utilities Commission (MPUC) approves and reviews the reliability standards for IOUs.

Prevention of Outages

Preventive actions can go a long ways in decreasing the frequency of outages and the length of each outage. Barnesville has a tree trimming program to help prevent limbs from falling onto the power lines and a vegetation management program to spray any voluntary vegetation and tree growth at the substation. The utility also has lightning arresters installed and performs thermographic circuit inspections about every three years for preventive maintenance. The utility has approximately 50 percent of the distribution system underground, including the newer housing subdivisions, to prevent damage from severe storms. The utility continues to convert overhead lines to underground as budget and time permits. These preventive actions to increase reliability result in increased customer satisfaction by Barnesville's customers.

Communication about Planned Outages

Customer satisfaction and the quality of the relationship are strengthened through communicating to the customer about planned outages. Customers are notified in advance of planned outages by a variety of methods including the local television access channel, the monthly newsletter, email, the city's Facebook page, and the city's blog that is posted on the website at www.BarnesvilleMN.com.

Responsiveness to Outages

Otter Tail Power (OTP) Company is currently contracted by Barnesville Municipal Utilities to provide distribution maintenance services. Barnesville's TEC manager said that the OTP distribution crew is responsive to outages as one of the crew lives within Barnesville. When an outage occurs, OTP usually responds within an acceptable amount of time.

Local Employee Salaries

Economic studies have shown that local employee salaries circulate throughout the community four to five times boosting the local economy. From 2010 to 2012, the electric utility paid its employees a total average of $68,730 per year resulting in a local benefit between $275,000 and $344,000 per year. In addition to the local salaries, Barnesville contracts with Otter Tail Power Company for distribution maintenance. Some of the salaries paid to these linemen likely flow into the Barnesville economy.

Supplies and Services Purchased Locally

The electric utility purchases operating supplies and professional services from the local business community, which increases the economic value of having a municipal utility. The dollars spent each year will fluctuate based on the supply needs and services required by the utility. Between 2010 and 2012, the utility spent an average of $45,325 per year in Barnesville for supplies, fuel for vehicles, advertising, and professional services.

Support to the Barnesville Economic Development Authority

Barnesville Municipal Utilities also collaborates with the Economic Development Authority (EDA). The electric utility supports economic development by working with new customers to understand their infrastructure needs. The utility also works with current customers who are expanding or changing their business and utility requirements. According to the EDA executive director, the utility is very responsive in quickly meeting the EDA's requests for electric service to prepare an industrial site, and the utility has done this all within their capital and operating budgets.

When the I-94 Commercial Park was first constructed in 1998, the electric utility needed to make improvements to the substation to service the park, which cost about $45,500. This cost was assessed against the parcels in the commercial park on a per-acre basis, amounting to $3,450 per acre. All of the other distribution system improvements were provided to the park at no cost to the EDA or to the future property owners. The utility willingly partnered with the EDA to help provide shovel-ready building sites for businesses.

The utility also helps EDA's attract new businesses to Barnesville. Rather than directing management to an external electric company that may not even have a nearby office, the TEC manager and the EDA executive director are able to work together to ensure that the City of Barnesville is meeting the needs of its current and potential businesses. Two recent successful projects are the K&M Tire Distribution Center and the Rothsay Farmer's Co-op Fertilizer facility. Both of these businesses had very specific power needs, and the TEC manager excelled at identifying their needs, properly sizing transformers and ensuring the transformers were in place to meet the customer's timeline. The utility's excellent customer service shines in both of these examples.

From a residential development standpoint, in times of tremendous growth, Barnesville Municipal Utilities works hard to find both the time and the budget to make necessary investments in infrastructure to ensure that as people wanted to build new homes the lots are ready to go.

Operational Efficiencies

Barnesville gains efficiencies through integrated utility operations of the electric, water, sanitary sewer, cable TV, internet, telephone, and garbage utilities. Integrated operations include shared employees and benefits, utility billing and accounting software, office and shop building space, equipment, and vehicles. It is difficult to place a dollar value on the efficiencies without a more thorough analysis of all the utilities, not just the electric utility. For example, one of the operating efficiencies is having the TEC manager managing all seven utilities. In many communities, this may require several managers to operate all of these utilities.

