City Council
Staff Report

Subject:	**Discussion of Rocky Mountain Power's Substation Location**
Authors:	**Matthew Cassel, P.E., City Engineer** **Thomas Eddington, Planning Director**
Date:	**November 15, 2012**
Type of Item:	**Informational**

Recommendations:
This discussion is about the final location of the Park City Substation currently located in the Bonanza Park (BoPa) re-development area and proposed to be moved to the 1555 Lower Iron Horse Drive location. Staff recommends that Council discuss and provide direction to relocate the substation to 1555 Lower Iron Horse Drive or to expand the existing substation.

Topic/Description:
With the existing Park City substation nearing capacity, Rocky Mountain Power's (RMP) goal is to have the expanded/relocated Park City substation on line by the fall of 2015. To meet this timetable, RMP is looking for direction by the end of January to either upgrade the existing substation or relocate the substation to 1555 Lower Iron Horse Drive.

Background:
Rocky Mountain Power (RMP) owns the Park City Substation in the Bonanza Park area which is critical to the City's power grid. It takes transmission line energy and converts it to distribution level charges that flow to homes and businesses in a significant portion of Park City. The substation is currently running nearly full. According to state law, RMP is under obligation to provide service and has determined that the Park City power grid must be upgraded. The upgrades are according to a regional power grid improvement and service area upgrade master plan that area officials helped shape about three (3) years ago.

RMP created a Summit Wasatch Electrical Task Force in 2009, which spent over a year developing a long range plan for Summit and Wasatch Counties. Park City was represented on this task force. The purpose of the plan was to integrate local government's long-term land use development plans with future electrical network requirements. Principles from this plan may not necessarily reflect the position of each particular jurisdiction, but those involved support it as a good-faith effort to balance community and regional quality of life and economic development consideration with the need to ensure that all jurisdictions in Summit and Wasatch Counties have a safe, adequate and reliable supply of electricity.

This discussion is the first phase of a much larger discussion concerning the future of overall power in Park City. This phase focuses entirely on the relocation/expansion of the existing PC substation located in the Bonanza Park area. Once the substation location is determined, staff will be returning to City Council with the next phase, which will address power pole alignment to the substation, power pole height through Old Town, and the upgrade of the Judge Substation.

RMP approached the City approximately eighteen (18) months ago indicating that the Park City Substation is extremely close to capacity and is in need of expansion. The goal is to have the substation expansion occur within the next two (2) years – to be up and running in 2015. Staff recognized that this was the opportunity to investigate the possibility of moving the substation. Discussion took place concerning relocation options available for Park City including:

- If the substation is moved less than a ¼ mile from its current site, the magnitude of the cost impacts might be reasonable.
- The possible combination of the Judge Substation (located at the top of Daly Avenue) and the Park City Substation into one and relocating it to the Judge Site. RMP saw this as a very expensive option because the new transmission lines would need to be routed up to the site and new distribution lines would need to be routed out from the substation.
- The possible combination of the Judge Substation and the Park City Substation into one and relocating it to a "better" site. Again, RMP saw this as a very expensive option because the new transmission lines would need to be routed up to the new site and new distribution lines would need to be routed out from the substation.

As staff has continued to work through this process, the goals of PCMC for the Bonanza Park area were taken into account. Staff recognized the importance of ensuring that all infrastructure projects are well thought out and planned to effectuate the City's BoPa Plan. Moving the substation is an important first step in this ongoing process. Accordingly, RMP, staff and community stakeholders identified seven (7) possible sites within a ¼ mile of the existing substation. It should be noted that staff site selections only included un-developed or partially developed sites. The proposed sites included:

- Current location looking to expand to the north (Recycle Center);
- Current location looking to expand to the west (Mark Fischer's property);
- 2125 Monitor Drive - directly behind the cemetery (to the northeast of the Boothill Water facility);
- 1100 Snow Creek - between Snow Creek Shopping Center and behind Zion's Bank;
- A site adjacent to our Aeries water tank;
- Powdr Corporation's property off Munchkin Road; and
- 1185 Lower Iron Horse (the property located at the end of Lower Iron Horse).

Each of these sites was rated by staff using the Summit Wasatch Electrical Plan Scorecard provided in the RMP Long Range Plan. Once the sites were selected and evaluated, the scorecard was turned over to RMP so they could start their analysis of each site. With four (4) staff members scoring, the site rankings using the RMP score sheet are as follows (the higher the score, the more desirable):

- Existing location (Recycle Center or Mark Fischer's Property) 104
- 2125 Monitor Drive 93
- 1100 Snow Creek 92
- Site adjacent to Aerie tank 86
- Powdr Corporation's property 85
- 1185 Lower Iron Horse 54

After an April 25, 2011 meeting between local land owners and RMP, Mark Fischer offered his property located at 1555 Lower Iron Horse Drive as a potential location for the substation. Staff prepared GIS drawings for RMP showing zoning, property lines, setback requirements and other environmental concerns. After RMP had a chance to review the maps, staff and RMP visited each of the sites on Mark Fischer's property to determine the feasibility (as determined by RMP criteria) of each. Through their evaluation, RMP eliminated all but two (2) sites. A map is included in the exhibits showing the location of these two sites.

The two (2) final sites identified do have a total of three (3) alternatives as described below:

- 1555 Lower Iron Horse Drive with the incoming transmission power lines remaining in their existing alignment,
- 1555 Lower Iron Horse Drive with the incoming transmission power lines moved to the east of Bonanza Drive, and
- Expansion of the existing substation.

On September 12, 2011, the Mayor, City Council Member Simpson and the City Manager asked RMP to consider moving the substation to1555 Lower Iron Horse Drive. This request was consistent with recent discussions about Bonanza Park re-development. While Park City has been working with Rocky Mountain Power on the analysis of the two (2) identified sites, Mark Fischer has also been dealing directly with Rocky Mountain Power. Park City is not involved with Mark Fischer's deal negotiation with RMP.

On December 1, 2011, RMP and staff provided information to City Council during the work session. This discussion included how the final two sites were selected, why the substation needs to be expanded/relocated, how the sites might look, positives and negatives of the sites and the next steps to be taken in the process.

