



2027 Electric and Natural Gas Integrated Resource Plans **Technical Advisory Committee Meeting Transmission & Distribution Agenda**

Wednesday, October 7, 2026

Virtual Meeting – 10:00 pm to 12:00 pm Pacific Time

<u>Topic</u>	<u>State</u>	<u>Audience</u>
• Transmission System Reinforcements and Expansion	ID/WA	Electric
• Generation Interconnection Overview	ID/WA	Electric
• Large Load Interconnection Overview	ID/WA	Electric
• Distribution System Reinforcements	ID/WA	Electric

Microsoft Teams meeting

Join: <https://teams.microsoft.com/meet/279650158952813?p=hoL5fOYIKOHdrOSf2q>

Meeting ID: 279 650 158 952 813

Passcode: gd9Fr6UQ

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Dial in by phone

[+1 509-931-1514,,677837483#](#) United States, Spokane

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Transmission System Reinforcements

IRP TAC Meeting 15 – October 7, 2026

Dean Spratt – Transmission Planning Engineer

Kyle Hausam - Distribution Planning Engineer

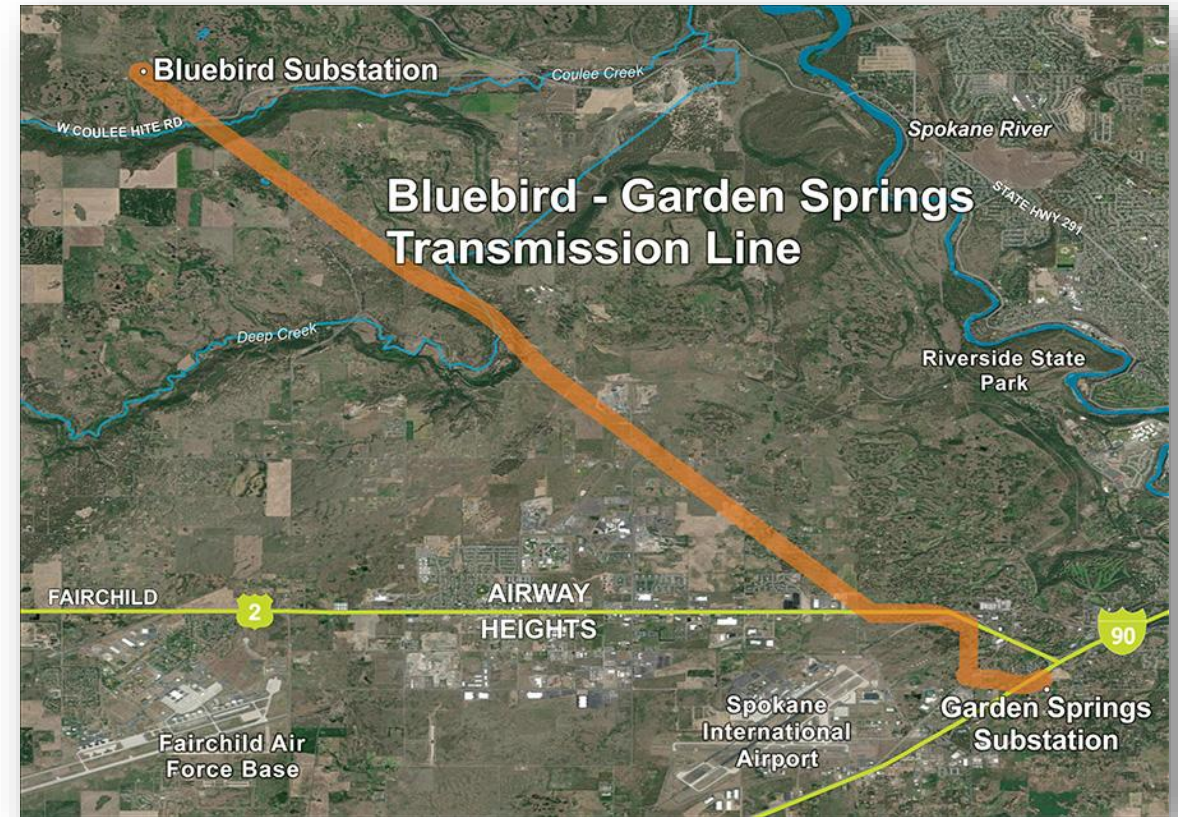
Planned Transmission Projects

5-Year Planned Projects

• Metro Station 115kV	2027
• Garden Springs 230/115kV	2027
• Lolo – Oxbow 230kV Rebuild	2029
• North Spokane 115kV	2029
• Melville 115kV	2030
• Carlin Bay & O’Gara 115kV	2031
• Lewiston Mitigation 115kV	2031