Customer Service

In today's age of technology, many IOUs have virtual customer service operations to reduce overhead and operating expenses. In Barnesville, the city office continues to have friendly and knowledgeable utility employees to help customers pay their bills and answer any questions they have regarding their service. Face-to-face interaction with Barnesville's utility customers also helps management become aware of any service issues and quickly resolve them. Barnesville does offer the ability for customers to pay online at the city's website, www.BarnesvilleMN.com, or to set up a monthly auto pay.

Environmental Stewardship

Electric customers may choose to purchase all or a portion of their energy from wind resources through the MRES River Winds program. The utility also provides the free *Bright Ideas* monthly newsletter through the Bright Energy Solutions® (BES) program. The newsletter offers energy efficiency tips and new technologies to Barnesville's customers.

BENEFITS OF BEING A MEMBER OF MISSOURI RIVER ENERGY SERVICES

MRES was formed in 1965, and Barnesville joined the organization in 1973. As a member of MRES, Barnesville enjoys many other services and benefits than just supplemental power supply. Some of the benefits and programs offered to Barnesville that may not otherwise be available, affordable, or would require dedicated staff include power supply and transmission planning, the BES program, Minnesota Conservation Improvement Program (CIP) filings, legislative and preference power representation, electric rate studies, educational meetings and workshops, and other services for Barnesville's customers.

Power Supply and Transmission Planning

MRES provides all power supply requirements to Barnesville above their fixed WAPA allocation through the S-1 Power Supply Agreement, which is in effect until 2046. MRES continues to work hard to provide a diversified, cost-effective power supply portfolio to its members while also meeting the Minnesota Renewable Energy Standard (RES). The operations center located at the MRES headquarters ensures adequate power supply for Barnesville based on its hourly energy requirements.

MRES also provides transmission planning and represents the members' transmission interests on issues at regional and national association meetings. Barnesville has a transmission service agreement with MRES as part of the Northern Cities Group (NCG).

MRES updates Barnesville's short-term and long-term power supply forecast every year. The forecast is used to provide wholesale power cost projections that include WAPA, MRES, and NCG transmission costs at least annually and more often as requested by Barnesville. Barnesville uses this information during its budget process for the electric utility.

Bright Energy Solutions

BES is a unique portfolio of energy efficiency cash incentive programs that will help residential and business customers reduce their electric energy costs and operate more efficiently. The program is offered to Barnesville's residential and business customers. The incentives change from year-to-year and the current incentives and energy saving tips can be found at www.brightenergysolutions.com.

Barnesville joined the program in 2009. From 2009 through 2012, Barnesville's residential and business customers have received over $13,900 in cash incentives for energy efficiency projects. In 2013, the residential program includes incentives for various Energy Star rated appliances, a refrigerator recycling incentive, heating and cooling, and decorative light strings. Barnesville also has several programs available for its commercial customers including lighting (new and retrofits),

Bright Energy Solutions®
Saving energy. Saving money.

heating and cooling, compressed air system efficiency, refrigeration, pumps and variable frequency drives, and custom programs. The following table shows the annual and total incentives paid to Barnesville's customers through the BES program along with the demand (kW) and energy (kWh) savings.

Bright Energy Solutions Program Results					
	2009	2010	2011	2012	Total
Cash Incentives	$1,842.00	$1,443.00	$1,633.50	$8,990.00	$13,908.50
kW Saved	3.365	1.790	1.540	21.710	28.405
kWh Saved	12,870	17,216	14,197	97,508	141,791

Minnesota Conservation Improvement Program Filings

On behalf of all Minnesota members, MRES assists with the annual Minnesota CIP filing with the Division of Energy Resources (DER) within the Department of Commerce (DOC). MRES compiles all of the individual BES program results, along with any local program results, into a CIP filing on behalf of each member, including Barnesville. This CIP filing is in response to the Next Generation Act of 2007 enacted by the Minnesota Legislature. The filing service also help MRES better plan its resources as part of its Integrated Resource Plan (IRP) and demand-side management (DSM) requirements.

Prior to 2007, municipal utilities in Minnesota were only required to report their spending on DSM programs. The prior law loosely stated that utilities were required to invest 1.5 percent of their gross operating revenues into DSM programs. Since there was little or no oversight into how those monies were spent, program performance was seldom documented or verified. Results were inconsistent.

The Next Generation Energy Act of 2007 changed all of that and municipal utilities were drawn into a process that is highly monitored and stipulated by the DER. These new ordinances governed several new aspects of power supply such as a renewable energy standard (RES) and mandated energy efficiency performance. Utilities are now required to attempt to achieve an annual 1.5 percent kWh savings goal based on their gross annual kWh sales.

