CALL TO ORDER
ROLL CALL
APPROVAL/ADJUSTMENTS TO THE AGENDA
CONFLICT OF INTEREST DECLARATION
NEW BUSINESS

   Explanation: An update on departmental operations will be given by Electrical Superintendent Mike Furmanski.

   Explanation: Administration will seek EAC and Council approval to enter into a lease agreement of 12.55 acres of property owned by Delta County.

   Explanation: Administration will seek EAC and Council approval to accept a proposal for a 7’ tall chain link fence to surround the solar facility. These proposals are due May 29th. A bid tab sheet and a recommendation will be forwarded before the meeting.

4. Discussion – Statewide Rates Comparisons.
   Explanation: Administration will update the EAC and Council on statewide rates for Municipal, Co-Operative and Investor Owned Utilities.

   Explanation: Administration will update the EAC and Council on recent indicative prices received for the June 2024 through May 2027 time period.

6. Approval – Rate Study.
   Explanation: Administration will seek EAC and Council approval to have a cost of service and rate study performed by Utility Financial Solutions, LLC of Leland, MI.
GENERAL PUBLIC COMMENT
COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS
ADJOURNMENT

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audiotapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling City Hall at (906) 786-9402.

Respectfully Submitted,

[Signature]
Patrick Jordan
City Manager
CITY OF ESCANABA        COUNTY OF DELTA        STATE OF MICHIGAN

NOTICE OF SPECIAL MEETING OF THE CITY COUNCIL,
AND ELECTRICAL ADVISORY COMMITTEE

PLEASE TAKE NOTICE that the Escanaba City Council and Electrical Advisory Committee will conduct a special joint meeting on Thursday, May 31, 2018, 4:00 p.m. in Room 101, of the City Hall. The purpose of the meeting is to discuss City Electrical issues, and/or any other items for discussion.

Thursday, May 31, 2018 at 4:00 p.m.

This notice is given in accordance with Act 267 of the 1976 Public Acts of the State of Michigan and Chapter II, Section 5, of the Escanaba City Charter. The City of Escanaba will provide necessary, reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon five (5) days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling the below named City Clerk. Public notice will be given regarding any changes of the above meeting.

Patrick S. Jordan, City Manager
(906) 786-9402

or

Lisa M. Glish, City Clerk
(906) 786-1194

LMG
posted 5/24/2018 1:24 PM
# LEASE AGREEMENT

<table>
<thead>
<tr>
<th>LESSOR</th>
<th>LESSEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The County of Delta, State of Michigan</td>
<td>The City of Escanaba, a Michigan municipal corporation</td>
</tr>
<tr>
<td>310 Ludington Street Escanaba, MI 49829</td>
<td>410 Ludington Street Escanaba, MI 49829</td>
</tr>
<tr>
<td>Hereinafter referred to as “Lessor”</td>
<td>Hereinafter referred to as “Lessee”</td>
</tr>
</tbody>
</table>

## WITNESSETH:

WHEREAS, the parties hereto desire to enter into an agreement to lease certain real property hereinafter described which is the property of the Lessor.

WHEREAS it is necessary and desirable to reduce to writing the covenants and agreements of the parties relative thereto.

NOW THEREFORE for and in consideration of the covenants and agreements contained herein the parties hereto agree as follows:

1. **Description of Property:**

   The Lessor in consideration of the rent and covenants herein contained does hereby let and lease to the Lessee all that certain piece of real property (hereinafter referred to as demised premises) situated in the City of Escanaba, County of Delta, State of Michigan and more particularly described as follows to wit: See attached Schedule 1

2. **Term of Lease and Rental:**

   Lessee rents the above described premises for a term of thirty (30) years commencing on the ____ day of ____________, 2018 and terminating on the ____ day of ____________.

   The annual rental during said 30-year period shall be in the amount of Two Hundred Ninety-five and no/100 ($295.00) Dollars per acre per year payable in yearly installments. On each five year anniversary the rental rate shall increase by 3%. At the option of Lessee (City of Escanaba) the lease may be extended for additional five year periods for a total of an additional 30 years.
3. **Use of Premises:**

   The leased premises may be used by Lessee for the purpose of a solar generation facility. Said use is subject to provision set forth in the attached Exhibit “A”.

4. **Alterations, Additions and Improvements:**

   During the term of the lease the Lessee, City of Escanaba shall be installing solar panels, racking systems, pile foundations, wiring and other improvements necessary for the solar project. If at any time the Lessee, City of Escanaba abandons said project, the Lessee, the City of Escanaba is responsible for removing the solar panels, racking systems, pile foundations, wiring and whatever other improvements might have been made and returning the site to its original condition.

   The Lessee is permitted to install a new security fence. The West boundary of the leased property connected at the North end to the existing airport security fence. The North boundary of the leased property is the existing airport security fence. The South boundary of the leased property connecting to the existing airport security fence on the East, adjacent to Portage Creek. Two gates will be placed in the new security fence providing access to the solar generation facility. The Lessor will be provided gate keys for emergency access to the solar generation site.

5. **Repairs and Maintenance:**

   The Lessee shall during the term of this lease at its sole expense keep their project in operating condition and Lessee shall have the obligation of cutting the grass and maintaining the grounds in and around said solar panels on demised property.

6. **Taxes and Assessments:**

   Lessee shall have the obligation to pay any and all personal and/or property taxes assessed against the demised premises or contents.

7. **Utilities:**

   Lessee shall pay all charges for electric, gas, water and other utility services required in connection with Lessee use of the demised premises.

8. **Insurance:**

   Lessee shall during the term of the lease obtain and maintain at its expense the following types and amounts of insurance:

   1) Fire and Casualty Insurance on all improvements to the demised premises.
   2) Insurance against liability for bodily injury in a single limit amount of not less than One Million and no/100 ($1,000,000.00) Dollars for any one accident.
   3) Property Damage Insurance in a minimal amount of Fifty Thousand and no/100 ($50,000.00) Dollars. Said policy shall name Lessor as an additional insured.
9. Extension of Electrical Distribution System:

In the event a business leases and/or purchases an additional site to the West of the devised premises, the Lessee, City of Escanaba agrees to extend the electrical distribution system further West beyond the solar project site in the Delta County Industrial Air Park. The electric distribution costs will be based solely on the wiring and equipment costs. Water and sewer utility services already extend West beyond the solar site.

10. Delta County Option to Purchase Solar Panels:

Upon the City Council approving the construction of the Escanaba Solar Project on the demised premises and the costs and terms for purchasing capacity are formerly established and approved by the Escanaba City Council, the Lessor, Delta County will have 6 months to exercise its option to purchase up to 500 solar panels. After said 6 months has expired, the Lessor, Delta County may purchase available capacity on the same basis as other residents and businesses within the Escanaba Electric Department service area.

11. Liability of Lessee:

Lessee shall be in exclusive control and possession of the demised premises and as between the parties, Lessee shall be liable for any injury or damages to any property or person on or about the demised premises or for any injury or damage to any property of the Lessee.

12. Fire or other Casualty:

If all or any part of the improvements located on the leased premises are damaged or destroyed by fire or other casualty, to the extent that it shall appear unlikely under the existing conditions that such damage could be repaired within 60 days from the happening of such event, then the Lessor and the Lessee shall each have the privilege of terminating this lease as of the date of such event by furnishing written notice to the other party to that effect and upon such election the rental hereunder shall be prorated and paid or refunded as the case may be as of the date of the damage.

13. Quiet Enjoyment and Zoning:

The Lessor hereby covenants that it is the sole owner of the leased premises that it has full authority to execute this lease that the premises are currently zoned for Lessee’s intended business purpose of a Solar Generation Facility on the said premises and that the Lessee upon paying said rent and performing the covenants contained in this lease shall and may quietly have hold and enjoy the leased premises during the term hereof.

The Lessor will not permit the building of future structures on their Delta County property boundaries of the demised property that would shade the solar panels and reduce the generation capacity of the solar facility. The Lessee has the option to trim and/or remove trees and bushes on the adjacent Delta County property that shades the solar panels. Lessee shall provide 48 hour prior written notice of such activity.
14. **Notices:**

All notices to be given with respect of this lease shall be in writing. Each notice shall be sent by mail, postage prepaid and return receipt requested to the party to be notified at the address set forth herein or at such address either party may from time to time designate in writing.

15. **Access to Premises:**

Lessor shall have the right to enter upon the leased premises during reasonable hours for the purpose of inspecting the same. The solar project layout will provide access to the Eastern unleased portion of the site for airport personnel.

16. **Total Agreement:**

This lease contains the entire agreement between the parties and cannot be changed or terminated except by a written instrument subsequently executed by the parties hereto. This lease and the terms and conditions hereof apply to and are binding on the heirs, legal representatives, successors and assigns of both parties.

**IN WITNESS WHEREOF,** the parties hereto have hereunto set their hands the ____ day of ____________, 2018.

**WITNESS:**

____________________________

**Lessee**

**By:**

____________________________

Chairman of the County Board

**WITNESS:**

____________________________

**Lessee**

**By:**

____________________________

Marc Tall
Mayor

**WITNESS:**

____________________________

**By:**

____________________________

City Clerk
Plat of Survey of
Part of SW1/4 of NW1/4 of
Section 1 T.38N., R.23W. And
Part of SE1/4 of NE1/4 of
Section 2 T.38N., R.23W.
City of Escanaba
Delta County, Michigan

12.55 ACRES

PROPERTY DESCRIPTION: (LEASE AREA)
FROM THE 1/4 CORNER COMMON TO SECTIONS 1 & 2 OF T.38N., R.23W. MEASURE N.00°09'04" W. ALONG THE COMMON
SECTION LINE BETWEEN SAID SECTIONS 1 & 2 A DISTANCE OF 102.47 FEET TO THE POINT OF BEGINNING OF THE LAND
HEREIN DESCRIBED, THENCE WEST A DISTANCE OF 899.11 FEET TO THE EAST RIGHT-OF-WAY LINE OF AIRPORT GATE #9
RUNWAY ACCESS ROAD, THENCE N.07°23'34" E. ALONG SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 372.65 FEET,
THENCE S.89°05'50" E. A DISTANCE OF 1506.27 FEET TO THE WEST RIGHT-OF-WAY LINE OF A 40.00 FOOT WIDE
SANITARY SEWER EASEMENT, THENCE 5.00°44'55" W. ALONG SAID WEST LINE A DISTANCE OF 345.83 FEET, THENCE
WEST A DISTANCE OF 650.62 FEET TO THE POINT OF BEGINNING.
CONTAINING 12.55 ACRES.
Exhibit "A"

This Lease (and all Leases for property surrounding the airport properties) is subject to certain rules and regulations imposed by the various governmental agencies, including but not limited to:

The U.S. Department of Transportation (Federal Aviation Administration), Contact: Detroit Airports District Office, Willow Run Airport, East 8820 Beck Road, Belleville, MI 48111

Michigan Department of Transportation (MDOT), Contact: Airports Division, 2700 East Airport Service Drive, Landing, MI 48906.

The following rules are applicable to Grantors, Grantees, Lessors and Lessees, without regard to how they might be designated in the following language. The enclosures are informational and intended to assist the Lessor and the Lessee in satisfying their respective obligations.

A. The following information is obtained from FAA Policy and Procedures Memorandum #5190.6, Appendix 3, dated June 14, 1994 (and is published in MDOT Guidelines last revised on July 22, 2004),

1. Grantor (the Lessee in this case) shall not construct or permit to stand on said premises any building, structure, poles, trees or other objects, whether natural or otherwise of a height in excess (state elevation above mean sea level or refer to an attached exhibit depicting property with existing or planned (whichever is more restrictive) FAR Part 77 surfaces).

