

THIRD TAXING DISTRICT
of the City of Norwalk
Commission Meeting
May 4, 2015

ATTENDANCE: Commissioners: Charles Yost, Chair; David Brown; Debora Goldstein

STAFF: Jim Smith, General Manager; Ron Scofield, Assistant General Manager;
Cynthia Tenney, Executive Assistant

OTHERS: Marvin PTO: Leia Hamilton, Lisanne Kyle, Sarah Amato-Mills
CMEEC: Justin Connell

CALL TO ORDER

Commissioner Yost called the meeting to order at 7:00 p.m. A quorum was present.

PUBLIC COMMENT

There was no one present from the public.

MINUTES OF MEETING

April 6, 2015

**** COMMISSIONER BROWN MOVED TO APPROVE THE MINUTES OF APRIL 6, 2015 REGULAR MEETING.**

**** COMMISSIONER GOLDSTEIN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

April 1, 2015

**** COMMISSIONER BROWN MOVED TO APPROVE THE MINUTES OF APRIL 1, 2015 SPECIAL MEETING.**

**** COMMISSIONER YOST SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

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April 24, 2015

**** COMMISSIONER GOLDSTEIN MOVED TO APPROVE THE MINUTES OF APRIL 24 2015 EMERGENCY MEETING.**

**** COMMISSIONER YOST SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

MARVIN SCHOOL GRANT REQUEST

Sarah Amato-Mills spoke to the Commission and requested a grant in the amount of \$5,000 for Marvin School's Science programs. The grant money would be for 4 programs throughout the school year. Commissioner Brown asked what the Maritime Seashore Exploration program entailed. Ms. Amato-Mills explained what the program was about and how it teaches the children about marine life, conservation and being eco-friendly.

Ms. Amato-Mills explained the reason for the request. Without the grant money, the financial aspect would fall upon the parents and some of the families are considered as low income and would not be able to afford the cost for their child(ren). The funds would guarantee that all the students would be able to participate.

**** COMMISSIONER GOLDSTEIN MOVED TO APPROVE THE GRANT TO THE MARVIN IN THE AMOUNT OF \$5,000.**

**** COMMISSIONER YOST SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

CMEEC PRESENTATIONS

Summer Market Outlook

Mr. Connell indicated that as of today, 80% of the energy has been procured for the summer at a price of \$53/MWh. Pricing has been coming down due to the milder weather the area has been experiencing. The balance of the power supply portfolio will be filled in over time as the weather forecasts are updated. As of right now there are no indications as to whether it will be either a hotter or cooler summer.

Community Solar Garden Update

CMEEC and the member utilities have gone out and procured 15MW of Community Solar Gardens, which is utility grade solar. Then, the utilities sign up retail customers to participate in the energy generated from the community solar gardens. It benefits the retail customers who don't have the benefit to install their own solar.

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The solar garden will be located at the Groton Subbase, Groton Waste Water Treatment Facility, Norwich Rogers Road Landfill, Bozrah and Stott Avenue near the CMEEC offices in Norwich. Construction is currently ahead of schedule. The expected commercial operation date is between Q4 2015 and Q1 2016.

There will also be a battery storage opportunity. CMEEC will be contracting for 1.5MW of storage capacity to be installed at the Subbase and Stott Avenue locations. The solar gardens will charge the batteries, and CMEEC will discharge the batteries at strategic intervals to create an economic benefit for its members.

By July 2015 members will have marketing materials available for Solar Garden subscriptions. This program will replace the current Green Choice Program. Individuals will have the opportunity to subscribe for their desired solar power mix. As of right now, Third Taxing District has 24 customers that are signed up for the Green Choice Program.

CMEEC MEMBERSHIP MARGINS

Mr. Smith explained that CMEEC has declared a membership margin which is basically a dividend as a result of their operations. Mr. Smith and Commissioner Brown attended a special meeting at CMEEC and it was declared that they wanted to take a Full Excess Equity Distribution. Third Taxing District is entitled to \$226,760 from the overall dividend. Mr. Smith and Commissioner Brown discussed where the monies should be transferred to and are recommending it go to the Rate Stabilization Fund.

Commissioner Goldstein asked what the other choices were. Mr. Smith said it could be used to offset an invoice, placed in the Trust Fund or take it as a direct check.

**** COMMISSIONER GOLDSTEIN MOVED TO APPROVE THE TRANSFER INTO THE RATE STABILIZATION FUND.**
****COMMISSIONER YOST SECONDED.**
**** THE MOTION PASSED UNANIMOUSLY.**

COST OF SERVICE/RATES

Mr. Smith reviewed with the Commission the development of the retail rate design in 2014. Some of the updates included the elimination of the 2 free KW of demand, which appears to not have been issue whatsoever, as well as any issues from the ratepayers with regard to the new rate structure. We have had few, if any, comments from customers.

A detailed Power Cost Adjustment Worksheet has been established and is being used to track month-to-month changes in the wholesale cost of power from CMEEC. TTD has set the initial PCA at 0.0100 (1 cent) for the past six months. As of April 1, 2015 is was raised to 0.0170 (1.7

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cents) due to a cumulative under collection of PCA revenues. This will be monitored more closely and may need to have adjustments made on a quarterly basis.

Mr. Smith believes that within the next 12 months an update to the initial Cost of Service Study should be performed in order to further refine costs and “true up” the results of the initial study.

ENERGY CONSERVATION PROGRAMS/ACTIVITIES

Ms. Tenney reviewed with the Commission the different energy conservation programs that Third Taxing District is currently offering their ratepayers – solar, rebate programs, lighting retrofit incentives, HES Program and the bi-annual light bulb program.

Since January, solar and rebate programs have not been as active. On the other hand, the HES Program has become popular and since the beginning of January, 17 customers have taken advantage of this “free” program.

The most recent program taking place is the Free Light Bulb Program. This time around, TechniArt designed a landing page for TTD and an email blast was sent to the ratepayers, whereby allowing them to order their light bulbs online vs. mailing in a coupon. The coupon still exists and is being included in the May billing.

ANNUAL MEETING REVIEW

Mr. Scofield told the Commission now that the Annual Meeting has taken place, it is a good idea to go back and review the proceedings and get input as to how it could be handled more efficiently. He asked the Commission if they had any new recommendations or requests for future meetings. For example, perhaps we should look for a new Recording Secretary, as he doesn't believe our current Recording Secretary can do it as quickly or efficiently as in the past. He asked what type of Minutes would the Commission like to see coming out of the Annual Meeting, i.e., a transcript vs. verbatim.

Commissioner Brown thought that perhaps the Recording Secretary could take the agenda and make small notes, i.e., who gets elected as Secretary, election of Meeting Chairperson, etc.

Commissioner Goldstein showed concern about fulfilling the FOI obligation by having the Minutes posted within 48 hours, which would consist of motions and votes taken. She indicated that the Commission would still want to have a full transcript of the meeting so they could get a good read on the intent of the room and any little idiosyncrasies that may have taken place.

Commissioner Yost suggested that a laptop/projector be used to put the current motion up for all to read, as well as any amendments that come from the floor, so as to avoid any confusion as to what is taking place at the time. He also suggested that videos of all voting be taken.

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It was also suggested that the meeting needs to be slowed down and be more formal, thus eliminating any confusion for the ratepayers.

It was decided that the Commissioners would give this topic more thought over the next few months and revisit the subject in September.

CAPITAL/OPERATING BUDGETS FOR FY 2015-16

Mr. Smith has conducted initial planning meetings with both Mike Adams and Ron Scofield over the past month or so. In early April budget worksheets for given to both for data input with a “first draft” due at the end of April.

Mr. Smith is also meeting with Matt Allred to review the first draft of each budget in order to make any adjustments necessary prior to printing a “second draft” for the final review at the end of May. Subsequent budget meetings will then be scheduled with the Commission as necessary to review and approve the budgets for the upcoming fiscal year.

GENERAL MANAGER’S REPORT

ByLaw Review

Mr. Smith indicated that this issue had been pursued in the past with John Bove and at the time the consensus of the Commission was to defer developing a formal set of ByLaws until a future date. Since this item is now on the calendar, he is once again asking if there is any interest in having any further discussion on the matter.

Mr. Smith provided the Commission with “sample” ByLaws from other organizations similar to Third Taxing District. Discussion took place about the ByLaws and how to develop them. Mr. Smith felt he could put together a draft, run it by the Commission and then take it up with John Bove.

After further discussion, it was decided that Commission Goldstein would work on putting together a very rough draft and present it at the June 2015 meeting, then work collaboratively on the project with the Commission.

Contributions Line Item – 2015/16 Operating Budget

With regard to the new line item of “Other District Services” added to the District Budget, Mr. Smith made the suggestion that perhaps we add a “Contributions” line item to the Operating Budget and remove the line item from the District Budget going forward. Discussion took place about whether or not it should be removed from the District Budget in the future and what the

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effects would be with the ratepayers. The consensus was that the monies be added to the Operating Budget going forward with a per person cap.

DISCUSSION/ANALYSIS OF FINANCIAL STATEMENTS/KEY PERFORMANCE

Net income is positive. Since July, \$315,100 has been added to the Rate Stabilization Fund. Going forward another line item will be added the Financial Highlights page to reflect the Total CMEEC Debt being paid down. The beginning total CMEEC debt beginning in July 2014 was approximately \$5.3 million. As of today, it is approximately \$4.7 million.

During the month of March, we basically held our own. It was a fairly cold month, power bills ran high, a lot of overtime associated with call-outs, etc. Bottom line is that March was a break-even month.

We still had a strong month with regard to Norden. We didn't run into the market as much as we had anticipated. We're holding our own P&L-wise.

With regard to Cervalis, an expansion of 1MW to 1.5MW may take place within the next couple of months due to a new client coming in.

3rd Qtr. Budget vs. Actual with a benchmark of 75% - From a budgeting standpoint for revenues, the budgeting is pretty close, 74% of budget. Total Income is at 76%. We under-estimated our power supply expenses which is at 61%. On a cash basis, we're in fairly good shape. We've spent a lot of time tracking these expenses. For those that are above the benchmark, we are always looking for ways to lower the costs.

EXECUTIVE SESSION

- Defamation Claim regarding items published in local news sources – Planning and Strategy of a Potential Claim
- FOI Appeal regarding ENIA Executive Session – Planning and Strategy of a Potential Claim
- Maplewood Claim

**** COMMISSIONER YOST MOVED TO ENTER INTO EXECUTIVE SESSION TO DISCUSS POSSIBLE CLAIM(S) FOR DEFAMATION, TO DISCUSS AN APPEAL TO THE FOI COMMISSION AND MAPLEWOOD CLAIM.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

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The Commissioners, Mr. Smith and Mr. Scofield entered into Executive Session at 8:55 p.m.

**** COMMISSIONER YOST MOVED TO EXIT EXECUTIVE SESSION AND RETURN TO PUBLIC SESSION.**

**** COMMISSIONER GOLDSTEIN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

The Commissioners, Mr. Smith and Mr. Scofield returned to public session at 9:25 p.m.

ADJOURNMENT

**** COMMISSIONER GOLDSTEIN MOVED TO ADJOURN.**

**** COMMISSIONER YOST SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

The meeting adjourned at 9:25 p.m.

Respectfully submitted,

Cynthia Tenney
Executive Assistant
Third Taxing District

MOTION FOR MINUTES

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) REGULAR MEETING.

OR

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) REGULAR MEETING AS CORRECTED.

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THIRD TAXING DISTRICT
of the City of Norwalk
Special Commission Meeting
May 20, 2015

ATTENDANCE: Commissioners: Charles Yost, Chair; David Brown; Debora Goldstein*

STAFF: Jim Smith, General Manager

OTHERS: Alex Cohen*, Aaron Cohen Associates

CALL TO ORDER

Commissioner Yost called the meeting to order at 1:00 p.m. A quorum was present.

PUBLIC COMMENT

There was no one present from the public.

PREP FOR MAY 30TH EVENT

Mr. Alex Cohen reviewed the agenda for the May 30th event with the Commission on a line-by-line basis. It was determined that the agenda should remain as presented. Mr. Cohen will be bringing two associates with him to the event to assist with the coverage of the 5 stations. He suggested that the Commissioners participate and cover the stations that remain unmanned.

The next phase of the discussion was the online survey. Mr. Cohen reviewed the questions with the Commission to see if they would like to add and/or remove any of the questions on the survey. The Commission decided to add two new questions and remove one. The online survey will also be available at the May 30th event.

Mr. Cohen said he would touch base again before the event, sometime next week.

ADJOURNMENT

**** COMMISSIONER YOST MOVED TO ADJOURN.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

*Commissioner Goldstein and Alex Cohen participated by telephone, and confirmed that they could hear and be heard.

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of the City of Norwalk
May 20, 2015

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The meeting adjourned at 2:00 p.m.

Respectfully submitted,

Cynthia Tenney
Executive Assistant
Third Taxing District

*Commissioner Goldstein and Alex Cohen participated by telephone, and confirmed that they could hear and be heard.

Third Taxing District
of the City of Norwalk
May 20, 2015

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COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING.

OR

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING AS CORRECTED.

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THIRD TAXING DISTRICT
of the City of Norwalk
Special Commission Meeting
May 21, 2015

ATTENDANCE: Commissioners: Charles Yost, Chair; David Brown; Debora Goldstein

STAFF: Jim Smith, General Manager; Ron Scofield, Assistant General Manager;
Cynthia Tenney, Executive Assistant

OTHERS: Tom Hennick, FOI Commission

CALL TO ORDER

Commissioner Yost called the meeting to order at 7:00 p.m. A quorum was present.

PUBLIC COMMENT

There was no one present from the public.

FOI TRAINING

Mr. Tom Hennick of the FOI Commission of the State of Connecticut was in attendance to review with the Commissioners and TTD staff proper procedures for conducting meetings. He began by giving a bit of history as to why and how the FOI Act came to fruition 40 years ago.

Items which were reviewed were Notice of Meetings, Types of Meetings, Executive Sessions and requests for public records.

EXECUTIVE SESSION

- Library Planning Committee – Resume Review
- Mediation

**** COMMISSIONER BROWN MOVED TO ENTER INTO EXECUTIVE SESSION TO DISCUSS THE LIBRARY PLANNING COMMITTEE RESUME REVIEW AND MEDIATION.**

**** COMMISSIONER GOLDSTEIN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

Third Taxing District
of the City of Norwalk
May 21, 2015

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The Commissioners, Mr. Smith and Mr. Scofield entered into Executive Session at 8:21 p.m.

