



MEMORANDUM

To: Mayor and City Councilors

From: Rich Olson, City Manager
Dennis Gordon, Energy Officer
Ricky Albertson, Load Management Specialist

Date: October 25, 2013

Re: Update –Energy Efficiency Commission Recommendations Progress

BACKGROUND:

One of the provisions included in the Mayor's Energy Efficiency Commission recommendations is that City staff is to provide a report of the dwellings weatherized and other significant accomplishments in the area of energy conservation three times per year in January, May and September. The last update provided to the Council was May 28, 2013.

ANALYSIS:

For Fiscal Year 2013-2014, the City Council appropriated \$160,000 for the City's Weatherization Program to retrofit homes. To date, \$129,054.61 has been spent. The total homes retrofitted to date are 43, at an average cost per unit of \$3001.27. In addition, the Council provided \$10,000 for Heat Pump Rebates. There have been no permits issued for this type of work to individual homeowners; therefore, no funds have been used. Finally, \$2,000 was provided for our Attic Insulation Rebate Program; and to date, \$1,000 has been spent. All these programs are designed to increase the energy efficiency of the City's housing stock and assist our citizens in managing their energy costs.

Weatherization Statistics

Since May 2013, Energy Officer Dennis Gordon has had a request for a total of 65 energy audit appointments.

To date this fiscal year, we have completed weatherization of 43 homes. Currently we have 6 additional homes in various stages of completion. The average cost per home is \$3,001.27.

Weatherization measures consistently performed on each unit are comprised of the following:

1. Air sealing the entire attic space to include top plates on interior and exterior walls, chases and bypasses.
2. Installing R38 insulation to the entire attic space.
3. Air sealing the attic hatches or dropdown stairs to attic space and ensuring R38 or higher R-value is achieved at the covers.
4. Air sealing penetrations in the conditioned space.
5. Air sealing penetrations in crawlspace sub-floors.
6. Installing R19 insulation to sub-floor areas, when applicable.
7. Installing moisture barriers, when applicable.
8. Installing carbon monoxide detectors, when applicable.

Mr. Gordon had to reject 20 requests for home weatherization because they were beyond the scope of the program.

Note: As of January 2013, income guidelines are not a requirement for weatherization eligibility.

City staff has provided three reference examples of customers that were impacted by weatherization.

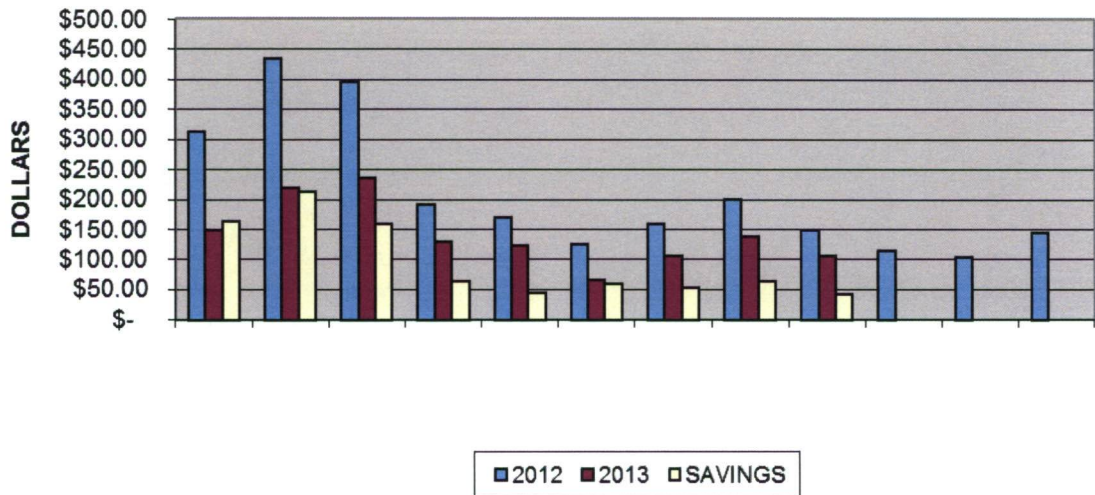
Actual customer #1 weatherization was completed January 2013. Weatherization retrofit cost was \$2,763.28. Since weatherization was completed this customer has saved \$698.31 to date.

