

Midway City Council
17 December 2019
Regular Meeting

Rocky Mountain Power /
Conditional Use Permit for
Transmission Line



CITY COUNCIL MEETING STAFF REPORT

DATE OF MEETING: December 17, 2019

NAME OF PROJECT: Transmission Line Rebuild along 970 South, Stringtown Road, and Wards Lane

NAME OF APPLICANT: Rocky Mountain Power and Heber Light and Power

AGENDA ITEM: Conditional Use Permit

LOCATION OF ITEM: 970 South, Stringtown Road, and Wards Lane

ZONING DESIGNATION: R-1-15 & R-1-22

ITEM: 5

Rocky Mountain Power and Heber Light and Power are requesting a Conditional Use Permit to rebuild an existing Heber Light and Power transmission line and install a 138kV line for Rocky Mountain Power that will be located on the Heber Light and Power poles. Heber Light and Power would also have a 46 – 138 KV line on the same pole. The proposal will establish a second transmission interconnection which will strengthen service reliability and increase capacity in Midway and the surrounding area. It also creates a “loop” for RMP increasing their capacity to deliver power to a larger area. The portion in Midway is about one mile in length and will follow the existing transmission line along Wards Lane, Stringtown Road, and 970 South. The proposed poles range in height from 65’-88’ above ground.

BACKGROUND:

This request for a Conditional Use Permit (CUP) by Rocky Mountain Power and Heber Light and Power to rebuild the existing transmission line and install a 138kV line for Rocky Mountain Power that will be located on the Heber Light and Power poles. As part of the proposal, the distribution, and potentially, the communication lines that currently

are located on the transmission line poles will be buried along the route. The proposal will establish a second transmission interconnection which will strengthen service reliability and increase capacity in Midway and the surrounding area. The portion in Midway is about one mile in length and will follow the existing transmission line along Wards Lane, Stringtown Road, and 970 South. The proposed poles range in height from 65' -88' above ground.

The plan is to use many of the existing easements, which include prescriptive easements, through property in the city limits. The prescriptive easements are not wide enough for the proposed transmission lines so additional easements will need to be acquired to accommodate the wider easements necessary for the new lines. The proposed poles will be taller than the existing poles along the route in question and will carry considerably more power than what the current transmission lines carry. Heber Light and Power has stated that the main reason for this proposal is to have a second source of power into the Heber Valley. Another reason for the proposal is to increase power capacity for the Heber Valley that is needed because of development and growth. Rocky Mountain Power is an applicant for the conditional use permit because they would like a transmission to connect their areas of service in Summit County and Utah County. Rocky Mountain Power will pay 80% of the cost of the proposed line which will in turn save Heber Light and Power rate payers the cost that would have been required if Heber Light Power were to fix the aforementioned issues on its own. Heber Light and Power rate payers may see an increase in rates though based on the 20% of the transmission line cost that Heber Light and Power is paying for the transmission lines.

Midway residents are concerned about how this upgraded and larger line will impact them. Staff has received comments that range from aesthetics, health concerns, property value concerns, and lack of additional options.

The City recently adopted a transmission line code on January 15, 2019 to regulate the processing and requirements regarding new transmission lines and the rebuilding of existing transmission lines. This code is Section 16.13.47 in the Midway City Municipal Code (please see attached to this report).

The applicant has submitted the following studies and reports to the City. All studies are all available at the Planning Office and on the City's website.

- Underground Transmission Cost/Feasibility Study
- Transmission Lines and Property Values: Review of the Research
- EMF Electric and Magnetic Fields Associated with the Use of Electric Power
- Powering Our Future: Summit Wasatch Electrical Plan Local Planning Handbook

Section 16.13.47 Transmission Line Code Requirements and Comments

Section 16.13.47 (D)(1) prefers that transmission lines follow routes where transmission lines are currently located. The proposal does follow the current location of transmission lines along 970 South, Stringtown Road, and Wards Lane.

Section 16.13.47 (D)(2) prefers the shortest poles allowed by industry standards though all options should be considered for aesthetics and for harmonizing with the vision of Midway City as described in the General Plan. Generally, taller poles will reduce the number of poles and shorter poles will increase the number poles. The proposal is to replace the existing poles that are 55' – 65' in length (includes the buried portion of the poles) with new poles that are 65'-88' above ground. Wood poles may be taller than metal poles even though the same amount of power are carried by both. Wood poles may be preferred though because currently, there are wood poles along this route and second because they don't feel as industrial as metal poles. The height and number of poles is an item the Planning Commission and City Council can determine.

Section 16.13.47 (D)(3) limits the types of poles that are allowed and focusses on the visual impact of the poles and lines. No galvanized poles, or poles with other reflective material can be used. Pole color and material shall be focused on minimizing the visual impact of the transmission line. The City may consider wood poles or metal poles. If metal poles are used, then the City can determine the color that will minimize the visual impact on the community.

Section 16.13.47 (D)(4) allows the City to impose any reasonable restrictions on the conditional use.

Section 16.13.47 (E) allows the City to require the burial of transmission lines and distribution lines that share a transmission line pole. The applicant has stated that distribution will be buried, and communication lines may be buried in conduit the power companies will install. The cost of burying the distribution lines will be paid for by the Heber Light and Power rate payers. The applicants and City will need to work with the communication line companies to have the communication lines buried. Heber Light and Power has offered to install conduit for the communication companies when the conduit for the distribution lines is installed.

The City may, after consideration of cost, require the transmission lines to be buried. Burying the transmission lines will have a positive visual impact on the community by eliminating all current lines and future transmission lines along this specific route. Financially, the difference in cost of above ground lines and buried lines would need to be paid by the City or some other funding source by private individuals. The amount required would need to be paid within 30 days of when construction begins. The limited time allowed to pay for the difference in cost creates complications that would need to be considered.

The Planning Commission first reviewed this item and held a public hearing on May 14, 2019. The following motion was made that night:

Motion: Commissioner Streeter: I move that we continue the application for the transmission line rebuild on 970 South, Stringtown Road and Wards Lane as per our ordinance and accept staff reports. The following conditions are that Rocky Mountain Power provide alternative route study, Rocky Mountain Power and Heber Valley Light and Power to provide cost and size of easements, easement locations, clearly marked, above and below ground with the visual aspects, more clarification as to the number of poles, heights and property line locations and talk to the two large land owners.

Seconded: Commissioner O'Toole

Chairman Kohler: Any discussion on the motion?

Commissioner

Chairman Kohler: All in favor.

Ayes: Commissioners Streeter, Payne, O'Toole, Nicholas, Bouwhuis (Alternates Whitney and McKeon-no vote needed)

Nays: None

Motion: Passed

The applicant provided additional information, which is included with this staff report, and has addressed the items listed in the motion which are the following:

- Alternative route study

The City code prefers that transmission lines follow routes where transmission lines are currently located. The proposal does follow the current location of transmission lines along 970 South, Stringtown Road, and Wards Lane.

- Provide cost and size of easements

The applicant has provided a series of 12 maps (please see maps included with this report) that describes the amount of easements that must be obtained for three potential scenarios. The first set is titled "Option A (short spans)" and shows the developer would need to acquire easements beyond the current prescriptive easement to a total of 13,123 sq. ft. The estimated of value of the easement is \$22,594.70 (please see included excel spreadsheet) for this option. The second set is "Option B (long spans)" and shows the developer would need to acquire more easements beyond the current prescriptive easement to a total of 14,952 sq. ft. The estimated of value of the easement is \$25,743.80 for this option. The third set is "Option C (Underground)" and shows the developer would need to acquire more easements beyond the current prescriptive easement to a total of 2,574 sq. ft. The estimated of value of the easement is \$4,431.82 for this option.

- Easement locations

The previously described series of 12 maps identifies the location of the current prescriptive easement and the proposed easements based on the potential three scenarios of short spans, long spans, or underground. As mentioned in the previous point, the number of easements that will need to be acquired above the current prescriptive easement is the following: short spans – 13,123 sq. ft., long spans – 14,952 sq. ft., and underground – 2,574 sq. ft.

- Visual impacts

The applicant has provided some updated photo simulations for a section of the transmission line route (please see included photos). The photos show the area along Wards Lane with poles with short spans and poles with long spans. The short span wood poles are 65' tall above grade and the long span poles are 75' above grade. The applicant has also provided series of photos titled "46 kV-138kV Rights-of-Way with Vegetation" that show different types poles and examples of vegetation that is appropriate in the transmission line easement (please see included photos). Some poles are wood, and some are metal that are painted or finished with different colors. If metal poles are approved, then the City may decide what color of poles will be used.

- Number and height of poles

Two maps have been provided that illustrate two potential scenarios. The first is titled "Typical Span Lengths Proposal" and the second is titled "Reduced Pole Height Proposal". The typical span lengths proposal includes 16 poles that range in height from 70' to 85'. There are six steel poles included and there are ten wood poles. The reduced pole height proposal includes 21 poles that range in height from 65' to 83'. There are six steel poles included and 15 wood poles.

- Property lines

The previously described series of 12 maps identifies the property lines along the route in relation to the prescriptive easement and the potential easements that will be required based on the three different scenarios.

An alternate option for long spans has been submitted to the City. This alternate shows some of the poles moved from the prescriptive location to areas that may create a better alignment for the poles along the 970 S corridor. All the changes are relatively minor in nature. The three maps that illustrate this alignment are the last maps included on this packet and two for the maps are titled "Jordanelle - Midway: Planning Commission Requested Alternate Siting 970 South (SR113 – 250 W)

ANALYSIS:

The comments in italicized represent Planning Staff's comments pertaining to compliance or lack of compliance with the findings. The Planning Commission must make in considering this request. Section 16.26.120 requires specifically the Planning Commission to find that:

1. The proposed use is conditionally permitted within the Land Use Title, and would not impair the integrity and character of the intended purpose of the subject zoning district and complies with all of the applicable provisions of this Code; *planning staff believes that the proposal will have an impact on the properties along the route and on the entire community. There will be a visual impact that will be greater with the new proposal than the existing lines. In one way the impact will be diminished, and this is because of the removal of the distribution and communication lines. This will help the area feel less busy. Some of the other impacts may be on property values and depending on which study is considered, health.*
2. The proposed use is consistent with the General Plan; *the proposed use will create a greater visual presence for the transmission line because of the increased height. The General Plan describes the surrounding zones as an area of relatively large lots in an agricultural setting. The proposed lines will not be in harmony with this description though lines do currently exist along this route and have for several decades.*
3. The approval of the conditional use or special exception permit for the proposed use is in compliance with the requirements of state, federal and Midway City or other local regulations; *the proposal is required to comply with all federal, state and local requirements and staff has not identified any noncompliant issues at this point.*
4. There will be no potential, significant negative effects upon the environmental quality and natural resources that could not be properly mitigated and monitored; *the City may require and environmental impact study for the proposed conditional use per Section 16.13.47 (C)(4). This is a report the City may require if deemed necessary.*
5. The design, location, size, and operating characteristics of the proposed use are compatible with the existing and future land uses with the general area in which the proposed use is to be located and will not create significant noise, traffic, or other conditions or situations that may be objectionable or detrimental to other permitted uses in the vicinity or adverse to the public interest, health, safety, convenience, or welfare to the City; *the proposed use will supply power to the Heber Valley which is important to all residents. The proposal will also provide redundancy to the power supply so if a fire or some other natural disaster disrupts one of the sources of power to the valley there will be another route for power supply. Regarding health, there are studies*

that argue that transmission lines have a negative impact on the health of those that live nearby and there are studies that argue that there is no negative health impact on surrounding neighbors. The City may want to consult experts regarding this issue.

6. The subject site is physically suitable for the type and density/intensity of the proposed use; *the proposed location has had transmission lines for decades. It is debatable if increasing the transmission lines will create an intensity that is unsuitable for the subject site. The City may require additional studies, including an environmental impact study, to help answer this question.*
7. There are adequate provisions for public access, including internal and surrounding traffic flow, water, sanitation, and public utilities, and services to insure that the proposed use would not be detrimental to public health and safety; *The debate of the effects of EMF (electromagnetic field) are strong on both sides. However, the proposal will create more access to power and create a redundancy that will benefit the community which should have a positive impact on the community as a whole.*

SURVEY RESULTS:

The City Council approved awarding a contract to hire a professional survey company to conduct a statistically sound survey to determine what percentage of Midway residents are willing to pay to bury the proposed transmission lines. The City sent bid requests to three survey companies. Survey Design & Analysis was chosen based on their price and ability to finish the survey in the timeframe desired by the City. After consulting with Dr. Edward Halteman, of Survey Design & Analysis, it was determined that 200 responses were necessary to determine statistically sound numbers to answer the question. The City requested that 300 responses be gathered to error on the side of caution. The City also wanted assurance that all areas of the City were represented in the survey. The City was divided into four areas: northeast – north of Main and east of Center, northwest – north of Main and west of Center, southeast – south of Main and east of Center, and southwest – south of Main and west of Center. It was determined that a minimum number of responses, based on population, were gathered from the four areas. 96 were required from the northeast, 122 from the northwest, 45 from the southeast, and 37 from the southwest. The following are the results from the survey:

Counts	NE	NW	SE	SW	No Area designation	Total	
Keep it above ground		26	28	16	3	2	75
Bury the line, I accept the fact that my utility bill will increase		63	88	28	32	0	211
Not sure, need more info		6	4	1	1	0	12
No opinion either is fine		1	1	0	1	0	3
		96	121	45	37	2	301

Percents	NE	NW	SE	SW	No Area designation	Overall Total
Keep it above ground	27.1%	23.1%	35.6%	8.1%	100.0%	24.9%
Bury the line, I accept the fact that my utility bill will increase	65.6%	72.7%	62.2%	86.5%	0.0%	70.1%
Not sure, need more info	6.3%	3.3%	2.2%	2.7%	0.0%	4.0%
No opinion either is fine	1.0%	0.8%	0.0%	2.7%	0.0%	1.0%

PLANNING COMMISSION RECOMMENDATION:

Motion: Commissioner Bouwhuis: I make a motion to recommend approval to City Council for Rocky Mountain Power and Heber Light and Power for a Conditional Use Permit to rebuild the existing Heber Light and Power transmission line and install a 138kV line for Rocky Mountain Power that will be located on the Heber Light and Power poles, accept staff findings with the following conditions. That Rocky Mountain Power and Heber Light and Power work with the City Engineer to ensure that the pole placement will be located outside of the right of way and including the widening of 970 South and address the impact of the sight triangles. Recommend the long span option, and before going to City Council have staff compile a narrow look at a local special assessment.

Seconded: Commissioner Nicholas

Kohler: Any discussion the motion?

There was none

Chairman Kohler: All in favor.

Ayes: Commissioners: Ream, Nicholas, O'Toole, Bouwhuis

Nays: Payne

Inaudible: Streeter

Motion: Passed

POSSIBLE FINDINGS:

- The proposal is an administrative review and approval
- The proposed use is a conditional use and the city may impose reasonable conditions to mitigate identified negative impacts
- The proposal includes taller poles that will be visible to the residents of Midway, visitors of Midway, and the surrounding residents of Wasatch County
- The distribution and communication lines will be buried to help declutter the current transmission line situation, and reduce the weight being carried by the poles, thus reducing poles in the area
- The proposal will create a second point of power access that will benefit the residents of the valley
- The proposal will allow more power to enter the valley that will benefit the entire community by meeting community needs

ALTERNATIVE ACTIONS:

1. Approval (conditional). This action can be taken if the City Council finds the application complies with the requirements of the code and any conditions will mitigate identified issues.
 - a. Accept staff report
 - b. List accepted findings
 - c. Place condition(s)
2. Continuance. This action can be taken if the City Council finds that there are unresolved issues.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for continuance
 - i. Unresolved issues that must be addressed
 - d. Date when the item will be heard again
3. Denial. This action can be taken if the City Council finds that the request does not meet the intent of the ordinance.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for denial

POTENTIAL MOTIONS:

Option 1 – Approval

“I move to grant the application for the petitioned conditional use permit based on the following findings and subject to the following conditions:”

Findings:

- The proposal is an administrative review and approval
- The proposed use is a conditional use and the city may impose reasonable conditions to mitigate identified negative impacts
- The proposal includes taller poles that will be visible to the residents of Midway, visitors of Midway, and the surrounding residents of Wasatch County
- The distribution and communication lines will be buried to help declutter the current transmission line situation, and reduce the weight being carried by the poles, thus reducing poles in the area
- The proposal will create a second point of power access that will benefit the residents of the valley
- The proposal will allow more power to enter the valley that will benefit the entire community by meeting community needs
- Based on an independent survey of the citizens of Midway 70.1% percent expressed willingness to pay to bury the lines
- Based on an independent survey of the citizens of Midway 24.9% percent expressed unwillingness to pay to bury the lines
- Per applicant’s calculations and the results of applicant’s third-party appraisal analysis and underground cost study, the estimated excess costs are \$3.8 million to bury the line, assuming all of the underground line and the dip poles are located within City limits.
- Per applicant’s calculations and the results of applicant’s third-party appraisal analysis and underground cost study, the estimated excess costs are approximately \$5 million to bury the line, assuming the line is buried from the fish hatchery to the substation.
- The City acknowledges that the cost estimates listed above are approximations and that the City will be required to pay the difference between the estimates and actual costs.

- The City is relying on representations made by property owners along the line route that they will donate required easements at no cost in order to reduce the cost of burying the lines.

Conditions:

1. The transmission lines shall be buried within the boundaries of Midway City subject to the following conditions:
 - a. Wasatch County approves amendment of RMP's existing Conditional Use Permit moving the dead-end poles to the east away from Hwy 113 by a minimum of 400' and allowing the lines to be buried from this point to the west. If this condition is not met:
 - i. The line will be buried within the City limits
 - OR
 - ii. The line will be installed above ground
 - b. Payment to install the lines underground shall be as set forth below. If funds are not available in full by the dates set forth below, the line will be installed above ground:
 - i. Heber Light and Power agrees to issue a bond in an amount sufficient to bury the lines no later than _____.
 - OR
 - ii. Citizens of Midway raise funds in an amount sufficient to bury the lines and turns the money over to the City no later than _____.
 - OR
 - iii. Heber Light and Power agrees to issue a bond in conjunction with money raised by the citizens of Midway with the two amounts sufficient to bury the lines no later than _____.
 - c. The approval to bury the lines is conditioned on _____ of the effected property owners along the route for the line agreeing to donate the needed easements to bury the line at no cost to the project.
 - d. The staff report and proposed findings are adopted as part of the approval for the conditional use permit.
 - e. Dead-end steel poles shall be finished self-weathering rust colored steel.

- f. The transmission lines used shall be non-specular or low-reflective so as to reduce visual impact.
 - g. The applicants shall contact all property owners whose properties are crossed by the power line prior to beginning construction.
 - h. The applicants shall obtain all property rights required by Utah law prior to beginning construction.
 - i. Once construction is finished on the underground line, the actual costs will be trued-up and either RMP shall refund the overpayment to the City, or the City shall pay the difference to RMP.
2. If the amounts required to bury the lines are not available in full by _____ date the condition to bury the lines will lapse and the applicant shall be allowed to install the line above ground subject to the following conditions:
- a. Taller poles and longer spans that reduce the number of total poles.
 - b. Pole placement shall be as set forth in the plans showing the pole placement described as Option B Alternate, as attached.
 - c. Wood poles and steel poles as set forth in Option B Alternate.
 - d. Steel poles shall be finished self-weathering rust colored steel.
 - e. The transmission lines used shall be non-specular or low-reflective so as to reduce visual impact.
 - f. All distribution lines shall be buried at the cost of the applicant.
 - g. Applicant shall install at its own cost conduit sufficient to allow communication lines to also be placed underground.
 - h. The applicants shall contact all property owners whose properties are crossed by the power line prior to beginning construction.
 - i. The applicants shall obtain all property rights required by Utah law prior to beginning construction.
 - j. In the event a final determination is made by a court with jurisdiction that any existing property rights are not sufficient for the project, the companies will acquire legally sufficient property rights for the project, which may include negotiated agreements with the property owners or the use of eminent domain. As a part of this process and in accordance with Utah law, the companies will pay compensation for the properties either as negotiated with the property owner or determined by the court.
 - k. The staff report and proposed findings are adopted as part of the approval for the conditional use permit.

Option 2 – Denial

“I move to deny the conditional use permit because the applicant’s proposal has not reasonably mitigated the negative impacts created by the proposed transmission lines.

The staff report and proposed findings are adopted as part of the denial of the conditional use permit.”

Option 3 - Continuance

“I move to continue the proposed conditional use permit to another meeting on [DATE], with direction to the applicant and/or Staff on information and/or changes needed to render a decision, as follows:

1. _____
2. _____
3. _____

Exhibits

Exhibit 1: Power Line Burial Cost Analysis

Submitted by Kevin Payne

Exhibit 2: Letter and Supporting Documents

Submitted by Ginny Tuite

Exhibit 3: Letter from Heber Light & Power

Submitted by Adam Long, HL&P

Exhibit 4: Third Party Appraisal

Submitted by Benjamin Clegg, Sigmautility Solutions & RMP

Exhibit 5: Updated Overhead Easement Cost

Submitted by Benjamin Clegg, Sigmautility Solutions & RMP

Exhibit 1

Michael Henke

From: Kevin Payne <kpayne@paynedev.com>
Sent: Thursday, December 12, 2019 9:20 AM
To: Michael Henke; Celeste Johnson
Cc: Melannie Egan
Subject: Power Line Burial Cost Analysis
Attachments: Cost Analysis of Burial of Power Lines 12-06-2019.xlsx

Importance: High

Michael / Mayor Johnson:

I've updated the Power Line Burial Cost Analysis spreadsheet (see attached) after meeting with Harold Wilson of HL&P to get his input.

I've broken it down into 4 categories to be more easily understood:

1. Total Burial Costs – This is simply to determine what the total burial costs are from the Cemetery sub-station to right before the fish hatchery building.
2. Per Lineal Foot Cost to Bury – This is to determine the per lineal foot cost to bury the additional 535 ft. from the west side of Center St. to before the fish hatchery building. In order to come up with this amount I subtracted "non-recurring" items that wouldn't be amortized over (i.e. wouldn't be added for) the 535 ft. additional length (such as splices, vaults, and cable risers etc.).
3. Midway Share of Burial Costs – This is to determine what Midway's share of the burial costs would be by subtracting what the above ground costs would be.
4. Monthly Cost Per Meter in Midway – This takes Midway's share of the burial costs less any donations/contributions to determine the monthly cost per meter in Midway.

Please note how eerily close the estimated cost per meter in Midway (assuming only \$500k in donations and \$0 credit for above ground easement/severance/damages) came to exactly \$10.00 per month. Additionally, even if the above ground costs were \$2,000,000 more than estimated (a 30% over-run), the per month meter cost would be \$14.14 per month which is still within the \$10-15 range of the survey.