The change from a spending requirement to a kWh savings requirement significantly increased the complexity of the program design and implementation tenfold or more. In order to attempt to achieve these goals, the CIP program managers must have an intimate understanding of technology, energy savings associated with hundreds of individual energy efficiency measures, and meticulous record keeping.

The State of Minnesota requires that each incentive paid to a customer be documented, the savings coordinated into a verifiable savings database, a percentage of all projects to be inspected, and the results summarized into the DER-Energy Savings Platform database annually. The process is time consuming and complex, and is the driving reason that MRES offers the BES as a professional service for our members.

Legislative Representation

Public power utility staff and governing boards are expected to stay on top of the electric utility industry, including the local, state, and federal legislative issues. MRES provides legislative support to Barnesville by strengthening the political presence of its members at all levels with MRES staff and lobbyists. MRES staff informs its members about relevant legislative issues through its website at www.mrenergy.com, newsletters, meetings, and email updates. Weekly updates are also provided to MRES members when the legislatures are in session.

Barnesville also is a member of the APPA, which lobbies mostly at the federal level on behalf of its public power member utilities.

Preference Power Representation

MRES protects and supports the equity interests of its members with the WAPA. In the past year, MRES staff has been assisting the members with extending their Firm Electric Service (FES) contracts with WAPA. MRES reviewed Barnesville's FES to ensure it is in the best interest of the utility. The FES extends the WAPA hydropower supply contract from 2020 to 2050.

Electric Rate Studies

The electric rate study service includes the five-year power forecast and cost projections, five-year revenue and reserve projections, cost-of-service analysis, retail rate design, bill comparisons to regional utilities along with benchmarking and other member specific recommendations. The report and presentation also are used as an educational tool to increase the city council and public's knowledge about the rate-setting process.

Barnesville completed rate studies in 2008 and 2013. When the rate study service began over 15 years ago, the MRES Board of Directors approved paying for 50 percent of the market cost of providing a rate study. As a result of the Board's decision, Barnesville has saved $10,500 on the two studies.

Educational Meetings and Workshops

Throughout the year, MRES offers several meetings and workshops to keep its members up-to-date on the electric utility industry, including current issues and new services and technologies. Many of the meetings are free or low-cost and are held either in Sioux Falls, SD or throughout the membership territory to increase member participation while reducing their travel costs. Each of the meetings also provides an opportunity to network amongst peers, which can result in valuable connections and information. The meetings and workshops include the following:

- APPA Legislative Rally in Washington, D.C. in March
- State legislative events in February and March
- Technology Days in April
- MRES Annual Meeting in May
- Legal Seminar in August
- MRES Area Meetings in October
- Special events during the year:
  - Laramie River Station tours
  - Compressed Air System Workshops
  - Customer Service Workshops

Member Services for Barnesville's Customers

Over the years, the menu of services that MRES offers to the members' customers has grown and received excellent remarks from the customers. The services include key account representatives; maintenance testing programs including infrared scanning, ultra-sonic leak detection, and motor testing; and Questline services. MRES also offers load-profiling software, called EnergyTrak, available for businesses to monitor their energy usage and reduce their peak demand.

Distribution Maintenance Program

The MRES® Distribution Maintenance Program began in 1998 and provides member utilities an option to contract with MRES crews to maintain electric distribution lines and other related services. MRES employs a reliable and professional group of technicians who perform the daily line maintenance necessary to enhance reliability and power quality for a distribution system. These technicians also provide project-specific services to municipals in areas such as directional boring, line reconductoring, and construction of new lines on an expanding system.

Barnesville currently contracts with OTP for its distribution maintenance. The MRES Distribution Maintenance program may be an alternative option to consider when the current distribution maintenance contract expires.

COMMUNICATION CAMPAIGN AND MARKETING STRATEGIES

Barnesville Municipal Utilities provides excellent electric service to its customers. Strategic communication suggestions are provided to enhance Barnesville's current public relations efforts. The suggestions will focus on informing Barnesville's customers about the value the utility brings to the community and general awareness of their electric suppliers. As customers better understand the value of the services and the programs the municipal utility provides, their loyalty and participation in the utility's program would likely increase along with their hometown pride. A transparent and strategic communication campaign may also build trust with Barnesville's customers, the local media, and its employees.

To capture the attention of Barnesville's diverse customer segmentations, several communication methods and styles are recommended, including traditional and social media methods. MRES, with the help of the utility, will create a unique, low-cost communication campaign while having a significant impact of customer and policy maker knowledge. The campaign also will evolve over time to meet the communication needs of Barnesville.