Actual customer #2 weatherization was completed December 2012. Weatherization retrofit cost was \$4,652.00. Since weatherization was completed this customer has saved \$95.51 in electrical cost. This customer uses an alternative energy source other than electricity for heating, and heating cost savings are not reflected in this analysis. This unit was also done in collaboration with Elizabeth City State University Community Development.

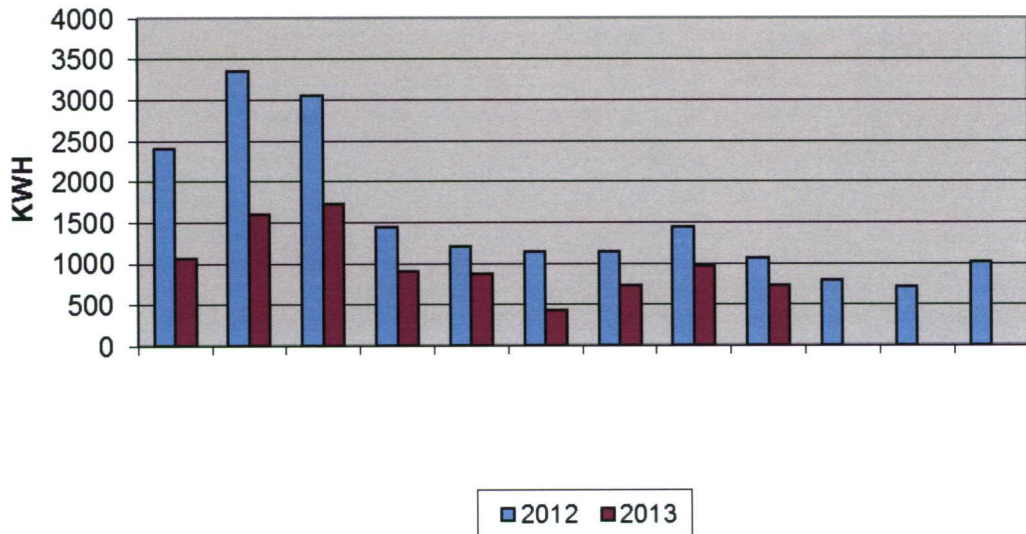
Actual customer #3 weatherization was completed December 2012. Weatherization retrofit cost was \$2,363.23. Since weatherization was completed this customer has saved \$87.40 to date. This customer also uses an alternative energy source for heating other than electricity, and heating savings are not reflected in this analysis.

Note: Customers using electric resistant heat have a greater cost savings in electrical usage, after retrofit measures are performed.

