



**ENERGY COMMITTEE
REGULAR MEETING AGENDA
Monday, March 9, 2015 6:30 pm
City Hall Council Chamber, Bethel, AK**

Members

Mary Weiss
Chair
mtweiss@uaa.alaska.edu

Shari Neth
Vice-Chair
Shari_neth@lksd.org

Zach Fansler
Council Representative
zfansler@cityofbethel.net

Jeff Sanders
Jeefco2004@yahoo.com

Eddie Stanley
eddieselectric@gci.net

Wade Ferdig
wadeferdig@gmail.com

Jody Drew
Jody_drew@yahoo.com

Alternative Members:

Ex-Officio Member

John Sargent
Recorder
543-1386
jsargent@cityofbethel.net

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. PEOPLE TO BE HEARD** – Fifteen minutes per person
- IV. APPROVAL OF AGENDA**
- V. APPROVAL OF MEETING MINUTES**
 - a. Regular Energy Committee Meeting December 1, 2014
 - b. Regular Energy Committee Meeting January 5, 2015
 - c. Regular Energy Committee Meeting February 2, 2015
- VI. UNFINISHED BUSINESS**
 - a. Alternative Energy Report Update
 - b. Municipal Solid Waste Gasification Findings
 - c. Renewable Energy Alaska Project – City membership consideration
 - d. Update on AVEC Energy Efforts in and for Bethel by AVEC Representative by telephone/in-person
- VII. NEW BUSINESS**
 - a. Alternative Energy News & Ideas
 - b. AVEC Wind Data Collection Effort in Bethel (Zach)
 - d. LNG Project Funding Request
 - f. Waste Heat from AVEC to City
 - h. Pool wind turbine data collection and display
 - i. Permanently change meeting to second Monday of month
- VIII. COUNCIL MEMBER COMMENTS**
- IX. ADJOURNMENT**

City of Bethel, Alaska

Energy Committee

December 1, 2014

Regular Meeting

Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Energy Committee held on December 1, 2014 at time 6:30p in the Bethel City Council Chamber, Bethel, Alaska.

Chair, Mary Weiss called the meeting to order at time 6:30p.

II. ROLL CALL

Compromising a quorum, the following members were present for roll call:

Mary Weiss
Shari Neth
Zach Fansler
Jeff Sanders
Eddie Stanley

Ex-Officio members present were the following:

Lori Strickler, City Clerk

III. PEOPLE TO BE HEARD

Wade Ferdia- Suggested his interest in the Committee; stated he was attending to get a better idea of what the Committee was working on.

IV. APPROVAL OF AGENDA

MOVED:	Neth	Approve the agenda.
SECONDED:	Fansler	
VOTE ON MAIN MOTION	All in favor	

V. APPROVAL OF THE MEETING MINUTES

MOVED:	Fansler	Approval of meeting minutes from September 8, 2014.
SECONDED:	Stanley	

VOTE ON MAIN MOTION	All in favor

VI. SPECIAL ORDER OF BUSINESS

The City Clerk provided a brief explanation on the Open Meetings Act and answered questions presented by the Committee members.

VII. UNFINISHED BUSINESS

Item A- Update Alternative Energy Report

MOVED:	Fansler	Postpone.
SECONDED:	Stanley	
VOTE ON MAIN MOTION	All in favor	

Item B – Municipal Solid Waste Gasification Findings

MOVED:	Fansler	Move into a committee of the whole.
SECONDED:	Neth	
VOTE ON MAIN MOTION	All in favor	

MOVED:	Fansler	Postpone.
SECONDED:	Neth	
VOTE ON MAIN MOTION	All in favor	

Item C- Consideration of Becoming a Member of Renewable Energy Alaska Project.

MOVED:	Neth	Postpone.
SECONDED:	Fansler	
VOTE ON MAIN MOTION	All in favor	

VIII. NEW BUSINESS

Item A- Alternative Energy News and Ideas

IX. COMMISSION MEMBER'S COMENTS

Eddie Stanley- Apologized for missing the last few meetings.