2. Grantor shall file a notice consistent with requirements of FAR Part 77 (FAA Form No. 7460-1) prior to constructing any facility, structure, or other item on said premises. (The Lessor and the Lessee shall combine to file this notice)

3. Grantor shall not hereafter use nor permit nor suffer use of the land first above described in such a manner as to create electrical interference with radio communication between the installation upon the airport and aircraft or as to make it difficult for fliers to distinguish between airport lights and others, or as to impair visibility in the vicinity of the airport or as otherwise to endanger the landing, taking off, or maneuvering of aircraft.

4. There is hereby reserved to the Grantor, its successors and assigns, for the use and benefit of the public, a right of flight for the passage of aircraft in the airspace above the surface of the premises herein conveyed. This public right shall include the right to cause in said airspace any noise inherent in the operation of any aircraft used for navigation or flight through the said airspace or landing at, taking off from or operation on the Delta County Airport.

5. The aforesaid covenants and agreements shall run with the land, as herein above described, for the benefit of the Grantor and its successors and assigns in the ownership and operation of the Airport.
6. Grantor shall not hereafter use, nor permit, nor suffer use of the land first above described in such a manner as to create a potential for attracting birds and other wildlife which may pose a hazard to aircraft.

8. This contract (and all airport contracts) is subject to 49 CFR 21 Nondiscrimination in Federally Assisted Programs of the Department of Transportation which in general requires an affirmative covenant that shall run with the land and which covenants shall be expressly stated in any Lease Agreement or contract. The provisions are as follows:

/a. 1. The (grantee, licensee, lessee, permittee, etc., as appropriate) for himself, his heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases, add "as a covenant running with the land") that in the event facilities are constructed, maintained, or otherwise operated on the said property described in this (deed, license, lease, permit, etc.) for a purpose for which a DOT program or activity is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to 49 CFR Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation, and as said regulations may be amended. (49 CFR Part 21 – DOT Title VI Assurance – AC 150/5100-15A)

/b. 2. The (grantee, licensee, lessee, permittee, etc., as appropriate) for himself, his heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases, add "as a covenant running with the land") that: (1) no person on the grounds of race, color, or national origin shall be excluded from participation in, denied benefits of, or be otherwise subjected to discrimination in the use of said facilities; (2) that in the construction of any improvements on, over, or under such land and the furnishing of services thereon no person on the grounds of race, color or national origin shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination; and (3) that the (grantee, licensee, lessee, permittee, etc.) shall use the premises in compliance with Nondiscrimination in Federally Assisted Programs of the Department of Transportation, and as said Regulations may be amended. (49 CFR Part 21 – DOT Title VI Assurance – AC 150/5100-15A)

/b. 3. The Lessee (licensee, permittee, contractor, etc.) agrees to furnish service on a fair, equal, and not unjustly discriminatory basis to all users thereof, and to charge fair, reasonable, and no unjustly discriminatory prices for each unit of service, PROVIDED, that the Lessee may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers. (Grant Assurance 22)

/b. 4. The Lessee (licensee, permittee, contractor, etc.) assures that it will comply with pertinent statues, Executive Orders and such rules as are promulgated to assure that no person shall on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This Provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport program, except where Federal assistance is to provide, or is in the form of
personal property or real property or interest therein or structures or improvements thereon. In these cases, the Provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this Provision binds the contractors from the bid solicitation period through the completion of the contract. (AAIA of 1982, Section 520-AC 150/5100-15A)

/b 5. The Lessee (licensee, permittee, contractor, etc.) agrees that it practice nondiscrimination in their activities and will provide DBE participation in their leases as required by the sponsor, in order to meet the sponsor's goals, or required by the FAA in order to maintain an exemption from the prohibition against Long-term exclusive leases. (49 CFR Part 23 – AC 150/5100-15A)

/b 6. The Lessee (licenses, permittee, contractor, etc.) agrees that it shall insert the above five provisions in any lease (agreement, contract etc.) by which said Lessee (licensee, permittee, contractor, etc.) grants a right or privilege to any person, firm or corporation to render accommodations and/or services to the public on the premises herein leased or owned. (See the documents referenced for the above clauses)

/b 7. It is hereby specifically understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right to provide aeronautical services to the public as prohibited by Section 308(a) of the Federal Aviation Act of 1958, as amended, and the Lessor reserves the right to grant to others the privilege the right of conducting any one or all activities or an aeronautical nature. (Federal Aviation Act of 1958 Section 308(a) – AC 150/5100-16A)

/c 8. The County of Delta reserves the right to further develop or improve the landing area of the airport as it sees fit, regardless of the desires or view of the Lessee, and without interference or hindrance. (FAA Order 5190.6A – AGL-600)

/c 9. The County of Delta reserves the right, but shall not be obligated to the Lessee, to maintain and keep in repair the landing area of the airport and all publicly-owned facilities at the airport, together with the right of direct and control all activities of the Lessee in this regard. (FAA Order 5190.5A – AGL-600)

/c 10. This (lease) shall be subordinate to the provisions of and requirements of any existing or future agreement between the County of Delta and the United States, relative to the development, operation or maintenance of the airport. (FAA Order 5190.6A – AGL-600)

11. The Lessee (licensee, permittee, contractor, etc.) agrees to comply with the notification and review requirements covered in Part 77 of the Federal Aviation Regulations in the event any future structure or building is planned for the (leased) premises, or in the event of any planned modification or alteration of any present or future building or structure situated on the (leased) premises. (FAA Order 5190.6A - AGL-600)
12. There is hereby reserved to the County of Delta, its successors and assigns for the use and benefit of the public, a right of flight for the passage of aircraft in the airspace above the surface of the premises herein (leased). This public right of flight shall include the right to cause in said airspace any noise inherent in the operation of any aircraft used for navigation or flight through the said airspace or landing at, taking off from, or operation on the Delta County Airport. (FAA Order 5190.6A – AGL-600)

13. The Lessee (licensee, permittee, contractor, etc.) by accepting this expressly agrees for itself its successors and assigns that it will not erect nor permit the erection of any structure or object nor permit the growth of any tree on the land leased hereunder above a mean sea level elevation of 625 feet. In the event the aforesaid covenants are breached, the County of Delta reserves the right to enter upon the land (leased) hereunder and to remove the offending structure or object and cut the offending tree, all of which shall be at the expense of the Lessee. (FAA Order 5190.6A – AGL-600)

14. The Lessee (licensee, permittee, contractor, etc.) by accepting this lease agrees for itself, its successors, and assigns that it will not make use of the (leased) premises in any manner which might Interfere with the landing and taking off of aircraft from Delta County Airport or otherwise constitute a hazard. In the event the aforesaid covenant is breached, the County of Delta reserves the right to enter upon the premises hereby (leased) and cause the abatement of such interference at the expense of the Lessee. (FAA Order 5190.6A – AGL-600)

/\d** 15. This lease and all the provisions hereof shall be subject to whatever right the United States Government now has or in the future may have or acquire affecting the control, operation, regulation, and taking over of said airport of the exclusive or non-exclusive use of the airport by the United States during the time of war or National emergency. (Surplus Property Act of 1944 – FAA Order 5190.6A – AGL-600)

/\b 16. It is clearly understood by the Lessee or Permittee that no right or privilege has been granted which would operate to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own regular employees (including but not limited to maintenance and repair) that it may choose to perform. (Assurance22 – FAA Order 5190.6A – AGL-600)

/\e 17. This agreement is subject to the requirements of the United States Department of Transportation’s regulations 49 CFR Part 23, Subpart F. The Lessee (licensee, permittee, contractor, etc.) agrees that it will not discriminate against any business owner because of the owner’s race, color, national origin, or sex in connection with the award or performance of any concession agreement covered by 49 CFR Part 23, Subpart F. The lessee also agrees to include the above statements in any subsequent complementary aeronautical activity agreements that it enters into and cause those businesses to similarly include the statements in further agreements. (49 CFR Part 23, Subpart F)

NOTES:
/a Mandatory in all leases/agreements if airport is obligated by a Federal Agreement since January 30, 1965.

/b Mandatory in all leases/agreements for aeronautical services at airports subject to continuing obligations under FAAP/ADAP Agreements

/c Mandatory in all Use Agreements permitting aeronautical operations from adjoining non-airport property.

/d Mandatory in all leases/agreements at airports acquired in whole or in part under Federal Surplus Property Transfer (unless the National Emergency Use Provision of the Surplus Transfer Document has been specifically released by the FAA).

/e Mandatory in all complementary aeronautical activity leases/agreements executed after June 1, 1992.

*Insert the number of feet mean sea level applicable to the most critical area of the parcel contained in the Lease in accordance with Part 77 of the Federal Aviation Regulations. If required, the area of a lease may be subdivided as shown on a property map to provide more than one height limitation or more restrictive height limitations may be imposed at the discretion of the Sponsor.

**If the Airport is not subject to the National Emergency Use Provision generally contained in Surplus Property Instruments of Disposal, Paragraph 15 above may be modified to exclude that portion of the provision, “or the exclusive or non-exclusive use of the airport by the United States during the time of war or national emergency”.

MEMORANDUM

To: Electric Advisory Committee and City Council

From: Mike Furmanski

Date: 30MAY18

Re: Solar Facility Security Fence

The Electric Department issued an RFP on May 18th, 2018 for a 7' tall security fence to be installed around the solar generating facility. Bids were sent to 3 (three) vendors and 4 (four) bids were received. The bid tab sheet is attached. I would like to seek Council approval to accept the bid from Delta Fence and Construction of Escanaba, MI for a not-to-exceed total of $32,000. This amount is within the expected cost of the fence and is included in the budget for the solar project.
Bid Summary for Escanaba Solar Project Security Fence

**Base Bid** – EPC Contract for 2030 feet of 7 foot high galvanized chain link fence with two 18 ft gates

<table>
<thead>
<tr>
<th>Bid Company</th>
<th>Base Bid Price, $</th>
<th>Cost per foot for Additional Fence, $/ft</th>
<th>Earliest Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta Fence &amp; Construction</td>
<td>30,442</td>
<td>14.75</td>
<td>July 2</td>
</tr>
<tr>
<td>Fortress Fence</td>
<td>34,000</td>
<td>15.77</td>
<td>June 30</td>
</tr>
<tr>
<td>American Fence</td>
<td>41,604</td>
<td>19.70</td>
<td>June 4</td>
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<tr>
<td>Future Fence Co.</td>
<td>43,260</td>
<td>20.25</td>
<td>June 21</td>
</tr>
</tbody>
</table>

Requesting Approval to Purchase up to $32,000 in security fencing from Delta Fence & Construction
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Adj. Date</th>
<th>Notes</th>
<th>Discount</th>
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<tbody>
<tr>
<td>Fortress Fence</td>
<td>$254,000</td>
<td>$14.75</td>
<td>08/12/18</td>
<td>B.B. 10%</td>
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<tr>
<td>Delta Fence</td>
<td>$20,443</td>
<td>$14.75</td>
<td>07/08/18</td>
<td>Cash CF  $3,049.20</td>
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<td>Future Fence Company</td>
<td>$43,900</td>
<td>$30.05</td>
<td>3 weeks</td>
<td>B.B. 10%</td>
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<td>American Fence Company</td>
<td>$41,904</td>
<td>$19.70</td>
<td>06/04/18</td>
<td>B.B. 10%</td>
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</tbody>
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CITY OF ESCANABA
RECORD OF BIDS

DATE BIDS OPENED: Tuesday, May 29, 2018 @ 2:00 PM
DESCRIPTION OF ITEM: Solar Project Security Fence
Official Bidder's Proposal

Date: 5-25-18

City of Escanaba
Escanaba, MI 49829

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price(s):

**Base Bid**

Total installed cost for 2030' of 7' tall chain link fence, with two (2) 18' wide gates

$30,442.00

DEDUCT $485 IF PERFORMANCE BOND NOT REQUIRED ($29,957.00)