Since the December 1, 2011 meeting, RMP has been evaluating these two (2) sites and three options, including site visits, survey and trying to fit their pieces of equipment on

both sites. RMP has worked cooperatively with staff evaluating these sites and indicated that they do not have a preference between either site. A lot of work has been done over this last year, and in September 2012, staff was finally comfortable that the information was robust enough to start the stakeholder and public meetings and to come to Council for further discussion.

RMP, though, is pushing for a decision by January 1, 2013 so they can then change their focus to the alignment design for the overhead power lines coming into the substation. Until the final substation site is determined, RMP has indicated that they cannot start on the overhead power line alignment design.

October 11 Study Session – The study session with City Council was the first opportunity for staff to discuss the layout and cost of each site. RMP had supplied this information just a couple of weeks before the meeting.

October 15 Stakeholder Meeting – Staff and RMP representatives prepared a presentation to stakeholders immediately surrounding the proposed 1555 Lower Iron Horse Substation. The question and answer discussion focused on the two sites and the advantages and disadvantages of each site.

October 23 Community Meeting – The community meeting was held in an open house format with a total of five stations providing a varying amount of information. The five stations included:

1. Why there is consideration for both sites,
2. Expansion of the existing substation,
3. Relocation of the substation to 1555 Lower Iron Horse Drive,
4. Other valuable information including EMF data and an estimate of construction costs,
5. A sign-in and comment card station.

Numerous comment cards were received back from attendees and are attached to this staff report.

Analysis:
The following analysis provides summary information with numerous exhibits to tell the full story.

Why should the City Consider Moving the Substation?
The reasons for considering the relocation of the substation include:

- The City's Planning Department completed the Bonanza Park Area Plan in January 2012,
- The Plan recommends the creation of a mixed-use (e.g. commercial and residential uses) neighborhood for this area,
- The current substation is in the heart of the Bonanza Park Area Plan and impacts past and future decisions for this Area Plan,

- This is the most opportune time to consider moving the substation. When expanded/relocated, the new substation will have a life of up to 100 years. If after the substation is expanded and then there is a decision to move it, the cost would significantly increase.

Site Layout of Proposed and Existing

Included in the exhibits are the site layouts and renderings for both the 1555 Lower Iron Horse Drive site and the existing site. The exhibits include:

- 1555 Lower Iron Horse Drive Site
  - Site plan of substation site,
  - Existing view looking north on Bonanza Drive,
  - Rendered view looking north on Bonanza Drive,
  - Existing view looking north from Fireside parking lot, and
  - Rendered view looking north from Fireside parking lot,
- Existing Site
  - Site plan of substation site,
  - Existing view looking south from Munchkin Drive,
  - Rendering view looking south from Munchkin Drive,

RMP has recently confirmed that the modified layout of the 1555 Lower Iron Horse Drive will work, which will allow for the access drive for the Iron Horse apartments to be located to the north of the substation. In the development of this substation site, staff identified four possible alignments for the access road around the substation and servicing the Iron Horse apartments. These alignments will be shown during the work session meeting but their order of preference is as follows:

1. Aligning the road between Silver Creek and the proposed substation with egress either at the original Lower Iron Horse Drive location or at the Upper Iron Horse Drive location,
2. Aligning the road between the hillside and the proposed substation with egress either at the original Lower Iron Horse Drive location or at the Upper Iron Horse Drive location,
3. Aligning the road between Silver Creek and the proposed substation with egress near the intersection of the Rail Trail and Bonanza Drive, and
4. Construct a bridge across Silver Creek and the Rail Trail. The bridge's approximate location would be just east of the Iron Horse apartments and would land in the Prospector Square just west of Lot G.

Because of the technical nature of this project, staff has hired Steve Nash with ICPE to assist the city in reviewing the technical and cost information provided by RMP. Because they have just been hired, they are busy getting up to speed on the project but will be available during the work session meeting to help clarify issues for Council

Positives and Negatives of the Expansion/Relocation

During the December 1, 2011 work session meeting with Council, staff provided a list of positive and negatives for both the expansion in the current location and for relocation to 1555 Lower Iron Horse Drive. This list is included below for Council's reference.

ROCKY MOUNTAIN POWER'S SUBSTATION LOCATION		
IMPACTS FOR 1555 LOWER IRON HORSE DRIVE	**POSITIVES**	**NEGATIVES**
The property at 1555 Lower Iron Horse Drive is currently a fueling station and laundry facility.	The substation will significantly decrease traffic in the area.	Higher structures located in the substation will need to be mitigated.
	Without traffic & other outdoor uses, the noise levels will significantly reduce.	The traditional walking shortcuts used by the neighborhood would be lost to the substation.
	Substation would have a minimum amount of light, thus helping to meet our night sky ordinance.	Aeries subdivision, Iron Horse Condos and Fireside Condos will see the substation facility if not properly screened and landscaped.
	EMF Issue - This substation location could have a larger buffer from existing resident.	Economic justice issues related to lower income housing that could be impacted.
	This site would not locate the substation in a view corridor.	The potential public costs to the City if the relocation plan is more expensive.
	Because of the potential to shorten the length of transmission lines into the substation, the opportunity to bury more power lines appears to be greater.	Development of an alternative access road to the apartment complex would be required.
	A good wall/fencing/screening system could hide the substation at ground level.	The large fenced or walled substation may be susceptible to vandalism such as graffiti.
		The substation will create a different sense of place in the immediate location of the property.

ROCKY MOUNTAIN POWER'S SUBSTATION LOCATION		
IMPACTS FOR EXISTING SUBSTATION SITE	**POSITIVES**	**NEGATIVES**
The existing substation location is currently in the heart of the future BoPa redevelopment	Without traffic and other outdoor uses on the property, the noise levels will significantly reduce.	Higher structures will be located in the substation, which will be potentially visible throughout the BoPa re-development.
	The substation would have a minimum amount of light and thus assist in meeting our night sky ordinance.	EMF Issue - It is highly likely that residents will be increasingly closer in this location as the re-development attempts to maximize footprint usage and thus reduce the buffer area around the substation.
	A good wall/fencing/screening system could hide the substation at ground level.	The existing substation is in a view corridor.
		Expansion of the existing substation location would be right in the heart of the BoPa re-development and thus not allowing the re-development to reach its full potential.