Jeff Sander- No additional comments.

Zach Fansler-Thankful the Committee was able to hold a meeting. Stated the Committee has a lot of potential.

Shari Neth-Thanked the City Clerk for the clarification of the Open Meeting Act. Thanked Wade for his interest in serving on the Committee.

Mary Weiss-Thanked everyone for coming. Suggested the committee members consider being a judge for the Robotics Competition.

X. ADJOURNMENT

Mary Weiss, Chair

ATTEST:

Lori Strickler, City Clerk

City of Bethel

Energy Committee

January 5, 2015

Regular Meeting

Bethel, Alaska

No Meeting Held

The regular meeting of the Energy Committee was not held on January 5, 2015 at 6:30 pm in the City Hall Council Chambers, in Bethel, Alaska because proper five-day notice to the public was not made. Rather than hold a special meeting in January, the chair decided that the planned agenda items should carry over to the next regular meeting to be held February 2, 2015.

City of Bethel

Energy Committee

February 2, 2015

Regular Meeting

Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Energy Committee was held on February 2, 2015 at 6:30 pm in the City Hall Council Chambers, in Bethel, Alaska.

Chair Mary Weiss called the meeting to order at 6:35 pm.

II. ROLL CALL

Compromising a quorum of the Committee, the following members were present for roll call:

Mary Weiss
Shari Neth
Wade Ferdig
Jeff Sanders
John Sargent (Ex-Officio)

III. PEOPLE TO BE HEARD

None

IV. APPROVAL OF AGENDA

MOVED:	Mary	Postpone January 5, 2015 meeting minutes to March 2015 meeting and remove December 1, 2014 meeting minutes from agenda.
SECONDED:	Wade	
VOTE ON MAIN MOTION		
All in favor Motion passes; 4 and 0 opposed.		

MOVED:	Shari	Approve the agenda as amended.
SECONDED:	Wade	
VOTE ON MAIN MOTION		
All in favor or Motion passes; 4 and 0 opposed.		

V. APPROVAL OF MEETING MINUTES

Items removed in motion made under Approval of Agenda.

VII. UNFINISHED BUSINESS

- A. Alternative Energy Report Update
Shari read each item on tracking form; information added as appropriate.

John to update tracking sheet for next meeting.

Zack to speak with Steve Gilbert with AVEC, get information for the update, and invite AVEC representative to call-in and participate in our next meeting.

Add LNG to next agenda and include ONC application in packet, if possible.

Wade volunteered to be the LNG czar and bring in LNG information for committee.

John to add gasification plant to list of energy projects.

John to add incinerator to list of energy projects.

Add waste heat to next agenda.

MOVED:	Shari	Encourage the City to work with AVEC to develop wind data collection site.
SECONDED:	Wade	
VOTE ON MAIN MOTION		
Motion fails; 0 and 4 opposed.		

B. Municipal Solid Waste Gasification Findings

Conclusion: City does not produce enough trash to justify a gasification incinerator.

John to get Zack a copy of the Energy Committee Recommendation to conduct feasibility study to start and operate gasification unit to reduce solid waste entering landfill.

C. Renewable Energy Alaska Project – City membership consideration

No information. Move to next agenda.

D. AVEC Representative Invited to Meeting

Zack volunteered to invite AVEC representative to participate in next Energy Committee meeting by telephone or in-person.

VIII. NEW BUSINESS

A. Alternative Energy News & Ideas

Add wind turbine at the pool to next agenda. Add Recommendation to collect wind turbine data and display it on City's website.

Keep Alternative Energy News & Ideas on every agenda.

Add City Council Report so that Zack can update the Committee on Council discussions and actions.

Can incinerators heat City buildings?

Next Energy Committee Meeting will be March 9, 2015 at 6:30 pm in City Hall Council Chambers.

IX. COMMITTEE MEMBER COMMENTS

Comments made by several members.