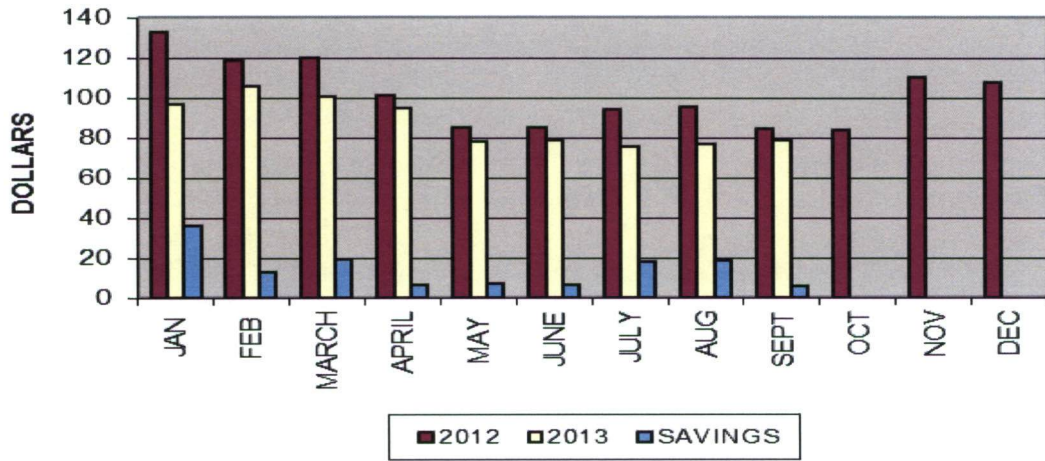
CUSTOMER #1 Electric Cost



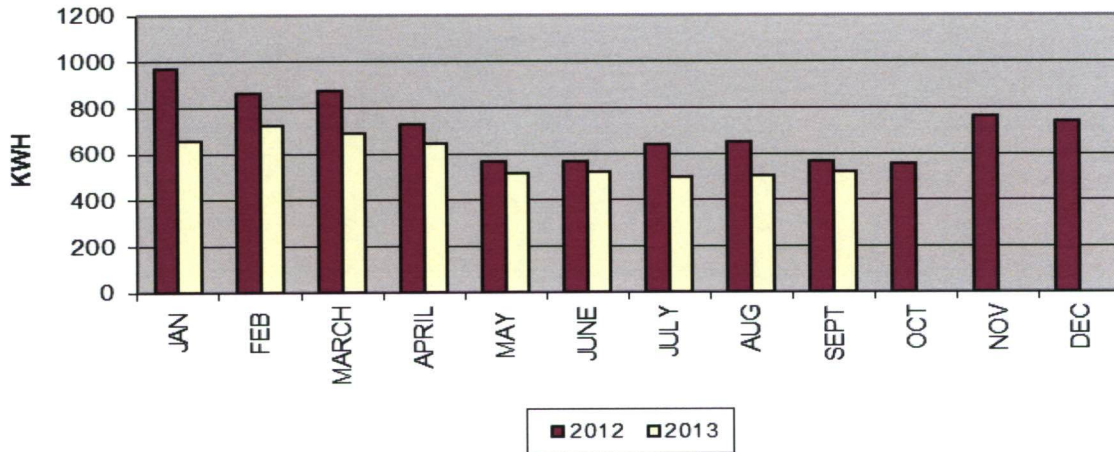
CUSTOMER #1 KWH Usage



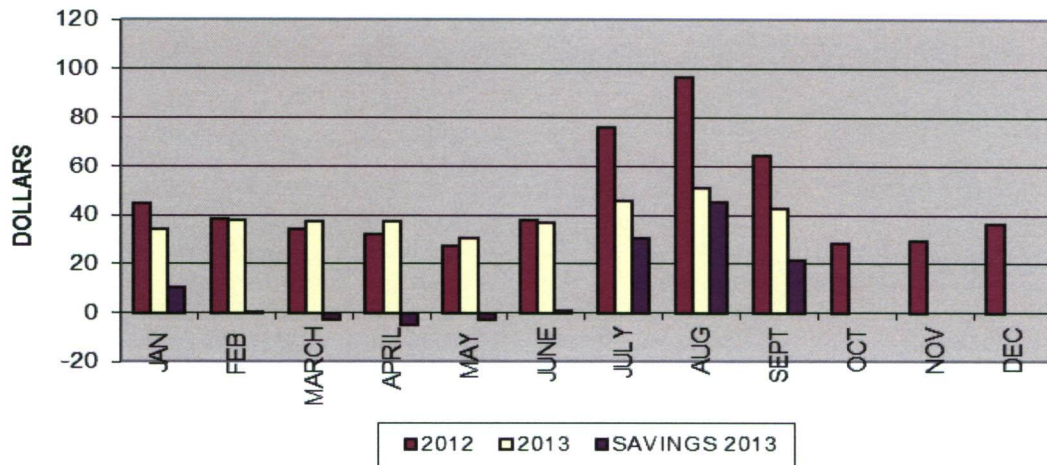
**CUSTOMER #2
Electric Cost**



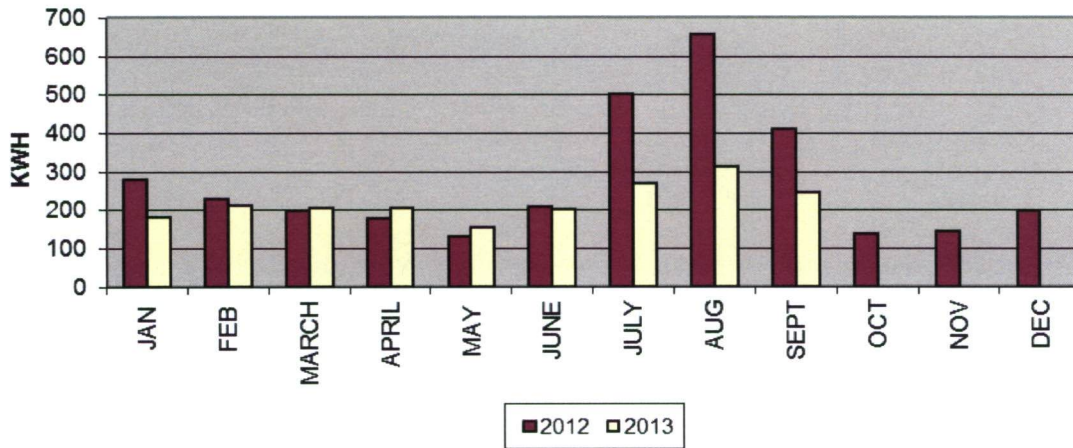
**Customer #2
KWH Usage**



**CUSTOMER #3
Electric Cost**



**CUSTOMER #3
KWH Usage**



Update on Energy Commission Recommendations – October 28, 2013 (Changes from the May 28, 2013 Report are Highlighted)

1. Goal – To develop a public that is knowledgeable of ways and means to reduce their electrical usage.

Sub-Section	Action Steps	Responsibility	Cost/Impact	To be completed	Update 10-28-13
(1)	<p>Develop two rating scales to communicate approximate cost and efficiency of each dwelling unit:</p> <p>a. Using historical electrical usage data for the last three years, place every housing unit in the city on an “Approximate Cost Scale” so that citizens can determine approximate electrical cost associated with each dwelling.</p> <p>b. Develop a Dwelling Efficiency Rating scale that will rate the efficiency of every housing unit in the city based on kWh/sq. ft.</p> <p>c. Put this information on the city’s website.</p>	City Manager	Time	October, 2012	Completed
(2)	<p>Amend the utility service policies to include the disclosure of the Dwelling Efficiency Rating and the approximate dollar cost for the structure at the time of sign up and add these ratings to the city’s website for full public disclosure.</p>	City Manager	Time	June 30, 2012	Completed
(3)	<p>Require all persons seeking a third extension on their electric bill within a year to take a seminar on energy efficiency strategies before the third extension is granted.</p>	Customer Service, Energy Officer	Time to develop seminar	June 30, 2012	To date, 45 persons have been through the class
(4)	<p>Inspect dwellings of persons requesting a third extension to ensure they have an operational cycle and save switch and consider a blower door test, if their dwelling’s efficiency rating warrants it.</p>	Energy Officer	Time	July 1, 2012	Ongoing

