PARK CITY COUNCIL STUDY SESSION
SUMMIT COUNTY, UTAH
OCTOBER 11, 2012

Present: **Mayor Dana Williams; Council members Andy Beerman; Alex Butwinski; Cindy Matsumoto; Dick Peek; and Liza Simpson**

Matt Cassel, City Engineer; Thomas Eddington, Planning Manager; Diane Foster, Interim City Manager; and Mark Harrington, City Attorney

Steve Rush, Brian Bowles and Kevin Freestone, Rocky Mountain Power

1. **Rocky Mountain Power Substation.** Matt Cassel explained that this study session is to discuss RMP's potential expansion/relocation of the current substation located off of Woodbine Way. He introduced the representatives from RMP listed above. The staff report addresses the history of the project and he listed the topics to be covered today which will focus only on Phase 1, the substation. Overhead power lines are associated with Phase 2, and the Judge Substation upgrade is Phase 3.

Thomas Eddington pointed out that the *gives and gets* in the community vision statements are discussed a lot as part of the Bonanza Park Plan. There have been discussions about the redevelopment of the property RMP currently occupies to the south of the Recycle Center. RMP has been in discussions with Mark Fischer for quite some time about relocating to 1555 lower Iron Horse Drive. This concept has been part of the discussions relating to the Bonanza Park Plan. He displayed a map illustrating the 100 acre Bonanza Park area, the current substation location, and the proposed relocation area. These discussions have been identified in the draft Bonanza Park Plan submitted in January 2012, and staff feels this is the right location. There were probably five or six other locations considered.

Matt Cassel explained that one of the locations not included in the report was moving the substation out to the Park City Heights area. RMP considered the site but it was not feasible.

Mr. Eddington continued that the City has always envisioned an opportunity to redevelop the Bonanza Park area. He displayed concept renderings of a development with mixed uses and diverse residents. The need to relocate the substation is somewhat important to effectuate that kind of vision. The 2009 Visioning document highlights core values and part of the visioning process was to create a collaborative approach. The City has been working closely with Mark Fischer and RMP to try to accomplish this kind of relocation and there is only one chance to get it right. Mr. Eddington understood that the current substation was moved from the Coalition Building site on Park Avenue to the Recycle Utah location as development of Old Town

continued to the north. The substation has been part of both the Bonanza Park and the Redevelopment Plan.

Mayor Williams emphasized for the benefit of the audience that growth has nothing to do with the expansion or the movement of the substation. Matt Cassel stated that the expansion of the substation is not because of anticipated growth, but based on current needs and RMP's timeline for this project has passed.

Steve Rush, Customer Community Manager, pointed out a 2.5% to 3% increase per year in Park City and RMP's in-service date is 2015. Ms. Matsumoto asked if the power lines will take the same path into town in the preferred site location. Matt Cassel explained that wherever the substation ends up won't change where the power lines need to come in. Cindy Matsumoto brought up the Park City Heights location and it was pointed out that it would not eliminate power lines coming over the hill. Matt Cassel noted that a work session is scheduled on October 25 to cover any outstanding questions members may have.

Brian Bowles explained that there would be no expansion of the footprint. Iron Horse Option 1 is basically keeping all of the transmission on the east side of Bonanza, and inserting one or two more structures to maintain clearances. Iron Horse Option 2 is basically the same as the options in the existing alignment with the overhead structures crossing over Bonanza to the lower Iron Horse Substation. He referred to a map of the different substations in the area and where they serve. The Park City Substation which is increasing 3.1% per year has the most electrical demand growth. The Mayor pointed out that substations differ. Kevin Freestone relayed that additional capacity was added at Snyderville four years ago. One of the challenges with building a substation and feeding local distribution is the density of the load and getting away much more than two miles creates operating issues. The Park City substation is located on the outskirts of the edge limiting where it can be moved. Another challenge is the Judge Substation meeting its demand.

Matt Cassel emphasized that this project is not intended to meet demands elsewhere. The needs are here. Diane Foster interjected that making people conserve will not delay the need for the expansion and according to state law, RMP has an obligation to adequately serve the current needs of a community.

Brian Bowles displayed visuals of both locations. Matt Cassel stated that these renderings will be placed on-line for the public. Mr. Bowles explained that the design at the existing facility is typical for a 46 KV substation. Steve Rush explained that this means 46,000 volts and the other voltage referenced is 138 KV. Mr. Bowles displayed the overhead option for the current facility upgraded to 138 KV. The diameters of the towers are reduced although they are tall. He addressed the underground option where the transmission structures outside of the property are reduced but another set of structures are added just inside the substation. He described the path of the power lines for overhead and underground and lightning shields for overhead designs. In

response to a question from Dick Peek, Mr. Bowles described the use of capacitor banks to help support voltage but when upgrading to 138, this piece of equipment is no longer needed at the existing site. These are spread throughout the system. He displayed overhead and underground renderings of the Bonanza Drive locations and felt that the view from Fireside Condominiums can be mitigated with landscaping and trees.

