# Section C Energy Committee Recommendations To The Planning Board

Date: January 14, 2016 Meeting

Members: Larry Pritchett, Bill Pearce, Tony Coyne, Brooks Winner

Nathan Davis (Mayor Has Nominated/Pending Council Confirmation)

Agenda: Larry Pritchett

Committee Chair

Minutes: Bill Pearce

{None: When Minutes Completed In Italicized Text In Brackets Below}

# 1 Introduce Nate

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# 2 Review Moratorium On Power Generation Facilities Over 10 MW

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# 3 Confirm Energy Meeting Dates Related To Moratorium Schedule

Scheduled To Provide "Issues Summary" For Planning Board

1/14 Thursday 4:30 PM (Council Chambers)

1/21 Thursday 4:30 PM (Council Chambers)

1/25 Monday 4:30 PM (Library Community Room)

Note: Energy Should Vote On Summary For Planning Board On 1/25

Schedule Additional Tentative Meetings On Technical Advisor(s) Question Note: EC Needs To Vote On List Of Options By 2/10

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# 4 Review Presenters' Slides From August 19th Forum

SMRT/Everett

CLF/Cunningham

OPA/Schneider

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# 5 Review Of Questions From Two City Forums

Note: See Separate PDF's from May & August Forums For Community Questions

Note: Request Similar Info From Renew Rockland's Forum

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# 6 Initial Discussion Of Issues For Planning Board Consideration

What is the most appropriate "forum" to address a particular question?

What might be MePUC questions?

What might be MeDEP questions?

What might be local TIF (if requested) questions, but not Planning Board Questions?

What are clearly local regulatory questions?

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# 7 Initial Discussion Of Possible Technical/Legal Advisors (If Time Permits)

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# 8 Committee Member Tasks Prior To January 21 Meeting

Start Initial Draft Of Issues For PB Outline?

Contact CLE?

Contact SMRT?

Contact Woodard & Curran?

Contact Panelist From Renew Rockland Forum?

Any Others At This Stage?

Do an RFI For Technical Assistance?

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#### **Bill Pearce**

From: Bill Pearce [mailto:billpearce@roadrunner.com]

Sent: Saturday, January 23, 2016 14:52

To: Kevin Beal

Subject: Approved minutes of Rockland Energy Advisory Committee

Dear Kevin:

Here are the approved minutes for the web site.

# **Rockland Energy Advisory Committee**

# Rockland City Council Chambers on January 14, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, Tony Coyne, and Bill Pearce. Guests: Nathan Davis

The minutes of November 19, 2015, were approved by the Committee.

The Committee introduced itself to Nathan Davis, who has been nominated to the Energy Committee, pending Council approval.

A discussion of the new charge to the Energy Advisory Committee by city council on January 11, 2016, to review the moratorium on power generation facilities over 10 MW.

Tentative meetings for 4:30 PM on 2/3/16 and 4:30 PM on 2/10/16 in City Council Chambers were determined, if needed.

Larry will meet with City staff in the 7-10 days. No additional information is needed from the Committee at this time concerning replacing the decorative street lights in downtown Rockland.

Next Energy Advisory Committee meetings are January 21 in Council Chambers and 25 in Library Community Room, 2016, at 4:30 PM.

#### **Nathan Davis**

From: Nathan Davis [mailto:n.kroms.davis@gmail.com]

Sent: Friday, January 15, 2016 10:12

To: Brooks Winner

Cc: Larry Pritchett; 'Pearce, Bill'; 'Peggy Coyne'; 'deborah donnelly'

**Subject:** Re: Energy Meeting > Today > Thursday > 4:30 PM > Council Chambers

Also, here is contact information for Jim Tolan, the engineer who participated in the Renew Rockland forum:

#### jimtolanusa@gmail.com

207-751-8545

Looking through our planning e-mails for the forum, the only other person who jumps out as maybe being useful for the Planning Board is this person:

http://umaine.edu/soe/faculty-and-staff/thaler/

Nate

# **Ron Huber**

From: Ron Huber <coastwatch@gmail.com>

**Sent:** Friday, January 15, 2016 13:48

To: Larry Pritchett; billjillson.council@gmail.com

**Subject:** Rockland energy committee 1/14/16 meeting. Was the energy ordinance

discussed?

