MURRAY CITY MUNICIPAL COUNCIL
COMMITTEE OF THE WHOLE

The Murray City Municipal Council met as a Committee of the Whole on Tuesday, May 20, 2014, in the Murray City Center, Conference Room #107, 5025 South State Street, Murray Utah.

Members in Attendance:

Dave Nicponski	Council Member
D. Blair Camp	Council Member
Diane Turner	Council Member
Brett Hales	Excused
Jim Brass	Excused

Others in Attendance:

Doug Hill	Public Services Director	Frank Nakamura	City Attorney
Janet M. Lopez	Council Administrator	Justin Zollinger	Finance Director
Gilbert Gonzales	Building Division ADS	Blaine Haacke	Power General Manager
Brent Davidson	Deputy Recorder	Steve Roberson	Resident/Fire
Daren Wightman	Resident/Fire	Janet Towers	Exec. Asst. to the Mayor
Jan Wells	Chief Administrative Officer	Kellie Challburg	Council Office
Jackie Coombs	UAMPS	Brent Maxfield	Structural Engineer Assoc.
Eliot Setzer	Resident	Aimee Winder-Newton	Salt Lake County Council

Mr. Nicponski called the Committee of the Whole meeting to order and welcomed those in attendance.

Approval of Minutes

Mr. Nicponski asked for approval of the minutes from Committee of the Whole on April 15, 2014. Ms. Turner moved approval. Mr. Camp seconded the motion. All were in favor.

Business Item #1 **Utah Associated Municipal Power Systems (UAMPS) Overview- Blaine Haacke and Jackie Coombs.**

Mr. Haacke explained that a UAMPS representative likes to attend the meetings annually and report on the systems. He introduced Jackie Coombs, the UAMPS Manager of Corporate Relations. He stated that Ms. Coombs would explain the UAMPS

ties to Murray specifically, and that UAMPS is probably the most important organization that the Murray Power Department belongs. It is very important for Murray to have a good relationship with UAMPS, noted Mr. Haacke. He invited anyone that was interested to attend the monthly UAMPS meetings. Mr. Nicponski asked about the downtown lunch meeting with UAMPS. Ms. Coombs replied that was the annual meeting, and would be held in December. There is also an educational meeting in August that would be held in Logan.

Ms. Coombs explained that the relationship between Murray City and UAMPS is a partnership. UAMPS provides their members electric service on a non-profit basis. UAMPS is project based, which means that the members can elect which projects they participate in. After the projects are chosen, then UAMPS enters into contractual obligations with the member that defines the conditions and costs.

Ms. Coombs discussed the portfolio of Murray City and showed that over time Murray started procuring its own resources. That shifts costs so that the City no longer pays UAMPS for power, so the dynamics are different.

The projects do not have a cross default. If a member chooses not to participate in a project, there is no liability associated with that. All of the projects provide more economy of scale.

UAMPS has 46 members, and just accepted the County of Los Alamos, New Mexico as their newest member. UAMPS spans eight states.

UAMPS has the following power supply projects:

- Hunter- a coal fired power plant in Emery County.
- San Juan- a coal fired power plant in New Mexico.
- IPP- Intermountain Power Project in Delta, not owned by UAMPS, but UAMPS is the named agent that does the call input.
- Pool project- to trade power among members.
- Craig-Mona transmission project- the bonds are paid off for that project and an attempt is being made to facilitate a sale of that property; it isn't as beneficial since the deregulation of transmission.
- Member Services
- Government & Public Affairs- Ms. Coombs complimented the efforts by the municipalities on the recent Legislative session.

Murray continues to grow and peaks at just over 100 megawatts. Ms. Coombs showed a chart of the load for Murray every hour. The first hump is the HLH (high load hours), that is power needed in the middle of the day, starting at 8:00 until 23:00. The second hump is the LLH (low load hours) that starts in the middle of the night and on Sundays. The LLH is not as high as the HLH, and it makes sense to try and use appliances in the middle of the night.

Murray has a huge benefit with the capability of striking the internal generation. Currently, Murray doesn't need to operate it because the market is very soft with low power pricing. Mr. Haacke is buying blocks of power through the UAMPS pool every month rather than striking the engine. This prevents wear and tear on the engines and is less expensive than just buying fuel for the generators.