ROCKY MOUNTAIN POWER'S SUBSTATION LOCATION		
IMPACTS TO CITY	**POSITIVES**	**NEGATIVES**
Is this a positive or negative deal for Park City to move the substation?	Minimal costs for expansion at existing location for RMP.	Cost to move existing substation to 1555 Lower Iron Horse location.
	Opens up BoPa for opportunities with relocation to 1555 Lower Iron Horse location.	BoPa Area Plan would have to be revisited with expansion at existing location.
	Contaminated soil cost at existing location for RMP.	Additional distribution lines may be required.
	Power lines into 1555 Lower Iron Horse can remain overhead while power lines out may be buried.	Cost to bury overhead power lines will be greater at existing location.
	Less transmission poles and lines may be installed by RMP at 1555 Lower Iron Horse location.	Access development required for apartment complex at 1555 Lower Iron Horse location.

ROCKY MOUNTAIN POWER'S SUBSTATION LOCATION		
IMPACTS TO MARK FISCHER	**POSITIVES**	**NEGATIVES**
Mark Fischer is the 3rd party involved. He offered his property at 1555 Lower Iron Horse Drive. Is this a positive deal for him?	Existing substation property adjacent to his BoPa parcel.	Contaminated soils cost at 1555 Lower Iron Horse Drive location.
	Greater potential for the existing substation property adjacent to his BoPa parcel.	Loss of revenue from 1555 Lower Iron Horse Drive if this location is used.
	Clear his property in the BoPa area of power poles and lines.	

Property Ownership Adjacent to 1555 Lower Iron Horse Drive

The properties with ownership surrounding the proposed location at 1555 Lower Iron Horse Drive (Ironhorse Industrial) include:

- Rail Trail (Park City Municipal Corporation)
- Iron Horse Park (Iron Horse Apartments),
- Iron Horse Condominiums (individually owned),
- Fireside Condominiums (individually owned),
- Ironhorse Park Commercial Subdivision (Wintzer-Wolfe Properties), and
- Bonanza Place (Mark Fischer is now owner).

One issue that is being worked through between the Iron Horse Apartments owner and 1555 Lower Iron Horse owner is the ownership of a section of Lower Iron Horse Drive. The most recently recorded plats show the road to be an easement across the Ironhorse Industrial Subdivision while the owners of Iron Horse Apartments indicate that they own the road.

Economic Impacts

While a detailed analysis of the existing site's development potential has not been completed, a quick-back-of-the-napkin analysis indicates the .83 acre lot that the current substation sits upon could house approximately 144,000 SF of development based upon the proposed Bonanza Park Area Plan. Assuming the building contained the following uses and layout, one could anticipate annual property (real estate) and sales taxes generated to be approximately $913,000 per year ($220,000 for Park City specifically):

	% of Bldng	SF	$ / SF (sale)	Actual	Assessed
Retail	20%	28,800	175	5,040,000	5,040,000
Office	20%	28,800	175	5,040,000	5,040,000
Residential (Affordable)	20%	28,800	200	5,760,000	3,168,000
Residential (Primary)	30%	43,200	325	14,040,000	7,722,000
Residential (Second Home)	10%	14,400	500	7,200,000	7,200,000
		144,325		37,080,000	28,170,000

Property (Real Estate) Taxes

		PC Share
Area Real Estate Tax Rate	0.009546	0.001431

	Total	PC Share
PCMC, School District, Summit County, PC Fire, Weber Basin, and Mosquito Abatement — Estimated Annual RE Taxes	$268,911	$40,311

Sales Taxes

Commercial - Retail SF	28,800	
Estimated $ / SF per Design Workshop Study	250	
Utah General Sales Tax	0.047	
Summit County Options Sales Tax	0.0025	
Summit - Recreation, Arts, and Parks Tax	0.001	
Summit - Restaurant Tax	0.01	
Summit - Motor Vehicle Rental Tax (NA)	0.025	
Summit - Transient Room Tax (NA)	0.03	

		PC Share
Resort Sales Tax Rate (2012+)	0.016	0.016
Local Option Sales Tax	0.01	0.006
Mass Transit Tax	0.003	0.003

	Total	PC Share
Estimated Annual Sale Taxes	$644,400	$180,000

Total Taxes

	Total	PC Share
Total Annual Taxes Estimated	$913,311	$220,311

Note that this is a very rough analysis; however it is indicative of the loss of revenue that would occur if the substation remained in its current location. In addition to this direct loss of revenue, the negative externalities of the substation in its current location include eliminating development opportunities surrounding it. One could conclude that no restaurants (high dollar revenue generators at $400/SF) would locate directly surrounding the substation. It is highly unlikely that any development would take place directly adjacent to or across the street from the substation with the exception of possible storage, archival, similar spaces that would not require windows/views out toward the facility. Assuming this area was the length of the two sides of the substation boundary (the other side is the proposed park per the Bonanza Park Area Plan where development is not proposed), this would equate to

approximately 620 linear feet and assume a depth (or setback) of 35 feet for lost development opportunities. This would equate to an area that is approximately a half acre in size. Using the same back-of-the-napkin analysis noted above, this would equate to an additional $132,000 in lost property and sales tax revenues (annually) for the City. The total lost revenue for the City (for the RMP site and the area immediately surrounding the site) would be approximately $352,000 annually. This does not take into consideration additional losses that cannot be predicted; such as an estimate of the overall impacts to the Bonanza Park area given that the substation maintains an "industrial" look and feel. Many new developments may stay away from this overall area as they look at location, location, location challenges.