Hi Larry, Bill.

Did the energy committee meet last night? Jan 14th.

Was there discussion of the Energy ordinance - about who and how to reach out to potential experts etc?

Thanks!

Ron

Ron Huber

Friends of Penobscot Bay: a Waterkeeper Alliance Affilliate

POB 1871

Rockland Maine 04841

FB: facebook.com/penobscotbay

Web: www.penbay.net & www.penbay.org

e: coastwatch@gmail.com

tel: 207-691-7485 \* cell 207-593-2744

# **Larry Pritchett**

From: Larry Pritchett <a href="mailto:larrypritchett.council@gmail.com">larrypritchett.council@gmail.com</a>

**Sent:** Sunday, January 17, 2016 09:11 **To:** 'Debby Atwell'; 'Nathan Davis'

Cc: 'Amy Files'; 'Ron Huber'; 'Joe Steinberger'; 'El Sargazero';

Valli.citycouncil@gmail.com; 'Bill Jillson'; 'Kendall A Merriam'; 'Vivian Newman';

'Adele Grossman Faber'; 'Sandra Schramm'

**Subject:** RE: moratorium party postponement

**Attachments:** 2016\_01.14\_Energy\_Committee\_Meeting\_Agenda\_Materials\_2.pdf

#### Morning Debby (All),

Attached is a PDF that includes the agenda from last Thursday's Energy Committee as well as the language of the moratorium as passed. Please note that Agenda Item #3 contains the dates and locations for the next two Energy Meetings. Additional dates in early February will be confirmed next week.

In terms of discussion, the committee primarily worked through Agenda Items #1 through #4. The Committee started discussion of #5 (topics/questions raised at the three forums), but did not get very far into that discussion before time ran out.

All Energy Committee members are reviewing the questions raised at the three forums before next Thursday. The Committee will begin working on the questions for the Planning Board at its 1/21 meeting.

The only item the Committee took out of order was agreement that all of the technical resources listed on the agenda (plus Jim Tolan form the Renew Rockland forum), were parties worth contacting to determine availability (and any potential conflicts). Other names will likely be added to the list over the new three weeks.

Larry

From: Debby Atwell [mailto:parthedy@gmail.com]

Sent: Friday, January 15, 2016 08:37

To: Nathan Davis; Amy Files; Ron Huber; Joe Steinberger; El Sargazero; Valli Geiger; tired plowguy; Kendall A

Merriam; Vivian Newman; Adele Grossman Faber; Larry Pritchett; Sandra Schramm

Subject: moratorium party postponement

Dear Friends, I wanted very much to hold the open house pizza party this Sunday afternoon to celebrate the moratorium! However, having a party when Amy and Zander can't be there seems worth postponement. They will not be back til late Sunday night.

I mourn the struggle of this invite and only hope we can successfully regroup somewhere soon to mark our joy and relief. What a storm. No surprise even a tiny party will take some effort!

with great affection, Debby

# **Larry Pritchett**

From: Larry Pritchett <a href="mailto:larrypritchett.council@gmail.com">larrypritchett.council@gmail.com</a>

**Sent:** Tuesday, January 19, 2016 12:37

**To:** Eric Laustsen

Cc: 'Jim Chaousis'; jroot@ci.rockland.me.us; 'P vanVuuren';

cjordan@mainevaluation.com; 'Abbie Knickelbein'

**Subject:** Review Standards > Power Generation Facilities Over 10 MW **Attachments:** 2016\_01.14\_Energy\_Committee\_Meeting\_Agenda\_Materials\_2.pdf

Hi Eric,

As I assume you are aware the Council enacted last week a moratorium on new applications to build power generation facilities large than 10 Megawatts. As Chair of the Energy Committee, I wanted to reach out to you as Chair of the Planning Board in regard to the steps stipulated in the moratorium for the two committees.