**Base Bid Adjustments**

Should the total fence length vary from the estimated length, the price shall be adjusted by: $14.75/foot

**Soonest Available Start Date:** 7-2-18

(MATERIAL MUST BE ORDERED)

CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF:

$3,044.00

(Must be included to qualify)

SUBMITTED BY:

FIRM: DELTA FENCE & CONSTRUCTION

ADDRESS: 16052 N. 75 DRIVE

ESCANABA MI 49829

NAME (PRINT): RONALD D. CHOUINARD

SIGNED: [Signature]

TITLE: Vice President
Official Bidder’s Proposal

Date: 5/25/18

City of Escanaba
Escanaba, MI 49829

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price(s):

Base Bid

Total installed cost for 2030' of 7' tall chain link fence, with two (2) 18' wide gates $43,260.00

Base Bid Adjustments

Should the total fence length vary from the estimated length, the price shall be adjusted by: $20.25/foot for additional

Soonest Available Start Date: 3 weeks upon approval

CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF:

$43,260.00
(Must be included to qualify)

SUBMITTED BY:

FIRM: Future Fence Company
ADDRESS: 23450 Regency Park Drive
Warren, MI 48089

NAME (PRINT): Lauren Griffith
SIGNED: 
TITLE: Estimator
TO: City of Escanaba  
PO Box 948 Ludington St  
Escanaba, MI 49829  

PROJECT: Delta County Airport Solar Project  
LOCATION: Escanaba, MI  

ATTN: Mike Furmanski  
DATE: May 29, 2018  
PHONE: 906.786.9402  
FAX: 0  
E-MAIL: mfuranski@escanaba.org

SCOPE OF WORK:

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030</td>
<td>Linear feet of 7 foot high aluminized chain link fencing with top rail and brace and truss</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>18 foot wide by 7 foot high double swing chain link gate</td>
<td>$43,260.00</td>
</tr>
</tbody>
</table>

Notes:
- 1% bond excluded.
- Traffic control and devices by others.
- Removals by others.
- Posts set prior to flat work.
- Clearing and grubbing by others.
- Union Ironworkers Local 25.
- No wage requirements included in this proposal
- Site restoration by others.

We propose to furnish material and/or labor, complete in accordance with the plans and specifications, except as noted above, including tax if applicable, for the sum of:

As Shown Above  $43,260.00

ESTIMATOR: Lauren Griffith, Estimator  
Direct Line 586-825-9142  
Email: laureng@futurefencempany.com

NOTE: This proposal may be withdrawn by us if not accepted within 15 days. Future Fence reserves the right to revise our pricing based on documents not in possession at time of bid. This includes but is not limited to drawings, specifications, addenda and contracts.

CONDITIONS: Unforeseen digging conditions such as, but not limited to: old building foundations, excessive brick or rocks, unstable soil which collapses and hand digging more than 5 holes are subject to additional charges.
Future Fence Company is not responsible for damage to private utilities. This includes site electric, irrigation, gas and other private utilities that may be present. Owner to locate private utilities or additional cost upon request.

ACCEPTANCE OF PROPOSAL: The prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment Terms: Net 30 days unless otherwise noted.

Signature: ____________________________  
Date: ____________________________

Printed Name: ________________
Official Bidder's Proposal

Date: 5/23/18

City of Escanaba
Escanaba, MI 49829

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price(s):

Base Bid

Total installed cost for 2030' of 7' tall chain link fence, with two (2) 18' wide gates $34,003.02

Base Bid Adjustments

Should the total fence length vary from the estimated length, the price shall be adjusted by: $15.77/foot

Soonest Available Start Date: 6/30/18 But would prefer to do all at once

CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF:

$ Bond 10%
(Must be included to qualify)

SUBMITTED BY:

FIRM: Fortress Fence Co. (Dir. of Century Fence Co.)

ADDRESS: 1225 Lithgow Dr.
Green Bay, WI 54313

NAME (PRINT):

SIGNED:

TITLE: Estimator
Official Bidder's Proposal

Date: 5-23-2018

City of Escanaba
Escanaba, MI 49829

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price[s]:

Base Bid

Total installed cost for 2030' of 7' tall chain link fence, with two (2) 18' wide gates $41,604.00

Base Bid Adjustments

Should the total fence length vary from the estimated length, the price shall be adjusted by:  $19.70 /foot

Soonest Available Start Date: 6-4-2018

CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF: $ 42,000.00
(Must be included to qualify)

SUBMITTED BY:

FIRM: Tschudy Corp. DBA American Fence Co.

ADDRESS: 3210 Mecca Dr.
Plover, WI 54467

NAME (PRINT): Chris Zarecki

SIGNED: 

TITLE: Secretary/Treasurer
MEMORANDUM

TO: Electric Advisory Committee, City Council, Patrick Jordan
FROM: Michael Furmanski, Electrical Superintendent

SUBJ: Average revenue rate for Michigan utilities

The table below shows the total average revenue rates per kWh for 7 selected U.P. based utilities for the time period of 2011 through 2016. All of these values were retrieved from Energy Administration Information form 861. These revenue rates could include energy sales, meter charges, misc revenue, rentals, etc. Or, they may not include them depending on how each utility accounts for all the revenue. Therefore, these rates should be viewed as relative to each other and themselves over time and not as exact rates.

Attached are 1) the 2016 data for all Michigan utilities and 2) a 6 year history of 18 U.P. utilities.
<table>
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<tr>
<th>Name</th>
<th>Res cents/kWh</th>
<th>Com cents/kWh</th>
<th>Ind cents/kWh</th>
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MEMORANDUM

TO: Electric Advisory Committee, City Council, Patrick Jordan
FROM: Michael Furmanski, Electrical Superintendent
SUBJ: Wholesale Rates for Escanaba

The table below shows estimated wholesale power supply costs for the City through May of 2027. The costs of Transmission and MISO have been estimated for the 9 year period shown below. We have contracts in place for energy and capacity through May of 2024, with indicative offers for the period of June 2024 through May of 2027. Our energy contracts are for full requirements, delivered to our pricing node. This means that we pay the contract price for all energy purchased all hours of the day. This price is fixed for each year by contract and cannot vary.

Chart 1

Wholesale Costs

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Our capacity contract is for 32 MW per year through May of 2024. MISO planning years run from June 1st to May 31st. Our latest forecast study shows capacity needs as follows:

The planning reserve margins for this same period range from 8.3 – 8.4%. This puts our expected maximum capacity needs at 31.5 MW. Any excess capacity can be sold in the annual capacity auction.
The table below shows estimated total budgets for the next 9 years. As seen below, wholesale costs are 70-80% of the total budget. Charts 1 and 2 assume that sales will remain flat for the next 9 years. Our general trend for the past 11 years has been a reduction in sales of approximately 1% per year. If this decline in sales continues, rates will be increased more than if sales had remained flat or increased. The accelerated increase is mainly due to fewer kWhs to spread the fixed costs among.

Chart 2

The numbers in Charts 1 and 2 through Planning Year 23/24 are made up of energy and capacity costs that are under contract. Transmission and MISO costs are estimated. Department costs are estimated by using this year’s actual budget numbers and an annual increase. The costs shown above for PY 24/25 through 26/27 are indicative offers that are available at this time for energy and capacity. These 2 items do not have to be purchased together. We do not have to purchase anything at this time. We will need to purchase capacity by February of 2021 to show the MPSC that we can meet our future capacity obligations beyond PY 23/24.
The City of Escanaba

PROPOSAL FOR

Electric Cost of Service and Rate Design Study

May 18, 2018

Utility Financial Solutions, LLC

Utility Financial Solutions, LLC
Po Box 582
Leland, MI 49654

Submitted Respectfully by:
Dawn Lund
Vice-President, Utility Financial Solutions
dlund@ufsweb.com
May 18, 2018

Mr. Mike Furmanski
City of Escanaba Electric Department
1711 Sheridan Rd.
Escanaba, MI 49829

Dear Mr. Furmanski:

Utility Financial Solutions (UFS) is pleased to submit a proposal to provide an electric cost of service and rate design study for the City of Escanaba Electric Department (the City). Our proposal is based on our prior experience with completing electric cost of service studies for municipal utilities and cooperatives around the nation including Michigan.

UFS understands that the City requires a consultant who is seasoned in the development of Cost of Service and Rate Design. We will provide you with the highest quality service within an agreed-upon timeframe. The study will take approximately 12 weeks to complete after receipt of requested information.

UFS is an internationally known firm with a long-standing relationship and history of assisting municipalities with financial analysis and are recognized experts in the utility field. Acting as project manager for the City, I will oversee project management and contractual agreements. Utility Financial Solutions began in 2001. I currently act as Vice-President of UFS and teach numerous national courses for the American Public Power Association.

UFS has extensive quality control procedures including a three-level review of the study prior to any formal presentation. This provides assurance the study is accurate and defensible to governing bodies and rate payers. Our project team assigned to this engagement is composed of highly qualified, experienced, and knowledgeable professionals who remain current on all issues facing municipal utilities. Our reputation has allowed us to be the recommended rate consulting firm for numerous utilities and agencies around the country and the American Public Power Association (APPA). We are also the preferred vendor for cost of service and financial analysis through APPA’s Hometown Connections. Included in our proposal are sample listings of presentations and courses taught by UFS staff.

UFS would like to be a resource to you for many years in the future. Our success is dependent on the quality and timeliness of our services provided to utilities like the City and we are committed to your complete satisfaction.

We appreciate the opportunity to submit this proposal and look forward to discussing it with you. If you have questions or need additional information, please contact me at 231-218-9664.

Sincerely,

Dawn Lund
Vice-President, Utility Financial Solutions, LLC
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Understanding of Project Requirements

The following services will be provided as part of the study by Utility Financial Solutions, LLC:

Summary of Services

1. Five Year Financial Projection that includes the following:
   a. Determination of Revenue Requirements for each year
   b. Development and identification of financial targets related to the following:
      i. Debt Coverage Ratio
      ii. Minimum Cash Reserves
      iii. Operating Income
   c. Identification of long-term rate track to maintain financial stability of utility and minimize the potential rate impacts on customers

2. Development of Cost of Service Study that identifies the following:
   a. Comparison of cost to provide service to each class with projected revenues
   b. Identification of potential new rate classes based on load characteristics
   c. Monthly customer charges for each class of customers
   d. Transmission delivery charges
   e. Distribution delivery charges
   f. Power supply charges
   g. Seasonality of costs
   h. Identification of fixed and variable costs including the following broken out by season:
      i. Total demand related costs
      ii. Total energy related costs
      iii. Monthly customer related costs
   i. Identification of costs based on voltage level of customers
      i. Transmission level customer
      ii. Primary metered customer
      iii. Secondary metered customer

3. Rate Design (One year included)
   a. Development of rates to move classes closer to cost of service
   b. Development of rates to move components of rates closer to cost of service
   c. Identification of impacts of rate changes by classes considering the following:
      i. Percentage impacts at various usage levels
      ii. Dollar impacts at various usage levels
      iii. Percentage impacts for demand rate classes based on load factors
   d. Identification of overall rate impacts on customers
4. Review and potential implementation of Power Cost Adjustment
   a. Discuss with staff and Council the positives and negatives of power cost adjustments
   b. Discuss a recommended approach to implement and power cost adjustment (PCA) that achieves two objectives:
      i. Minimizes month to month or year to year changes in PCA to reduce potential complaints from customers
      ii. Maintains the long term financial strength of electric utility

5. Presentation to Staff, Board/Council
   a. Review results and assumptions
   b. Development of appropriate financial targets
   c. Obtain input and feedback on rate track and rate designs including:
      i. Overall rate change for each year
      ii. Customer charges
   d. Discussion of overall goals and objectives of management and Council including:
      i. Energy conservation
      ii. Economic development
      iii. Distributed generation customers
      iv. Other considerations in rate design

6. Reports
   a. Executive summary report discussing the following:
      i. Financial projection results and rate adjustment to achieve financial targets
      ii. Cost of service results for each rate class
      iii. Cost based rate structures
      iv. Assumptions used in development of study
      v. Recommendations on rate track, movement toward cost of service, financial targets, others as identified
   b. Second report on rate design after input from staff and Council
      i. Proposed rate design for each rate class
      ii. Rate impacts on each customer class
      iii. Rate impacts at various levels of usage for each rate class
Proposed Work Plan and Project Approach

Our approach to this project was developed to meet the objectives of the City and is based on the scope of services and UFS prior experience in completing electric cost of service studies around the nation including Michigan. Listed below are more detailed descriptions of the services provided, our process and sample outputs from our studies. Our proposed work plan is designed to meet the requirements and methodologies established in the industry.