10-Year Planned Projects

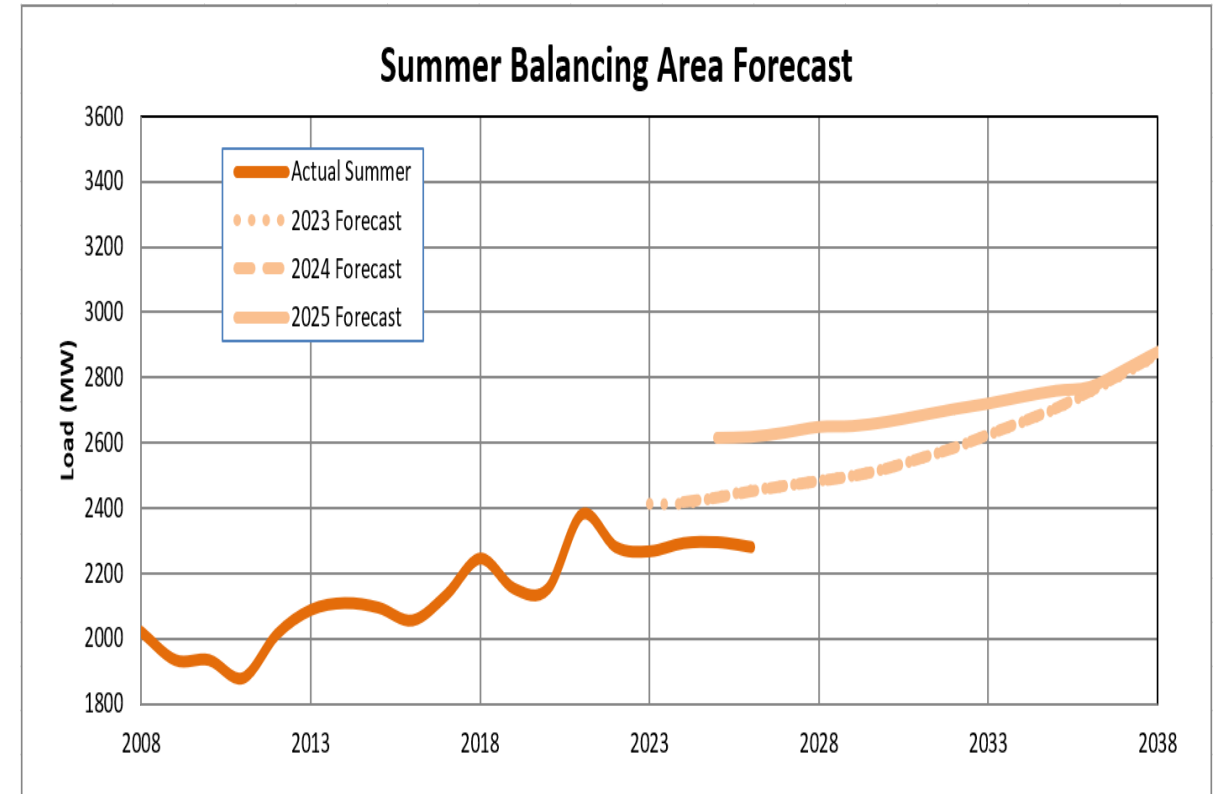
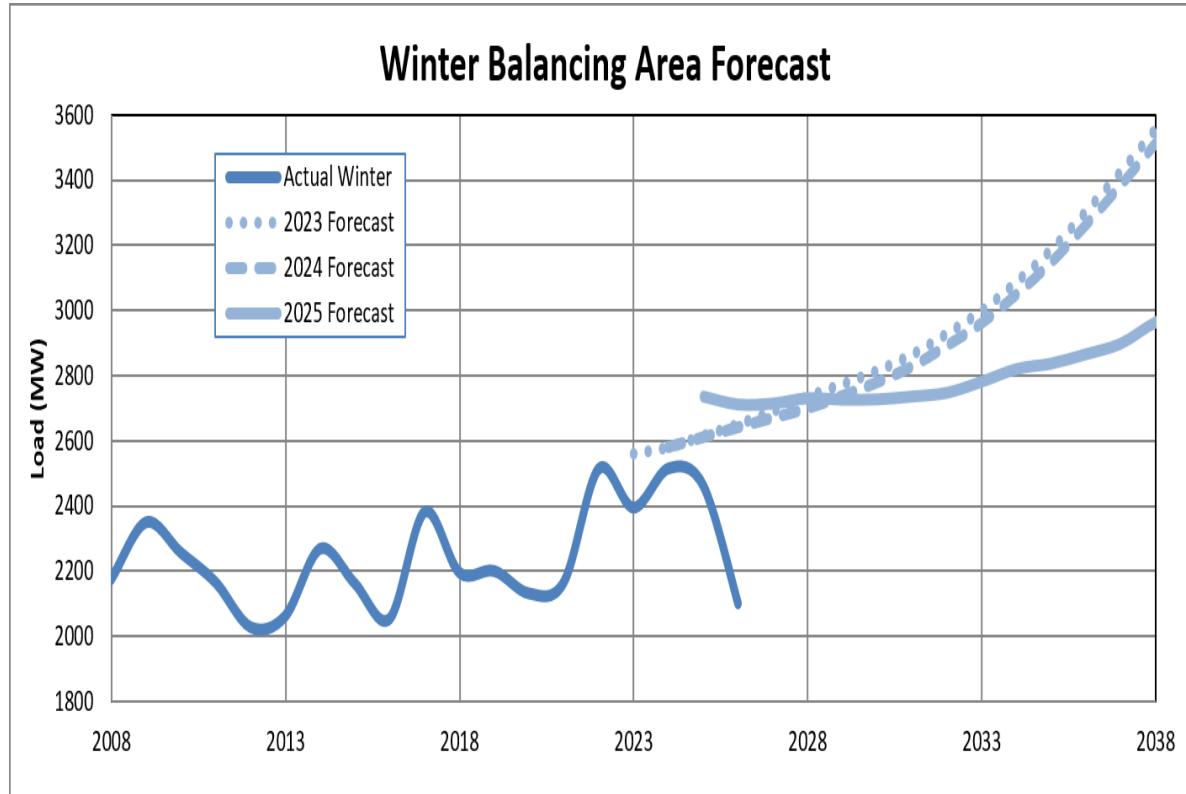
• Kootenai County 230/115kV	2032
• Lewiston Mitigation 230kV	2032