I have attached a PDF that contains both the moratorium as enacted (pages 3 and 4) as well as the steps the Energy Committee began to take at its meeting last Thursday (see pages 1 and 2 for Committee meeting agenda from 7/14, the Committee was working on Agenda Item 5 when the meeting adjourned).

Broadly speaking, Energy is to provide to PB information on areas for review identified to date as well and options for technical support. And, going forward, the Energy Committee is to be a resource for the Board as requested by the Planning Board Chair. I would be glad to meet with you, or attend a PB meeting, to discuss this process.

I also wanted to extend an invitation to have one or two Planning Board members attend the next few Energy Committee meetings (see dates in PDF) to help insure that the information coming from Energy to Planning Board provides a solid starting point for the Board. Let me know how you would like to proceed.

Best, Larry 594-8806 Date: January 21, 2016 Meeting

Members: Larry Pritchett, Bill Pearce, Tony Coyne, Brooks Winner

Nathan Davis (Mayor Has Nominated/Pending Council Confirmation)

Agenda: Larry Pritchett

Committee Chair

Minutes: Bill Pearce

{None: When Minutes Completed In Italicized Text In Brackets Below}

## 1 Approve Minutes From 1/14 Meeting

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# 2 Confirm Energy Meeting Dates Related To Moratorium Schedule

Scheduled To Provide "Issues Summary" For Planning Board 1/25 Monday 4:30 PM (Library Community Room)

Note: Energy Committee Should Vote On Summary For Planning Board On 1/25

Scheduled To Provide Options For "Technical Advisors" For Planning Board 2/3 Wednesday 5:30 PM (Council Chambers) 2/10 Wednesday 5:30 PM (Council Chambers)

Note: EC Needs To Vote On List Of Options By 2/10

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## 3 Additional Review Of Presenters' Slides From August 19th Forum (As Needed)

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#### 4 Review Of Questions From Two City Forums & Renew Rockland Forum

Note: See Separate PDF's from May & August Forums For Community Questions

# 5 Initial Discussion Of Issues For Planning Board Consideration

What is the most appropriate "forum" to address a particular question?

What might be MePUC questions?

What might be MeDEP questions?

What might be local TIF (if requested) questions, but likely not Planning Board Questions?

What are clearly local regulatory questions?

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# 6 Initial Discussion Of Possible Technical/Legal Advisors (As Time Permits)

CLF? SMRT? Woodard & Curran? Kleinschmidt? TRC? Jim Tolan? JBGH? Others?

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# 7 Possible Committee Recommendation To Council On OPA Solar Market Proposal

Should the Energy Committee recommend that City Council broadly support the goals of comprehensive solar reforms proposed by the Office of the Public Advocate?

If yes, the Committee would need to vote on this recommendation on 1/25

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# 8 Committee Member Tasks Prior To January 25 Meeting

Draft Of Issues For PB Outline?

Contact Possible Technical Advisors To Determine Availability

Draft Possible Resolve/Memo To Council On Solar (Agenda Items #7)?

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#### **Bill Pearce**

From: Bill Pearce <br/>
Sent: Bill Pearce <br/>
Wednesday, February 03, 2016 15:04

To: Kevin Beal

**Subject:** Approved minutes of Rockland Energy Advisory Committee of January 21,

2016

Dear Kevin:

Here are the approved minutes for the web site.

# **Rockland Energy Advisory Committee**

## Rockland City Council Chambers on January 21, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, Tony Coyne, and Bill Pearce. Guests: Dan Dunkle

The minutes of January 14, 2016, were amended and approved by the Committee.

The City discussed issues at 2015 public forums on a possible local gas fired power generation facility for Planning Board to consider when reviewing current site plan standards.

Points discussed included water utilization, air emissions, noise standards, cooling towers, truck routes to supply fuel, safety standards, as well as financial capacity of project developer.

Committee discussed the solar market proposals developed by the Office of the Public Advocate and may recommend Council broadly support the concept.