Thanks,

POWER LINE BURIAL COST ANALYSIS

TOTAL BURIAL COSTS

(a) Cost to Bury for Segment 8 - Sub-Station to Center St.	\$ 6,377,066	Pg 6 - HL&P Underground Cost Study
(b) Cost to Bury - Center St. to Fish Hatchery	\$ 451,126	= i x j
(c) Additional Roadway Bore - Center St.	\$ 13,500	Prorata from pages 4-7 of Cost Details
(d) Burial Easements / Severance / Damages	<u>\$ -</u>	
(e) Total Cost to Bury - Sub-Station to Fish Hatchery	\$ 6,841,692	

PER LINEAL FOOT COST TO BURY

(e) Cost to Bury for Segment 8 - Sub-Station to Center St.	\$ 6,377,066	Pg 6 - HL&P Underground Cost Study
(f) Less Seg. 8 Terminations, Splices, Vaults, Cable Risers	<u>\$ (730,823)</u>	Pages 4-7 of Cost Details
(g) Total Cost to Bury Seg. 8 Less Non-Recurring Costs	\$ 5,646,243	
(h) Segment 8 Length (Feet)	6,696	Appendix A - Cost Study
(i) Additional Cost to Bury Per Lineal Foot	\$ 843	= g / h
(j) Hwy 113 / Center Street Additional Burial Length (Feet)	535	West side of Center to Fish Hatchery

MIDWAY SHARE OF BURIAL COSTS

(e) Total Cost to Bury - Sub-Station to Fish Hatchery	\$ 6,841,692	
(k) Less Above Ground Costs for Segment 8	\$ (1,400,000)	Pg 2 - HL&P Underground Cost Study
(l) Less Above Ground Costs for Center St. Extension	\$ (111,858)	= (k / h) x j
(m) Less Above Ground Easement / Severance / Damages	<u>\$ -</u>	Est. from \$25k to \$2.6 mil for Seg. 8 only
(n) Total Midway Share of Burial Costs	\$ 5,329,834	= e + k + l

MONTHLY COST PER METER IN MIDWAY

(n) Total Midway Share of Burial Costs	\$ 5,329,834	
(o) Less Donations / Contributions	<u>\$ (500,000)</u>	
(p) Total Costs to be Borne by Midway Rate Payers	\$ 4,829,834	= n + o
(q) Assumed Bond Interest Rate	4.000%	Most recent HL&P Bond Rate = 3.50%
(r) Bond Term	20	Years
(s) Total Number of Meters in Midway	2,926	
(t) Monthly Cost per Meter in Midway	\$ 10.00	

Exhibit 2

Dear Midway City Council Members:

Citizens of Midway have formed an Ad-hoc Power Committee to try to help provide citizen input to the Rocky Mountain Power (RMP) and Heber Light and Power (HLP) (together, the "Applicants") transmission line project conditional use permit (CUP) process as it pertains to Midway.

We urge you to please CONTINUE a decision on this matter until the Applicants provide critical information in order for the CUP to be deemed complete and for proper consideration by the Midway City Council.

Specifically, we are asking you to require the following Open Items and unanswered questions from the Applicants:

1. **Underground Installation Bids:** We expect our City to act as stewards of the citizens' resources and require multiple bids for the cost of placing the transmission power lines underground. We currently only have 1 bid from the Applicants, and that bid is much higher than the national average cost of approx. \$1.5M/mile to bury transmission lines. (see **Exhibit A**)

Per our City Code (Midway City Code Sec. 16.13.47(C)(4)), we would ask that you require at least 3 independent bids at the applicants' expense.

Midway residents are in the process of obtaining additional bids to bury the lines.

2. **Dip Poles, Alternatives, & Costs:** The Applicants need to provide the City with accurate information on what the various engineering (e.g., "racks" at the substation) and screening options are for the "dip" poles, along with costs.

The dip poles were not displayed to the public until the November Town Hall meetings. Alternatives to dip poles and their locations do exist, as well as ways to minimize their impact. We need this information, as well as the costs for each of the options, in writing. Photos and renderings of the alternatives need to be provided by the Applicants.

Summit County and Wasatch County went through this process with RMP a few years ago, and there is documentation from that process that covers some of the options Summit County considered. (see **Exhibit B**)

If the lines stay above ground what type of pole will be at the same spot as the proposed dip poles? We need to see a comparison. Screening at any of these locations should be considered.

3. **Studies:** The City needs to obtain documentation and studies in order to ensure that Midway residents and visitors are adequately protected. Studies that should be obtained and considered are:

- a. Low Income Housing Impacts - determine the impact of the new power lines on FHA Loans/affordable housing (**Exhibit C**)
- b. Fall Zone impacts (engineering study) (**Exhibit C, D**)
- c. Fire safety studies (**Exhibit E**)
 - RMP has said PG&E doesn't insulate their lines, which is why they are such proficient fire starters, but others say they do. It would be important to know what is being installed here and the inherent risks we have with wind and dry brush.
- d. Environmental impacts - on birds, wildlife, agriculture. What studies has RMP provided? (**Exhibit F**)
- e. Property value impacts - studies and documentation (**Exhibit G**)
- f. Insurance impacts - What insurance does the City/RMP have should these homes along the route catch fire because of these new lines or any other catastrophic event occur? Highly unlikely - yes, but nevertheless a very serious problem if it should happen and we need to know what protections or recourses are in place. Who is liable in that regard? Documentation should be provided.

(Multiple attachments provide more detailed information regarding each of these needed studies)

4. **Resident Protections:** The City should work out an oversight committee and determine a structure to ensure that residents most impacted along the new transmission lines are properly protected and provided with adequate financial compensation for damages and easement costs.

The City should set out a timeline for RMP (for example, 60 or more days prior to commencement of any construction) by which all easement costs and damages must be settled by RMP-HLP with the property owners. The time frame set out by the City Council should consider how much time the City needs in order to issue the bond through HLP to help fund the costs of burying the line.

5. **Legal options:** Please explain to the public what your understanding is of the process should the threat of taking the City to the Utility Facility Review Board come to fruition. This process seemed unclear when discussed at prior meetings. Other attorneys have said going in front of the board at this point could actually be beneficial! These are very different perspectives. Which is better? We don't know unless someone can explain this process and it should be made public, especially if it is being used a fear tactic for our Council.

6. **True Purpose of Line/Threats:** Real purpose/threats had to do with threats by RMP to come down River Road if it was not allowed to go on the South line. Also, true purpose: this regional power line is needed for Summit County. **(See Exhibit H)**

OTHER ITEMS TO NOTE:

CC and Public Presence at HLP Board Vote: If the City Council votes to bury the line, the City Council should be fully present at any HLP meetings, including the voting meeting, that HLP holds regarding issuing a bond for the cost of burying the transmission lines around Midway. Midway owns 25% of HLP, and the public should also be allowed to be present at these Board meetings, as well. We need to hold the HLP Board accountable to any city referendum taken by Midway.

HLP Cash & Borrowing Position: HLP had \$7.4M of cash as of 12/31/2018 audited financial statements. Plus, it has net cash generated during 2019, as well as at \$15M of cash from issuing a recent bond for capital expenditures. In addition, HLP has had cash reserves ranging from \$5.0M - \$7.2M during the prior 3 years (2015 - 2017). Currently, the HLP effective borrowing rate on bonds appears to be 3.5% - 4% (bonds are being sold at a premium).

Public Comment: New information was submitted by RMP/HLP and VOLT that the public has not heard or discussed, nor have they had a chance to comment on. Evidence as to the negative impacts of overhead transmission lines are also being submitted. *We would request more opportunities for public comment.*

IN SUMMARY:

We strongly urge the City Council to continue a decision on this matter until the information above has been received and carefully evaluated with appropriate public input.

Once the approval is issued, if anything has not been properly included in the motion, there is likely no room for correction. Please make sure you are ready to proceed with a motion that protects the City in all aspects and concerns. **You have the authority to do so.**

POWER LINE BURIAL COST ANALYSIS
NO PROPERTY DAMAGES/EASEMENT COSTS REFLECTED

TOTAL BURIAL COSTS

(a) Cost to Bury for Segment 8 - Cemetery Sub-Station to Center St.	\$ 6,377,066	Pg 6 - HL&P Underground Cost Study
(b) Cost to Bury - Center St. to Fish Hatchery	\$ 451,126	= i x j
(c) Additional Roadway Bore - Center St.	\$ 13,500	Prorata from pages 4-7 of Cost Details
(d) Burial Easements / Severance / Damages	\$ -	
(e) Total Cost to Bury - Cemetery Sub-Station to Fish Hatchery	\$ 6,841,692	

PER LINEAL FOOT COST TO BURY

(e) Cost to Bury for Segment 8 - Cemetery Sub-Station to Center St.	\$ 6,377,066	
(f) Less Segment 8 Terminations, Splices, Vaults, Cable Risers	\$ (730,823)	Pages 4-7 of Cost Details
(g) Total Cost to Bury Seg. 8 Less Term., Splices, Vaults, Cable Risers	\$ 5,646,243	
(h) Segment 8 Length (Feet)	6,696	Appendix A - Cost Study
(i) Additional Cost to Bury Per Lineal Foot	\$ 843	= g / h
(j) Hwy 113 / Center Street Additional Burial Length (Feet)	535	West side of Center to Fish Hatchery

MIDWAY SHARE OF BURIAL COSTS

(e) Total Cost to Bury - Cemetery Sub-Station to Fish Hatchery	\$ 6,841,692	
(k) Less Above Ground Costs for Segment 8	\$ (1,400,000)	Pg 2 - HL&P Underground Cost Study
(l) Less Above Ground Costs for Center St. Extension	\$ (111,858)	= (k / h) x j
(m) Less Above Ground Easement / Severance / Damages	\$ -	Est. from \$25k to \$2.6 mil for Seg. 8 only
(n) Total Midway Share of Burial Costs	\$ 5,329,834	= e + k + l

MONTHLY COST PER METER IN MIDWAY

(n) Total Midway Share of Burial Costs	\$ 5,329,834	
(o) Less Donations / Contributions	\$ 500,000	
(p) Total Costs to be Borne by Midway Rate Payers	\$ 4,829,834	= n - o
(q) Assumed Bond Interest Rate	4.000%	Most recent HL&P Bond Rate 3.50%
(r) Bond Term	20	Years
(s) Total Number of Meters in Midway	2,926	
(t) Monthly Cost per Meter in Midway	\$ 10.00	

**POWER LINE BURIAL COST ANALYSIS
WITH 50% PROPERTY DAMAGES RECEIVED ESTIMATE**

TOTAL BURIAL COSTS

(a) Cost to Bury for Segment 8 - Cemetery Sub-Station to Center St.	\$ 6,377,066	Pg 6 - HL&P Underground Cost Study
(b) Cost to Bury - Center St. to Fish Hatchery	\$ 451,126	= i x j
(c) Additional Roadway Bore - Center St.	\$ 13,500	Prorata from pages 4-7 of Cost Details
(d) Burial Easements / Severance / Damages	\$ -	
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(l) Less Above Ground Costs for Center St. Extension	\$ (111,858)	= (k / h) x j
(m) Less Above Ground Easement / Severance / Damages	\$ (1,300,000)	Est. from \$25k to \$2.6 mil for Seg. 8 only
(n) Total Midway Share of Burial Costs	\$ 4,029,834	= e + k + l

MONTHLY COST PER METER IN MIDWAY

(n) Total Midway Share of Burial Costs	\$ 4,029,834	
(o) Less Donations / Contributions	\$ 500,000	
(p) Total Costs to be Borne by Midway Rate Payers	\$ 3,529,834	= n - o
(q) Assumed Bond Interest Rate	4.000%	Most recent HL&P Bond Rate 3.50%
(r) Bond Term	20	Years
(s) Total Number of Meters in Midway	2,926	
(t) Monthly Cost per Meter in Midway	\$ 7.31	

① Line comes down the
Center of Midway
Approx River Road

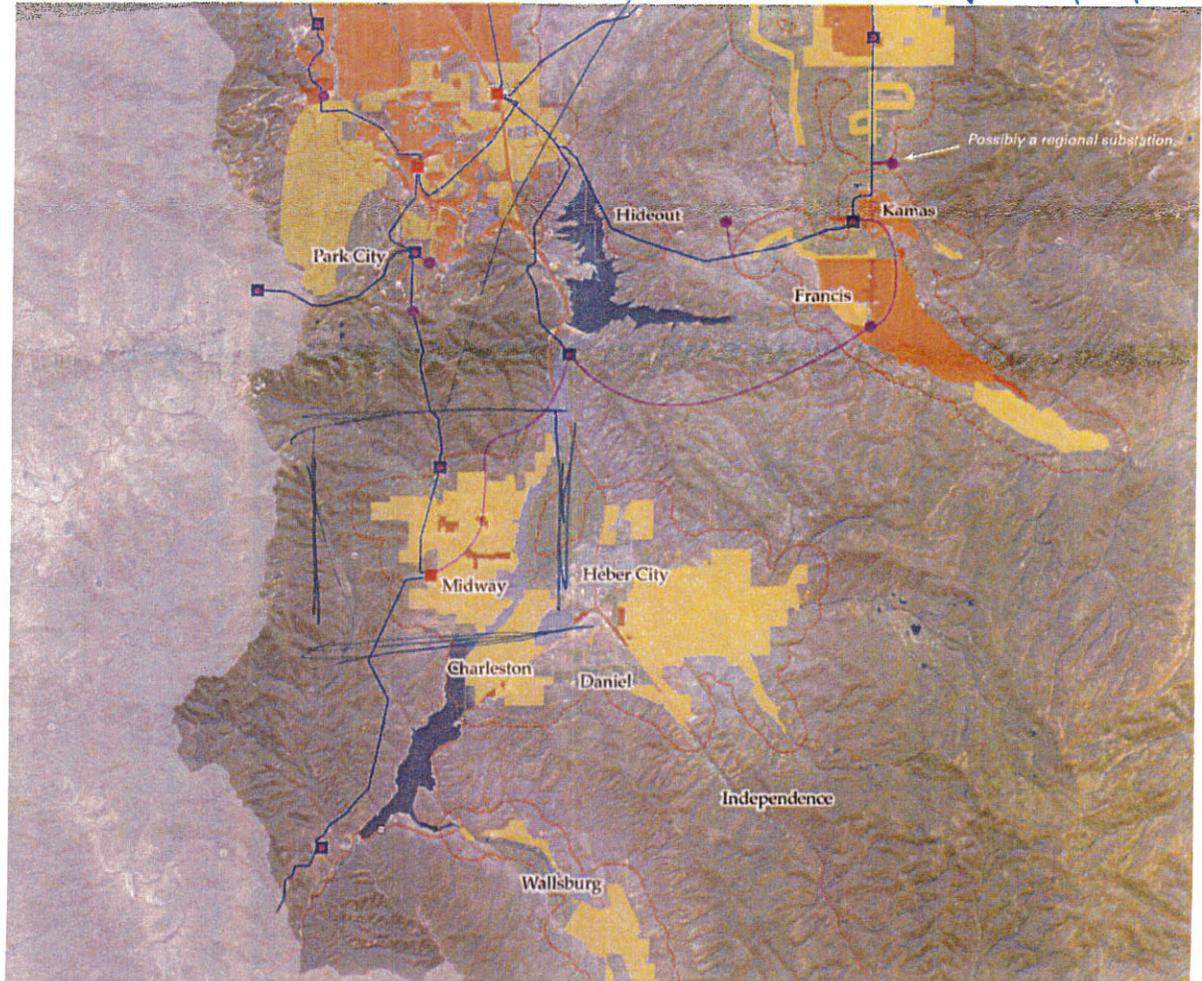
② This was one of the
original plans for the RMP
Transmission line
as submitted by RMP¹⁹
its part of the CLIP

SOUTHERN SUMMIT AND WASATCH COUNTIES

GENERAL ELECTRICAL SYSTEM LEGEND

Substations	
	Existing Substation
	New Substation
	Existing Substation: Subject to Change

Lines	
	Existing Line
	New Line
	Existing Line: Subject to Change (Expand, widen, upgrade, remove, etc)



③ Goal for this Map
Midway residents need to
understand that this line
is a City issue... not
just a small street.

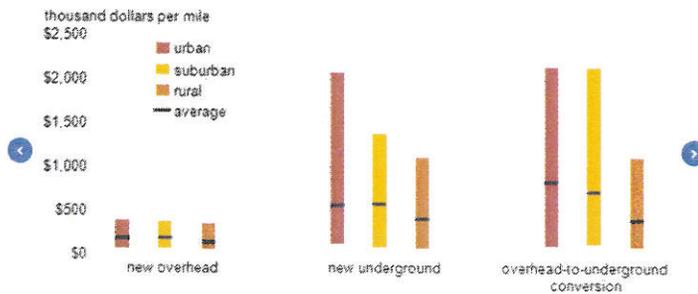
Exhibits for Negative Impacts of Overhead Transmission Lines

Exhibit A:

Figure 2: uploaded by Mike Warwick
Content may be subject to copyright

Download

View publication



24 Cost per Mile for Distribution Lines: Overhead versus Underground 73

Source publication

Rural costs are under \$1M/mile to bury.

The above chart says distribution lines, however in many references the distribution/transmission/power lines are used interchangeably. Even if it is distribution, transmission costs are not a whole lot higher. Either way, the bid amount from RMP is considerably more than most amounts shown. (And then again, some costs are higher than RMP's, thus the need for more bids.)

www.energy.gov

Cost per Mile: New Construction Transmission

	Overhead			Underground		
	Urban	Suburban	Rural	Urban	Suburban	Rural
Minimum	\$377,000	\$232,000	\$174,000	\$3,500,000	\$2,300,000	\$1,400,000
Maximum	\$11,000,000	\$4,500,000	\$6,500,000	\$30,000,000	\$30,000,000	\$27,000,000

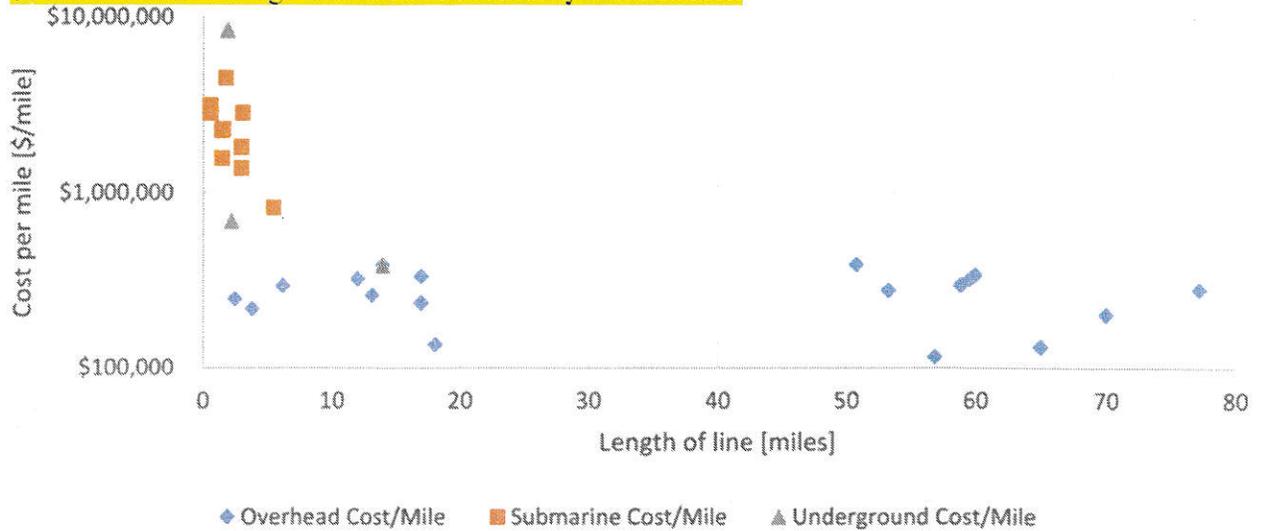
- This is the most current cost we found. It is higher than others. Keep in mind that HLP is already burying the distribution lines, so the extra cost should not be much more for trenching. But to be impartial, it is included.

[https://www.desertsun.com › story › news › environment › 2019/10/11 › cos...](https://www.desertsun.com/story/news/environment/2019/10/11/cos...)

Oct 11, 2019 - It costs about \$3 million per mile to convert underground electric distribution lines from overhead, while the cost to build a mile of new overhead line is less than a third of that, at approximately \$800,000 per mile, according to a section on PG&E's website called Facts About Undergrounding Power Lines. Still, it is half of the \$6.3M bid from RMP.

- A typical new 69kV overhead single-circuit transmission line costs approximately \$285,000 per mile, while a new 69kV underground line costs approximately \$1.5 million, according to a 2011 paper published by the Public Service Commission of Wisconsin.

- Electrical transmission lines in Alaska vary from overhead to submarine to underground installations. Analysis indicates that overhead transmission lines are the least expensive to build, ranging from \$100 000 to \$400 000/mile. Cost variability is influenced by pole spacing, pole heights, line ratings, river crossings, and the amount of work on energized power lines. Submarine lines and underground lines are substantially more expensive than overhead lines, ranging from less than \$3 000 000 to more than \$4 500 000/mile although there is some uncertainty in the datasets



- <https://www.sun-sentinel.com/business/fl-bz-fpl-undergrounding-bill-20190422-story.html>
- <https://www.sfchronicle.com/bayarea/article/Underground-power-lines-don-t-cause-wildfires-12295031.php>

Exhibit B

Park City's process before the project came to Wasatch County

<https://www.parkcity.org/home/showdocument?id=13333>

<https://www.parkcity.org/home/showdocument?id=13336>

Exhibit C

<https://www.govinfo.gov/content/pkg/CHRG-112hrg75087/html/CHRG-112hrg75087.htm>

THE IMPACT OF OVERHEAD HIGH

VOLTAGE TRANSMISSION TOWERS
AND LINES ON ELIGIBILITY FOR
FEDERAL HOUSING ADMINISTRATION (FHA)
INSURED MORTGAGE PROGRAMS

=====

FIELD HEARING
BEFORE THE
SUBCOMMITTEE ON
INSURANCE, HOUSING AND
COMMUNITY OPPORTUNITY
OF THE
COMMITTEE ON FINANCIAL SERVICES
U.S. HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
SECOND SESSION

—————
APRIL 14, 2012

Court Case of Chino Hills (2016) Fall zone, FHA regulations, Home Value Decreases

Exhibit D

<https://www.eng-tips.com/viewthread.cfm?qid=252993>

HUD guidelines preclude a building from being constructed within the "Engineered" Fall Distance of a high voltage tower. We have contacted the power company (Dominion Virginia Power) to get the required info and their response was that our towers are not going to fall and they sent a 4 page boilerplate letter out to HUD. Well HUD is tightening their lending requirements and this letter (which has worked in the past) does not work anymore. They want verification that the building is not within this fall distance.

Exhibit E

Tribune article- Midway is in the fire risk zone

<https://www.sltrib.com/news/politics/2019/11/01/utahns-could-face/>

Exhibit F

<https://retasite.wordpress.com/the-environment/>

<https://retasite.wordpress.com/burying-high-voltage-lines/>

Exhibit G

- <https://archive.sltrib.com/article.php?id=57949894&itype=CMSID>

Tooele – loss of property value **even affects future building** in scenic areas

Rocky Mountain Power pays Utah \$2.5M in power line fight - The Salt Lake Tribune – **great case law evidence that RMP can be challenged!**

- <http://fieldpost.org/StarkEnergy/Studies/Valuation%20Guidelines%20for%20Properties%20with%20Electric%20Transmission%20Lines%201.pdf>

Exhibit H

- CUP proposal of possibly using River Road as a route. This issue affects all of Midway, not just those along the currently proposed line. Michael Henke has the documentation. We couldn't find it online.
- This agenda would not pull up online either so the power section of the Park City Council Meeting Minutes from April 24, 2014 are cut and pasted below. Demonstrates how the lines going through Midway benefit Park City.

Rocky Mountain Power

Ann Ober, Regional Coordinator, Steve Rush and Jake Barker with Rocky Mountain Power spoke to the substation that was proposed to go in out in the county. Rocky Mountain has had discussions with Heber Power and light to combine services and would change the cost. The agreement with Heber is going well and will be bringing in 10 miles of line. They will be back to work with the planning department to put in the substation and are excited to work with staff to complete the project. The transfer line will be installed in along the current poles and will increase the capacity by 45% and will give the area 15-17 years of growth. Barker stated that they are installing a transformer at the Snyderville substation. Mayor Thomas inquired about the wall around the substation and if the transfer lines are non-reflective lines. Rush stated that they will work with staff but they typical wall is 10 feet and the line will be non-reflective. Council member Matsumoto inquired if they are able to paint and repair the poles. Rush stated that he

PARK CITY COUNCIL MEETING MINUTES SUMMIT COUNTY, UTAH, April 24, 2014 Page |

4

would pass along the comments. They will completed by fall 2015. Council member Peek inquired if the reconfiguration of the substation would impact the area around the recycle center. Council member Simpson suggested they speak with the recycling center regarding a temporary relocation of the entrance during construction. Rush also spoke to the weather incident in Parley's canyon stating that one of the poles failed during that storm. The pole served a large amount of Summit County and RMP was forced to perform rolling black outs until the load was back on line. They were fortunate that it was only one structure but this would have been avoided if the construction of the current projects was complete.