Hunter has a planned outage, so that would require covering power at that time. Ms. Coombs explained the different colors in the chart, defining landfill contract times, San Juan, and the Federal project.

Ms. Coombs explained short power and the requirements to cover on an hourly basis, and high and low loads. Pricing is affected because it is a lot more expensive to purchase on peak times, such as the summer. Mr. Haacke explained that short power doesn't necessarily mean it is bad, it just means that there are so many options to be played in the market. He compared the resources to a glove, and that you don't necessarily want it tight fitting, you want some room to play with. Ms. Coombs said that currently, Mr. Haacke has the capability of calling back IPP, striking generation, or buying from the open market. The portfolio can be managed on a yearly basis to the lowest incremental cost.

Ms. Coombs showed a chart of the history of the peak loads in Murray City. She said the peak would increase with the addition of the hotels and new construction. Murray did fairly well during the recession of 2008, and didn't lose too much of the load. It shows there is a lot of air conditioning increased load in the summer that requires management.

In 1997, Murray bought all the resources through UAMPS. The coal energy and the CRSP (Colorado River Storage Project) met a lot of the load needs. There was a slice purchased from Idaho Power, and a small IPP callback. Over time, the CRSP, which is the least expensive resource continues to get smaller as the load grows larger, that automatically increases the cost for power. When landfill is brought in, some of the other short-term purchases are displaced. Murray is now bringing in WAPA (Western Area Power Administration), another product with Federal power.

Ms. Coombs complimented Mr. Haacke on his excellent job of managing the portfolio. Mr. Haacke has picked up more landfill and he calls ten days before the end of the month stating what power he wants to purchase.

Hunter is still one of Murray's largest resources, and has a carbon footprint. All coal fired power plants are being asked by the Sierra Club to reduce their carbon footprint.

The CRSP contract no longer flows through UAMPS, and Mr. Haacke manages that in the portfolio. That UAMPS cost will go down even more this year. The cost for Murray per megawatt hour has decreased.

The power market is so soft right now, that UAMPS is taking advantage of low pricing, due to the fracking of natural gas, stated Ms. Coombs.

Ms. Coombs said that all of the members are considered when scheduling power. They schedule to the lowest incremental cost to all the members. Murray gets every kilowatt that is produced from the projects that Murray participates in, for every single hour. If there are not enough resources, then they can be purchased from the UAMPS pool, and likewise can also be sold to the pool.

Allocations are made every hour in the participating projects. Then, on an hourly basis, any member long on power can sell to the UAMPS pool, and power is sold to those members that are short. Murray City is a buyer, not a seller on almost every single hour.

Environmental regulations are causing the electric industry to move very quickly and many environmentalists do not like coal. President Obama enacted a climate change plan that goes against the coal fired power plants, in an effort to reduce greenhouse gasses. It is 1000 pounds per CO2 per megawatt hour, as well as carbon catcher and sequestration. The technology is impossible to currently deploy, so there will be no new power plants until the technology is perfected. The existing coal plants are aging and the economics of those are being evaluated. It is reviewed every time there is new legislation requiring new equipment. UAMPS believes coal is a great resource and hopes to operate it as long as possible, as long as it is economical for the members.

Operations after 2025 most likely won't include coal, and natural gas is the obvious answer. Natural gas is still a volatile fuel, and it is unknown if fuel costs will stay low, due to fracking and exportation. UAMPS believes that small modular reactors are an option. Currently, 21% of the entire portfolio is coal, and 43% is purchased from the open market, which will leave a large hole to fill.