Next Energy Advisory Committee meeting is on January 25 in Library Community Room, 2016, at 4:30 PM. Confirmed meetings for 4:30 PM on 2/3/16 and 4:30 PM on 2/10/16 in City Council Chambers were determined, if needed.

# **Larry Pritchett**

From: Larry Pritchett <a href="mailto:larrypritchett.council@gmail.com">larrypritchett.council@gmail.com</a>

**Sent:** Monday, January 25, 2016 12:10

To: 'Pearce, Bill'; 'Tony Coyne'; 'Brooks Winner'; 'Nathan Davis'

Cc: 'Jim Chaousis'; 'Audra Bell'; 'Stephen Betts'; Dan Dunkle ; 'Lynda Clancy'; 'Andy

O'Brien'; 'Amber Abbotoni'

**Subject:** Energy Committee > Meeitng > Today > 4:30 PM > Library > Community

Room

**Attachments:** 2016\_01.25\_EC\_Over\_10MW\_Issues\_For\_PB\_DRAFT\_3.pdf

Hi All,

Reminder that Energy is meeting today at 4:30 PM. Please note that this meeting will be held in the Community Room at the Library. There are four agenda items for today's meeting.

Approve Minutes From Last Meeting:

Confirm February Meeting Dates and Times: 2/3 at 4:30 PM In Council Chambers 2/10 at 4::30 PM In Council Chambers Add one meeting last week of February (or first week of March)

Finalize Questions/Summary For The Planning Board:

Vote On Recommendation To Council On OPA Solar Procurement:

Attached please find a draft of the summary for the Planning Board that attempts to capture all of the points (ten) discussed at the meeting last Thursday. My suggestion would to finalize and vote on this today to meet the deadline. I will circulate a copy tomorrow to confirm that any edits/revisions were correctly added.

See You Soon, Larry 594-8806

#### **Bill Pearce**

From: Bill Pearce <br/>
<br/>
Bill Pearce <br/>
<br/>
billpearce@roadrunner.com>

**Sent:** Friday, February 05, 2016 21:21

To: Kevin Beal

**Subject:** Approved minutes of Rockland Energy Advisory Committee of January 25,

2016

Dear Kevin:

Here are the approved minutes for the web site.

# **Rockland Energy Advisory Committee**

# Rockland Community Room at Library on January 25, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, and Bill Pearce. Guests:Sandra Shramm, Ron Huber, and Warren Bodine.

The minutes of January 21, 2016, were amended and approved by the Committee.

The Committee reviewed the concepts of water utilization, disposal, and recycling, adding absolute maximum and drought conditions.

Question related to noise standards in the Site Plan Evaluation process were discussed and the Committee added a note to its recommendations that any noise modeling or similar analysis should be paid for by the applicant. Abutting high value wetlands was discussed as to whether bird life of the wetlands could be affected by noise considerations.

Local Air Emissions and meeting Emissions Reduction targets, Cooling Towers, and On site Storage of fuel sources were also discussed..

Motion to approve recommendations to the planning board, as amended, by Brooks and seconded by Larry.. Motion was passed unanimously.

Motion was made to recommend that council pass a resolve in support of the Office of Public Advocates proposed new solar procurement mechanism. Bill made the motion and seconded by Brooks. Motion

# was passed unanimously.

Next Energy Advisory Committee meetings are at 4:30 PM on 2/3/16 and 4:30 PM on 2/10/16 in City Council Chambers were determined, if needed.

# **Rockland Energy Advisory Committee**

# Rockland Community Room at Library on February 10, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, Nathan Davis, and Bill Pearce. Guests Ron Huber and David Leon.

The minutes of February 3, 2016, were amended and approved by the Committee.

Brooks made a motion to recommend the six firms to the Planning Board concerning the power plant moratorium. The motion was seconded by Nathan. The motion was passed unanimously.

Brooks made a motion to go ahead with the feasibility of a solar interconnection meeting with CMP at McDougall school, Gamage Lane, and the City's closed and capped Quarry 2 South landfill site. Larry seconded the motion. The motion passed unanimously.

