Jim Chaousis

From: Jim Chaousis < jchaousis@ci.rockland.me.us>

Sent: Wednesday, August 12, 2015 15:22

To: 'Susan Ware Page'; 'Larry Pritchett'; 'Frank Isganitis'

Cc: 'Audra Bell'; louisemaclellanruf@gmail.com; valli.citycouncil@gmail.com;

williamclayton79@gmail.com; 'Charlie Page'; 'John Ware'

Subject: RE: Energy Forum

Mrs. Page,

I will attempt to answer your questions.

ENERGY ADVISORY COMMITTEE

Will anyone be able to ask questions/make comments at this public forum? What is the time allotment? The structure of the forum will be dependent on the Energy Committee. Based on the knowledge level of the speakers, I would expect some unfettered speaking with some public interaction. I'm sure time will depend on the number if public speakers present. This is not a legislative/regulatory hearing but an educational forum.

7 MEMBERS

3-YEAR TERM

Who are the members on the energy advisory committee?

William Pearce	39 Mountain View Ext	594-8413	2016
Suzanne MacDonald	54 Pacific Street	Not Listed	2015
Anthony Coyne	41 Highland Street	Not Listed	2015
Larry Pritchett	39 Brewster St (POB 126)	594-8806	2017
Deborah Donnelly	188 Bog Road	594-9442	2017
Brooks Winner	7 Granite St. Apt. 1	358-0219	2016
Vacant	-		2016

The Mayor and City Manager (or designees) shall be ex-officio, non-voting members of the committee

Is there a date set for the vote to go to referendum? If not, when is it expected?

The referendum is dependent on a purchase and sale of the City land. That is not completed or even close. It is nearly impossible to predict when, or if, there will be a referendum.

Any resolution on where to place City Hall/Public Works and have you nailed down plans & costs that Rockland Energy says they'll pay for?

That is an important part of the negotiation that is nowhere near completion.

Has any city official done an analysis study (I suggested this to you Frank) as to the negative economic impact in our communities as well as the potential positive? I think it's important to look at everything.

These studies would be paid for by the developer based on zoning conditions or negotiated terms. As I stated before, we are not close to that stage.

I hope my answers are helpful. Thank you.

James D Chaousis II, City Manager City of Rockland 270 Pleasant Street Rockland, ME 04841 Phone (207)593-0636

www.ci.rockland.me.us jchaousis@ci.rockland.me.us

From: Susan Ware Page [mailto:SusanW@maritimeenergy.com]

Sent: Tuesday, August 11, 2015 3:45 PM

To: 'Larry Pritchett' larry Pritchett' larry Pritchett' frank lsganitis' frank lsg

jchaousis@ci.rockland.me.us

Cc: 'Audra Bell' <abell@ci.rockland.me.us>; louisemaclellanruf@gmail.com; valli.citycouncil@gmail.com;

williamclayton79@gmail.com; Charlie Page <charliep@maritimeenergy.com>; John Ware

<JohnW@maritimeenergy.com>
Subject: RE: Energy Forum

Larry & Frank,

Thank you for sending along the information. Please see my questions below highlighted in yellow that I'm requesting answers to.

Our childcare is closed next week for summer vacation and Wednesday is we had plans to be out of town with the kids. I have now cancelled our hotel reservations, so I can be in attendance at this forum. I wish we were all given more notice.

Can you let me know about the questions highlighted in yellow?

Thanks, Susan

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Tuesday, August 11, 2015 1:20 PM

To: Susan Ware Page; 'Frank Isganitis'; jchaousis@ci.rockland.me.us

Cc: 'Audra Bell'; louisemaclellanruf@gmail.com; valli.citycouncil@gmail.com; williamclayton79@gmail.com;

Charlie Page; John Ware **Subject:** RE: Energy Forum

Hi Susan,

Press release is attached. I have a meeting at 1:30, so I'll answer the simplest question below. I chair the City's Energy Committee and the Committee for years has been focused on energy efficiency and building envelope projects in City government and sharing what the City learns with owners of commercial and historic buildings.

The Energy Committee members are Brooks Winner (who is the Community Energy Associate at the Island Institute), Deb Donnelly (whose husband is a master electrician who works on a range of commercial scale solar projects primarily out of state); Bill Pearce (who was a founding member of the Committee and a member of the Sierra Club's Executive Committee at the time); and Tony Coyne (who was a home energy auditor and installer before retiring).

Suzanne MacDonald who directs the Island Institute's Community Energy program has served on the Committee. A lot of informal info sharing (& some cosponsoring of projects) occurs between the City and the Institute. More info soon.