New Transmission Projects

Project Name	Desired In-service	Cost Estimate
Beacon Transmission Reinforcement	5 – 10 years	\$\$\$\$
West of Lancaster Transmission Reinforcement	2 – 5 years	\$\$\$
Sandpoint Area Transmission Reinforcement	5 – 10 years	\$\$
Palouse Area Transmission Reinforcement	5 – 10 years	\$\$
Northwest Spokane Transmission Reinforcement	4 – 6 years	\$
West Spokane Transmission Reinforcement	4 – 6 years	\$
115kV Voltage Support (CDA, Grangeville, Mead)	4 – 6 years	\$

Load Growth Assumptions



- Vehicle and building electrification included
- 1-in-10 probability of weather occurrence (104° and -20°)

Transmission Performance Criteria

Planning Horizons

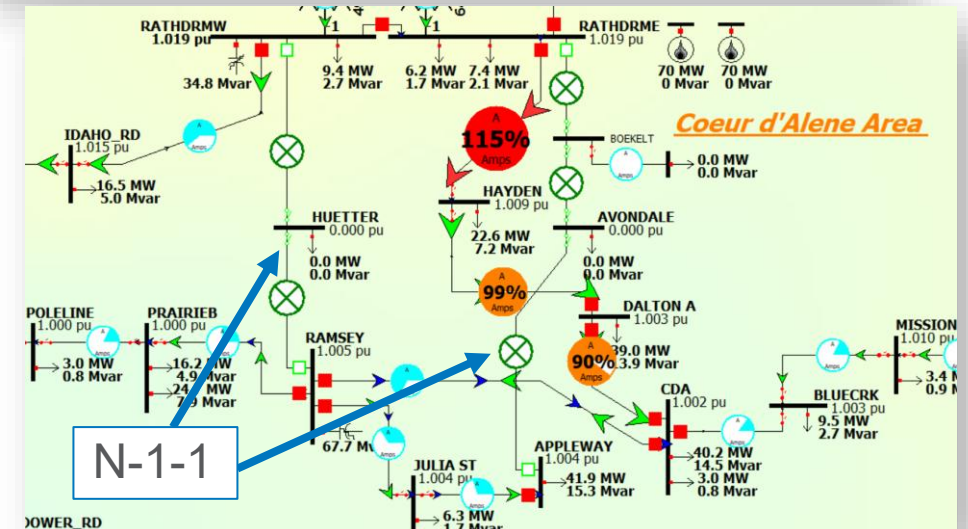
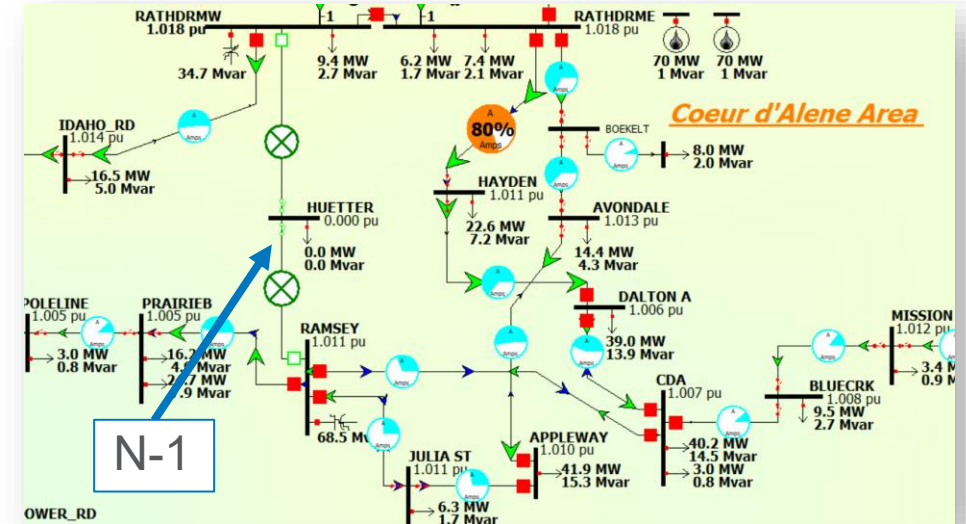
- Near Term – 1-5 years
- Long Term – 5-10+ years