Preliminary Tasks
Listed below are tasks to develop the financial projection and cost of service portion of the study.

1. Review of Relevant Reports
   Review of certain reports is necessary to ensure the models are established to fit the specific requirements of the City. Listed below are examples of reports to obtain and review.
   - Yearly financial, operating and maintenance reports including fixed assets reports
   - Outstanding bond issues and specific bond covenants
   - Rate schedules and any special contracts

2. Collect and Verify Data
   Meeting with utility management is critical to ensuring the final reports will meet the objectives of the City and the information request prepared by Utility Financial Solutions is understood. The specific objectives of the meeting will be to:
   - Identify and clarify the scope of services and specific expectations of management
   - Review billing system capabilities for providing the information necessary for the cost of service analysis. We will complete one revenue proof to reconcile revenues received compared with calculated revenues from billing system.
   - Review chart of accounts and determine strengths and weaknesses and its consistency with utility accounting practices
   - Availability of load research data and develop a plan to obtain Information needed by cost of service study
   - Discuss with management the strengths and weaknesses of determining utility revenue requirements using a utility basis vs. cash basis
   - Discuss power supply and recent or anticipated changes in rates or operations
   - Review of transmission charges
   - Additions or losses of major customers
3. **Preparation of Data Request**
   After completion of the preliminary tasks UFS will prepare an information request that will include the necessary information to complete the study. Listed below are specific reports that will be requested:
   
   - Customer billing and usage statistics by month for latest fiscal year
   - Monthly production statistics or power supply purchases
   - Power supply rates for upcoming years
   - System hourly load information
   - Trial balances for latest two years
   - Audited financial statements for the latest three years
   - Debt service schedules
   - Current work-in-process
   - Future capital improvement plan
   - Power Supply costs
   - System load data (if available for example through a SCADA system)

**Development of Five Year Financial Projection and Financial Targets**

**Development of Sales Projection**
Through review of historical sales and discussion with utility staff we will develop a projection of the following:

1. Future energy sales
2. Number of customers
3. Billing demands
4. Miscellaneous revenues
5. If a power cost adjustment mechanism is approved, this will be incorporated into the financial projection

**Development of Utility Revenue Requirements**
Revenue requirements are developed through review of historical expenses and discussions with the utility on changes in costs and the utilities budget. Completion of this tasks is summarized below:

- **Operating Expense Projection**
  Operating expenses often include expenses related to operation, maintenance and administration of the utility and the distribution system. Operating expense projections are often based on historical expenses adjusted for changes in costs and includes adjustments for changes that management anticipates will occur in the future.

- **Power Supply Projection**
  Power supply costs typically represent over 70% of an electric utilities total revenue requirement. The magnitude of this expenditure requires this projection to be based on reasonable assumptions that are documented and reviewed with management. To project power supply expense we often review the latest twelve months of detail power supply invoices and develop a power supply projection model where we can include growth of the system and changes in power supply costs. We will work with utility staff to estimate power supply costs based on the projected monthly loads.
- **Transmission Cost Projection**
  Transmission costs are often included as part of the power supply bill or may be in a separate invoice. As part of the power supply projection we will include changes in demand rates for transmission and review the transmission cost projection with utility staff.

- **Debt Service**
  The amortization schedules for outstanding debt service will be incorporated into the financial projection. The corresponding principal and interest expense are appropriately classified into the income statement and cash flow sections of the long term financial projection. Any potential future bonding requirements will be identified and incorporated into the projection with the debt coverage ratios compared with the bond ordinance requirements adjusted for certain safety factors to adjust for changes in weather and the subsequent sales of electricity.

- **Capital Improvement Plan**
  A critical part of the financial projection is the capital improvement plan received from the utility. Often the capital improvement plan UFS receives is reviewed with utility staff for reasonableness and capabilities of the utility to complete the projects as stated. The financial projection models can easily incorporate sensitivity analysis for changes in capital but it is preferred that the report includes a reasonable approximation of the annual expense. The financial model will incorporate the capital plan and identify the sources of funding either from existing cash reserves, the annual rate funded capital or through the issuance of bonds.

UFS financial models and the subsequent cost of service studies are unique in their ability to easily change from cash basis revenue requirements to accrual basis (Utility Basis) revenue requirements. The financial models include both cash basis targets such as cash reserves and debt coverage; and accrual basis targets such as rate of return. Listed below are discussion of the development of the three main financial targets for utilities. UFS studies also include a review of secondary financial matrices such as debt/equity ratios, age of system, days cash on hand and working capital requirements as part of the overall assessment of the financial health of the utility.

- **Rate of Return**
  Rate of return is often associated with investor-owned utilities. Public power systems need to have a rate of return to breakeven and ensure customers are appropriately paying for their use of the infrastructure. The breakeven rate of return recovers two types of costs:

  1. Interest expense on outstanding debt
  2. Inflationary increases in an assets eventual replacement -
     An appropriately developed rate of return identifies the annual funding requirements for capital replacement of existing facilities and prevents current customers from being overcharged or undercharged at any point in time. This helps prevent large rate increases often resulting when only the cash basis targets are reviewed. The rate of return typically results in a more financially stable utility requiring only modest rate adjustments once the rate of return target is achieved. Development of the rate of return target will include a review of interest expense on debt and the age of existing infrastructure to identify the breakeven rate of return requirements.
• **Minimum Cash Reserves**
  A critical question for utilities is the amount of cash reserves required to be held in reserve to help ensure funds exist to pay bills in a timely manner, to fund catastrophic events, future capital improvements and rapid changes in power supply or transmission costs. Each utility has various needs for cash and is dependent on the risks associated with the operations of a utility. As part of our studies we assist utilities with identifying the minimum level of cash a utility should maintain in reserves and include a review of the following:
  1. Historical investment in assets and age of infrastructure
  2. Exposure to catastrophic event
  3. Working capital requirements
  4. Debt service payments
  5. Risks related to changes in power supply or transmission costs
  6. Stability of rate structures and its ability to recover fixed costs
  7. External reserve requirements related to items such as OPEB or Pension cost liabilities
  8. Power cost adjustment mechanism (PCA)

Review of the minimum cash reserves will be included as part of the study and will be discussed in the executive summary report and presentation to utility staff and Council.

• **Debt Coverage Ratio**
  Electric utilities are often required to issue revenue bonds that include requirements related to debt coverage. It is critical electric utilities meet or exceed these bonding requirements to help ensure the utility maintains appropriate bond ratings to keep future interest rates low. As part of our studies we review the existing bond ordinances and identify the debt coverage requirements. These are included in the study with an appropriate safety factor to help ensure coverage requirements are met during periods of low sales due to weather or dramatic changes in expenses such as power supply costs.

**Dashboard and Summary Financial Projections**
The financial projection and financial targets are included in a dashboard summary and a rate track is developed to meet the financial targets. Development of the rate track attempts to minimize the impact of rate adjustments on customers while keeping the utility financially stable.
Development of Cost of Service Study

The development of the cost of service study incorporates the revenue requirement identified as part of the financial projection. This section describes the additional procedures used in development of the cost of service study and sample outputs from previous studies.

Development of customer class demands and allocation factors used to allocate revenue requirements

Load Profile Information
Load profile information identifies how customers use electricity at various times of the day and is critical to ensure the cost of service study is accurate and defensible. UFS works with utility staff in identification of the appropriate sources of load research information. We will analyze information from the following sources:

- Electronic meters installed on time of use and other customers
- Load research information available from other sources
- Analysis of substation feeders
- Utilize our data base of existing load research obtained from other utilities

The load research information identifies the monthly load factors for each class, how much is being used by the class at the peak time of the day when power supply demand or transmission demand charges are determined. The load research information is compared with the hourly system hourly load data to determine the class contributions. The information is then used to determine the class share of transmission and power supply costs.

System Losses
Losses can vary substantially depending on system loading and temperature. We will identify the system loss at the various voltage levels of service to customers. To determine the overall system losses we typically use a three year average of losses to reduce the impact of changing weather patterns between the last and first month of each year. The losses are then allocated between voltage level such as transmission, substations, primary service and secondary voltage levels.
Development of Allocators
The load profile information for each class is used to determine the allocation factors used to allocate expenses based on cost-causation. Examples of cost causation include the identification of the date and time power supply demand charges are determined and each class usage at the time of the peak demands. There are over 40 allocation factors often developed as part of a UFS cost of service study. Allocation factors are developed for each season and developed for specific expenses. A summary of the costs where specific allocation factors need to be developed are listed below.
- Power supply demand cost by time of day and season
- Power supply energy cost by time of day and season
- Distribution related costs for sub-transmission or transmission service
- Distribution related costs for primary metered customers
- Distribution related costs for secondary metered customers
- Customer related costs for each class of customers

Prepare Cost of Service Analysis
Customer classes are typically established based on differences in load and usage patterns. How customers use electricity dictates the cost of providing many of the utility services.

The cost of service portion of the model will determine the following:
- Rate adjustment necessary to meet rate of return requirements of the utility
- Cost to serve each class compared with projected revenues
- Rate adjustment necessary for class to meet cost of service requirements
- Monthly customer charge by class
- Energy charge for each customer class
- Demand charge for demand metered customers

A summary of the cost of service analysis is developed similar to the table below:

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Cost of Service</th>
<th>Projected Revenues</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$47,326,833</td>
<td>$43,615,239</td>
<td>9%</td>
</tr>
<tr>
<td>Residential Dual Fuel</td>
<td>21,403</td>
<td>10,081</td>
<td>112%</td>
</tr>
<tr>
<td>Residential High Efficiency HVAC</td>
<td>176,818</td>
<td>128,097</td>
<td>38%</td>
</tr>
<tr>
<td>Small General Service</td>
<td>17,795,064</td>
<td>16,519,937</td>
<td>8%</td>
</tr>
<tr>
<td>SGS - High Efficiency HVAC</td>
<td>59,308</td>
<td>50,427</td>
<td>18%</td>
</tr>
<tr>
<td>City Street Lighting</td>
<td>1,639,666</td>
<td>1,194,127</td>
<td>37%</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>127,155</td>
<td>105,392</td>
<td>21%</td>
</tr>
<tr>
<td>Security Lighting</td>
<td>198,138</td>
<td>209,386</td>
<td>-5%</td>
</tr>
<tr>
<td>Civil Defense Sirens</td>
<td>8,357</td>
<td>8,834</td>
<td>-5%</td>
</tr>
<tr>
<td>Medium General Service</td>
<td>30,370,455</td>
<td>30,157,753</td>
<td>1%</td>
</tr>
<tr>
<td>MGS - High Efficiency HVAC</td>
<td>194,666</td>
<td>171,436</td>
<td>14%</td>
</tr>
<tr>
<td>MGS - Time-of-Use</td>
<td>1,879,529</td>
<td>1,904,024</td>
<td>-1%</td>
</tr>
<tr>
<td>Large General Service</td>
<td>10,445,537</td>
<td>10,669,838</td>
<td>-2%</td>
</tr>
<tr>
<td>Large Industrial Service</td>
<td>22,575,880</td>
<td>20,755,543</td>
<td>9%</td>
</tr>
<tr>
<td>Interruptible Service</td>
<td>5,407,792</td>
<td>4,683,596</td>
<td>17%</td>
</tr>
<tr>
<td>Cogen and Small Power Prod</td>
<td>12,203</td>
<td>10,183</td>
<td>20%</td>
</tr>
<tr>
<td>Interdepartmental</td>
<td>929,722</td>
<td>946,527</td>
<td>-2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$139,226,527</strong></td>
<td><strong>$131,140,420</strong></td>
<td><strong>6.2%</strong></td>
</tr>
</tbody>
</table>

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The cost of service column from the table on the previous page identifies the cost to provide service to each class of customers and is compared with the projected revenues from each class. The percent change is the rate adjustment necessary for each class to achieve cost of service. We typically do not recommend rates move fully to cost of service, but as part of the discussions with staff and Council we develop a plan to move classes toward cost of service to minimize rate impacts on any specific customer class.