Larry 594-8806

From: Larry Pritchett [mailto:larrypritchett.council@qmail.com]

Sent: Tuesday, August 11, 2015 11:01

To: 'Susan Ware Page'; 'Frank Isganitis'; jchaousis@ci.rockland.me.us

Cc: 'Audra Bell'; louisemaclellanruf@gmail.com; valli.citycouncil@gmail.com; williamclayton79@gmail.com;

'Charlie Page'; 'John Ware' **Subject:** RE: Energy Forum

Hi Susan,

A press release with more details than in my verbal summary about the public forum at Council meeting last night will go out at lunch time. That should answer some of your questions below. Perhaps Audra as Economic Develop Director and I as Energy Committee Chair could arrange a time to with you about energy questions?

Best, Larry 594-8806

From: Susan Ware Page [mailto:SusanW@maritimeenergy.com]

Sent: Tuesday, August 11, 2015 09:47

To: 'Larry Pritchett'; 'Frank Isganitis'; 'jchaousis@ci.rockland.me.us'

Cc: 'Audra Bell'; <u>louisemaclellanruf@gmail.com</u>; <u>valli.citycouncil@gmail.com</u>; <u>williamclayton79@gmail.com</u>;

Charlie Page; John Ware **Subject:** Energy Forum

Hello,

I read last night on BDN that there will be an energy public forum next week. I was not aware of this.

Will anyone be able to ask questions/make comments at this public forum? What is the time allotment?

Who are the members on the energy advisory committee?

Is there a date set for the vote to go to referendum? If not, when is it expected?

Any resolution on where to place City Hall/Public Works and have you nailed down plans & costs that Rockland Energy says they'll pay for?

Has any city official done an analysis study (I suggested this to you Frank) as to the negative economic impact in our communities as well as the potential positive? I think it's important to look at everything.

Larry, Frank, Jim...I'm not sure who is best to answer my questions, so I've copied Audra and the respective Councilors.

Look forward to your response. Please put in writing, so I have for the record.

Thank you, Susan The city of Rockland's energy advisory committee and the city's community and economic development committee will be hosting a public forum next Wednesday evening (6:30 p.m. Aug. 19) at city hall related to the proposed natural gas-fired power plant. Speakers will be Tim Schneider, the state's public advocate; Greg Cunningham, vice president and director of Clean Energy and Climate Change program; and Anthony Buxton who is the chair of the Pretu Flaherty law firm's energy and utilities practice group. The public is invited to come and listen to the presentations and ask questions.

Draft Document: Not Distributed

Larry Pritchett

To: Mayor; City Council

Cc: City Manager; Community Development Director

Subject: Combined Heat & Power (CHP) > District Energy > Memo > Council

Dear All,

Over the last few weeks I, and other members of the Energy Committee, have been reviewing a variety of material on CHP facilities (i.e., combined heat and power or cogeneration), district energy systems that distribute power (steam, hot water, etc.) to commercial and residential buildings along with municipal climate action plans.

As an overview I am passing along the following summary and related links to Council so all members have some general background information on this topic and so each of member Council can develop their own questions (note the text of this email is also in the attached PDF).

COMBINED HEAT AND POWER/COGENERATION OVERVIEW (Done??)

In the materials Energy Committee folk have seen, the base component of common CHP facilities is a pair of fuel powered electrical generation turbines (Two 5.5 megawatt gas turbines in the NYU example referenced below and illustrated here: http://www.nyu.edu/sustainability/pdf/NYUCogen.pdf).

The next step in CHP systems that utilize fuel to power, as to oppose to steam to power, electrical generation turbines is a heat recovery steam generator (HRSG) that produces steam from the heat in the turbines' exhaust.

This steam can be used in two ways (and the two options frequently are combined) depending on the balance of the local need for electricity vs the need for thermal energy from the CHP facility. If the electrical demand is higher, the steam generated by the heat in the exhaust gas can be used to power a smaller electrical turbine.

A steam turbine powered from exhaust heat produced by the base component gas powered electrical generation turbines is often roughly 20% to 30% of the size of the primary fuel fired turbines (i.e., in the NYU example the combined capacity of the gas turbines is 11 megawatts and the capacity of the steam turbine is 2.4 megawatts).

Regardless of whether the CHP facility has a single stage or two stages of electricity generation, the final stage is distributing the residual thermal energy for specialty manufacturing uses, for facility heating, for heating domestic hot water, for refrigeration, and/or for building cooling.

The energy, cost, and environmental benefit of CHP is the same energy (i.e., from burning the primary fuel) is utilized 2 or 3 times. For more on CHP see Sections 1 (Intro), 3 (Combustion Turbines), & 4 (Steam Turbines) of EPA's 2015 "Catalog of CHP Technologies" (http://epa.gov/chp/documents/catalog chptech full.pdf).

EVALUATING CHP/COGEN (Done??)

Technical aspects to consider when evaluating a fuel fired CHP project include: efficiency of the turbines (i.e., how effective are the turbines in converting energy content of the fuel into electricity); and efficiency of the heat recovery steam generator (i.e., how effective is the HRSG at converting exhaust heat into steam).