System Conditions

- Peak loading
- Light loading
- Sensitivities

Performance

- Meet applicable facility ratings
- N-1 – loss of single facility
- N-1-1 – loss of any two facilities



Coeur d'Alene Station Voltage Support

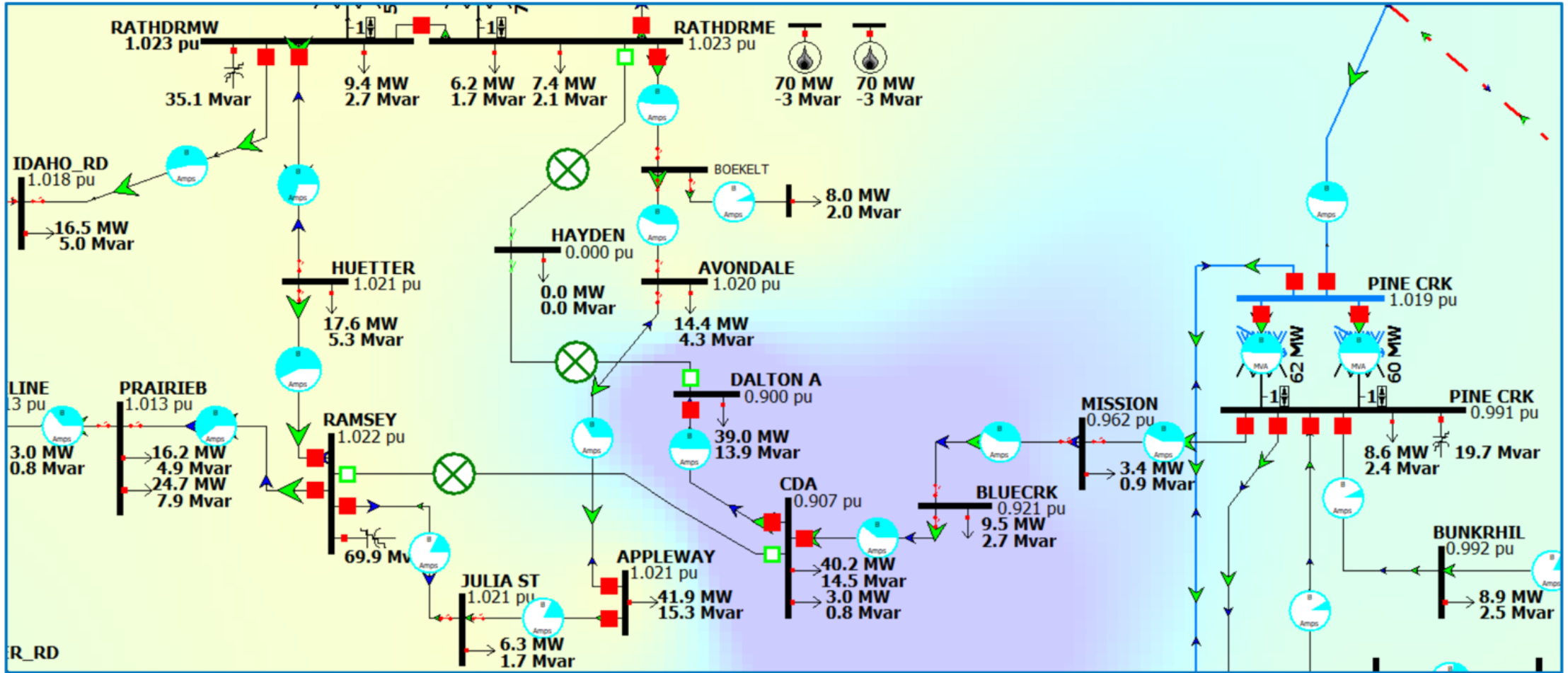


Figure 13: Coeur d'Alene – Ramsey 115kV and Dalton – Rathdrum 115kV Transmission Line Outage – 2030 Heavy Summer Scenario