Evidence of Negative Impacts of Overhead Transmission Lines

The following sources provide pertinent evidence (much of which is contrary to RMP's submissions.) There are additional attachment/exhibits to validate each of the items listed below.

Installation Bids and Burial Costs:

- Midway City Code Sec. 16.13.47(C)(4) authorizes the City to ask for bids/studies. Please abide by the code, ask for bids and studies, and defer any decision until a third party calculates true burial construction costs and IMPACTS Under that ordinance "at the City's sole discretion, the City may require outside third-party providers to conduct some or all of the studies, do independent studies, or to review the studies prepared by the applicant to verify the information contained therein. All reasonable costs incurred by third party studies shall be borne by the applicant."
- <https://www.sfchronicle.com/bayarea/article/Underground-power-lines-don-t-cause-wildfires-12295031.php> A new underground distribution line across most of PG&E's territory costs about \$1.16 million per mile, according to data filed with state regulators during the utility's most recent general rate case. That's more than twice the price of a new overhead line, which costs about \$448,800 per mile. Most of the difference comes from the expense of digging a trench for the cable. Prices rise within cities, where the work is more complex.

Local contractors have discussed and offered to help with the trenching process, which cuts costs quite a bit. They often do this when working with RMP because RMP's costs are much higher. This reiterates the need for additional bids.

- <https://www.sun-sentinel.com/business/fl-bz-fpl-undergrounding-bill-20190422-story.html>

Florida legislators say they're tired of getting calls from constituents every time their power goes out. That's one reason many support legislation to bury power lines underground — even if it raises your electric bills.

But Kury said many communities have tallied the expense of undergrounding — generally about \$1 million a mile — and decided that it wasn't worth the price. "Utilities aren't spending their money — they're spending customers' money. We have to be vigilant about how we're spending customers' money," Kury

said. In Florida, rural areas aren't likely to cost as much to underground while cities that have dense population and infrastructure and coastal areas are more problematic.

(Opposing views have been included here for burying – for large areas it really just comes down to price. Where this is a small project we're doing, it's a different aspect. But in fairness, the only negatives in several studies/articles was cost and it can be more difficult to repair, but repairs are far more infrequent)

- https://emp.lbl.gov/sites/all/files/lbnl-1006394_pre-publication.pdf This is an October 2016 research paper on burying transmission lines. Super complex but good info, but here are a few cost quotes. Only negatives shown are increased cost to repair but repairs are less likely.

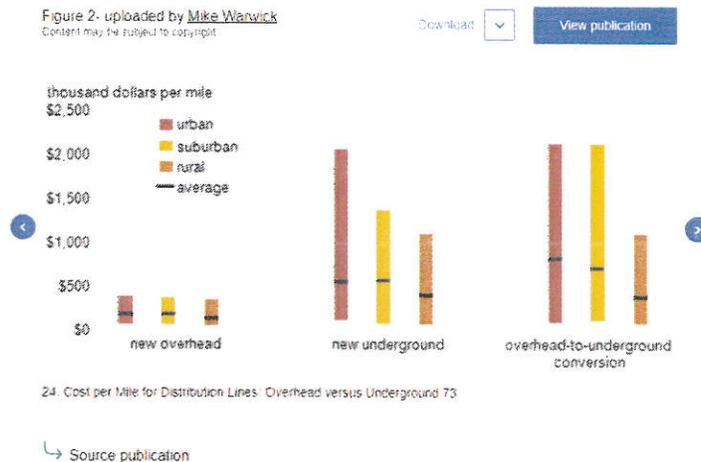
Brown (2009) assumed that converting existing overhead transmission lines to underground lines would cost approximately \$5 million per mile. Higher example² For comparison, Brown (2009) ² EEI (2013) reported a minimum overhead-to-underground transmission line conversion cost of \$536,760–\$1,100,000/mile and a maximum conversion cost of \$6,000,000–\$12,000,000. EEI (2013) reported a minimum overhead-to-underground distribution line conversion cost range of \$158,100–\$1,000,000/mile and a maximum conversion cost range of \$1,960,000–\$5,000,000. The Edison Electric Institute (EEI) estimates that the minimum replacement costs for overhead transmission lines range from \$174,000 per mile (rural) to \$377,000 (urban). The maximum replacement costs for existing overhead transmission lines ranges from \$4.5 million/mile (suburban) to \$11 million/mile for urban customers (EEI 2013). EEI (2013) also reported that installing new underground ⁷ indicates that it costs ~\$180,000/mile to replace single, wood pole transmission lines and ~\$459,000/mile to replace state-of-the-art, overhead transmission lines that meet current National Electric Safety Code (NESC) standards.³ Brown (2009) estimated that undergrounding local overhead distribution lines would cost ~\$1 million per mile. For comparison, the minimum replacement costs for existing overhead distribution lines ranged from \$86,700 to \$126,900/mile with maximum replacement costs ranging from \$903,000 to \$1,000,000 (EEI 2013)

Des Rosiers (2002) found that a direct view of a transmission system pylon or conductors had a significantly negative impact on property prices with lost values ranging from -5% to -20% depending on the distance from the overhead infrastructure to the residence. Sims and Dent (2005) also evaluated how property prices changed based on proximity to high-voltage overhead transmission lines. Sims and Dent studied four different types of property and found that the relationship is not linear, but that there was a ~10%–18% reduction in value for semi-detached properties and a ~6%–13% reduction for detached distribution lines costs from \$297,200–\$1,141,300/mile (minimum) to \$1,840,000–\$4,500,000/mile (maximum). EEI noted that installing new underground transmission lines costs from \$1,400,000–\$3,500,000/mile (minimum) to \$27,000,000–\$30,000,000/mile (maximum). ³ Brown (2009) assumes that future costs and benefits are discounted 10% annually. In addition, underground and overhead T&D infrastructure have forty- and sixty-year lifespans, respectively. ⁸ properties. Furthermore, properties having a rear view of a pylon were found to have their value reduced by ~7%. By comparison, the negative impact on value for property having a frontal view was found to be greater (14.4% loss). These costs are from 2002. More recent articles are higher percentages in loss of

property values, but this shows the very real fact that property values decrease. RMP has not factored that into their damage payout.

- 3.3 **Avoided Costs from Less Frequent Outages**

It is assumed that habitat restoration activities took place when the existing overhead and underground lines were sited, but that fewer restoration activities will need to take place as new lines are added and/or converted to underground infrastructure. It is also assumed that undergrounding T&D lines will affect a larger surface area than overhead lines



Again, rural costs are under \$1M/mile to bury.

- A typical new 69kV overhead single-circuit transmission line costs approximately \$285,000 per mile, while a new 69kV underground line costs approximately \$1.5 million, according to a 2011 paper published by the Public Service Commission of Wisconsin.

SAFETY:

Fall Zones:

- Has there been a “Fall Zone” letter submitted by RMP? **Current HLP prescriptive easements (# of feet) needed RMP easement (# of feet) including the Fall zone distance. RMP has not submitted anything for Fall Zone or Danger Zone for the poles on the entire route.**

Municipalities can require an engineer to provide a “fall zone letter” to certify that a pole structure will not collapse beyond a certain radius. HUD guidelines are very specific about building within the “Engineered” Fall Distance of a high voltage tower or pole. The taller poles, especially the turning poles, according to some structural engineers who design and analyze transmission poles and towers that to be safe the worst case scenerio needs to be given in case the poles would fall. Then the entire pole height needs to be considered if there were failures with the anchor bolts at the base and the pole would fall over like a tree. (Taken from the

engineering forum) **This should be asked for to protect the citizens' homes/properties, and those driving on the roads directly in the required easement.**

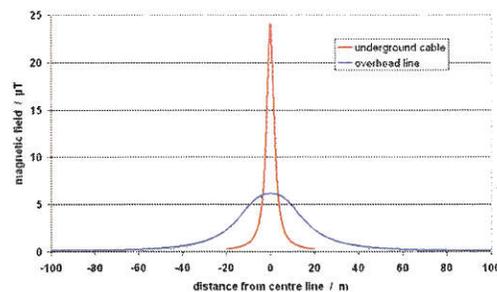
<https://www.eng-tips.com/viewthread.cfm?qid=252993>

- In New Hampshire, Setbacks are not enough as the power company can come change out the pole later to be even higher and more voltage in the future. Burying has shown to be safer and more affordable.

<https://www.nhsec.nh.gov/projects/2014-04/documents/09-15-15-sec-2014-04-letter-pamela-martin.pdf>

EMF RISKS:

- <http://www.emfs.info/sources/underground/>
With underground cables the individual conductors, being insulated, can be closer together, leading to greater cancellation and lower fields. However, unless they are buried very deeply, they can also be approached more closely, leading to higher fields. Overall, ground-level magnetic fields from underground cables fall much more rapidly with distance than those from a corresponding overhead line, but can actually be higher at small distances from the cable



- **Is There a Safe Living Distance from Power Lines?**

<https://www.safespaceprotection.com/>

Hundreds of studies worldwide have shown that living next to high voltage power lines and other parts of the power transmission network increases your risk of cancer and other health problems.

- The closer you are the more you are bombarded with dangerous EMFs. The electrical power grid uses a “step down” system of distribution, highest near the generating station and substations, lowest at the end.
Increasingly, the medical community is recognizing the danger to health these power lines can cause. For example, a variety of studies suggests that living close to high-voltage power lines can increase the incidence of several kinds of cancer, as well as other diseases.

<https://www.paloaltoonline.com/square/2013/01/24/kids-health-benefit-from-underground-power-lines-instead-of-overhead-poles->

- **Underground power lines are much better for EMF (Web Link):**
"A study prepared by eight major New York State utilities showed that when a 345 kV transmission line is placed in steel pipe filled with oil and buried at a depth of five feet, the strength of the magnetic field measured one metre above the ground over the pipe is only about 1 mG during normal current flow, as compared with magnetic field strengths as high as 60 mG that can be measured at the edge of a 100 foot right-of-way for an overhead 345 kV transmission line."

Posted by **tina**
a resident of Palo Verde School
on Jan 25, 2013 at 11:08 am

If you test with the EMF meter (the Amazon link in the original post), you'll see the natural magnetic field is much smaller (around 0.1-0.2mg) without an overhead pole. It gets much bigger (5-100mg) with an overhead pole.

Placements in regards to water:

Fire risk (wind & ice) :

- <https://www.sltrib.com/news/politics/2019/11/01/utahns-could-face/>
<https://www.sfchronicle.com/bayarea/article/Underground-power-lines-don-t-cause-wildfires-12295031.php>
- <https://www.powerlink.com.au/sites/default/files/2019-01/Fire%20and%20High%20Voltage%20Transmission%20Line%20Safety.pdf>
- <https://www.ecmag.com/section/systems/link-between-power-lines-and-wildfires>
- <https://wildfiremitigation.tees.tamus.edu/faqs/how-power-lines-cause-wildfires>
- <https://www.latimes.com/california/story/2019-10-29/how-do-wildfires-start>
- <https://wildfiretoday.com/tag/power-line/>

Decibel levels/Corona effect:

- <https://pdfs.semanticscholar.org/5ec0/f6c50884fcf2f56cde56d8f309d80cb769be.pdf>
Talks about what causes noise. Basically older style ACSR style cable (which is what I think they want to use - cheap and effective but noisy) as opposed to newer GZTACSR .see page 16 of the report. Also, none of the proposed cables are insulated.

<https://www.sciencedirect.com/science/article/pii/B9780444531223500453>

- <https://www.scientificamerican.com/article/what-causes-the-noise-emi/>
- https://www.w8ji.com/power_line_noise.htm

CITY GROWTH:

- Overhead transmission lines impact not only the property values in that area, but also affects affordable housing options. Both HUD and FHA loans are not allowed along these lines.

Scroll to page 11 letter (J) <https://www.hud.gov/sites/documents/41502C2HSGH.PDF>

J. OVERHEAD HIGH-VOLTAGE TRANSMISSION LINES

No dwelling or related property improvement may be located within the engineering (designed) fall distance of any pole, tower or support structure of a high-voltage transmission line, radio/TV transmission tower, microwave relay dish or tower or satellite dish (radio, TV cable, etc.). For field analysis, the appraiser may use tower height as the fall distance.

For the purpose of this Handbook, a High-Voltage Electric Transmission Line is a power line that carries high voltage between a generating plant and a substation. These lines are usually 60 Kilovolts (kV) and greater, and are considered hazardous. Lines with capacity of 12-60 kV and above are considered high voltage for the purpose of this handbook

- <https://appraisersforum.com/forums/threads/high-voltage-fall-zone.170883/>
- Include: HUD guidelines and how they require it as these lines are deemed hazardous voltage.
- See Chino Hills Court Case attachment

LOSS OF PROPERTY VALUES:

- <http://fieldpost.org/StarkEnergy/Studies/Valuation%20Guidelines%20for%20Properties%20with%20Electric%20Transmission%20Lines%201.pdf> This points out there is a big difference in property values affected by transmission lines v regular power and distribution lines.

- Property devaluation for properties on the line but the affect to those even adjacent. Chino Hills,CA report that includes city website postings, newspaper articles, court hearing transcripts holding statistics on loss of property value when transmission towers and poles went in by neighborhoods. FHA came forward that their loans were tied up in many homes there and affecting their value. End of efforts were in 2016 the line is now buried and the towers and poles that first went in at the start of the project were removed. <https://www.google.com/amp/s/www.dailybulletin.com/2016/10/30/edison-about-to-flip-the-switch-on-controversial-power-line-project-through-chino-hills/amp/>

See attached court case, which was won in favor of the City!

- <https://www.lexology.com/library/detail.aspx?g=c4d888-e09e-4de8-b51f-0cd9d8da9e35> another court case awarding fair market easement values

- <https://retasite.wordpress.com/property-value/>

The current route evaluation criteria used by AltaLink and EPCOR (or any other transmission company) do not ascribe a monetary value to the decrease in value of people's property. We have done much research on this subject and, while there is a considerable range of estimates on how much property values are affected, we feel very comfortable using a 15%-20% average within 1 kilometre or so of the Heartland towers and lines approved by the AUC November 1, 2011. Front line homes can be hit much harder – as much as 40% or more. Some appraisals have listed up to 91% devaluation associated with overhead lines.

HEALTH RISKS:

RMP refutes that high voltage lines affect health and say there are no documented cases. This is always people's first concern (then the aesthetics) and is worthy of our concern. Hundreds of articles exist. Here are a few. Keep in mind there are families currently battling cancer living under this proposed line as well as a young girl with cochlear implants which will be affected by the overhead static and cause buzzing in her ears. RMP has yet to acknowledge damages to these situations.

- <https://retasite.wordpress.com/your-health/> This covers everything from leukemia, Alzheimer's, birth defects, depression & suicide, corona effects, EMFs and more. Includes studies and references. Pretty eye opening.
- <http://www.brucej.me/Fact.24.pdf> corona effects and cancer risks are carried downwind several miles
- EMFs contribute to Autism

<http://www.clearlightventures.com/blog/2014/07/emf-reduction-for-autism.html>

- <https://retasite.wordpress.com/2013/01/23/new-report-confirms-health-risks-of-overhead-high-voltage-power-lines/>

ENVIRONMENTAL IMPACTS

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4081594/>
- <https://abcbirds.org/article/us-taking-action-to-enforce-the-migratory-bird-treaty-act/>.
- <https://www.epa.gov/energy/electricity-delivery-and-its-environmental-impacts>
Many high-voltage circuit breakers, switches, and other pieces of equipment used in the transmission and distribution system are insulated with sulfur hexafluoride, which is a potent greenhouse gas. This gas can leak into the atmosphere from aging equipment or during maintenance and servicing.
- <https://retasite.wordpress.com/the-environment/>

***This is a website dedicated to information related to burying high voltage transmission lines. It is well worth your time to review. On the right side info tab you will find fact sheets, and more than you ever wanted to know! https://retasite.wordpress.com/burying-high-voltage-lines/?fbclid=IwAR1555jo_z6umYrLGT8mXHDkSCZ2RB4vQ6Ku-fN48NahCF49fkp-plJDEdg

***And here are oodles of fact references: <http://www.brucej.me/References.pdf>

500kv buried underground

<https://newsroom.edison.com/stories/transmission-towers-in-chino-hills-safely-demolished-to-make-way-for-first-500-kilovolt-underground-transmission-line-in-the-united-states>

Video of the burying

<https://m.youtube.com/watch?v=iPNzW3OfCMc>

Attachments area

Preview YouTube video Chino Hills Transition Station | SCE Tehachapi Renewable Transmission Project



Responsible Electricity Transmission for Albertans

Burying High Voltage Lines



RETA has conducted significant research on burying high voltage power lines. We have studied the literature on the matter, and have met with underground cable experts from around the world. Several underground cable experts from Europacable have attended public and private meetings organized by RETA. We arranged for underground cable experts to meet with the Alberta Minister of Energy, other Alberta Members of the Legislative Assembly, as well as Alberta Energy staff, to explain how the undergrounding technology has advanced in recent years and how the costs have come down. Unfortunately, the Alberta Government, Alberta Electric System Operator (AESO) and Alberta Utilities Commission (AUC) refuse to seriously consider burying high voltage power lines like more progressive jurisdictions around the world do.

RETA has prepared a Fact Sheet on burying high voltage power lines, and references on the subject are included in our comprehensive reference list.

Benefits of Underground Lines:

In summary, when compared with overhead or above-ground lines, buried high voltage power lines:

1. eliminate the electrical field through shielding and significantly reduce the magnetic field through phase cancellation,

2. reduce the negative health impacts of overhead line electromagnetic fields (EMFs) to almost zero,
3. eliminate the negative health impacts of the overhead line corona effect,
4. are safer because they can't electrocute people or animals,
5. eliminate EMFs and stray voltage that negatively affect livestock,
6. do not negatively impact agricultural crop production,
7. do not interfere with agricultural operations,
8. are safer because buried lines don't fall over in hurricanes, tornadoes, other high wind storms or ice storms,
9. eliminate costly power outages to hundreds of thousands of customers every day resulting from damage to above-ground electricity infrastructure,
10. are not affected by solar storms,
11. do not start wildfires nor are they affected by fires,
12. are safer because aircraft and hot air balloons can't crash into them,
13. do not cause nearby pipeline corrosion or hazardous induced currents in pipelines,
14. do not lower adjacent property values,
15. are not an eyesore,
16. do not buzz or hum,
17. do not negatively affect tourism,
18. do not negatively affect other economic development opportunities,
19. do not negatively affect the environment,
20. do not kill millions of birds annually through collision,
21. do not frighten wildlife with ultra-violet flashes,
22. are not negatively affected by volcano ash fall-out,
23. are safer because they are not susceptible to terrorist attacks,
24. do not create electromagnetic interference or other negative effects on national defense equipment/installations,
25. are more reliable,
26. have lower maintenance costs,
27. are more efficient and have lower transmission loss costs, and
28. can be buried for almost the same capital cost as overhead lines.

Costs of Underground Lines:

With regard to the cost of burying high voltage power lines, based on RETA's research, expert testimony provided at the AUC hearing on the proposed Heartland Transmission Project, and many discussions with underground cable experts in Europe:

- The capital cost of burying these lines is not 4 to 20 times the cost of building overhead lines, as suggested by the Alberta Electric System Operator (AESO), Alberta Energy and transmission facility owners in Alberta (e.g., AltaLink, ATCO Electric, EPCOR).
- For example, expert testimony at the April and May 2011 Heartland AUC hearing indicates that the capital cost of a partially buried Heartland double circuit 500 kilovolt line (i.e., 20 of 66 kilometres

would be buried) is only about 15% higher than AltaLink's and EPCOR's \$580 million estimated cost of an entirely above-ground Heartland line. This is a rounding error within the electricity transmission industry, and well within AltaLink's and EPCOR's Heartland Transmission Project contingency budget.

- Maintenance costs of buried high voltage power lines are substantially lower than for overhead lines, and this is because underground lines are not subject to tornadoes and other high wind storms, ice storms, general weather deterioration, birds colliding with lines and knocking the power out, etc. For example, the 40-kilometre 500kV line buried in Tokyo in 2000 has had zero maintenance issues.
- Transmission loss (electricity to heat) costs are anywhere from 50% to 67% lower for buried than for overhead lines. This can add up substantially over the 60-year life of a line. In Alberta, the one-year transmission loss costs were estimated by AESO at \$220 million in 2009.

When you combine the capital, maintenance and transmission loss costs over the 60-year life of a high voltage power line, and add the health and property devaluation costs associated with overhead lines, buried lines cost much less than overhead lines. So don't believe any transmission company that says it's too expensive to bury high voltage power lines.

Examples of Underground Lines:

When asked about burying high voltage power lines, many electricity transmission companies will respond, *"It hasn't been done before"* or *"The technology hasn't been sufficiently developed"* or *"You can't successfully bury higher voltage transmission lines such as 500 kilovolt or 400 kilovolt lines"*. None of these responses is true.

The fact is there are thousands of examples of successfully buried 240 kilovolt transmission lines and lines of lower voltage. Many cities and towns around the world have many miles and kilometres of buried high voltage lines, especially in densely populated and "downtown" areas.

As transmission companies look to build higher voltage lines – 500kV and 400kV – more and more residents, businesses and governments are calling for these lines to be buried because the higher voltage towers and lines are usually much taller and more unsightly, and hence have increased negative impacts. There are many examples of successfully buried 500kV and 400kV lines. This list includes just a few of the many successfully buried 500kV lines, and this list includes just a few of the many successfully buried 400kV lines. For technical details of another successfully buried 40-kilometre-long 500kV line in Tokyo see Yonemoto et al. 2003.

Summary:

When the capital, maintenance and transmission loss costs are combined over the 60-year life of a line, underground high voltage lines are generally less expensive than overhead lines. High Voltage Direct

Current (HVDC) lines are even easier and cheaper to bury than High Voltage Alternating Current (HVAC) lines. We bury sewer lines, water lines, telephone lines, electricity distribution lines, TV cable, natural gas lines, oil pipelines, gas pipelines, and other petroleum product pipelines. It's time we started burying more high voltage transmission lines (AC and DC) because overhead lines and towers are unsightly and have so many other negative impacts.

Blog at WordPress.com.

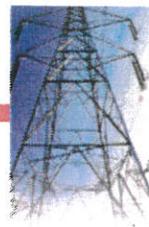


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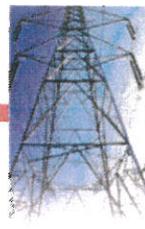


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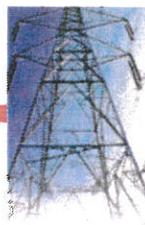


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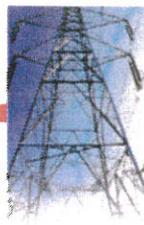


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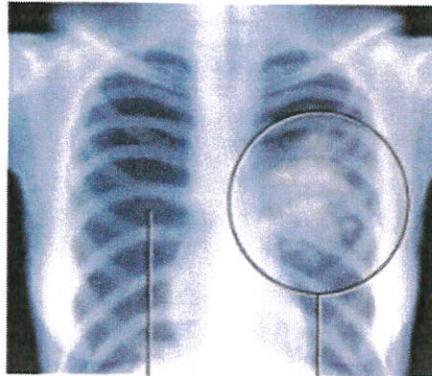
HEALTH IMPACTS OF CORONA EFFECT

The Myth:

The corona effect associated with overhead high voltage power lines has no impact on health.