A third key consideration is the utilization of the residual energy captured by the heat recovery steam generator. If the thermal exhaust energy is effectively converted into steam, but the steam is not efficiently utilized by users in the district energy area served, the economic and environmental value of the CHP facility diminishes.

To address these points, EPA's Office of Science and Technology calculates the efficiency of CHP/District Energy systems by comparing the energy needed to generate the electricity and the thermal energy separately vs the energy needed to generate the same amount of thermal energy and electricity together in the CHP system.

In terms of air emissions, new CHP facilities are often installed to replace 1st generation CoGen facilities (see NYU example below) or to replace existing current separate systems (i.e., electricity generation at one facility and steam generation at another or electricity purchased from the grid and steam generated onsite).

To the extent that the energy generated by a new CHP facility is displacing existing systems (i.e., older CHP facility, current separate systems, etc.), the analysis may prove to be fairly straight forward (CO2, NOX, SOX, PM10 released into the air by current sources compared to same parameters for proposed new CHP system).

In terms of water, EPA publications such as the one referenced above describe the water used by CHP facilities as "negligible" compared to traditional electrical generation plants and there appears to be operating CHP facilities that use treated wastewater to supply the limited volume of water required.

DISTRIBUTED GENERATION/DISTRICT ENERGY (DONE??)

As just described a key component for a CHP facility like the one proposed in Rockland to meet efficiency, utility and environmental benchmarks entails developing some framework for distributing the thermal energy to users in Rockland - - a system typically now called "District Energy" and historically referred to as "District Heating."

According to data from the US Department of Energy, there are 33 CHP facilities operating in Maine. Seven of those CHP facilities drive "District Energy" systems - - i.e., provide power to a variety of buildings. In Maine those "districts" are mostly the campuses of colleges (Bowdoin, Colby, UMO, etc.) and health care systems (EMMC).

The US EPA just gave one of three 2015 "Energy Star" awards to Bowdoin College for its natural gas fired CHP facility that provides part of the power to 65 buildings on campus and was an integral part of the Bowdoin's strategy to reduce carbon emissions (see http://epa.gov/chp/awards/winners.html).

While District Energy/Heating systems in Maine are limited to institutional campus, many District Energy systems are currently serving developed city/town centers and industrial areas in the U.S. and Canada as well as in European Union countries (especially Finland, Norway, Sweden, Denmark, & the Netherlands)

District heating has been around for over a century (see next point). Initially most just produced heat (typically steam). However, many old systems as well as most new district energy systems appear to now be powered by CHP facilities (published figures suggest as much as 80% of District Energy in Denmark is supplied by CHP units).

The International District Energy Association just held a conference in Boston. As of today (7/22), a number of short video's from the conference were on the IDEA's home page (http://www.districtenergy.org/).

These videos note ways CHP/District Energy/Micro Grids can be used to reduce air emissions, reduce carbon emissions, provide lower cost cleaner energy and be a tool for economic development ("District Energy/CHP as a Climate Change Mitigation Strategy," "District Energy Microgrids Planning for Economic Development").

DISTRICT HEATING/DISTRICT ENERGY EXAMPLES: DENMARK AND NYC

District Energy (or "District Heating" or "District Heating and Cooling," depending on the application and the Country) has been in place in Europe and the US for over a century. Some technical histories suggest the concept may have originated in Denmark.

In the US the oldest and largest "District Heating" system is

https://www.youtube.com/watch?v=-0V5OMS4kzw

the 184 page New York Department of Environmental Conservation permit for the 286 Megawatt cogeneration facility at the Brooklyn Navy Yard

CHP EXAMPLES: NYU/NY Presbyterian/Longwood Medical

CHP/DISTRICT ENERGY AND CLIMATE ACTION/RESILIENCY PLANS

NYU Climate Action Plan NYC Climate Action Plan CHP/Dictrict Energy & Hurricane Sandy





Let's celebrate our commitment to ending our use of fossil fuels together! What better way than a group bike ride?

Renew Rockland invites you to ride with us to the August 19th meeting about the Rockland, ME natural gas power plant proposal.

A natural gas plant is proposed to be located at 270 Pleasant Street, currently City Hall, of Rockland, ME. Residents have many questions and concerns—come to the meeting to find out more about its environmental impact, economic impact, and potential location of the new midcoast natural gas pipeline that will be needed to feed it.

All you need is your bike and your helmet!