Grangeville Station Voltage Support

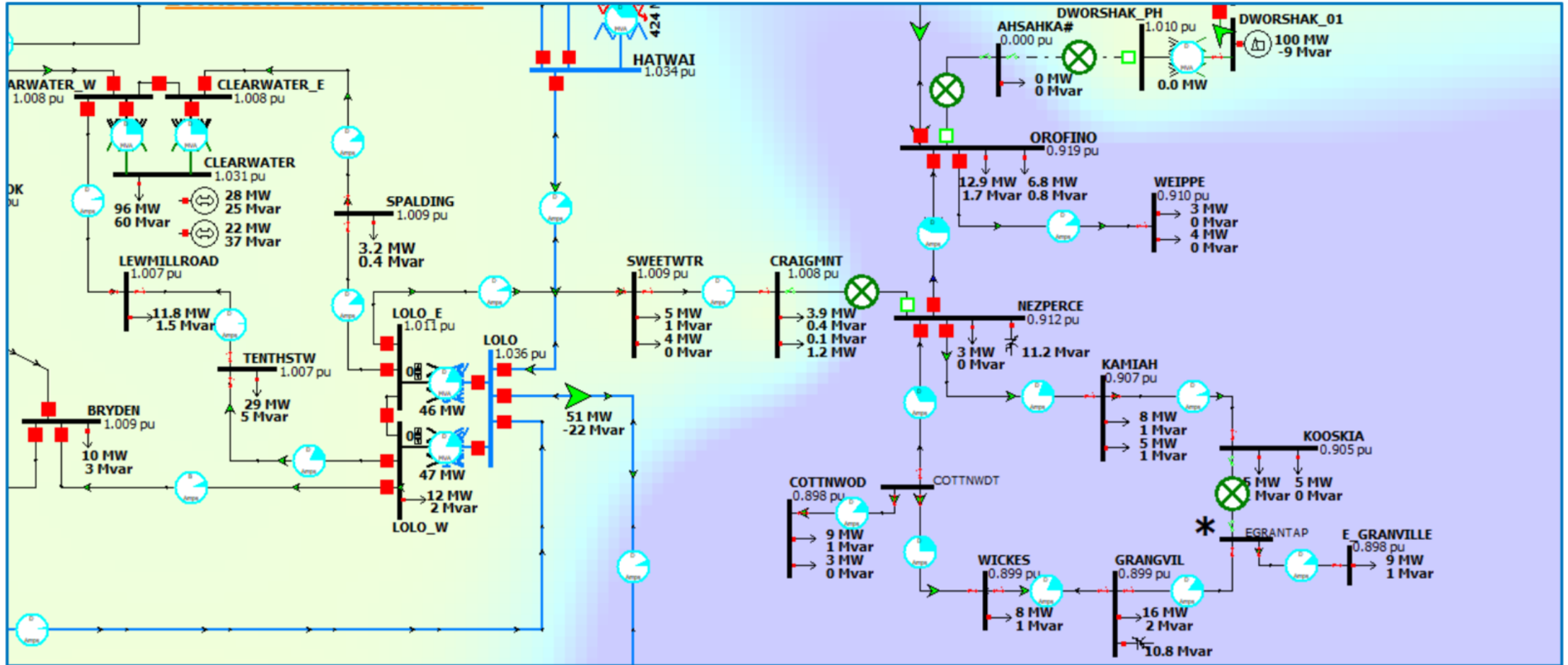


Figure 27: Dworshak – Orofino 115kV and Lolo – Nez Perce 115kV Transmission Line Outage – 2030 Heavy Winter Scenario