The Facts:

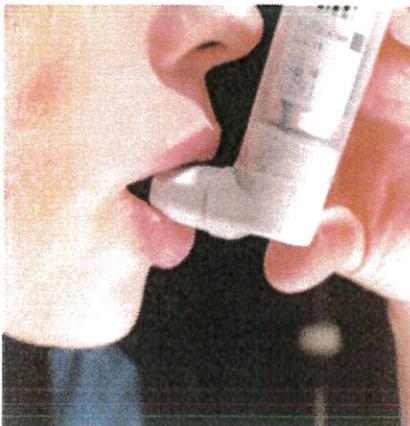
- Overhead high voltage power lines ionize the air, emitting trillions of so-called corona ions into the air per second (Abdel-Salam and Abdel-Aziz 1994, Henshaw and Fews 2004). These ions attach to aerosol-sized particles of air pollution including those that are carcinogenic (e.g., diesel exhaust), increasing the electric charge state on these aerosols. The resulting cloud of corona ions and charged aerosols is carried by the wind for significant distances, varying from several hundred metres up to 7 kilometres downwind of power lines (Chalmers 1952, Mühleisen 1953, Henshaw and Fews 2004). When inhaled, electrically charged pollutant aerosol particles deposit in the lungs at a far greater rate than uncharged aerosols (Cohen et al. 1998, Fews et al. 1999, Melandri et al. 1983).
- A risk analysis conducted by Henshaw (2002), suggests that 200 to 400 excess cases of lung cancer mortality and 2,000 to 3,000 excess cases of cardiovascular and respiratory illnesses and aggravated asthma and allergies may occur annually among the 2.7 million people living within 400m of high voltage power lines in the UK. The researcher suggested that these excess cases of illnesses resulting from the corona effect are likely at a level of public health significance.



Normal lung

Cancerous tumour

- Preece et al. (2001) found increased incidence of both lung cancer and mouth cancer in populations living downwind of overhead high voltage power lines in southwest England. For lung cancer, there was a statistically significant higher rate downwind.
- It is known that between 50% and 90% of outdoor pollutant aerosols penetrate indoors in normal ventilation (Hussein et al. 2001). It is therefore safe to assume that near overhead high voltage power lines a significant proportion of pollutant aerosols electrically charged by corona ions will be inhaled indoors (Henshaw and Fews 2004).
- The risks reported above would be particularly significant along Highway 216 adjacent to EPCOR's and AltaLink's preferred route for the Heartland power line where carcinogenic aerosols (diesel exhaust) are in high concentration a very short distance upwind of thousands of homes and many schools.



For information on what you can do go to www.reta.ca

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Prepared by RETA. Updated January 20, 2010. References available at www.reta.ca.

LIVESTOCK, PETS AND HIGH VOLTAGE POWER LINES

The Myth:

Overhead high voltage power lines and associated electromagnetic fields (EMFs) have no negative impacts on livestock or pets.

The Facts:

- In addition to the many laboratory studies on the negative effects of EMFs on animals and cells, important studies have been conducted on EMF effects on dairy cattle. Dairy cattle are not only a significant agricultural and economic resource, but are also important indicators of how EMFs probably affect other large mammals in the wild (e.g., bison, bighorn sheep, moose, mule deer, white-tailed deer [the last 3 species are found along EPCOR's and AltaLink's preferred and alternate routes for the Heartland line]).
- Exposure to electric and magnetic fields resulted in an average decrease of about 5.0% in milk yield, 13.8% decrease in fat corrected milk yield, and 16.4% decrease in milk fat among Holstein cows in Quebec (Burchard et al. 2003).
- Other studies show a weakening of the blood-brain barrier (Burchard et al. 1998) and negative changes in response to daylight hours (Rodriguez et al. 2004) in Holstein cows exposed to EMFs.
- The family of a French farm crossed by a high voltage power line reported breathing problems and weakened immune systems in both cows and pigs; abnormally low pig birth rates and high piglet mortality; and undersize heifers, some afflicted with hemorrhages or abortions and 10% milk loss (Agence France Presse 2008). A French Civil Court ruled in the family's favor and ordered the power company to pay for damages.
- A study of pet dogs and cats exposed to above-normal EMF levels in Michigan (Marks et al. 1995) reported deformities in stillborn and surviving puppies and kittens. Female dogs ceased cycling or had abnormal "unbreedable" seasons. Male dogs revealed a lack of sperm. Neither Persian nor mongrel female cats showed signs of reproductive cycling.
- Pet dogs that lived in homes with above-normal magnetic field levels had risks of canine lymphoma (cancer of the lymph system) up to 6.8 times the expected (Reif et al. 1995).



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Exhibit B (1)

PARK CITY COUNCIL WORK SESSION MINUTES SUMMIT COUNTY UTAH NOVEMBER 15, 2012

Present: Mayor Dana Williams, City Council Members Alex Butwinski, Liza Simpson, Dick Peek, Cindy Matsumoto, and Andy Beerman

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

Steve Rush, Kevin Keystone and Brian Bowles, Rocky Mountain Power; Les Bell and Mike Volarty, ICPE; Steve Preston and Bill Miller, Iron Horse Apartments; Jesse Shetler, Park Meadows resident, Mark Fischer, property owner; John Phillips, Park Meadows resident representing the Fireside HOA; Mary Wintzer, property owner; and Tim Brenwald, Powdr Corp

Rocky Mountain Power Substation expansion/relocation. Planning Director Thomas Eddington stated that the objective was to discuss the Council's support for the relocation, as well as any conditions or additional information needed with regard to the potential relocation. Mr. Eddington presented images and provided a brief overview of both the existing and proposed sites. At a previous meeting the City Council had a number of design questions, at which time Rocky Mountain Power was able to show initial perspectives and photo shop images of what the site might look like. Since that time stakeholder meetings were held at The Yard and the Staff has worked with Rocky Mountain Power on the idea of possibly moving the substation back on the relocated site and rotating it a little. Mr. Eddington reviewed images that were updated since the last meeting.

Cindy Matsumoto asked about three poles shown in front. Mr. Eddington believed those were for the overhead option that brings the lines in and drops them down into the substation. Whether the lines are underground or above ground, there would still be some poles.

Alex Butwinski asked if money was unlimited, whether they could underground power all the way to the station, and if it would still have to go vertical up a 55 foot pole. Kevin Keystone with Rocky Mountain Power explained why a 55 foot pole is still required with undergrounding. Because of the topography of this particular site, the ground pole sits at street level. Where the steel structure sits is down in the ground. Mr. Keystone pointed out that the distribution is all that goes underground. Lower voltage underground distribution was being proposed for all the options in either location. Mr. Butwinski had commented on the power line design on 11th East. Mr. Keystone explained the difference between the one proposed and the one on 11th East. He noted that the 11th east substation was rebuilt four or five years ago. Mayor Williams asked if 11th East has been a continuous site for 25 or 30 years. Mr. Keystone replied that the original site was built

around 1920 and was the original track system of Salt Lake. It has been modified through the years into what it is today.

Andy Beerman understood that even if the lines were undergrounded, it would still have to be daylighted and run up the poles to come into the station. He asked if that was due to an efficiency issue or lack of technology. Mr. Keystone stated that technology known as Gas Insulated Substations (GIS) is used when there is a high significant cost to the value of land. However, the cost of GIS technology is 8-10 times higher than what was being proposed. Dick Peek asked for the incremental cost of doing the option of three poles in front. Mr. Keystone estimated the difference to be \$3-5 million. Referring to a rendering, he noted that if they used the GIS technology, it would remove the three poles out front and the three H structures in the back. Mr. Beerman asked if the GIS technology had been done anywhere in Utah. Mr. Keystone answered no. He stated that Rocky Mountain Power did an evaluation four years ago on an upgrade south of the E Center, and found that the incremental cost was not worth the benefit. The GIS technology is typically used in Casinos along the Las Vegas Strip. It is also used in cities such as Tokyo where there is high density with high loads.

Liza Simpson clarified that the cost would be \$8 million above the normal price of doing the substation, and that number is only for what is inside the walls. The cost does not include undergrounding the lines into the substation or out of the substation. Cindy Matsumoto understood that it was \$3-5 million additional, and that could increase to \$8 million with the undergrounding. Mr. Keystone showed exactly where the GIS would be used. The transformers and remaining pieces would not change. Ms. Simpson stated that she had asked for clarity because the number was not far off from the basic relocation cost. Mr. Keystone noted that it would be above and beyond the relocation cost. Mr. Beerman remarked that if it was also above and beyond the cost to install the poles and all the structures there would not be a savings.

Diane Foster noted that the consultants were in attendance and she asked them to introduce themselves. Les Bell with ICPE stated that he was hired by the City to confirm cost estimates and projects. Mr. Bell stated that he worked on a GIS substation at Caesar's Palace in Las Vegas and the cost was overwhelming. Mike Volarty, also with ICPE, stated that he has been working with Matt Cassel on some of the issues.

The Council and Rocky Mountain Power discussed various scenarios and options related to the substation.

Mayor Williams noted that projects associated with moving the substation would generate a greater demand for power. Based on that fact, he asked if Rocky Mountain ever considers reducing the cost of relocating the substation. Mr. Keystone pointed out that since another

viable option is to expand inside the existing footprint, there would be no way to make an argument for a cost reduction as a reasonable economic approach. Rocky Mountain Power has never had a situation where the cost was reduced. Mayor Williams questioned why a billion dollar economic improvement to the City was not worth the \$3-4 million to move the substation. Steve Rush stated that other rate payers would have to bear the cost if a reduction was given to Park City and that would not pass the Public Service Commission. Mr. Butwinski asked why the revenue increase for Rocky Mountain Power was not in the equation. Mr. Keystone stated that under the established process Rocky Mountain Power must have a signed guaranteed revenue contract in order to spend those funds. There is a mechanism in place to credit the revenue funding towards a specific entity. The entity would have to guarantee the specified load, and even if the load was not delivered it would need to be compensated. Mayor Williams asked if there was a specific time limit on the guaranteed load. Mr. Keystone replied that the contract takes the delivery as soon as the substation is built.

In looking on Google Earth, Dick Peek thought the 11th East substation looked remarkably compact. Liza Simpson asked for the square footage of the 11th East substation. Mr. Keystone recalled that the 11th East substation was approximately 180' x 190'. The Council and representatives from Rocky Mountain Power discussed the location and design of the 11th East substation. In terms of the Park City substation, Mr. Keystone noted that the design proposed for the relocated site could be accomplished on the existing site. The challenge with the existing site is access and the ability to turn equipment around. Mr. Keystone stated that the functionality of the 11th East design could not be replicated on the existing Park City site.

Mr. Eddington presented slides showing how the substation would fit into the Bonanza Park Plan Area. He showed the impacts that would occur if the Substation was left in its current location. It would also require a significant redesign for the Bonanza Park Area Plan.

Diane Foster stated that the Staff would come back with a financial analysis to confirm the numbers mentioned this evening. She clarified that they were not looking for an answer this evening on whether or not to move the substation. It was an ongoing process; however, in order to get through a CUP process and have the substation in place by 2015, the Council will be asked to make that decision in January. The Staff would like to know from this meeting what additional information the Council would like to see at the next meeting. Alex Butwinski remarked that visual impact was an obvious concern and screening is an important factor to consider in the studies. He asked who had paid for the screening on the 11th East site. Mr. Keystone replied that Rocky Mountain Power paid for all the improvements because the site had to be expanded to meet their needs. An expansion would not be required for the existing Park City site to fit the facilities.

Liza Simpson was confused as to why having transmission lines on the east side of Bonanza was more costly than on the west side of Bonanza. When the Staff comes back with more definitive numbers, she would like to see aesthetically pleasing fencing options regardless of where the power station is located. Ms. Simpson thought fencing would be a significant piece of the cost and a factor in determining whether or not to put the lines underground.

Steve Rush stated that Rocky Mountain Power was willing and able to build on the existing site. With the possibilities presented at lower Iron Horse, they were trying to make sure that it technically fits. He understood the expectation of focusing on other issues, but their primary focus is whether it can work, the best way to make it fit using the footprint as best as possible, and to create space for landscaping.

Dick Peek wanted to see option for GIS and buried lines at the new location. He would like to see GIS in the existing location, and the type of screening that Rocky Mountain Power would provide. Mr. Rush stated that per the current arrangement being discussed, if they build on the existing site, very little needs to be done with the property. The relocated site would have to be prepared to meet Rocky Mountain Power requirements. If Park City adds additional requirements, he was unsure who would bear that cost but it would not be Rocky Mountain Power. Mr. Peek clarified that he wanted to see the cost of what he requested for both the existing and the new site, so the Council could consider that information in making the decision moving forward. Mayor Williams questioned why they would ask Rocky Mountain Power to do additional work and research when the City is still trying to find funds to relocate the substation. Mr. Peek did not believe it would cost much for Rocky Mountain Power to provide different options. Diane Foster recalled that in conversations with Matt Cassel, the challenge is not being able to dig over the flood plain in the new location and they would need to research that further.

Andy Beerman wanted to see the same information Mr. Peek had requested. Ms. Simpson clarified that her direction regarding the fencing was to Staff and not Rocky Mountain Power. Ms. Simpson also requested a cost estimate to create the new access road through the parking lot in Prospector to the lower Iron Horse condos. She needed to pin down the numbers associated with all the pieces in order to make a decision.

Andy Beerman asked if there was a maximum height for screening walls based on equipment needs and access. Mr. Keystone noted that the same question was asked during the development of the Gateway. They went through a number of renderings and actually looked at a façade on the front that was between 20 and 25 feet. Mr. Keystone stated that the challenge for the Park City site is the need for a support structure, which takes up more space. Rocky Mountain Power is required to build to a

certain seismic criteria because they are a critical service. There are options, but it involves more than just vertical height. Mr. Beerman asked if the GIS option could be entirely enclosed in a structure. Mr. Keystone stated that it could be done; however, it adds another dimension from the standpoint of cooling the transformers. If enclosure limits the airflow, they would have to provide cooling systems. Another problem with full enclosure is removing equipment when it fails. Mr. Rush commented on other implications related to full enclosures.

Diane Foster remarked that the City Council would have opportunities for future discussions and funding options. The intent is to have a holistic funding discussion with the City Council to help set priorities; followed by a funding discussion on the substation. Mayor Williams thought they needed to be careful about spending tax dollars. Another option is for the City to work with the developer and for the developer to pay because he gains the benefit. The City would need x-amount of additional density in order to justify the expense of paying for it. Mayor Williams referred to a conversation in a joint meeting with the Planning Commission about possibly allowing 8-10 story buildings. He believed that is where this was going. He was progressively more concerned about what BoPa would turn into as an exchange for the relocation. Diane Foster stated that the Staff would be presenting a range of funding options. She asked the Council to remember that this was a 50-100 year decision and there would be bonding options from a 15-20 year perspective.

Liza Simpson asked if Mr. Eddington was satisfied with the numbers on tax revenue. Mr. Eddington replied that the Staff was fairly satisfied with the numbers. Based on the discussion this evening, he would scrutinize the numbers more closely. He noted that the rough calculation did not include all of the perceived impacts if the substation remained in its current location. He believed the actual impacts would be greater. Mr. Eddington anticipated less development in the Bonanza Park Area Plan if the substation stays in its current location. He summarized that the Staff would research costs for the access road, as well as for increased heights and facades and other opportunities.

Liza Simpson stated that they have worked very hard to create something vibrant in the Bonanza Park area, and she would like to know the costs in terms of reduced revenue and projected revenue. Cindy Matsumoto referred to the slide with the red building and asked for the height of the building. Mr. Eddington believed it was approximately 25 feet. Dick Peek thought it would be interesting to see a rendering with that scenario in its current location with GIS. Ms. Matsumoto remarked that if they can save \$2-3 million dollars by not moving the substation, that money could be used for screening. Mr. Peek agreed. He also suggested that they could create a funding mechanism for that area of Bonanza Park to help pay for it.

Mayor Williams called for public input.

Steve Preston spoke on behalf of the Iron Horse Park Apartments. His motivation is to preserve the safe and pleasant atmosphere of the Iron Horse Park Apartments for the numerous residents who live there. In reviewing the design criteria for both substations and transmission, he noticed a number of things. One was that it would avoid residential neighborhoods. There was also criteria based on proximity to parks and waterways. Mr. Preston stated that there were approximately 417 within the Iron Horse Park Apartments; 225 adults and 192 children. He noted that the City was talking about putting a substation into one of the highest density areas in Park City. Ten percent of Park City's population lives in that area. Mr. Preston pointed out that when the Iron Horse Park Apartments were developed, numerous restrictive covenants were recorded against the land with several organizations and with the lenders. He requested that the City resolve some of the impacts and suggested a connection across Prospector Square so the residents and school children do not have to weave through the maze of a substation to get to their property.

Bill Miller noted that a portion of the land for the substation site is actually part of the condominium project. He had documents from the Title Company to support his claim. In addition an easement was given and no one could move it. Mr. Eddington stated that he and Matt Cassel were researching that property question.

Jesse Shetler, a Park Meadows resident and a local businessman stated that many of his questions were answered during the discussion this evening. There are many issues and it appears that the City Council is prepared to address them. Mr. Shetler was interested in opening an establishment in Bonanza Park. He is very pro-commercial and he believes it is important to move the power substation so the Bonanza Park Development can maximize its potential, which would include a large residential element. Mr. Shetler had confidence in the City Council and he looks forward to future meetings.

Mark Fischer stated that this decision has been a long time coming. Because it is a 50-100 decision, he encouraged everyone to take the necessary time to get it right, even if it extends beyond January. He was very concerned about the issues expressed by the other speakers and they need to realize that this is a once-in-a-lifetime decision that will dramatically alter or eliminate the idea of Bonanza Park if the substation is not moved. Mr. Fischer felt that fact needed to be weighed against the other options. He thought a crossing from Prospector across the Rail Trail should be considered. It would avoid the concern of children on the road and it would provide a quicker access to school. It would also take traffic off of Bonanza Drive and it would solve the problem with the Iron Horse intersection. Mr. Fischer stated for the record that if the substation is moved to the new site, his property would not be condemned. He looks forward to working with the City and he promised to be open and considerate of the neighbors in an effort to come up with the best solution.

John Phillips, representing the Fireside HOA, agreed with the speakers from Iron Horse that the large population base is important to consider and mitigating impacts to them is the most important element. Mr. Phillips understood that the City believes that the end result would benefit the residents because moving the substation would allow for creating a vibrant community in the Bonanza Park area. After hearing the discussion, he believes they are all on the right track. In his personal opinion, it is a good location for the substation and for the future development of the area. It can be positive for those living in the immediate area as long as the impacts are mitigated. He asked the City Council to make sure there are contingencies to address unintended consequences that may arise.

Cindy Matsumoto asked if Mr. Phillips lives in the area. Mr. Phillips stated that he is currently a homeowner in Park Meadows. He lived in the Bonanza Park area for approximately four years and he is still very involved with that community. He is a Board member of the Fireside HOA. Cindy Matsumoto asked if the Fireside Board had taken a position on the substation. Mr. Phillips replied that the Board members have attended community meetings and they are very comfortable with the direction the developer and the City is headed. This is a culmination of everyone working together and with that cooperation it could benefit everyone.

Mary Wintzer, an owner of the Iron Horse District, stated that she and Mark Fischer have discussed this matter at length. As a commercial property owner she did not feel that moving the substation would benefit her project. However, as a citizen at large, she asked that the City obtain view corridor studies coming down Iron Horse to see how it would impair the view. Ms. Wintzer remarked that it is extremely important to consider the concerns expressed by the Iron Horse residents and that size of population. If impacts could be mitigated without destroying Mr. Fischer's plans for Bonanza Park, the impacts should be to commercial buildings and not residential. Ms. Wintzer commented on the importance of understanding the real numbers because the cost is significant for taxpayers. If the Council is undecided and the substation stays in its current location, she asked that they look at ways to make it palatable so it does not destroy what Mr. Fischer has accomplished. If the substation is moved the City needs to find a way to fund it so the taxpayers are not bearing the burden. Also, if the substation is moved to enhance Bonanza Park, some of the revenue must go into mitigating the impacts.

Tim Brenwald with Powder Corp. stated that the Company hopes to one day develop property in partnership with Mark Fischer. It provides an opportunity for the City to look at new infrastructure as well as new roadways. Mr. Brenwald thought power lines were overlooked in the discussion. When power lines come in and go to one station or the other, there will be significant visual impacts. He thought that issue needed to be discussed in greater detail.

Steve Rush agreed with Mark Fischer about the timeline and the importance of this decision. He explained that the timeline projected by Rocky Mountain Power was based on the fact that the substation must be in service by the fall of 2015. They were not insensitive to the importance, but they have to look at the reality of the time it takes to go through all the City processes.

Mr. Butwinski asked about staging on the existing site and how that would affect Mr. Fischer. Mr. Keystone explained the construction sequencing and dismantling of equipment in the timeline of when the load is down. Typically construction can start in March and goes into September. In terms of staging materials, all the equipment would be staged at a Rocky Mountain Power facility. He assumed staging would occur at the Park City Service Center in the Snyderville area and transported to the site. Mr. Keystone did not think they would need to use Mr. Fischer's property.

Mr. Butwinski asked how long Rocky Mountain Power has known that the substation needed to be moved or rebuilt. Mr. Keystone replied that they started the project with a timeline approximately 2-1/2 years ago. They have been working with Staff for the last 18 months on choosing a site and going through a number of exercises to narrow it down to the two locations proposed. Mr. Rush stated that substation would have needed to be in service sooner if the economy had not slowed down.

Mr. Butwinski noted that the City Council received the information six weeks ago and now they are being asked to make a decision by the end of the year. He did not feel the Council was given a fair amount of time to evaluate all the options and consider the costs. Mr. Rush stated that Rocky Mountain Power has worked with Staff and evaluated a number of sites, and he believed the City Council was made aware of that at the time. He wanted it clear that Rocky Mountain Power did not have a preferred site and that the decision is up to the City Council. However, Rocky Mountain Power has a responsibility to make sure that in 2015 they have the ability to provide power to the residents of Park City. They were being responsive to the options and trying to work with the City.

Liza Simpson pointed out that the City has been talking about this for months and the Council received the evaluation of suggested sites months ago. She understood Mr. Butwinski's concern and she was certain that if they were not ready to make a decision until February that Rocky Mountain Power could work with that time frame. Ms. Simpson was open to any suggestions for outreach to the citizens to get them involved in understanding the decision the Council is faced with making. Mr. Butwinski clarified that his comments related to the limited time the Council was given to obtain and evaluate the necessary information to help make their decision.

City Council Meeting
November 15, 2012
Page 9

The meeting for which these minutes were prepared was noticed by posting at least 24 hours in advance and by delivery to the new media two days prior to the meeting.

Prepared by Mary May, Secretarial Services



City Council Staff Report

Subject: Relocation of Rocky Mountain Power's
Bonanza Substation

Authors: Matthew Cassel, P.E., City Engineer
Thomas Eddington, Planning Director
Phyllis Robinson, Community Affairs Manager
Nate Rockwood, Capital Budget Manager

Date: January 24, 2013

Type of Item: Work Session

Recommendation:

Staff recommends that the Bonanza substation be relocated to 1555 Iron Horse Drive in the low profile alignment as described in this report and subject to staff's ability to secure a public-private funding package.

Topic/Description:

Rocky Mountain Power Substation Relocation

Background:

Rocky Mountain Power 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 at nearly full capacity. Rocky Mountain Power has indicated that it needs to upgrade the substation by Fall 2015 in order to meet local power needs.