In addition to the economic/revenue losses for the City are the qualitative losses for the City in terms of aesthetics, streetscape, and park layout/design. The proposed Bonanza Park Area Plan envisions this area as one of lively streets, an open park area, mixed use development opportunities, etc. If the substation remained, the impact on the streetscape would be severe; likely to the point of severely decreasing walkability on the streets surrounding it. In addition, the aesthetics of the area would be severely compromised as the views of the substation from future buildings as well as the park would be undesirable. There are no hillside slopes or natural buffers to mitigate these views in its current location. Ultimately, the substation at its existing location would compromise the entire Bonanza Park Area Plan; the proposed park/open space would have to be relocated, building setbacks would have to be altered, and the proposed mix of uses would be reduced for the area surrounding the substation.

Previous Move of the Substation from Lower Main Street

On December 15, 1983, Park City Municipal Corporation entered into an agreement with Utah Power and Light (currently RMP) to move the electrical substation from its location near Park Avenue and the Depot to its current location. One consideration of the agreement was that Utah Power and Light abandon its plans to relocate the electrical substation to a location near the intersection of SR-224 and Holiday Ranch Loop Road. In recent meetings with RMP, they have indicated that Park City initiated the move, but the May 19, 1983 City Council meeting minutes do not shed more light on the issue. Information found does not indicate why the substation was moved.

Electric and Magnetic Fields

During the October 23 Community Meeting, the fourth information station had a discussion item concerning the effects of electric and magnetic fields (EMF) created by power lines. Margaret Oler, from RMP, staffed the station and provided information to those attending the meeting. The board provided at the meeting is attached in the exhibits. The following information was provided on the board:

"What have scientists concluded about EMF and health?

Respected scientific organizations have not concluded that EMF is known to cause any disease. Neither have these organizations proposed any exposure limits nor required new measures to reduce EMF exposures in community settings. These conclusions are the results of more than 30 years of extensive studies conducted by large groups of scientists in numerous national and international organizations. These organizations include:

- U.S. National Institute of Environmental Health Sciences
- National Academy of Sciences
- International Agency for Research on Cancer
- Health Council of the Netherlands"

Buried versus overhead

Throughout the discussions concerning the substation, buried power lines versus overhead power lines has been for the most part, set to the side. This section discusses this issue and attempts to put a very approximate cost to this alternative. There four sections of power lines to be evaluated; transmission power into and out of 1555 Lower Iron Horse Drive site and transmission power into and out of the existing substation site. Included in the exhibits is a map showing the two potential routes into and out of the proposed 1555 Lower Iron Horse Drive site and the transmission lines into and out of the existing site.

1555 Lower Iron Horse Drive Substation Site

- The transmission line into this site will be moved to the east of Bonanza Drive. With this overhead transmission line outside of the BoPa area, it is staff's recommendation that this line remains overhead.
- The transmission line out of this site could be buried because it does cross through the BoPa area. It is approximately 1,057 feet from this proposed substation site across Bonanza Drive and then north to SR-248. RMP is estimating the cost to bury transmission lines at a minimum of $8,000,000 per mile. The estimate to bury this section of transmission line is $1,601,500.

Existing Substation Site

- The transmission line into this site will remain to the west of Bonanza Drive. It is recommended that the transmission line be buried starting at the intersection of Iron Horse Drive and Bonanza Drive and ending at the existing substation. It is approximately 1,048 feet from this intersection to the existing substation. At $8,000,000 per mile, the estimate to bury this section of transmission line is $1,587,900.
- The transmission line out of this site could be buried because it does cross through the BoPa area. It is approximately 1,100 feet from the existing substation site and then north to SR-248. At $8,000,000 per mile, the estimate to bury this section of transmission line is $1,666,700.

Cost Discussion

Included in the exhibits is the comparison cost estimate for the expansion/relocation of the substation. These numbers have been provided by Rocky Mountain Power and have not yet been reviewed by our consultant. The bottom line cost from the spreadsheet is summarized below along with other potential costs of the project that need to be acknowledged:

	Expansion at Existing Site	Relocation to 1555 Lower Iron Horse site (Power lines west of Bonanza)	Relocation to 1555 Lower Iron Horse site (Power Lines east of Bonanza)
Cost to expand/relocate substation	$0	$2,553,456	$3,770,056
Cost to move road, utilities, construct retaining walls	$0	$865,000	$865,000
Total Cost to either expand or relocate Substation	$0	$3,418,456	$4,635,056
Bury transmission lines out of 1555 Lower Iron Horse site	$0	$1,601,500	$1,601,500
Bury transmission lines into existing site	$1,587,900	$0	$0
Bury transmission lines out of existing site	$1,666,700	$0	$0
Option 1			
Cost with all overhead transmission lines	$0	$3,418,456	$4,635,056
Cost with buried transmission lines	$3,254,600	$5,019,956	$6,236,556
Option 2			
If land costs do not materialize for each option	-$0	-$150,000	-$954,600
Cost with all	$0	$3,268,456	$3,680,456

overhead transmission lines			
Cost with buried transmission lines	$3,254,600	$4,869,956	$5,281,956
Option 3			
If construction costs paid upfront	-$0	-$82,765	-$111,963
Cost with all overhead transmission lines	$0	$3,335,691	$4,523,093
Cost with buried transmission lines	$3,254,600	$4,936,191	$6,124,593
Option 4			
If land costs do not materialize and construction costs paid up front	-$0	-$232,765	-$1,066,563
Cost with all overhead transmission lines	$0	$3,185,691	$3,568,493
Cost with buried transmission lines	$3,254,600	$4,787,191	$5,169,993

Funding for this project has not been currently identified. Preliminary discussions with RMP about funding options offered by the utility revealed that they do not provide any programs that help municipalities to finance projects. Staff recognizes that funding strategies for this project will need to be a key item for discussion.

Next Steps

RMP needs a decision to be made by January 1, 2013 so they can maintain their schedule. Once a decision is made to expand/relocate the substation RMP next two steps will be:

- RMP will submit an application for a CUP, which will go before the Planning Commission; and
- RMP would then turn their focus on the overhead power lines alignment and pole location.