Development of new rate classes
As part of the initial discussions with management and review of the existing rate tariffs, we will discuss with utility staff if new rate classes should be considered or if existing rate classes should be combined. Rate classes are created based on similarity in usage patterns, but often utilities will develop new rate classes to create incentives for customers to shift usage to periods of time where power supply costs are lower such as on and off peak time periods for time of use rates. Examples of new rate class developments are listed below.

- **Standby charges** – Cost isolated by investment in facilities to serve customers on a standby basis.
- **Interruptible Loads** – Rates to promote interruptible loads that reflect the savings to the City. Our study will isolate costs by power supply demand, energy and transmission to identify the potential cost savings of an interruptible customer.
- **Seasonal Rates** – The cost of service study allocates costs to each rate class based on seasonal time period. The time periods will be identified through review of system loads and power supply and transmission costs.
- **Time of Use** – For time of use rates to be effective in sending the proper price signal, the cost of service analysis is supplemented with marginal costs to identify and recommend appropriate charges on a time of use basis.
- **Economic Development Rates**
  - Rates can be developed to promote economic development by attracting new customers or expansion of existing customers. It is important economic development rates be developed using a marginal cost approach to ensure existing customers are not unduly subsidizing any reduce rates or fees charged under an economic development program.
- **Other Potential Rates are listed below:**
  1. Public education rates
  2. Green Rates
  3. Net Metering Rates
  4. Aggregation Rates

New rate designs may result in additional charges for the services provided by UFS. As part of the initial kick off meeting, we should discuss if any potential new rate classes are being considered.
### Electric Cost of Service and Rate Design Study

**Proposed Work Plan and Project Approach**

Breakdown of cost of service rate structure by type of expense for each class of customers

UFS cost of service studies identify cost in a summary and a detail cost breakdown for each class of customers. For example, the summary of costs identifies the class cost breakdown by customer charge, power supply demand, transmission demand, distribution demand and energy costs. An example is listed below:

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Monthly Distribution</th>
<th>Monthly Transmission</th>
<th>Summer Rates</th>
<th>Winter Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Charge</td>
<td>Rate</td>
<td>Demand</td>
<td>Energy</td>
</tr>
<tr>
<td>Residential</td>
<td>$21.25</td>
<td>$0.02085</td>
<td>$0.0057</td>
<td>$0.0334</td>
</tr>
<tr>
<td>Small General Service</td>
<td>43.25</td>
<td>$0.0224</td>
<td>$0.0057</td>
<td>$0.0370</td>
</tr>
<tr>
<td>City Street Lighting</td>
<td>-</td>
<td>$0.2066</td>
<td>$0.0040</td>
<td>$0.0197</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>41.02</td>
<td>$0.0164</td>
<td>$0.0067</td>
<td>$0.0293</td>
</tr>
<tr>
<td>Security Lighting</td>
<td>7.86</td>
<td>$0.0196</td>
<td>$0.0125</td>
<td>$0.0197</td>
</tr>
<tr>
<td>Medium General Service</td>
<td>134.50</td>
<td>2.39</td>
<td>1.13</td>
<td>12.04</td>
</tr>
<tr>
<td>MGS - High Efficiency HVAC</td>
<td>129.04</td>
<td>2.63</td>
<td>1.26</td>
<td>10.45</td>
</tr>
<tr>
<td>MGS - Time-of-Use</td>
<td>135.22</td>
<td>3.04</td>
<td>1.44</td>
<td>9.85</td>
</tr>
<tr>
<td>Large General Service</td>
<td>306.92</td>
<td>2.79</td>
<td>1.30</td>
<td>13.06</td>
</tr>
<tr>
<td>Large Industrial Service</td>
<td>1,810.78</td>
<td>2.96</td>
<td>1.37</td>
<td>14.50</td>
</tr>
<tr>
<td>Interruptible Service</td>
<td>176.12</td>
<td>2.59</td>
<td>1.38</td>
<td>10.05</td>
</tr>
<tr>
<td>Interdepartmental</td>
<td>83.83</td>
<td>2.38</td>
<td>1.19</td>
<td>12.50</td>
</tr>
</tbody>
</table>

In addition, further breakdowns are available in the studies depending on the needs of each utility. A sample detailed breakdown of distribution costs are listed below:

<table>
<thead>
<tr>
<th>Cost Breakdown</th>
<th>Residential Service</th>
<th>Small General Service</th>
<th>Medium General Service</th>
<th>MGS - High Efficiency HVAC</th>
<th>MGS - Time-of-Use Service</th>
<th>Large Industrial Service</th>
<th>Large Hospital Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution</td>
<td>$0.0079</td>
<td>$0.0032</td>
<td>$1.06</td>
<td>$2.15</td>
<td>$2.46</td>
<td>$2.39</td>
<td>$2.41</td>
</tr>
<tr>
<td>Transmission</td>
<td>$0.0027</td>
<td>$0.0027</td>
<td>$1.13</td>
<td>$1.26</td>
<td>$1.44</td>
<td>$1.30</td>
<td>$1.37</td>
</tr>
<tr>
<td>Transformer</td>
<td>$0.0012</td>
<td>$0.0014</td>
<td>$0.20</td>
<td>$0.32</td>
<td>$0.37</td>
<td>$0.34</td>
<td>$0.30</td>
</tr>
<tr>
<td>Substation</td>
<td>0.0006</td>
<td>0.0007</td>
<td>0.14</td>
<td>0.15</td>
<td>0.18</td>
<td>0.16</td>
<td>0.17</td>
</tr>
<tr>
<td>Direct</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subtotal of Kwh Charge</td>
<td>$0.0154</td>
<td>$0.0169</td>
<td>$3.024</td>
<td>$3.886</td>
<td>$3.025</td>
<td>$3.997</td>
<td>$3.719</td>
</tr>
<tr>
<td>Generation to City</td>
<td>$0.0919</td>
<td>$0.0912</td>
<td>$1.954</td>
<td>$1.893</td>
<td>$1.951</td>
<td>$1.892</td>
<td>$1.912</td>
</tr>
</tbody>
</table>

| Distribution Customer Costs  | $10.96               | $21.31                | $50.42                 | $59.42                    | $61.34                    | $90.12                   | $151.94                |
| Transformer Customer Costs   | 1.17                 | 2.33                  | 5.70                   | 7.00                      | 7.00                      | 10.40                    | 10.40                  |
| Substation Customer Costs    | 0.96                 | 0.10                  | 0.55                   | 0.55                      | 0.55                      | 0.83                     | 0.83                   |
| Meter O&M                   | 0.27                 | 0.30                  | 0.48                   | 0.48                      | 1.01                      | 1.01                     | 15.83                  |
| Meter Reading               | 0.25                 | 0.50                  | 1.49                   | 1.49                      | 1.49                      | 1.49                     | 1.49                   |
| Services                    | 0.34                 | 1.17                  | 15.96                  | 17.24                     | 17.24                     | 25.24                    | 25.24                  |
| Customer Service            | 8.58                 | 17.10                 | 51.46                  | 51.46                     | 51.46                     | 77.16                    | 77.16                  |
| Customer Charge             | $21.25               | $43.25                | $134.50                | $129.04                   | $135.22                   | $309.92                  | $1,619.78              |
Rate Design
Design of electric rates uses input from the cost of service study as guidance on changes to rate classes and the rate components for each rate class. Cost of service results are one factor in design of electric rates for customers. Other factors must be considered such as impact on customers, social and environmental issues and philosophy of the utilities governing body. The rate design process includes discussion with utility staff and input from Council prior to developing a proposed rate structure. This allows the governing body to have input prior to the actual design of rates. The guidance provided by Council includes input on the overall increase in rates and the increases for each class of customers. Based on UFS experience, this critical step in the process allows for a smooth approval of the proposed rates.

Summary of overall rate adjustments for each class

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Class Code</th>
<th>2015 Revenue base</th>
<th>2015 Revenue with Adjustments</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Rate RES</td>
<td>RES</td>
<td>$43,615,239</td>
<td>$45,197,813</td>
<td>3.6%</td>
</tr>
<tr>
<td>Residential Dual Fuel Rate RES-DF</td>
<td>RES-DF</td>
<td>$10,081</td>
<td>$10,784</td>
<td>7.0%</td>
</tr>
<tr>
<td>Residential High Efficiency HVAC Rate RES-HSECO</td>
<td>RES-HSECO</td>
<td>$128,097</td>
<td>$137,070</td>
<td>7.0%</td>
</tr>
<tr>
<td>Small General Service Rate GS</td>
<td>GS</td>
<td>$18,519,937</td>
<td>$17,819,208</td>
<td>4.2%</td>
</tr>
<tr>
<td>SGS - High Efficiency HVAC Rate SGS-HF</td>
<td>GS-HF</td>
<td>$50,427</td>
<td>$52,950</td>
<td>5.0%</td>
</tr>
<tr>
<td>Medium General Service Rate MGS</td>
<td>MGS</td>
<td>$30,157,753</td>
<td>$31,118,228</td>
<td>3.2%</td>
</tr>
<tr>
<td>MGS - High Efficiency HVAC Rate MGS-HF</td>
<td>MGS-HF</td>
<td>$1,714,138</td>
<td>$1,79,115</td>
<td>4.5%</td>
</tr>
<tr>
<td>MGS - Time-of-Use Rate MGS-TOU</td>
<td>MGS-TOU</td>
<td>$1,064,024</td>
<td>$1,275,605</td>
<td>3.7%</td>
</tr>
<tr>
<td>Large General Service Rate LGS</td>
<td>LGS</td>
<td>$10,669,838</td>
<td>$10,771,426</td>
<td>1.0%</td>
</tr>
<tr>
<td>Large Industrial Service Rate LIS</td>
<td>LIS</td>
<td>$20,755,543</td>
<td>$21,602,500</td>
<td>4.1%</td>
</tr>
<tr>
<td>Interruptible Service Rate INT</td>
<td>INT</td>
<td>$4,683,595</td>
<td>$4,917,673</td>
<td>5.0%</td>
</tr>
<tr>
<td>Cogen and Small Power Prodi Rate Cogen</td>
<td>Cogen</td>
<td>$10,185</td>
<td>$10,602</td>
<td>4.1%</td>
</tr>
<tr>
<td>Interdepartmental Rate MUNI</td>
<td>MUNI</td>
<td>$946,527</td>
<td>$964,046</td>
<td>4.0%</td>
</tr>
<tr>
<td>Civil Defense System 25</td>
<td>CBS</td>
<td>$8,834</td>
<td>$9,049</td>
<td>2.4%</td>
</tr>
<tr>
<td>City Street Lighting/27</td>
<td>CSL</td>
<td>$1,185,625</td>
<td>$1,292,774</td>
<td>2.0%</td>
</tr>
<tr>
<td>Security Lighting/27</td>
<td>SL</td>
<td>$209,386</td>
<td>$212,564</td>
<td>1.4%</td>
</tr>
<tr>
<td>Traffic Signal/27</td>
<td>TS</td>
<td>$105,392</td>
<td>$110,373</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Total $131,131,917 $135,717,975 3.50%