WHERE: we will meet in the middle of the Harbor Park parking lot—in the big grassy island area

WHEN: Wednesday, August 19th we will gather at 5:30pm and begin our ride at 5:45 pm. We plan to ride down Pleasant Street to Rockland City Hall, located at 270 Pleasant Street.



location of bike meetup

 ${\bf Check\ our\ Facebook\ page\ for\ updates: facebook.com/renew the midcoast}$

Mike Chonko

From: Mike Chonko <MCHONKO@SMRTInc.com>

Sent: Thursday, August 13, 2015 20:37

To: Larry Pritchett
Cc: Kate Everett

Subject: RE: Rockland > Energy > CHP > Questions > 8/19 > Public Forum

Larry,

Thanks for this summary email. I suspect Kate may be camping outside of cell range. We will figure out a way to cover the meeting.

Mike

Michael Chonko PE, CEM Principal/Director of Mechanical Engineering

SMRT Architects and Engineers

p: 877.700.7678 c: 207.807.4682 smrtinc.com

----- Original message -----

From: Larry Pritchett larry Pritchett larry Pritchett larrypritchett.council@gmail.com

Date: 08/13/2015 9:32 AM (GMT-05:00)

To: Mike Chonko < MCHONKO@SMRTInc.com>

Cc: Kate Everett < keverett@smrtinc.com>

Subject: Rockland > Energy > CHP > Questions > 8/19 > Public Forum

Hi Mike,

I had roughed out this email after we talked and was holding it until I heard from Kate or you. Since the calendar is getting tighter, I thought I would clean up my rough notes and pass this along so both of you would have the info.

Attached is the press release that went out Tuesday morning. As I said when we talked, it is not a big deal to put out a follow up press release noting that another party will be joining the forum. I had hoped to know by the end of the day Friday, if that was practical given both of you are on vacation.

In terms of the forum, if Kate is available, the City might would have her lead off with a very general, high level overview. Ten to twelve minute presentation on topics like: (1) What is combined heat and power? (2) What are the key design aspects of a high efficiency, low emissions CHP facility?

(3) What is District Energy? (4) As a high level concept, does the City's Industrial Park and the Tillson Waterfront Area (west side of Main Street Downtown, commercial area on Tillson, FMC) have the technical characteristics (density, users, etc.) that would suggest district energy for these areas could be a concept worth exploring?

From the comments and questions received those four points (with a couple of examples included like NYU or

Montpelier District Heat or an SMRT project, etc.) would seem like the intro focus. Four other questions which can be either weaved into the opening, or addressed in the discussion might be topics like:

- (5) Beyond winter heating, what types of year round loads would make the CHP efficient and practical (i.e., possible options like FMC's year round steam load, steam powered centrifugal chiller for O'Hara frozen bait, etc.). (6) What are the common/typical emissions controls for a CHP facility?
- (7) Noise: What are common/typically noise controls? If noise control is done well, how close can residences be? When CHP units are located at residential facilities, is noise an issue? (8) How close to the CHP facility does a user of steam, hot water or chilled water need to be for the system to be efficient and practical?

Obviously, the City as well as SMRT should be very clear the EMI proposal is NOT an SMRT project. You could say your comments are based on CHP facilities SMRT has work on.

Or, you could say that if the City approached SMRT about developing a CHP powered municipal district energy system, these would be key points and areas on which you would focus the discussion. That is a summary of what the City is thinking. Let me know when you hear from Kate.

Thanks! Larry 594-8806

Sandy Billington

From: Sandy Billington <sbillington@ci.rockland.me.us>

Sent: Friday, August 14, 2015 09:37

To: 'Larry Pritchett'

Subject: RE: Info > May 26 > Forum

Okay..they're up as a calendar attachment and a "news/headline" attachment when one clicks on the forum announcement.

Thanks!

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Friday, August 14, 2015 9:13 AM

To: 'Sandy Billington'

Subject: RE: Info > May 26 > Forum

Hi Sandy,

Did you hear from Audra on this? Has she been around the office?

I know she had an EPA deadline and I think her inlaws from Australia are still in town.

LP

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Tuesday, August 11, 2015 13:00

To: 'Audra Bell' Cc: Sandy Billington

Subject: Info > May 26 > Forum

Hi Audra,

Energy folk did not realize until finalize stuff for the August 19th forum, that the info from the forum back in May never got on the web site. We all reviewed this over the weekend, and found only a few typos. Could you page through, and if nothing seems inaccurate, green light Sandy to post on the City web site?

Larry 594-8806

Larry Pritchett

From: Larry Pritchett

Sent: Friday, August 14, 2015 11:54

To: Thomas Peaco

Subject: Rockland > Energy > Forum > August 19

Attachments: 2015_08.19_Rockland_Energy_Community_Development_Forum_Press_Final.pdf

Hi Tom,

The PBRCC Friday report just popped into my Inbox. Which lead to some grumbling by me (and at me) because I had forgotten to get the attached over to you folk. You and I discussed this over breakfast. I have attached the press release that went out on Tuesday. My mistake for not getting that to the Chamber.