For the past several months staff has worked with Rocky Mountain Power to identify substation location options consistent with these goals and the Bonanza Park Area Plan. In November 2012, staff presented three substation scenarios to City Council for discussion:

- **Do Nothing.** Rocky Mountain Power will upgrade the substation within the existing footprint.
- **Mitigate.** Underground transmission lines at the existing site and provide visual screening as possible.
- **Relocate.** Move the substation to 1555 Iron Horse Drive and mitigate visual impacts.

Staff recommends relocating the substation to achieve the joint City Council/Planning Commission redevelopment goals for the Bonanza Park area and the resulting Bonanza Park Area Plan presented to the City Council and Planning Commission in January 2012. The Plan proposes a mixed-use concept for the 99 acre area that is envisioned to be a district that is locally focused in terms of residential development (mixed-income opportunities) and commercial development that diversifies the City's existing mix and might include a satellite campus for higher education, a business incubator, a culinary institute, or research/office space for new businesses.

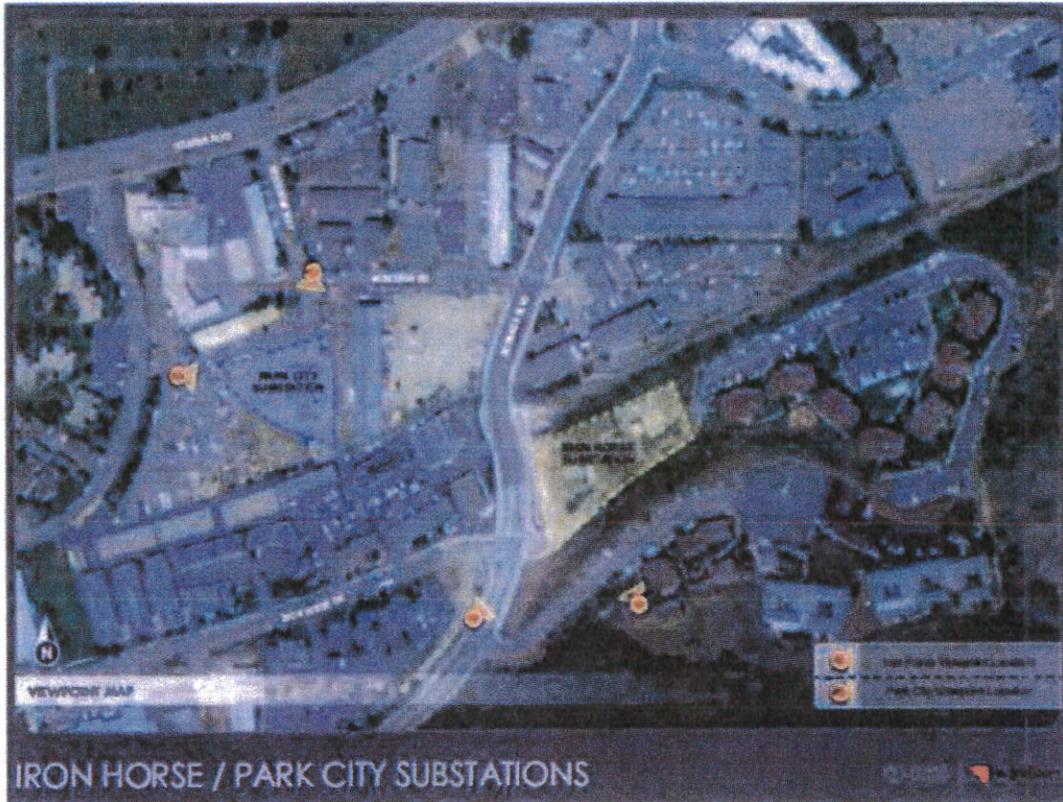


Figure 1: Substation Study Area

The Bonanza Park district is a unique area within Park City – it is comprised of flat land that is easily developed (and redeveloped) and is located at the intersection of the City’s two transportation corridors (SR 224 and SR 248). The Bonanza Park Area Plan represents a significant opportunity to create a new residential/commercial district that addresses the needs of the local community. The vision for the Bonanza Park area stemmed from the joint City Council – Planning Commissions that were held from July – December 2011. The overall takeaway from those meetings focused on “collaboration” between the City and the private entities as a way to effectuate the kind of development that we would like to see for future generations.

Joint Redevelopment Goals for Bonanza Park (August 25, 2011 Joint Meeting)

<u>Current Character</u>	<u>Future Character</u>
Underutilized, Room to Grow	Vibrant
Rundown, Outdated, Aging	Affordable
Lacking Identity	Multi-Generational
Uniform, Boring, "Anywhere USA"	Contemporary
Uninviting	Strong Identity

<u>Current Function</u>	<u>Future Function</u>
Entrepreneur/Sm. Business Opportunities	Mixed Use
Commercial	Fulfills Everyday Needs
Mixed Use	Entrepreneur/Sm. Business Opportunities
Industrial	Local Focus
Local	Shopping
Fulfills Everyday Needs	

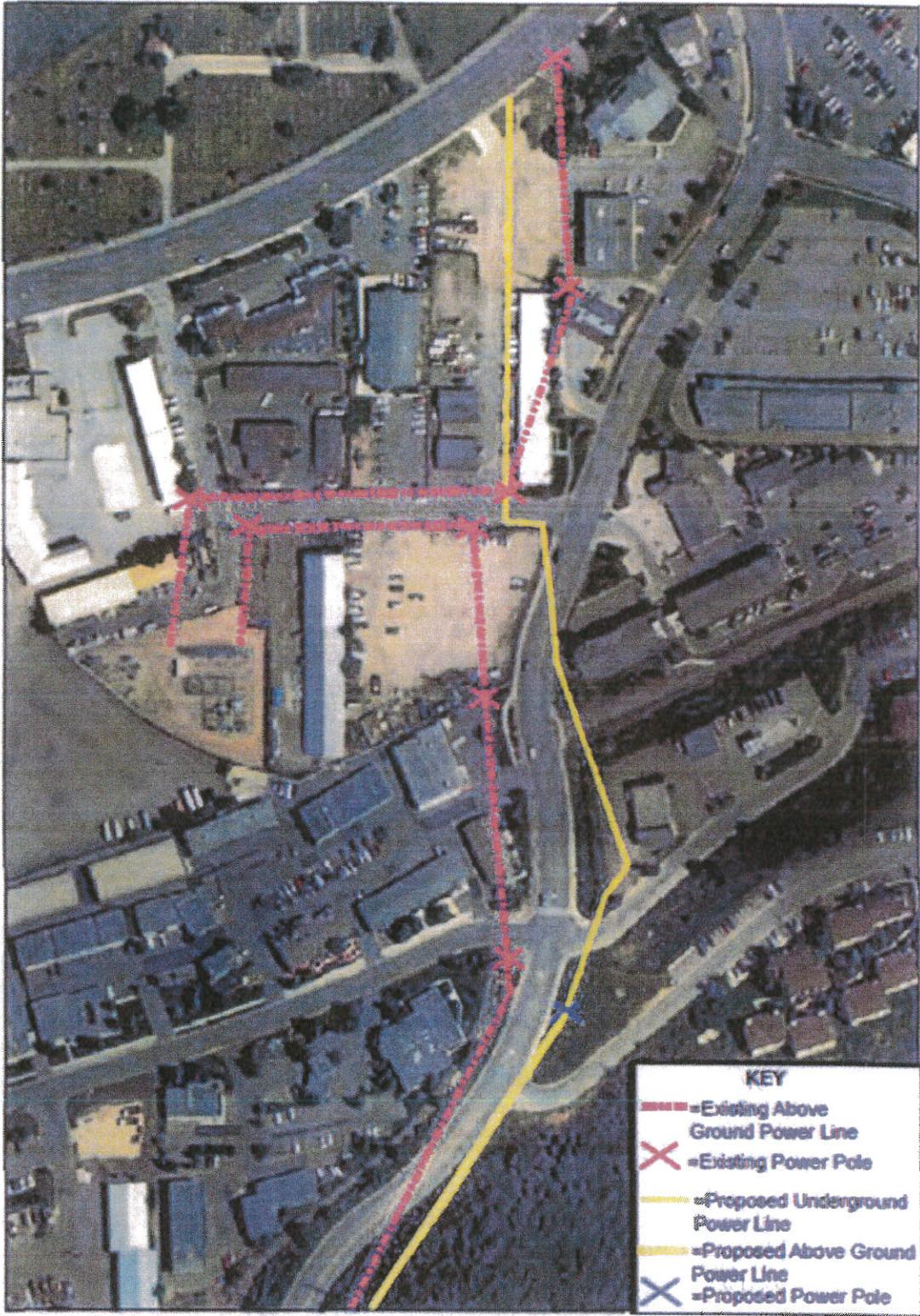


Figure 2: Existing/Future Conditions Map

Analysis:

Following a lengthy work session discussion on November 12, 2012, Council requested that staff return with the technical information listed below. Staff hired Intermountain Consumer Professional Engineers, Inc. (ICPE) to provide a third party review of the information submitted by Rocky Mountain Power.

- a. **Is it possible and what is the cost to construct a Gas Insulated Station (GIS)?** While theoretically possible to construct a GIS station that would completely conceal the substation, it is not an option in Utah. Rocky Mountain Power does not have experience with this technology and would not be able to implement it in Park City. This is a technology used for very large developments (such as in casinos in Las Vegas.) The \$15.5 mil construction estimate provided by ICPE is for the electrical infrastructure components only.
- b. **Is it possible to relocate the substation to the Silver Creek area (Quinns Junction Area)?** Relocating the substation outside of Bonanza Park will not meet Rocky Mountain Power's time frame of an upgraded substation in service by September 2015. Additionally, the cost to move the substation will be in excess of \$20 million. The electrical infrastructure components of the system are estimated to cost \$15,800,000. Adding in potential land costs, rights of way costs, potential soil and wetland mitigation costs, road reconstruction costs and cost to cross Highway 40, will push the cost in excess of \$20,000. This is not a viable option.
- c. **Are the proposed layouts and costs provided by Rocky Mountain Power reasonable?** The City's consultant, ICPE, reviewed both of these concerns and found them to be within generally accepted industry standards. It is ICPE's opinion that Rocky Mountain Power will not be able to expand totally within its existing footprint and will need more space depending on the alternative. If the do-nothing alternative (expand at existing with power lines overhead) is selected, Rocky Mountain Power would need an additional 900 square feet from Park City Mountain Resort's (PCMR) property. If the expansion on the existing site is selected with buried power lines in and out of the substation, Rocky Mountain Power would need the 900 square feet from PCMR and an additional 1,400 square feet of City property. If the expansion on the existing site is selected using the low profile system, Rocky Mountain Power would again need the 900 square feet from PCMR and an additional 5,340 square feet of City property. Rocky Mountain Power's construction costs for the electrical infrastructure components only were evaluated by ICPE. Other costs prepared by staff such as decorative walls/screening, utility relocation costs, roadway costs, retaining wall costs, were not evaluated by ICPE.

Council also raised concerns about the visual impact and cost of an upgraded substation. Specifically, Council requested the following additional information:

- c. **Are there other design/layout options that could be pursued to reduce the visual impact of the substation, and**
- d. **What funding options are available to offset costs of moving the substation and/or mitigating its impacts?**

This staff report focuses on these two questions and presents a design and funding approach for Council's consideration.

Preferred "Low Profile" Horizontal Substation Configuration

Following the November 2012 work session, staff met with Rocky Mountain Power to once again to discuss options to reduce the visual impact of the substation. At our December 2012 meeting, Rocky Mountain Power suggested a different option which would reduce the height by spreading the substation horizontally rather than stacking equipment vertically. Rocky Mountain Power operates substations with this "low profile" or "horizontal" layout in other locations in Utah. In addition to reducing the height of the substation, the power lines entering and leaving the substation in this configuration are all underground further reducing visual impact.

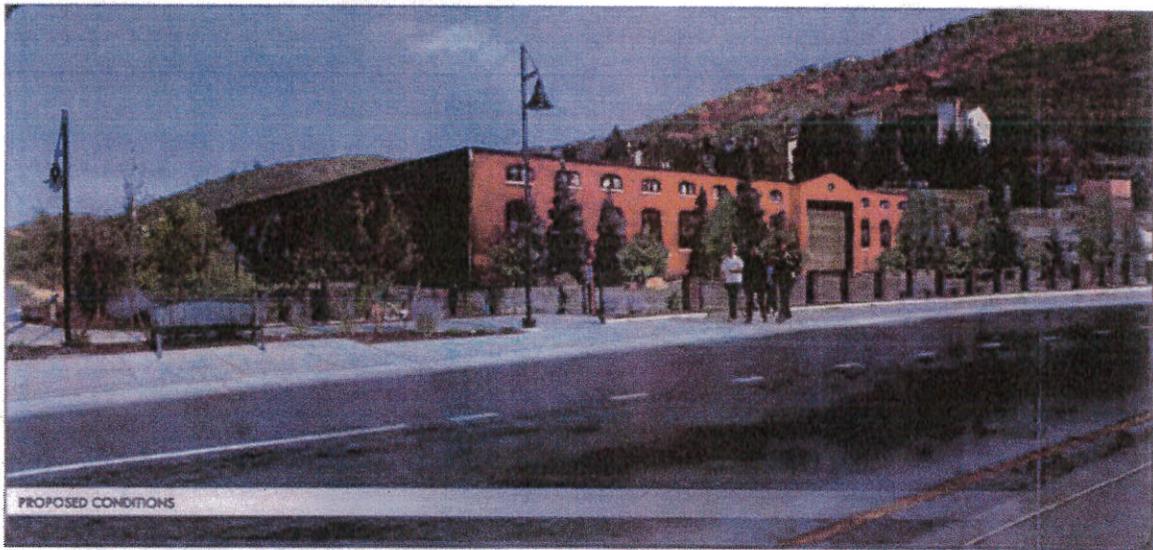


Figure 3: Low Profile with Building Screen

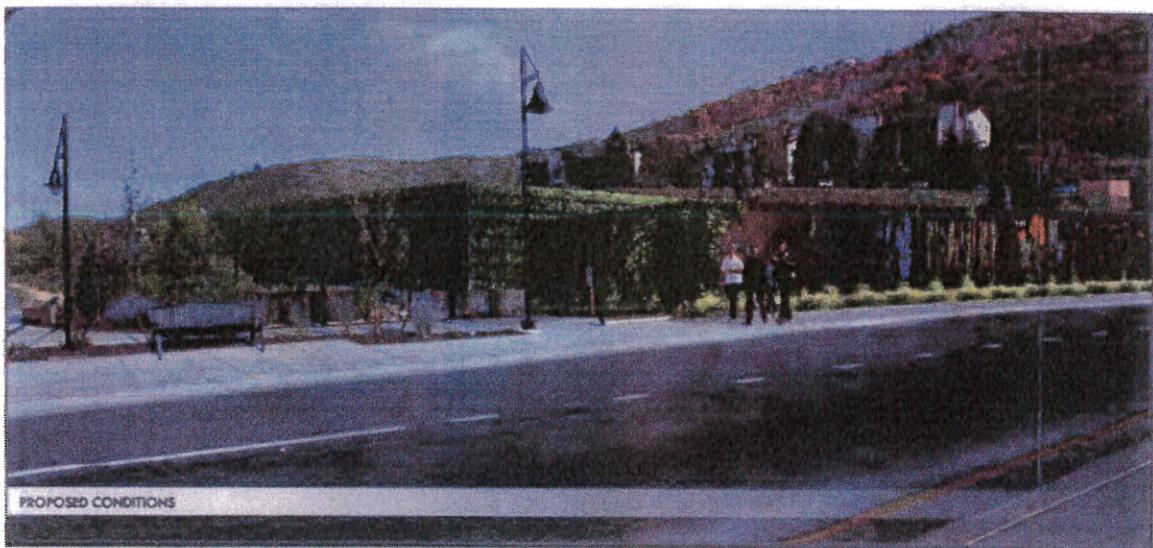


Figure 4: Low Profile with Art and Gardens

This “low profile” or “horizontal” layout has several advantages to prior design approaches:

- **Mitigates visual impact of substation.** The low profile layout reduces the height of the substation from a height of 60 feet to approximately 30 feet, or three stories. At this height it becomes possible to effectively screen the substation and significantly reduce its visual impact. The ability to screen the substation and incorporate it into the landscape of the area reduces the impact on the streetscape that the vertical option will have.
- **Reduces visual intrusion in the community.** The low profile layout reduces the visual intrusion from multiple vantage points including Iron Horse Drive and Upper and Lower Iron Horse Drive within the district, as well as neighborhoods in Prospector. It also improves the visual experience along the corridor.
- **Creates opportunities to resolve other land use issues.** This layout option also can address other land use issues including circulation and access for the residents of Lower Iron Horse Drive, and in turn through traffic on Bonanza Drive. Re-routing access into Prospector also provides the opportunity to address traffic flow in that area, as well as other development constraints.
- **Increases separation between residential uses and substation.** While the science on the impact of EMFs is not conclusive, the lower profile layout increases the distance between the substation and adjacent residential units.



Figure 5: Potential Low Profile Layout

Challenges of Low Profile Option

There are two critical issues that affect the feasibility of the Low Profile Option are Development Cost and Development Risk.

Development Cost:

The projected cost for the low profile substation relocated to 1555 Iron Horse Drive is \$11.4 million.

Project Cost for Low Profile Substation at 1555 Iron Horse

Substation relocation (RMP submitted costs)	\$3,770,056
Site prep/improvements; rights of way acquisition	\$ 500,000
Visual buffering and landscaping	\$ 600,000
Bridge across Silver Creek	\$ 965,000
Buried power lines – IN (required for low profile)	\$2,221,850
Buried power line – OUT (required for low profile)	\$3,355,000
TOTAL	\$11,411,906

(A related consideration is that fully funding the cost of the substation move up front to Rocky Mountain Power (substation relocation costs only) will reduce the project cost by \$111,000.)

Revenue: Sales and Property Tax

The other half of the equation is the Return on Investment – what is the anticipated financial return on relocating the substation. The relocation of the substation provides a substantial opportunity to increase sales and property tax revenue.

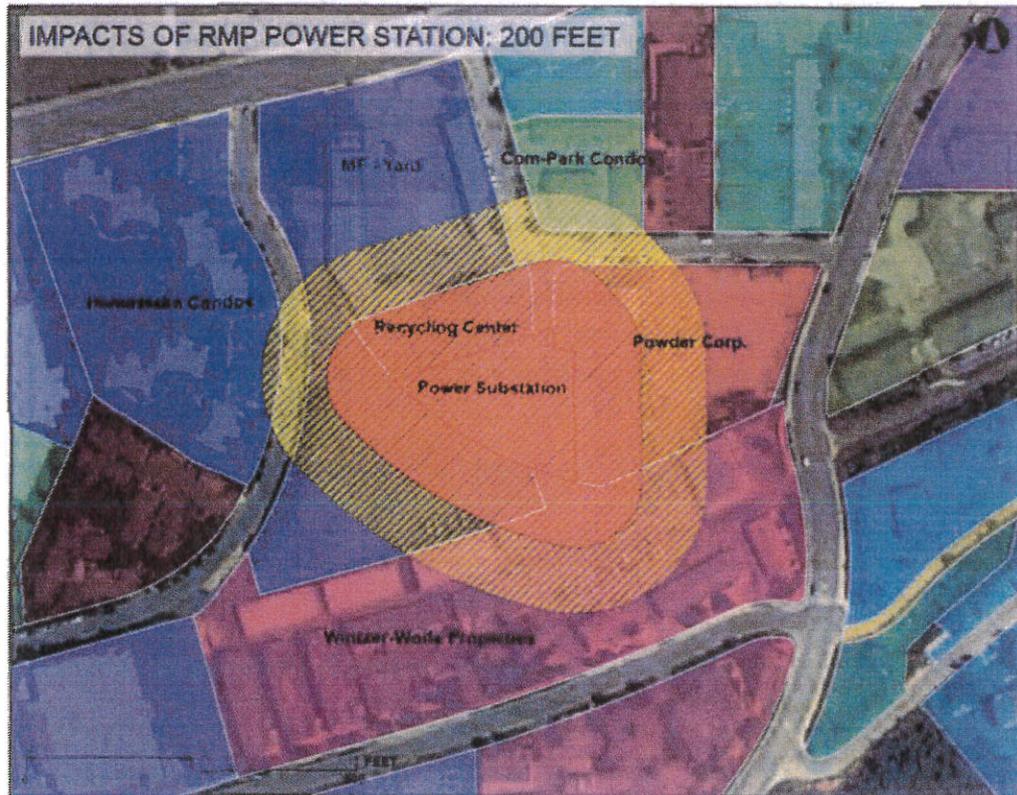


Figure 6: Property Ownership Map of Study Area with Radius of Impact
 If the substation were to remain, this site would have reduced redevelopment potential and in turn reduced revenue generation. The substation would also have negative impacts on the surrounding area for about a 200' radius (a distance of just over a half of

a standard city block in length.) This affects an area of approximately 7.5 acres. After accounting for non-productive land (e.g., square feet that would be necessary for rights-of-way and open space requirements), the remaining buildable area with negative development impacts from the substation remaining in place is approximately four acres.

Assuming that this area was fully developed for mixed use purposes as envisioned in the draft Bonanza Park plan, there is the potential for approximately 750,000 square feet of development. The potential revenue in property and sales tax that could accrue to Park City if the substation was relocated and the site fully redeveloped is \$862,000 annually. As shown in Table 1 below, other taxing also will realize increased revenues with the relocation of the substation.

The revenue will be significantly less if the substation remains in place. This is due to the reduced amount of square feet that can be developed as well as the area of influence of the substation. This development would likely not be of the same scale or quality as anticipated in the Table 1 below.

A conservative assumption would be that a quarter of the site's potential could be built upon/realized in the shadow of a substation (this development would likely include some of the uses that are currently located around the substation – they would remain in place given that demand for this location would likely not increase if the substation remained on the existing site). One-quarter of the square feet (and at a reduced assessed or sales valuation) would result in a property and sales tax revenue value of only \$206,000 annually for the City. Additional revenue would also be generated by the approved 1555 Lower Iron Horse Drive Master Planned Development. Applying the same assumptions provided in Table 1 below, once built the approved MPD would generate \$146,000 per year for the City in property and sales tax revenue.

Table 1: Revenue Forecasts for Substation Relocation

	% of Bldg	SF	\$ / SF (sale)	Actual	Assessed
Retail	20%	145,643	175	25,487,501	25,487,501
Office	20%	145,643	175	25,487,501	25,487,501
Residential (Affordable)	20%	145,643	200	29,128,572	16,020,715
Residential (Primary)	30%	218,464	325	71,000,894	39,050,492
Residential (Seasonal Homes)	10%	<u>77,821</u>	500	<u>36,410,715</u>	<u>36,410,715</u>
		728,214		187,515,182	142,456,922
Property (Real Estate) Taxes					
				<u>PC Share</u>	
Area Real Estate Tax Rate	0.009546	0.001431			
PCMC, School District, Summit County, PC Fire, Weber Basin, and Mosquito Abatement				<u>Total</u>	<u>PC Share</u>
				Estimated Annual RE Taxes	\$1,359,894 \$203,856
Sales Taxes					
Commercial - Retail SF		145,643			
Estimated \$ / SF per Design Workshop Study		200			
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			<u>PC Share</u>	
Resort Sales Tax Rate (2012+)		0	0.016		
Local Option Sales Tax		0.006	0.0036		
Mass Transit Tax		0.003	0.003		
				<u>Total</u>	<u>PC Share</u>
				Estimated Annual Sale Taxes	\$2,024,436 \$658,306
Total Taxes					
				<u>Total</u>	<u>PC Share</u>
				Total Annual Taxes Estimated	\$3,384,330 \$862,162

The following are brief descriptions of some potential funding tools which may be available for the substation project:

Reallocation of the Capital Improvement Plan (CIP), including adjustments to the 10-year Additional Resort Communities Sales Tax Plan

As part of FY 2013 budget, City Council adopted the 5-year CIP. This includes the first five years of the 10 year plan for the additional resort communities sales tax funds. The potential exists to fund all or a portion of the substation relocation project costs by reallocating CIP funds (including projects funded with the additional resort sales tax) towards the substation project. The reallocation of CIP funds would require funding delays and reduction in budget to currently funded CIP projects. The extent of the project delays or budget reductions would depend on the final cost of the substation project and the amount of the City's share of any public-private funding package. If directed by Council, staff will prepare possible capital budget adjustment scenarios. According to the ballot language, a portion of the Additional Resort Communities Sales Tax could be used for funding the substation. Council should indicate to staff if reallocation of the Resort Communities Sales Tax revenue within the CIP is an option. Without consideration of the Resort Communities Sales Tax any significant level of city funding for the substation relocation is unlikely.