The rate design model compares the current rates with proposed changes. The tables on the next page are sample outputs for the residential class.
### Proposed rates and percentage impacts at various levels of usage

<table>
<thead>
<tr>
<th>Monthly Customer Charge</th>
<th>Current Rates</th>
<th>2015 Proposed Rate Designs</th>
<th>Cost of Service Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers #1</td>
<td>$ 14.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Block 1 (0 - All kWh)</td>
<td>$ 0.09/12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Block 1 (0 - All kWh)</td>
<td>$ 0.11/12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Revenues from Current Rates | $ 43,615,239 |
| Revenues from Proposed Rates | $ 45,197,813 |
| Percentage Change from Current | 3.63% |

### Customer Bill Impacts for Residential 2015 Proposed Rate Designs

![Graph showing customer bill impacts for different usage levels]

### Residential dollar impacts of customers at various usage levels

<table>
<thead>
<tr>
<th>Usage (kWh)</th>
<th>Current Bill ($)</th>
<th>Proposed Bill ($)</th>
<th>Dollar Change ($)</th>
<th>Percent Change (%)</th>
<th>% Customers Ending in Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>230</td>
<td>$ 39.00</td>
<td>$ 41.00</td>
<td>$ 2.00</td>
<td>5.12%</td>
<td>4.61%</td>
</tr>
<tr>
<td>330</td>
<td>$ 49.48</td>
<td>$ 51.69</td>
<td>$ 2.21</td>
<td>4.47%</td>
<td>10.50%</td>
</tr>
<tr>
<td>430</td>
<td>$ 59.96</td>
<td>$ 62.39</td>
<td>$ 2.43</td>
<td>4.05%</td>
<td>12.13%</td>
</tr>
<tr>
<td>530</td>
<td>$ 70.44</td>
<td>$ 73.08</td>
<td>$ 2.64</td>
<td>3.75%</td>
<td>13.04%</td>
</tr>
<tr>
<td>630</td>
<td>$ 80.92</td>
<td>$ 83.78</td>
<td>$ 2.86</td>
<td>3.54%</td>
<td>12.98%</td>
</tr>
<tr>
<td>730</td>
<td>$ 91.40</td>
<td>$ 94.47</td>
<td>$ 3.08</td>
<td>3.37%</td>
<td>11.38%</td>
</tr>
<tr>
<td>830</td>
<td>$ 101.88</td>
<td>$ 105.17</td>
<td>$ 3.29</td>
<td>3.23%</td>
<td>9.56%</td>
</tr>
<tr>
<td>930</td>
<td>$ 112.35</td>
<td>$ 115.86</td>
<td>$ 3.51</td>
<td>3.12%</td>
<td>7.57%</td>
</tr>
<tr>
<td>1030</td>
<td>$ 122.83</td>
<td>$ 126.56</td>
<td>$ 3.72</td>
<td>3.03%</td>
<td>5.53%</td>
</tr>
</tbody>
</table>

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UFS Proposal for the City of Escanaba
Review and Potential Implementation of Power Cost Adjustment (Optional Service)

Power cost adjustments (PCA) are used by many municipal electric utilities to help ensure power costs are recovered from customers in a timely fashion and the electric utility remains financially stable. A PCA reduces the utility’s risk and exposure to changes in power supply costs or changes in transmission charges and helps ensure retail customers are not over or undercharged for electricity in any given year. A PCA has to be implemented properly to ensure dramatic changes in the PCA do not occur on a month to month basis leading to customer complaints. UFS has implemented PCAs for electric utilities around the nation and has extensive experience in identify the most appropriate method that balances customer impacts while maintaining the financial health of the utility. UFS will review the risks and monthly power cost to identify the most appropriate method. Listed below are general methods used by utilities. (A number of variations of each method also exists)

**Monthly (Quarterly, Semi Annual) PCA** - Typically calculated each month or period of time such as quarterly. This methodology tends to result in dramatic changes in the PCA at the time of the true up and may result in increased complaints from customers.

**Annual PCA** - The power costs are trued-up each year and significant changes can occur at the beginning of each year. Also the Utility has to maintain significant reserves to provide funds to cover the fluctuations in the power costs.

**Rolling average PCA** - Tends to smooth out the fluctuations while maintaining the financial integrity of the utility. Costs are reviewed each month with small changes occurring with the goal of balancing power costs at the end of specific period of time such as 12 months.

**Forecasted PCA Monthly Review** - Based on the annual budget then adjusted monthly to reflect actual power supply costs

Renewable Energy – Net Metering and Avoided Cost (Optional Service)

The growth of customer installed Photovoltaic (PV) may result in under-recovering the utilities’ fixed costs due to inappropriately structured residential rates. Many utilities face the following residential rate structure issues:

- Customer charges have historically been held low
- Many states require net metering customers with renewables rather than pricing on avoided costs
- Inverted block rate structures that shift fixed cost recovery to outer rate blocks
- Metering and billing limitations
- Historical practices of recovering fixed costs in the energy component of the rate

These issues have resulted in unstable revenue recovery and under-recovery of costs from customers installing distributed generation. This also causes cost shifts and subsidies. The current rate structures may artificially over-value or under-value distributed generation. The graph on the next page shows fixed and variable recovery for a typical residential customer using 798 kWh’s per month.
Typical Residential Summer Customer  
(Average monthly consumption = 798 kWh's)

If the customer installed a 5kW PV generator producing 700 kWh's (Estimated production from a 5kW PV) the billed energy consumption is reduced to less than 100 kWh's. When the Utility applies its current rates to the remaining usage the revenues recovered from the customer are approximately $23.00, however, the cost to provide electricity to the customer is $45.00. This occurs because residential rate structures do not align with costs.

Typical Residential Summer Customer  
Installation of 5kW PV

For this utility the under-recovery occurs because distribution costs should be recovered through a demand charge and customer charges rather than through the energy (kWh) charge.
A variety of difficulties and limitations exist to correct the rate structure, although some can be easily corrected. They include:

- Limitation on metering & billing systems
- Education of the governing body & customers
- Opposition from interveners and special interest groups
- Past practices in rate designs
- Incorrect price signals sent by certain Joint Action Agencies
Meetings, Reports and Deliverables

Meetings
The following meetings are anticipated:

- Initial meeting – Clarify scope of services, expectations of management and preliminary fieldwork (Conference call and/or webex)
- Fieldwork – Fieldwork will be conducted to verify data (WebEx or conference call)
- Review draft reports with management (Conference call and/or WebEx - On-site optional)
- Presentation as requested by management such as review report with City Council (Conference call and/or WebEx - On-site optional)

Format of Reports
UFS reports are typically separated into two reports listed below:

- **Executive Summary Report** – An overview that identifies the objectives, process and results of the rate study in a clear and concise format, the report includes graphs, charts, tables and recommendations.
- **Rate Design Recommendation Report** – The rate design report is a separate module. To ensure efficiency and timeliness of the study the executive summary is provided to management for input into the rate design process. The rate design report includes the following:
  - Comparison of the current and proposed rates
  - Expected revenues generated from proposed rates
  - Impact on customer classes at various usage levels or load factors within each rate class

Presentation of Cost of Service and Rate Design Study
A critical aspect of the study is the clear and concise presentation to the governing body of the utility. UFS professionals are skilled at explaining and working with advisory and governing bodies to ensure decisions are based on information they can understand and apply to their community.
Firm Qualifications

Qualifications Introduction
UFS has a long-standing relationship and over 17 years of history in assisting municipalities with cost of service and financial analysis for Electric utilities and are recognized experts in the utility field. Our group and the project team assigned to this engagement is composed of highly qualified, experienced, and knowledgeable professionals who remain current on all issues facing utilities. UFS’ reputation has resulted in an industry leading status shown by our frequent request to instruct classes and speak at conferences around the nation, the number of rate studies we have completed.

UFS provides consulting services to assist publicly-owned utilities in meeting their strategic and financial objectives. Services are designed to ensure complete client satisfaction and a commitment that:

- Services will be completed in the agreed upon timeframe
- Services are delivered within budget for services requested
- Services provided will meet or exceed client expectations
- Services will be unbiased and independent recommendations provided to the utility

The Project Manager for the City will be Dawn Lund, and will be assisted by staff. The resume of each individual is included in the resume section below. This section includes:

1. A summary of our experience and qualifications
2. Name of Contact Person for UFS
3. Proposed Team Members and Locations
4. Resumes of UFS personnel

Our experience and commitment to publicly-owned utilities ensures that we understand the issues they face and can assist in providing a variety of services including:

- Electric cost of service and rate design
- Review of indirect cost allocations
- Fee and ancillary service charges
- Cost reduction strategies and benchmarking analysis for utilities
- Financial analysis and feasibility studies for offering telecommunication services
- Evaluating and developing policies and procedures
- Econometric forecasts of sales and load growth
- Utility valuation services
- Power supply negotiation and financial analysis
Summary of Qualifications and Experience

Industry Leading Status
Utility Financial Solutions, LLC (UFS) are recognized experts in the utility field assisting electric utilities with cost of service and financial analysis. UFS is an industry leader and frequently requested to teach classes and present at electric utility conferences around the nation.

Training for Utility Management and Governing Bodies
UFS teaches a series of cost of service, rate design and financial training courses for utility management and governing bodies through American Public Power (APPA) education institutes, on-site training, and webinars. We are instructors for their training courses to assist with their certification program. Additionally, UFS teaches Water Cost of Service and Rate Design for EUCI who is an industry leader in conferences and courses around the nation.

Training for Utility Staff
UFS personnel are the instructors on cost of service and financial planning courses offered through the American Public Power Association (APPA) and the National Association of Regulatory Utility Commissioners (NARUC). These courses include the following:

- Basic Cost of Service
- Intermediate Cost of Service
- Advanced Cost of Service
- Financial Planning
- Utility Financial Check-up
- Cost of Service and Rate Design for Distributed Generation
- Development of Line Extension Policies
- Rate Structures to promote Energy Conservation
- Rate Structures to create Revenue Stability
- Advanced issues in Rate Design
- Advanced issues in Cost Allocations

Conference Presentations
UFS staff are frequently requested to present special topics at regional conferences around the nation including the APPA's National Conference, Educational Institutes, E&O Workshop and the Business and Financial Workshop. A sample of recent presentations are listed below:

- Development of Avoided Cost and Rate Designs for Distributed Generation
- Appropriate levels of Contributions to City (Payment in lieu of Tax)
- Information provided by Cost of Service Studies
- Cash Reserve Policies for Electric Utilities
- Development of Utility Extension Policies
- Development of Key Financial Targets
- Cost of Service Challenges and Solutions

UFS' industry leading status has allowed us to present courses on distributed generation to the US Department of Energy and provide them with proper pricing methods to recover costs and promote renewable generation.
Quality Control
Proper quality control and management includes help ensure the accomplished work is in alignment with the project scope, is completed timely, within budget and the results are accurate and defensible. UFS implements a number of quality controls to achieve these desired goals, including a three level review of the financial projection, cost of service studies and that rate designs achieve the desired revenue requirements. The quality controls developed by UFS are specific to utility rate studies and are based on our prior experience working with electric utilities in the USA, Guam, the Caribbean and Canada. All portions of our studies include the following at a minimum:

1. Development of a detailed work plan based on scope of services and discussion with management
2. Establish work plan with projected milestones and timelines
3. Proof and Balance historical usage, expenses, and revenues with audited financial statements
4. Compare UFS financial projections with utility budgets
5. Review by Project Manager of projections and cost of service study
6. Review by UFS President or Vice-President of study results
7. Presentation of results by UFS with Utility Staff prior to finalizing study

Timeliness of Studies
Part of the quality control includes the timely completion of the rate studies. UFS experience in completing studies provides us the ability to complete the studies as requested and discussed in the initial kick-off meeting.