Kootenai County Transmission Reinforcement

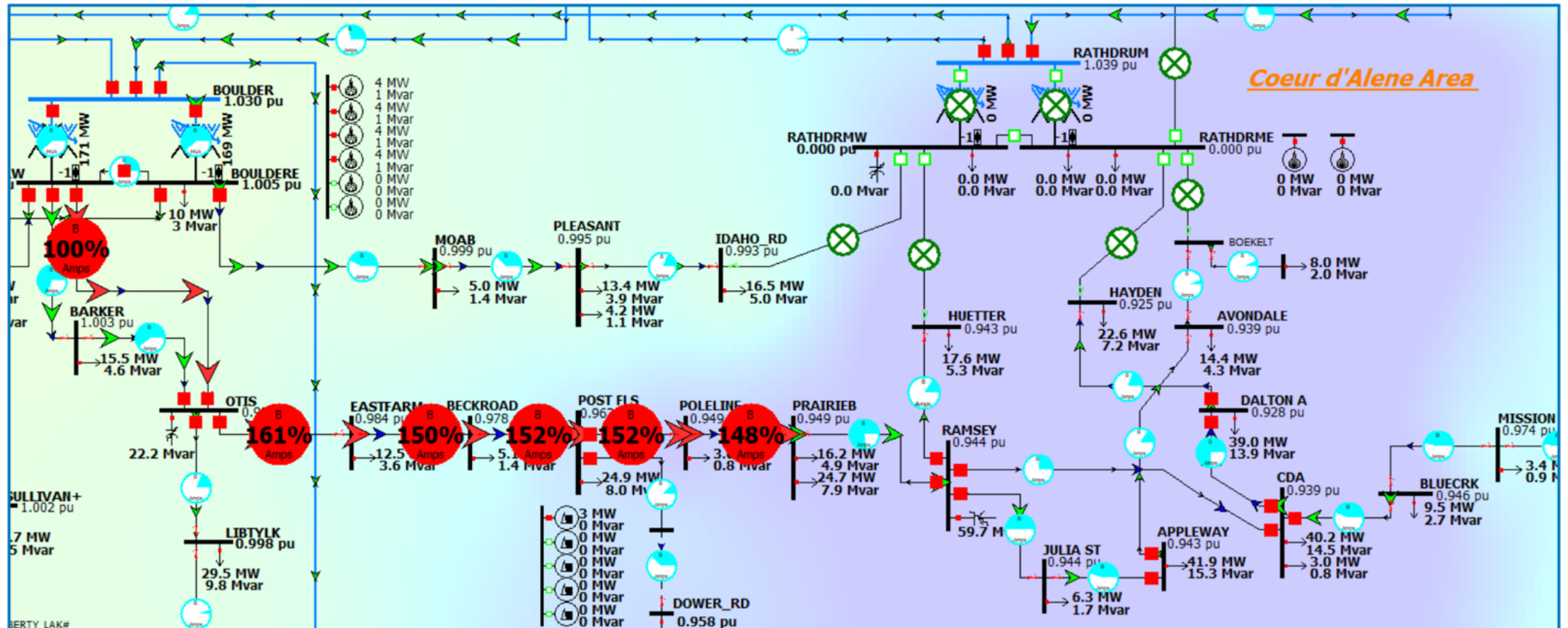


Figure 24: Rathdrum 115kV Bus-tie Breaker Failure – 2030 Heavy Summer Scenario

Lewiston 230kV Transmission Reinforcement

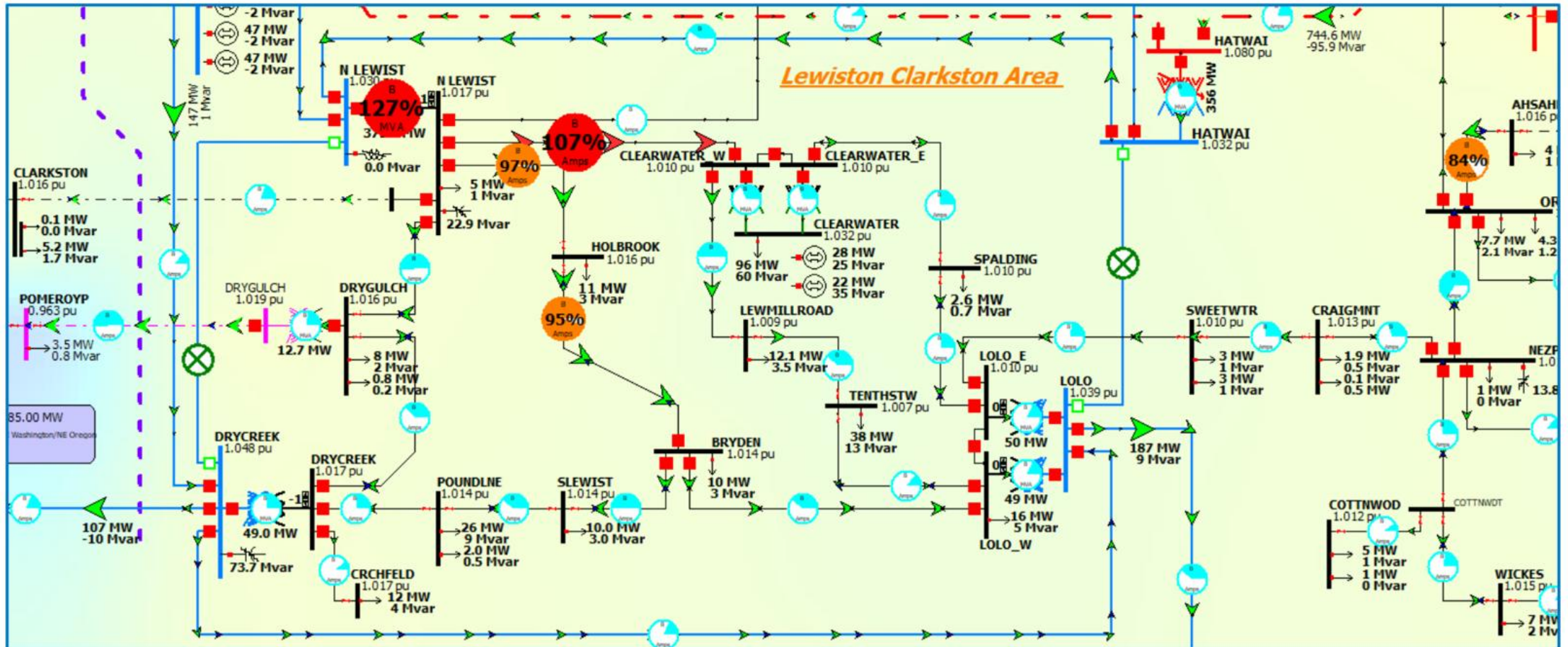


Figure 20: Dry Creek – North Lewiston 230kV and the Hatwai – Lolo 230kV Transmission Line Outage – 2030 Heavy Summer Scenario