SMARTER Communication Goals

To measure the effectiveness of the communication campaign, MRES suggests establishing SMARTER goals. SMARTER is an acronym for Specific, Measurable, Attainable, Relevant, Timely, Evaluate, and Re-evaluate. The process determines appropriate action steps, why the action steps are important, and a method to follow through on the effectiveness of the action steps. The evaluation process will help verify the communication methods that are effective and the methods that need revising or eliminated.

Each of the suggested action steps can have separate SMARTER goals attached to them and evaluated over time as the action steps are implemented.

Communication Strategies

The most effective communication strategies are created from the customer's perspective and incorporating benefits from what motivates them to take action within the communication method. Does saving money on their utility bill and reducing their environmental impact motivate a segment of customers? Does having the newest energy efficient technology interest customers? Does supporting renewable energy resources inspire your customers?

Strategic Communication Action Steps:

- **Community Presentations:**
  - MRES will present Barnesville Municipal Power Advantage report to the Barnesville City Council in July 2013.
  - The utility staff may use the MRES presentation and/or information from this report and present it to other civic and community groups in Barnesville including the Chamber of Commerce, Economic Development Authority, Main Street Program, other civic clubs, and to the schools.

- **Public Power Week each October**:
  - The utility can reach out to public and private schools within Barnesville's service territory during this week by hosting an assembly, providing age-appropriate activity ideas and worksheets about the electric utility, or visiting the classrooms.
  - The utility can host an open house at the city office and provide a free CFL along with other information about BES energy efficiency programs.
  - The utility can host a luncheon for its industrial customers and provide information about the BES energy efficiency programs or other ways to reduce their electricity costs.

- **Traditional Media**:
  - Barnesville's monthly newsletter is called "Keeping You Connected". The utility can insert information in the newsletter to inform customers about the municipal utility advantages highlighted in this report along with articles provided by MRES or other utility associations, and information about utility projects going on around town.

  - Newspaper:
    - Articles: The utility can develop collaborative relations with the local newspaper editor and staff in order for the utility to be able to provide its point of view when writing a news article about the utility.
    - Advertisements: The utility can also purchase advertisements for special events such as Public Power Week activities.

- Barnesville's Main Street Program – Barnesville Municipal Utilities currently participates in this program and part of the program brings welcome packets to new resident, which includes information about the municipal electric utility.

- Brochures – MRES will create a brochure template that Barnesville can use to provide information to its customers about the utility. The brochure would include some of the advantages of having a municipal electric utility in Barnesville, the financial and non-financial benefits of the utility, BES information, contact information, and other appropriate information.

- **Social Media**:
  - Websites:
    - The City of Barnesville's website at www.barnesvillemn.com includes information about the electric utility and many of its programs, including links to the MRES and BES websites. The utility staff should periodically check the website content to make sure it is up-to-date and accurate, especially the retail rates.
    - The BES website at www.brightenergysolutions.com provides information about Barnesville's energy efficiency programs and incentives.

  - Facebook and Twitter: The utility can use social media to provide alerts to its customers, energy efficiency tidbits, information about new or existing programs, and information from this report discussing the value of the utility. Many citizens are already following the City of Barnesville on Facebook and Twitter to stay current with activities and alerts. The utility could use the either same account or create a new account and request the current friends and followers to like the new page or account. These two social media sites can be linked together so when a post is done on one media platform, it is automatically posted to the other platform.

  - YouTube:
    - The utility can create a video discussing the value and contributions the utility makes to the community.
    - The utility can also create safety videos for elementary students. and upload them to a YouTube account. The utility can inform the teachers about the videos, which can be a teaching mechanism during Public Power week since each child has an iPad in the Barnesville school district. The ideas for the videos are endless. In addition, parents can watch the videos at home with their child(ren) and discuss the topic. The videos can also be run on the local access channel.

- Email Messaging: Email messaging may be used for alerts such as a reminder of a planned outage.

- **Other Community Involvement Opportunities**:
  - Potato Days Festival:
    - Provide Barnesville Municipal Utilities signage in high traffic areas
      - Set up an educational booth
      - Bright Energy Solutions
    - Vampire usage demonstration using popular home electronics
    - Directly sponsor an activity that is related to electricity
      - Safety demonstration
      - Riding a bike to generate electricity to draw interest

  - Summer Movie Night: The utility can sponsor a family movie night at a local park a few times during the summer. It is suggested that the evening have pre-determined dates set on a regular basis, such as the second and fourth Thursday in June, July, and August. Prior to the movie starting, the utility can play YouTube videos, scroll information about utility's programs, or have a safety demonstration for the kids.