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(5)	Develop a comprehensive communications plan that includes but is not limited to: city officials presenting to community groups, use of public television, the city's website, billboards, developing information for teachers to use with students, continuing to offer tips through the bill, and a door-to-door campaign for delivering energy saving kits to dwellings with poor efficiency ratings.	Customer Service Energy Officer City Manager City Council	Time to develop materials needed	August 31, 2012	Continues in process; various practices already implemented
(6)	Require citizens receiving city money through the Salvation Army for payment of their utility bills to attend the educational seminar mentioned above before receiving payment.	Customer Service Energy Officer Salvation Army staff	Time	July 1, 2012	All money has been distributed and we were able to help 45 persons (\$11,918.10 for FY12-13) Additional policy guidelines needed.
(7)	Reformat the electric bill so it is easier to distinguish the electric charges from the other charges on the bill and to draw attention to the city's energy assistance program for the purpose of increasing donations.	Customer Service, City Manager	Time/Software?	January 1, 2013	Will be dependent on software migration
(8)	Develop a plan to expand the usage of load management switches which includes a component that raises public awareness as to the importance of these devices. This plan will determine what if any changes or additions should be made to the City Code or other pertinent procedures.	Load Management Tech, City Manager City Council	\$35,000	September 30, 2012	In Process – An issue has occurred with load management switch
(9)	More aggressively pursue criminal action under state law against contractors or citizens who disconnect load management switches.	City Manager City Council	Time	August 31, 2012	Ongoing

Update on Energy Commission Recommendations – October 28, 2013 (Changes from the May 28, 2013 Report are **Highlighted**)

