

Town of Harvard Energy Advisory Committee

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KEITH CHEVERALLS, CAPITAL PLANNING

Meeting Minutes 6/8/11

Attendees: B. Smith, B. Blackwell, Matt Coke (Guest), Phil Robinson(Guest)

Action / Topic	Meeting Discussion/Status
1. Approve the previous meeting minutes.	The minutes of the 5/25/11 meeting were approved.
2. Solarize Program	The CEC Solar 101 workshop was held on 5/31 and was well attended. The solar integrator is expected to be selected this week. The Solar 102 workshop defining the financial elements of the program will be held in mid June.
3. Energy Retrofit Projects	1. See Attachment (1) for a list of projects, status and next steps.
4. Other Items	a. Still River Fire Station Lighting Upgrade – Bill contacted Prism Energy Services to perform an evaluation of this building and the smaller building not audited during the last group of lighting upgrades. Prism will evaluate and schedule a site visit. b. There was a discussion about how to integrate an energy curriculum in Bromfield and use the Solar PV as a way to get it started.

ENERGY COMMITTEE PROJECTS

Building	Project	Status Category	Status	Next Steps	HEAC Contact	Planned Complete
Funded and In Progress or Planned						
FY11						
Bromfield High School	Solar Panels - 5 kW system	In Process	Equipment procured. 6/8 - Inspector signoff expected 6/13. 5/11 - Final Drawings done. Drawing submitted to inspector for permit 5/16. 5/25 - School Committee approval not required for mounting change.	1. Obtain approval of Building inspector. 2. Install structural roof supports. 3. Connect to electric grid. 4. Set up DAS and educational plan/curriculum. 5. Arrange PR.	Bill B	Jun-11
Bromfield High School	Mechanical Upgrades - DCV, BAS Upgrade, Retrocommissioning, RTU Fan VSDs	In Process	1. Equipment Installed. 2. 5/25 B2Q waiting for controls contractor to provide list of items that require repair.	1. B2Q to provide list of repairs to equipment discovered during the retrocommissioning. 2. Need final Ngrid signoff. 3. Electrical issues regarding electrical protection to be <u>evaluated</u> .	Brian S	May-11
Bromfield High School	Mechanical Upgrades - Options - Boiler HW VSDs, Pneumatic Controls Conversion	In Process	Equipment Installed	1. Need final Ngrid signoff.	Brian S	May-11
Hildreth Elementary	Boiler HW VSDs and Digital Controls	In Process	Equipment Installed	1. Need final Ngrid signoff.	Brian S	May-11
Town Hall	Energy Monitoring	In Process	4/27 - 5/25 - Dave Woodsum reviewed the monitoring equipment and electric panel. 5/25 - Completed circuits in Town Hall make this project more difficult than expected. 6/8 - David considers Hildreth House as best building to monitor circuits. Bromfield House would be a backup.	1. Select building and set up circuit monitors.	David F	May-11
FY12						
Hildreth Elementary School	Mechanical Upgrades - DCV, New BAS, Retrocommissioning	Funded Planned	1. Scope defined and updated in Jan 2011 by B2Q. 2. B2Q to contact Ngrid superiors to expedite incentive approval.	1. Need official confirmation of Ngrid incentives.	Brian S	Q4 2011
Police Station	HVAC / EMS Upgrade	Partially Funded; Planning	1. Determining the controls and boiler replacement changes with the largest impact and lowest cost. Investigation has included a site visit, Fitchburg Heating history review, Chief interview, B2Q site visit, EED audit. 2. Ngrid agreed verbally to a WBA evaluation.	1. Ngrid to arrange B2Q to perform engineering audit. 2. Compile results of investigation. 3. Recommend mod to GC grant proposal based on B2Q proposal.	Brian S	Q4 2012
Fire Station	Replace Boiler	Funded Planning	Boiler quoted for budget estimate in Dec 2010 by Fitchburg Heating.	1. Review with new Fire Chief. 2. Prepare short bid request and obtain 3 updated bids (one from Fitchburg Heating).	Forrest H	Q4 2011
Town Hall	Energy Study of Building Envelope	Funded Planning	Study to be integrated with design effort.	1. Contact Ngrid to see if work needs to be implemented first.	Eric B	Q4 2011
Bromfield High School	Gas Installation	Funded Planning		1. Ensure special natural gas rate provided by Ngrid. 2. Review project status with Mark Force - funded in FY12.	Forrest H	Q3 2011
FY13 and Future						
Active						
Transfer Station PV Site	Solar PV Array 250 kW min PPA		4/14 reviewed Scituate experience with Scituate DPW Director Al Bangert. Discussed landfill history with Tim Bragan. Landfill covered in early 80's prior to EPA regulations.	1. Determine if Solar PV can be installed on uncapped landfill without capping. 2. Layout planning process.	Brian S	Q3 2012

ENERGY COMMITTEE PROJECTS

6/8/11

Not Active						
Town Hall & Fire Station	Insulation					Q4 2011
Town Hall	HVAC System Replacement/ Insulation		Assume 20% savings on baseline energy for heat			Q3 2013
Town Hall & Fire Station	Heating Controls - TH Heat Zones; FS Door Timer & Thermostats					Q3 2011
Public Library	Recommission EMS					Q1 2013
Public Library	Volunteer Hall Fan VSD, heating system outdoor reset control					
Hildreth Elementary School	Secondary Boiler(not burner)		Pursuit of MSBA and GC funds cancelled Mar 2011		Eric B	FY12
Hildreth Elementary School	K Wing Windows		Pursuit of MSBA and GC funds cancelled Mar 2011		Eric B	FY14
Bromfield High School	Secondary Boiler					
Fire Station	Remaining Projects from EED Audit					
Bromfield High School	Solar PV Array Roof PPA					
Bromfield High School	Solar Thermal for Kitchen					
Hildreth House	HVAC System Replacement/ Insulation					Q3 2013
Hildreth House	Energy Audit					
Old Library	HVAC System Replacement/ Insulation					Q3 2013
Town Highway Building	Remaining Projects from EED Audit					FY13
Bromfield House	Energy Audit					
Pond Pump	3 Phase Power?					
Town Buildings	Energy Monitoring System		Integrate with Schools BAS interface			