**** COMMISSIONER GOLDSTEIN MOVED TO EXIT EXECUTIVE SESSION AND RETURN TO PUBLIC SESSION.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

The Commissioners, Mr. Smith and Mr. Scofield returned to public session at 8:55 p.m.

ADJOURNMENT

**** COMMISSIONER GOLDSTEIN MOVED TO ADJOURN.**

**** COMMISSIONER BROWN SECONDED.**

**** THE MOTION PASSED UNANIMOUSLY.**

The meeting adjourned at 8:55 p.m.

Respectfully submitted,

Cynthia Tenney
Executive Assistant
Third Taxing District

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of the City of Norwalk
May 21, 2015

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COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING.

OR

COMMISSIONER (name of Commissioner) MOVED TO APPROVE THE MINUTES OF (date of meeting) SPECIAL COMMISSION MEETING AS CORRECTED.

Memorandum Third Taxing District Electric Department

To: TTD Commissioners

From: Jim Smith – General Manager

Date: May 21, 2015

Subject: Marvin School Grant Payment



As a follow-up to last month's meeting, the Commission approved the grant to Marvin School in the amount of \$5,000, but no final decision was made as to where the monies should be taken from.

There are several funding options available:

- . Take the money out of the CL&M fund @ CMEEC (past practice).
- . Take the money out of the "Other District Services" line item in the District Budget as presented and approved @ the 2015 Annual Meeting.
- . Take the money out of the 2015-16 Operating Budget, as an expense under the "Contributions Expense" category.

My recommendation would be to take the funds from the Contribution Expense account in the 2015-16 Annual Operating Budget, which would be set up to fund these type of requests going forward and eliminate the confusion we experienced @ the last Annual meeting.

Let's plan on discussing and making a final decision @ the Commission meeting on June 1st.

Memorandum Third Taxing District Electric Department

To: TTD Commissioners

From: Jim Smith – General Manager

Date: May 26, 2015

Subject: Presentation of TTD Five Year Capital and Operating Budgets

Attached please find for your initial review a draft of the TTD Five Year Capital Budget for the FY 2015-16 through 2019-20 and the TTD Annual Operating Budget for FY 2015-16.

The Budget format has been prepared consistent with prior years with some minor administrative edits to make it easier to understand and follow.

Funding for these items will be consistent with prior years, utilizing a combination of monies from the Capital Improvements Account and short term debt financing from the line of credit we currently have with Patriot Bank. We also may want to utilize the Rate Stabilization Fund at CMEEC, but only if necessary.

Please look through the Budget and make a note of any items you wish to discuss in more detail.

Depending on the number of questions, we may want to schedule a special meeting in the month of June just to address any specific issues related to the Capital and Revenue and Operating budgets.

My goal is to have both budgets reviewed and approved by the Commission so that we can have it in place for the start of the July 1, 2015 fiscal year.

Memorandum

Third Taxing District

Electric Department

To: TTD Commissioners

From: Jim Smith – General Manager

Date: May 22, 2015

Subject: EMERGENCY REPAIR - Partial Roof Replacement – 2 Second St. Facility

Attached please find copies of detailed bid documents and bid responses regarding a roof replacement of the garage area between the Truck Bay Garage and the main office area (see drawings) of the Second St. facility.

This section of the roof has been leaking for some time and has begun to develop more serious leaks recently; necessitating the use of 40 gallon trash buckets to catch the water on a rainy day. It also contains an asbestos membrane which must be totally abated.

This section of the roof has now reached the point where it now needs to be totally replaced.

As a result, we solicited Gill and Gill Architects, who have drafted roofing bid documents for several other City of Norwalk municipal buildings, to create a set of detailed bid documents, including asbestos removal, for prospective bidders.

Two qualified bids were received on the project.

The results of the bids are as follows:

- . J. Antonelli Roofing - \$ 54,850.00
- . Rick's Main Roofing - \$39,231.00

Based on the bid results, we recommend that the low qualified bidder, Rick's Main Roofing of E. Norwalk, Ct., be awarded the bid for the project.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Requirements, bidding documents and drawings.

1.2 SUMMARY

- A. Furnish and install roof materials, insulation, flashings, and miscellaneous materials on the following designated roof areas:

- B. Work at Third Taxing District Electric Department includes:

- 1. Installation of Ethylene propylene diene monomer (EPDM) membrane roofing system on steel deck, including but not limited to:
 - a. Removal and legal disposal of asbestos containing materials, gravel ballast, roof membranes, insulations and flashings down to deck. Removal of former antennae anchor eyelets and cables.
 - b. Polyisocyanurate insulation, average R Value of 24, loose laid on steel decking.
 - c. ½" per foot slope minimum tapered polyisocyanurate insulation, loose laid on base insulation or steel decking.
 - d. ½" cover board fully, mechanically fastened.
 - e. EPDM membrane fully adhered to cover board.
 - f. Install specified flashing system
 - g. New scupper drains.

1.3 INTENT OF THE SPECIFICATIONS

- A. The intent of these specifications is to describe the materials and methods of construction required for the performance of the work. In general, it is intended that the drawings shall delineate the detailed extent of the work. In the event of a discrepancy between drawings, specifications or industry standards, the most expensive method shall govern unless otherwise directed by the Owner or Architect.

1.4 PROTECTION

- A. The Contractor shall use every available precaution to provide for the safety of property owner, visitors to the site, and all connected with the work under the specification.
- B. All existing facilities both above and below ground shall be protected and maintained free of damage. Existing facilities shall remain operating during the period of construction unless otherwise permitted. All access roadways must remain open to traffic unless otherwise permitted.

SUMMARY OF WORK
SECTION 01010

- C. Barricades shall be erected to fence off all construction areas from operations personnel.
- D. Safety Requirements
 - 1. All application, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
 - 2. Comply with federal, state, local and owner fire and safety requirements.
 - 3. Advise owner whenever work is expected to be hazardous to owner employees and/or operations.
 - 4. Maintain a crewman as a floor area guard whenever roof decking is being repaired or replaced.
 - 5. Maintain proper fire extinguisher within easy access whenever power tools, roofing kettles, and torches are being used.
 - 6. All safety requirements of the building owner must be followed. No exceptions will be permitted. Safety orientation meeting required prior to performing any work.
- E. The Contractor shall provide safe access for the Owner and Architect to examine and inspect the work during the entire duration of the project.

1.5 HOUSEKEEPING

- A. Keep materials neat and orderly.
- B. All materials stored on the roof shall be tied down or otherwise secured to prevent wind from blowing loose materials off the roof.
- C. Remove scrap, waste and debris from project area at the end of each day to prevent loose materials from being blown off the roof.
- D. Maintenance of clean conditions on both the interior and exterior of the building while work is in progress and cleanup when work is completed shall be in strict accordance with the "General Requirements" of this contract. The Contractor shall be responsible for cleaning dust and debris on a daily basis. If the Contractor fails to do so and school custodians are required to clean dust and/or debris caused by the Contractor, the Contractor shall be back charged for the custodial time.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.1 Contractor to notify City prior to commencing work.

END OF SECTION

Partial Roofing Replacement at
Third Taxing District Electric Department
2 Second Street, Norwalk, CT 06855

Project No.: 1513

ADDENDUM ONE (with attachments 12 pages)

Thursday, May 13, 2015

Bid Proposal Due

3:00 pm

Monday, May 18, 2015

The following clarification(s) are applicable to drawings and specifications for the project referenced above.

Item 1 Add: Hazardous materials specification sections 01011 (3 pages), 02080 (3 pages) and 02081 (5 pages) - Attachment 11 pages.

End of Addendum One

SUMMARY OF ASBESTOS RELATED WORK

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work consists of removal and disposal of asbestos-containing roofing material and possible insulation from underside of roof drain bowls.
- B. Asbestos has been classified by the Federal Government as a cancer producing material. To protect building occupants and minimize employee exposure, controls are necessary wherever there is a potential for generation of airborne fibers.
- C. The Contractor is expected to field verify materials, quantities, dimensions, and the extent of the work and to include all quantities in the governmental notifications and waste disposal records. In particular, the Contractor is expected to examine the underside of roof drain bowls before disturbance of the bowls. If a mud-type insulation is found, the assumed asbestos-containing material is to be removed using glovebags.

1.2 RELATED DOCUMENTS

- A. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01.

1.3 GENERAL CONDITIONS

- A. The Contractor is expected to comply with all applicable governmental regulations pertaining to work practices, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. Regulations which govern asbestos specific work practices include:
 - 1. US Occupational Safety and Health Administration (OSHA)
Construction Standards for Asbestos
29 CFR 1926.1101
 - 2. US Environmental Protection Agency (EPA)
National Emission Standard for Asbestos (NESHAP)
40 CFR 61, Subpart M
 - 3. CT Department of Public Health
Standards for Asbestos Abatement
RCSA 19a-332a-1 through 19a-332-16
 - 4. CT Department of Public Health
Licensure and Training Requirements for Persons Engaged in Asbestos Abatement and Consultation Services
RCSA 20-440-1 through 20-440-9 and 20-441
- B. The Contractor shall maintain two copies of applicable regulations, posting one copy at the job site and keeping one copy on file in Contractor's office.

- C. The Contractor shall be licensed to operate in the State of Connecticut as an asbestos contractor.
- D. The Contractor shall have on site an OSHA competent person who is in compliance with the training requirements of the Connecticut Department of Public Health for Asbestos Site Supervisor.
- E. Each worker shall be in compliance with the certification requirements of the Connecticut Department of Public Health for Asbestos Worker.
- F. The Owner will retain an independent Asbestos Consultant to function as the Owner's Representative during this work. The Consultant will be licensed by the Connecticut Department of Public Health as an Asbestos Project Monitor.
- G. The Contractor is to make sure that all workers and supervisory personnel are in compliance with the training requirements of the applicable regulations and that subcontractors who will be at the job site are familiar with health and regulatory aspects of working with asbestos-containing materials.

1.4 SUBMITTALS AND NOTICES

- A. Before beginning work:

Submit notification to the following agency and the Owner at least 10 days before work commences:

- 1. Indoor Air Program
Department of Public Health
410 Capitol Avenue, MS #51air
P.O. Box 340308
Hartford, CT 06134-0308

Notification shall be on forms prescribed by the Commissioner of the Department of Public Health.

Submit a copy of the Contractor's license to operate as an Asbestos Abatement Contractor in the State of Connecticut.

Submit a copy of each worker's and each supervisor's State of Connecticut certification, current refresher training certificate, most recent medical clearance, and most recent respirator fit test.

1.5 ASBESTOS-CONTAINING MATERIALS

- A. The following materials are considered to be asbestos-containing materials:
 - 1. Bituminous roofing, both main field and flashing.
- B. The presence of the following suspect materials is uncertain:
 - 1. Insulation on roof drain bowls.

- C. The Owner's inspection reports, sampling results, and existing record drawings will be made available to the Contractor upon request.
- D. When there is a disagreement on the nature or composition of the materials to be removed, the Contractor may engage an approved independent testing laboratory to test the materials. The Contractor shall pay costs in connection with the testing and there shall be no claim of delay.

PART 2 - PRODUCTS

- A. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.
- B. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of as asbestos waste.
- C. Have available sufficient inventory or dated purchase orders for materials, tools, and equipment necessary for the job.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

REMOVAL AND DISPOSAL OF ACM ROOFING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section covers removal and disposal of asbestos-containing bituminous roofing materials and asbestos-contaminated waste.

1.2 RELATED DOCUMENTS

- A. The conditions of Section 01011 - Summary of Asbestos Related Work - apply to this Section.
- B. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01.

1.3 GENERAL CONDITIONS

- A. The Contractor is expected to comply with all applicable governmental regulations pertaining to work practices, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. Regulations which govern asbestos specific work practices include:
 - 1. US Department of Transportation (DOT)
Hazardous Materials Regulations
49 CFR 171-177 (Subchapter C)
- B. The Contractor shall maintain two copies of applicable regulations, posting one copy at the job site and keeping one copy on file in Contractor's office.

1.4 SUBMITTALS AND NOTICES

- A. Before beginning work:
 - 1. If the disposal site is located in Connecticut, submit notification to the following agency at least 25 days before work commences:
Bureau of Waste Management
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127
If the disposal site is located outside Connecticut, notification and other requirements of the State in which the disposal site is located must be submitted.
- B. After completion of work:
 - 1. Submit a list of workers with name, social security number, and employer.
 - 2. Submit executed chain-of-custody transport and disposal documents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide all materials needed to transport and dispose of removed asbestos-containing materials and asbestos-contaminated waste.
- B. Plastic sheeting shall be 6-mil thick polyethylene.
- C. Duct tape shall be 2 inches in width with an adhesive which is formulated to aggressively stick to sheet polyethylene and to finished or unfinished surfaces of dissimilar materials under both dry and wet conditions.
- D. Open top waste transport containers shall be lined with a bladder bag installed by the waste transport container company. Bladder bag shall be the equivalent of two outer layers of 6-mil polyethylene and one inner layer of 22-mil woven polypropylene. Bladder bag shall be sealed and transport container wet wiped before waste transport.
- E. Polyethylene bags shall be six (6) mil thick with leak-tight seams.
- F. 50-gallon or 55-gallon fiber drums shall have air-tight sealable tops.
- G. Plastic bags, fiber drums, and sheet wrapped materials shall be labeled as follows:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
RQ, Asbestos Waste, 9
Mixture, NA-2212, PG III
Third Taxing District
2 Second Street
East Norwalk, CT 06855

2.2 EQUIPMENT

- A. Provide all equipment and tools needed to carry out the specified work.
- B. Rotating blade saws, if any, shall be equipped with:
 - 1. A blade guard that completely encloses the blade and extends down close to the roof surface.
 - 2. A device for spraying a fine mist of water inside the blade guard in order to keep the point of cutting wet.

PART 3 - EXECUTION

3.1 REMOVAL OF ROOFING MATERIAL

- A. Other material may have to be removed before this material can be removed. This includes rick ballast.

- B. Establish a regulated area as required by OSHA. Shut down and seal roof level ventilation and air intake sources using plastic sheeting and duct tape.
- C. Cut roofing material with knives, hatchets, or rotating blade saws equipped as described above in order to not discharge visible emissions into the air. DO NOT SAND, DRILL, OR DRY CUT. Remove materials in an intact state to the extent feasible.
- D. HEPA vacuum any loose dust created by the removal as soon as possible.
- E. Do not throw material onto ground. Place directly into disposal bags or lower to ground via covered, dust-tight chutes and place immediately into disposal container.