I'll have blog page and Facebook page set up on this event either later today or tomorrow morning. Could the Chamber do a Facebook posting on this event on Monday? Possibly link to the blog page? Or? Other suggestions? What comments are you getting on this?

Thanks!
Councilor Larry R. Pritchett
Chair, City Of Rockland Energy Committee
LarryPritchett.Council@GMail.Com

Phone: (207) 594-8806

Frank Isganitis

From: Frank Isganitis <frankisganitis@gmail.com>

Sent: Friday, August 14, 2015 12:01

To: Larry Pritchett

Cc: James Chaousis; Will Clayton; Lousie MacLellan-Ruf; Valli Geiger; Audra Bell

Subject: Re: Energy > Forum > May 26 > Info > Questions

Thanks to you and Brooks for copious notes!

On Fri, Aug 14, 2015 at 11:11 AM, Larry Pritchett < larrypritchett.council@gmail.com> wrote:

Morning All,

As you may recall, Energy Committee member Brooks Winner recorded (on screen where folks could see it) the key questions and ideas raised during the May 26th Public Forum. The committee members and staff have used those questions to select participants for and determine the format of the August 19th follow up forum.

What attendees should see next Wednesday evening is each of the invited folk will speak briefly to two or three questions/issues (different for each person and based on each person's area of expertise) identified at the May 26th forum.

Before going to the next speaker/presenter, there will be an opportunity for discussion/debate among the presenters and some follow up from community members. As JimC alluded to in an email yesterday, I suspect the discussion/debate among presenters might prove to be the most informative and engaging part of the evening.

The attached file merges EMI's slides from the May 26th forum with Brook's notes on issues, questions, and ideas raised by the community. In the attached PDF file the comments and questions from the community have been grouped topically. This file is also up on the City's web site. I wanted to be sure Council members had this info.

In short, the City has seven pages of questions raised by and ideas from the community. Next Wednesday is an opportunity to hear folk with decades of experience in the fields of energy, environmental advocacy, and utility regulation discuss those issues and have the community ask follow up questions.

Best, Larry 594-8806

Larry Pritchett

From: Larry Pritchett larrypritchett.council@gmail.com

Sent: Sunday, August 16, 2015 19:08 **To:** Larry@Pritchett4Rockland.Com

Subject: FW: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power >

Wednesday > 8/19 > City Hall

Dear Neighbors and Friends,

As you all know, I do not send out very many "group" emails - - maybe six or seven a year. I realize it feels like we all get too many. That said, given the importance of the questions, I am emailing to invite all members of the community to a public forum Wednesday Evening:

Combined Heat & Power, District Energy, And Natural Gas: Is This A Good Option For Rockland?
August 19, Rockland City Hall
6:30 PM

(For More Info See http://pritchett4rockland.typepad.com/larry/)

As most of you are aware, Energy Management Inc approached the City back in March to explore the concept of constructing a combined heat and power (CHP or CoGen) plant and local district energy system in Rockland. This concept is an opportunity that raises a number of challenging questions, such as:

- 1) In an era when the goal is to reduce carbon emissions released into the air, how does a community weigh the merits of a new natural gas fired combined heat and power plant and a new district energy system to supply locally generated power to parts of the City?
- 2) In Rockland where specialty manufacturing is key to the strength of the year round economy, how critical is natural gas to the viability and competitive position of these businesses for the next thirty years (or more)?
- 3) Natural gas driven combined heat and power plants supplying electricity and other forms of energy (steam, hot water, etc.) are a key part of a number of universities' and research hospitals' strategies to reduce carbon & other air emissions and to provide resilient locally generated power. Is this a good approach for Rockland?

On Wednesday evening several people from a variety of backgrounds (utility regulation, environmental advocacy, etc.) with decades of experience will be at City Hall to discuss these questions with the community.

As noted above, more information is on my web site (http://pritchett4rockland.typepad.com/larry/). I hope you will review this information and make an effort to attend Wednesday evening's public forum. I believe these questions warrant thoughtful consideration by all of us. Please share this with anyone who is interested.

Thanks!
Councilor Larry R. Pritchett
Chair, City of Rockland Energy Committee
LarryPritchett.Council@GMail.Com

Phone: (207) 594-8806

Greg Cunningham

From: Greg Cunningham <GCunningham@clf.org>

Sent: Monday, August 17, 2015 10:38

To: Larry Pritchett

Subject: RE: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power >

Wednesday > 8/19 > City Hall

Sounds good. I am working from home with poor cell service, so please call my land line 207-847-3011. Thanks

Greg Cunningham

Conservation Law Foundation

P: 207-210-6439 **C**: 207-329-9161

E: gcunningham@clf.org

For a thriving New England

From: Larry Pritchett

Sent: Monday, August 17, 2015 10:35 AM

To: Greg Cunningham

Subject: RE: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power > Wednesday > 8/19 > City Hall

How about 3:30?