Murray currently doesn't participate in small modular reactors. UAMPS entered into a teaming agreement with NuScale and Energy Northwest. NuScale is developing a small modular reactor technology and is the founder of that. Energy Northwest operates the Columbia Nuclear Station in Washington. It is believed that UAMPS would take the output and Energy Northwest would operate it. It could possibly be cited at the Idaho National Laboratory which has been testing for the last 16 years. NuScale received a $226 million matching grant to continue to develop the technology. The project consists of 12- 45 megawatt reactors for a total of 540. Each reactor is in their own containment vessels, and placed in a bed of water under grade. It is considered a very safe technology and the reactor has the capability of shutting down by itself, without human interaction. She commented that Fukushima stymied the large scale nuclear in the United States, but that reactor required additional action to cool the reactor. The simplicity of this technology allows the reactor to be factory built and lowers the cost. UAMPS is currently putting together a communications package for City Councils to address citizen questions on nuclear technology. UAMPS is mainly looking at nuclear technology due to greenhouse gasses, but there will be safety issues and questions regarding spent fuel. It does help that the small reactor would not be cited in Utah, but she still would like to keep the Council informed. She showed a picture of a crane picking up the reactor and it is fueled underwater; everything is done under grade, even the control room and operators. She stated that more information regarding the reactors would be available at the annual meeting.

Ms. Coombs said that Murray is in good shape and has a great leader managing the assets.

Mr. Nicponski thanked Ms. Coombs for her presentation.

Business Item #2 **Building Occupancy Resumption Program (BORP) Presentation- Gilbert Gonzales and Brent Maxfield**

Mr. Gonzales explained why he believes the BORP program is a win-win situation for Murray City. He stated that in the case of a natural disaster, such as an earthquake, Murray City would need to get out and placard buildings. The placards would consist of: Red- unsafe, do not enter, Yellow- limited entry, possibly partial building collapse, or Green- safe entry. Currently, the only people allowed to placard a building in the case of an emergency is Murray City employees. If the Council chooses to adopt the BORP program, then participating businesses would be allowed to placard their own buildings. The design team would evaluate the building, do a structural analysis, give suggestions and placard the building if needed. He believes this is a great program for businesses, because Murray City would not have the resources to get to every building in a timely manner.

Mr. Gonzales stated that there are a lot of people that support the BORP program. Zions Bank has a program, similar to BORP in place.

Ms. Turner asked if Murray City would oversee the BORP program. He replied that was correct. He included a sample of a Salt Lake City ordinance regarding their BORP program.

Mr. Gonzales introduced Mr. Maxfield, who was instrumental in establishing this program in Salt Lake City.

Mr. Maxfield is with the Structural Engineers of Utah and has been working on the BORP program for about five years. He added that the Salt Lake City Council passed the ordinance involving BORP last summer, and has been working on a policy document. As of March, the program in Salt Lake City is fully operational and ready to go. He hopes to show Murray City the benefits of the program and get it passed in Murray also.

The program started in San Francisco, where the name BORP originated. It was adopted in San Francisco right after the earthquake in 1989. They realized there was a big need for building owners to get back into their buildings. The inspection process took such a lengthy period of time. This program would help business owners get back in operation, and the City wouldn't have to worry about the buildings participating in the BORP program. The services that the public would need, would be in operation much sooner.

Mr. Maxfield showed some of the urgent needs that would occur after an earthquake. There would be about 300,000 buildings that would need to be inspected along the Wasatch Front. If those buildings were to be inspected within 30 days, it would require almost 2400 inspectors. That is an unavailable resource and a lot of people wouldn't be able to get into their buildings. The building owners that really want to get their businesses up and running may have to wait weeks before an inspection could happen.

He noted that Mr. Gonzales had previously mentioned that because of jurisdiction, Murray City had to give authorization. He added that Murray City would exhaust its resources quickly, due to the number of buildings requiring inspection. The State is working on creating a pool of credentialed inspectors that could assist Murray City. This

pool would consist of building inspectors, architects, professional engineers and structural engineers.

The training document, ATC 20-1 teaches the inspectors what to look for, such as specific types of damage. as they are inspecting buildings, They would then decide what placard to place on the building, based on their understanding of building construction. These inspections would be rapid inspections and only take about 15 minutes. The inspectors can use several placards for different parts of a building, or they can give a time period for the owner to go and collect their belongings but not return into the building.

There will be thousands of buildings needing inspections, which could take months and resources would be exceeded. Qualified volunteers would be used from within and also outside of the State. The State is creating agreements with other states to bring in qualified inspectors with this program.

Building inspections would be prioritized based on critical infrastructure first; leaving private business inspections to be done later. It would be a quick, mainly exterior observation inspection done by a qualified individual. Once the building is inspected and posted, it may require some follow up inspection by a structural engineer.