  - Annual Home Showcase in the spring
    - Continue providing a booth with educational information
    - A short customer survey could be completed by attendees with a free gift
    - Impact of electric space heater demonstration

  - School Science Fairs: The utility could sponsor and participate in the school science fairs while bringing awareness to the students about Barnesville Municipal Utilities and also about the variety of careers in public power. Through sponsorship, the utility may also be able to set up a demonstration and/or booth to engage the students in learning more about the electric industry. Barnesville staff could also serve as judges at the science fair.

- **Key Account Activities:**
  - Power Lunches with C&I customers
  - Barnesville can increase its loyalty from its Large Power customers by making regular visits to the customer's business to better understand their operations and how the utility can better serve them to meet their needs and goals. The utility staff can discuss changes in the customer's business, upcoming utility events, new programs being offered that the customer may benefit from, and pending rate changes. MRES energy service representatives are available to foster the relationship and discuss available programs from MRES.

CONCLUSION

Barnesville Municipal Utilities provides so many services and benefits to the citizens and businesses in the community. The Municipal Power Advantage report outlines the value of these services that sometimes taken for granted. The City Council, TEC Board, electric utility staff, and the community should continue to bring forth these extraordinary benefits and let them be known through the consistent communication efforts using various platforms.

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Appendix A

Barnesville's Retail Electric Rates

In 2008 and 2013, MRES completed an electric rate study for Barnesville. Each rate study determined the cost of providing electric service to each customer class and then compared those costs with the revenues received. The difference between costs and revenues, if any, results in the cost-of-service adjustments to consider when designing rates for each class. The City Council has authority to approve Barnesville's electric rates. The electric rates approved are usually from the rate study recommendations; however, the Council also has flexibility to modify the approved rates to better meet Barnesville's requirements, if needed.

The recommended rates approved by the City Council that will be implemented in July 2013 and in July 2014 reflect small cost of service adjustments to the rate classes along with an overall 2.8 percent rate increase each year. The rate increases are necessary to recover increasing power supply and transmission expenses along with increasing operating expenses. The rate increases would also fund planned system upgrades and equipment purchases and meet debt service obligations while gradually increasing reserves to a more adequate level. The approved rate increases by the City Council will result in a financially stronger utility that is still able to transfer funds to the City of Barnesville's general fund to support other city services.

Barnesville's Electric Utility Rates

Customer Class	Rate Components	July 1, 2013 Rates	July 1, 2014 Rates
Residential	Base Charge	$13.50	$14.00
	Energy Charge:		
	June-August	0.1040	0.1130
	September-May	0.0945	0.0960
General Service	Base Charge:		
	Single-phase	16.50	17.00
	Three-phase	22.75	23.50
	Energy Charge:		
	June-August	0.1050	0.1120
	September-May	0.0975	0.0980
Large Power (over 20 kW)	Base Charge	37.00	38.00
	Demand Charge:		
	June-August	12.75	13.90
	September-May	10.30	10.35
	Energy Charge	0.0530	0.0530
Dual Fuel Heating	Energy Charge:		
	June-August	0.1040	0.1130
	Sept.-May	0.0465	0.0470
Off-peak Heating	Energy Charge:		
	June-August	0.1040	0.1130
	Sept.-May	0.0465	0.0470
Residential Controlled Central Air Conditioning Credit	Monthly Credit:		
	June-August	5.00	5.00
	Total Annual Cr.	15.00	15.00

Seasonal Rate Structure

After careful consideration, the Barnesville City Council approved a seasonal rate structure for all classes that will be implemented in July 2013. The residential and general service classes will have seasonal energy rates, and the Large power class will have seasonal demand rates with a single energy rate. The rates for July 2013 and July 2014 are shown in the next table. The seasonal rates better reflect Barnesville's wholesale power supply costs by season and will also result in more equitable rates since the customers that use a greater amount of energy in the summer months will pay the higher rate for that power. The previous rate structure blended the cost of power across all months and did not provide a price signal to conserve during the summer months.

Dual-Fuel and Off-Peak Heating Rate Options

In addition to the standard class rates for the classes, Barnesville offers a dual-fuel rate and an off-peak rate option to its customers to help them save money on their total heating costs. The utility is able to reduce its wholesale power costs during peak demand times and pass a portion of those savings onto the customers participating in one of the programs through a lower energy rate.