Northwest Transmission Reinforcement

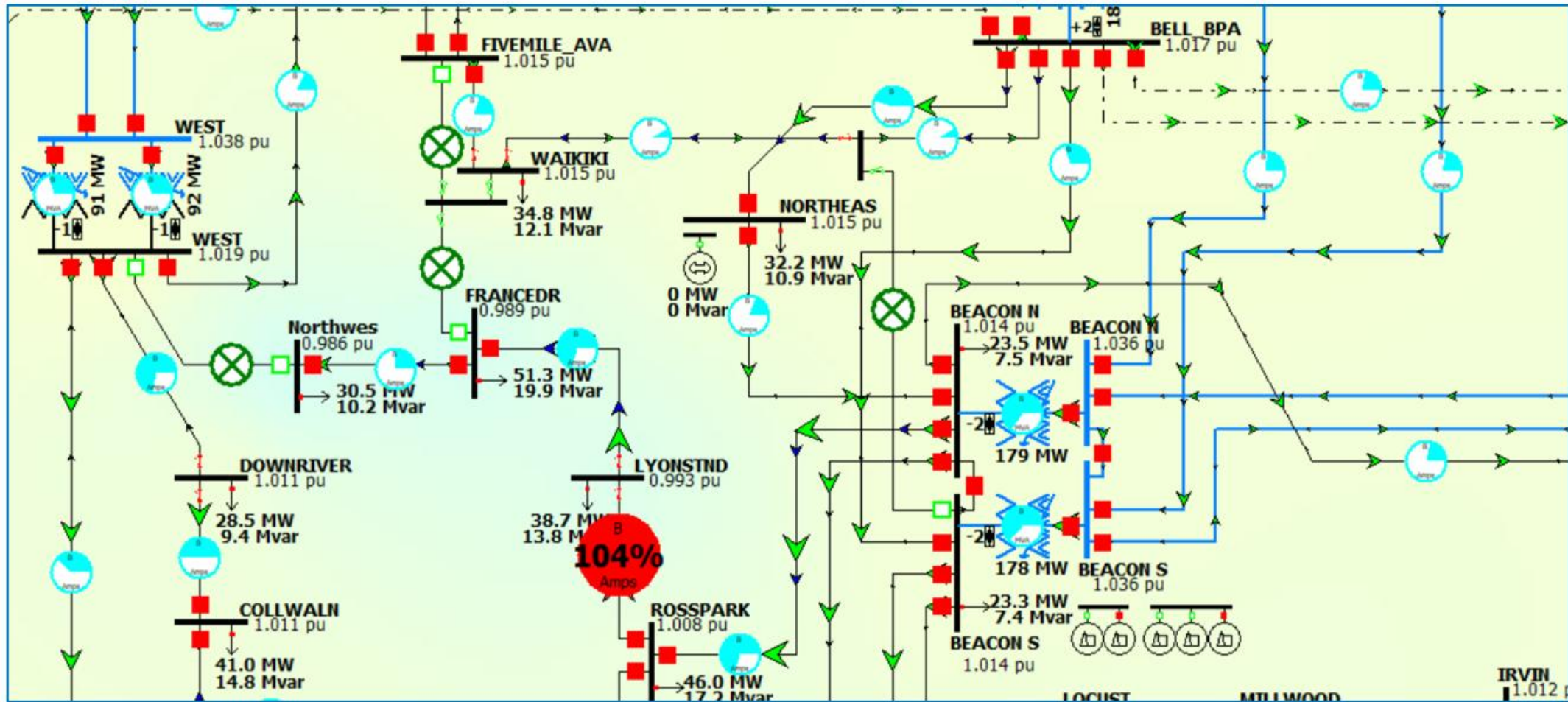


Figure 17: Five Mile – Francis & Cedar 115kV and Northwest – Westside 115kV Transmission Line Outage – 2030 Heavy Summer Scenario

