



**MINUTES OF THE WORK / STUDY MEETING
OF THE CITY COUNCIL
OF THE CITY OF SPRINGVILLE, UTAH
COUNCIL CHAMBERS, 110 SOUTH MAIN STREET
FEBRUARY 04, 2014 – 5:15 P.M.**

The following are the minutes of the Work/Study Meeting of the Springville City Council. The meeting was held on **Tuesday, February 04, 2014 at 5:15 p.m.** in the Springville City Civic Center Council Chambers, 110 South Main Street, Springville, Utah. Adequate notice of this meeting, as required by law, was posted in the Civic Center and on the City's website, and delivered to members of the Council, media, and interested citizens.

Mayor Wilford W. Clyde presided. In addition to Mayor Clyde, the following were present: Councilmember Richard Child, Councilmember Craig Conover, Councilmember Christopher Creer, Councilmember Dean Olsen, City Administrator Troy Fitzgerald, Assistant City Administrator/Finance Director Bruce Riddle, Assistant City Administrator/City Attorney John Penrod, and City Recorder Kim Rayburn. Also present were: Community Development Director Fred Aegerter, Public Works Director Brad Stapley, Power Director Leon Fredrickson, Power Generation Superintendent Matt Hancock, Whitehead Plant Operations Manager/Resource Specialist Coordinator Shawn Black, Public Safety Director Scott Finlayson, Administrative Services Manager Rod Oldroyd, and Museum of Art Director Dr. Rita Wright. Councilmember Chris Sorensen and Buildings and Grounds Director Alex Roylance were excused.

CALL TO ORDER

Mayor Wilford Clyde called the meeting to order at 5:15 p.m.

COUNCIL BUSINESS

1. Minutes

COUNCILMEMBER CREER MOVED TO APPROVE THE MINUTES OF JANUARY 21, 2014 AS WRITTEN. COUNCILMEMBER OLSEN SECONDED THE MOTION, AND ALL VOTED AYE.

2. Calendar

- February 11 – Work/Study Meeting 5:15 p.m.
- February 17 – Presidents' Day, City Offices Closed
- February 18 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- March 4 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.
- March 11 – Work/Study Meeting 5:15 p.m.
- March 18 – Work/Study Meeting 5:15 p.m., City Council Meeting 7:00 p.m.

Mayor Clyde mentioned the upcoming budget retreat in April. After discussion a tentative date of April 29, 2014 was decided. He asked if there was other discussion on the calendar. There was none.

3. Discussion on this evening's Regular Meeting agenda items

- a) Invocation – Councilmember Child
- b) Pledge of Allegiance – Councilmember Creer
- c) Consent Agenda
 - 3. Approval of all City purchase orders properly signed (SCC §2-10-110(5))
 - 4. Approval of a Resolution approving Springville City's Municipal Wastewater Planning Report for 2013 – Juan Garrido, Water Reclamation and Storm Water Superintendent
 - 5. Approval of a Resolution renewing the Interlocal Cooperation Agreement for NPDES Phase II Storm Water Public Education and Outreach – Juan Garrido, Water Reclamation and Storm Water Superintendent

Mayor Clyde asked if there was any discussion. There was none.

4. DISCUSSIONS/PRESENTATIONS

a) Electric Generation

Power Director Leon Fredrickson introduced Power Generation Superintendent Matt Hancock and Whitehead Plant Operations Manager/Resource Specialist Coordinator Shaun Black to the Council. Superintendent Hancock gave a presentation with an overview of the Power Department and how power resources are acquired and used by the City. Superintendent Hancock stated the power department has been providing public power since 1904 to Springville citizens.

Superintendent Hancock supplied an illustrated map of the City's electric power infrastructure for the Council to review. Superintendent Hancock added the Power Department dispatches all electrical power operations for the city and explained the dispatch center uses these maps to keep track of power lines, poles, meters, and any outages.

Superintendent Hancock emphasized that Springville operates five distribution substations and three transmission substations, including the Whitehead Power Plant, along with the maintenance and operation of four hydro power plants in Hobble Creek Canyon. The hydro plants are Spring Creek, Hobble Creek, Bartholomew, and Upper Bartholomew. Mayor Clyde and Council discussed with Superintendent Hancock the various hydro plants and the capacity each used. Superintendent Hancock expressed the hydro plants generate approximately 1.5 million kilowatt hours per year. Mayor Clyde questioned how much power could be generated at one time from each hydro plant. Superintendent Hancock explained the approximate generation from each hydro plant. Spring Creek hydro runs 250 kilowatts; Hobble Creek hydro runs 130 kilowatts most of year up to 200 kilowatts; Bartholomew hydro will run one megawatt at full load three months of the year during spring runoff; and Upper Bartholomew can run up to 200

kilowatts, with most the year at around 30 to 40 kilowatts, and 60 or 70 kilowatts during high water.