Economic Development Area/Community Development Area

Another potential funding source is the use of Tax Increment Financing (TIF"s) such as an Economic Development Area (EDA) or Community Development Area (CDA). These financing options are in many ways the equivalent of an RDA. The Bonanza Park Planning Area would be as a project area which would follow a specific development plan. The development area would be funded with a portion future tax increment beyond what is currently generated (the tax base). The formation of a new Bonanza Park TIF would require significant planning. As with the current RDA"s, a new TIF area would require the „buy-in“ of the other taxing entities involved rather than the property owners as required with an Assessment Area. The short time-frame under which we are operating could be a significant limiting factor in the use of this tool for the relocation of the substation. An additional and perhaps greater challenge in creating a new Bonanza Park TIF area is that a large portion of Bonanza Park is already located within the Lower Park RDA. A new TIF area could not overlap and existing area which would therefore limit the footprint of the new area.



Figure 7: Lower Park Avenue Redevelopment Area and Bonanza Park

City Property Tax Abatement

Staff also recommends looking at the use of city property tax abatement as another tool in its financial toolbox for Bonanza Park. The City could monetize the time value of property tax abatement. In exchange, the affected property owner(s) would contribute to either substation relocation or other improvements in the area up front. The city would “repay” this contribution by abating property taxes in lieu of a cash payment that it would make if a bond was issued.

Lower Park Avenue RDA

It is not permissible to use Lower Park Ave RDA funds for the costs associated with the substation relocation. The existing substation location and the proposed relocation to 1555 Iron Horse Drive are not within the Lower Park Avenue RDA boundaries. State statute requires that utilities and infrastructure located outside the district be publicly-owned in order to be eligible for RDA funds. Rocky Mountain Power is a private utility company thus making the project ineligible for RDA funds.

Special Assessment Area

Utah State Code, under the Assessment Area Act, allows the City and property owners to set up special assessment areas to be used for the purpose of financing the costs of improvements, operation and maintenance, or economic promotion activities that benefit property within the assessment area. Similar to the RDA requirements, infrastructure financed through a Special Assessment Area bond must be publicly owned. The substation is owned by Rocky Mountain Power, a private utility company. Its relocation cannot be financed by an Assessment Bond.

Present Value Comparison

For Council to be able to evaluate and compare the alternatives based on the sale and property tax impacts and up-front costs, a present value analysis is being provided. This analysis combines the anticipated up-front costs for each alternative with its anticipated social and property tax impacts over the next 20 years. The 20 years of revenue was then converted to its present value, so the anticipated cost/revenue for each alternative can be compared.

The present value analysis for the move to 1555 Iron Horse Drive has the following assumptions:

- The total tax revenue gain would not be realized until 5 years after the substation is moved, the first 5-years of growth will be curved from 0 to 100% of the total anticipated tax revenue gain accordingly.
- Analysis is for revenue generated for 20 years immediately after the relocation.
- Annual discount rate is set to be a modest 3% per year.

Low Profile Substation at 1555 Lower Iron Horse	
Total Project Cost	\$11,411,906
Net Present Value of Revenue Forecast	\$10,475,000
ROI (Revenue/Cost)	\$936,906
Years Until Break Even	23

Development Risk

The low profile substation is a new concept provided to us by Rocky Mountain Power in the last five weeks. The tight timeline that Rocky Mountain Power has outlined creates development risk for this option. The site would need to be prepared to Rocky Mountain Power's standards by summer 2014. Our analysis to date indicates this to be most viable option for the relocation of the substation. That being said, there are still a number of issues that we have not had the opportunity to fully examine such as the access road alignment and the related issues of potential rights of way acquisition and/or a vehicular rail trail crossing.

Policy Discussion

Staff is requesting council discussion on the relocation of the substation to 1555 Iron Horse. Specifically, staff is requesting direction on the following policy questions:

1. Does Council concur with staff's recommendation to relocate the substation in a horizontal layout?
2. Staff is requesting Council authorization to explore funding options with affected property owners where the substation would be relocated. To what extent does Council support a public- private funding package for the relocation?
3. The substation is the first cost of redevelopment and early City financial participation would provide the City with the maximum ability to negotiate gives and gets such as design guidelines, green development criteria, timing of construction, preferred business/institutional uses, multi-generational housing and/or private funding

requirements for future infrastructure in the area. What are the "gets" that Council would like to see in order to consider public funding for the relocation.

Other Related Substation Upgrade Considerations

There are additional costs associated with the upgrade of the substation that are unrelated to the issue of whether the power station is relocated.

1. **Impact of power lines crossing Old Town.** Burying the power lines as they cross Old Town is important to preservation of the community character. The estimated cost for this option is \$5 million. As this project is located in the Lower Park Avenue RDA district, it could be funded by the LPARDA. Rocky Mountain Power anticipates starting this construction beginning in 2018.
2. **Potential re-alignment of power poles in other areas of town.** Rocky Mountain Power does not anticipate re-aligning the location of power poles. Should the City request the re-alignment of power poles, this would be an additional expense to the City. Staff is including a place holder of \$500,000 for this work. There is not an identified funding source for this activity. This upgrade is not anticipated to occur within the next ten (10) years.
3. **Expansion of the Judge substation.** Staff believes the substation should be expanded on-site. Rocky Mountain Power would like to relocate it to be closer to the road. It is unclear if this expansion would have additional costs to the City. Rocky Mountain Power anticipates starting this construction beginning in 2018.

Next Steps

Should Council wish to explore a public-private funding package, Staff will return to Council in early February with a tentative funding plan to relocate the substation. Rocky Mountain Power has requested that a decision to be made within the next month to meet their schedule for upgrading the substation. Once a decision regarding the location of the substation, Rocky Mountain Power will submit a CUP application which will go before the Planning Commission and begin work on the alignment of overhead lines and poles.

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

Recommendation:

Staff recommends that the Bonanza substation be relocated to 1555 Iron Horse Drive in the low profile alignment as described in this report and subject to staff's ability to secure a public-private funding package.

**PARK CITY COUNCIL WORK SESSION MINUTES
SUMMIT COUNTY UTAH
NOVEMBER 29, 2012**

Present: Mayor Dana Williams, Alex Butwinski, Liza Simpson, Dick Peek, Cindy Matsumoto, Andy Beerman.

Staff present was Diane Foster, Interim City Manager; Mark Harrington, City Attorney; Thomas Eddington, Planning Director; Katie Cattan, Planner; Heinrich Deters, Trails and Open Space Project Manager; Jim Blankenau, Environmental Regulatory Programs Manager; Brent Howser, Strategic Initiatives Manager; Tyler Poulson, Environmental Sustainability Program Manager.

1. Council questions/comments. Council Member Simpson had attended a joint Transit Advisory Board meeting. The Park City to Salt Lake bus route is changing slightly and getting ready to go into full winter service. A more extensive update would be given in February and she suggested that Mayor Williams or Council Member Beerman be included in that discussion due to their work on Mountain Transportation issues. The Transit Advisory Board also talked about CNG.

Alex Butwinski had attended two Planning Commission meetings: a special work session dedicated to the General Plan update, and the regular meeting which included a discussion on a number of LMC amendments, including the possibility of allowing MPDs in the Heber Avenue subzone. The Planning Commission heard considerable public input and he noted the hearing was very civil and everyone had researched the facts. Council Member Butwinski had also attended an Arts and Culture meeting. The Art Board and other non-profits meet once a month to discuss their current projects.

Mayor Williams reported that he had not attended the Council of Governments meeting because of the City Manager interviews. However, he understood that Kent Cashel would be part of that group primarily due to the use of funds collected through driver's license fees for purchasing property and right-of-ways for improvement projects. Mayor Williams expressed his appreciation to the Staff and the Citizens Committee for their work in the City Manager hiring process. He also thanked the City Council for their participation and stated when the process is completed he believes they will have made the best decision possible.

2. General Plan Update. Planning Director Thomas Eddington presented the layout for the new General Plan which was divided into four chapters based on the Core Elements of Small Town, Natural Setting, Sense of Community and Historic Character, which were identified during Visioning 2009. The Planning Commission had reviewed the first three Chapters and the final chapter, Historic Character, would be presented and discussed on December 11, 2012. Director Eddington stated that significant public input has been received and there has been interesting dialogue among the Planning Commission. The Staff has software that allows the Planning Commission to answer questions anonymously before discussing the related issues. The process is going well and moving forward.

Planner Katie Cattan spoke about the task force, which has also been of significant benefit to the General Plan process. During the month of August and September the Staff met with the task force comprised of 12 members of the community. That was the first time they started using the key pad polling process to answer questions. The task force discussed current trends in Park City and the goals and strategies necessary to keep the healthy trends moving forward, as well as a shift in trends that were seen as threatening to the core values. Planner Cattan remarked that four task force meetings were scheduled; however, based on the success, a fifth meeting was held to discuss the items that had evolved throughout the conversations. She noted that much of the task force discussion focused on primary homes, energy, housing, and affordable housing.

Planner Cattan stated that the next step in the process was to edit the task force discussions and to hear feedback from the internal Staff and departments who would be influenced by the goals and strategies. Phyllis Robinson, who played a large role in helping with the Bonanza Park Plan, was asked to do a final edit of the General Plan. Planner Cattan stated that the process had reached the point of implementing Planning Commission edits. The Staff was working diligently to have a complete draft of the General Plan by January 31st.

Dick Roth, a task force member, stated that he was astounded by the professionalism of Director Eddington, Planner Cattan, and others from the Planning Department and wanted the City Council to know the caliber of people on staff. They had assembled a task force of a broad group of people from different areas of expertise. Mr. Roth looked forward to participating in more City processes.

Council Member Beerman stated that he also attended the Planning Commission meeting on Tuesday evening and he was very impressed with the presentation on the General Plan. The articulation of the goals was deeper than the outline presented today, and he found it to be thoughtful and exciting. Council Member Beerman thought the Staff was headed in the right direction with the General Plan and he complimented their work.

Interim City Manager Diane Foster clarified that the draft would be completed by January 31st and work sessions were scheduled for February. In terms of expectation, she wanted everyone to understand that it could still be several months before the General Plan was finalized.

Council Member Peek referred to Goal 7, Sense of Community Housing, and asked if that was aimed at everyone or just the City. Director Eddington replied that it was for everyone. He explained that the General Plan identifies different strategies for each goal. Some are more municipal based and others are more holistic City-wide based. Planner Cattan stated that the General Plan is planning action strategies for those that would be implemented by the LMC and affect the greater community.

Council Member Peek referred to Goal 14 and asked if there was a reason why National Designated Historic Resources and Districts were not included in the sentence. Director Eddington noted that the strategies and action implementations for that goal talk about preserving the National District. Planner Cattan pointed out that Park City has more locally designated historic resources than nationally designated districts. Addressing the local also captures the national. Council Member Peek was concerned that if the word "national" was not in the General Plan, it would be dropped from the LMC re-writes over time.

Council Member Butwinski echoed the comments regarding the great work by the Staff. He believed the most amazing was the interaction and the public participation that has been part of this process. People attended the special General Plan work sessions and were willing to make comment or ask questions. He observed the same type of public participation at the regular Planning Commission meeting regarding the MPD, and noted that many of the same people had attended both meetings. They were actually interested in the overall planning of the community and not just single issue participants. Council Member Butwinski remarked that citizen participation is a key part of this and it should be highly publicized so people understand that their voices can be heard.

Council Member Beerman read from 3C, Sense of Community and Special Events, "Park City shall provide world-class recreation infrastructure to host events". He thought the infrastructure provided goes beyond recreational infrastructure. In his opinion, recreational infrastructure includes chairlifts, trails, etc.; however, the City was also providing transportation systems, lodging and other forms of infrastructure. Planner Cattan agreed that the term "recreation infrastructure" was too narrow and it should be changed.

Mayor Williams summarized that there was general agreement among the City Council that the General Plan was moving in the right direction and they were pleased with the results of the process. Mayor Williams particularly liked the connectivity to the Vision.

3. Mine Hazard Update. Heinrich Deters, Trails and Open Space Project Manager, provided an update of the Mine Hazard Ordinance and how Park City Municipal, as a landowner, came into compliance. He reported that the City Council adopted the Physical Mine Hazard Ordinance in April 2011, with the goal of reducing hazards primarily related to open holes or mine shafts. The City had received a letter of Notification of the Ordinance which explained the ordinance and the timelines. It also showed the 38 City-owned parcels that needed to be evaluated. The Staff evaluated each parcel and through the due diligence process had determined which parcels had past mining claims and potential mining hazards. Using the mining map they were able to identify specific locations through GPS. Mr. Deters stated that the Staff compiled the documentation, printed photos, and put everything together in a packet. He reported that no hazards were found on City-owned property that needed mitigation.

Jim Blankenau, Environmental Regulatory Programs Manager, noted that property owners were asked to evaluate their own property. If they find hazards that require mitigation, a mitigation plan must be submitted prior to December 1, 2012. There is an option for a one-year extension if the property owner can show that progress is being made in their evaluation. Mitigation must occur within three years.

Council Member Peek asked if there was ongoing monitoring of some of the sites. Mr. Deters replied that in his opinion, there has to be some ongoing monitoring. They had hiked to unusual places without trails which should be watched to avoid unexpected situations. However, he definitely thought areas on the trails should be monitored. When the ordinance was enacted it included a provision whereby if a new hazard was found and it was reported to the City or another property owner, they would have an obligation to submit a new mine hazard mitigation form.

Council Member Butwinski asked about compliance enforcement. Mr. Deter stated that most of the evaluations have been received with the exception of a few property owners. Two letters were sent to property owner over the past year as a reminder of the December 1st deadline. A penalty of up to \$1,000 per violation would be implemented for those who do not comply.

Mayor Williams understood that they were primarily looking for sealed shafts, but not testing for compliance with the Soils Ordinance. Mr. Deter replied that this was correct. They were looking for hazards that could cause physical harm. Mayor Williams asked if the BLM was notified because they control the area east of the Prospector Ponds, including some of the Prospector Ponds. Mr. Deter believed he was referring to the Hidden Meadows open space area and that was included as part of the City's inventory.

4. Quarterly Goals Format. Brent Howser, Strategic Initiatives Manager, reported the intent to tie the Quarterly Goals Update to the Strategic Planning Process. He provided a brief background of the recently adopted Park City 2030 long range strategic plan, which outlined the Council priorities to eventually achieve the community vision and desired outcomes. Mr. Howser noted that one recommendation in the Long Range Strategic Plan was to come up with a department by department business plan that lays out strategies in each department, and the action steps necessary to pursue those strategies. He also presented the budgeting concepts they have been working on for a few years. Mr. Howser reported that the Department Business Plans would be made available to the City Council and the public on the website through a link on document central. He reviewed a Public Works Business Plan as an example of how the plan works.

Mr. Howser remarked that the report in the new Quarterly Goals Report compiles all the actions steps from each business plan into one report. However, the report is lengthy because it contains all the action steps from every City department. He presented the

Quarterly Goals Report contained in the Staff report and indicated how the layout flows from the Council Priority area to strategies in the Business Plans and the action steps for each strategy. The report is laid out to show what is being done, the deliverables outcome, and who has the responsibility. He indicated the area on the report for status updates when quarterly updates are done. There was also an area for comments when explanations are needed.

Mr. Howser noted that the current report was 32 pages and requested input from the Council on the layout and ideas for shortening the report. He was concerned that a shorter report would require eliminating some of the content. Mr. Howser offered suggestions on how a shorter report could be accomplished.

Council Member Beerman understood that they were trying to match up everything with the strategy plans and goals and priorities. However, he noticed that a number of departments were repeated. For example, the emergency management plan was shown in five different locations. To avoid being repetitive, he suggested consolidating by department and having sub-headings to show what goals or priorities they tie back to. Mr. Howser pointed out that the action steps were not repeated, but he agreed that the departments could possibly be consolidated. Diane Foster stated that multiple departments that go into a single program might be consolidated. She thought the suggestion from Council Member Beerman would be an easier process for the Staff.

Council Member Peek suggested using color and bold type in the format to make it easy to scan for changes in the report. He liked the page format as opposed to something larger.

Mayor Williams asked if the Council was generally comfortable with the layout. Council Member Simpson thought the material presented was a lot to digest; and suggested that they use the format presented a few times before they take steps to shorten it. She preferred to have a longer report where they could see all the actions items rather, than have someone else choose what they may or may not be interested in seeing.

Council Member Butwinski agreed that they should use the current format until they define what they really need. Regarding the format, he suggested using italics to highlight the changes since there was already bold type used in the report. Council Member Butwinski thought the goal for snow plowing on Page 20 should also include, "one pass down every street at least every 24 hours". That was agreed to over two years ago and he assumed it had slipped through the cracks. Using Page 21 as an example, he thought there could be better headings under Strategies to clarify the intent.

Ms. Foster summarized that the formatting suggestions should be incorporated into the report, and that the length and content of the report should remain in its current form for now. The Council concurred.

5. Municipal lighting and lighting public art. Tyler Poulson, Environmental Sustainability Program Manager, reported on a study session that was held in July regarding dark skies. One topic of interest resulting from that study was uplighting public art. The Staff had evaluated the uplighting of public art and monuments, taking into account the City Council goals and some industry standards. The Staff recommendation was that the uplighting of public art, monuments and statues would achieve various Council goals with marginal downsides, such as a minimal impact to dark skies and a small energy footprint related to that activity.

Mr. Poulson reviewed visual examples of what uplighting looks like from both a fixture perspective and from an art/monument perspective. The concept of uplighting is to direct light upwards towards an object. Uplighting is used to enhance the character and profile of major public monuments. The Eiffel Tower and various pyramids were positive examples of the use of uplighting. To demonstrate the negatives of uplighting, Mr. Poulson presented an example of a monument that was well lit; however, there was a lot of light trespass and the lighting was intrusive. He presented an example of an art piece to show how lighting added visual value. Mr. Poulson stated that part of the decision in the Staff recommendation was looking at the relative impact of uplighting art to light pollution and dark skies in general. If the uplighting is done well, it has minimal impact and adds good value.

Mr. Poulson remarked that the LMC currently states that uplighting of all flags except for the U.S. Flag is prohibited. The Federal government issues guidance on U.S. flags and states that if flags are flown at night they should not be enveloped in darkness. He noted that the LMC has restrictions in terms of maximum flag size and pole height. A flag cannot be above 24 square feet in size or 28 feet in height. Mr. Poulson stated that the language recommendation provided for the LMC allows uplighting of the U.S. flag.

The Staff recommended that the City Council pursue the LMC amendment to allow uplighting of public statues, monuments, ground mounted art, and to also include U.S. flags. If the City Council agrees with that recommendation, the Staff would take it to the Planning Commission in January and it would ultimately return to the City Council for formal action.

Mr. Poulson stated that when he and the Planning Department drafted the LMC language, they were looking at publicly owned installations, primarily due to the amount of control and discretion that could be provided towards the uplighting project. He noted that the language was intentionally not overly prescriptive in terms of defining how uplighting would apply to each project.

Council Member Beerman clarified that the intent was the ability to uplight public art; but not uplight the bus shelter art and other areas unless there was a determined need. He was told that this was correct.

The Council members generally supported the Staff recommendation. Director Eddington stated that the recommendation would go before the Planning Commission with other LMC amendments on January 9, 2013. Ms. Foster asked if the Staff would add "municipal owned" for clarification. Director Eddington stated that private art and private uplighting were addressed in the Code, however, it was ambiguous. He offered to revise the language to address municipal public art.

Mr. Poulsen stated that Municipal Lighting was another topic discussed during the Dark Skies study session. Comments from Council members in July was that the City should consider leading the way in terms of Municipal owned lighting before taking on a community-wide dark skies initiative where people are asked to retrofit and become dark skies compliant. The Staff considered that recommendation and provided information in the Staff report regarding the process and associated costs. At this time the Staff was not recommending a professional survey or full-scale retrofit of Municipal owned lighting. Mr. Poulsen reviewed slides of Municipal-owned lighting.

The first example was three fixtures on Swede Alley that were installed at different times for a different purpose. Another example was a pole and fixture along Main Street. Mr. Poulson noted that the Staff report referenced commentary from the City's Historic Preservation Consultant. As they consider Main Street Improvements, the City should either refurbish or replace in-kind fixtures along Main Street to maintain their historic integrity. A third example showed a variety of fixtures and poles that were installed as part of different developments at different times. Mr. Poulson commented on the costs and environmental impacts of migrating towards standardized lighting. He presented examples of recreation lighting that has been installed in an effort to balance the needs of a world-class resort with amenities to the community. Mr. Poulson that the lights on the tennis courts at City Park is considered a shielded light fixture. He pointed out the lighting needs depend on the space to be lighted. The light fixture for a soccer field may be different than the lighting utilized for a tennis court.

Mr. Poulson presented images of the recreation lighting and light poles at Quinn's field. He stated that in 2010 the Staff investigated the concept of attaching visor to those lights as a way to focus light in different areas. At that time a professional assessment concluded that wind loading issues would put an undue burden on the poles and cause a safety hazard. The only way to change out those lights would be a full replacement, costing approximately \$250,000. The decision was made not to move forward with that replacement.

Mr. Poulson provided recent examples of where the City was installing new and more efficient lighting. One example was the Public Works Building at 1053 Ironhorse. Similar lighting fixtures were utilized at some public restrooms in parks. Mr. Poulson commented on an added level of complexity with street lighting. The City owns a number of the street lights within the City limits; however, Rocky Mountain Power and other public entities also own a number of street lights. In order to move towards a streamlined process, the City would have to take ownership and maintenance of all those light fixtures. Staff had determined that the timing was not right for the City to consider that step now.

Council Member Simpson wanted to know who pays the power bill on the lights owned by other entities. Mr. Poulson replied that the lights owned by Rocky Mountain Power are organized under a state level rate at the Public Service Commission. The City pays for the use of the fixtures, but not the kilowatt power used. The City pays Rocky Mountain Power for the service of providing street lighting.

Mr. Poulson reviewed slides of LED lights that were piloted in the parking lots at City Hall. In addition to assessing the aesthetics of those lights, the Staff also looked at financial cost benefit. With the existing high sodium lights in the south parking lot, there was no compelling payback to move towards an expensive \$1100 LED fixture. However, LED fixtures are becoming better, more efficient and more durable, and the market is moving in that direction.

The Staff recommendation for outdoor lighting was not to pursue a robust or a major retrofit of Municipal lighting. The Staff will continue to pursue using LED and highly efficient lights when doing new installs or where it makes sense.

Council Member Butwinski asked if making LED lighting warmer would change the light distribution. Mr. Poulson replied that the lighting can be tailored to what they want by changing the shield, the lighting color, etc.

Council Member Beerman stated that he recently piloted several rooms in the hotel with LED lighting. They have incredible warm light and it disburse much better than fluorescent lights. He thought the City should be ready to update when they have to start replacing lights to avoid having to purchase more of the old type lights.

The Council was generally in favor of the Staff recommendation.

Exhibit 3



November 19, 2019

Midway City Council
c/o Michael Henke, Midway City Planner
75 North 100 West
Midway, Utah 84049

Via email to
mhenke@midwaycityut.org

Dear City Council Members:

Heber Light & Power (“HL&P”) and Rocky Mountain Power (“RMP”) presented to the City Council on October 15, 2019 in support of the application for a conditional use permit to rebuild approximately one mile of electrical transmission line through Midway. As you recall, the City held the public hearing despite the discovery of some errors in the noticing. Another public hearing has been noticed and is scheduled for November 19. During the October meeting, the Council asked for additional information from HL&P and RMP on the following topics:

1. Width and scope of existing prescriptive easements
2. Risks of transferring HLP’s existing prescriptive easement rights to RMP (loss of control, etc.)
3. Effect of easements / questions about easements as relating to the conditional use permit process
4. More information about how estimated easement costs are calculated
5. Scope of potential severance damages
6. Process for acquiring easements

In the interest of efficient use of the Council’s time, this letter will address each of these matters in turn and then provide some relevant information as to the scope of the Council’s responsibilities when acting as the land use authority on a conditional use permit application.

1. Width and scope of existing prescriptive easements

The width of HL&P’s prescriptive easement to operate an electrical transmission line is established by scope of HL&P’s use of the easement area over the last twenty years. In Utah, “[i]t has long been the law . . . that the extent of an easement acquired by prescription is measured and limited by the use made during the prescriptive period[,]” which is twenty years.¹ Utah courts have, however, recognized “the common law presumption that parties to an easement anticipate increased future use and reasonable technological improvements.”² “Thus, absent express evidence of contrary intent, there is a firmly established background rule that an easement holder may make technological upgrades to its property,

¹ *McBride v. McBride*, 581 P.2d 996, 997 (Utah 1978); *Judd v. Bowen*, 2017 UT App 56, ¶ 10, 397 P.3d 686.

² *Stern v. Metropolitan Water Dist. of Salt Lake & Sandy*, 2012 UT 16, ¶ 69, 274 P.3d 935.

so long as they are not unreasonably burdensome of the servient estate” and do not cause “unnecessary injury to the servient owners.”³ Nevertheless, making improvements to a prescriptive easement does not include the “taking [of] more or different land.”⁴

The width of HL&P’s prescriptive easement is at least 26 feet from the centerline of the line in both directions, or a total easement width of at least 52 feet. This is the *minimum* area required to safely operate a 46 kV transmission line as established by applicable safety codes. HL&P could likely make arguments that the actual scope of the prescriptive easement is wider than 52 feet based on actual historical use; however, HL&P has chosen to take the most conservative possible approach as to the scope of its prescriptive easements.

During the preceding twenty years—and in fact much longer—HL&P has maintained and operated its 46 kV transmission line (known as the South Line) on the entire proposed route of the transmission line that is the subject of this CUP application. The scope of HL&P’s prescriptive easement for the South Line is determined by HL&P’s use of the property under and adjacent to the transmission line. For the purposes of a prescriptive easement, “use” includes such activities as repair, maintenance, inspection, vegetation trimming and accessing the area around the transmission line to perform such activities. In the case of an electrical line, “use” also includes the area within which the utility has the right and obligation (as established by applicable national electric codes, particularly the National Electric Code and the National Electric Safety Code (“Codes”)) to maintain clearances between the line and surrounding structures and vegetation. The Codes provide specific calculations to determine the *minimum* area required to operate a transmission line of a particular voltage and configuration. The 1997 Codes require the same minimum area calculations as the current codes. In other words, the calculation of the minimum easement area required to safely operate the existing 46 kV transmission line has not changed in over twenty years, thus establishing the minimum area of HL&P’s prescriptive easement. This minimum easement width is 26 feet from the centerline of the existing transmission line.

2. Risks of transferring HLP’s existing prescriptive easement rights to RMP (loss of control, etc.)

As part of the construction agreement with RMP, HL&P will transfer its existing prescriptive easement rights to RMP, while retaining the right to operate a transmission line on the poles that will be owned by RMP and located on property on which the right to operate the line exists, whether that right is based on existing prescriptive easements, new express easements, or some combination thereof. The construction agreement is very specific about HLP’s rights to continue to operate its transmission line. The construction agreement was been drafted and reviewed by HL&P’s legal counsel and management and was approved by the HL&P Board.

³ *Stern*, 2012 UT at ¶ 69; *Big Cottonwood Tanner Ditch Co. v. Moyle*, 174 P.2d 148, 160 (Utah 1946).

⁴ *Harvey v. Hights Bench Irr. Co.*, 318 P.2d 343, 348 (Utah 1957); *see also Stern* 2012 UT at ¶ 69 n.3; and *Valcarce v. Fitzgerald*, 961 P.2d 305, 312-13 (Utah 1998).



As you may know, HL&P's service area was the subject of a long dispute with RMP that culminated in a combination of litigation all the way to the Utah Supreme Court,⁵ new legislation specifically addressing HL&P's unique situation as an interlocal entity electric utility, and a comprehensive settlement agreement between HL&P and RMP. As a result of these actions, HL&P's service territory is extremely secure and HL&P sees no plausible risk of loss of control over its service territory as a result of this project.

RMP will own the poles that support HL&P's electrical wires, which is expected to be a significant benefit to HL&P and its customers as RMP will be responsible for the bulk of the maintenance and expenses relating to this transmission line. HL&P exists to provide efficient, economical, and reliable electrical service to its customers throughout the valley; HL&P does not exist to acquire and maintain capital assets other than those needed to support HL&P's overall purpose. In this case, the opportunity existed to jointly construct a line with RMP that replaces HL&P's deteriorating South Line, avoid placing two separate transmission lines through the valley, and to spend less money to accomplish the same results. As a real-world illustration, a vehicle recently hit one of HL&P's metal poles along Hwy. 40 in Wasatch County and damaged the pole to the extent that it must be replaced at a cost of approximately \$60,000. The owner only carried the required minimum liability insurance, which means HL&P will end up paying a significant portion of the costs of that pole replacement. If this pole had been owned by RMP, RMP would be covering the costs of replacing the pole.

3. Effect of easements / questions about easements as relating to the conditional use permit process

Looking only at the conditional use permit process, the questions of easements and the costs of easements are irrelevant. For the exact same reasons that property owner #1 cannot build a barn on the land belonging to property owner #2, a utility cannot construct a transmission line or any other facility on the property of another without some right to do so. No matter the permitting requirements, or lack of permitting requirements, HL&P and RMP cannot construct this transmission line on private property without the right to do so. That right may be in the form of a prescriptive easement, an express easement, a public right of way, a public utility easement, or by some other manner. Regardless of how that right is established, it is an absolute prerequisite to construction of a facility on property owned by another. The Council could place a condition on the permit that requires the utilities to acquire the necessary property rights prior to construction of the line; however, such a condition is merely a restatement of existing legal reality.

Easement costs do, however, factor into the decision as to whether the City wants to pay to bury the transmission lines. This question is related to the conditional use permit process but is really a separate legal question governed by a different set of statutes. Without delving into the details of the calculation or the obligations of the utilities to construct facilities in the manner desired by the City, the City is able to dictate many aspects of the construction of a particular utility facility so long as the City pays the excess costs associated with doing so. These excess costs are—put very simply—the difference between the costs of the project if constructed according to the utility's normal standards versus the costs of

⁵ *Heber Light & Power Co. v. Utah Public Service Comm'n*, 231 P.3d 1203, (Utah 2010)



constructing the project in the manner requested by the City. Costs of easements or other necessary property rights are part of these costs. Logically, if easement costs are higher for the standard overhead line as compared to the easement costs for a buried line, the difference in costs paid by the City is reduced.

4. More information about how estimated easement costs are calculated

The statement that easement costs are “calculated” is perhaps a misnomer. As described in the next section, the cost of acquiring an easement that burdens particular land is determined through negotiation or, failing that, by a court based on the evidence of value and damages presented in a litigation proceeding.

RMP has provided estimates of expected easement acquisition costs for various configurations of the proposed line, using an estimated average value of the property in question of \$150,000. The acquisition of an easement, which is not fee ownership of property but rather merely a right to use that property for a particular non-possessory purpose, is logically less than the value of actual fee ownership of the property. A report from independent appraisers has been, or will be, submitted to the Council by RMP. This report concludes that values of property impacted range between \$90,000 and \$420,000 per acre and estimates that additional easement rights would cost between 25 and 75 percent of the underlying land value. Thus, the acquisition of one acre of new easement would likely cost between \$22,500 and \$67,500 for property worth \$90,000 per acre and between \$105,000 and \$315,000 for property worth \$420,000 per acre.

5. Severance damages to affected property owners

Severance damages are defined as follows by the State Property Right’s Ombudsman:

Severance Damages— Compensation that is due when a parcel loses value because a portion is taken for a public use. Severance damages may be part of the overall compensation due to a property owner, but are only awarded when a portion of a parcel is taken (or “severed”), and the owner retains the remainder of the parcel

Examples of situations in which severance damages would be an issue are the case of a highway bisecting a large agricultural parcel, thus preventing efficient access between the two resulting parcels, or the case of a city taking a small portion of a 5 acre lot in an area zoned to require five acres to construct a house resulting the parcel now being un-developable. In each of these cases, the impact to the property owner is likely greater than merely the per-acre value of the land taken for public use. However, changing certain facts in each situation would likely remove the possibility of severance damages. If the large agricultural parcel was already bisected by an impassable river, the addition of a highway bisecting the parcel in the same manner would likely mean that the property owner is not affected beyond the actual land taken and thus not entitled to severance damages. Likewise, if the 5-acre parcel was already undevelopable because



of existing zoning, the slight reduction in size to less than 5 acres likely does not impact the property owner beyond the land actually taken.

Regarding the transmission line, claims have been made that property owners will be entitled to severance damages and that these damages will amount to several million dollars for property owners in Midway alone. Some property owners may indeed be entitled to severance damages; however, the likelihood that those damages will add up to several million dollars is extraordinarily low.

As an initial matter, the door is only open to severance damages if a portion of the property is actually taken for public use (as described in the definition quoted above and also discussed by Utah courts as explained below). This means that placement of the proposed transmission line (including the required easements or access rights as determined by Codes) fully in existing prescriptive easements, or fully in public rights of way or dedicated public utility easements will absolutely not open the door to severance damages as no property is being taken.

The Utah Supreme Court succinctly stated the law on severance damages in *Admiral Beverage*:

We hold that when a landowner suffers the physical taking of a portion of his land, he is entitled to severance damages amounting to the full loss of market value in his remaining property caused by the taking. However, we reaffirm our prior rule that when a landowner alleges “damages” not connected to an actual physical taking, the landowner may recover only for damage to protectable property rights.

Admiral Beverage, 2011 UT 62, ¶ 19, 275 P.3d 208

Accordingly, property owners that suffer an actual taking of a portion of their real property may indeed be able to seek severance damages equal to the reduction in market value of their property due to the taking, or may have their compensation for the taken property reduced if the construction of the public improvement increases the value of the property.⁶ However, the Court makes very clear that property owners who do not suffer an actual physical taking are only entitled to compensation for “protectable property rights.”⁷ A property adjacent to another parcel subject to a physical taking does not have a

⁶ See Utah Code § 78B-6-511(d), “. . . separately, how much the portion not sought to be condemned, and each estate or interest in it, will be benefitted, if at all, by the construction of the improvement proposed by the plaintiff, provided that if the benefit is equal to the damages assessed under Subsection (1)(b), the owner of the parcel shall be allowed no compensation except the value of the portion taken; but if the benefit is less than the damages assessed, the former shall be deducted from the latter, and the remainder shall be the only damages allowed in addition to the value of the portion taken.”

⁷ *Bingham v. Roosevelt City Corp.*, 2010 UT 37, ¶ 19, 235 P.3d 730, 736, (“To enjoy the protections of article I, section 22, an alleged property interest must be more ‘than a unilateral expectation of continued privileges.’ We have declined to find a taking in situations where the plaintiffs failed to prove a ‘vested legally enforceable interest.’ In



protectable property right in the view from that particular property. As such, even though an improvement located on a property acquired through eminent domain may be visible from nearby properties, those nearby properties have no claim to damages as no protectable property rights of those nearby properties were impacted.⁸

In this particular situation, although HL&P and RMP would prefer to negotiate compensation with all property owners, some property could potentially be taken through eminent domain. The owners of those properties could potentially argue for severance damages and, if severance damages are awarded, the acquiring entity would compensate the property owner for those damages. However, no damages are available to properties not subject to a physical taking unless those property owners can prove that they have a protectable property right that was impaired by the construction of the transmission line project.

Also note that the inquiry as to damages of any sort, including severance damages, is fact-based and unique to each situation. In every case, the amount of damages, if any, must be calculated based on the condition prior to the taking as compared to the condition after the taking. Here, the current condition is that of an existing 46 kV transmission line, with distribution and communication facilities also on the poles even closer to the ground, while the condition after the taking will be a slightly larger transmission line of a slightly different configuration approximately half as many wires on the poles. The measure of severance damages would be the difference in value between these two conditions. Any impact on the value of property adjacent to the current transmission line must be assumed to have been considered during prior sales of the property since the transmission line was already in place—meaning current owners of parcels adjacent to the line presumably paid less to acquire their properties due to the presence of the existing lines. In the case of this project, replacement of the old and deteriorating transmission line combined with the undergrounding of distribution and communication facilities may be beneficial to the market value of the properties along this route as the lines are further in the air and thus less noticeable to the adjacent properties.

6. Process for acquiring easements

This question is not relevant to the Council’s review of the CUP application. That said, the companies expect that most, and perhaps all, new easements required for this project will be acquired through voluntary, arm’s-length transactions. In general, representatives of RMP and/or HL&P will approach each

contrast, we have acknowledged the protectable interest one acquires when they have obtained a “completed, consummated right for present or future enjoyment.”); *see also Strawberry Elec.*, 918 P.2d at 878; *Bagford*, 904 P.2d at 1099 (“[T]o create a protectable property interest, a contract must establish rights more substantial than a unilateral expectation of continued privileges.”).

⁸ The Utah Supreme Court noted that appraisers must “resort to rank speculation when attempting to exclude the loss of visibility from fair market value.” *Admiral Beverage*, ¶ 41.



affected property owner and begin the process of negotiating the price of the necessary easement rights. Like buying any other piece of property, the eventual price paid for any given easement right is the price that is agreed to between the buyer and the seller—otherwise known as fair market value. In the rare situation where a property owner absolutely refuses to grant a necessary easement or the parties cannot agree on an acceptable price, both RMP and HL&P have the legal rights to use eminent domain to acquire the necessary property rights. To the knowledge of current HL&P employees, HL&P has never needed to resort to eminent domain to acquire the property rights to construct utility facilities.

In the event that property must be acquired by eminent domain, the process for doing so has been established by the Utah Legislature and is discussed in detail on the webpage of the State Property Rights Ombudsman at <https://propertyrights.utah.gov/>. That same webpage discusses easements generally, the determination of proper compensation, conditional use permits, and numerous other land use topics.

7. Scope of City Council Authority Acting as the Land Use Authority.

Concerning a conditional use permit application, the land use authority is tasked with applying the ordinances as they have been enacted by the legislative body. In the case of a conditional use permit for an electrical transmission line, the City Council is the land use authority for the purposes of decisions on the conditional use permit. This is an administrative role—meaning the Council is only applying the ordinances as are currently in place—and the Council cannot base its decisions on factors not listed in the applicable ordinance. The Utah Land Use Deskbook describes this role (note that while the quote refers to a planning commission acting as a land use authority, the same principles apply to a city council acting as the land use authority):

... the planning commission, when acting as a land use authority, has very little discretion on whether or not to grant or deny a permit. If the landowner's application complies with the ordinances the commission must approve it, and if it does not comply then the planning commission must deny the application. This is regardless of whether or not the planning commission, or the public, thinks that the application is a good or bad idea."

Section 1.1B, Utah Land Use Regulation Deskbook; Utah Land Use Institute (2016)

The same Utah Land Use Deskbook describes the land use authority's discretion as to a conditional use permit application as follows:

If a use is allowed as a conditional use in the zone, it is assumed that the conditional use is desirable but that it may require an extra level of review. The review criteria must be outlined in the local land use code. Denial must be based on some factor unique to the proposed location that renders the potential negative effects of the proposed use in that



location beyond mitigation, where those same potential negative effects could be mitigated elsewhere in the zone.

“Mitigation” means to temper or reduce the negative aspects, not to eliminate them; conditions that mitigate the negative aspects of a conditional use would make those negative aspects less severe or harmful.

The action taken in response to a land use application is legal only if it is supported by substantial evidence in the record. “Substantial evidence” is evidence that is relevant and credible. To be relevant, it must relate to the standards in the ordinance related to the review of applications for conditional uses. To be credible, it must be objective and independent.

Generally, public opinion testimony is inappropriate with respect to a conditional use permit application. Evidence against a conditional use permit application must not be based on public opinion. Public clamor is not evidence. The opinion of expert witnesses qualified to testify in their field of expertise can be substantial evidence if proper information is provided supporting the qualifications of the persons expressing the opinions.

Conditional use permits are always “administrative” decisions. As such, the standard for review on appeal is whether there is substantial evidence in the record to support the decision. A conditional use permits decision is subject to appeal within 30 days. It is not subject to referendum.

Section 5.5, Utah Land Use Regulation Deskbook; Utah Land Use Institute (2016)

An administrative action by a land use authority must be supported by “substantial evidence.” This standard is discussed in detail in *Uintah Mountain RTC, LLC v. Duchesne County* (2005 UT App 565). Public clamor cannot form the substantial evidence necessary to support an administrative land use decision such as granting or denying a conditional use permit. In the event that the land use authority’s decision is appealed, the decision must be shown to have been supported by substantial evidence—meaning not only the amount of evidence in support of the decision but also that the information relied on by the land use authority was of the type that could legally be considered by the land use authority.

In the event of an appeal, the court will review the entire record of the proceedings before the Planning Commission and City Council, which includes all documents submitted and all statements at public meetings. If the record of a proceeding is predominately information that cannot legally be considered by the Council, proving that the decision was supported by substantial evidence is possibly more difficult.



Recall that the City Council has already determined that a transmission line is a permitted use with reasonable conditions that can be applied to mitigate any detrimental effects. The Council—acting as the land use authority—cannot decide that an overhead transmission line is irreconcilable with a certain area in Midway—that is a legislative decision that has already been made by the City Council when it made transmission lines a conditional use throughout all of Midway (with the preference as stated in the ordinance that transmission lines stay within existing corridors). The decision now faced by the Council is purely an administrative one.

Conclusion

Although the ordinance does not mention aesthetic considerations, HL&P and RMP have generally agreed to follow the Council’s recommendations as to the type of poles used, the color of the metal poles, and whether the line should be constructed to allow for shorter spans (and therefore shorter distances between poles) or to allow for taller poles with longer spans (and therefore fewer poles overall). Note that the heights of poles are limited on the lower end by applicable safety regulations and on the higher end by cost and engineering considerations. In general, the height difference between the shorter option and the taller option is less than fifteen feet.

We appreciate the Council’s consideration of this matter and we look forward to an approval of the application with guidance on pole color and pole height. I am happy to answer any questions about the conditional use permit process or related legal standards; I ask that you direct any communications through your City Attorney.

Sincerely,



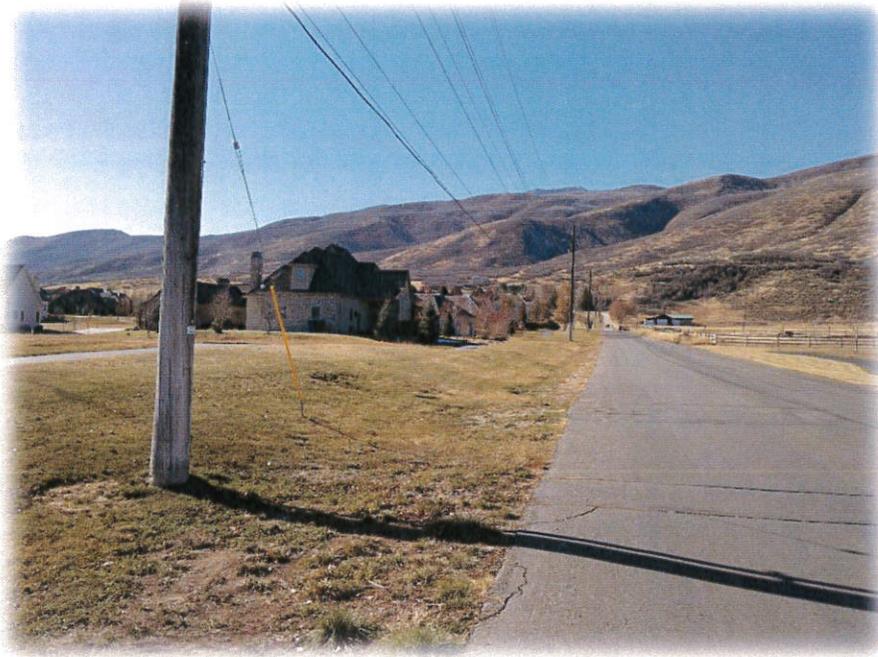
Adam S. Long
General Counsel for Heber Light & Power

cc: Corbin Gordon, Midway City Attorney
Celeste Johnson, Midway City Mayor



Exhibit 4

Jordanelle-Midway Transmission Line



Location

970 South, Stringtown Road, Wards Lane
Midway, Utah

Report Date

November 18, 2019

Report 160-2019-1280

Prepared For

Rocky Mountain Power

Prepared By

Troy Lunt, MAI
Eric Leonhardt, MAI

Integra Realty Resources
5107 South 900 East
Murray, Utah 84117
801 263-9700

November 18, 2019

Rocky Mountain Power
1407 West North Temple
Salt Lake City, Utah 84116

Rocky Mountain Power - Officers, Agents, Representatives

SUBJECT: Jordanelle-Midway Transmission Line

Thank you for allowing our office to provide an opinion of real property value within the project area, and the impact of the project on market value. The project is to upgrade an existing 46 kV transmission line to 138 kV in cooperation with Heber Light and Power.

The project is located in the southwest quadrant of Midway City. The project extends west from Center Street along 970 South to Stringtown Road (400 West), then extends north along Stringtown Road to Wards Lane (865 South), then extends west along Wards Lane to 900 West. The following table shows the parcels impacted by the project.

Impacted Parcel Summary					
Parcel	Name	Street	Coordinate	Zoning	Acres
00-0020-4611	Day	970 South	30 West	R-1-22	1.33
00-0020-4256	Dwell	970 South	300 West	R-1-22	6.00
00-0020-4255	Price	970 South	350 West	R-1-22	6.88
00-0020-4254	Medallion	970 South	350 West	R-1-22	10.16
Common Area	Saddle Creek	970 South	150 West	R-1-22	34.35
00-0020-4248	Jonsson	Stringtown Road	955 South	R-1-22	0.42
00-0020-4250	Bodensteiner	Stringtown Road	923 South	R-1-22	0.50
00-0020-4251	Jonsson	Stringtown Road	945 South	R-1-22	1.47
00-0020-4249	Almaden	Stringtown Road	905 South	R-1-22	2.60
00-0020-4247	Twin Creeks	Stringtown Road	845 South	R-1-22	6.81
00-0008-5949	Burt	Wards Lane	792 West	RA-1-43	5.01

The land use plan is the same as zoning. The 0.42 acre parcel recorded to Jonsson does not meet minimum development standards associated with R-1-22 zoning. For valuation, it is combined with the contiguous 1.47 acre parcel that is also recorded to Jonsson. Saddle Creek Ranch is common area for a planned unit development

Analysis of Land Value

Parcels impacted by the project range from 0.42 acre to 34.35 acres. A good sample of sales are found within Wasatch County from which a credible indicator of value can be extracted for the impacted parcels. Of the 27 sales found, 23 are closed sales, 3 are listed for sell, and 1 is a listing that expired without a sale. The 27 sales selected as value indicators for the impacted parcels are from a pool of 104 listings. Those eliminated from the pool have hillside, forested, or resort locations. Other factors for elimination are distance from the project area and surplus land. The mean discount from the listing price to the purchase price for parcels over 5 acres is 8.9% and for 8.2% for parcels under 5 acres. Listings that sold are given priority except in segments where credible sales are not found.

The sample range is from 0.39 acre to 46.21 acres as shown on the following page.

Indicators of Land Value				
County Parcel	Zoning	Status	Acre	Price/Acre
00-0021-3014	R-1-15	Sold	0.39	\$897,436
00-0021-3018	R-1-15	Sold	0.40	\$937,500
00-0021-3020	R-1-15	Sold	0.45	\$817,778
00-0021-2606	R-1-22	Sold	0.50	\$357,000
00-0021-2608	R-1-22	Sold	0.50	\$360,000
00-0021-2607	R-1-22	Sold	0.50	\$380,000
00-0021-2604	R-1-22	Sold	0.50	\$410,000
00-0020-4742	R-1-15	Sold	0.50	\$464,000
00-0020-4761	R-1-15	Sold	0.50	\$590,000
00-0021-2605	R-1-22	Sold	0.72	\$319,444
00-0020-4608	R-1-22	Sold	1.00	\$199,900
00-0020-4766	R-1-15	Sold	1.02	\$375,000
00-0020-3366	RA-1-43	Sold	3.00	\$266,667
00-0021-2600	RA-5	Sold	5.01	\$81,836
00-0021-2602	RA-5	Sold	5.02	\$85,657
00-0020-7641	RA-1	Sold	6.81	\$48,458
00-0021-4256	RA-1	Sold	7.02	\$105,413
00-0020-2533	RA-1	Sold	7.40	\$94,595
00-0020-4254	R-1-22	Sold	10.16	\$115,650
00-0020-6764	R-1-15	Sold	11.44	\$163,899
00-0020-2515	R-2 8KSF	Sold	13.38	\$186,846
00-0021-4371	RA-1	Sold	14.03	\$85,531
00-0020-6922	RA-1	Sold	14.62	\$58,140
00-0020-7240	R-1	Expired	16.28	\$153,501
00-0006-3797	RA-1-43	Active	35.38	\$189,000
00-0000-8693	RA-1-43	Active	42.23	\$56,829
00-0020-4290	RA-1-43	Active	46.21	\$97,382

All sales occurred over the past two years. Price per acre is the unit of comparison. The sales may be multiple parcels that include the parcel shown.

Many factors, both transactional and physical, influence value. The most influential factors on land value in the project area are size, zoning, and location. All but one of the impacted parcels is zoned and planned for residential use on minimum half-acre lots. The impacted parcel along Wards Lane is zoned for residential use on minimum one acre lots.

The following table shows the expected value range of the impacted parcels based on market activity and the most influential factors on value.

Impacted Parcel Summary					Range	
Parcel	Name	Street	Zoning	Acres	Low	High
00-0020-4611	Day	970 South	R-1-22	1.33	\$275,000	\$325,000
00-0020-4256	Dwell	970 South	R-1-22	6.00	\$115,000	\$140,000
00-0020-4255	Price	970 South	R-1-22	6.88		
00-0020-4254	Medallion	970 South	R-1-22	10.16	\$95,000	\$140,000
Common Area	Saddle Creek	970 South	R-1-22	34.35		
00-0020-4250	Bodensteiner	Stringtown	R-1-22	0.50	\$360,000	\$420,000
00-0020-4251	Jonsson	Stringtown	R-1-22	1.89	\$275,000	\$300,000
00-0020-4249	Almaden	Stringtown	R-1-22	2.60	\$115,000	\$140,000
00-0020-4247	Twin Creeks	Stringtown	R-1-22	6.81		
00-0008-5949	Burt	Wards	RA-1-43	5.01	\$105,000	\$120,000

Project Impact Analysis

The study of transmission line impact on real property value is vast. Historic studies show the impact to be 10% or less on real property value. We participated in a study of about 350,000 properties in Salt Lake County from 2001 to 2014 spanning 128,000 transactions and 450 variables. The study found: 1) homes within 165 feet of a 138 kV line show a 5.1% decrease in value; 2) homes within 165 feet of a 46 kV line have no measurable decrease but show a decrease of 2.5% beyond 660 feet. The study appears to support a diminution in value of about 5% for a change in transmission from a 46 kV to 138 kV based on the variance in the indicated property value impact for line types.

However, the study does not include as analytical variants either associated easement width or road type on which the various properties fronted. The fact that neither of these variants was isolated undermines the reliability of studies value indication for comparative purposes, particularly given the relative nominal indicated value impacts for either line type. General market observations indicate that variances between the value impacts in the study for the two line types would reasonably be ascribable to the added width associated with 138kV lines and the fact that such lines, and the properties so encumbered, are more frequently located along major arterials. Location on heavily traveled roadways has been shown to adversely impact residential values. Consequently, while the study indicates a value impact variance between 46 kV and 138 kV lines, that variance is more reasonably ascribable to other variances, and not the relatively modest increase pole height/crossarm width. General market indications do not support a value impact between 46 kV and 138 kV lines beyond the impact from the added encumbrance width.

On this point, the project area includes four contiguous lots within the Eldons Place Subdivision identified as County Parcels 00-0021-2604, 2606, 2607, and 2608. The four parcels have the same zoning and size. Only Parcel 00-0021-2604 fronts a 46 kV line. Recognizing various elements that determine value, there is no indication that fronting the transmission line has any diminution on real property value.

Over 20 years of experience of appraising the impact of transmission lines on real property has identified noteworthy observations. Studies recognize that the leading cause of diminution associated with transmission lines is the visual impact on view. This is most obvious when the transmission line is first constructed but recedes into the background over time – especially when the transmission line is along a road where public utilities are common and expected. This phenomenon is not limited to transmission lines. Trees along a familiar road, traffic noise, offensive smells, neighborhood culinary water taste, faded colors. All these have little notice until there is a change. Because of this phenomenon, appraisers seldom make a deduction for existing powerlines and utilities when valuing real property in general. However, when acquiring right of way for a new transmission line or public utility the argument of minimal impact is not well received by impacted property owners.

National Electrical Safety Code (NESC) adopted by Utah State sets minimum clearance requirements for power lines. The increase in voltage transmission from 46 kV to 138 kV will require a greater width by code evoking an increase in clearance from the utility. The increase for this project is 0.8 feet to 9.1 feet based on Option B (long spans). The mean is 3.8 feet and the median is 3.4 feet. The increase will be along road frontage where building is prohibited by ordinance or is impractical. However, there is a loss of property rights such as quiet enjoyment.

Conclusions

After analysis of the subject market, review of relevant transmission line studies, and appraisal experience, compensation of 25% to 75% of the underlying land value is indicated for that portion of the impacted properties within the expanded easement area. There is no indication of severance damages to land outside the expanded easement area. The underlying land value varies from \$95,000 per acre to \$420,000 per acre.

Thank you for this assignment. Your input is welcome.



Troy Lunt, MAI



Eric Leonhardt, MAI



970 South – East Looking West



970 South – East Looking East



970 South – West Looking West



970 South – West Looking East



Stringtown Road Looking North



Stringtown Road Looking South



Wards Lane Looking West



Wards Lane Looking East

Exhibit 5

Parcel	Name	Street	Zoning	Acres	Low	High	Frontage (ft)	Width Increase (ft)	Additional Area (sf)	Additional Area (acres)	Average [(Low + High) / 2]	Average Fee [(Low + High) / 2]	Estimated Easement Cost
00-0020-4611	Day	970 South	R-1-22	1.33	\$275,000	\$325,000	300	3	900	2.07%	\$300,000	50%	\$3,099
00-0020-4256	Dwell	970 South	R-1-22	6	\$115,000	\$140,000	435	2	870	2.00%	\$127,500	50%	\$1,273
00-0020-4255	Price	970 South	R-1-22	6.88	\$115,000	\$140,000	700	3.5	2450	5.62%	\$127,500	50%	\$3,586
00-0020-4254	Medallion	970 South	R-1-22	10.16	\$115,000	\$140,000	1131	3.5	3958.5	9.09%	\$127,500	50%	\$5,793
Common Area	Saddle Creek	970 South	R-1-22	34.35	\$95,000	\$140,000	1125	6	6750	15.50%	\$117,500	50%	\$9,104
00-0020-4250	Bodensteiner	Stringtown	R-1-22	0.5	\$360,000	\$420,000	75	1	75	0.17%	\$390,000	50%	\$336
00-0020-4251	Jonsson	Stringtown	R-1-22	1.89	\$275,000	\$300,000	210	1.5	315	0.72%	\$287,500	50%	\$1,040
00-0020-4249	Almaden	Stringtown	R-1-22	2.6	\$275,000	\$300,000	145	0.5	72.5	0.17%	\$287,500	50%	\$239
00-0020-4247	Twin Creeks	Stringtown	R-1-22	6.81	\$115,000	\$140,000	200	0.5	100	0.23%	\$127,500	50%	\$146
00-0020-4235	Hansen	Stringtown	R-1-22	1.05	\$360,000	\$420,000	210	1	210	0.48%	\$390,000	50%	\$940
Total Estimate												\$25,556	

Short Span

Parcel	Name	Street	Zoning	Acres	Low	High	Frontage (ft)	Width Increase (ft)	Additional Area (sf)	Additional Area (acres)	Average [(Low + High) / 2]	Average Fee [(Low + High) / 2]	Estimated Easement Cost
00-0020-4611	Day	970 South	R-1-22	1.33	\$275,000	\$325,000	300	3.5	1050	2.41%	\$300,000	50%	\$3,616
00-0020-4256	Dwell	970 South	R-1-22	6	\$115,000	\$140,000	435	2.5	1087.5	2.50%	\$127,500	50%	\$1,592
00-0020-4255	Price	970 South	R-1-22	6.88	\$115,000	\$140,000	700	4	2800	6.43%	\$127,500	50%	\$4,098
00-0020-4254	Medallion	970 South	R-1-22	10.16	\$115,000	\$140,000	1131	4	4524	10.39%	\$127,500	50%	\$6,621
Common Area	Saddle Creek	970 South	R-1-22	34.35	\$95,000	\$140,000	1125	6.5	7312.5	16.79%	\$117,500	50%	\$9,862
00-0020-4250	Bodensteiner	Stringtown	R-1-22	0.5	\$360,000	\$420,000	75	1.5	112.5	0.26%	\$390,000	50%	\$504
00-0020-4251	Jonsson	Stringtown	R-1-22	1.89	\$275,000	\$300,000	210	2	420	0.96%	\$287,500	50%	\$1,386
00-0020-4249	Almaden	Stringtown	R-1-22	2.6	\$275,000	\$300,000	145	1	145	0.33%	\$287,500	50%	\$479
00-0020-4247	Twin Creeks	Stringtown	R-1-22	6.81	\$115,000	\$140,000	200	1	200	0.46%	\$127,500	50%	\$293
00-0020-4235	Hansen	Stringtown	R-1-22	1.05	\$360,000	\$420,000	210	1	210	0.48%	\$390,000	50%	\$940
Total Estimate												\$29,389	

Long Span

Parcel	Name	Street	Zoning	Acres	Low	High	Frontage (ft)	Width Increase (ft)	Additional Area (sf)	Additional Area (acres)	Average [(Low + High) / 2]	Average Fee [(Low + High) / 2]	Estimated Easement Cost
00-0020-4611	Day	970 South	R-1-22	1.33	\$275,000	\$325,000	300	0	0	0.00%	\$300,000	50%	\$0
00-0020-4256	Dwell	970 South	R-1-22	6	\$115,000	\$140,000	435	0	0	0.00%	\$127,500	50%	\$0
00-0020-4255	Price	970 South	R-1-22	6.88	\$115,000	\$140,000	700	264.6	264.6	0.61%	\$127,500	50%	\$387
00-0020-4254	Medallion	970 South	R-1-22	10.16	\$115,000	\$140,000	1131	0	0	0.00%	\$127,500	50%	\$0
Common Area	Saddle Creek	970 South	R-1-22	34.35	\$95,000	\$140,000	1125	813	813	1.87%	\$117,500	50%	\$1,097
00-0020-4250	Bodensteiner	Stringtown	R-1-22	0.5	\$360,000	\$420,000	75	0	0	0.00%	\$390,000	50%	\$0
00-0020-4251	Jonsson	Stringtown	R-1-22	1.89	\$275,000	\$300,000	210	64.4	64.4	0.15%	\$287,500	50%	\$213
00-0020-4249	Almaden	Stringtown	R-1-22	2.6	\$275,000	\$300,000	145	0	0	0.00%	\$287,500	50%	\$0
00-0020-4247	Twin Creeks	Stringtown	R-1-22	6.81	\$115,000	\$140,000	200	1298	1298	2.98%	\$127,500	50%	\$1,900
00-0020-4235	Cascades	Stringtown	R-1-22	1.05	\$360,000	\$420,000	210	134	134	0.31%	\$390,000	50%	\$600
Total Estimate												\$4,196	

Underground

From: Ginny Tuite ginny@bhhsutah.com 
Subject: KSL/Herald Article: Property Owners Sue RMP over Wildfire



Date: December 13, 2019 at 8:30 AM
To: mhenke@midwaycityut.org, Celeste Johnson cjohnson@midwaycityut.org, jsimonsen@midwaycityut.org, jdrury@midwaycityut.org,
lchristen@midwaycityut.org, bprobst@midwaycityut.org, kvanwagoner@midwaycityut.org

Dear City Council Members,

Attached are two articles (KSL and Herald) from 2012 in which RMP was sued and began settling with Landowners. Fire Marshall concluded that high winds caused lines to start the fire. High winds and fire danger are a concern in Midway.

Please read the attached articles, which are brief and on point to our situation in Midway with RMP.

Thank you,

Members of the Ad-Hoc Midway Power Committee
his copy from your system. Thank you for your cooperation.



Property owners
sue Ro...fire.pdf



Property owners
sue Ro...om.pdf

[Click here to print this page](#)



Property owners sue Rocky Mountain Power over wildfire

SALT LAKE CITY (AP) — More than 100 property owners sued Utah's largest utility for negligence Tuesday after a summer wildfire burned more than 70 square miles and destroyed more than 50 homes.

The group of cabin owners, landowners and business interests filed the lawsuit against Rocky Mountain Power after authorities determined the blaze — which left one man dead — was caused by arcing between two sets of power transmission lines built too closely together.

The family of the man who was trapped and killed by the fire is reportedly pursuing a separate legal claim.

The utility initially blamed a thief for stripping a protective copper ground wire from one of its transmission poles. But a state fire investigator later determined the ground wire wasn't designed to absorb the powerful arc and wouldn't have stopped the surge from igniting dry grass.

Rocky Mountain Power said Tuesday it is offering cash settlements to landowners. In a statement offered to The Associated Press, the utility was careful to avoid admitting fault but said it was pursuing out-of-court

settlements with dozens of families.

“We believe this lawsuit is unnecessary given the company's initiation of a claims resolution process.”

–Maria O'Mara

"We believe this lawsuit is unnecessary given the company's initiation of a claims resolution process," Rocky Mountain Power spokeswoman Maria O'Mara said.

The utility says it has already paid some settlements. Rocky Mountain Power President Richard Walje made the offer at a July 31 meeting in Fairview with hundreds of fire victims.

"Until liability can be determined, based on preliminary information, I decided that we should try to help by making it easier for individuals who experienced losses from the fire to rebuild their homes and structures," Walje told the crowd, according to a statement provided by O'Mara. "I'm here to propose a process to assist you in that effort."

But one of the lawyers involved in the case, Jonathan Schofield, said Rocky Mountain Power may be shortchanging landowners who decided not to sign up for the lawsuit.

"We just want to make sure our clients are adequately compensated for their losses," Schofield said. "It's unclear whether Rocky Mountain Power is considering the full extent of damages that have been incurred for the fire victims."

The lawsuit doesn't specify how much money the plaintiffs are seeking. It represents owners of more than half of the 54 square miles of private land that burned, said Stephen J. Hill, another lawyer. Another 17 square miles of public range land were blackened.

Related:



[One dead in Wood Hollow Fire; Fairview evacuated](#)

Search and rescue crews evaluating charred areas of the Wood Hollow Fire discovered a body on Tuesday.

Among the 104 plaintiffs are cattle ranchers who had to sell herds because of the loss of forage, Schofield said. Others are residents of several wooded subdivisions around Indianola off Utah's scenic Route 89.

The Wood Hollow Fire started June 23 about 15 miles farther south, near Fountain Green. The blaze was one of Utah's largest this year, destroying 52 houses and more than 100 outbuildings. It took 10 days to fully contain and cost the state more than \$5 million to fight, officials said.

Winds caused two sets of high-voltage power lines to either touch or swing close enough to each other to create a surge that swept down the poles into dry brush, Deputy Utah Fire Marshal Troy Mills found.

"That is the cause of the fire," Mills told the AP in July. "There's some things where you've got to take a stand. It is what it is."

Lawyers in the case say the arc also could have flung a piece of molten metal onto dry grass.

O'Mara said Rocky Mountain Power is conducting its own investigation into the fire and will share the results once the probe is completed.

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https://www.heraldextra.com/sanpete-county/news/property-owners-sue-rocky-mountain-power/article_d4a496ac-863e-52ec-83f1-7988f906fffa.html

Property owners sue Rocky Mountain Power

The Associated Press Sep 20, 2012

SALT LAKE CITY -- More than 100 property owners sued Utah's largest utility for negligence after a summer wildfire burned more than 70 square miles and destroyed more than 50 homes.

The group of cabin owners, landowners and business interests filed the lawsuit against Rocky Mountain Power after authorities determined the blaze, which left one man dead, was caused by arcing between two sets of power transmission lines built too closely together. The family of the man who was trapped and killed by the fire is reportedly pursuing a separate legal claim.

The utility initially blamed a thief for stripping a protective copper ground wire from one of its transmission poles. But a state fire investigator later determined the ground wire wasn't designed to absorb the powerful arc and wouldn't have stopped the surge from igniting dry grass.

Rocky Mountain Power said it is offering cash settlements to landowners. In a statement offered to The Associated Press, the utility was careful to avoid admitting fault but said it was pursuing out-of-court settlements with dozens of families.

"We believe this lawsuit is unnecessary given the company's initiation of a claims resolution process," Rocky Mountain Power spokeswoman Maria O'Mara said.

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According to findings by Deputy Utah Fire Marshal Troy Mills, winds caused two sets of high-voltage power lines to either touch or swing close enough to each other to create a surge that swept down the poles into dry brush.

"That is the cause of the fire," Mills told the AP in July. "There's some things where you've got to take a stand. It is what it is."

Lawyers in the case say the arc also could have flung a piece of molten metal onto dry grass.

O'Mara said Rocky Mountain Power is conducting its own investigation into the fire and will share the results once the probe is completed.

From: Ginny Tuite ginny@bhhsutah.com

Subject: Tribune Article: RMP Pays \$2.5M to Utah in Power Line Fight

Date: December 13, 2019 at 8:27 AM

To: mhenke@midwaycityut.org, Celeste Johnson cjohnson@midwaycityut.org, jsimonsen@midwaycityut.org, jdrury@midwaycityut.org, bprobst@midwaycityut.org, lchristen@midwaycityut.org, kvanwagoner@midwaycityut.org



Dear City Council Members,

Attached is a Salt Lake City Tribune article from 2014 in which RMP was required to pay \$2.5M in damages to the State of Utah in a case very similar to that of Midway. The law firm representing the State of Utah in this case is the same firm representing VOLT.

Please read the attached article, which is brief and on point to our situation in Midway with RMP.

Thank you,

Members of the Ad-Hoc Midway Power Committee



Ginny Tuite

Realtor

Berkshire Hathaway HomeServices Utah Properties

Ph: 801.201.9004

Email: ginny@bhhsutah.com

Website: <https://ginnytuite.bhhsutah.com>

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The Salt Lake Tribune

Rocky Mountain Power pays Utah \$2.5M in power line fight

State lands • The utility initially offered to pay \$70,000 for the impact of a Tooele transmission line.



By Brian Maffly The Salt Lake Tribune

• May 17, 2014 3:21 pm

This is an archived article that was published on sltrib.com in 2014, and information in the article may be outdated. It is provided only for personal research purposes and may not be reprinted.

What's the value of not having a transmission line run over your land that may someday be a subdivision? To a utility, not much. To Utah's school kids, millions.

State trust lands managers have resolved such a condemnation dispute, which turned into drawn-out and costly affair, over the value of an easement through state land in Tooele County.

Rocky Mountain Power's 345-kilovolt 100-mile Oquirrh-to-Mona line, completed last

~~sections~~ crosses about a mile of land the School and Institutional Trust Lands Administration, or SITLA, acquired on the southeast flank of the Stansbury Mountains with an eye toward residential development.



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To resolve SITLA's claim that the line has substantially diminished the land's value, officials say, the utility has agreed to pay \$2.5 million to the agency, which manages state lands to generate revenue for education.

The dispute centered on SITLA's 6,000-acre St. John block, land south of Grantsville that agency says offers great development potential in a scenic valley only 40 minutes from the Salt Lake City International Airport.

Superb views of the Oquirrh and Deseret Peak now include 200-foot transmission towers. SITLA claimed such an eyesore reduced the land's value by \$4.5 million.

"That finding was based on future development that would be severely limited," SITLA general counsel John Andrews told his board Thursday. "The large size of the property magnified the severity of damages."

The utility countered with \$70,000.



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"In our view of the law, fair market is the present value because future value is highly speculative," utility spokesman David Eskelsen said.

The deal resolving this vast discrepancy — spanning three orders of magnitude — was reached last month, days before the dispute was to be argued before the Utah Supreme Court.

SITLA routinely sells easements, but the agency had little appetite for a power line over and near property it hopes to build homes on. Rocky Mountain used the legal power of eminent domain to condemn a corridor through the St. John block.

The line is part of Rocky Mountain Power's Energy Gateway, a multi-phase program beefing up transmission capacity around the utility's service area in Wyoming, Idaho and Utah. This segment moves power from the Clover substation in Mona to South Jordan, with the route looping to the west through Tooele County to connect the future Limber substation.

According to Andrews, the utility could have reduced the line's visual impact  it a little farther to the east, but it was more interested in avoiding the viewshed of an influential private landowner. Under pressure from lawmakers and the county, "we grudgingly agreed the proposed route would be acceptable, but we were not going to pull any punches in determining value of the easement," Andrews said. **Subscribe**

The agency amassed a "team of experts in planning, water and engineering who were credible people who had done their homework," Andrews told the board. The goal was to demonstrate the land could be developed and the power line undermined its marketability. The agency also hired Snell & Wilmer, a Salt Lake City law firm.

"Litigation at this level is darned expensive and we were spending a lot of money," Andrews said.

He declined to divulge what SITLA spent, but said settling the dispute reversed the flow of money in a positive direction and also set up a framework so SITLA and the utility will be more likely to resolve future eminent domain disputes without going to court.

An aggressive stance was worth it, according to SITLA director Kevin Carter



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"The line was shoved down our throat and we made a decision to fight this," he said. "I want recognition from utilities they can't push us around with impunity. We will fight it with every aspect we can. I'm happy with the consequences."

bmaffy@sltrib.com