3.2 PACKAGING OF MATERIALS

- A. If transport container is a sealed truck or front loading, roofed dumpster, place material into disposal bag, twist neck of bag, bend over and seal with minimum three wraps of duct tape. Place sealed bag into a second bag or fiber drum. More than one bag may be placed into each drum. Seal bags or drums.
- B. If transport container is a lined open-top dumpster, place materials into container. Do not throw materials.

3.3 DISPOSAL OF MATERIALS

- A. Do not store material outside of the work area. Take packaged material from the work area directly to the transport container.
- B. Transport material to authorized dump site for disposal.
- C. Generate chain-of-custody disposal documents and shipping papers in compliance with EPA and DOT regulations.

END OF SECTION

USE OF GLOVEBAGS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This specification covers the removal and disposal of asbestos-containing pipe and pipe fitting insulation in those cases where use of glovebags without negative pressure enclosure is acceptable.
- B. Deviations from these specifications shall require the written approval of the Owner.

1.2 RELATED DOCUMENTS

- A. The conditions of Section 01011 - Summary of Asbestos Related Work - and Section 02080 - Removal and Disposal of ACM Roofing - apply to this Section.
- B. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01.

1.3 GENERAL CONDITIONS

- A. Additional regulatory requirements pertaining to the work of this Section include:
 - 1. US Occupational Safety and Health Administration (OSHA)
Respiratory Protection
29 CFR 1910.134

1.4 SUBMITTALS AND NOTICES

- A. Before Beginning Work:
 - 1. Notify the Project Monitor at least three (3) days before commencing work.
 - 2. When rental equipment is to be used in work areas or to transport waste materials, submit a copy of the written notification provided to the rental company informing them of the nature of use of the rented equipment.
- B. While Work Is In Progress:
 - 1. Post signs which meet the requirements for an OSHA regulated area at all approaches to the work areas. Signs shall be posted a sufficient distance from the work area to permit a person to read the sign and take precautionary measures to avoid exposure to asbestos.
- C. At Project Completion:
 - 1. Submit a list of workers with names, social security number, and employer.

1.5 SEQUENCE OF WORK

- A. The following sequence shall be followed:
1. removal of movable objects by Contractor
 2. installation of glovebags by Contractor
 3. inspection and approval by Project Monitor
 4. removal of insulation and clean-up by Contractor
 5. visual inspection by Project Monitor
 6. final clean-up by Contractor
 7. disposal of waste by Contractor.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Provide all materials, tools, and equipment needed to carry out the specified work.
- B. Glovebags shall be constructed of a minimum 6 mil polyethylene with two sealed inward projecting long sleeved gloves or mittens, preprinted with the same warning notice as a disposal bag, equipped with a pouch for storage of tools, with designated location for wand or HEPA vacuum wand, and sufficient capacity to hold removed materials and permit sealing as specified.
- C. Polyethylene bags shall be six (6) mil and of sufficient size for the application.
- D. Tape shall be 2 inches in width with an adhesive which is formulated to aggressively stick to sheet polyethylene and to finished or unfinished surfaces of dissimilar materials under both dry and wet conditions, including use of amended water.
- E. Surfactant (wetting agent) shall consist of fifty (50) percent polyoxyethylene ether and fifty (50) percent polyoxyethylene ester, or equivalent, and shall be mixed with water to provide a concentration of one (1) ounce surfactant to five (5) gallons of water or as directed by manufacturer.
- F. Labels and signs, as required, shall be commercially printed using water-proof ink. Signs shall be printed in English. Signs shall also be printed in appropriate other languages if there are non-English speaking workers on the job.

PART 3 - EXECUTION

3.1 PERSONNEL PROTECTION

- A. All persons potentially exposed to asbestos from the asbestos abatement project shall wear protective clothing and respirators. The Contractor shall provide all authorized visitors with protective clothing.
- B. The Contractor shall ensure that no employee is exposed to an airborne concentration of asbestos materials in excess of 0.1 fibers per cubic centimeter of air as an eight hour time

weighted average. The Contractor shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air as averaged over a sampling period of thirty minutes.

- C. Proper respiratory protection shall be used as requires by OSHA Respiratory Protection Standards and Construction Standards for Asbestos.
- D. Disposable clothing such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings shall be provided and worn by personnel in work areas. Protective clothing shall be impermeable to airborne asbestos fibers. Such clothing is typically made from Tyvek^(TM) material. Protective clothing shall be disposed of as contaminated waste.
- E. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the work area.

3.2 WORK AREA PREPARATION

- A. Shut down and isolate heating, cooling, and ventilation air systems within the work area to prevent contamination and fiber dispersal to other areas of the structure. During the work, vents within the work area shall be sealed with tape and polyethylene sheeting.
- B. Clean the proposed work areas using HEPA vacuum equipment or wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.
- C. Maintain emergency and fire exits from the work area, or establish alternative exits satisfactory to fire officials.

3.3 ASBESTOS REMOVAL

- A. A wetting agent shall be used to control the release of asbestos fibers from asbestos-containing materials before and during the removal operation. Spray asbestos materials with amended water, using airless spray equipment capable of providing a "mist" application to reduce the release of fibers. The wetting agent shall be applied in sufficient quantity to achieve complete penetration for friable asbestos-containing materials prior to removal. Small test patches shall be removed and examined to determine the extent of wetting agent penetration. If needed, reapply wetting agent to assure complete penetration.
- B. Use of glovebags to remove pipe insulation shall be in accordance with OSHA Construction Standards for Asbestos.
 - 1. Cut 1" minimum beyond asbestos-containing pipe joint, elbow or valve insulation. Inspect adjacent non-asbestos insulation and remove all contamination materials.
 - 2. After completion of stripping work, all surfaces from which asbestos has been removed shall be wet brushed, using a nylon brush (wire brushes are not

permitted), wet wiped and sponged or cleaned by an equivalent method to remove all visible material. During this work the surfaces being cleaned shall be kept wet.

- C. If the substrate surface is very rough, and all fibrous material cannot be totally removed, the Contractor shall be required to seal the surface with a bridging encapsulation material (or equivalent).
- D. If the Project Monitor suspects contamination of areas outside the work area, the Contractor shall stop all abatement work and take steps to decontaminate these areas and eliminate causes of such contamination. Unprotected individuals shall be prohibited from entering contaminated areas until air sampling and visual inspections certify decontamination.

3.4 AIR MONITORING

A. Contractor air sampling:

- 1. Air sampling shall be conducted by the Contractor, as necessary, to assure that workers are using appropriate respiratory protection.
- 2. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and be available for review until the job is complete. Upon completion of the job, these are to be forwarded to the Owner for inclusion with project records.
- 3. Documentation of sample analysis must include as a minimum: sample identification; total sample duration; sample flow rate; total air volume; total fibers counted; total fields counted; and calculated fiber concentration.

B. Owner air sampling:

- 1. The Project Monitor may conduct an air sampling program for the Owner's protection and for those who use the premises as follows:
- 2. Pre-abatement sampling - A sufficient number of air samples shall be collected prior to the start of abatement activities in order to determine prevalent airborne concentrations.
- 3. Sampling during the abatement project - Two (2) area samples may be collected on a daily basis once abatement activities begin.

3.5 FINAL CLEAN-UP AND REINSTALLATION OF EQUIPMENT

- A. Relocate objects moved to temporary locations in the course of the work to their proper positions.
- B. Reinstall mounted objects removed in the course of the work in their former positions. When fire-proofing has been removed, properly re-fireproof before reinstalling mounted objects.

- C. Re-establish HVAC, mechanical and electrical systems in proper working order and in conformance with all applicable building mechanical and electrical codes. Install new HVAC filters and dispose of used filters as asbestos-contaminated waste.
- D. Restore all finishes that have been damaged by the abatement work.

END OF SECTION

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Fax Server



REED CONSTRUCTION DATA
Data Acquisition Group
ERP@ReedBusiness.com
5/19/2015

Fax

TO: To Whom it May Concern

FROM: East Region Public (RBI-US)

Third Taxing District

EMAIL: ERP@REEDBUSINESS.COM

FAX: 2038669856

FAX: (800) 467 - 2860

RE: Request for Post Bid Results

COMMENTS:

Fax Request for Post Bid

To: To Whom it May Concern

Third Taxing District

Fax: 2038669856

Date: 5/19/2015

RE: Request for Post Bid Results

Please send any low bid and/or award information for the following project(s) to Reed Construction Data (RCD). Please include the base low bid amounts for the 3 lowest bidders and the total number of bids received. If Post Bid information is not yet available or the project status has changed, please indicate this in your response.

RCD Project ID	Project Name	City	State	Invite #	Bid Date & Time
1002279583	THIRD TAXING DISTRICT ELECTRIC DEPARTMENT-ROOFING	Norwalk	CT		5/18/2015 03:00 PM

Sending your information to RCD via email allows us to process it **EVEN FASTER** - Please email information to ERP@ReedBusiness.com. If you prefer to fax the information, the fax number is (800) 467-2860.

Please reference the RCD Project ID(s) on your return email or fax, so that we may assure speedy and accurate posting of information. If you have recently transmitted this information, please disregard this request.

Thank you in advance!

Data Acquisition Group
Reed Construction Data

If you prefer that we call or email you for post bid updates, please contact us at (800) 424-3996 and we will be happy to change how we contact you in the future.

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BID FORM

1. Submit bids in compliance with Instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete Bid Forms.
2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.
3. Project Name: Partial Roof Replacement at
Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
4. Project Owner: Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
5. The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.) The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents, hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, (including utility and transportation services required to perform and complete this Contract), all in accordance with the Contract Documents for the total fixed sum (BASE BID) specified in the schedule of prices which follows, increased or decreased in a manner as provided for in the contract:

BID PRICE: All work required to install 20 year warrantied roofing.

Fifty Four Thousand Eight Hundred Fifty and no/100's dollars Dollars (\$ 54,850.00)

Approximate number of consecutive calendar days to complete work.

Thirty One Days (31)

6. In addition to the Base Bid the Bidder proposes to provide the following unit prices: (Fill in amount in words and numbers.)

Unit Price #1

a. Twelve
Dollars (\$ 12.00)

Provide a unit price per lineal foot for installing 2x6 pressure treated lumber at coping. Length of lumber, if required, to be reviewed and approved by Owner.

Unit Price #2

b. Twenty
Dollars (\$ 20.00)

Provide a unit price per square foot to replace rusted 1 1/2" steel decking with new galvanized decking to match existing. Area of decking, if required, to be reviewed and approved by Owner.

If and when additional or lesser work is explicitly ordered by change order in advance of the work being carried out, the unit prices shall apply. Work done without prior approved change order shall be considered part of the basic contract work. Unit prices for deducted work shall be the same as unit prices for additional work. Unit prices for both additional work and deducted work shall include overhead, profit, general conditions and fees.

7. Bid Security in the amount indicated below is attached to this Bid Form:

\$ 5% (2,742.50)

8. Liquidated Damages: The Bidder agrees to have liquidated damages penalties assessed at the rate of **\$250.00 per day** deducted from this Final Payment for each day Substantial Completion is delayed beyond the Proposed Date of Substantial Completion indicated below for reasons with his control.

9. Time: The Bidder proposes the following dates (Fill in):

a. Proposed Starting Date: July 1, 2015

b. Proposed Date of Substantial Completion: July 31, 2105

10. By submitting this Bid Form, the Bidder certifies that Bidder has visited the project site, is aware of existing conditions which affect the work, and has reviewed the Contract Documents, including the following Addenda:

Addendum Number..... 1 Date..... 5-13-15

Addendum Number..... Date.....

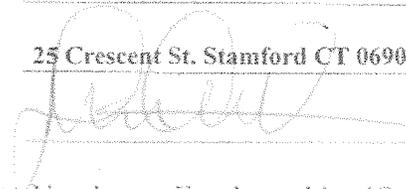
Addendum Number..... Date.....

11. Bid Qualifications: Submit bid qualifications and reasons for qualifications with this Bid Form on separate sheet of Bidders' Letterhead. Include impact of bid qualifications on time, cost or quality. Bid qualifications may include: Cash flow requirements, assumptions for access to the work, assumptions for staging the work, assumptions for protecting existing and abutting work, proposed modifications to General and Supplementary Conditions, proposed modifications to drawings and specifications.

12. Signed and sealed (Enter date, Bidder's signature and legal business address.)

Bidder Name: J. Antonelli Roofing (a div. of The Property Group of CT, Inc.)

Address: 25 Crescent St. Stamford CT 06906

Signature:  Title: John E. Antonelli, Vice President

Social Security Number or Employer Identification Number 06-1222198

13. Bidders' Project Manager to be assigned to the Project (name):

John Antonelli

14. Bidders' List of Proposed Major Subcontractors (list):

Trade	Contractor
<u>Asbestos Abatement</u>	<u>Homeguard Environmental</u>

END OF DOCUMENT

BID FORM

1. Submit bids in compliance with Instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete Bid Forms.
2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.
3. Project Name: Partial Roof Replacement at
Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
4. Project Owner: Third District Taxing Electric Department
2 Second Street
Norwalk, CT 06855
5. The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.) The undersigned, having familiarized (himself, itself, themselves) with the existing conditions on the Project Site affecting the cost of the work, and with the Contract Documents, hereby proposes to furnish all supervision, technical personnel, labor, materials, equipment, tools, appurtenances, services, (including utility and transportation services required to perform and complete this Contract), all in accordance with the Contract Documents for the total fixed sum (BASE BID) specified in the schedule of prices which follows, increased or decreased in a manner as provided for in the contract:

BID PRICE: All work required to install 20 year warrantied roofing.

Thirty Nine Thousand Two Hundred Thirty One Dollars (\$ 39,231.00)

Approximate number of consecutive calendar days to complete work.

SIX Days ()

6. In addition to the Base Bid the Bidder proposes to provide the following unit prices: (Fill in amount in words and numbers.)

Unit Price #1

a. Three
Dollars (\$ 3.00)

Provide a unit price per lineal foot for installing 2x6 pressure treated lumber at coping. Length of lumber, if required, to be reviewed and approved by Owner.

Unit Price #2

b. Two and 25/100
Dollars (\$ 2.25)

Provide a unit price per square foot to replace rusted 1 1/2" steel decking with new galvanized decking to match existing. Area of decking, if required, to be reviewed and approved by Owner.

If and when additional or lesser work is explicitly ordered by change order in advance of the work being carried out, the unit prices shall apply. Work done without prior approved change order shall be considered part of the basic contract work. Unit prices for deducted work shall be the same as unit prices for additional work. Unit prices for both additional work and deducted work shall include overhead, profit, general conditions and fees.