2. Goal – To modify city codes as needed and to improve the efficiency and capacity of code enforcement

Sub-Section	Action Steps	Responsibility	Cost/Impact	To be completed	Update 5-28-13
(1)	Annually conduct a windshield inspection of all streets within the city to identify code violation, whether building, zoning and/or nuisance and then direct appropriate action to be taken to address the issues discovered. Report findings annually to the City Council	City Manager City Council	Time	September 15, 2012	Update competed for 2012. Another one is scheduled for July 2013
(2)	Increase the amount of money budgeted to demolish dwellings in the city budget.	City Manager City Council	\$18,000	July 1, 2012	Fiscal year 13-14 budget has \$36,000 proposed
(3)	Amend the city code to reduce the time a unit can be boarded up from 12 to 6 months. At 6 months aggressively move to demo the boarded up dwellings that are declared unsound or take the owners of boarded up dwellings declared sound to court.	Code enforcement officers, Building Inspections Dept. City Manager City Council	Attorney costs	July 1, 2012	Code amended 7-23-12
(4)	Add an additional code enforcement officer	City Manager City Council	\$9,060	July 1, 2012	Darrell Cross hired as Code Enforcement Officer effective 9-11-12
(5)	Make the amendments to the city code as outlined in Appendix 1 attached to this document.	City Council	Time	September 1, 2012	Refer to Update on Appendix 1
(6)	Modify the City Code to allow staff to utilize “chronic offender” statute (Appendix 1)	City Manager City Council	Time	September 1, 2012	Adopted 7-23-12

Update on Energy Commission Recommendations – October 28, 2013 (Changes from the May 28, 2013 Report are Highlighted)

3. Goal – To strengthen the city’s existing rental inspection program

Sub-Section	Action Steps	Responsibility	Cost/Impact	To be completed	Update 5-28-13
(1)	Develop an accurate listing of all rental properties within the city using the tax records.	Building Inspections	Time	September 30, 2012	Completed
(2)	Adopt the revisions to the utility service application procedure found in Appendix 2 so that the city can maintain an accurate listing of all rental property within the city.	City Manager City Council	Time/Software?	September 30, 2012	Waiting on new software
(3)	Continue to key rental inspections to utility service applications.	Building Inspections	None	Completed – May 14, 2012	Ongoing
(4)	Develop a renters’ Bill of Rights that will be posted on the city’s website.	Mayor	Time	July 1, 2012	Placed information in Community Development section of website on August 30, 2013

Update on Energy Commission Recommendations – October 28, 2013 (Changes from the May 28, 2013 Report are Highlighted)

1. Goal – To strengthen and expand the city's current weatherization program

Sub-Section	Action Steps	Responsibility	Cost/Impact	To be completed	Update 5-28-13
(1)	Develop a Dwelling Efficiency Rating scale that will rate the efficiency of every housing unit in the city based on kWh per sq. ft. This scale will be used to determine the prioritization of housing units needing weatherization.	City Manager	Time	May 31, 2012	Complete
(2)	Increase the amount budgeted for weatherization to \$200,000 annually.	City Council	\$100,000	July 1, 2012	Adopted in FY 12-13 Budget
(3)	Expand the weatherization program to include rental dwellings so as to tap into the Federal Weatherization Program dollars.	City Council Energy Officer	Time	July 1, 2012	Federal funds are no longer available for this. City's WAP has accomplished this measure.
(4)	Utilize the Dwelling Efficiency Rating, average kWh usage and other objective measures to develop a priority list for dwellings needing weatherization.	Energy Officer	None	September 1, 2012	EIC was only funded for 20 units within a ten-county service area.
(5)	Identify, train if necessary, local contractors who can be used to supplement Martin County Community Action Inc. to weatherize dwellings.	Energy Officer City Manager	Time	September 1, 2012	Workforce Development is no longer funded.