Larry showed a cost calculation sheet that can be used for solar system evaluations.

Next Energy Advisory Committee meetings are at 4:30 PM on 2/24/16 in City Council Chambers. Meetings have been also scheduled for March 10 and 24, 2016, for the library.

# **Rockland Energy Advisory Committee**

## Rockland City Council Chambers on February 24, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, Nathan Davis, Tony Coyne, and Bill Pearce. Guests Ron Huber, David Leon, and Sandra Schram.

The minutes of February 10, 2016, were amended and approved by the Committee.

Nathan requested information about city-wide energy usage, and whether the Energy Committee and the Comprehensive Planning Board might collaborate. Energy sustainability goals for the city should be developed. This might be a topic for future discussion.

Larry and Brooks summarized the discussion the last qualification call with SMRT/Woodard & Curran

Brooks made a motion to recommend using SMRT/Woodard & Curran as the firms to assist the City with evaluation of the Power Plant ordinance proposals.. The motion was seconded by Tony. The motion was unanimously approved.

The Committee discussed the solar possibility at the McDougal School site.

Next Energy Advisory Committee meetings are at March 10 and 24, 2016, in the Mural Room at the Rockland Public Library.

Date: January 25, 2016 Meeting

Members: Larry Pritchett, Bill Pearce, Tony Coyne, Brooks Winner

Nathan Davis (Mayor Has Nominated/Pending Council Confirmation)

To: Eric Laustsen & Members Of Planning Board

Regarding: Ordinance Amendment #48

Development Of Standards For Grid Scale Power Generation Facilities

# 1. Summary/Overview

On January 11, 2016 the City Council enacted a moratorium on site plan applications for new power generation facilities over 10 megawatts in capacity. The moratorium as enacted does not apply to businesses constructing heating or power generation systems to meet on-site heating and/or power needs. The first step under the moratorium is for the City's Energy Committee to provide a summary of issues and questions that the Committee recommends be considered by the Planning Board based on the questions raised and information presented at the community forums facilitated by the Committee in 2015. This document constitutes that summary.

The Energy Committee held three meetings (1/14, 1/21 and 1/25) to review materials and develop this summary for the Planning Board. At the initial meet on January 14th, the Committee discussed at some length the types of power generation facilities that would likely be covered by this moratorium. While wind power projects are being built at sizes over 10 Megawatts, the City's long standing height ordinance precludes the construction of grid scale wind projects in the City. Likewise, solar is being developed at some locations on a scale over 10 megawatts. But a 10 MW solar farm would require 50 acres of land, which makes development on that scale in Rockland unlikely.

After some discussion the Committee concluded that in practice this moratorium would apply to a couple of related power generation technologies. First the moratorium would apply to facilities that use a liquid or gaseous fuel (biogas, natural gas, diesel, etc.) to power a turbine that drives a generator. Second, the moratorium would apply to facilities that burn some form of feedstock or fuel (biomass, natural gas, oil, biogas, etc.) to make steam that in turn drives a generator. Many modern power generation facilities utilize both processes (i.e., biogas or natural gas powers a turbine; the exhaust heat from the turbine is utilized to make steam that in turn powers a steam turbine).

The points detailed below are drafted around these types of technologies. The Committee also discussed that regulations should be crafted with careful thought not to inadvertently preclude renewable energy sources or preclude a business from installing power or heat generation equipment that would lower a business' emissions and energy consumption.

#### 2. Water Utilization, Recycling & Disposal

# A. <u>Background Information:</u>

Historically, many types of electrical power generation facilities utilized large volumes of water. Some of this water was used for equipment cooling. In many cases the largest water utilization was to make steam to drive generators. If this water was used on a "once through basis" (i.e., run through the power plant and then discharged to a water body or released into the air as low

pressure steam), daily water consumption by an electrical power plant could be on the scale of hundreds of thousands, if not millions, of gallons per day.