Staff's Recommendation

Staff is requesting council discussion and direction on the following issues/questions:

- What additional information does Council need? (Staff is already planning on returning to Council with a detailed discussion of costs, once our consultant has had an opportunity to do that analysis.)

- Does Council support the relocation of the substation?
- Under what conditions would Council support the relocation?

Department Review:
This report has been reviewed by City Manager, Planning, Sustainability and Legal. All comments have been integrated into this report.

Significant Impacts

	World Class Multi-Seasonal Resort Destination (Economic Impact)	Preserving & Enhancing the Natural Environment (Environmental Impact)	An Inclusive Community of Diverse Economic & Cultural Opportunities (Social Equity Impact)	Responsive, Cutting-Edge & Effective Government
Which Desired Outcomes might the Recommended Action Impact?	+ Unique and diverse businesses + Safe community that is walkable and bike-able + Balance between tourism and local quality of life	- Managed natural resources balancing ecosystem needs + Economically and environmentally feasible soil disposal + Abundant preserved and publicly-accessible open space	+ Residents live and work locally + Cluster development while preserving open space + Physically and socially connected neighborhoods	+ Fiscally and legally sound + Well-maintained assets and infrastructure
Assessment of Overall Impact on Council Priority *(Quality of Life Impact)*	Very Positive	Positive	Very Positive	Very Positive
Comments:				

The above recommendation grid is based on the substation being moved to the 1555 Lower Iron Horse Drive location. The significant impacts from moving the substation include:

- By moving the substation to a location that currently houses a fueling station and laundry facilities, the open space in in BoPa can be fully realized,
- Locating the substation near the rail trail and along Bonanza Drive will create challenges in trying to soften and/or hide the proposed facility to reduce its visual impacts to the trail users and those entering the City,

Recommendation:
This discussion is about the final location of the Park City Substation currently located in the Bonanza Park (BoPa) re-development area and proposed to be moved to the 1555 Lower Iron Horse Drive location. Staff recommends that Council discuss and provide direction to relocate the substation to 1555 Lower Iron Horse Drive or to expand the existing substation.

Exhibits – *EXHIBIT A* **-** Comments from October 23 community meeting
EXHIBIT B - Map of both sites (provided by RMP)

1555 Lower Iron Horse Drive site information including:
EXHIBIT C1 - Site plan of substation site
EXHIBIT C2 - Existing view looking north on Bonanza Drive
EXHIBIT C3 - Rendered view looking north on Bonanza Drive
EXHIBIT C4 - Existing view looking north from Fireside parking lot
EXHIBIT C5 - Rendered view looking north from Fireside parking lot

Existing site information including:
EXHIBIT D1 - Site plan of substation site
EXHIBIT D2 - Existing view looking south from Munchkin Drive
EXHIBIT D3 - Rendering view looking south from Munchkin Drive

EXHIBIT E - Map of Power Line Routes (provided by RMP)
EXHIBIT F - EMF Discussion Panel (provided by RMP)
EXHIBIT G - Rocky Mountain Power cost evaluation (provided by RMP)

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

EXHIBIT A

Comments, Questions, Suggestions

Move Substation to 1355 Iron Horse –
Look for out of the box ways to stealth the
Substation & transmission lines!

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY
1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Excellent job of PCMC & RMP staff of presenting info. in lay-person terms.

Also, Kudos for the collaboration towards most optimal solution to increased demand.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Lisa Yoder
Email or Phone: lisa.yoder@comcast.net
Neighborhood: Summit Park

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY 1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Visual impacts are critical. Put a great deal of effort into shielding the project from public view and diminishing public concerns.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

PLEASE PUT THE NEW SUBSTATION AS FAR AS POSSIBLE BACK FROM THE ROAD SO POWER POLES CAN ALL BE ON EAST SIDE OF BONANZA

PLEASE MAKE SURE EMF AND STRAY CURRENT ISSUES ARE MITIGATED AS MUCH AS POSSIBLE - MY OFFICE IS THE CLOSEST BLDG TO THE NEW STATION LOCATION

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: MARK K. FISCHER
Email or Phone: 410 336 9981
Neighborhood: BONANZA PARK

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY
1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

- Move the substation to the proposed location but with lines run underground
- Heavy landscape berm
- [illegible]

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

The substation needs to be moved to a location where it isn't as visible. The wires need to be underground as station itself needs to be hidden behind landscaping. I feel the Ironhorse Location.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY
1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

The movement to the new location seems very appropriate and reasonable, making the least visual impact and opening up the central area of Bonanza Park to be redeveloped in a more thought full manner.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

After attending the 3 meetings on this topic & seeing the extensive research done by City Staff, I agree that relocating the power substation is this communities best option. The new Iron Horse site shields the power station much better than at its current location. I also am excited to see the redeveloped Bonanza Park done to its fullest potential. That development will be enjoyed by visitors and locals during all 4 seasons.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Matt Kelly
Email or Phone: matt@transactionexpertkw.com
Neighborhood: Park Meadows

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Moving the Substation to the ~~the~~ new location is a fantastic way to spur + revive a new economy + neighborhood. It is preserving the views ~~for~~ everyone of our ridgeline in its current location.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Laura Lewis
Email or Phone: lleelewis2@yahoo.com
Neighborhood: Park Meadows

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Without Question, the substation is the perfect Fit on the Ironhorse location.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Suggestion:
Modernize the existing substation + use the money saved to put some of the powerlines underground.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: PETER WRIGHT
Email or Phone: PWRIGHTJ@COMCAST.NET
Neighborhood: PARK MEADOWS

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

moving it to Iron Horse is a good decision for the city.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Christine Dwyer
Email or Phone: 435-659-1876 4
Neighborhood:

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

I think moving it is the only smart decision.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Candy Pyer
Email or Phone: 582-7276861
Neighborhood:

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

it needs to be moved now. The city of PC will benefit

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

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Optional
Name: F. X. Dwyer
Email or Phone: 435 655 5561
Neighborhood:

PARK CITY 1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

I have a very serious concern that moving the substation effectively puts the ugliness right under an area populated by a poor population in our community while benefiting development for the wealthier part of our community. As such it is simply unfair.
Park City should be above this type of thing.
And no - I am not effected personally.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: PETER WRIGHT
Email or Phone: PWRIGHTTJ@COMCAST.NET
Neighborhood: PARK MEADOWS

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PARK CITY 1884

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

MAKE SENSE TO MOVE.
BONANZA LOCATION NEEDS BETTER SCREENING

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: BRONSON
Email or Phone:
Neighborhood: PARK MEADOWS

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

I THINK THIS DEVELOPMENT WILL BE A GREAT ASSET TO THE COMMUNITY

Move to 1555 Iron Horse

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Jack Lipsch
Email or Phone:
Neighborhood: PARK MEADOWS

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Great idea. Great site. I approve 100%

Move to 1555 Iron Horse

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Michael Lynch
Email or Phone:
Neighborhood: PARK MEADOWS

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

I am not in favor ~~off~~ of having a sub station located on a main entrance to Park City.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

In favor of expansion in place because:

- No cost to City except (possibly) relocation of Recycle Center.
- Redevelopment of BoPa (when and IF) can take substation into account.
- Existing residential @ Northhorse severely impacted
- Potential access to Northhorse through Rail Trail - either City Open Space or State Park. Also creates access to two parcels with potential development
- Visual impact along Bonanza is tremendously bad. Not many residents know where existing substation is, in my opinion
- Not City's role to create greater profits for private developer.
- Dumping substation into area with high percentage of affordable housing (few, if any at Open House) is not socially equitable.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

MOVING THE EXISTING STATION SEEMS TO BE THE BEST SOLUTION FOR ALL INVOLVED.

PROGRESS COMES IN STEPS - THERE WILL BE GROWING PAINS THAT HOPEFULLY WILL BE MINIMIZED FOR SURROUNDING RESIDENTS

INFORMATION & COMMUNICATION IS ALWAYS KEY IN RE ASSURING THAT CONCERNS + QUALITY OF LIFE WILL BE ADDRESSED

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

THANK YOU FOR THIS COMMUNITY MEETING

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

As property manager of Suncreek Condos, 1885 Prospector Ave., and as an owner of a condo at Suncreek, and ~~as~~ on the behalf of the Suncreek Condos HOA and it's board, I (we) strongly disapprove of any re-location of the RMP substation which would result in a road being built next to or near the Suncreek condos and Lot G to provide ingress/egress for the Ironhorse condos residents/guests. This is entirely too much additional vehicle traffic directed onto Prospector Ave (a side street!), which is already heavily ~~traffic~~ traveled.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Scott Sherwood / Wasatch Mtn Properties
Email or Phone: 435-659-8362
Neighborhood: Prospector

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Move the Power Plant. Bonanza Park need to Be All that it can be.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Costanzo
Email or Phone: 435-640-1903
Neighborhood: Prospector Park

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

- I would love to see the power station moved to the bonanza location. Having a proper downtown development would be much more successful with that area cleaned up.
- Only concern would be in regards to the health of people who never asked for the move but live close to the new site.
- I would pay extra to bury the lines vs. keeping the overhead
- One more thing - It's ugly no matter where you put it. Is there a way through sponsoring renewable energies to reduce expected loades on the system?

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

So why is the city involved in the movement of the substation? This is a private matter for private developers + landowners. In my conversation with power company they specifically said they don't "need" to move. So if a private developer wants to "encourage" them to move then is ok as that developer pays for it all. It should not impact other private residents.
↳ ½ allowed

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Move it!

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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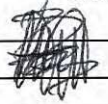
ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Move it 

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Move it

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

- Move substation to crow house location but move away from road + soften as much as possible with landscaping.

Underground is good!

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Please move the Sub Station
~~[illegible]~~ but not near or
neighborhood.
I can walk that is better

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Please move the substation.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY 1881

ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

I think it would be a great idea to move the substation.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: _____
Email or Phone: _____
Neighborhood: _____

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PARK CITY
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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

* Social Equity Concerns MUST be prioritized ABOVE
  Development
  View Condors

* If we have it, cost must be matched by residents AND
  those that will most benefit
  Developers
  Land Owners

* Is there ANY other option? Conservation? Renewable? I'd
  rather spend significantly more for a project that
  moves us forward (sustainability) versus the same old
  soon to be at-doute technology.

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name:_____
Email or Phone:_____
Neighborhood:_____

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ROCKY MOUNTAIN POWER SUBSTATION
COMMUNITY MEETING
TUESDAY, OCTOBER 23, 2012

Comments, Questions, Suggestions

Decisions must be made rapidly - How would ~~we~~ pay for this? underground seems to be prohibitively expensive - but what about the EMF ramifications for the lower Iron Horse neighborhood?

How would a 2-year construction project affect Bonanza (again)? }

Probably more questions to come - - - -

Thank you!

Your Comments, Questions, & Suggestions are greatly appreciated. Thank you.