X. ADJOURNMENT

To avoid the conflict of the Parks and Recreation Committee meeting on the first Monday of the month at 6:30 pm and the requirement that all committee and commission meetings must be held in the City Hall Council Chambers, the next meeting of the Energy Committee is set for Monday, March 9, 2015.

Mary Weiss, Chairperson

ATTEST:

John Sargent, Recorder

**City of Bethel
Energy Committee
Renewable/Alternative Power Options
Updated March 2, 2015**

Project	Description	State of Development (Timeline)	Pros	Cons
1. Wind Energy Construction Project (AEA & Denali Commission funding)	AVEC has \$2.9 million from City. They will use it to design upgrades to power plant to prepare to accept alt. energy.	Need to call AVEC for an update.	Prepare for large-scale wind in Bethel; potential to lower cost of electricity.	Not enough money to pay for upgrades to generators/switch gear; may not lower cost of electricity.
2. Wind Energy Feasibility Study	City is working with AVEC to spend remaining \$78,000 on WAIS Analysis, wind data collection in Bethel.	Grant deadline: June 30, 2015	Helps AVEC move closer to providing wind energy in Bethel;	Small amount of money; City land harder for AVEC to use because must be leased by Council;
3. LNG shipped to Bethel from Fairbanks	Carry LNG down Yukon River then overland on winter road to Kuskokwim River, then down to Bethel.	Proposal rejected in 2012	Potential to lower cost of fuel for heating; could be a "bridge" fuel between fossil fuels and other sources; one LNG plant in north slope could power the State.	Years away;
4. Large natural gas-fired plant located near North Slope	Large plant built near clean, cheap, natural gas sources. Power transmitted via DC power lines all over State.	Formal study expected. AVEC promoting project.	Stabilize electric power in many places; may be able to be delivered to Bethel.	Many years away; High cost; No support yet.

Project	Description	State of Development (Timeline)	Pros	Cons
5. Bethel Natural Gas Development	Drill for natural gas in the YK Delta.	Find formal study of hole drilled near Bethel by Amoco.	Potential to lower cost of electricity; Bethel could make LNG in plant and ship to villages; run lines to villages.	Expensive; preliminary results do not support it; Need high population to make cost cheaper relative to demand.
6. City utilize waste heat from Bethel power plant.	AVEC expressed interest in idea, but City has not pursued it; 3 city buildings can be hooked up: Fire Station, Courthouse, City Hall.	No deadline, no timeline.	Savings over heating oil;	Price of waste heat has risen over the years, lowering the benefit; heat may not be hot enough to heat building effectively with other demands on heat.
7. Natural Gas Pipeline to Donlin Creek Mine	If natural gas piped in to mine, then pipe could be extended to Bethel.	Planning stage. No timeline. Mine mostly shut down while they wait for NEPA approvals.	Natural gas is clean, plentiful, and may be cheaper than heating oil.	Depends on NEPA approvals and mine going into operation.
8. Biomass System	AVCP project?		Willows and alders grow fast; Easy to transplant;	Alder and willow leave no coals, making them poor biomass contributors.
9. Gasification unit to power public works building or aerators at sewage lagoon	Burn municipal solid waste in super hot incinerator (gasification unit) to create electricity and get rid of waste.	Planning stage.	Electricity may be cheaper; solid waste reduced to 5% ash; can provide power to a City building; Landfill close to PW bldg.	Environmental costs unknown (air monitoring); high cost of heating oil to operate unit; cost in City manpower and resources to operate.

Project	Description	State of Development (Timeline)	Pros	Cons
10. Kinetic Energy from Kuskokwim River	Turbines placed on old barge and sunk to bottom where the river movement generates electricity.	UAF did a study 3 years ago on the Kuskokwim in Bethel. Need a copy of that study.	Potential for a cheap source of power; Power lines emanating from the river need a place for power to go: into grid, to buildings; may work under ice perfectly with little disturbance from above.	Shallow river may not lend itself to ideal locations for sunken barges; maintenance costs unknown; may present river navigation hazard.