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(6)	<p>Reconstitute the rebate programs the city has offered in the past: \$500 for energy efficient HVAC, attic insulation and supplying hot water heater blankets, where applicable.</p>	<p>Energy Officer</p>	<p>Time \$20,000 furnaces \$5,000 insulation</p>	<p>July 1, 2012</p>	<p>Adopted in FY 12-13 Budget. Heat Pump Rebate Policy Adopted 7-23-12. Program in process.</p>
(7)	<p>Allocate up to \$4,500 per privately owned dwelling and up to \$1,000 per rental unit to weatherize based upon established criteria and the recommendation of the energy officer.</p>	<p>Energy Officer</p>	<p>See above</p>	<p>July 1, 2012</p>	<p>Goal Accomplished</p>
(8)	<p>Meet with landlords to make them aware of the Federal Weatherization Program and offer the City's assistance in pursuing these dollars.</p>	<p>City Manager Mayor</p>	<p>Time</p>	<p>August, 30, 2012</p>	<p>On hold due to federal funding cut.</p>
(9)	<p>Identify and recruit community agencies, such as River City CDC and The Northeast Commission who can assist renters and landlords through the Federal Weatherization Program.</p>	<p>City Manager Mayor</p>	<p>Time/Training</p>	<p>August 15, 2012</p>	<p>On Hold due to lack of federal funding</p>
(10)	<p>Provide the City Council a report of dwellings weatherized and other significant accomplishments in the area of energy conservation three times per year: January, May, & September.</p>	<p>City Manager</p>	<p>Time</p>	<p>September 2, 2012</p>	<p>Ongoing</p>

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APPENDIX 1

Code Location	Section	Action Steps	Timeline	Responsibility	Update
City Code	42-85(1)	Modify to lower weeds/grass height from 18" to 12"	45 days	Police	Adopted 7-23-12
City Code	42-85(2)	Corner visibility for site triangle from 3 ft. to 2 ft.	45 days	Police	Council ordered aggressive enforcement for 6 mos. from 6-25-12
City Code	50-8	Prohibit recreational vehicles/equipment on streets	45 days	Police	Council chose not to pursue
City Code	74-10	Lower vegetation height within site triangle from 3 ft. to 2 ft.	45 days	Police	See 42-85(2)
City Code	74-11	Modify to prohibit grass clippings from being deposited in street due to their adverse impact on drainage	90 days	Public Works	Will be addressed with revisions to Stormwater II regulations
UDO	9.5	Modify section on accessory use to reflect provision that addresses shipping containers and portable storage containers	90 days	Planning	Adopted 11/26/12
City Code	46-114(11)	Modify to prohibit parking in the front yard unless it is on an improved surface (concrete, asphalt, gravel, etc.)	45 days	Code Enforcement	Being worked on by Planning Commission
City Code	46-114(12)	All recreational vehicles must be parked behind the front building set	45 days	Planning	Council chose not to pursue
City Code	42-85(10)	Modify the length of time a building may be boarded up from one year to 6 months	45 days	Inspections/Code Enforcement	Adopted 7-23-12

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City Code	42-90	Modify the City Code to allow staff to utilize “chronic offender” statute	45 days	Code Enforcement	Adopted 7-23-12
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Appendix 2

Residential Utility Service Application

In order to qualify for a **Landlord, Property Owner &/or Agent** residential “utility turn-on” within the City limits, the City will:

1. Develop two rating scales to communicate approximate cost and efficiency of each dwelling unit:
 - a. Using historical electrical usage data for the last three years, place every housing unit in the city on an “approximate cost scale” so that citizens can determine approximate electrical cost associated with each dwelling.
 - b. Develop a dwelling efficiency rating scale that will rate the efficiency of every housing unit in the city based on kWh/sq. ft.
2. An inspection request will automatically be generated by the Business Office anytime an applicant applies for an electrical turn-on request within the City limits, for any dwelling unit that has other residential utility accounts in the same name &/or the applicant is an owner or part owner of another residential property within the city limits, even when the account or property is listed under a different name.
3. The City’s existing utility service agreement application will be modified to include a question asking the applicant whether they own other residential dwelling units within the City limits. If they respond yes, they will be required to list the addresses of said property **OR** required to complete a property disclosure form. The utility account application already has a statement where giving false information will be grounds for refusal of service rendered or disconnection of services.

Exception 1. Inspections Department *may* waive the automatic inspection requirement as listed in **A** above, based on the property &/or the owners previous code compliance history, last inspection date, etc. However the ownership listing of other applicable properties would still apply.

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Exception 2. Except for the required inspection, utility accounts for temporary electrical service poles are exempt from the ownership disclosure & time frames listed in A above. Said poles are to be utilized for construction related purposes only & does not give anyone permission to occupy the dwelling unit for habitable purposes until approved by the Inspections Department.