7. Bid Security in the amount indicated below is attached to this Bid Form:

\$ 1,862.00

8. Liquidated Damages: The Bidder agrees to have liquidated damages penalties assessed at the rate of \$250.00 per day deducted from this Final Payment for each day Substantial Completion is delayed beyond the Proposed Date of Substantial Completion indicated below for reasons with his control.

9. Time: The Bidder proposes the following dates (Fill in):

a. Proposed Starting Date: After 6/1/2015

b. Proposed Date of Substantial Completion: 6/8/2015

10. By submitting this Bid Form, the Bidder certifies that Bidder has visited the project site, is aware of existing conditions which affect the work, and has reviewed the Contract Documents, including the following Addenda:

Addendum Number..... Date.....

Addendum Number..... Date.....

Addendum Number..... Date.....

11. Bid Qualifications: Submit bid qualifications and reasons for qualifications with this Bid Form on separate sheet of Bidders' Letterhead. Include impact of bid qualifications on time, cost or quality. Bid qualifications may include: Cash flow requirements, assumptions for access to the work, assumptions for staging the work, assumptions for protecting existing and abutting work, proposed modifications to General and Supplementary Conditions, proposed modifications to drawings and specifications.

12. Signed and sealed (Enter date, Bidder's signature and legal business address.)

Bidder Name: Rick's Main Roofing Ltd

Address: 26 Fitch St Norwalk CT

Signature:  Title: VP Sales

Social Security Number or Employer Identification Number 20-0017257

13. Bidders' Project Manager to be assigned to the Project (name):

Brian J DeFreese

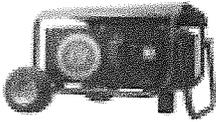
14. Bidders' List of Proposed Major Subcontractors (list):

Trade	Contractor

END OF DOCUMENT

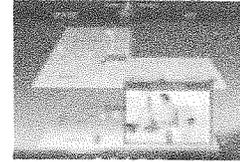
GENERAL MANAGER'S REPORT
(Note Page)

ARTICLES: UTILITIES



PREVIOUS ARTICLE
The Battery-Powered
Mobile...

NEXT ARTICLE
Control Offers Smart-
Home...



Forget Utility 2.0—the Power Sector Needs ‘Regulation of the Future’



Bob Stump:
“These are serious ratemaking issues we need to get right and do it in a rational, mature way.”

Julia Pyper
March 23, 2015

New technologies and financial innovation have launched an era of consumer choice and control in the power sector the likes of which the industry has never seen before.

Solar panels, smart meters, energy storage, electric vehicles and microgrids are transforming the distribution grid and spurring debates around a model for “utility 2.0.” But while technology is stimulating change, policy drove the conversation at a meeting of electricity industry leaders last week, hosted by the Edison Foundation’s Institute for Electric Innovation.

“Let’s not have another discussion about grid of the future -- utility 2.0, utility 3.0,” said Lawrence Jones, vice president of utility innovations and infrastructure resilience at Alstom.

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electrical grid, without a clear understanding of the system in which the technical model will operate, he said.

“We agree today we will no longer write another report [referencing the] ‘utility of the future,’” said Jones. “What we need now is ‘regulation of the future.’”

So what does “regulation 2.0” look like?

Today’s regulatory framework is built on the notion of universal service and non-discriminatory rates that ensure everyone in the country has the ability to pay for electricity.

“I can’t say, ‘Is it fair to charge somebody more and somebody less for the same thing?’ That’s the system we have today,” said Michael Champley, commissioner at the Hawaii Public Utilities Commission.

Having non-discriminatory rates “is a universal practice,” he added. “But you can question whether it’s appropriate for regulation 2.0.”

Hawaii has been on the front lines of grid transformation, particularly when it comes to testing the limits of rooftop solar penetration. According to Champley, 12 percent of residential customers in Hawaii have rooftop solar -- the highest percentage of any state in the nation. As a result, Hawaiian Electric Company (HECO) reports that it’s seeing an increasing number of distribution circuits with rooftop solar exceeding 100 percent of daytime minimum load.

In 2013, HECO initiated a strict approval process for solar systems connected to the grid. Consequently, the number of permits dropped by half, and the state’s solar sector shed thousands of workers.

Regulators and utilities in Hawaii are now negotiating a comprehensive reform plan to guide the adoption of distributed energy going forward.

“We went forward -- way too far, probably -- without really having a master plan,” said Champley.

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model for customer choice, he said. For Champley, that means regulators should be less focused on fixed charges -- a view that some utilities would disagree with -- and more focused on establishing the right incentives.

"I believe we're going to have to have a whole lot of optional rate tariffs, as opposed to the one-size-fits-all [model]," he said. "I really do believe we're going to have to go to time-of-use or dynamic pricing."

"Ultimately, I think it's going to be...the more advanced developers that are going to figure out a value proposition for customers," he added. "And that value proposition needs to change from fleeing the grid financially, to how I can provide value to the grid and get paid for it."

"Plug-and-play, but at some point somebody also has to pay"

New technologies have emboldened consumers, to the point where some think it's their constitutional right to plug new technologies into the grid at their own will, said Champley. The term "plug-and-play" needs to further defined, he said.

"It's great you can plug in, but it's the rules and terms and conditions of how you play that makes the difference," he said.

"Plug-and-play, but at some point somebody also has to pay," joked Bob Rowe, president and CEO of Northwestern Corporation.

Bob Stump, commissioner at the Arizona Corporation Commission, which oversees Arizona Public Service (APS), echoed that rate modernization is paramount to enabling consumer choice, while also ensuring that the new class of "prosumers" do not put additional stress on the grid.

Stump called the controversial demand charges recently approved by Salt River Project, which is not governed by the ACC, "an ingenious solution to peak shaving."

"I think the demand charge was an intriguing way to go about it, because it does offer that choice to the consumer, in the sense that you can reduce your usage during the peak. thereby the consumer

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Media. "I hate the cliché 'win-win,' but I think there's a lot of potential there for good."

Increased utility control of rooftop solar would also help to reduce the impact solar arrays have on the grid, he said.

"I think we need to consider if you own solar or are involved with a leasing company, perhaps ceding some control of the inverters to the utility," said Stump. "Allow [the inverters] to be reprogrammed so the utility can speak not just to substation, but to the individual homeowner, and also reduce some of those voltage issues."

"The question then becomes in Arizona, and nationally, whether solar users are indeed willing to do that -- to be a good grid citizen, but [also] to have their panels potentially producing less," he continued.

Utility ownership of rooftop solar would go even further in helping the grid, because utilities would angle the panels west instead of south, accepting reduced efficiency to help with peak shaving, Stump said. It would also solve the issue of not taking infrastructure costs into account under net metering.

"Put the sloganeering aside"

The topic of utility control and ownership of rooftop solar has spurred a lively debate. Late last year, Arizona regulators gave the state's two largest utilities -- APS and Tucson Electric Power -- the green light to enter the residential solar market.

This comes as APS and leading national solar installer SolarCity continue a heated battle over solar fees and net metering policies. Stump called out Barry Goldwater Jr.'s solar advocacy group, Tell Utilities Solar Won't Be Killed (TUSK), for adding fuel to the fire.

To make his point, Stump told attendees at the IEI event a tongue-in-cheek story of the fictional consumer George B. Green, who is seeking energy independence, choice and freedom through rooftop solar. Along the way, however, George realizes that rooftop solar won't get the U.S. off of imported oil, and that the utility is central to both power reliability and a competitive energy marketplace.

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deploying rooftop solar will enable energy independence and liberation from the grid. This is a point of view being encouraged in part by some of the louder voices in the solar industry, he said.

“I think if you take solar seriously, as I do, and I know everyone in the room does, then you will portray it accurately,” he said. “As a regulator, all I ask [about] any energy source is to discuss the pros and cons.”

A 2013 study by the consulting firm Crossborder Energy, determined that the APS net metering program would produce a net benefit of \$34 million each year by 2015.

Now, as the Commission considers reforming policies on rooftop solar, a new, comprehensive evaluation of the costs and benefits is essential, according to Stump. A range of stakeholders, including the Electric Power Research Institute, will be important players in this.

In the meantime, politicking needs to be put aside, he said.

“I made it very clear to my friends from SolarCity [that] we need to have a serious discussion about ratemaking. Put the sloganeering aside from all parties,” said Stump. “These are serious ratemaking issues we need to get right and do it in a rational, mature way.”

Testing new approaches

These discussions are already well underway in New York and California.

Flexibility needs to be at the heart of whatever new regulatory framework takes shape, said Robert Schimmenti, senior vice president of electric operations at Consolidated Edison, which is heavily involved in New York’s Reforming the Energy Vision proceeding.

For Con Ed, demonstration projects -- like the distribution utility’s plan to defer rebuilding a \$1 billion substation -- are proving to be pivotal in allowing the utility to test new business models and third-party partnerships.

“We also have the ability to fail. I think that’s something that utilities aren’t used to. We’re tied to public safety and reliability, so we tend

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Schimmenti. “Demonstration projects will allow us to try thing some things and fail, and move on and modify some of those things.”

Theodore Craver, chairman, president and CEO of Edison International, said he sees Southern California Edison playing a central role in enabling the grid of the future. “We believe we will be facilitators for all these distributed energy resources, and ones we can’t even think of today,” he said.

But similar to Champley and Stump, Craver said the utility industry’s non-discriminatory regulatory model is creating barriers for the integration of new technologies. The flexibility for utilities to provide customers different levels of power quality through differentiated pricing is part of the way SCE envisions the grid of the future operating. “But we have a long way to go to get there,” said Craver.

“I’m very optimistic we will eventually get ‘regulatory model 2.0,’” said Alstom’s Jones.

“We will get something, but it will be evolutionary,” he continued. “I think we need to be very careful that disruption, albeit coming, will be at different levels, and that there are no unintended consequences. [...] We need to make sure to protect utilities, as well as others, so we don’t blow up the whole system and end up flat-footed.”

TAGS: [alstom](#), [arizona corporation commission](#), [arizona public service](#), [bob stump](#), [conedison](#), [hawaii](#), [heco](#), [institute for electric innovation](#), [solarcity](#), [southern california edison](#)

General Session

2:45–4 p.m.

Recommended CEUs .1 / PDHs 1.2 / CPEs 1.5

Utility 2.0: What's Next for the Electric Utility Industry and How Public Power Can Prepare for the Future

Sean Hamilton, General Manager, Sterling Municipal Light Department, Mass.

Rolf Nordstrom, President & CEO, Great Plains Institute, Minneapolis, Minn.

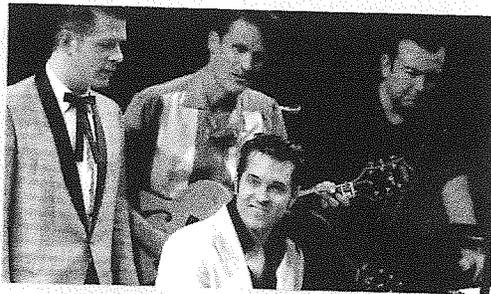
Arlen Orchard, General Manager & CEO, Sacramento Municipal Utility District, Calif.

The traditional role of utilities is changing and could have lasting implications for public power. "Utility 2.0" is a hot topic, and new utility business models are being discussed everywhere. These models are designed to develop systems that use more distributed generation — including rooftop solar — and can accommodate microgrids, energy efficiency, battery storage, and other evolving technologies. A panel of experts will explore the "Utility 2.0" model and explain how your utility can gear up for a new role.

Association Business Meeting

4:15 p.m.

Voting delegates at APPA's annual business meeting will elect members to the APPA board of directors and vote on policy resolutions that will guide APPA's advocacy efforts for the coming year. The meeting will also feature reports from the board chair and treasurer. Each APPA member utility should designate one voting delegate for the business meeting.



Concert: A Night to Remember

8 p.m.

On December 4, 1956, music legends Carl Perkins, Johnny Cash, Jerry Lee Lewis, and Elvis Presley came together for a jam session at Sam Phillip's Sun Studios in Memphis. "A Night to Remember" is a tribute to this historic evening. Have the time of your life at this memorable jam session with talent and music that has stood the test of time — rockabilly, country, gospel, and pure 1950's rock and roll.



Wednesday, April 15, 2015



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Is Utility 2.0 a Forecast or a Post-Mortem?

[John Farrell](#)

February 26, 2014 | [8 Comments](#)



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For the last six months, the energy news sphere (perhaps led by the [Edison Electric Institute](#)) has been rife with a discussion about the threat to the utility business from distributed energy like local solar, as their customers shift to



getting their own power from nearby renewable resources. Reports and news stories – e.g. “[Adapt or Die](#)” – suggest changes to the electric utility business model are imminent as power generation shifts from massive to medium scale and from remote to local.

For some utilities, this discussion is not a forecast, but a post-mortem.

Electric utilities have always built infrastructure (power lines, power plants, etc.) as long-term investments. They relied on growing electricity demand and sales to help recoup the costs of new coal-fired power or (over budget) nuclear retrofits in the Midwest or new high-voltage power lines in the Northeast. Utility commissions played along, allowing them cost recovery and generous returns



[John Farrell](#)

John Farrell directs the Energy Self-Reliant States and

Communities program at ILSR and he focuses on energy policy developments that best expand the benefits of local ownership and dispersed generation of renewable energy. His latest paper,...

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Fig. 51

on equity (10-11 percent) for new infrastructure. But hardware that seemed wise in the 1990s and 2000s is suddenly and rapidly being exposed as untimely and unnecessary.

Electricity demand has flattened (even fallen), thanks to energy efficiency legislation and economic stagnation. Customers are increasingly generating their own energy from renewable energy like solar, whose cost is falling by 10 percent or more per year. Not only is big infrastructure proving harder to pay off as revenues stagnate, it's also increasingly irrelevant in a 21st century electricity system where power generation can be cost-effectively placed right on the roof.

Commercial wind power started to crack the facade 20 years ago, but today renewable energy is rapidly imploding the utility's entire antiquated business model. Renewable energy capacity is growing by 25 percent per year, and solar is growing even faster. The utilities are the landline phone companies facing down the iPhone, as SolarCity and other service providers are beginning to package solar with batteries, allowing customers to not just cut their energy bills, but cut off from the grid entirely. (RMI just released a report with the bold headline, "Will the Electricity Grid Become Optional?")

Look at Georgia Power. They're struggling to complete new reactors at their Vogtle nuclear power plant, and costs are rising despite over \$8 billion in federal loan guarantees. But thanks to a coalition of environmentalists and the Georgia Tea Party, the state's public utilities commission has required the utility to invest in distributed solar power. The utility will get 525 MW of new clean power generation, years before either new reactor will generate a single kilowatt-hour. And by 2017, the earliest the reactors could come online, it will cost less for Georgia Power customers to get solar energy from their own rooftop than to buy it from the utility.