LP

From: Greg Cunningham [mailto:GCunningham@clf.org]

Sent: Monday, August 17, 2015 10:23

To: Larry Pritchett

Subject: RE: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power > Wednesday > 8/19 > City

Hall

Hi Larry. I have good availability this afternoon. Let me know what time works for you.

Greg Cunningham

Conservation Law Foundation

P: 207-210-6439 **C**: 207-329-9161

E: gcunningham@clf.org

For a thriving New England

From: Larry Pritchett

Sent: Monday, August 17, 2015 7:45 AM

To: Greg Cunningham

Subject: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power > Wednesday > 8/19 > City Hall

Morning Greg,

Welcome back. Let me know if this gets to you. Is there a time late today (Monday) or early tomorrow (Tuesday) that we could touch base on the format for Wednesday's forum? Press releases went out to the local media last Wednesday.

I put the content of the press release on my web site/blog (with links to other related documents and web sites plus some graphics added). I sent the following email to my 2013 re-election email list yesterday. Meant to get this to you last week but could not track down an email for you.

Best, Larry 594-8806

From: Larry Pritchet

Sent: Sunday, August 16, 2015 18:59 **To:** 'Larry@Pritchett4Rockland.Com'

Subject: ENEGRY > Public Forum > Natural Gas > Combined Heat & Power > Wednesday > 8/19 > City Hall

Dear Neighbors and Friends,

As you all know, I do not send out very many "group" emails - - maybe six or seven a year. I realize it feels like we all get too many. That said, given the importance of the questions, I am emailing to invite all members of the community to a public forum Wednesday Evening:

Combined Heat & Power, District Energy, And Natural Gas: Is This A Good Option For Rockland?
August 19, Rockland City Hall
6:30 PM

(For More Info See http://pritchett4rockland.typepad.com/larry/)

As most of you are aware, Energy Management Inc approached the City back in March to explore the concept of constructing a combined heat and power (CHP or CoGen) plant and local district energy system in Rockland. This concept is an opportunity that raises a number of challenging questions, such as:

- 1) In an era when the goal is to reduce carbon emissions released into the air, how does a community weigh the merits of a new natural gas fired combined heat and power plant and a new district energy system to supply locally generated power to parts of the City?
- 2) In Rockland where specialty manufacturing is key to the strength of the year round economy, how critical is natural gas to the viability and competitive position of these businesses for the next thirty years (or more)?
- 3) Natural gas driven combined heat and power plants supplying electricity and other forms of energy (steam, hot water, etc.) are a key part of a number of universities' and research hospitals' strategies to reduce carbon & other air emissions and to provide resilient locally generated power. Is this a good approach for Rockland?

On Wednesday evening several people from a variety of backgrounds (utility regulation, environmental advocacy, etc.) with decades of experience will be at City Hall to discuss these questions with the community.

As noted above, more information is on my web site (http://pritchett4rockland.typepad.com/larry/). I hope you will review this information and make an effort to attend Wednesday evening's public forum. I believe these

questions warrant thoughtful consideration by all of us. Please share this with anyone who is interested.

Thanks!
Councilor Larry R. Pritchett
Chair, City of Rockland Energy Committee
LarryPritchett.Council@GMail.Com

Phone: (207) 594-8806

Audra Caler-Bell

From: Audra Bell <abell@ci.rockland.me.us>
Sent: Monday, August 17, 2015 15:07

To: 'Larry Pritchett'
Cc: 'Brooks Winner'

Subject: draft potenital panel questions

Attachments: panel questions.docx; RenewRockland_BiketoMeeting.pdf

Hi Larry & Brooks,

Please find attached the draft questions.

Also attached is a flyer that is being distributed by Renew Rockland. They're description of the purpose of the panel discussion is completely wrong. Should we do something to try and correct this or just let it go?

Audra

Audra Caler-Bell Community & Economic Development Director Rockland, Maine 207-594-0306

Draft List From Audra

Questions for Panelists

- 1. What is your process for determining whether or not to support the expansion of natural gas pipelines? How would this be applied to an expansion here in the Midcoast (Tim)
- Give examples of when the CLF has supported projects to expand natural gas to certain areas and examples of when you have opposed projects. What were the reasons for your support or opposition? (Greg)
- 3. Do you believe a natural gas pipeline to the Midcoast is important for our region's economic sustainability if so why, if not why not? (Tony)
- 4. In your experience can combined heat and power natural gas plants be effective in generating clean affordable energy? Could a natural gas CHP plant be effective for these purposes in Rockland? (Kate)
- 5. What is the process for the PUC awarding a long term capacity contract? What are the different factors considered when awarding a contract? (Tim)
- 6. Do you believe all new power generation projects can only be from renewable energy sources in order to make progress in reducing greenhouse gas emissions? (Greg)
- 7. Manufacturing is very important in Rockland. Can our industrial energy users be sustainable in Rockland using only renewable energy as opposed to natural gas? (Tony)
- 8. What role do combined heat and power natural gas plants play in reducing or increasing greenhouse gas emissions and energy affordability? (Kate)
- 9. What role if any does natural gas play in affordable energy costs? In both Maine and Rockland is it possible that by only using renewable energy consumers can still have access to power that is affordable? (Tim)
- 10. What are important questions or conversations a community like Rockland should have around expanding a natural gas pipeline to Rockland and the region and hosting a natural gas CHP plant? What type of debate is helpful and what is hyperbolic? (All panelists)

