



**ENERGY COMMITTEE
REGULAR MEETING AGENDA
Tuesday, June 21, 2016 6:30 pm
City Hall Council Chamber, Bethel, AK**

Members

Jody Drew
Chair
Jody_drew@yahoo.com

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

Alternative Members:

None

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. UNFINISHED BUSINESS

- a. Alternative Energy Report Update
- b. Review of BMC Chapter 13.08 Sewer Services
- c. City ordinance change format and process
- d. Electricity-generating exercise equipment at YK Fitness Center (Jeff)

VI. NEW BUSINESS

- a. Senator Murkowski's Hearing on Energy Innovation
- b. Recovered Heat update (John)
- c. YK Energy, Proton Onsite, Hydrogen Technologies and emissions free boiler
- d. City wind turbine energy savings
- e. Committee member vacancy declaration

VII. COMMITTEE MEMBER COMMENTS

VIII. ADJOURNMENT

**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.

Introduced by:
Date:
Public Hearing:
Action:
Vote:

CITY OF BETHEL, ALASKA

Ordinance #13-

AN ORDINANCE

WHEREAS

WHEREAS

WHEREAS

WHEREAS

WHEREAS

THEREFORE BE IT ORDAINED by the City Council of Bethel, Alaska, that:

SECTION 1. Classification.

SECTION 2. Amendment.

SECTION 3. Effective Date.

ENACTED THIS DAY OF 2013, BY A VOTE OF IN FAVOR AND OPPOSED.

Joseph A. Klejka, Mayor

ATTEST:

Lori Strickler, City Clerk

Introduced by: City Manager Bob Herron
Date: July 19, 2016
Action:
Vote:

CITY OF BETHEL, ALASKA

Ordinance # 05-

AN ORDINANCE AMENDING CHAPTER 4.20.90, SECTION G OF THE BETHEL MUNICIPAL CODE CONCERNING AWARD OF SEALED BIDS

WHEREAS, sealed bids are generally used for the purchase of construction services, vehicles, equipment, supplies, and other durable goods with uniform characteristics;

WHEREAS, sealed proposals are generally used for the purchase of plans, designs, studies, reports, and other unique, usually one-of-a-kind projects;

WHEREAS, the Bethel Municipal Code (BMC) says that contracts associated with the Invitation for Bid process will be awarded based on lowest bid price and that contracts associated with the Request for Proposals process will be awarded based on proposal elements most advantageous to the City;

WHEREAS, the procedures set forth in the BMC for purchases made through sealed bids or sealed proposals should result in an award that is most advantageous to the City;

WHEREAS, a bid or proposal that is "most advantageous to the City" means that it provides significant benefit to the City and may not be the one with the lowest price;

WHEREAS, this ordinance would align the basis for awards under the two sealed purchasing methods;

THEREFORE, BE IT ORDAINED by the Bethel City Council that:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become part of the Bethel Municipal Code.

Section 2. Amendment. Chapter 4.20.90 of the Bethel Municipal Code titled *Competitive Sealed Bidding* is hereby amended to read as follows (new wording is underlined and deleted wording is stricken):

G. Award. The contract shall be awarded ~~with reasonable promptness by~~ appropriate written notice to the ~~local business that is the lowest responsible and responsive bidder whose bid meets the requirements and criteria set forth in the invitation for bids provided such bid does not exceed by more than five percent~~

Introduced by: City Manager Bob Herron

Date: July 19, 2016

Action:

Vote:

~~the lowest bid of any bidder that is not a local business.~~ responsible bidder whose bid is determined to be the most advantageous to the city after full consideration of the bid price and evaluation criteria set forth in the Invitation for Bids. In the event the ~~low responsive and responsible bid~~ responsible bid selected for award exceeds available funds as certified by the finance director, and such bid does not exceed such funds by more than five percent, the city manager or authorized designee is authorized, when time or economic considerations preclude resolicitation of work of a reduced scope, to negotiate an adjustment of the bid price within the amount of available funds.

ENACTED THIS 25th DAY OF JANUARY 2005 BY A VOTE OF _____ IN FAVOR AND _____ OPPOSED.

Hugh Dymont., Mayor

ATTEST:

Sandra Modigh, City Clerk