Optional
Name: Strike
Email or Phone: strke7676@yahoo.com
Neighborhood: Old Town

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PARK CITY
1884

EXHIBIT B

IRON HORSE / PARK CITY SUBSTATIONS

POWER ENGINEERS | PACIFICORP

EXHIBIT C1

EXHIBIT C2

EXISTING CONDITIONS

KOP 1

DATE: 9/19/2012
TIME: 05:45 PM
CAMERA LENS LENGTH: 50mm.
VIEW LOOKING: East

IRON HORSE SUBSTATION

POWER ENGINEERS | PACIFICORP

EXHIBIT C3

KOP 1

DATE: 9/19/2012
TIME: 05:45 PM
CAMERA LENS LENGTH: 50mm.
VIEW LOOKING: East

IRON HORSE SUBSTATION

POWER ENGINEERS | PACIFICORP

EXHIBIT C4

EXISTING CONDITIONS

KOP 2

DATE: 9/19/2012
TIME: 10:23 AM
CAMERA LENS LENGTH: 28mm.
VIEW LOOKING: North

IRON HORSE SUBSTATION

POWER ENGINEERS | PACIFICORP

EXHIBIT C5

KOP 2

DATE: 9/19/2012
TIME: 10:23 AM
CAMERA LENS LENGTH: 28mm.
VIEW LOOKING: North

IRON HORSE SUBSTATION

POWER ENGINEERS | PACIFICORP

EXHIBIT D1

FUTURE SITE PLAN OF EXISTING SUBSTATION SITE

Existing RMP Substation Location

EXHIBIT D2

EXISTING CONDITIONS

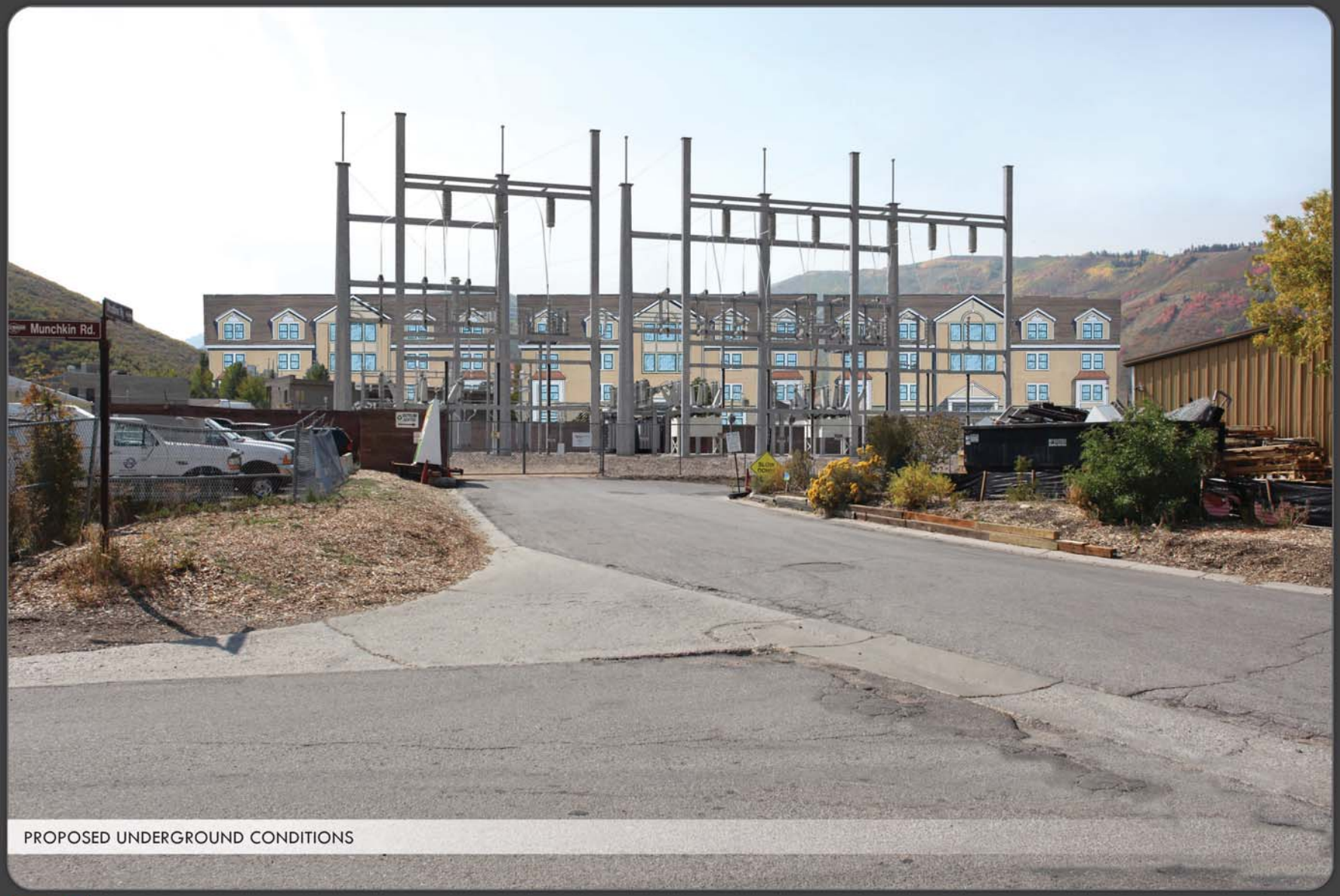
KOP 1

DATE: 9/20/2012
TIME: 11:53 AM
CAMERA LENS LENGTH: 28mm.
VIEW LOOKING: South

PARK CITY SUBSTATION

POWER ENGINEERS | PACIFICORP

EXHIBIT D3



PROPOSED UNDERGROUND CONDITIONS

KOP 1

DATE: 9/20/2012
TIME: 11:53 AM
CAMERA LENS LENGTH: 28mm.
VIEW LOOKING: South

PARK CITY SUBSTATION

POWER ENGINEERS | PACIFICORP

Park City Substation Options

(with transmission line routes)

