

Town of Harvard Energy Advisory Committee

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PAT WENGER, SCHOOL COMMITTEE
KEITH CHEVERALLS, CAPITAL PLANNING

Meeting Minutes 7/13/11 Draft

Attendees: B. Smith, E. Broadbent, Matt Coke (Guest), Jim Elkind(Guest), Pat Wenger

Action / Topic	Meeting Discussion/Status
1. Approve the previous meeting minutes.	The minutes of 6/22/11 were reviewed but not approved due to no quorum present.
2. Solarize Program	There is a significant effort to communicate the program to residents. New England Breeze has a list of site visits to perform. An effort is in progress with Tim Bragan and the Harvard Inspection department to support an expedited permitting process for solar installations.
3. Energy Retrofit Projects	a. See Attachment (1) for a list of projects, status and next steps. b. Green Community reporting – Eric is coordinating quarterly reports from Town departments.
4. Other Items	a. School Energy Usage – Pat reported from Lorraine Leonard that school electric usage has increased this year and requested that we investigate. b. Annual appointments for Jim E and Matt C are scheduled for BOS on July 19. c. HEAC will assign a member to assist Mark Force with making progress on the Bromfield gas conversion.

ENERGY COMMITTEE PROJECTS

7/13/11

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. 5/11 - Final Drawings done. Drawing submitted to inspector for permit 5/16. 5/25 - School Committee approval not required for mounting change. 6/8 - Inspector signoff expected 6/13.	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 (\$100k) Planned	1. Scope defined and updated in Jan 2011 by B2Q. July - Electric Incentives approved by Ngrid.	1. Need official confirmation of Ngrid Gas incentives via RISE Engineering.	Brian S	Q4 2011
Police Station	HVAC / EMS Upgrade	Partially Funded (\$22k); 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 (\$15k) Planning	1. Boiler quoted for budget estimate in Dec 2010 by Fitchburg Heating. 2. 6/22 Met with Fire Chief; distribution not controlled well.	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 (\$12.5k) Planning	Study to be integrated with design effort.	1. Contact Ngrid to see if work needs to be implemented first. 2. Contact Municipal Building Committee to justify investment for operational energy savings.	Eric B	Q4 2011
Bromfield High School	Gas Installation	Funded (\$30k) Planning		1. Review project with Ngrid - rates, connection, meter. 2. Review project status with Mark Force - funded in FY12.	Forrest H	Q3 2011

FY13 and Future

Active						
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ENERGY COMMITTEE PROJECTS

Transfer Station PV Site	Solar PV Array 250 kW min PPA		#####	1. Determine if Solar PV can be installed on uncapped landfill without capping. 2. Layout planning process. 3. Determine DEP permits required.	Brian S	Q3 2012
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			