Andy Beerman asked if the substation has to be located so close to Bonanza Drive. Kevin Freestone acknowledged that the site is tight and there is no additional space because of the triangular shapes of the properties and adequate clearance for maintenance vehicles has to be provided. Matt Cassel expressed that staff understands this but is still working on this issue. Steve Rush added that Mark Fischer acquired additional property which makes this location workable. The transformers are significantly larger. Andy Beerman pointed out that the five poles are side by side and asked if this configuration is required. Mr. Bowles answered that there is not enough room on the site to space them apart.

Mayor Williams remarked that undergrounding seems to remove two towers. Mr. Bowles explained the differences by displaying the renderings again. Cindy Matsumoto felt that the underground design is harsher than the overhead. Kevin Freestone explained that the renderings are layered making it difficult to see what is being removed with the underground. Access from Bonanza Drive was discussed as well as building a retaining wall. Matt Cassel believed the tallest wall is six to eight feet but staff would like the substation pushed farther into the hill and to build a road next to the creek. Diane Foster pointed out that the perspective from a car is not looking up. Matt Cassel stated that staff used RMP's drawings but added higher retaining walls and more landscaping to soften the view from the road level. Ms. Matsumoto questioned if there is enough room to plant trees. Mr. Rush pointed out that they can't be planted under transmission lines or adjacent to a fence which could provide access to the substation site. Mr. Cassel assured members that there is enough space. If the substation is expanded at its existing site, the plan for Bonanza Park would be difficult to accomplish. Kevin Freestone relayed that one side of the Gateway building in Salt Lake acts as a fence for the substation. Steve Rush pointed out that 138 KV is the standard and 46 KV substations are no longer being built.

Matt Cassel referred to the table of the breakdown of costs in the meeting packet which is attached to these minutes.

Kevin Freestone explained that the existing facilities have to remain in place while the upgrade is being installed before it is put in service. Expanding the existing facility can be phased. The transformer costs are the same for both locations and he addressed depreciation values. Brian Bowles explained that RMP estimated what it would cost to rebuild from Silver Creek to Park City and Silver Creek to lower Iron Horse and basically the cost difference is $280,000. The lower Iron Horse west route receives a full credit of $280,000; the lower Iron Horse east route receives a credit of $112,000 for the transmission. The cost for internal labor for engineering, design, and project

management was pointed out. The design for the lower side distribution and also on the lower Iron Horse east route includes an extra transmission representing the difference in cost. He pointed out contract labor and design costs. There is an extra cost with the transmission on the east lower Iron Horse route compared to the west route. There is no low side construction needed at the existing site, but needed on both Iron Horse options. The distribution can be reused at the existing site and would cost about $1 million to move it to lower Iron Horse. The cost associated with land acquisition at the existing site is $350,000 to remove equipment so there is a buildable site. Moving to lower Iron Horse is more expensive because RMP would be removing the entire substation. Construction overhead is based on the total cost and he discussed financing costs. Iron Horse west or Option 2 represents a cost difference of $2.5 million. RMP has committed to do something similar to a special service district wherein if that cost is paid up front, Park City receives a 7% discount on interest charges for either Iron Horse option. Mr. Bowles stated that there are no additional right-of-way costs associated with the west location but locating on the east side of road would require an 80 foot right-of-way. He acknowledged ownership confusion about whether the City or Mark Fischer owns the property. Through illustration of a map, Mr. Bowles described the location. He believed the current right-of-way is 40 to 50 feet and the 80 foot right-of-way is needed to provide adequate clearances because of the hill.

The Mayor pointed out that the cost projections are based on above-ground. He asked about financing options and Steve Rush responded that RMP does not offer a financing program. Kevin Freestone added that having a city ask RMP to relocate a substation is a unique situation and undergrounding utilities is dictated by the Legislature. Mr. Rush emphasized that Park City will have to come up with the money because RMP is not involved in special service districts. Diane Foster interjected that there might be other opportunities available in the future if approved by the Legislature.

The Mayor encouraged public input on this project and announced that on October 23 a community meeting will be held at The Yard from 5 p.m. to 7 p.m. On October 15, a stakeholders meeting will be held from 4 p.m. to 5:30 p.m. at The Yard. On October 24, the Bonanza Park form-based code will be presented at the Planning Commission meeting, but the substation will not be a focus of discussion. The City Council will hold another work session on this matter on October 25.