The dual- fuel rate is available to all customers with a dual fuel heating system, including a heat pump, that is controlled by the utility's load management system. Customers who are on the dual-fuel program have their electric heating system interrupted and switched to a non-electric fuel source, such as propane or natural gas.

The off-peak rate is available for electric thermal storage (ETS) space heaters and various under concrete slab heating systems. The off-peak customers are allowed to recharge the ETS or slab heating system during restricted hours, which are typically overnight, to avoid the system peak during the day.

Controlled Central Air Conditioning Credit

A credit of $5 per month from June through August is available to residential customers that choose to have the utility control their central air conditioner. The utility's load management system cycles the air conditioner during peak usage days in the summer months, which reduces the overall utility power costs during these peak demand periods.

The dual-fuel, off-peak heating, and controlled central air conditioning programs are a win-win for the customers and the utility by saving money for both.

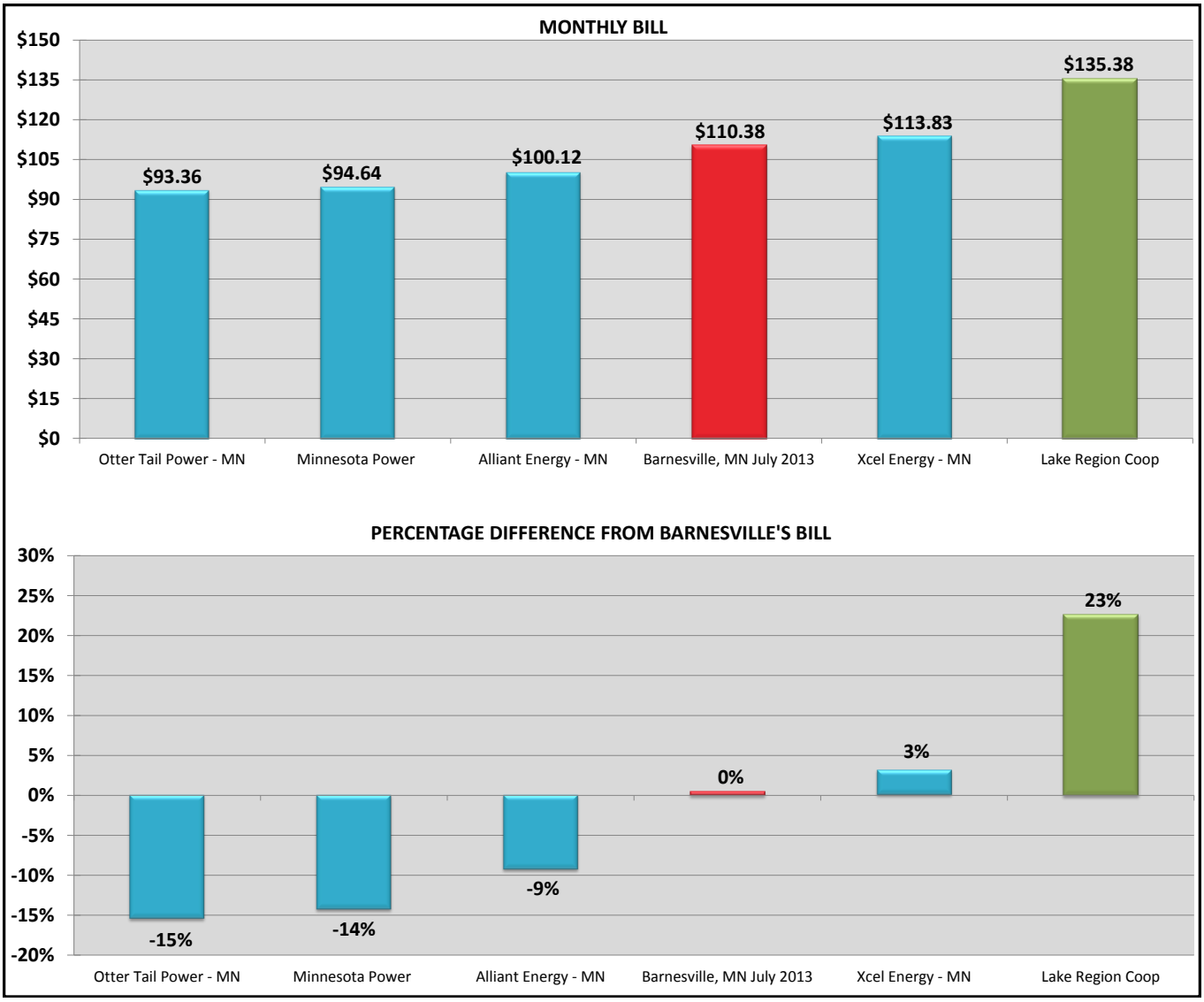
River Winds℠ Energy Option

Barnesville customers who would like to support renewable wind energy can voluntarily participate in the MRES River Winds Energy program. As part of the program, customers can purchase 100 kWh blocks of energy produced by MRES wind turbines for an additional cost of $2 per 100 kWh, or $0.02 per kWh.