Experience:
UFS extensive experience includes completion of rate studies in 43 states, including Michigan and Guam, the Caribbean and Canada. We have worked with small utilities as well as some of the largest public power systems around the Country. A small sample includes: Nashville TN, Rochester MN, Danville VA, Naperville IL, Cedar Falls Iowa, Palo Alto CA, and Imperial Irrigation District.

UFS works with the utilities governing bodies to obtain rate approvals and develops rates to assist utilities in meeting the community’s objectives. We have become the nation’s leader in rate development and a sample of some of our services is listed below:

- Development of power cost adjustments
- Time of use rates
- Economic Development Rates
- Standby rates
- Distributed Generation Rates
- Line extension policies
- Street lighting rates
- Combining or expanding rate classes
Experience in Michigan
UFS has provided services to utilities in Michigan including rate studies and training for the City Council. Below is a listing of sampling of current Michigan electric clients.

<table>
<thead>
<tr>
<th>Current Michigan Electric Clients</th>
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<tbody>
<tr>
<td>Bay City, MI</td>
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<tr>
<td>Charlevoix, MI</td>
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<td>Chelsae, MI</td>
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<td>Coldwater, MI</td>
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<td>Grand Haven, MI</td>
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<td>Holland BPW, MI</td>
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<td>Lansing BWL, MI</td>
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<td>Sturgis, MI</td>
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<td>Traverse City, MI</td>
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<td>UPPCO, MI</td>
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<td>Zeeland MI</td>
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Financial Strength
UFS commenced business in 2001 and has the highest financial rating by Dunn and Bradstreet.

Independence
UFS maintains its independence throughout its engagements to help ensure unbiased recommendations to the governing bodies. We do not provide services that could impair our independence such as engineering, accounting, or auditing services. UFS only provides financial services related to Financial Planning, Cost of Service and Rate Designs for Utilities.

Diversity of UFS Staff
The proper development of rate study requires knowledge in accounting, finance, economics and engineering. Utility staff has diverse backgrounds that include degrees in accounting (CPA), engineering, finance, economics and information technology.

Similar Past Studies
UFS has completed electric cost of service studies for a number of utilities around the nation of similar scope of services. A small sampling of clients listed on the next page vary from small to large public power systems.
### Electric Client

<table>
<thead>
<tr>
<th>Electric Client</th>
<th>Electric Utility System</th>
<th>Morgan UT</th>
<th>Słoka AK</th>
<th>Smethport PA</th>
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<tr>
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<td>Georgetown Utility Systems TX</td>
<td>Murfreesboro TN</td>
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<td>Naperville IL</td>
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<td>Bay City MI</td>
<td>Howard Greely NE</td>
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<td>Bedford VA</td>
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<td>Benton County PUD WA</td>
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[www.ufsw.com]
Name and title of primary contact person
Dawn Lund
Vice-President, Utility Financial Solutions, LLC
E-mail - clund@ufsweb.com
Cell - (231) 218-9664
Date firm established - UFS was established in September, 2001

Proposed service team including titles and responsibilities
Mark Beauchamp, President
Dawn Lund – Vice President
Dan Kasbohm – Manager
Mike Johnson – Manager
Chris Lund – Business and Technology Manager
Joan Bakenhus – Senior Financial Analyst
Jillian Beauchamp – Financial Analyst
Robert Blank – Financial Analyst

<table>
<thead>
<tr>
<th>Full Time Staff and Office Locations</th>
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<tbody>
<tr>
<td><strong>Title: President</strong></td>
</tr>
<tr>
<td>Mark Beauchamp</td>
</tr>
<tr>
<td>185 Sun Meadow Ct</td>
</tr>
<tr>
<td>Holland MI 49424</td>
</tr>
<tr>
<td>UFS – 16 Years</td>
</tr>
<tr>
<td>Industry Experience – 34 years</td>
</tr>
<tr>
<td>Phone 616-393-9722</td>
</tr>
<tr>
<td>Fax 888-501-0998</td>
</tr>
<tr>
<td>Cell 616-403-5450</td>
</tr>
<tr>
<td><a href="mailto:mbeauchamp@ufsweb.com">mbeauchamp@ufsweb.com</a></td>
</tr>
<tr>
<td><a href="http://www.ufsweb.com">www.ufsweb.com</a></td>
</tr>
</tbody>
</table>

| **Title: Senior Analyst** |
| Dan Kasbohm |
| 14986 Sandstone Road |
| Grand Haven MI 49417 |
| UFS – 10 years |
| Industry Experience – 10 years |
| Phone 616-846-6464 |
| Fax 888-499-6609 |
| Cell 616-402-7045 |
| dkasbohm@ufsweb.com |
| www.ufsweb.com |

| **Title: Vice President** |
| Dawn Lund |
| 604 S Lake St |
| Leland MI 49654 |
| UFS – 13 Years |
| Industry Experience – 21 years |
| Phone 231-256-0092 |
| Fax 888-566-4430 |
| Cell 231-218-9664 |
| clund@ufsweb.com |
| www.ufsweb.com |

| **Title: Senior Analyst** |
| Mike Johnson |
| 4901 Hermansmeier Road |
| Madison WI 53714 |
| UFS – 6 Years |
| Industry Experience - 21 years |
| Phone 608-230-5849 |
| Fax 888-809-9640 |
| Cell 608-609-6279 |
| mjohnson@ufsweb.com |
| www.ufsweb.com |
Project Team Qualifications

Proposed team members

UFS has put together a project team with the knowledge and experience to successfully meet your requirements and to deliver the report by the agreed upon time-frame. The team has over 100 years of combined experience performing similar studies for utilities. This provides the City with the experience to creatively solve financial and operational issues and help ensure financial stability in future years. The project team assigned has three team members located in Michigan plus support services out of Wisconsin and Nebraska. This team has completed cost of service, financial plans and rate design studies in 43 States, Guam and the Caribbean.

The personnel assigned to this engagement are listed below:

Staff Availability
Utility Financial Solutions has adequate staff available to complete the tasks in the timeline requested in the RFP.

Resumes
The next section consists of resumes of the team members assigned to this engagement.
Mark Beauchamp, CPA, CMA, MBA
President, Utility Financial Solutions, LLC

Email: mbeauchamp@ufsweb.com
Cellular: 616.403.5450
Location: Holland, MI

Education
- AAS Water Purification Technology
- ABA Business Administration
- BBA Major – Accounting
- MBA Master’s Degree in Business

Course Instructor
American Public Power Association (APPA)
- Advanced Cost of Service Course (Cash Basis & Utility Basis of Ratemaking)
- Intermediate Cost of Service (Cash Basis & Utility Basis of Ratemaking)
- Basic Cost of Service (Cash Basis and Utility Basis of Ratemaking)
- Financial Planning for Municipal Utilities
- Financial Planning for Board & Councils
- Financial Planning and Rate Setting for Managers (Part of Managers Certificate Program)

American Municipal Power (AMP)
- Financial Planning and Rate Designs for Electric Utilities

Expert Witness Service
- Detroit Edison vs. Ameritech – Provided expert witness services for Detroit Edison on development of Pole Attachment Rates for Ameritech
- Nebraska State Unicameral – Served as an expert witness before the state of Nebraska Unicameral on proper rate setting and credits to provide customer installed renewable generation
- Dayton Power & Light – Provided expert witness services on pole attachment rates. Case was resolved prior to Court appearance
- Coldwater Board of Public Works – Provide expert witness services on rate challenge by large industrial customer. Case was dropped after deposition was provided
- Smethport PA – Provided deposition and responses to Pennsylvania Public Service Commission on Rate Filing for Smethport

License and Qualifications
- Class “A” license in wastewater treatment from the State of Michigan
- (CPA) Certified Public Accountant – Wisconsin
- (CMA) Certified Management Accountant – Institute Certified Management Accountants

Course Instructor
Michigan State University
- Advanced Issues in Cost Allocation (Utility Basis of Rate Making)
- Retail Costing and Pricing of Electricity
- Wholesale Costing and Pricing of Electricity

Southwest American Water Works Association
- Cost of Service & Rate Making for Water Utilities

Michigan Finance Government Officers Association
- Cost of Service & Rate Making for Water & Wastewater Utilities

Industry Involvement
- Member of the American Public Power Association
- Member of the American Water Works Association
- Member of the Institute of Management Accountants
- Speaker at national conferences on Financial Planning for Municipal Utilities, Pricing for Water Utilities, Pricing Fiber Optic backbone systems, Unbundling Electric Rates, and Ways to Attract and Retain Customers
- Author of articles appearing in national magazines and newsletters regarding pricing fiber optics, training electric rates, and designing water rates
Dawn has 21 years' experience pricing and marketing utility services for electric, water and wastewater. Dawn has worked with UFS for over 10 years and previously worked with a large utility and held positions as Cost and Rate Specialist and Marketing and Communications Specialist. Dawn works with utilities across the country teaching financial concepts and is also the instructor for Financial Planning courses for the American Public Power Association. She is also a regularly requested speaker for various regional and national organizations. Dawn has the following experience:

Email: dlund@ufsweb.com  
Cellular: 231.218.9664  
Location: Traverse City, MI

Cost of Service (COS)
- Completed electric water and wastewater cost of service and rate design studies for utilities across the country, Guam and the Caribbean
- Determining appropriate allocations of overhead costs between utility services

Long-term financial analysis
- Development of long-term sales and expense projections for electric, water, and wastewater utilities
- Development of long-term financial plan and rate track for electric, water, and wastewater

Presentation/Training
- Presentations to City Councils and Boards for approval of utility rates and proposed rate tracks
- Instructor for APPA's Financial Planning courses
- Monthly presentations to various organizations on topics such as: financial planning, Key financial targets, cash policies and how to explain rate increases to the end user, cost of services challenges/solutions, and introduction to allocation studies

Rate Design
- Development of electric rate designs to meet financial and social objectives of utility
- Development of special rates for electric utilities including Net Metering, Economic Development and Time of Use

Other Utility Tools
- Development of power (fuel) cost adjustments for electric utilities
- Development of connection charges for water and wastewater utilities
- Review and recommend changes to ordinances related to utility operations
- Development of fees for utility services
- Business plan development for telecommunications and pricing of fiber services to customers
- Determining high strength surcharge rates for wastewater treatment plants consistent with EPA requirements
- Development of marketing plans for utilities
- Experienced in pricing electric line extension fees and system development charges
ELECTRIC COST OF SERVICE AND RATE DESIGN STUDY

Project Team Qualifications

Mike Johnson
Manager, Utility Financial Solutions, LLC

Mike joined Utility Financial Solutions in 2011 and has over 20 years' experience assisting utilities. He has a Higher National Diploma in Mechatronics (Combined Electrical/Mechanical Engineering). Mike is experienced in cost of service, rate making, financial/operational modeling, automation, electric utility operations, and power supply.