However technologies like "Combined Heat and Power" were developed to utilize the heat from the power generation process for manufacturing purposes or building heating and cooling. The U.S. Environmental Protection Agency supported research on these types of technologies in part because CHP type plants can, in a cost effective manner, dramatically reduce if not eliminate daily source water consumption and daily wastewater discharges from power generation facilities.

#### B. Key Question(s):

- 1. Should the City add standards requiring a minimum percentage (50%? 85% or ???) of source water utilized in a combined cycle power generation facility, a combined heat and power facility or in a steam powered electrical generation facility for cooling, steam generation, or hot water distribution be recycled?
- 2. If the City requires a minimum level of water recycling, should that minimum requirement be reduced, or eliminated, if processed wastewater is the source water for the facility?
- 3. For a power generation facility, should the City add standards that would set an absolute maximum peak or average water consumption or set standards for drought conditions?
- 4. Should the city regulate or prohibit (if it does not already) thermal discharges to the municipal stormwater system or new direct thermal discharges to the harbor?

## 3. Noise Standards & Site Plan Evaluation Mechanism

#### A. <u>Background Information:</u>

Electrical power generators may be driven by direct fuel powered turbines (i.e., natural gas, biogas, etc.) or by steam turbines (i.e., powered by heat recovered from the fuel driven turbines or from biomass or similar stream boilers). Both sides of this process (i.e., the turbine and the steam) may generate substantial noise that can have unique sound attributes.

## B. Key Question(s):

- 1. Does the City need to modify its noise standards, or add specific site review noise modeling provisions that would be paid for by the applicant, to insure adequate analysis of potential sounds/noise attributable to processes in these types of electrical power generation facilities?
- 2. Should the City add local ordinances provisions governing either noise easements or sound mitigation measures on nearby properties?

#### 4. Local Air Emissions And Meeting Emissions Reduction Targets

#### A. <u>Background Information:</u>

Burning virtually any fuel (natural gas, oil, biogas, diesel, solid waste, biomass, wood pellets, coal, etc.) generates some level of the air pollutants nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter (PM10) and carbon dioxide (CO2). NOx, SOx and PM10 all can contribute to respiratory problems like asthma. In Maine, especially along the coast, these pollutants are the primary source of acid rain which degrades lake water quality and weakens softwood trees.

Carbon dioxide (CO<sub>2</sub>) emissions from burning fossil fuels are generally accepted as a major contributor to climate change. The best available data indicates CO<sub>2</sub> emissions and global warming present significant challenges to the Gulf of Maine due to related warming of the Gulf's historically cold waters and due to CO<sub>2</sub> emission making the Gulf more acidic. The northeast states have a goal of reducing CO<sub>2</sub> emissions by 80% from historic peaks by 2050.

High efficiency systems combined with emissions controls can limit emissions of SOx, NOx, and PM10 to low levels Utilizing technology like "Combined Heat and Power" allows electrical power to be generated and the heat from the power generation process utilized for other purposes. Thus electricity could be produced locally with no increase in emissions (or a reduction in emissions) if the recovered heat from new power generation displaces heat being generated by existing boilers.

#### B. Key Question(s):

1. For power generation facilities developed to sell power, as opposed to facilities developed to directly supply a local business' energy needs,, should the City make site plan approval contingent on MeDEP approval of any required air emissions license for the proposed facility combined with an additional submittal by the applicant showing that the MeDEP approved emissions limits will lower air pollutants released locally (by a specific target percentage??) because of other existing local air emissions sources replaced by the facility or by efficiency measures implemented as a part of the project?

#### 5. Standards Specific To Open Cooling Towers

## A. <u>Background Information:</u>

In some cooling tower designs, the water being cooled cascades down an open tower directly exposed to the air as opposed to flowing through coiling coils. Steam/mist will be visibly under some (many) atmospheric conditions around open cooling towers. Utilized on a large scale, an open cooling tower may produce enough steam/fog/mist/precipitants in the immediate area to potentially be a nuisance or to potentially raise traffic safety questions.

#### B. Key Question(s):

1. Should the City either prohibit open cooling towers over a specific size or develop standards by which to evaluate larger open towers and to base conditions that avoid potential localized impacts?