Superintendent Hancock stated Springville Power dispatches nine SUVPS substations and transmission systems. One transmission system runs from the Dry Creek substation down and around to Payson through Spanish Fork back to Dry Creek. Mayor Clyde asked what other cities participate in SUVPS (Southern Utah Valley Power). Superintendent Hancock replied Payson, Salem, and Spanish Fork.

Superintendent Hancock went on to explain the electric department dispatches all telemetry and control for Springville's culinary water system. Superintendent Hancock expressed the electric department works closely with the water department in monitoring the water pumps. Councilmember Conover emphasized that during the summer months this becomes essential should the water levels become low.

Superintendent Hancock reported Springville Power also maintains and operates all of Springville's fiber communication and infrastructure. Over the years, after purchasing the old air switch fiber, the City has continued to add on and recently connected the last of the city office buildings the streets department building. Superintendent Hancock explained all city buildings should be connected by fiber up to this point. Springville also maintains with local Centercom providing communication to all the schools through fiber.

Councilmember Conover inquired about Google Fiber coming to the City. Superintendent Hancock stated the City has what is called "dark fiber" that may be available for this type of use. City Administrator Fitzgerald explained the City has reached out to Google. At this time, they are very busy and have not been responsive. City Administrator Fitzgerald stated the City is doing what they can to express an interest to Google.

Mayor Clyde inquired about the fiber and conduit and whether it is working. Superintendent Hancock replied the fiber is run around the transmission system to major hubs and then fed out to homes in what is called a "thin net". Currently, the power department is only maintaining the main hubs. Upcoming capital projects will be looking at expanding the fiber.

Superintendent Hancock conveyed that Springville Power Department maintains 24 hour dispatch and operates Springville City's Supervisory Control and DATA acquisition system (SCADA). The SCADA system is a full Energy Management System (EMS) that automates all telemetry and control for substations, the power plant, and the City-owned water system. Information is gathered and historical data is kept as for loads and managing power resources.

Superintendent Hancock stated Springville Power manages a diverse portfolio of electric power resources, such as natural gas; peaking; coal, fossil fuel base load power; renewable, base load power; and market, firm base load power. Councilmember Conover asked how much wind power is being used as a renewable source. Superintendent Hancock replied with the current resources being used: Colorado River Storage Project, or CRSP hydro at 7 MW; Pleasant Valley Wind, Wyoming at 1 MW; Horse Butte wind, Idaho at 3 MW; Springville Hydro, Springville Utah at 2 MW; Blue Mountain Biogas, Milford Utah at 3 MW; Nebo Power Station, Payson Utah, natural gas at 27 MW; San Juan Power Plant, New Mexico, coal at 4 MW; Whitehead Power Plant, Springville Utah, natural gas at 26 MW; and longterm power purchase agreements,

PPA Firm at 5 MW. Mr. Hancock explained with wind power you have the capacity factor based on when the wind blows.

Superintendent Hancock articulated the total resource mix the department is using as 68 percent natural gas; 16 percent wind, hydro and solar; 12 percent coal, contract PPA; and 4 percent biogas. Superintendent Hancock provided graphs on various different load profiles during different seasons and times of day for the Council's review.

Superintendent Hancock stated that about six months ago the Council directed the Power Department to stabilize rates and sustain reliability. In line with this direction, City Administrator Fitzgerald explained the power department has been in discussions with the Power Board about various options with power purchase agreements, and some additions of engines at Whitehead. In the coming months, the Council will be receiving information for consideration based upon the Power Board and staff recommendations.

Mayor Clyde asked for input regarding pricing and if it will remain stable. Power Director Fredrickson explained there is some regulatory pressure on coal power because of the inversions in the valley and the need to clean up the air. There will be a need to continue to put emission controls on the two engines at the Whitehead plant that do not have catalytic converters. This is also affecting other coal power plants to keep up with old equipment and the cost to regulate emissions. Director Fredrickson expressed the need for more moisture. This would allow for up to 7000 kilowatts of power from CRSP. Currently 2000 to 3000 kilowatts is coming from CRSP.

Councilmember Conover requested work on commercial rates. He stated the feedback from businesses is that rates are higher in Springville. Director Fredrickson explained there are large commercial businesses that use over 35 kilowatts, and smaller businesses, such as gas stations, that use around 50 kilowatts. City Administrator Fitzgerald stated a review of rate class may be in order. Director Fredrickson said he would provide a list of commercial businesses in the 35 kilowatt rate class to the Council for their review.

b) Public Works

Public Works Director, Brad Stapley discussed the proposed ordinance regarding the regulation of ground source heat pump installations within ground water protection zones. Director Stapley noted that last July this issue was brought before the Council and there were questions regarding the ordinance. Since then, Director Stapley has been acquiring information and attending classes on ground source heat pumps.