(Questions struck through as incorporated into panelists agenda)

Larry Pritchett

From: Larry Pritchett larrypritchett.council@gmail.com

Sent: Monday, August 17, 2015 12:05 **To:** 'Brooks Winner'; 'Audra Bell'

Subject: RE: Confirming 1 PM Today At Island Institute

Attachments: 2015_08.19_Energy_Forum_Format_EC_LP_AC_DRAFT_17Aug1201hrs.docx

I did not get all the way through. But the attached attempts to be an outline/very rough draft agenda that pulls in many of the major points raised. Wanted to get to both of you at least a little ahead of 1 PM.

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Monday, August 17, 2015 11:20 **To:** 'Brooks Winner'; 'Audra Bell'

Subject: RE: Confirming 1 PM Today At Island Institute

Kate Everett from SMRT got back from vacation and confirmed this morning.

So, panel will include third party technical expertise on CHP, District Energy, noise, etc.

LP

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Monday, August 17, 2015 11:17 **To:** 'Brooks Winner'; 'Audra Bell'

Subject: Confirming 1 PM Today At Island Institute

See you then.

LP



8/17 1200hrs: Initial draft of forum format with suggestions compiled into one document

Community Forum:

Combined Heat & Power, District Energy, And Natural Gas Would This Benefit Rockland? 6:30 PM Wednesday August 19th

Council Chambers At Rockland City Hall

Draft Panelist Version:

The following is draft agenda with additional info for panelist. The published agenda will only contain condensed version four "Primary Points" under the heading for each panelist.

As proposed below the format would be 10 minutes of presentation by a panelist, discussion among & questions to that panelist for up to twenty minutes and then repeat for the next panelist.

PLEASE get back to the City with any suggested revisions, questions or clarifications

District Energy, Combined Heat & Power: How does all of this work?

Katherine Everett: Mechanical Division Lead SMRT

Primary Opening Presentation Points (10 Minute High Level/General Overview)

- (1) What is combined heat and power?
- (2) What are the key design aspects of a high efficiency, low emissions CHP facility?
- (3) What is District Energy?
- (4) As a high level concept, does the City's Industrial Park and the Tillson Waterfront Area (west side of Main Street Downtown, commercial area on Tillson, etc.) have the general technical characteristics (density, users, etc.) that would suggest district energy for these areas could be a concept worth the City exploring?

Likely Question/Discussion Topics

(Be prepared for questions in these areas)

- (5) Beyond winter heating, what types of year round loads would make the CHP efficient and practical?
- (6) What are the common/typical emissions controls for a CHP facility?
- (7) Noise: What are common/typically noise controls? If noise control is done well, how close can residences be? When CHP units are located at residential facilities, is noise an issue?
- (8) How close to the CHP facility does a user of steam, hot water or chilled water need to be for the system to be efficient and practical?

Twenty Minutes: Questions & Discussion

Questions from moderator, other panelists and submitted from audience?

Electricity, Natural Gas, & Long Term Contracts: What is in Maine residents' interest?

Tim Schneider: Office of the Public Advocate

City of Rockland Page 2 of 3

Primary Points: (Ten Minute General Overview)

- (1) Current mix of energy sources used to generate electricity in Maine?
- (2) Does Maine need additional generation capacity?
- (3) What are the local grid constraints? Is additional generation needed locally?
- (4) 2050 Goals established for energy sources?
- (5) How does OPA typically review (& historically the PUC) whether a contract for long term power meets the state's policy objectives and is fiscally in consumer's interest?

Secondary Points

(Weave in if time permits, be prepared for questions about)

- (1) OPA's value of solar report
- (2) Add CHP/District Energy & Long term contracts question (RFP/PPA criteria)?
- (3) What role would the PUC play in reviewing a natural gas distribution pipeline extension into Rockland?
- (4) Does OPA (or the PUC) weigh the costs of the pipeline against other energy sources (i.e., continued use of heating oil, propane, local solar, etc?)
- (5) What was the cost to ratepayers, and the payback period, for the distribution line extension from Windsor into East Augusta?

Energy Costs, Natural Gas & Specialty Manufacturing: Can Rockland Stay Competitive?