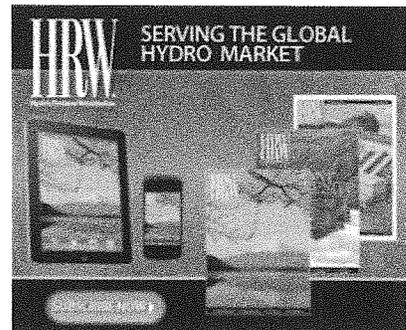
It's the same problem in the Heartland. A coalition of Midwestern utilities is completing construction of a new high-voltage transmission project — CAPX2020 — to be completed by the end of the decade. But in the next 10 years, long before those lines are paid off, distributed solar will be competitive (without subsidies) with retail electricity prices of nearly every Midwestern utility. An infrastructure decision from last decade (for a grid of the last century) is likely to be stranded by a storm of solar power and customer-initiated, local power alternatives.

It may have taken the utilities until 2013 to notice, but their business model cracked 20 years ago. Already, their customers (you and me) are going to pay heavily for their mistakes as utility commissions in many states allow them to raise rates to cover their ill-fated investments.

But we can do something. We can tell regulators to stop utilities from making any investment (in power plants or power lines) that does not align with the inevitable distributed renewable energy future. We can insist that utility shareholders pay first for shortsighted choices, before ratepayers are asked to cover their company's mistakes. We can insist that utility resource planning should focus first on conservation, efficiency, and facilitating the maximum use

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27 Solar, Wind Industries Release 'How-To' Handbook for Cutting Carbon Emissions

27 Questionable Cost Concerns Slow Net Metering

27 Dear Government of Australia: The Energy Prosperity Future Mega Super Plan

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of renewable energy. And we can toss out the antiquated notion that a utility grid must be centrally planned and centrally owned in an era when cost-effective energy generation is neither.

It's too late to save the utilities from their business model blackout, and their customers from carrying the cost, but it's never too late to shift to a future where utilities can respect (and transmit) power from the people.

Photo credit: [Rick Payette](#)

Utility Sales May Drop by Half
as Homes Make Their Own
Renewable Power

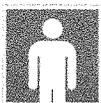
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Listen Up: Can We Get To
100 Percent Renewables?

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8 COMMENTS

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[PETER BRADSHAW](#)

March 3, 2014

I see two possible electric utility billing structures for the mostly-renewable future. One is to pay a "wholesale" rate for customer-generated power, charging "retail" rates for utility-generated power. I notice that my new "net-metering" meter (read many times a day via WiFi or equivalent) keeps separate track of ingoing and outgoing power, though the current billing is just on the (time-dependent) difference. Since the power I send to the utility is mostly used locally, even in the heavy-rooftop-PV future, the "wholesale" rate should not be too far below the "retail" rate, though the night rate could well be higher than the day rate.

The alternative is to retain the current net-metering deal (again, probably higher rates at night), with a fixed "connectivity" charge for grid utilization. \$10 per month doesn't sound too bad.

In either of these cases, heavy storage capability might well be utility-provided (pumped-storage, for example, using facilities like those added to many nuclear power plants, again used the opposite way round from the original expectation, i.e. store PV-generation during the day, provide power at night. The wind power and tidal/wave power sources would complicate this, but since storage would need to cover several days (according to the extra calculations in my analytic spread sheet), this might not be such a big issue.

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JOHN KONTOLEFA

March 2, 2014

Con Edison of NY almost completely divested themselves of power generation assets. They provide service which consists of pass through for energy/ancillary services and the rest for maintenance and capital cost recovery for infrastructure. Since energy cost is approximately only 30% of an electricity bill, a pure net metering rate of 100% is patently unfair. What net metering advocates seem to want is a legislated perpetual motion machine where energy pumped into the grid is returned for their use with no losses.

Claims that distributed generation lessens need for additional transmission and distribution may be true, but those represent future costs, not current costs to maintain current infrastructure. Also, they must be offset by some extent in that intermittent renewables do seem to increase the need for ancillary services.

I live in NYC - in a high rise apartment. Since I don't own a car and the exterior wall surface to square foot ratio of my apartment is low, I probably have the lowest carbon footprint of anybody reading this column. To me, it seems that most current forms of distributed generation is industrial type windfarms or solar panels on the roof of large private houses out in the suburbs or exo-suburbs. I must say the "on the side of the environmental angels" tone of the articles and comments is wearing thin.

Disclaimer - I worked for Con Edison 35 years ago when I finished my BSEE and my mother owns Con Edison stock.

PATRICK O'LEARY

February 28, 2014

Mr. McKenna, isn't that the purpose behind the 'anonymous' postings?

Still, such comments only fret. Sometimes it is the things we think we know that just aren't so. EE/RE types make the same human mistakes, just in a different direction.

I think PV, even PV/Thermal, is tail end and deserves about that much attention. I have had precious little luck persuading others.

I think green fields should remain green. I think roofing, even flat built up deck, black roofing is a collector, from which we get precious little economic value, in part, because the things we think we know just aren't so. Please contact me.

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**WARREN MCKENNA**

February 28, 2014

@ANONYMOUS, Great set of fears voiced here. Easy to tell the serfs what they want and need when you are setting on the Monopoly throne. I'm sure AT&T had the same fears when they were broken up. The current structure of highly regulated outside-in central-station model that promotes all we can generate and consume is facing a paradigm shift.

Go to the Iowa IUB website and view the NOI-2014-0001 filings. The eye opener being that the likes of Facebook and Microsoft are wanting to locate in states with renewable energy options and they are letting regulators know this. The new Tesla battery plant will be made in a state that can also provide a high concentration of renewable energy.

The most innovative markets like technology are the least regulated. The innovation in electricity will only come when the regulated market monopoly structure is set free.

Great article John, you are spot on as usual!

**ANONYMOUS**

February 28, 2014

Ricky,

Our basic monthly customer charges before they use one kWh of electricity is about \$10, and escalating to \$20 over the next decade, to fully cover metering and service costs. All customers pay this. With these increases we adjust the energy rate to remain revenue neutral. With this adjustment, and the recent elimination of PV rebates, we are minimizing PV's impact on the basic rates all our customers pay. Of course there are still subsidies embedded in Net Energy Metering, but I think we are heading in the right direction.

**RICKY HANNAH**

February 28, 2014

Dear Anonymous

How much are your basic monthly customer charges before they use one kwh of electricity? Are you going to have to raise the basic rate to all your customers to cover the expense? Are those charges over the next 20 years going to cover the expense of

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running electric service to those subdivisions? I find it hard to believe the other customers will not be paying for the service to the 100% and net Zero subdivision customers.

I ride this free ride myself as I have a totally electric Midwestern home with 11,280 watts of solar and last year's power bill was \$36.00. I just do not think my free ride will last when 10% of the utility customers are providing 98% of their own power. Hopefully as Tesla builds a 5 billion dollar battery plant much will be learned about producing cheaper batteries with no maintenance and 6,000 charge discharge cycles while maintaining 80% capacity. Then I will go off grid. I estimate this will be about 2024.



PATRICK O'LEARY

February 27, 2014

The centralized generation model will yield in part, if not entirely towards a more de-centralized model, of necessity. Centralized generation was based on technology and that has shifted. The Grid is a slightly separate issue and will remain based on its own Utility. Merchant and solar sources will populate more and more places as it makes sense.



ANONYMOUS

February 27, 2014

John, your utopian view of the future for renewables, and demise of the old utility model, makes a few leaps in logic, which thankfully are not shared by all utilities and regulators. I'm an engineer in a large municipal utility (no shareholders to pay for our mistakes). Our job is to find the best solutions for our customers in an uncertain world. We promote energy efficiency, and clean renewable power, but hold on to the old fashioned idea that it is our responsibility to keep the lights on. If customers don't exit the grid as fast as forecasted, or perhaps want to charge electric vehicles at night (whether or not the wind is blowing), most of them still expect the utility to be there. To date, every new housing development in our service territory asks the utility for service. This includes 100% solar subdivisions, and even Zero Net Energy developments. Obviously the economics of serving these customers has changed, but they still appear to rely on the utility for some reason. It is true that technology could change this, but what if this change doesn't materialize as predicted, and when it does, it brings with it, as it always does, other unintended consequences?

Fig. 56

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Utility Dive

How power companies can get to Utility 2.0 and beyond

A new report provides a roadmap for utilities' changing business models

By [Herman K. Trabish](#) | December 11, 2014

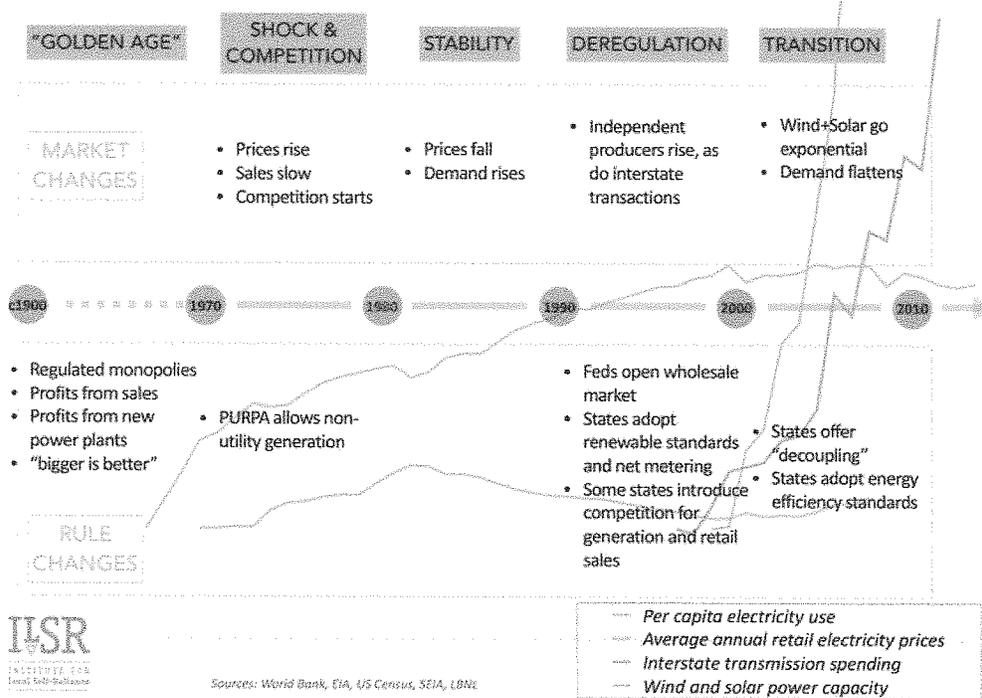
From [integrating more distributed generation](http://www.utilitydive.com/news/solarcity-partners-with-heco-to-study-solutions-to-solar-problems/335221/) (<http://www.utilitydive.com/news/solarcity-partners-with-heco-to-study-solutions-to-solar-problems/335221/>) to [pushing electric vehicle chargers](http://www.utilitydive.com/news/how-sdgc-wants-to-power-the-electric-vehicle-market/315887/) (<http://www.utilitydive.com/news/how-sdgc-wants-to-power-the-electric-vehicle-market/315887/>) and [home energy advising](http://www.utilitydive.com/news/how-txu-is-leveraging-disaggregation-to-become-a-trusted-energy-advisor/331565/) (<http://www.utilitydive.com/news/how-txu-is-leveraging-disaggregation-to-become-a-trusted-energy-advisor/331565/>), 2014 has seen a number of utilities making big changes to their business models.

Now a new report from a storied environmental and economic development think tank warns that in coming years, if power companies do not do more to change their business models, they could go the way of the land line phone provider.

The core principles that are key to the utility of the future “do not align with current financial incentives for most investor-owned utilities (or the typical business practices of most utilities; private, public, or cooperative),” according to “ (<http://ilsr.org/report-energy-democracy/>) *Beyond Utility 2.0 to Energy Democracy* (<http://ilsr.org/report-energy-democracy/>). ” (<http://ilsr.org/report-energy-democracy/>) a report by John Farrell of the [Institute for Local Self-Reliance](http://ilsr.org/wp-content/uploads/2012/01/ILSR-Background-and-Projects-2011.pdf) (<http://ilsr.org/wp-content/uploads/2012/01/ILSR-Background-and-Projects-2011.pdf>).

But, the report goes on, “the principles are indifferent to the economic opportunity. That is, they can be implemented with utility control of the grid and its benefits or with a massively decentralized and democratized electricity economy.” In other words, utilities don’t have to go away if they understand what is coming and respond to it.

The U.S. Electricity Timeline



Credit: ILSR (used with permission)

The grid and Utility 2.0

“The grid is a valuable network,” Farrell said. A veteran of regulatory proceedings in Minnesota, Farrell was the driving force behind a stakeholder process that included Xcel Energy and produced that state’s [Value of Solar methodology](http://www.utilitydive.com/news/can-minnesotas-value-of-solar-end-the-net-metering-debate/250451/) (<http://www.utilitydive.com/news/can-minnesotas-value-of-solar-end-the-net-metering-debate/250451/>). One of solar’s key values is to grid operations, the methodology shows.