Appendix B

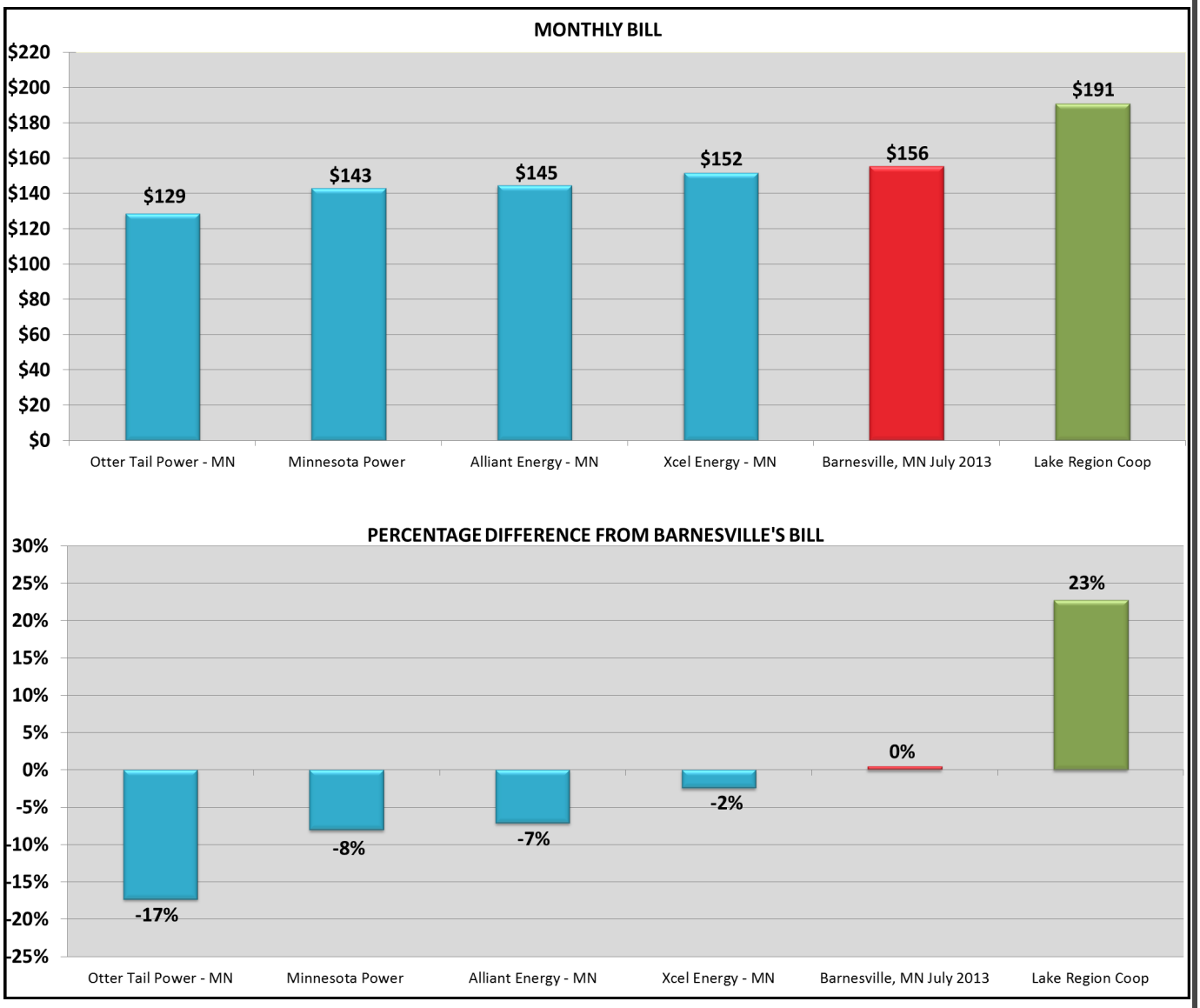
Residential Bill

1,000 kWh per Month



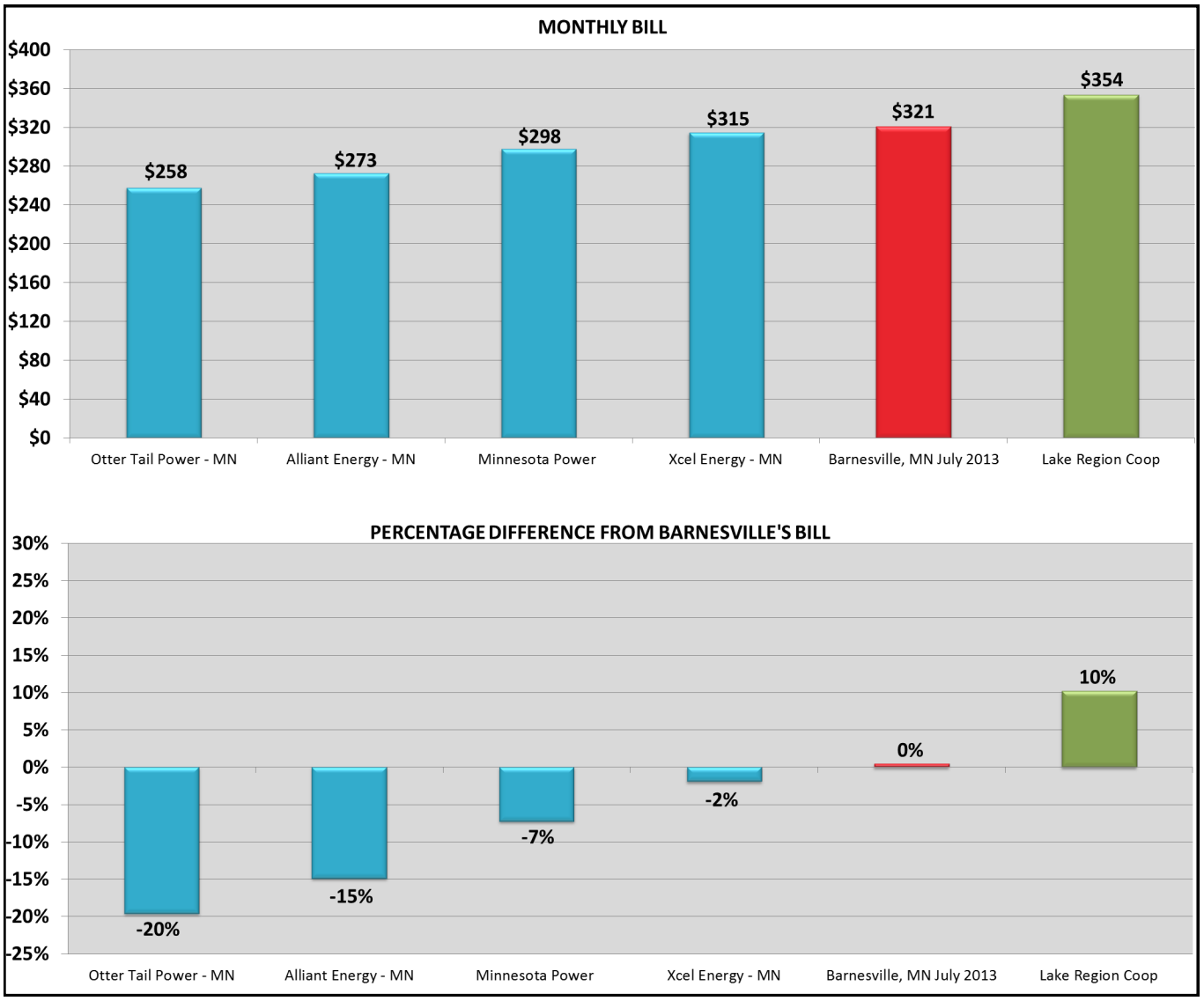
General Service Single-phase Bill

1,400 kWh per Month



General Service Three-phase Bill

3,000 kWh per Month



Large Power Bill

40,000 kWh, 100 kW, 55% Load Factor


MISSOURI
RIVER
ENERGY SERVICES®