

Town of Harvard Energy Advisory Committee

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 KEITH CHEVERALLS, CAPITAL PLANNING

Meeting Minutes 9/28/11

Attendees: B. Smith, E. Broadbent, B. Blackwell, J. Elkind, F. Hodgkins, D. Fay

Action / Topic	Meeting Discussion/Status
Meeting minutes.	September 14, 2011 minutes were approved.
Energy Retrofit Projects	<ul style="list-style-type: none"> a. See Attachment (1) for a list of projects, status and next steps. b. Fire Station boiler – The bids were reviewed and a vote taken on which bid to recommend to the Town to accept. The Croteau bid was voted – 5 for and 1 abstained (D. Fay). Action: Forrest to obtain boiler sizing basis from Croteau to confirm size is acceptable.
Other Items	<ul style="list-style-type: none"> a. Capital Plan – The HEAC five year plan and FY13 capital requests are due to CPIC Oct 4. b. Web Site – A separate HEAC web site is to be created by Bill B and we will all contribute files to upload. c. Energy Manager/Town Facilities position – The Energy Manager responsibilities list was updated by Jim and Brian and provided to the Town Facilities Resource committee meeting on 9/22/11. An effort to support this new position is to audit all buildings and determine repairs needed. In addition, an energy audit will be performed as defined by HEAC. Action: HEAC (Jim E and David F) to research what type of energy audit is available and cost to perform for the town buildings. Brian to tabulate what audit work has been performed on each building. d. HEAC is requested to present an annual energy usage and report to the School Committee in October. e. HEAC (Jim E and Eric B) will share experiences with Solarize and Green Communities at the MRPC 9/29 presentation. f. All Boards Meeting 9/21/11 – Brian attended this meeting and reported on the strategic plan items related to energy identified on the other committee five year plans.

ENERGY COMMITTEE PROJECTS

9/28/11

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. 8/10 - Permit signoff complete.	2. Starting 8/17 - Titan Roofing perform roof work and Ostrow install structural roof supports and panels by 8/30. 3. Connect to electric grid. 4. Set up DAS and educational plan/curriculum. 5. Arrange PR.	Bill B	Dec-11
Bromfield High School	Mechanical Upgrades - DCV, BAS Upgrade, Retrocommissioning, RTU Fan VSDs	Complete	1. Equipment Installed and operational Dec 15, 2010. Retrocommissioning not complete due to controller issues. 2. 5/25 B2Q waiting for controls contractor to provide list of items that require repair. Estimated \$42k for dampers, actuators, controller, valves.	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 evaluated. 4. B2Q to provide As-Built diagrams and explanation of proprietary code that was required to connect to existing equipment. 5. B2Q to provide Mark F a list of contractors in addition to BCM that can support the BAS system.	Brian S	Oct-11
Bromfield High School	Mechanical Upgrades - Options - Boiler HW VSDs, Pneumatic Controls Conversion	Complete	Equipment Installed and operational Dec 15, 2010 and then in Feb 2011 there was an equipment issue regarding 3 phase power. First Electric ended up repairing the TECO VSDs under warranty and the units were operating in March 2011.	1. Need final Ngrid signoff.	Brian S	May-11
Hildreth Elementary	Boiler HW VSDs and Digital Controls	In Process	Equipment Installed Dec 2010.	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	Oct-11
FY12						
Hildreth Elementary School	Mechanical Upgrades - DCV, New BAS, Retrocommissioning	Funded (\$100k) Planned	1. Scope defined and updated in Jan 2011 by B2Q. 7/5/11 - Electric Incentives approved by Ngrid \$5850.	1. Need official confirmation of Ngrid Gas incentives via RISE Engineering. 2. Evaluate reduced scope pending incentives received.	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. Schedule walk through for B2Q to perform engineering audit. 2. Compile results of investigation by 9/3. 3. Recommend mod to GC grant proposal based on B2Q proposal.	Brian S	Q4 2012
Fire Station	Replace Boiler	Funded (\$15k) Planning	Boiler quoted for budget estimate in Dec 2010 by Fitchburg Heating. 9/14 - clarifications requested from Leominster & Croteau 6/22 Met with Fire Chief; distribution not controlled well. 8/24 - Bids discussed Leominster Plumbing & Heating, O.G. Croteau, Fitchburg Heating; Spadafore declined 9/28 - voted to recommend Croteau bid.	1. Review with new Fire Chief. 2. Review bids received. Compare offerings.	Forrest H	Q4 2011
Town Hall	Energy Study of Building Envelope	Funded (\$12.5k) Planning	Study to be integrated with design effort. 8/10 - Eric provided Building Committee with justification for Energy Modeling. 8/24 - MBC to pick OPM and will need help in Oct. for bid spec.	1. Contact Ngrid to see if work needs to be implemented first.	Eric B	Q4 2011

ENERGY COMMITTEE PROJECTS

9/28/11

Bromfield High School	Gas Installation	Funded (\$30k) Planning	8/10/11 - No response from National Grid. \$8500 additional incentive expected. 9/14 - Mark Force has quote for interior design work @ Bromfield.	1. Review project with Ngrid - rates, connection, meter. 2. Review project status with Mark Force - funded in FY12.	Forrest H	Q3 2011
Town Buildings	Lighting upgrades in small buildings	Not Funded	8/24 - requested Prism to review Cemetery, Beach, Old Ambulance, Still River Fire and Hildreth House.	1. Arrange for Prism Consulting to review/audit buildings.	Bill B	Q4 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 - no formal cap.	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
			7/13 - Federal Tax Credit incentives expire if construction does not begin at end of 2011. A MassDEP Landfill Post Closure Permit is required. The first step is to set up a Pre-Application meeting with DEP			
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		10/11/11 Mark Force stated that this boiler will be used until it fails and it will not be replaced.			
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/Blower Door					
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			