## 6. Traffic Impacts and Transportation Routes For Trucked Fuel/Feed Stock

#### A. <u>Background Information:</u>

Power generation facilities utilizing compressed natural gas (CNG), biomass (i.e., wood chips, wood pellets, straw, etc.) or solid waste could require more than a dozen 80,000 lb. GVW truck deliveries daily depending on the size of the facility (municipally owned 70 megawatt McNeil Biomass plant in Burlington Vermont as one example).

#### B. Key Question(s):

- 1. Should the City's site plan standards be revised to allow the City to specify which routes would be used, or the timing of deliveries, to supply the fuel to the facility?
- 2. Should the City's site plan standards be revised to allow the City to require the developer to pay for road or intersection improvements needed to safely accommodate added truck traffic providing fuel/feedstock to the facility?

# 7. Onsite Fuel/Feedstock Storage, Fugitive Emissions & Emergency Response Plan

## A. <u>Background Information:</u>

A natural gas fueled facility supplied by a pipeline would likely have some onsite fuel storage (either CNG or diesel). A biomass facility could have several days of feedstock stored onsite. A CNG supplied facility would have several trailers parked on site. Also, power generation facilities of these types would require an emergency response plan for both onsite fuel and the generation facility.

#### B. <u>Key Question(s):</u>

- 1. Are any revisions needed to the City's site plan standards to insure appropriate screening and safety measures are required for onsite fuel storage or any other hazardous materials utilized?
- 2. Are any specific revisions needed to the City's site plan standards to address any potential fugitive emissions of fuels or other chemicals from a power generation facility?
- 3. Do the City's site plan standards (or other ordinances) require the developer to pay for any municipal costs related to the development of emergency response plans for the facility?

# 8. <u>Development Of Properties on Zone Boundaries</u>

#### A. Background Information:

In some locations in the City properties in Commercial or Industrial zones on which a grid scale electrical power generation facility could be located are adjacent to, or across the street from, residential zones or existing residential uses.

#### B. Key Question(s):

1. Should any supplemental revisions to setback, screening, or sound standards be added for grid scale power generation projects where the property on which the facility is proposed abuts a residential zone (or an existing residential use)?

# 9. <u>Development Of Properties Abutting High Value Wetlands</u>

#### A. Background Information:

In some locations properties in Commercial or Industrial zones on which a grid scale electrical power generation facility could be located are adjacent to high value wetlands.

#### B. Key Question(s):

1. Should any supplemental revisions to setback, screening, sound or other standards be added for grid scale power generation projects where the property on which the facility is proposed abuts high value wetlands?

#### 10. Fiscal Capacity Standard For Developer

#### A. Background Information:

Grid scale electrical power generation facilities require multi-million dollar level of investment to bring to full operational status.

#### B. Key Question(s):

1. Is the City's financial capacity requirement adequate to insure that once permits are granted the facility will likely be completed and the City is not at any significant risk of acquiring a partially completed project due to unpaid taxes in the future?

## 11. <u>Decommissioning Costs</u>

#### A. Background Information

Smaller power generation facilities likely raise no unique questions once closed than a range of other commercial and industrial uses the City permits. However larger power generation facilities (30 MW, 75 MW, 250 MW) may be of a scale that the facility would present substantial financial challenges to repurpose or demolish when closed down.

#### B. Key Question

Should the City create a mechanism by which facilities over a specified size would be required to set aside some percentage of annual revenue from the sale of electricity generated into a City verifiable escrow account that can be used solely for decommissioning?

# 12. Questions Raised That Appear Not To Be Site Plan Or Zoning Questions

When the community forums were held, City Council had approved an option on both the current Public Services Garage site and the adjacent City Hall property with a developer who was considering constructing a combined heat and power generation facility up to 74 Megawatts in capacity. Many of the questions raised and concerns expressed can be translated into regulatory standards.

