

# Redundant Underground Transmission Line Funding

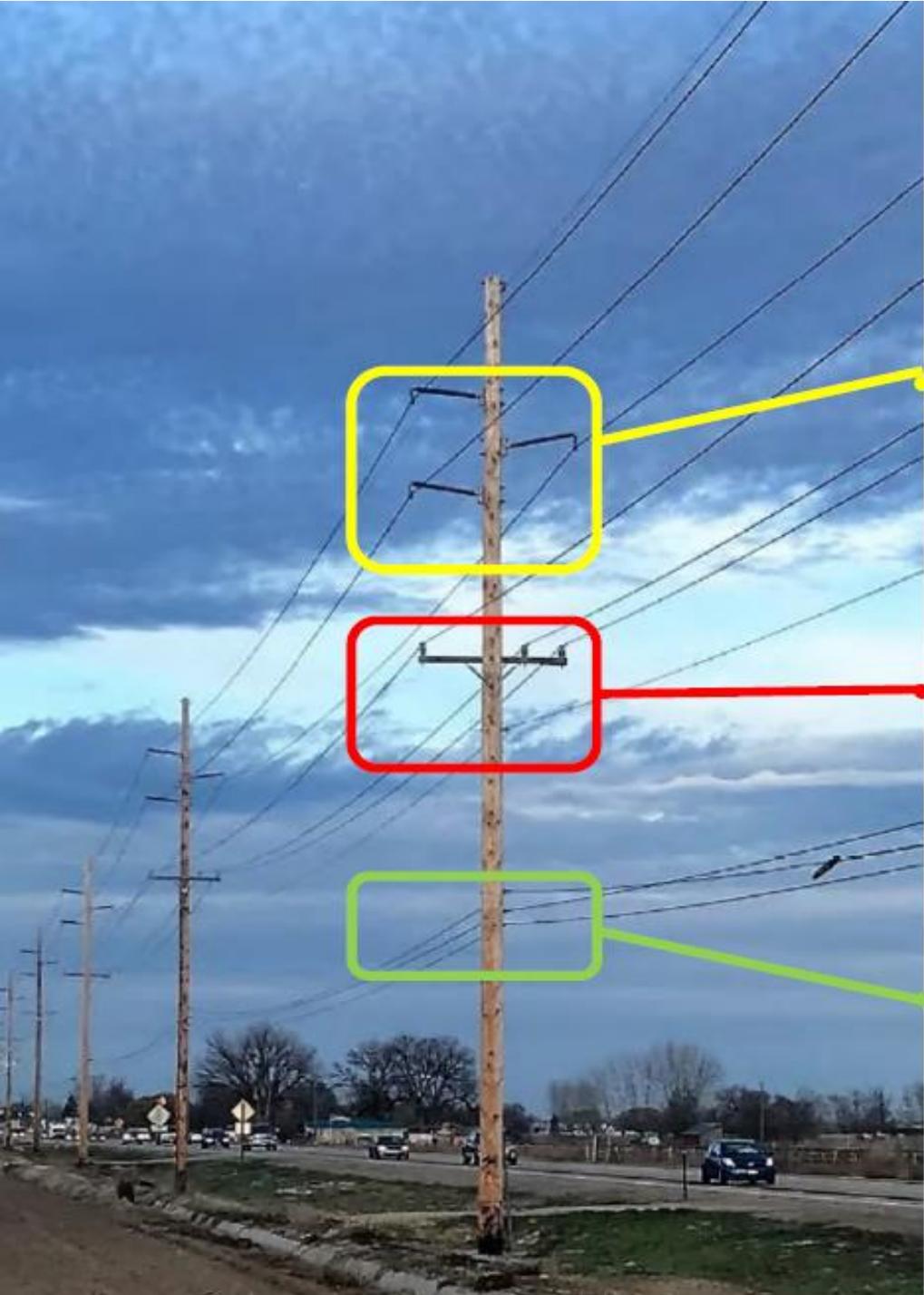


A review of funding options for the undergrounding of Idaho Power's 138Kv redundant transmission line

# Question to be discussed tonight:

Are Blaine County citizens willing to pay for the undergrounding of the 138KV transmission Line?

If so, how much are you willing to pay?



# How the Electrical Grid Works

## Transmission (Interstate Highway)

- Moving electricity over the grid between substations

## Distribution (Local Roads)

- Delivering electricity to customers from the substation

## Other Utilities

- We share our poles with other utility providers (cable, phone, fiber)

# History



**1962**

138- kV transmission line  
Wood River substation to  
Ketchum was built



**1973**

Idaho Power starts  
planning for a redundant  
line.



**1995**

After receiving opposition  
from the community  
Idaho Power shelved the  
redundant line project.  
1<sup>st</sup> transmission line is 33  
years old.



**2007-2014**

Community Advisory  
Committee (CAC) &  
Idaho Power Company  
interested in a  
redundant line.  
Idaho Power Co.  
submitted an  
application to Blaine  
County in 2015.



**2017 Idaho Power  
Application  
Denied**

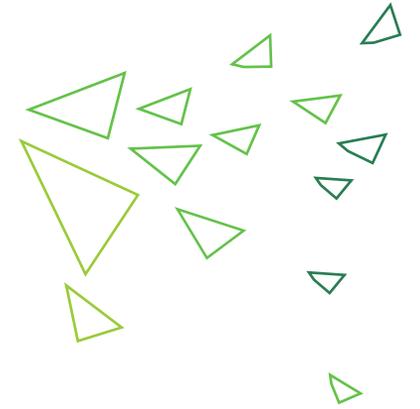
Redundant line denied since  
it could not meet standards  
of evaluation for the Blaine  
County Conditional Use  
Permit.

1<sup>st</sup> transmission line  
is 55 years old.



# 2017-2019

Idaho Power submits a Conditional Use Permit to build a redundant 138kV transmission line with the backing of the state Public Utilities Commission



- 11 miles of redundant overhead transmission line
- Poles proposed to be 8'7"-14' taller
- 3 transmission lines, 4 distribution lines, 2-3 leased utility lines
- Blaine County citizens voiced concern with scenic impact to the tourist based economy, fire hazard, & electromagnetic fields
- Public comments asked for undergrounding
- May 2019 BCC approved Conditional Use Permit with condition it be placed underground.

# Blaine County Decision

It is within that review that the Board must find that the only condition of approval that would allow it to make positive findings at this time is to underground the entire line from the Wood River Substation to the traffic light at the intersection of Elkhorn Road and Highway 75. Undergrounding the redundant transmission line allows for positive findings on compliance with the Comprehensive Plan, impacts on neighboring uses, potential hazards and disturbances, and permanent damage to areas of vital scenic importance. While imposing such a condition will require difficult discussions on the funding alternatives, the Board believes that these funding discussions should be fully exhausted before any consideration of an overhead transmission line in this area. Depending upon the results of these funding processes, further consideration and deliberation may be necessary to "continue to work together on these issues, as there may still be opportunities to find areas of common interest and common ground." Accordingly, the Board affirms the Commission's decision with the modification that it require as a condition of approval that the entire transmission line be undergrounded from the Wood River Substation north to the City of Ketchum.

# Idaho Public Utilities Commission (State Authority) decided:



## Need

PUC decided that the 2<sup>nd</sup> line was needed to provide adequate & reliable service to the North Valley and promote public health, safety and convenience.



## Route

PUC approved Idaho Power Co.'s general route of the proposed overhead redundant transmission line.



## Work together

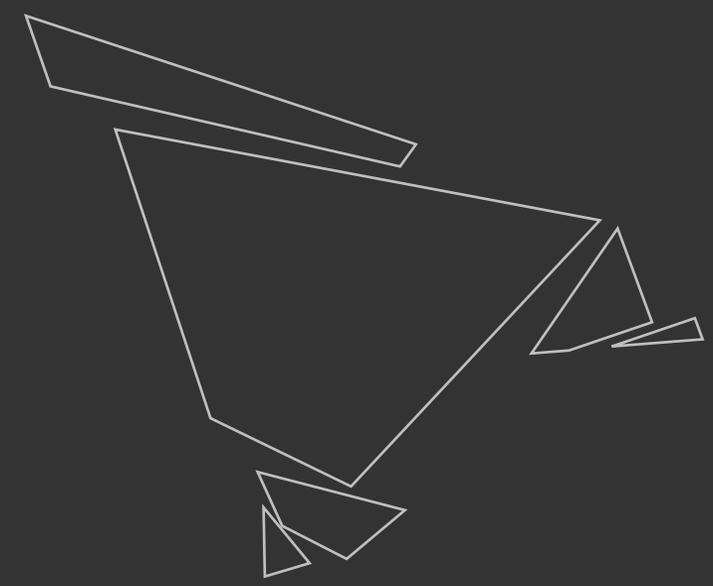
PUC encouraged the interested parties to continue to work together because there may be opportunity to find common ground .



# Idaho Public Utilities Commission

★ P.U.C has primacy over local land use decisions

ID Code: 67-6528: If a public utility has been ordered or permitted by specific order, pursuant to title 61, Idaho Code, to do or refrain from doing an act by the public utilities commission, any action or order of a governmental agency pursuant to titles 31, 50 or 67, Idaho Code, in conflict with said public utilities commission order, shall be insofar as it is in conflict, null and void if prior to entering said order, the public utilities commission has given the affected governmental agency an opportunity to appear before or consult with the public utilities commission with respect to such conflict.



# Funding

1. How much will it cost?
2. How do we pay for the undergrounding?

# Cost Estimate for Undergrounding Entire Transmission Line

 **\$38,151,503\***

\* \$10M in contingency that may or may not be expended.



 LEVY : 10 Year = \$56 Annually for \$100,000 Assessed Property Value  
30 Year- \$36 Annually for \$100,000 Assessed Property Value

## Cost Breakdown

Wood River Sub Station to Elkhorn Rd	\$28,489,626
Elkhorn Rd to Ketchum Sub Station	\$13,389,561
30% Contingency, 15% Overheads, Expenses to date, 9% AFUDC	\$26,112,329
Grand total of undergrounding entire line	\$67,991,516
- PUC approved transmission option	-\$35,102,288
Subtotal	\$32,889,227.53
Tax gross-up	\$5,262,276
Grand Total	<b>\$38,151,503</b>

 LID – Can only be created by County for properties less than an 5 acre however could create some voluntary private LID's If there is consensus from property owners that they are willing to pay.

ie: Valley Club HOA etc.

le: Specific Segments

# Levy

Entire Blaine County & Municipalities Included



### Temporary

2 years  
50% +1 vote



### Permanent

Can sunset a permanent Levy  
Need a 2/3 vote



### Timeline

May 2021  
or  
November 2021

# Permanent Levy- 10 year & 30 year

## 10 Year Levy

Idaho Power Loan Calcs (monthly compounding interest)			
Loan amount	\$ 38,151,503	Annual Payment	\$ 5,924,054
Annual interest rate	9.50%	Property Valuation	\$ 10,561,542,925
Loan period in years	10	Annual Cost per \$100k	\$ 56
Start date of loan	9/10/2020	Total Cost per \$100k	\$ 561
Monthly payment	\$ 493,671	My Property Value	\$ 500,000
Number of payments	120	My Annual Cost	\$ 280
Total interest	\$ 21,089,033	My Total Cost	\$ 2,805
Total cost of loan	\$ 59,240,536		

## 30 Year Levy

Idaho Power Loan Calcs (monthly compounding interest)			
Loan amount	\$ 38,151,503	Annual Payment	\$ 3,849,582
Annual interest rate	9.50%	Property Valuation	\$ 10,561,542,925
Loan period in years	30	Annual Cost per \$100k	\$ 36
Start date of loan	9/10/2020	Total Cost per \$100k	\$ 1,093
Monthly payment	\$ 320,799	My Property Value	\$ 500,000
Number of payments	360	My Annual Cost	\$ 182
Total interest	\$ 77,335,964	My Total Cost	\$ 5,467
Total cost of loan	\$ 115,487,467		

# Local Improvement Districts (L.I.D.): Only properties less than 5 acres



## What is a L.I.D.?

A Local Improvement District is a method by which a group of property owners can share in the cost of infrastructure improvements that benefit the property owners.



## Properties greater than 5 acres

**must volunteer to be included in the district**



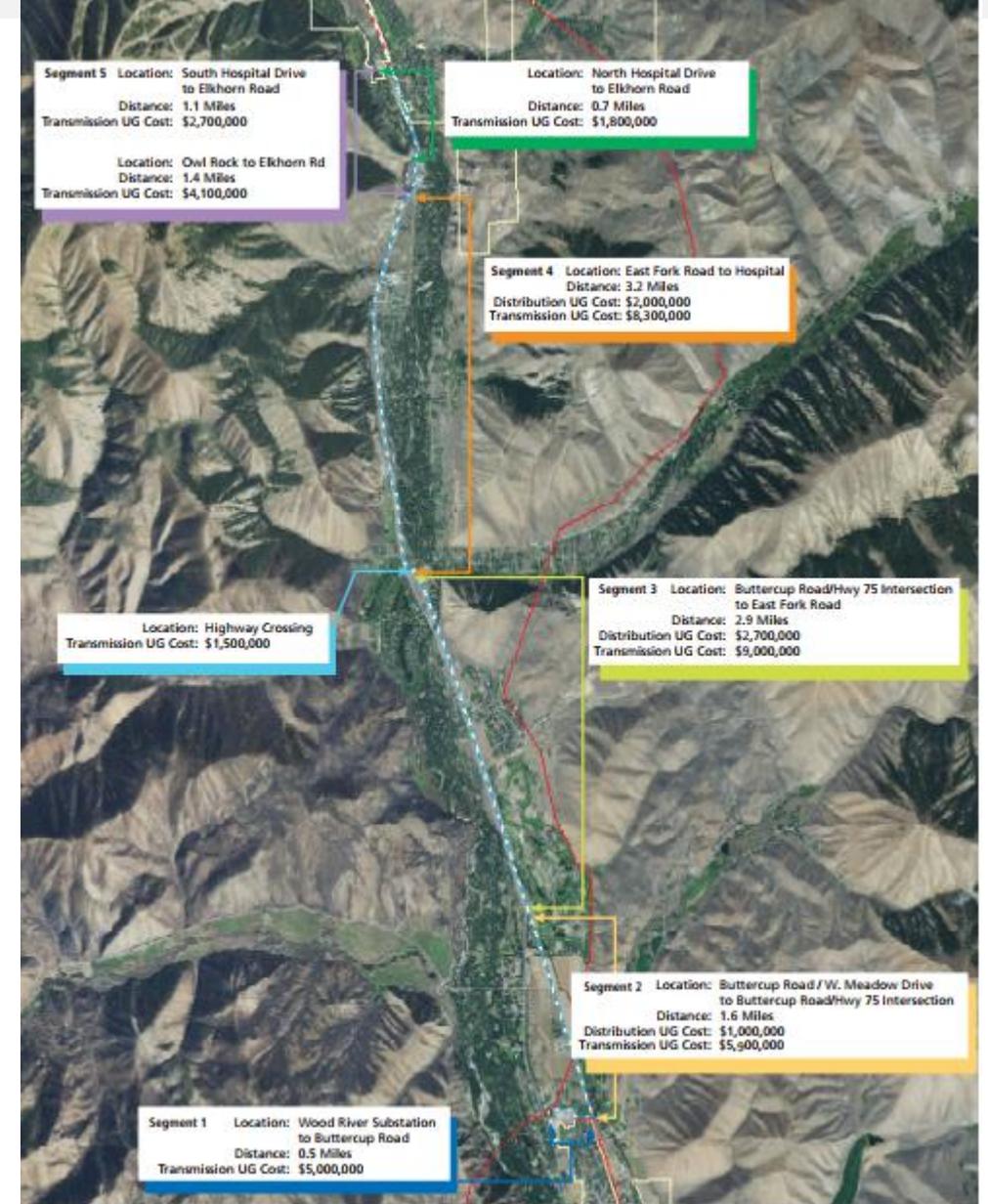
## 5 Acre Rule

“No single tract or parcel of property containing more than five (5) acres may be included in any district organized under this chapter, unless located within an incorporated city, without the consent of the owner or owners thereof.”

Idaho State Statute, Title 50 Ch.25

# Distribution undergrounding Cost Estimate

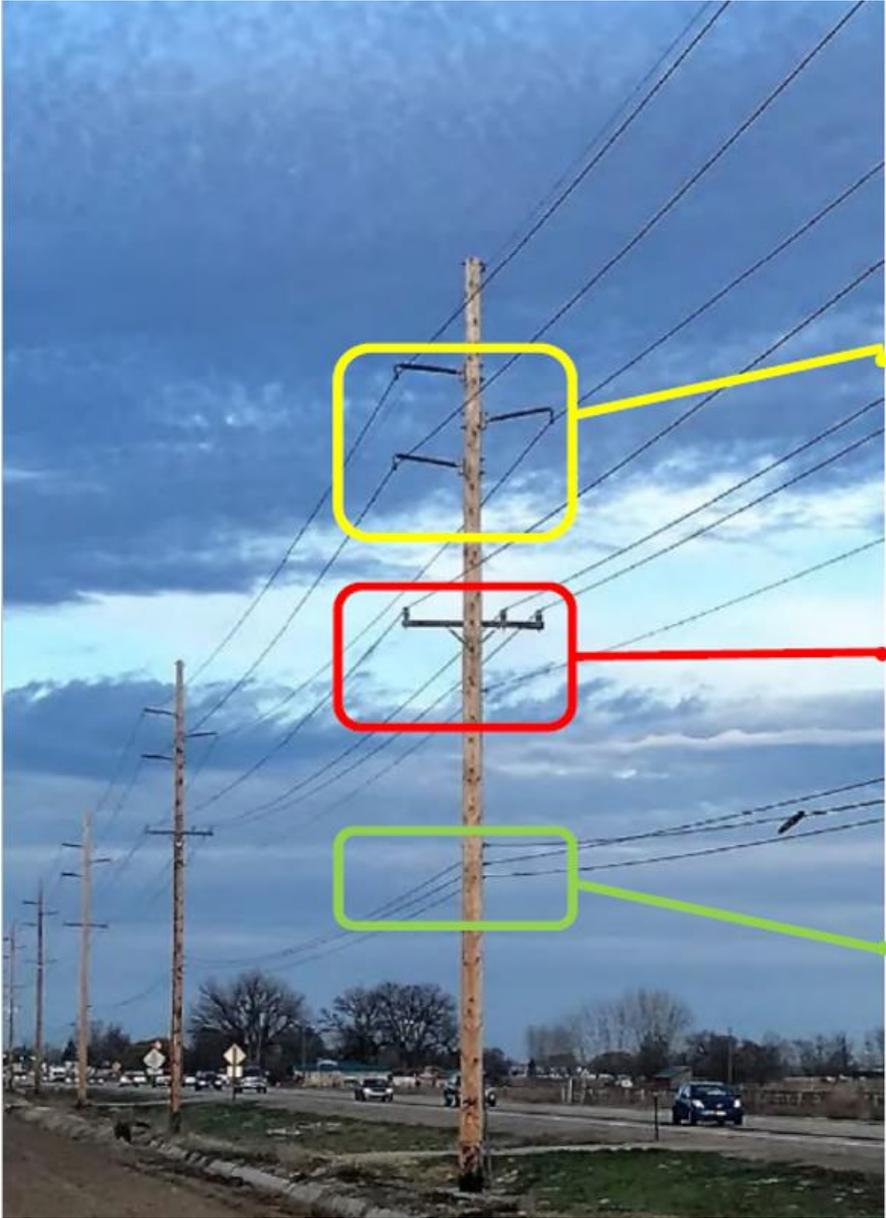
- \$5,700,000
- Burying the line south of the Ketchum City limit to the overhead lines are not included in the redundant transmission line application.



# Transmission Only vs Distribution



Bike path south of Hailey



# Idaho Power Company August 28, 2020 Settlement Proposal

## What:

Bury the distribution lines

Bury 1.1 miles segment to south of Hospital Dr.

Total Cost: 8.4 million

## How:

3 % surcharge for entire county over 20 years = 9.1 million

### Flat monthly Charge:

- \$3.57 residential costumers
- \$8.43 commercial, industrial, and irrigation customers
- \$3.77 unmetered customers

<b>BLAINE COUNTY</b>			
<b>Transmission and Distribution Line Funding</b>			
<b>UNDERGROUND DISTRIBUTION plus TRANSMISSION SEGMENT 5</b>			
<b>Total amount to be funded:</b>			
<b>Description</b>			<b>High-level cost estimate</b>
Underground distribution			5,700,000
Transmission segment 5-Option 2			2,700,000
		<b>Total</b>	<b>8,400,000</b>
<b>Funding Requirement:</b>			
Annual payment required	20 years		959,194
Plus: Administration fees			35,000
Annual Total required			994,194

<b>Funding Projection:</b>			
Funding Source:	All Blaine County		
Surcharge Percentage	3.0%		
	<b>Average Customers</b>	<b>Average Monthly Surcharge</b>	<b>Annual funding amount</b> (Customers * % * 12)
Residential	15,707	3.57	673,229
Non-Residential	3,963	8.43	400,933
Unmetered	33	3.77	1,494
			1,075,656
<b>Total Funding Provided</b>	<b>20 years</b>		<b>9,100,000</b>

# Planning and Zoning 2<sup>nd</sup> & 3<sup>rd</sup> Priority Decision

- **PZ 2<sup>nd</sup> Priority:** Underground distribution and communication lines in segments 2,3, & 4 (Along Buttercup to Hospital Drive) with micro siting across entire line:

## **Distribution undergrounding only:**

Segment 2: \$1,800,000

Segment 3: \$3,300,000

Segment 4: \$2,400,000

**\$ 7, 500,000 estimated cost**

**Rationale:** Most equitable across the transmission line keeping new/replacement poles lower to existing heights. No distribution from hospital drive north on the west side of the highway.

- **PZ 3<sup>rd</sup> Priority: Pole #158 (Owl Rock Road)** north to underground transmission and distribution to the Elkhorn transition location. **\$4,100,000 transmission line underground cost**

# Private LID HOA Funding

- **EXAMPLE: 1.8 miles in front of Valley Club Subdivision**

Transmission: \$5,400,000 (3 million per mile estimate)

Distribution: \$1,350,000

2 Transition structures: **\$207,000** per transition structure for the structure, foundation, and cable shroud. (That cost does not include engineering, construction management, mob/de-mob, or 30% contingency. )

**= Total: \$9,027,006+/-**

# Questions

Are Blaine County citizens willing to pay for the undergrounding of the 138KV transmission Line?

If so, how much are you willing to pay?

Options:

1. County Wide Levy: Entire line or certain segments
2. Surcharge: Burying Distribution and Transmission Line 1.1 miles from S. Hospital Drive 3% Surcharge on Idaho Power Bill for 20 Years
3. LIDs: Privately funded sections undergrounded by subdivisions
4. Do Nothing: Above ground Transmission