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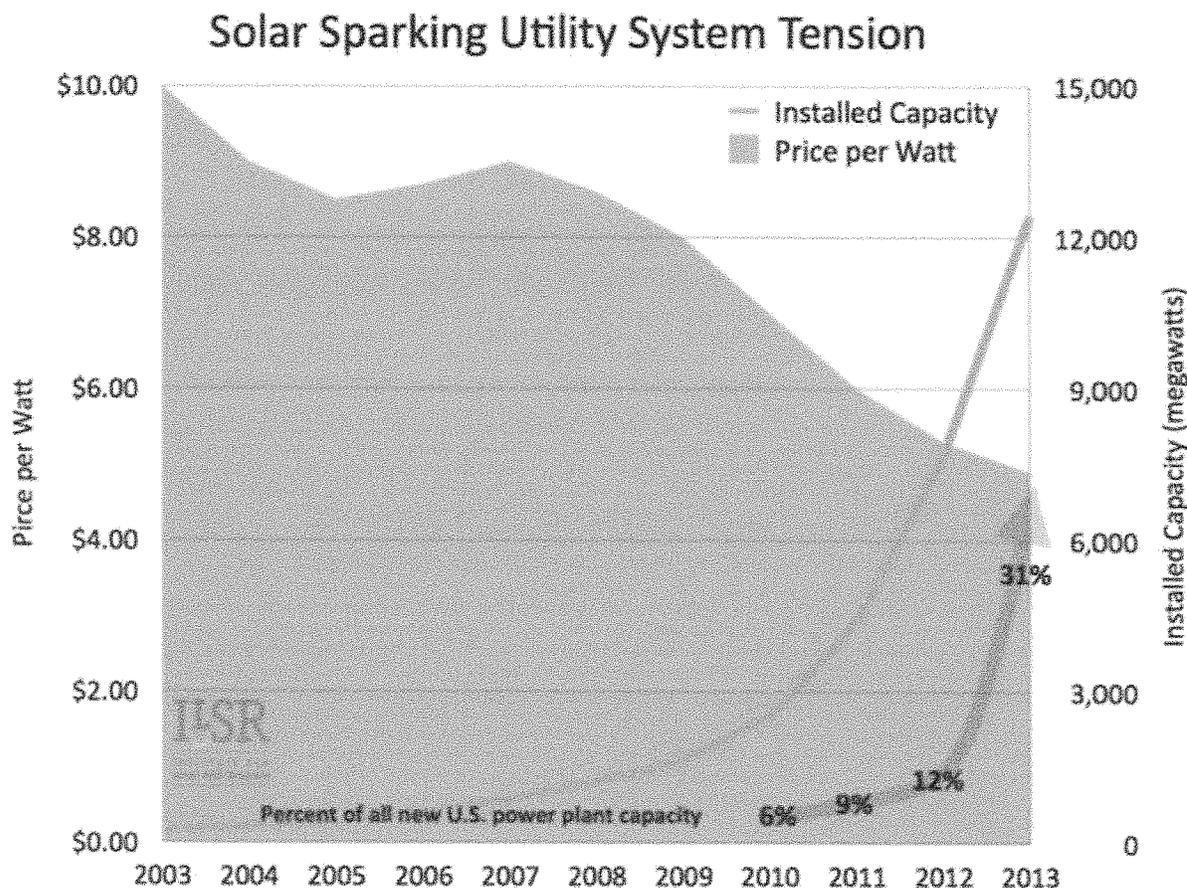
The dilemma utilities find themselves in is not entirely of their own making, the paper reports. Much of the cause is the 130-year-old system. Policymakers send “mixed incentives” that ask utilities to meet increasing [mandates for renewable energy and energy efficiency](http://www.dsireusa.org/) through a business model that only rewards increased electricity sales and rate based transmission and generation infrastructure. Regulators who judge utility planning often do so with inadequate information about alternatives. Yet utility executives who fail to navigate through all this to a profit are condemned and dismissed.

“Utility 2.0 (<http://blogs.edf.org/energyexchange/2014/10/27/utility-2-0-revolutionizing-the-use-of-distributed-energy-resources/>) is designed to solve many of these problems, properly aligning financial incentives with the outcomes most participants want from the electricity system,” the paper promises.

The 4 core Utility 2.0 principles of the paper are:

1. Reduced energy consumption through energy efficiencies
2. Reduced carbon emissions through a transition from fossil fuels to renewables
3. Grid efficiency via a two-way, networked smart grid that uses demand response, local generation, and local resources
4. Grid flexibility to integrate large quantities of distributed and utility-scale renewables

This can mean a lot of different things, Farrell said. It depends on [a utility’s ability to innovate and adapt](http://www.betterenergy.org/future-MN-electric-utilities-blog/). “For some utilities, it is a funeral dirge. The way they have operated for 100 years won’t make sense anymore. If they can’t adapt,” Farrell said, “this will be a land line-cell phone problem for them.”



Credit: ILSR (used with permission)

The opportunity for utilities

“\$364 billion in annual [U.S. electricity sales](http://www.eia.gov/electricity/data/eia826/) is up for grabs, Farrell added. “It is available to utilities who make the transition and provide the services people will need.”

Fig. 59

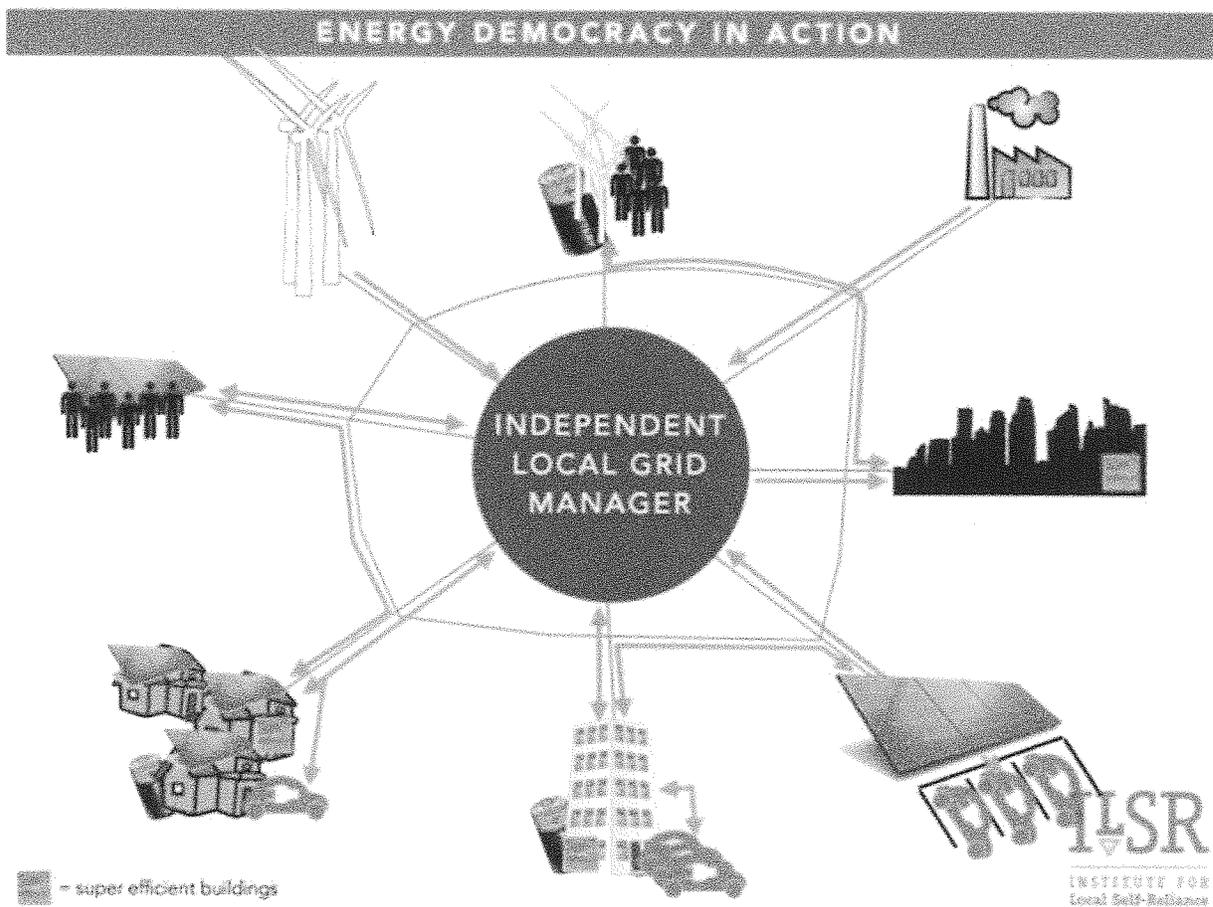
Farrell mentioned things like smart phone apps to manage energy services and other ways to process and manage energy system information (<http://www.utilitydive.com/news/how-4-utilities-are-using-big-data/293968/>). He also mentioned distribution system advances that make it more of a 2-way, networked, transactional system. "There are so many ways utilities could profit from this," he said.

One vertically integrated utility (<http://nptel.ac.in/courses/108101040/download/Lec-32.pdf>) might sell off its transmission system and just sell energy services. Another might sell off its power generation assets and operate a distribution system "and be the ultimate smart grid."

The goal of the paper is to describe this moment of transformation, Farrell said, not to dictate to utility execs how to take advantage of it.

There are 2 common themes in the structural changes needed:

1. Planning for generation or a transmission/distribution system that recognizes the potentials of local and regional level resources (<http://www.epri.com/Our-Work/Pages/Distributed-Electricity-Resources.aspx>) like rooftop solar, energy storage, electric vehicles, and non-capital measures like controllable, smart appliances.
2. Independent, neutral operation of the distribution system (<http://www.utilitydive.com/news/for-wellinghoff-utilities-should-not-operate-the-distribution-grid/298286/>) so that informed but unbiased planning can be done.



This is what energy democracy looks like, says ILSR
Credit: ILSR (used with permission)

Early expressions

The paper provides analysis of early expressions of the Utility 2.0 idea in New York, Hawaii (<http://www.utilitydive.com/news/hawaii-utilities-plan-for-67-renewables-by-2030/303926/>), Maine, and Vermont.

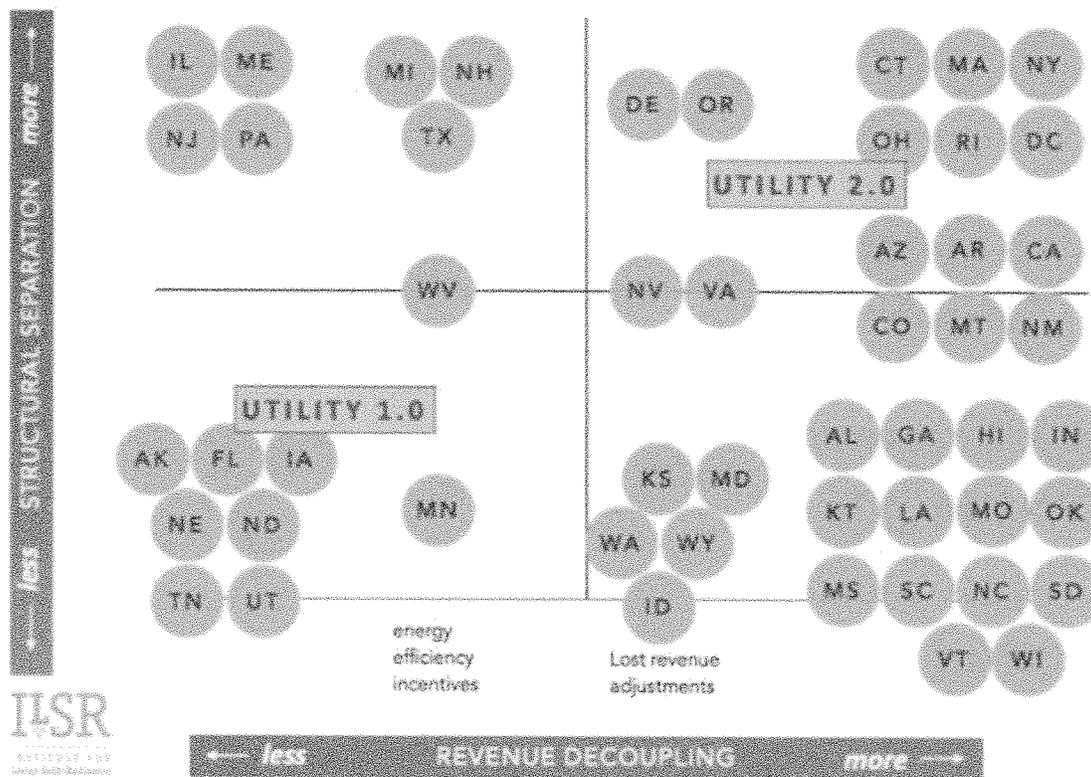
The New York REV (<http://www.utilitydive.com/news/how-new-york-is-reinventing-the-electric-utility/262727/>) process is "an excellent articulation of what the grid should look like to accomplish those principles," Farrell said. Where the process falls short is "the recognition of the economic opportunity."

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Vermont (<http://www.dsireusa.org/incentives/index.cfm?re=0&ee=0&spv=0&st=0&srp=1&state=VT>) is closest to having in place principles of integrated planning and rules for distributed generation and energy efficiency. "What they haven't done strikingly is adopt any of the structural change in the New York REV process," he explained.

"They have made a lot of big steps but they don't have a distribution marketplace where anybody could participate," Farrell said, "where it is all transactional and transparent, like an eBay (<http://www.ebay.com/>) for electricity. You shop for the services you need and bid and everybody sees the numbers."

STATUS OF UTILITY 2.0 STRUCTURAL CHANGE



Credit: ILSR (used with permission)

The shift to Energy Democracy

Utilities have to think about making the grid useful for 21st century technology (http://www.rmi.org/electricity_grid_defection) because there are two more principles that make the next utility business model into a model of "Energy Democracy," Farrell said. Because local communities have carried the burden of the old model, "we want a semblance of local control and equitable access." The report explains that "Energy Democracy" shares the four tenets of the Utility 2.0 model — reduced energy consumption, reduced carbon pollution, grid efficiency and grid flexibility — but adds those two values to the mix:

1. Local control: Individual communities should have the authority to make their own decisions about energy production and consumption, "with weight given to economic benefits not just energy costs."
2. Equitable access: Ownership and authority over the grid should be open to all, regardless of material wealth. "Since the resources of a 21st century electricity system (wind and sun) belong to everyone, all residents of a community should share in the wealth generated from them," the report concludes.

What is coming, Farrell said, is "an interconnected and distributed technology opportunity between smart phones and electric cars and energy storage and super cheap solar 20 years from now that is inevitable," he said. Whether utilities are dragged kicking and screaming or seize the moment, communities deserve the same opportunity.

This transition is being driven not just by electricity technologies but also computing technologies, Farrell said. "Revolutions come from the convergence of technologies in a sector and communications technologies (<http://www.thethirdindustrialrevolution.com/>). That is what happening here. And there is \$364 billion a year at stake."