Anthony Buxton: Chair of Preti Flaherty's Energy and Utilities Law Practice

Primary Points:

(Ten Minute General Overview)

Secondary Points

(Weave in if time permits, be prepared for questions about)

Air Emissions, Climate Change & Natural Gas: What is a Viable Transition?

Greg Cunningham: Conservation Law Foundation's Clean Energy and Climate Change Program

Primary Points:

(Ten Minute General Overview)

- (1) What are emissions are typically associated with a natural gas powered generation facility?
- (2) What type of permitting review occurs at the state level?
- (3) How would CLF view this if the project was heavily replacing existing local sources (i.e., through the District Energy system or micro grid) vs being a new source?
- (4) In presentations to Mass legislature, CLF sees an ongoing role for natural gas in combination with (1) a strong emphasis on efficiency and (2) a continued significant expansion of renewables.
- (5) What are the key points CLF looks at when considering a natural gas related project?

Secondary Points

City of Rockland Page 3 of 3

(Weave in if time permits, be prepared for questions about)

Everybody Questions:

Better Exmaples

Press Contact:

Larry R. Pritchett, Chair City of Rockland Energy Committee. (207) 594-8806 Audra Caller-Bell, City of Rockland Community Development Director. (207) 594-0306

Extension of Pipeline

Long Term Contracts

CHP Stuff

Out

CHP

Power Rate

Pipeline

Cards on seats/Hat circulated

Jim Chaousis

From: Jim Chaousis < jchaousis@ci.rockland.me.us>

Sent: Monday, August 17, 2015 13:21

To: 'Frank Isganitis'; williamclayton79@gmail.com; 'Larry Pritchett'; 'Louise

MacLellan-Ruf'; valli.citycouncil@gmail.com

Subject: FW: Rockland Energy Center

FYI

From: Jim Chaousis [mailto:jchaousis@ci.rockland.me.us]

Sent: Monday, August 17, 2015 1:21 PM

To: 'Stephen Betts' <sbetts@bangordailynews.com>

Subject: RE: Rockland Energy Center

Steve,

Rockland Energy Center executed the option on August 1st. They are paying the option payment of \$1,000. Other than the in person meeting, when they signed the option, there has not been any correspondence with Rockland Energy Center. I know they are working diligently to put together a proposal for the City.

Jim C

James D Chaousis II, City Manager

City of Rockland
270 Pleasant Street
Rockland, ME 04841
Phone (207)593-0636
www.ci.rockland.me.us
jchaousis@ci.rockland.me.us

From: Stephen Betts [mailto:sbetts@bangordailynews.com]

Sent: Monday, August 17, 2015 11:48 AM

To: James D Chaousis II < ichaousis@ci.rockland.me.us>

Subject: Rockland Energy Center

Jim,

Has Rockland Energy Center executed the option for the city land? A story I had in May quotes from a letter from Mitchell Jacobs said the compnay planned to execute the option within 30 days from that point.

Are they paying the monthly \$1,000 payment as part of that option?

Has there been any correspondence from them during the past month?

Thanks Steve

Brooks Winner

From: Brooks Winner

Brooks Winner@islandinstitute.org>

Sent: Tuesday, August 18, 2015 09:30 **To:** Larry Pritchett; 'Audra Bell'

Subject: RE: Confirming 1 PM Today At Island Institute

Attachments: 2015_08 19_Energy_Forum_Format_EC_LP_AC_DRAFT_17Aug1201hrs_BW.docx

Hi Larry,

Added a couple questions in here.

-Brooks

Brooks Winner

Community Energy Associate Island Institute 207.594.9209 x 148 207.358.0219 cell www.islandinstitute.org @brookswinner2 | LinkedIn

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Monday, August 17, 2015 12:05 PM

To: Brooks Winner <bwinner@islandinstitute.org>; 'Audra Bell' <abell@ci.rockland.me.us>

Subject: RE: Confirming 1 PM Today At Island Institute

I did not get all the way through. But the attached attempts to be an outline/very rough draft agenda that pulls in many of the major points raised. Wanted to get to both of you at least a little ahead of 1 PM.

From: Larry Pritchett [mailto:larrypritchett.council@qmail.com]

Sent: Monday, August 17, 2015 11:20 **To:** 'Brooks Winner'; 'Audra Bell'

Subject: RE: Confirming 1 PM Today At Island Institute

Kate Everett from SMRT got back from vacation and confirmed this morning.

So, panel will include third party technical expertise on CHP, District Energy, noise, etc.

LP

From: Larry Pritchett [mailto:larrypritchett.council@gmail.com]

Sent: Monday, August 17, 2015 11:17 **To:** 'Brooks Winner'; 'Audra Bell'

Subject: Confirming 1 PM Today At Island Institute

See you then.

LP