The benefits of participating in a BORP program include the fact that inspectors would be under contract with the building owners. The owner would have an agreement to have an inspector there within 72 hours of an earthquake. The City would pre-authorize those inspectors in the BORP program and give them authority to provide hosting of the placards. He noted that Salt Lake City is going to create special placards that indicate “BORP” on them.

The crux of the program is that an inspection plan would be given to the City and the building department for their review. That is the policy document that Salt Lake City recently published. The BORP program must meet all of the requirements and the Building Department would review the plan and ensure that all requirements are being met.

The program will tell the inspectors what to look for, how to look for it and understand all the details of the building. The program requires an engineer to come in and understand the weaknesses of the building for a quicker inspection.

The volunteer inspections require a much less thorough investigation than the BORP program requires. The BORP inspections would be done by a structural engineer and be a more thorough investigation. This should give the City confidence in that inspection. The two books involved for review are ATC-20 and ATC 20-2.

Owners that choose to participate benefit from structural engineers that would highlight the efficiencies and the weaknesses of the building, even before the event happens.

The inspection forms are also much more thorough. He showed the rapid inspection form and compared it to the detailed inspection form that BORP uses.

BORP is not a guarantee of re-entry. There may be circumstances preventing entry, such as weak buildings nearby that could fall on their building. There may not be power,

or entry could be blocked by emergency responders. It also isn't a guarantee of a green tag for re-entry. The engineer would be able to identify the problems to be repaired, for a better likelihood of getting a green tag.

Mr. Maxfield stated that the ordinance passed by the Salt Lake City Council was on their website. Their ordinance (#22.06) authorizes the building department to oversee the program.

Mr. Maxfield also showed the policy document that Salt Lake City published in March, 2014, and pointed out the minutes from the meeting.

Mr. Maxfield add that once the plan is approved by the Building Department, it requires a renewal every two years. The reason for that is to keep up with changes in inspectors, and/or changes in the buildings.

Ms. Turner asked how the BORP program was funded. Mr. Maxfield replied that the building owner would be required to hire a team to create the BORP plan, and also put the inspectors under retainer to show up at the building after an earthquake. For the City to implement the program, it is very simple. It only requires a review of the plan and maintaining a list of those buildings authorized to have inspectors.

Mr. Gonzales reiterated that it was strictly a volunteer program for the business owners. He stated that Salt Lake City had approximately 75 businesses participate. He estimated that Murray City's numbers would be much less. He did the same presentation at the Eggs and Issues Chamber of Commerce meeting, and had positive responses from the business owners there. Mr. Maxfield said he also has had very positive responses from business owners. He believes that any business owner that would like to resume operations quickly should look into the BORP program.

Mr. Camp asked about any liability with the BORP program. Mr. Maxfield stated that any liability in the BORP program fell on the specific engineer and the business owner. Under the current program, the liability would fall under the City. The BORP program severs that relationship and puts the liability on the hired inspectors.

Mr. Gonzales stated that the three new hotels should be approached to see if they are interested in the BORP program since they have all the current engineers and design team presently on hand. It would be more cost effective to do the inspection while the buildings are under construction, as would be the same with any new building.

Mr. Hill commented that it is difficult to hire qualified building inspectors and asked if there was a good supply of structural engineers available to take this project on. Mr. Maxfield commented that was an excellent question and he has warned the structural engineers not to overcommit themselves, because they are under obligation to inspect the buildings within the time period. He agreed that the number of engineers is a finite number, but he doesn't see any problems. He said the engineering firms may have to concentrate on critical resources.

The BORP program also requires a life safety engineer. On a large building, such as Intermountain Medical Center, it would require a large team of structural and life safety engineers. The program is very specific about requiring a team of structural, life safety and also elevator inspectors.

Mr. Gonzales commented that the design team may be from out of state on some of the buildings. For example, a Marriott Hotel may be able to placard their own building with a limited placard instead of waiting for the design team to arrive. If the manager is trained to do a rapid visual inspection, then he could placard the building.

Mr. Nicponski thanked them for the presentation.

Mr. Nicponski also excused Council Members Brett Hales and Jim Brass for their absence at the meeting.

Mr. Nicponski adjourned the meeting.

Council Office Administrator II
Kellie Challburg