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**Third Taxing District
Financial Highlights
July-Apr 2015 vs. July-Apr-2014**

	July-Apr -2015	July-Apr -2014	\$ Change	% Change
Total Income	8,186,323	8,218,529	-32,206	0%
Total Expense	9,090,226	8,912,685	177,541	2%
Net Ordinary Income	-903,903	-694,156	-209,747	30%
Other Income	673,659	499,983	173,676	35%
Other Expense	37,070	23,276	-	-
Net Income before Rate Stabilization	-267,314	-194,173	-73,141	38%
Rate Stabilization	325,976	-34,849	360,825	-1035%
Net Income	58,662	-252,298	310,960	-123%

CASH BALANCES FY 2015

ACCTS

	Apr-15
Operating Accounts	934,709
Capital Improvements Fund	1,010,000

TTD Outstanding Principal Balance with CMEEC

Balance as of July 1, 2014	5,146,271
Current Balance	4,746,693

	Current Fiscal Year-to-Date	Last Fiscal Year-to-Date	\$ Change	% Change
Power Supply				
Energy Cost	\$ 5,735,400	\$ 5,840,419	-105,020	-2%
Budget Energy Cost	\$ 5,276,568	\$ 5,548,398	-271,831	-5%
Energy Cost Cents/KWH	10.940	10.420	\$ 0.52	5%

Third Taxing District
Profit & Loss Prev Year Comparison
April 2015

	Apr 15	Apr 14	\$ Change	% Change
Ordinary Income/Expense				
Income				
443-00 · Cervalis Data Center Revenues	11,141.94	17,053.00	-5,911.06	-34.66%
440-00 · Residential Sales	328,291.98	208,563.57	119,728.41	57.41%
442-01 · Large Commercial Sales	80,729.52	51,655.42	29,074.10	56.29%
442-02 · Small Commercial Sales	221,458.73	150,048.31	71,410.42	47.59%
445-01 · Water Pollutn Contrl Plnt Sales	98,834.04	62,485.08	36,348.96	58.17%
445-02 · Flat Rate	8,729.79	7,243.06	1,486.73	20.53%
557-00 · Purchased Power Adjustment	78,931.44	304,248.42	-225,316.98	-74.06%
Total Income	828,117.44	801,296.86	26,820.58	3.35%
Cost of Goods Sold				
555-00 · Electrical Power Purchased	470,892.36	591,159.23	-120,266.87	-20.34%
Total COGS	470,892.36	591,159.23	-120,266.87	-20.34%
Gross Profit	357,225.08	210,137.63	147,087.45	70.0%
Expense				
904-00 · Substation	23,088.43	17,821.18	5,267.25	29.56%
403-00 · Depreciation Expense	46,636.06	60,370.35	-13,734.29	-22.75%
408-00 · Taxes	84,809.08	95,720.80	-10,911.72	-11.4%
540-00 · Other Power Generation Expense	22,100.92	1,887.73	20,213.19	1,070.77%
580-00 · Distribution Expenses	2,097.62	11,645.93	-9,548.31	-81.99%
590-00 · Maintenance Expenses	54,895.15	23,958.37	30,936.78	129.13%
900-00 · Customer Accounts & Service	18,259.20	25,003.54	-6,744.34	-26.97%
909-00 · Conservation Expenses	0.00	783.68	-783.68	-100.0%
920-00 · Administrative Expenses	163,045.80	133,871.60	29,174.20	21.79%
Total Expense	414,932.26	371,063.18	43,869.08	11.82%
Net Ordinary Income	-57,707.18	-160,925.55	103,218.37	64.14%
Other Income/Expense				
Other Income				
418-00 - Dvidend Income		1,500.00		
419-00 · Interest Income	0.00	12.15	-12.15	-100.0%
421-00 · Norden Project Income	42,500.00	55,834.12	-13,334.12	-23.88%
423-00 · Gain/(Loss) from Sale of FA	0.00	62,525.40	-62,525.40	-100.0%
424-00 · Energy Conservation Fund Income	15,047.23	11,155.92	3,891.31	34.88%
Total Other Income	57,547.23	131,027.59	-73,480.36	-56.08%
Other Expense				
942-00 · Interest Expense	312.94	625.88	-312.94	-50.0%
Total Other Expense	312.94	625.88	-312.94	-50.0%
Net Other Income	57,234.29	130,401.71	-73,167.42	-56.11%
Net Income before rate stabilization	-472.89	-30,523.84	30,050.95	98.45%
Rate Stabilization	25,008.89	58,769.30	-33,760.41	-57.45%
Net Income	24,536.00	28,245.46	-3,709.46	-13.13%

Third Taxing District
Profit & Loss Prev Year Comparison
 July 2014 through April 2015

	Jul '14 - Apr 15	Jul '13 - Apr 14	\$ Change	% Change
Ordinary Income/Expense				
Income				
443-00 · Cervalis Data Center Revenues	95,036.32	0.00	95,036.32	100.0%
440-00 · Residential Sales	3,079,814.74	2,228,943.75	850,870.99	38.17%
442-01 · Large Commercial Sales	772,930.49	555,780.14	217,150.35	39.07%
442-02 · Small Commercial Sales	2,021,296.49	1,639,038.10	382,258.39	23.32%
445-01 · Water Pollutn Contrl Plnt Sales	851,278.38	525,924.17	325,354.21	61.86%
445-02 · Flat Rate	75,299.62	68,728.52	6,571.10	9.56%
557-00 · Purchased Power Adjustment	1,290,666.94	3,200,114.66	-1,909,447.72	-59.67%
Total Income	8,186,322.98	8,218,529.34	-32,206.36	-0.39%
Cost of Goods Sold				
555-00 · Electrical Power Purchased	5,735,399.82	5,840,419.37	-105,019.55	-1.8%
Total COGS	5,735,399.82	5,840,419.37	-105,019.55	-1.8%
Gross Profit	2,450,923.16	2,378,109.97	72,813.19	3.06%
Expense				
904-00 · Substation	187,082.03	71,531.97	115,550.06	161.54%
930-43 · TTD 100th Anniversary	0.00	28,240.77	-28,240.77	-100.0%
403-00 · Depreciation Expense	507,563.47	473,297.41	34,266.06	7.24%
408-00 · Taxes	229,917.00	254,827.52	-24,910.52	-9.78%
540-00 · Other Power Generation Expense	126,030.68	175,270.16	-49,239.48	-28.09%
580-00 · Distribution Expenses	39,771.50	53,563.77	-13,792.27	-25.75%
590-00 · Maintenance Expenses	503,249.70	387,642.87	115,606.83	29.82%
900-00 · Customer Accounts & Service	220,080.70	355,705.45	-135,624.75	-38.13%
920-00 · Administrative Expenses	1,541,130.93	1,272,186.50	268,944.43	21.14%
Total Expense	3,354,826.01	3,072,266.42	282,559.59	9.2%
Net Ordinary Income	-903,902.85	-694,156.45	-209,746.40	-30.22%
Other Income/Expense				
Other Income				
418-00 · Dividends	13,293.69	1.70	13,291.99	781,881.77%
419-00 · Interest Income	210.00	426.96	-216.96	-50.82%
420-00 · Gain/(Loss) on Investments	42,399.81	0.00	42,399.81	100.0%
421-00 · Norden Project Income	551,336.14	409,437.98	141,898.16	34.66%
423-00 · Gain/(Loss) from Sale of FA	2,131.00	32,825.40	-30,694.40	-93.51%
424-00 · Energy Conservation Fund Income	64,288.08	57,291.45	6,996.63	12.21%
Total Other Income	673,658.72	499,983.49	173,675.23	34.74%
Other Expense				
426-30 · PERSON TO PERSON	20,000.00	20,000.00	0.00	0.0%
426-20 · Energy Conservation Expense	14,694.72	252.80	14,441.92	5,712.79%
942-00 · Interest Expense	2,375.26	3,023.62	-648.36	-21.44%
Total Other Expense	37,069.98	23,276.42	13,793.56	59.26%
Net Other Income	636,588.74	476,707.07	159,881.67	33.54%
Net Income before rate stabilization	-267,314.11	-217,449.38	-49,864.73	-22.93%
Rate Stabilization'	325,975.98	-34,849.15	360,825.13	1,035.39%
Net Income	58,661.87	-252,298.53	310,960.40	123.25%

Third Taxing District
Profit & Loss Statement
Explanation of Major Variances
Jul-Apr -2015 vs. Jul- Apr - 2014

1. The decrease in the fuel adjustment is due to the fact that the District moved to a revenue neutral rate adjustment in accordance with the results of the independent rate study. The Fuel Adjustment rate was decreased and the adjustments were spread proportionally to the revenues throughout the system. This can be seen by reviewing the year to date April 2015 month to date financial statements versus the year to date April 2014 financial statements.
2. The increase in substation expense of \$115K is due to the fact that a separate payroll expense category was setup for Pete Johnson and Scott Tracey who will be working on the substation. In addition, there was an extra payroll week in April 2015 versus the prior year.
3. Increase in depreciation expense is up due primarily to the depreciation of substation which came on line in January of 2014. The substation will be depreciated over 20 years and will have an annual depreciation of \$251,328 or monthly depreciation of \$20,944.
4. The decrease of \$49K in Other Power Generation expense is mainly due to the additional maintenance work done by HO Penn Machinery in the prior year to get the generators up and running to optimization.
5. The \$13K decrease in Distribution Expense is a function of materials and supply purchases from Air Gas, Electrical Wholesalers, and other miscellaneous vendors in prior years that were not made in the current year.
6. The \$115K increase in Maintenance Expense is due to approximately \$16K in additional substation maintenance from Eleck & Salvato, Oman's Garden, and Effective Plumbing, related to a water leak below the Fitch Street Substation Control House. These expenses will be offset in the future with a credit received from Eaton Corporation. We also spent \$8K on overhead line maintenance with WESCO. There is approximately 6,400 in roof repairs with Zhakar roofing. There is also an increase in tree trimmings and other related maintenance in an effort to reduce outages. . Also, there was an additional week's payroll in April 2015 versus the prior year.
7. The approximate \$135K decrease in Customer Accounts & Service is mainly due to payroll associated with the retirement of Ana Aguilar, as well as the fact that wages for Pete Johnson were shown in this category during the prior year and are now listed under Substation expense for the current year. Ana's

decreased wages are now being partially offset by the hiring of the new customer service rep position.

8. The increase of \$268K in Administrative Expenses is due to the following:
 - a. \$9K in temporary staffing of Cynthia and Kiki before hiring.
 - b. \$40K in repairs and maintenance.
 - c. \$125K in engineering fees paid to Cristino Associates for the on-going SCADA project as well as substation engineering. These amounts will be offset and capitalized as Joe is in the process of preparing a summary of the project.
 - d. \$10K increase over prior year in timing of health insurance premiums/expenses.
 - e. \$70K increase in legal fees mainly due to Amy Livolsi & Berchem, Moses, & Devlin.
 - f. The remainder is due to increases in Admin payroll, payroll taxes and call time charged to this account based on increased customer activity over the period.

9. The increase of \$42K is the unrealized gain on our capital improvements account to date. Note: Now that the Fitch Street and Cervalis projects are complete we are now investing in the account rather than keeping it completely liquid.

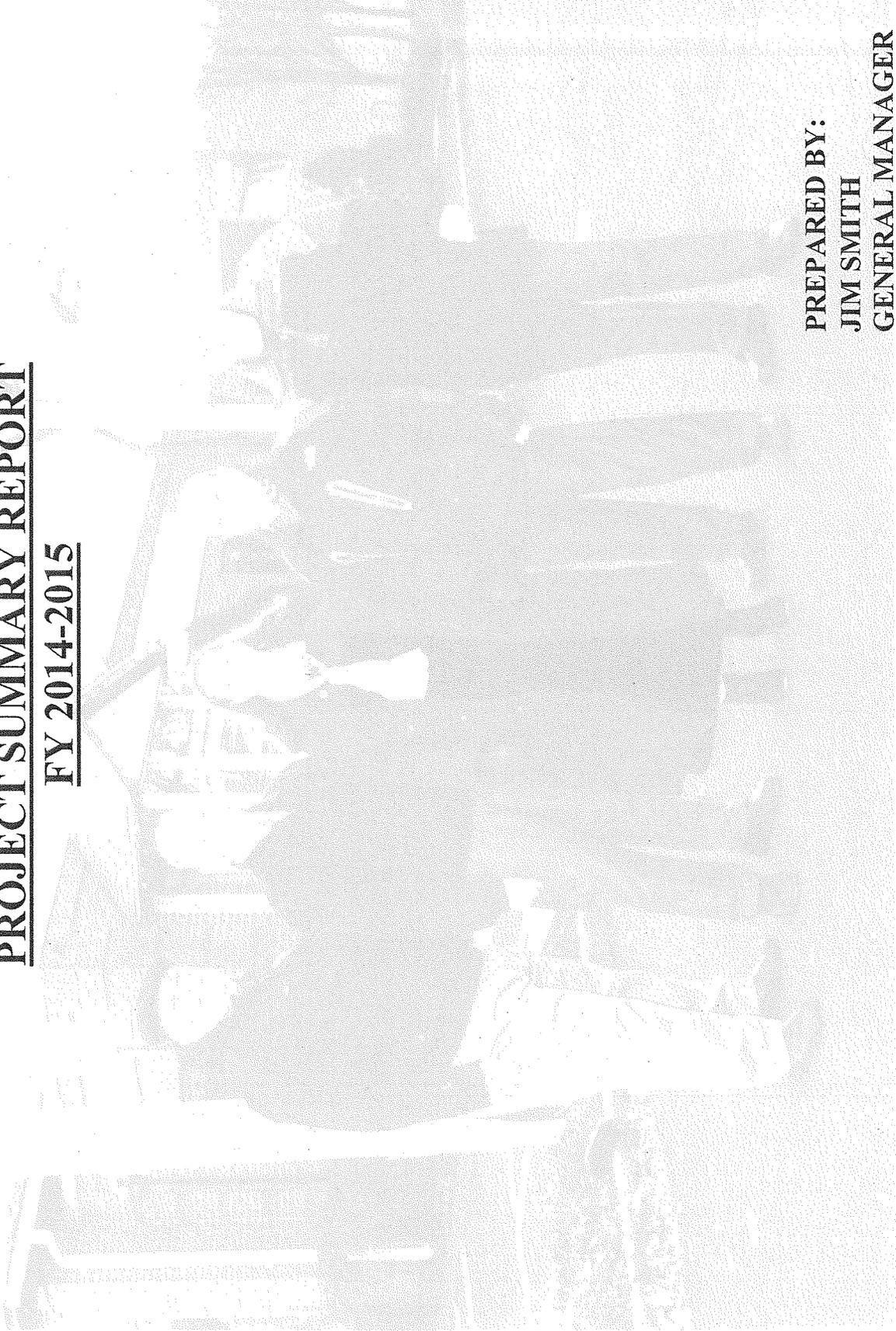
10. Gain or loss on the Sale of Fixed Assets is due to the sale of scrap.

11. The amounts in Energy Conservation expense are due to the purchase of the new LED streetlights as well as LED bulbs for our customers. As these expenses are incurred they are reimbursed to the district through our conservation fund.

