

WEST WINDSOR PLANNING COMMISSION

Draft Minutes
December 2, 2009

Present: Barbara Truex, Glenn Seward, Mark Isenberg, Hal Pyke, Martha Harrison, Steve Cottrell, Douglas Dulac, Mark Nowlan, Kerry Banks, Dennis Duling, Dave Dugdale, Pat Dugdale, Barbara Gerstner, David Jaacks, Peter Ferick, Sue Greenall, Win Johnson, Cathy Boedtke, Sue Greenough, Tom Kennedy, Ted Emerson, Bob Walker

1. Call to Order – Chair Hal Pyke called the meeting to order at 6:30 PM, welcomed those present to the Planning Commission’s Energy Forum, and introduced speakers Ted Emerson and Bob Walker and Moderator Tom Kennedy. Tom Kennedy talked briefly about the Energy chapter of the Town Plan. Bob Walker from the Sustainable Energy Resource Group (SERG) said he has worked with many towns on the energy section of their town plans. Bob provided a handout, Vermont Town Energy Planning, listing available resources. Bob said there are 90 towns in Vermont that have Energy Committees and the first step is to do an assessment to get an idea about energy usage. Bob said SERG is working with Clean Air-Cool Planet to assess municipal buildings in six New Hampshire towns in the Upper Valley and would like to do the same in Vermont. Bob said the Energy chapter will enable the town to do conservation, efficiency, and renewable energy programs, but increasing efficiency is the most cost-effective program both at the residential level and the community level. Bob suggested auditing town buildings, starting with the least efficient building. Bob said SEVCA offers free audits and weatherization for low-income residents and the Energy Committee could publicize that program. Bob noted that there is a waiting program for SEVCA. Bob mentioned some funding sources for towns interested in efficiency upgrades and talked about clean energy assessment districts. Bob said after a town has done its efficiency work, it should consider replacing energy sources with renewables. Bob noted some organizations that can help with alternative energy resources. Bob talked about the 2009 Energy conference, which is taking place this Saturday. Steve Cottrell said he was interested in refurbishing the streetlights in downtown Windsor to reduce the town’s energy bill from CVPS but he discovered that the town is charged per light rather than for the amount of energy used so it doesn’t save the town money to pursue more efficient streetlights. Bob said SERG was able to get CVPS to allow town ownership of streetlights but the rates they set were unreasonable. Bob said Green Mountain Power allows LED streetlights which is much more efficient. Bob recommended assessing streetlights and eliminating the ones that are not needed. Bob said Thetford has eliminated $\frac{1}{4}$ to $\frac{1}{3}$ of their streetlights. Ted said assessing energy improvements on houses acts as a disincentive for people to invest in efficiency upgrades. Bob said he’s not sure exactly how clean energy assessment districts work and encouraged folks to look at the PACE website: <http://www.veic.org/PACE>. David Jaacks asked if a certain percentage of the town has to be involved before a bond can be written as part of the clean energy assessment district program. Bob said he doesn’t think there is a threshold but this program was just passed so no one is doing it yet. Bob said it’s a fairly cumbersome program so it may be beyond the capacity of a small town but towns can combine into larger districts, possibly through the regional planning commission, and apply for bonding. Ted said there is an extra ticket available for the Energy conference if

