Meeting Minutes
Saco Energy & Sustainability Committee
July 26, 2016

Present: Howard Carter, Alex Mouzas, Rick Millard, Leslie Rounds, James Ferguson, Jackie McDonough, Cheryl Fournier, Joe Hirsch, Pat Fox, Charlie Cotsis, Eric Cote, Bob Hamblin, Bill Mann, Kevin Sutherland Ron Michaud and John Kerry

Natural Gas Expansion Update
- Update given by Pat Fox
- Unitil crew currently working on downtown side streets as well as Elm Street
- Industrial Park Road is almost complete
- Majority of underground natural gas lines are live
- Unitil has started to connect residential and non-residential properties to natural gas, around thirty connections are scheduled currently
- Due to traffic delays, Unitil will not be working on Main Street anymore until after Labor Day

School Heating System Upgrade Status and Update
- Update given by Howard Carter
- Mike Garrity decided to postpone the middle school heating system project to upgrade the entire system instead of just the boiler
- School department will try to get funding from the state of Maine to pay for additional heating system upgrades
- School department will be using some of the bond money in the near future to get the heating system controls at the middle school up to date
- Cheryl Fournier said city has up to three years to use bond money

Police Department Heating System Update
- Update given by Howard Carter
- Bids have been received for the police department heating system
- Mechanical Systems Inc advised the police station that they should keep their existing boiler and connect to natural gas as well as replace the HVAC unit on the roof

Saco Middle School Parking Lot Lighting
- Update given by Pat Fox
- Materials have been ordered and are waiting for delivery
- LED conversion on track to be completed by the third week of August 2016

Building LED Conversion Update
- Update given by Pat Fox
- Since the middle school heating system upgrade is on hold, the city will move forward with the remaining LED conversions in late September or early October 2016
- City hall still needs LED conversion as well as parks and recreation
- Efficiency Maine LED rebates are now available
Fuel and Electricity Spreadsheet Update
- Jackie McDonough has been working with Dor Bender on a biweekly basis to keep the fuel database up to date
- The up to date fuel usage spreadsheet was sent via email to the committee
- Due to the consideration of connecting municipal buildings to natural gas, the city did not participate in a fuel bid process this year, therefore the fuel usage spreadsheet shows the prior year fuel usage in gallons and the current year fuel usage in gallons as well as a percent variance for each row listed
- Jackie McDonough and Dor Bender are still working to bring the electricity database to current
- Pat Fox said the city will participate in fuel bids next spring
- City is paying market rate for heating fuel this year
- Unlike heating fuel, vehicle fuel prices have been locked in

Train Station Heating System
- Update given by Pat Fox
- In the first week of July, the train station suffered a failure of its HVAC system, possibly due to open loop geothermal system which caused grit to pit the refrigerant lines and freeze up
- Tenant occupies 3,000 of the 6,000 square foot building, no windows open in the building
- Public works installed temporary portable floor units, tenants space was still around eighty five degrees
- Jim Godbout installed five mini split heat pump units, not mounted on the building, installed in a landscaped area
- Cost for all five mini split heat pump units and installation between $40,000-$50,000
- Payback of less than two years on the mini split heat pump units and an expected savings of $72,000 over the next five years
- Open loop geothermal system was costing between $22,000-$32,000 per year for heating and cooling
- Mini split heat pump units will have energy costs under $10,000 a year
- Maintenance costs to drop to less than $10,000, not really any recurring maintenance fees for mini split heat pump units
- Will receive from Efficiency Maine between $3,000-$5,000 rebate for mini split heat pump units
- According to tenant now most comfortable the leased space has ever been since the installation of the mini split heat pump units

Scarborough Town Hall Tour
- Kevin Sutherland will set up Scarborough town hall tour, thinks committee should see tri-gen facility

New Business

Dyer Library Heating System
- Update given by Leslie Rounds, Executive Director of the Dyer Library
- Started Energy Conservation Challenge two and a half years ago with the intention of raising money for a geothermal heating and cooling system
- Received $100,000 grant from the Next Gen Foundation and raised an additional $150,000
- Dyer library has a lot of duct work
- Installed mini split heat pump units in areas without duct work
Currently gathering information about geothermal systems from two companies, one company uses WaterFurnace (5.0 COP) and the other uses ClimateMaster (4.7 COP)

Haley’s Metal Shop quoted the Dyer library $235,000 for the parts and installation of a geothermal system in two 10,000 square foot buildings

Howard Carter recommends having a system engineer do an energy audit of the Dyer library

Bill Mann thinks an HVAC consultant should come look at the Dyer library

Pat Fox said we should find a consultant that is not bias to a certain heating system

Joe Hirsch said the Dyer library has a flat roof, could have a roof top unit installed and use existing duct work

Pat Fox said to have Andrew Goldberg get in contact with Leslie Rounds and let her know who he uses for an energy consultant

Wind Turbine

Eric Cote spoke to a representative at Larkin Enterprises regarding the city’s wind turbine and was informed that the present turbine is outdated

Council Ward 7 sent an email to the committee with links regarding retrofitting older wind turbines with new technologies to make them more efficient

Pat Fox said making the tower of the wind turbine taller might improve the wind turbines performance but may have to redo foundation

Electric Car Charging Stations

Update given by Alex Mouzas

There is a federal plan going nationwide for electric car chargers

Alex Mouzas is involved in a Japanese electric car project, he helped design the trunk (5’x5’)

Extremely light car, wing in front and back for down force, weighs 800-900 lbs, can go up to 200mph and an estimate of 1,500 miles on a fully charged battery

Vehicle is not painted, it is wrapped and costs around $500 to change wrap

Sustainability Plan

John Kerry would like to see a sustainability plan for the city

Kevin Sutherland said to see if we can include the sustainability plan in with the comp plan

Action Items

Kevin Sutherland to set up Scarborough town hall tour

Andrew Goldberg to get in contact with Leslie Rounds and let her know who he uses for an energy consultant

Bill Mann to look into integrating the sustainability plan in with the comp plan

Next meeting August 30, 2016