Director Stapley described a ground source heat pump as an electrical-powered system that uses the earth's relative constant temperature to provide heating and cooling for homes or commercial buildings. They are designed with a series of tubes underground that allows fluid to flow in a loop through the pipes where it is heated or cooled to the ambient underground temperature. The fluid then travels back to the building where the air is heated or cooled within the building.

Director Stapley explained closed-loop tubing is used in various configurations. The wells can be shallow and horizontal, or vertical and very deep, up to 400 feet. The vertical

configuration can impact ground water. The recirculating fluid used in the tubes consists of chemical additives such as methanol and ethanol propylene glycol. Water can be used to recirculate, but the heat transfer is not as favorable.

Director Stapley stated most of the City wells are 500 to 600 feet deep servicing about 30,000 residents. He emphasized the City Code has a drinking water protection ordinance, and establishing drinking water source protection zones surrounding the well head. By defining the zones, the City can designate and regulate property uses within the zones and the types of conditions around them.

Director Stapley commented that ground water source protection zones are not regulated by City boundaries. These zones are established by the geology of the ground below them. Adjoining cities cannot do something that affects our ground water source protection zone.

Director Stapley stated the proposed ordinance will define what a ground source heat pump system is and that it will add to the current code establishing the drinking water protection zones and a design mechanism for the Design Review Committee to follow. He advised the proposed changes will add text stating the City restricts Ground Source Heat Pump wells drilled in Source Protection Zones 1 – 4. Wells are prohibited in Zone 1 and 2, and restricted to a maximum 30 feet deep in Zones 3 and 4. Wells greater than 30 feet deep are prohibited within drinking water protection zones 1 through 4.

Director Stapley said he had talked with a few departments and communities regarding how they work with ground source heat pumps. Ken Bousfield, Utah Director of Environmental Quality, stated to Director Stapley that local municipalities should consider the long term effects these systems may have on ground water aquifers. System failures have a potential to impair drinking water supplies. Good engineering design and regular monitoring of these systems is critical. Director Stapley spoke with Jim Goddard, Well Drilling Specialist with the Utah Division of Water Rights. The Division of Water Rights issues a ground source heat pump permit to the contractor. Director Stapley stated he contacted Salt Lake County and they explained that they use an installation guide.

Director Stapley emphasized the ordinance would help the City regulate ground source heat pumps and how they are setup. Councilmember Conover asked how do you regulate something happening in another city that borders Springville? Director Stapley replied when a company applies for a well permit they have to get approval from all entities affected within the protection zone.

Councilmember Conover asked if there is data available on reliability regarding breaks or failures in the pumps. Director Stapley responded there is data out there from the heat source pump industry, if there is a break the propylene glycol will-dissipate, after a few days it has a “half-life” and goes away. The issue about installation of these pumps is the need for regulation. Once the well is dug, it is turned over to the home-owner and is not regulated by the state. Director Stapley expressed the ordinance will allow the City to regulate where the pumps can be located and the requirements for installation. Director Stapley stated going forward the City will want to ensure the heat pumps and deep wells associated with it are not installed near City aquifers.

Director Stapley asked for more questions before going to the regular City Council meeting for approval. Councilman Creer asked for clarification on the depth of 30 feet in zones 1 and 2 and asked that it be changed to all wells less than 30 feet deep are prohibited in zones 1 and 2. Director Stapley stated the change will be made before it goes to Council this evening.

5. MAYOR, COUNCIL, AND ADMINISTRATIVE REPORTS

a) Community Enhancement

Mayor Clyde asked who would be handling this item. City Administrator Fitzgerald stated this is an item in the code that is not active at this time.

b) Consortium of Cities and County (Housing) – Councilmember Chris Creer

Councilman Creer stated a majority of Utah County cities participated and met at the end of the year in November and December. This year they had \$1.36 million in home funds to contribute. Presentations were given requesting funds that were awarded in January 2014. A few of the recipients receiving funds were Housing Authority of Utah County, Rural Housing Development, Habit for Humanity, Home to Own, County Wide, and Redevelopment Agency and Home Purchase Plus. These groups participate in projects throughout Utah County including Springville. Councilman Creer explained Cities do not apply for funding and that nonprofit groups apply.

6. CLOSED SESSION

The Springville City Council may temporarily recess the regular meeting and convene in a closed session to discuss pending or reasonably imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205

There was no closed session.

ADJOURNMENT

COUNCILMEMBER CHILD MOVED TO ADJOURN THE WORK/STUDY MEETING OF THE SPRINGVILLE CITY COUNCIL AT 6:21P.M. COUNCILMEMBER CONOVER SECONDED THE MOTION, ALL VOTED AYE.