THIRD TAXING DISTRICT
KEY PERFORMANCE INDICATORS (KPI'S)

		2015	February 2014	Industry Average (Bandwidth)
1)	OPERATING RATIO	TOTAL OPERATING EXPENSE / TOTAL OPERATING REVENUE	108.45%	87% - 92%
2)	POWER SUPPLY EXPENSE RATIO	TOTAL POWER SUPPLY EXPENSES / TOTAL EXPENSES	66%	65% - 70%
3)	BAD DEBT RATIO	TOTAL CUSTOMER ACCOUNTS OVER 90 DAY / TOTAL ACCOUNTS RECEIVABLE	5.00%	3% - 10%
4)	ACTUAL RATE OF RETURN ON RATE BASE	AUTHORIZED BY STATE STATUTE	N/A	Varies by state
5)	ELECTRIC CUSTOMERS PER EMPLOYEE	TOTAL ELECTRIC CUSTOMERS / TOTAL FULL TIME EMPLOYEES	410	200 - 500

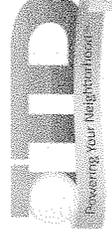
THIRD TAXING DISTRICT
PROJECT SUMMARY REPORT
FY 2014-2015



PREPARED BY:
JIM SMITH
GENERAL MANAGER

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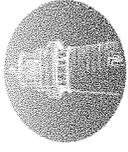
PAGE #	PROJECT #	PROJECT
1	1	A-BASE METER REPLACEMENT PROGRAM
1	2	CUSTOMER SERVICE TRAINING PROGRAM
2	3	SUCCESSION PLANNING PROCESS
2	4	RADIO-READ METER UPGRADE
2	5	UPGRADE FLEET VEHICLES
3	6	UPDATE EMERGENCY PLAN FOR DEPARTMENT
3	7	I/TUPGRADE/UPDATES
4	8	COST OF SERVICE/RATE STUDY
4	9	STRATEGIC PLANNING PROCESS
4	10	MAPLEWOOD
5	11	WEBSITE/MARKETING/BRANDING PROJECT
5	12	CATV/POLE ATTACHMENTS/AMPLIFIERS
5	13	UPGRADE/ENHANCE FUEL TANKS @ 2 SECOND STREET
5	14	SUBSTATION UPGRADES AND IMPROVEMENTS
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7-9	17	MISCELLANEOUS



THIRD TAXING DISTRICT – PROJECT SUMMARY

UPDATED: MAY 28, 2015

<u>#</u>	<u>PROJECT</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
1)	A-BASE METER REPLACEMENT PROGRAM	<ul style="list-style-type: none">• IN PROCESS WITH METER DEPT.	COMPLETE 3 RD QUARTER 2015	<ul style="list-style-type: none">• MAY 2015 – BEGAN CONTACTING INDIVIDUAL HOMEOWNERS ABOUT REPLACING THESE METERS ON A “WORST CASE” BASIS. THIS PROJECT WILL MOVE STEADILY FORWARD OVER THE NEXT FEW MONTHS.
2)	CUSTOMER SERVICE TRAINING PROGRAM	<ul style="list-style-type: none">• TRAINING THROUGHOUT THE YEAR BASED ON TRAINING OPPORTUNITIES AND EMPLOYEE SCHEDULES.	ON-GOING	



COMMENTS/MONTHLY UPDATE

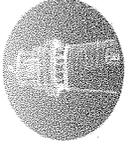
TIMELINE

STATUS

PROJECT

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	SUCCESSION PLANNING PROCESS	COMPLETE WITH PERIODIC REVIEW	ON-GOING	MAY 2015 – WILL INCLUDE PLANNED REPLACEMENT OF BILL RUEDEMAN IN LINE DEPARTMENT AS PART OF SUCCESSION PLAN IN THE 2015-16 OPERATING BUDGET.
3)	RADIO-READ METER UPGRADE		ON-GOING THROUGH 2015	MAY 2015 – CONTINUED TO INSTALL RADIO-READ METERS DURING THE MONTH BASED ON PURCHASE OF ITRON METERS HELD OVER FOR THE REMAINDER OF THE FISCAL YEAR.
5)	UPGRADE FLEET VEHICLES	PURCHASING/LEASING VEHICLES IN ACCORDANCE WITH FIVE-YEAR FLEET VEHICLE REPLACEMENT SCHEDULE.	ON-GOING WITH PERIODIC UPDATES	



COMMENTS/MONTHLY UPDATE

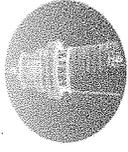
TIMELINE

STATUS

PROJECT

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<u>#</u>	<u>PROJECT</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
6)	UPDATE EMERGENCY PLAN FOR DEPARTMENT	<ul style="list-style-type: none">• IMPLEMENTED AS NEEDED DEPENDING ON WEATHER CONDITIONS, OR AS SPECIAL CIRCUMSTANCES DICTATE.	ON-GOING	
7)	I/T UPDATE/ UPGRADES	<ul style="list-style-type: none">• TRANSITION PROCESS COMPLETED WITH PERIODIC UPDATES TO HARDWARE/ SOFTWARE, IS SYSTEM, ETC.	ON-GOING	



COMMENTS/MONTHLY UPDATE

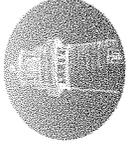
TIMELINE

STATUS

PROJECT

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<u>#</u>	<u>PROJECT</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
8)	CONDUCT COST OF SERVICE/RATE STUDY	<ul style="list-style-type: none"> COMPLETE WITH PERIODIC UPDATES. 		<ul style="list-style-type: none"> MAY 2015 – UPDATED THE PURCHASE COST ADJUSTMENT (PCA) MODEL DURING THE MONTH WHICH IS CURRENTLY AT .0170/KWH. AS WE HAVE RECENTLY DISCUSSED WITH THE COMMISSION, IT WILL BE ADJUSTED EVERY QUARTER TO REFLECT THE CUMULATIVE OVER/UNDER COLLECTION OF WHOLESALE POWER COSTS.
9)	STRATEGIC PLANNING PROCESS	<ul style="list-style-type: none"> TO BE ADDRESSED WITH THE COMMISSION AT A FUTURE DATE. 		
10)	MAPLEWOOD		ON-GOING	<ul style="list-style-type: none"> MAY 2015 – MAPLEWOOD HAS CHOSEN TO PURSUE THEIR LEGAL CASE IN SUPERIOR COURT BY FILING A LAWSUIT AGAINST TTD, EVERSOURCE AND PURA. WE HAVE FORWARDED THE COMPLAINT TO OUR ATTORNEYS AND THE COMMISSION FOR REVIEW AND RESPONSE.



COMMENTS/MONTHLY UPDATE

TIMELINE

STATUS

PROJECT

#

	<u>PROJECT</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
11)	WEBSITE/BRANDING PROJECT	COMMISSION GRANTED EXTENSION OF JUMAR CONTRACT THROUGH FIRST QUARTER OF 2016.	ON-GOING THROUGH FIRST QTR 2016.	
12)	CATV POLE ATTACHMENTS/AMPLIFIERS	<ul style="list-style-type: none"> CURRENTLY IN ACTIVE NEGOTIATIONS WITH CABLEVISION. 	ON-GOING	<ul style="list-style-type: none"> MAY 2015 – CHANGES SENT TO CABLEVISION HAVE BEEN RECEIVED BACK. WE ARE CLEARING UP SOME FINAL ISSUES PRIOR TO REVIEWING IT WITH THE COMMISSION.
13)	UPGRADE/ENHANCE FUEL TANKS @ 2 SECOND STREET	<ul style="list-style-type: none"> CURRENTLY IN COMPLIANCE WITH ALL STATE CODES THROUGH MONTHLY INSPECTIONS. 	ON-GOING	
14)	SUBSTATION UPGRADES AND IMPROVEMENTS	<ul style="list-style-type: none"> PROJECTS ON-GOING IN ALL SUBSTATIONS IN ORDER TO UPGRADE/ MAINTAIN COMPLIANCE WITH CONVEX/NERC/ FERC REQUIREMENTS. 	ON-GOING	<ul style="list-style-type: none"> MAY 2015 – INSTALLED TWO NEW VACUUM CIRCUIT BREAKERS IN THE ROWAN STREET SUBSTATION DURING THE MONTH AS PART OF OUR LONGER TERM UPGRADE OF OLD OIL CIRCUIT BREAKERS (OCB's). THESE BREAKERS ARE REPLACING BREAKERS THAT ARE IN EXCESS OF 50 YEARS OLD.



COMMENTS/MONTHLY UPDATE

TIMELINE

STATUS

PROJECT

#	PROJECT	STATUS	TIMELINE	COMMENTS/MONTHLY UPDATE
15)	18 ROWAN STREET RENOVATION	<ul style="list-style-type: none"> PROPERTY ACQUIRED, HOUSE DEMOLISHED AND LOT REPAVED. FINAL STEP IS TO SITE A MATERIALS STORAGE FACILITY ON THE SITE. 	ON-GOING THROUGH 3 RD QUARTER 2015	<ul style="list-style-type: none"> MAY 2015 – CONTINUING TO GET IDEAS FROM VENDORS ON TYPE, STYLE, AND SQUARE FOOTAGE OF STORAGE BUILDINGS LEADING UP TO A DESIGN/BUILD CONTRACT AFTR THE BEGINNING OF THE NEW FISCAL YEAR.
16)	CONSTRUCTION OF ELECTRIC VEHICLE CHARGING STATION	<ul style="list-style-type: none"> COMPLETED JANUARY 2015. NEED TO BUILD UP CUSTOMER BASE BASED ON PR/MARKETING INITIATIVES. 		<ul style="list-style-type: none"> MAY 2015 – DEVELOPED IDEAS TO INCREASE USAGE OF CHARGING STATION IN CONJUNCTION WITH JUMAR. THEY INCLUDE: <ul style="list-style-type: none"> DISTRIBUTED FLYERS AT EAST NORWALK TRAIN STATION PUBLICIZING THE EXISTENCE OF THE STATION. INSTALL TRAFFIC SIGNS AT VARIOUS LOCATIONS NEAR THE STATION GUIDING OWNERS OF E/V VEHICLES TO THE STATION. INSTALL SIGN AT LUDLOW PARK (CONCERT TYPE SIGN) PROMOTING THE CHARGING STATION. CONTACT THE STATE TO DETERMINE IF THEY HAVE A “LIST” OF E/V VEHICLE OWNERS AND MARKET DIRECTLY TO THEM.



COMMENTS/MONTHLY UPDATE

TIMELINE

STATUS

PROJECT

#	<u>MISCELLANEOUS</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
17)	<ul style="list-style-type: none"> ANNUAL REVENUE/ EXPENSE BUDGET/FIVE-YEAR CAPITAL BUDGET 	BUDGET BEING PREPARED FOR 2015/2016 FISCAL YEAR	SECOND QTR 2015, PRESENT TO COMMISSION FOR JULY 1, 2015 IMPLEMENTATION	<ul style="list-style-type: none"> MAY 2015 – WORK HAS CONTINUED ON BUDGET PREPARATION DURING THE MONTH. A DRAFT BUDGET WILL BE SENT TO THE COMMISSION AS PART OF THE JUNE MEETING AGENDA.
	<ul style="list-style-type: none"> SOLAR P/V PROJECT ROOFTOP AT SECOND STREET OFFICE 	NO ACTIVITY AT THIS TIME.		
	<ul style="list-style-type: none"> LEASE NEGOTIATION – NORDEN GENERATORS 	DISCUSSION STAGE	END OF 2 ND QTR	
	<ul style="list-style-type: none"> SOLAR PROJECTS 	DISCUSSION STAGE/ POTENTIAL PROJECTS	ON-GOING	<ul style="list-style-type: none"> MAY 2015 – THE “SOLAR GARDEN” PROJECT WAS DISCUSSED IN MORE DETAIL WITH THE COMMISSION BY CMEEC AT THE MAY MEETING. WE ARE ANTICIPATING A 3RD QUARTER 2015 START TO THE PROJECT.



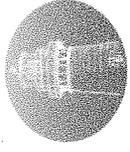
COMMENTS/MONTHLY UPDATE

TIMELINE

STATUS

PROJECT

#	<u>PROJECT</u>	<u>STATUS</u>	<u>TIMELINE</u>	<u>COMMENTS/MONTHLY UPDATE</u>
	<u>MISC. (Cont.)</u>			
•	ANNUAL FINANCIAL AUDIT (FYE 6/30/14)	COMPLETED AS OF DECEMBER 27, 2014	EXPECTED COMPLETION DATE – OCTOBER 15 TH OF EACH YEAR	
•	LED STREET LIGHT PROJECT	ON-GOING	ALL OF 2015	<ul style="list-style-type: none"> • MAY 2015 – CONTINUING PROGRESS ON INSTALLATION OF LED'S THROUGHOUT SYSTEM BASED ON AVAILABILITY OF STOCK.
•	T1 TRANSFORMER REPLACEMENT	COMPLETED – MAY 2015	APRIL 2015/MAY 2015	<ul style="list-style-type: none"> • MAY 2015 – THE T-1 REPLACEMENT PROJECT WAS COMPLETED AT THE END OF APRIL AND WAS OFFICIALLY COMMISSIONED DURING EARLY MAY. AS PART OF TTD'S UPGRADE OF ITS SUBSTATION INFRASTRUCTURE, EVERY PHASE OF THE PROJECT WAS PLANNED AND EXECUTED PROFESSIONALLY AND THOROUGHLY BY TTD STAFF AND ITS BUSINESS PARTNERS, WHICH RESULTED IN A SUCCESSFUL AND TIMELY INSTALLATION.



COMMENTS/MONTHLY UPDATE

TIMELINE

STATUS

PROJECT

#

	<u>MISC. (Cont.)</u>	PROJECT BEGINS MAY 2015		
<ul style="list-style-type: none"> SCADA PROJECT 	PROJECT BEGINS MAY 2015	<ul style="list-style-type: none"> 1ST/2ND PHASE (SECOND STREET-FITCH STREET SUB-STATION) – MAY 2015 – DECEMBER 2015 3RD PHASE (EAST AVENUE) JANUARY 2015 – APRIL 2016 4TH PHASE – MAY 2016 – AUGUST 2016 5TH PHASE – AUGUST 2016 – NOVEMBER 2016 	<ul style="list-style-type: none"> MAY 2015 – INITIAL WORK HAS BEGUN ON THE SCADA PROJECT DURING THE MONTH. WE WILL BE DOING PRELIMINARY FIELD TESTING DURING THE LATTER PART OF THE MONTH AFTER CONTRACT SIGNING, ETC. 	
<ul style="list-style-type: none"> COMMERCIAL CUSTOMER VISITS 	ON-GOING AS SCHEDULES PERMIT	THROUGHOUT 2015	<ul style="list-style-type: none"> MAY 2015 – CONTINUING CUSTOMER VISITS AS ARRANGEMENTS ARE MADE. 	