EXHIBIT E

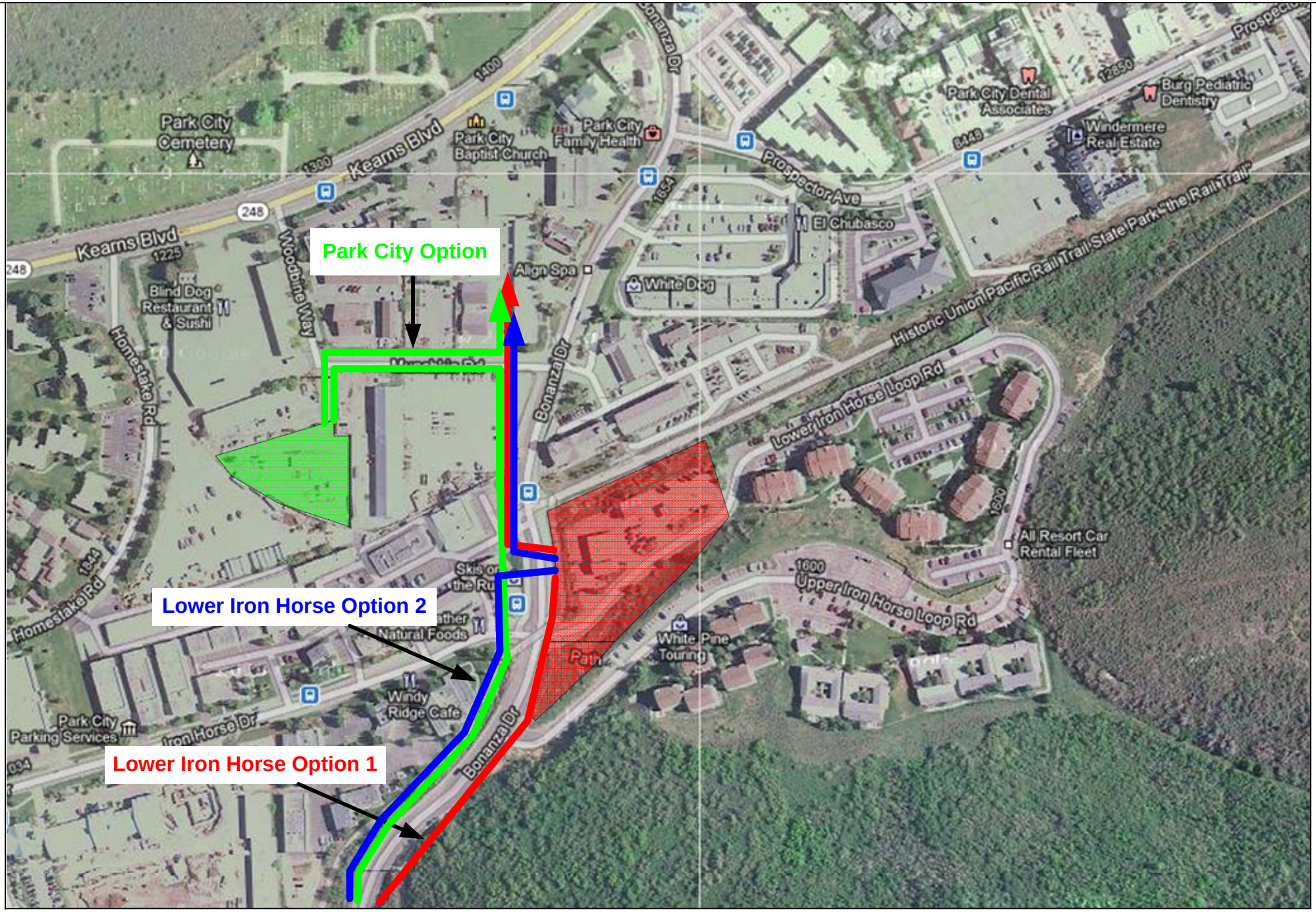
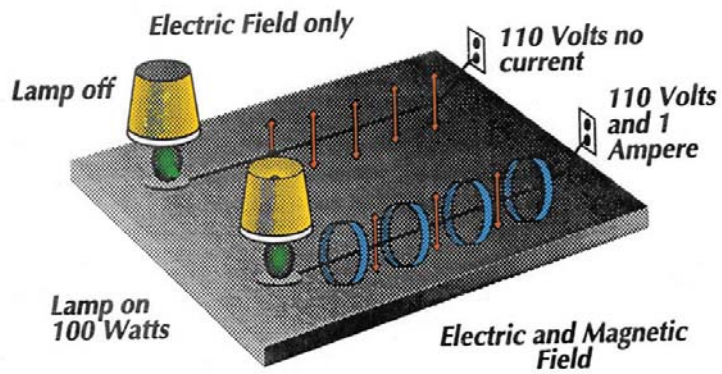


EXHIBIT F

Electric and Magnetic Fields

How are they produced?

Electric fields are created by voltage and are found near any electrical device that is plugged into an electrical outlet. For example, plugging an appliance (lamp, hair dryer) into an electrical wall outlet applies voltage to the cord, which is then surrounded by an electric field. Electric fields are stongest closest to the source.



Magnetic fields are created by flowing current and are found near the cord and electrical device (appliance) plugged in and operating. For example, turning on the appliance creates a flow of current that causes a magnetic field. Magnetic fields are greater for appliances that draw more current. Magnetic strength decreases rapidly as you move away from the source.

What are typical fields?

The strength of the field depends on the amount of current flowing through the electrical device and the voltage level. Fields are strongest immediately surrounding an electric wire or device. Field levels rapidly weaken as you move farther from the source. Electric fields are measured in units of volts per meter, while magnetic fields are measured in gauss or milligauss (1/1,000 gauss).

Field exposure lessens with increased distance from source

Electrical Device	1.2 inches away	12 inches away	39 inches away
Microwave oven	750 to 2,000	40 to 80	3 to 8
Clothes washer	8 to 400	2 to 30	0.1 to 2
Electric range	60 to 2,000	4 to 40	0.1 to 1
Fluorescent lamp	400 to 4,000	5 to 20	0.1 to 3
Hair dryer	60 to 20,000	1 to 70	0.1 to 3
Television	25 to 500	0.4 to 20	0.1 to 2

SOURCE: Adapted from Gauger 1985
NOTE: Measurements are in milligauss

Typical values of fields around distribution and transmission lines

Distribution lines	1 to 80 milligauss under the line
Transmission lines	1 to 300 milligauss edge of right-of-way

NOTE: Maximum values may be lower for some utilities

What have scientists concluded about EMF and health?

Respected scientific organizations have *not* concluded that EMF is known to cause any disease. Neither have these organizations proposed any exposure limits nor required new measures to reduce EMF exposures in community settings.

These conclusions are the results of more than 30 years of extensive studies conducted by large groups of scientists in numerous national and international organizations. These organizations include:

- U.S. National Institute of Environmental Health Sciences
- National Academy of Sciences
- International Agency for Research on Cancer
- Health Council of the Netherlands

EXHIBIT G

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)		
		RMP Costs	RMP Costs	RMP Costs	RMP Costs	RMP Costs	Numbers Provided By	Variability Driver
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.