anyone's interested. Ted talked about solar domestic hot water systems. According to Ted, three hours of sunshine provide the amount of energy the U.S. uses in one year so harnessing it has merit. Ted said there are thermal collectors and photovoltaic (PV) collectors. Ted said a clear view to the south year round is critical for solar systems. Solar systems can provide 70% of the hot water that an average home uses. After tax credits, a solar system costs between \$5,000 and \$6,000 and has a payback of 7 to 9 years. According to Ted, most components are made in this country. Ted said typically domestic hot water accounts for $\frac{1}{2}$ to $\frac{2}{3}$ of an electric bill. Steve Cottrell asked how effective it is to heat greenhouses with solar thermal as compared to an outside pellet furnace. Ted said he is not a big proponent of solar systems for space heating because of the lack of sunshine in the winter. Ted said pool heating is a better application. Bob said old outdoor wood furnaces are horribly inefficient. Ted said unless it has a gasifying boiler, an outdoor furnace makes an excessive amount of smog. Hal provided some information on tax credits for efficiency upgrades from the energy star website. Bob said the tax credits are for materials only, not labor. Hal said there is a house in West Windsor that uses a geothermal heat pump. Hal said geothermal, small wind, and solar energy systems qualify for the tax credit. Mark Isenberg asked about the payback on a PV system. Ted and Bob agreed that the payback period is probably 20 to 25 years but Win pointed out that switching to a PV system also helps stop mountain top removal in West Virginia. Ted said most people who install these systems are people who want to reduce their carbon footprint. Ted said PV systems are considerably more expensive than thermal systems and the efficiency is not there yet however, even a 25 year payback on investment is better than what banks are offering right now. Ted said for the state energy credit, installers have to guarantee their systems for five years and his company, SouthFace, guarantees their systems for seven years. Steve Cottrell asked Bob Walker if there is someone he can talk to about a small-scale hydro project. Bob said yes. Win said there was an article in *Orion* recently about refurbishing small-scale hydro plants. David Jaacks said he recently attended the Build Green trade show in Boston where he saw small wind turbines with 3' blades that are designed to be installed by the dozen on rooftops. Ted said turbines with smaller blades have more RPMs and are, therefore, noisier than turbines with larger blades. David asked about zoning regulations for windmills. Peter Ferick said he would not be opposed to a windmill on Mt. Ascutney. Ted said Norwich is thinking about installing a community PV array, which would be the largest solar PV array in the state. Bob said he doesn't think any towns in Vermont have done a community wind project yet, but SERG thinks it would be great. Peter asked if there is someone who could come to our community and evaluate it for a wind project. Bob said there is a non-profit that consults with communities on such projects. Tom Kennedy said the top of Ascutney was found to be suitable for wind. Tom said the PC needs to find out whether residents want to see residential or commercial wind generation in town. Bob said larger turbines are more efficient and cost-effective. Ted said the big turbines are really quiet. It was mentioned that birds sometimes get killed by wind turbines. Bob agreed that studies have to be done. Tom asked those present if they'd like to see a commercial wind application in town. Peter said he is not talking about a commercial application; he is talking about a town application. Someone pointed out that the top of the mountain is owned by three different towns. Peter said he is not sure that it would have to be on the top of the mountain. Ted asked how the hang gliders would feel about it. Peter said he understands that there is a lot of new technology in this field and he

showed a newspaper photo of an innovative turbine designed by a company in Wilbraham, MA. Hal said nuclear energy is the least expensive and most environmentally sensitive type of energy and he doesn't think alternative forms of energy will be ready to take the place of Vermont Yankee if it is shut down in five years. Ted said he likes the fact that nuclear energy has no carbon footprint. Several people disagreed with that statement. Win argued that you have to take into consideration the cost of mining and decommissioning. Bob said nuclear energy may be cheap now but if the plant is relicensed, it's going to go up. Bob said SERG hosted a forum on Vermont Yankee last week which will be available on their website. Bob said he doesn't think a town energy committee should get embroiled in the nuclear debate. David said there was a wood chip burning plant proposed for Springfield and he wonders if that use would be considered too heavy for West Windsor. Someone asked if the plant would have a gasification boiler. David said yes. Tom said the plant proposed for Springfield would provide enough power for 25,000 homes. Tom said Win Stanley Corporation is still trying to work things out with CVPS. Tom said there isn't a good understanding of where the materials are going to come from, and the logging industry wants a guaranteed price. Tom said he thinks it's a good idea but the details need to be worked out. Bob said people are still trying to figure out how much wood can be sustainably harvested. Hal said the proposal to turn West Windsor's talc plant into a pellet plant probably isn't going to happen. Bob said the VT sustainable jobs fund is working on maps that would give communities a better sense of the feasibility of renewable energy projects. Barbara asked how many homes are served by Ryegate. Tom said he can find out. Steve asked if all the potential hydro projects on the Connecticut River have been exhausted. Bob said yes; the state had the opportunity to buy them a number of years ago but the governor did not pursue it. Tom thanked everyone for coming.

2. Nominate Acting Zoning Administrator – **Barbara made a motion to nominate Shannon Harrington as Acting Zoning Administrator. Glenn seconded the motion, which passed unanimously.**
3. Approve Minutes – November 4, 2009: **Barbara made a motion to approve the minutes of November 4, 2009, as written. Glenn seconded the motion, which passed unanimously.**
4. Adjourn – **The Planning Commission adjourned by consensus at 7:50 PM.**

Respectfully submitted,

Martha Harrison