E-mail: mjohnson@ufsweb.com
Cellular: 608.230.5849
Location: Madison, WI

Cost of Service
- Development of cost of service studies for electric, communication, gas, water and Wastewater utilities
- Forecasts utility revenue requirements
- Cost allocation model development

Long Term Financial Analysis
- Develops utility financial analysis models
- Identifies growth and load forecasting
- Models rate and revenue effect for customer change within utilities (loss of customers/additional load)
- Develops target metrics for utilities including cash policies, operating income, debt coverage

Rate Design
- Provides cost of services class allocations and rate making
- Designs time of use rates
- Identify effects for different usage patterns within the same class
- Development of rates for alternative fuels and vehicles
- Evaluate marginal costs and development of line extension policies and economic development rates

Expert Witness Services
- Prepared and testified on filings to Public Utility Commission

Other Utility Tools
- Computes cost functionalization and allocation systems for designing and managing complex changes
- Evaluates data and system integration issues associated with new software implementations
- Provides market analysis, bidding and settlement processes analysis
- Identification and valuation of fixed assets
- Assessment of utility value for sales/purchase
- Development of risk mitigation tools, power/fuel cost adjustment mechanisms
Dan Kasbohm  
Manager, Utility Financial Solutions, LLC

Dan joined Utility Financial Solutions in 2007 and has experience in conducting cost of service and financial analysis for electric, water, wastewater and cable utilities around the nation. He has a Bachelor of Science degree in Engineering and was employed in the automotive industry for 16 years. Dan is a co-instructor for the Basic and Intermediate Cost of Service courses for the American Public Power Association and has the following experience:

E-mail: dkasbohm@mail.ufsweb.com  
Cellular: 616.402.7045  
Location: Grand Haven, MI

Cost of Service (COS)  
- Identification of fixed/variable costs related to:  
  - Customer availability to be served  
  - Commodity based costs  
  - Demand based costs  
- Identification of class to class subsidization  
- Utility cost breakdown by function  
- Detailed cost unbundling

Long-term financial analysis & identification of:  
- Utility revenue requirements (utility and cash based methods)  
- Debt Coverage conformance  
- Minimum cash requirements  
- Optimal operating income targets  
- Optional rate adjustments in projected years

Presentation/Training  
- Presenting study results to management and governing body of utility  
- Provide utility training on use of projection & COS models  
- Co-Instructor for the American Public Power Association Academy  
  - Basic & Intermediate Cost of Service

Rate Design  
- Current Utility rate structure updates  
  - Utility revenue impact  
  - Customer bill impacts at various usage levels  
  - Identify revenue stability of rates  
  - Rate survey analysis  
- Development of new rates including:  
  - Time of Use (seasonal, daily, hourly)  
  - Power Cost Adjustment (PCA)  
  - Coincidental-Peak Rates  
  - Economic Development rates  
  - Street lighting rates

Other Utility Tools  
- Power Cost Adjustment mechanisms based on utility cash position, objectives and dispatch profile  
- Street Light Cost of Service by light and pole types  
- Load Profile Analysis to identify utility and customer usage patterns  
- Power supply forecasting  
- Implementation of a justified minimum cash policy  
- Calculation of fees for standard utility work  
- Development of line extension policies
Joan Bakenhus
Senior Financial Analyst, Utility Financial Solutions, LLC

Joan has 17 years' experience working with municipal utilities and has a degree in Business Administration. Joan has worked as a Rate Analyst for one of the largest public power systems in the nation (Lincoln Electric System) and for Utility Financial Solutions since 2006. Joan is experienced in development of long-term financial plans, rate design models and cost of service studies for electric, water, and wastewater utilities. Joan's experience includes:

E-mail: jbakenhus@ufsweb.com
Cellular: 402.483.2542
Location: Nebraska

<table>
<thead>
<tr>
<th>Cost of Service (COS)</th>
<th>Rate Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with Utilities to identify information requirements to complete cost of service and financial plans</td>
<td>Balancing and set up of models for development rate design for water, wastewater and electric utilities to determine commodity and customer charges</td>
</tr>
<tr>
<td>Set up and develop utility revenue requirements, cost of service program and utility revenue proof</td>
<td>Development of rate design models for electric, Water utilities</td>
</tr>
<tr>
<td>Balancing and set up of models for development of cost of service for water, wastewater and electric utilities to determine commodity and customer charges</td>
<td>Development of rate surveys</td>
</tr>
<tr>
<td>Responsible for analysis, preparation and updating cost of service models for a number of electric, Water utilities</td>
<td>Other Utility Tools</td>
</tr>
</tbody>
</table>

- Balancing of sales with revenue to help ensure proper billing statistics are used in cost of service models

Long Term Financial Analysis
- Development of long-term financial forecasts for water, wastewater, and electric utilities to determine the amount and timing of rate adjustments
Chris Lund
Business & Technology Manager, Utility Financial Solutions, LLC

Chris has a bachelor’s degree in Business Administration with concentration in Computer Science and Speech Communications. He has been a technology and management consultant for over 20 years. Chris is an employee of UFS and has also sub-consulted on a variety of technology projects for UFS since 2003. A few of the highlights are below:

E-mail: clund@ufsweb.com
Cellular: 231.342.9798
Location: Traverse City, MI

Financial Consulting
- Completed cost of service and rate design studies for electric, water, wastewater, telecommunications and refuse utilities
- Designed, wrote and implemented long term financial projection model including revenue requirements and rate track
- Determined avoided cost for solar (photovoltaic - PV) and wind for renewable energy rates
- Lead consultant for electric vehicle (EV) rates and service study
- Conducted multiple fiber optic cost of service and rate design studies
- Presentations to City Councils and Boards for approval of utility rates and proposed rate tracks

Technology Experience
- Experienced in Microsoft Excel automation – including payroll data, job costing and automated billing (office automation)
- Experienced in Microsoft Access custom database, programming and reporting – including electronic data interchange (EDI) mapping using Microsoft VBA
- Lead consultant for multiple mission critical, corporate wide enterprise resource planning (ERP) technology solutions
- Implemented, trained and supported multiple telecommunications projects
- Implemented and supported some of the first voice over internet protocol (VOIP) telecommuting systems
- Guide management with technology related strategy and business integration
- Modification and complete custom program solutions on midrange and PC
- Wrote automated bill of material (BOM) purchasing forecasting system
- Specify, install and maintain mission critical PC network infrastructure, servers, workstation and related software
- Experienced in network security and virtual private network (VPN) technology
- Implemented and supported web storefronts integrated with corporate backend database solution for inventory management, order processing, billing and account status

Data Analytics
- Data mining and analysis specialist for electric load data research
- Specialist with data mining, data conversion and custom reporting
- Experienced with various ODBC (database connectivity)
- Implemented job costing solution for manufacturing companies
- Designed, written, implemented, supported multiple, custom bar coding and data collection systems for wholesale distribution and manufacturing organizations
- Data collection systems pushed data to payroll for time and attendance, automated inventory tracking and job costing
Jillian Beauchamp, MEc.
Financial Analyst, Utility Financial Solutions, LLC

E-mail: jbeauchamp@ufsweb.com
Cellular: 616.283.8502
Location: Holland, MI

Jill has been with UFS since 2013. She has a Bachelor’s degree in Mathematics and a Master’s degree in Applied Economics from Johns Hopkins University. Jill has populated and analyzed cost of service models, developed long-term financial projections, and designed rates for utilities. Jill specializes in econometric modeling and statistical analysis to project sales and usage. She has worked with a variety of econometric software packages and is competent in handling seasonality, trend, heteroscedasticity, and other economic inefficiencies that arise in data analysis. Jill is skilled in the following:

- Forecasting Utility revenue requirements
- Projecting revenues and expenses, asset depreciation, and net book value
- Designing rates based on Cost of Service results
- Analyzing rate payer impacts and sensitivities
- Working with Utility Staff to identify study goals and understand organization
- Keeping up to date on the current economic impacts of renewable energy, the relationship to the Clean Power Plan legislation, and potential effects on the Electric Industry

Robert Blank
Financial Analyst, Utility Financial Solutions, LLC

E-mail: bblank@ufsweb.com
Cellular: 616.403.9926
Location: Holland, MI

Robert has been working for Utility Financial Solutions since May of 2014 and has a Bachelor’s of Business Administration with a major in Finance from Davenport University. Over his time at UFS he has conducted Utility rate surveys as well as developed rate designs. Robert has experience with long term financial projections and cost of service studies for Electric, Water, Wastewater, and Gas utilities. Robert’s experiences include:

- Developing rate design models for electric utilities
- Conducting Rate Surveys
- Responsible for analysis of financial statements and preparation of cost of service models
- Working with utilities to identify the information needed to conduct an accurate cost of service study
- Calculating Minimum Cash Reserve levels, Target Operating Income, and Debt Coverage Ratios
References

**Coldwater Board of Public Utilities, Michigan**

Client Contact:  Paul Beckhusen, General Manager  
Client Phone: 517-279-9531  
Scope of Work: This project was an Electric cost of service and unbundling study, long-term financial plan and one year rate design. Water and Wastewater cost of service studies have also been completed.

**City of Bay City, Michigan**

Client Contact:  Phil Newton; General Manager  
Phone: 989-894-8348  
Scope of Work: Completion of an electric cost of service study, long-term financial plan and rate design. Developed time of use rates and special rates for large industrial customers. Presentation of Results to City Commission.

**Marquette Board of Light and Power, Michigan**

Client Contact:  Tom Carpenter; Executive Director  
Phone/Email: 906-228-0345  
Scope of Work: The project involved an electric cost of service and unbundling study, long-term financial projection and a one year rate design. Development and review of special rates such as a rate for university to run generation equipment. Presentation to Board of Directors.
Project Schedule

Our experience with municipal electric cost of service and rate design studies, allows us to conduct a cost effective and efficient study. The following is the tentative project schedule for completion of the electric cost of service and rate design. This schedule will be finalized during the initial project kick-off meeting with management.

<table>
<thead>
<tr>
<th>Task</th>
<th>Expected Completion - Twelve Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Meeting - Preparation of Information Request</td>
<td>Week One</td>
</tr>
<tr>
<td>Completion of Information Request by Client</td>
<td>Week Two</td>
</tr>
<tr>
<td>Planning/Set-up Models</td>
<td>Week Three – Five</td>
</tr>
<tr>
<td>Review and Development of Revenue Requirements</td>
<td>Week Six – Seven</td>
</tr>
<tr>
<td>Fieldwork</td>
<td>Week Eight</td>
</tr>
<tr>
<td>Cost of Service Analysis Component/Functional Costs</td>
<td>Week Nine</td>
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<tr>
<td>Cost based Rate Design and alternatives</td>
<td>Week Ten</td>
</tr>
<tr>
<td>Report, Recommendations &amp; Presentation of Draft</td>
<td>Week Eleven</td>
</tr>
<tr>
<td>Final Report</td>
<td>Week Twelve</td>
</tr>
</tbody>
</table>

The completion of the project on the proposed schedule is dependent on the cooperation of various departments within the City to prepare the information request in a timely manner.
Proposed Professional Services Agreement

Prices, terms, and conditions are good for a period of 90 days from proposal date of May 14, 2018. Payment will be made through submission of invoice which itemizes the work performed.

**Total project fees for Scope of Services are $19,500.00**

(*Total above does not include onsite visits, out of pocket travel expenses or travel time)

**Anticipated Meetings:**
- Initial meeting – Conference Call to clarify scope of services, expectations of management and preliminary information request
- Fieldwork – Conference Call to verify data provided
- Draft Report with management - Conference call
- Final Report with management – Conference call

**Deliverables:**
1) Long-term financial projection and rate track
2) Cost of Service Analysis
3) Minimum cash reserve determination
4) Debt Service Ratio
5) Target operating income (rate of return)
6) One-year rate design & revenue proof

**Hourly Rates (travel is discounted at 50%)**
- Mark Beauchamp: $295.00
- Dawn Lund: $250.00
- Dan Kasbohm: $230.00
- Mike Johnson: $230.00
- Chris Lund: $195.00
- Joan Bakenhus: $135.00
- Support Staff: $105.00 – 130.00

**Out of Scope Services – on-site and travel expenses**
On-site visits will be billed hourly plus out of pocket expenses as well as travel time discounted at 50% of regular rates. All cost incurred by schedule changes initiated by client after booking will be considered out of pocket. In addition, out of scope service work hours are billed at the hourly rates listed on this page.

We look forward to exceeding your expectations. Please sign, date, and return to clund@ufsweb.com at your earliest convenience.

*Sincerely,*

Dawn Lund

Dawn Lund
Vice-President, Utility Financial Solutions, LLC

Date:

Accepted By: