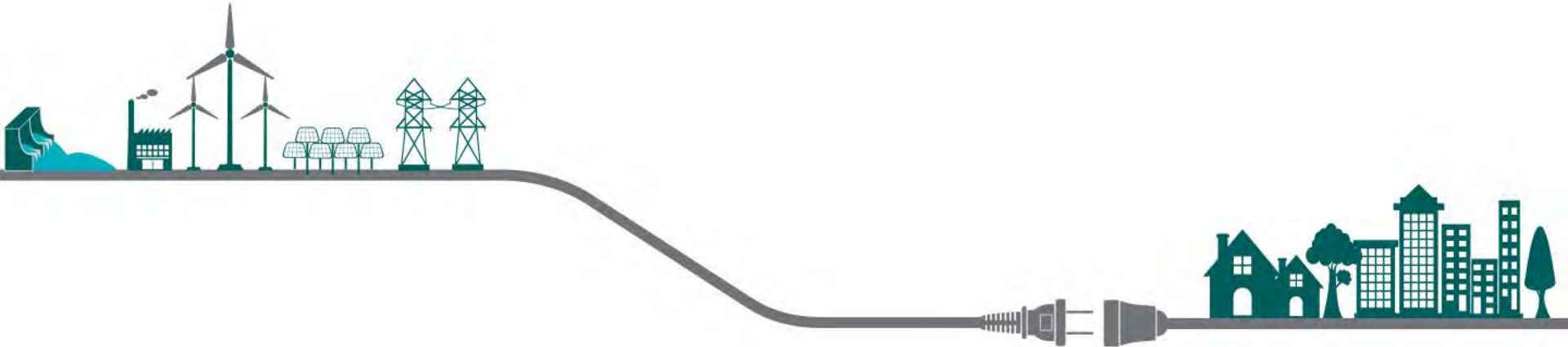


# Idaho Power Oregon Distribution System Planning



**DSP – Public Meeting #4  
June 6<sup>th</sup>, 2022**

# Welcome!



## Thank you

for attending Idaho Power Company's  
Distribution System Planning (DSP) Process

Workshop #4

# DSP Workshop Goals



- Provide information to enable participation
- Input and feedback on Traditional/Non-Wire Solution (NWS)  
Reviewed
  - Community impact
  - Project options/alternatives

# Agenda



- Short review
- Solution evaluation criteria
- Review distribution grid needs
- Evaluate distribution grid need solutions
- Gather community input on solutions

# Guidelines



- Post comments and question in the chat
- Please feel free to speak up and engage throughout
- Please keep the discussion civil and respectful
- Take comments with positive intent

# Introductions



In the chat, please send us:

- Name
- Organization

You can also send us more information at [DSP@idahopower.com](mailto:DSP@idahopower.com)

# Idaho Power Team



Name	Position	Name	Position
Jared Ellsworth	Transmission, Distribution & Resource Planning Director	Angelique Rood	Regional Manager
Jim Burdick	Distribution Planning Engineering Leader	Dena McFarlin	Regional Customer Relations Manager
Marc Patterson	Transmission & Distribution Strategy Engineer	Mike Ybarguen	Economic & Community Development Advisor
Tyson Kent	Distribution Planning Engineer	Danielle Ready	Education & Outreach Energy Advisor
Dan Johnston	Transmission & Distribution Strategy Engineer	Rodolfo Beltran	Key Account Energy Advisor
Alison Williams	Regulatory Policy & Strategy Advisor Regulatory Affairs	Duane Pearson	Agriculture Representative

# Traditional Solution Review



Traditional Solutions – Solutions that have been used historically for infrastructure upgrades





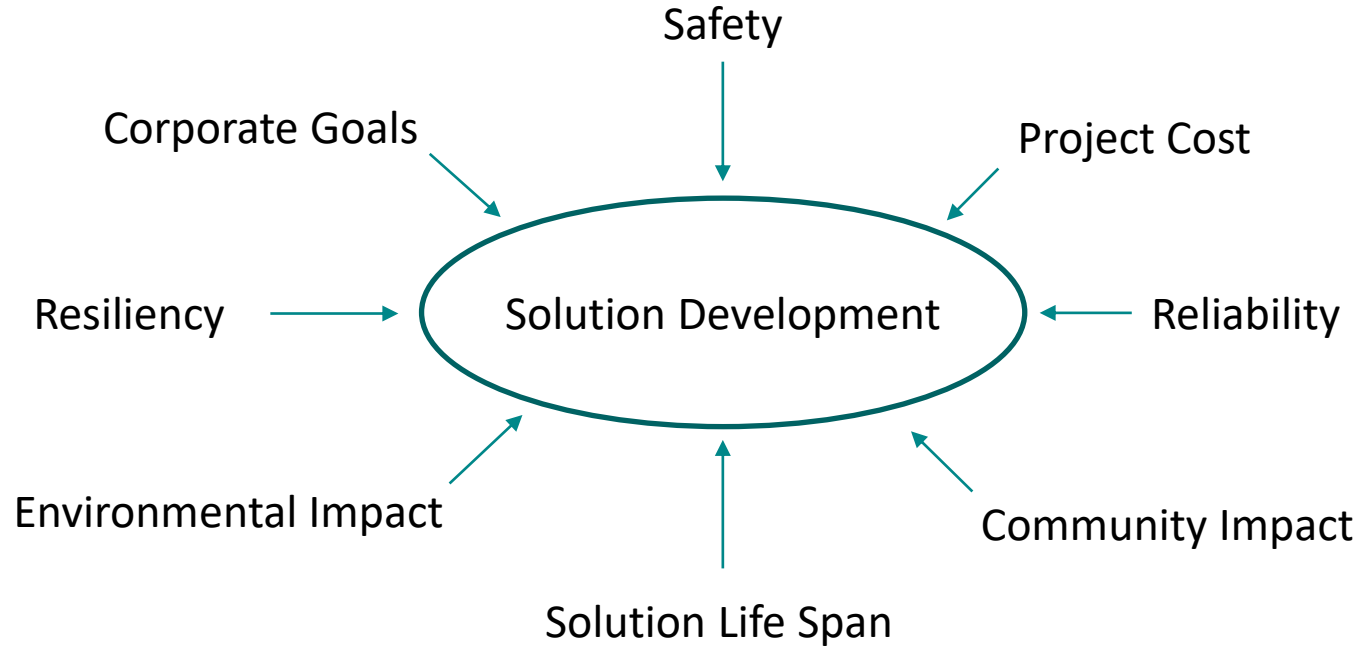
# Non-Wire Solution (NWS) Review



Non-Wire Solutions (NWS) - New renewable technologies that can limit or defer infrastructure upgrades



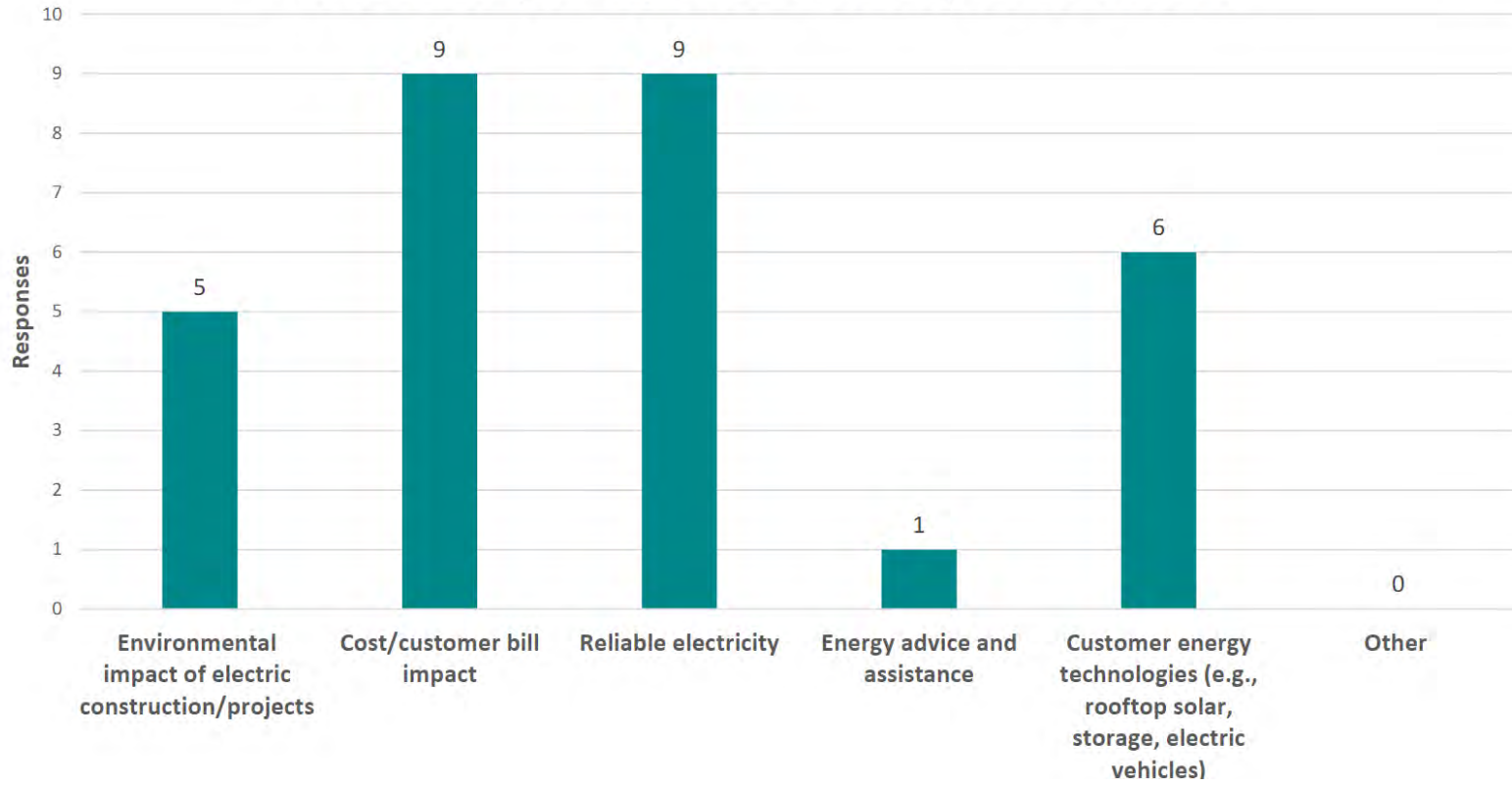
# Solution Evaluation Process



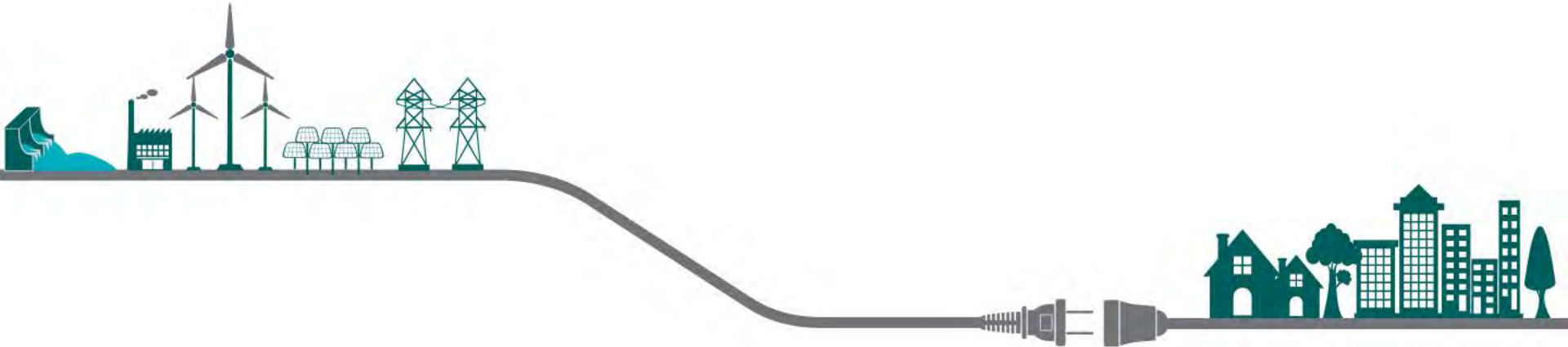
# Community Input



Please select your top three electricity considerations:



# NWS Screening of Grid Needs



# NWS Screening Matrix



Project Evaluation Factors	(Low/Medium/High)	Evaluation Ranges
Growth	Low	< 1%
	Medium	> 1% and < 3%
	High	> 3%
Traditional Solution Cost	Low	< \$100k
	Medium	> \$100k and < \$1M
	High	> \$1M
NWS Cost	Low	< \$100k
	Medium	> \$100k and < \$1M
	High	> \$1M



Ideal Candidate	
Growth	Low
Traditional Solution Cost	High
NWS Cost	Low

# NWS Screening Matrix



## Community Input



# NWS Project Screening Review



- Review the projects
- Input questions:
  - Community impact (benefits/concerns)?
  - Project options/modifications?
  - Other thoughts?
- After we have reviewed all the projects –
  - Projects that you find most interesting?



# Review Distribution Grid Needs 2023 - 2026



# Detailed Distribution Grid Needs 2023 - 2026



Area Impacted	Grid Need – Traditional Solution	Traditional Project Cost
Adrian	Line protection equipment does not record information - replace with modern smart recloser	\$21,000
Vale - Fuse	Limit outage impact - Add fuses	\$38,000
Vale - Regulator	Low voltage on feeder - Add regulator	\$48,000
Halfway	Regulator planning capacity at limit - Upgrade regulator capacity	\$51,500
Cow Valley	Low voltage on feeder - Add regulator	\$58,000

**Distribution Line Equipment**

# 2023 – 2026 Project List Matrix



	Ideal NWS Candidate
Growth	Low
Traditional Solution Cost	High
NWS Cost	Low

	Adrian	Vale - Fuse	Vale - Regulator	Halfway	Cow Valley
Growth	Low	Low	Low	Medium	Medium
Traditional Solution Cost	Low	Low	Low	Low	Low
NWS Cost	Medium	Medium	Medium	Medium	Medium

# Project Focus



- Community impact (benefits/concerns)?
- Project options/modifications?
- Other thoughts?

# Review Distribution Grid Needs 2027 - 2028



# Detailed Distribution Grid Needs 2027 - 2028



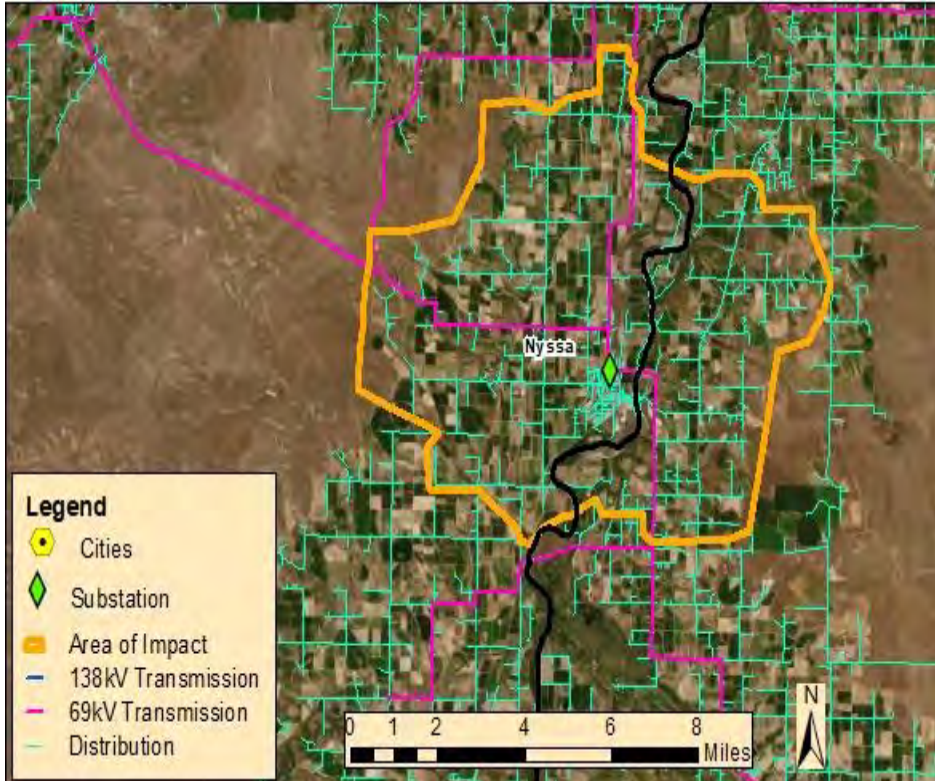
Area Impacted	Grid Need – Traditional Solution	Traditional Project Cost
Nyssa	Transformer capacity limit, transformer upgrade	\$1,716,000
Juntura	Transformer capacity limit, transformer upgrade	\$294,000
Jamieson	Transformer capacity limit, transformer upgrade	\$837,600



# Nyssa Substation Transformer Upgrade



# Nyssa Substation Transformer Upgrade



Nyssa Transformer	
Growth	Medium
Traditional Solution Cost	High
NWS Cost	High



# Project Focus

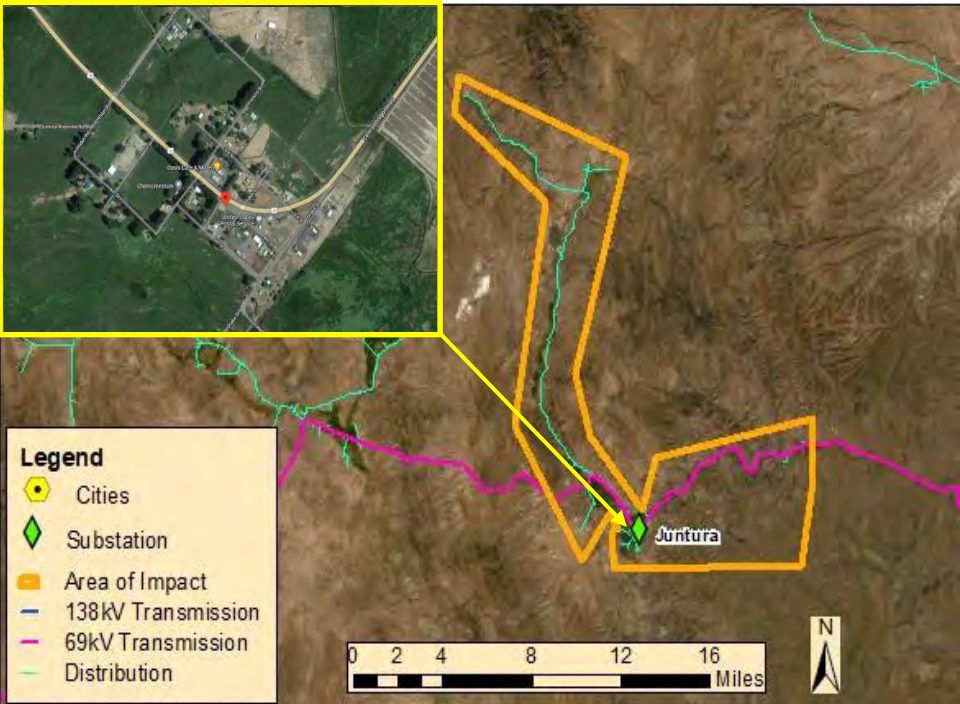


- Community Impact?
- Project options/modifications?
- Other Thoughts?

# Juntura Substation Transformer Upgrade



# Juntura Substation Transformer Upgrade



Juntura Transformer	
Growth	Low
Traditional Solution Cost	Medium
NWS Cost	Low

# Project Assessment



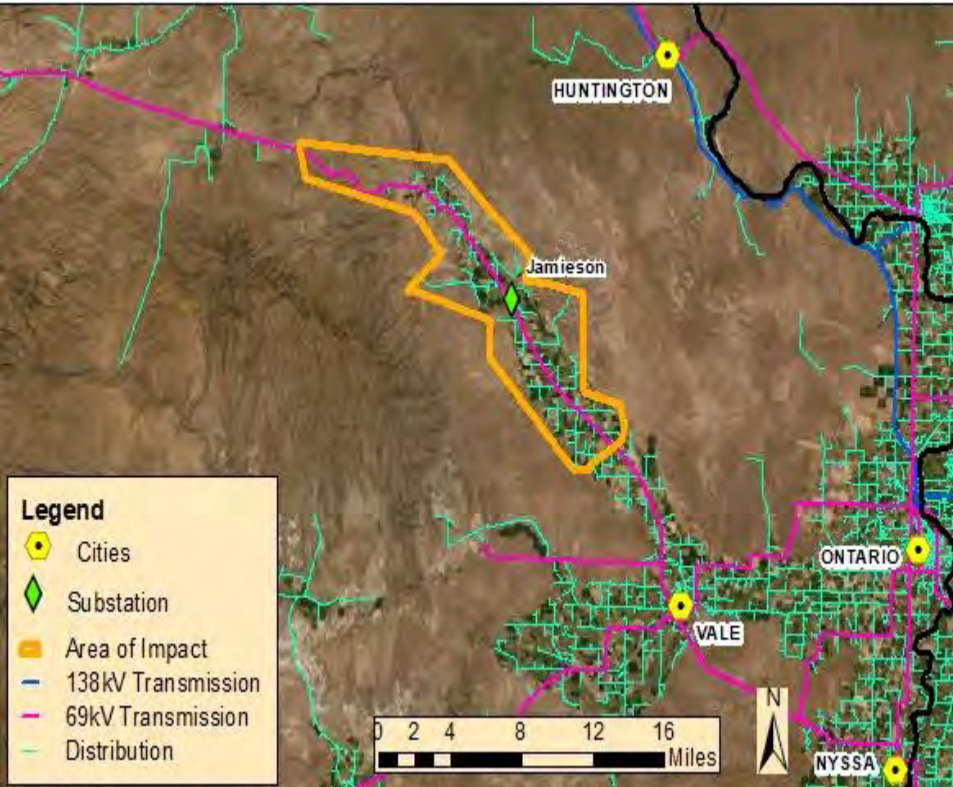
- Community Impact (benefits/concerns)?
- Project options/modifications?
- Other Thoughts?

# Jamieson Substation Transformer Upgrade





# Jamieson Substation Transformer Upgrade



Jamieson Transformer	
Growth	Low
Traditional Solution Cost	Medium
NWS Cost	High

# Project Focus



- Community Impact?
- Project options/modifications?
- Other Thoughts?
  
- Projects that you find most interesting?

# Final Thoughts