Alex Butwinski asked about the cost of undergrounding and Kevin Freestone responded that first the location of the substation needs to be determined. Matt Cassel estimated that undergrounding would cost $5 to $6 million per mile. Brian Bowles indicated that RMP is somewhat hesitant to estimate the cost of undergrounding this project. RMP just completed a project in the Gateway area where three lines were undergrounded for three blocks and he will share those costs with staff. Mr. Rush stated that state law is very specific about the customer paying for undergrounding transmission. Mr. Bowles felt he could provide more cost information on a RDA project in Salt Lake as well.

Ms. Matsumoto asked the cost of a terminating tower and Mr. Bowles advised that the structures are about $100,000 apiece. He spoke about undergrounding and discovering unanticipated problems which add costs. Dick Peek asked about the bidding process and Mr. Bowles stated that many times RMP bids it. Steve Rush emphasized that price is dependent on the current cost of materials.

Mayor Williams described the community as very protective of its view sheds. He feared the substation will create adverse economic impacts with regard to property values. He felt that the towers are somewhat dwarfed by the hill but the look of the substation it is a lot different when the towers are located in a neighborhood.

Steve Rush stated that they will evaluate those options and spoke about a pre-rusted pole which would blend in better with the environment.

Prepared by Janet M. Scott, City Recorder

Park City Substation Relocation Cost Evaluation

Rocky Mountain Power Cost Evaluation

DRAFT v10.05.2012

		Park City Conversion	Lower Iron Horse (East Route)	Variance to Park City (East Route)	Lower Iron Horse (West Route)	Variance to Park City (West Route)	Numbers Provided By	Variability Driver
		RMP Costs	RMP Costs	RMP Costs	RMP Costs	RMP Costs		
1	**Substation Material**	$2,451,421	$3,294,208	$842,787	$3,126,209	$674,788	RMP	
2	Substation Equipment not transformer)	$486,991	$1,443,778	$956,787	$1,443,779	$956,788	RMP	Commodity Price
3	Transformers	$1,692,430	$1,692,430		$1,692,430		RMP	Transformer Market
4	Equipment Salvage***	-$8,000	-$10,000	-$2,000	-$10,000	-$2,000	RMP	Salvage Value
5	Transmission Cost	$280,000	$168,000	-$112,000	$0	-$280,000	RMP	Commodity Price
6	**Labor (Engineering, Project Management, Internal Crews)**	$450,924	$596,714	$145,790	$558,806	$107,882	RMP	Labor Rate
7	**Contract Labor**	$3,422,297	$4,045,698	$623,401	$3,882,210	$459,913	RMP	Labor Rate
8	**Distribution (Material, Labor, Construction)**		$1,077,165	$1,077,165	$1,077,165	$1,077,165	RMP	Commodity Price / Labor Rate
9	**Land Acquisition**	$350,000	$500,000	$150,000	$500,000	$150,000	RMP/Park City	
10	(1) Park City Substation Property (0.838 Acres @ $30/sq ft. = $1,095,090)						RMP	Land Value
11	Cost to Vacate Existing Property and Remove Equipment		$500,000	$500,000	$500,000	$500,000	RMP	Disposal Cost / Labor Rate
12	Cost to remove equipment and stay at Park City.	$350,000		-$350,000		-$350,000		
13	(2) Lower Iron Horse Property * Land Value Difference from Park City (2.06 Acres @ $15/sq ft. = $1,346,000)		$0		$0		RMP	Land Value
14	**Construction Overhead**	$792,867	$919,180	$126,313	$876,575	$83,708	RMP	
15	**AFUDC (Interest During Construction)**	$516,916	$628,879	$111,963	$599,681	$82,765		
16	**Transmission ROW (Substation Interconnect Only)**	$0	$804,600	$804,600	$0		RMP	Land Value
17	Sub Totals	$7,467,509	$11,237,565		$10,020,965			
18	Actual Excess Cost for Relocating Substation			$3,770,056		$2,553,456		
19	Actual Excess Cost for Relocating Substation if Paid Upfront (≈7% Cost Savings)			$3,506,152		$2,374,714		

* Park City/Mr. Fischer will be providing the Lower Iron Horse property + bank owned property as one parcel to RMP. The site is expected to be at grade, existing structures removed and the existing road relocated. The company will vacate the existing Park City Substation upon completion. Park City will be responsible for the cost difference between the Park City substation site and the Lower Iron Horse property.

** The site is expected to disturb 2777 cubic yards.

*** Transformers and distribution breakers will be kept as spare inventory. The remaining equipment will be salvaged. Current market price for scrap steel is $200 a gross ton.

**** These costs do not reflect any costs associated with a block wall or landscaping at either site.

Draft – The figures represented are very high level estimates only and are strictly for discussion purposes only.