A few of the questions raised at the forums appear straightforward to consider as conditions to insure community benefits from the sale of public land. But the Energy Committee could not clearly identify any site plan aspect to these questions (or in one case noted below there is a local regulatory questions, but the issue appears to be mostly a street opening question and possibly not a site plan question). The Energy Committee decided to note these here in case there might be a Site Plan/Zoning facet to these which the Committee missed. And, all of these questions would appear valid if a developer requested a Credit Enhancement Agreement, or any similar form of City support.

#### A. Not Displacing Cleaner Local Distributed Generation

Conservation Law Foundation's presentation, "Getting Natural Gas Right," at the August forum included the point that a natural gas powered facility should not displace cleaner local distributed sources of power generation

#### B. Local Community Benefit

Some new construction of power generation is targeted to meet local electrical needs (or even consumption of just one business, home or institution). Larger projects are often developed to sell power to the New England grid. In this later scenario the benefits are regional. One key question is what benefits associated with grid scale power generation projects benefit the local community? A second question is whether the city should consider negotiating monetary and/or non-monetary community benefits with the developer?

# C. Standards For High Pressure Steam Lines/Safety Response to Steam Leaks

The Moratorium clearly envisions possible revisions to City's street opening ordinance to address natural gas lines and related questions. The moratorium does not mention steam lines. But thermal and pressure and joint standards may also warrant review.

## 13. Documents From Local Forums

The following documents are available on the City web site (and can be easily emailed to members of the Planning Board by the Energy Committee).

- A. May 26th Forum: EMI Slides & Energy Committee Record of Public Comments
- B. August 19th Forum: Greg Cunningham/Conservation Law Foundation Slides
- C. August 19th Forum: Tim Schneider/Public Advocate Slides
- D. August 19th Forum: Kathleen Everett/SMRT Slides
- E. August 19th Forum: Energy Committee Compilation of Community Questions

Date: February 3, 2016 Meeting

Members: Larry Pritchett, Bill Pearce, Tony Coyne, Brooks Winner

Nathan Davis (Mayor Has Nominated/Pending Council Confirmation)

Agenda: Larry Pritchett

Committee Chair

Minutes: Bill Pearce

{None: When Minutes Completed In Italicized Text In Brackets Below}

# 1 Approve Minutes From 1/21 Meeting

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# 2 Confirm February Energy Meeting Dates

Scheduled To Provide Options For "Technical Advisors" For Planning Board 2/10 Wednesday 5:30 PM (Council Chambers) Note: EC Needs To Vote On List Of Options By 2/10

Add Meeting the Last Week Of February

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3 Any Questions On Edits/Revisions To Summary For Planning Board From 1/25

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4 Review Questions/Issues Identified For Type of Assistance Possibly Needed

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#### 5 Any Additional Firms To Contact Beyond Those Identified

CLF? SMRT? Woodard & Curran? Kleinschmidt? TRC? Jim Tolan? JBGH? Others?

# 6 Update On Possible Revisions To Solar Distributed Generation Regulations

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# 7 Update On Maine Energy Network

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# 8 Committee Member Tasks Prior To February 10 Meeting

Finalize List

Other Towns From Maine Energy Network For Solar Resolve

Draft Possible Resolve/Memo To Council On Solar (Agenda Items #7)?

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# **Rockland Energy Advisory Committee**

# Rockland Community Room at Library on February 3, 2016, @ 4:30 PM EST

Attendance: Larry Pritchett, Brooks Winner, Tony Coyne, and Bill Pearce. Guests Nathan Davis

The minutes of January 25, 2016, were amended and approved by the Committee.

The Committee reviewed the concepts of Summary for Planning Board from January 25. The resources for type of assistance possibly needed concerning the power plant moratorium were discussed.

Brooks summarized the solar discussion at E2Tech forum in Hallowell. The Committee discussed the pros and cons of net metering.

The city is looking into replacing all the street lights with several other Maine communities. Photoelectric studies are being considered, as well as the color temperature of lighting to idealize street safety.

Next Energy Advisory Committee meetings are at 4:30 PM on 2/10/16 and 4:30 PM on 2/24/16 in City Council Chambers were determined, if needed.