Palouse Transmission Reinforcement

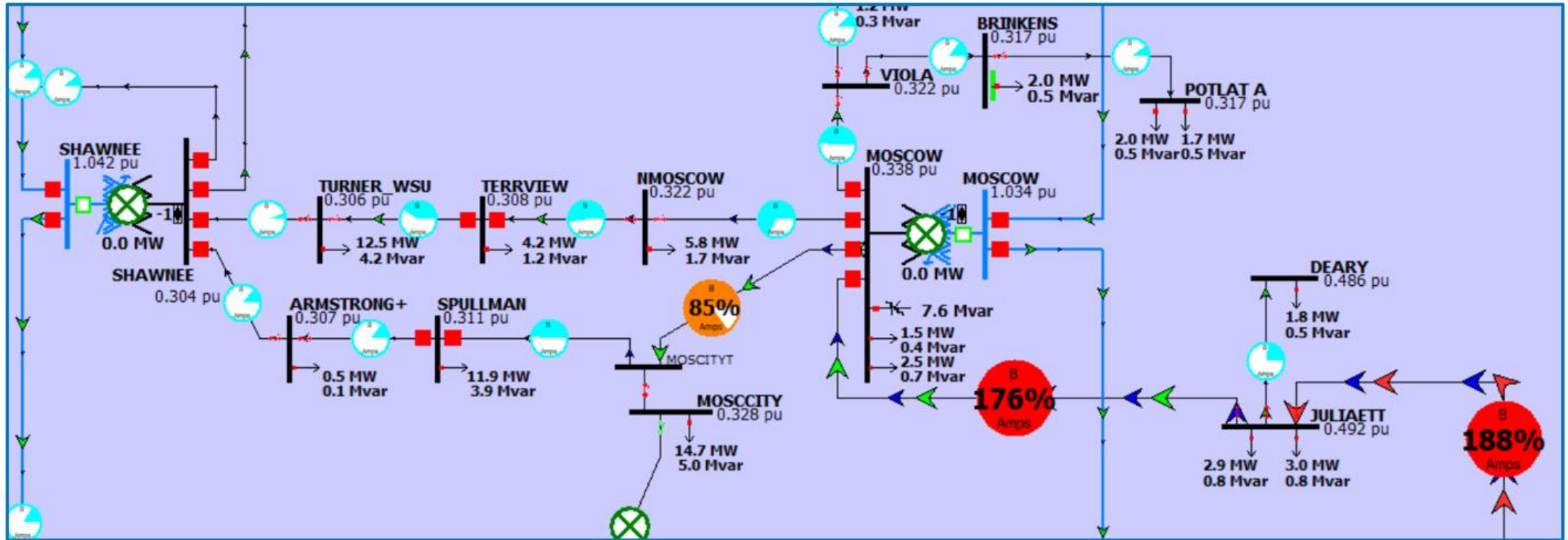


Figure 22: Moscow 230/115kV and Shawnee 230/115kV Transformer Outage – 2030 Heavy Summer Scenario

Sandpoint Transmission Reinforcement

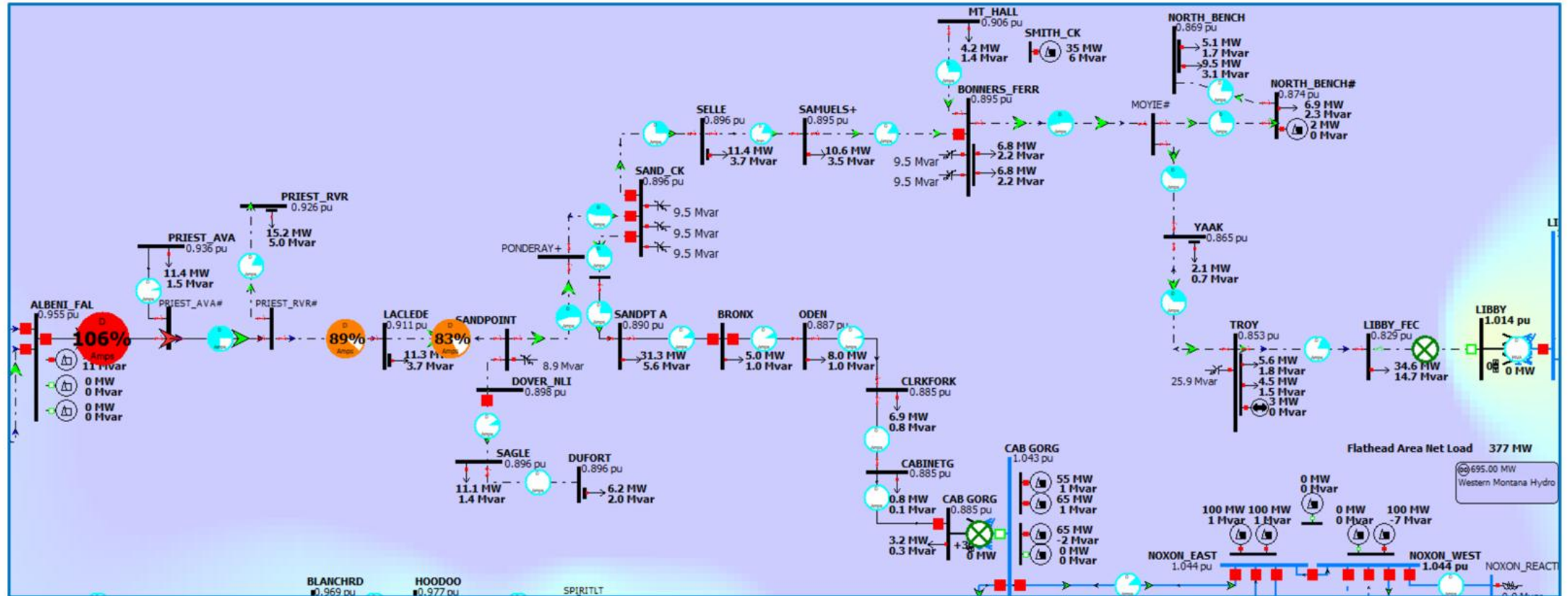


Figure 22: Cabinet 230/115kV Transformer and Libby 230/115kV Transformer Outage – 2030 Heavy Winter Scenario

West of Lancaster Constraint

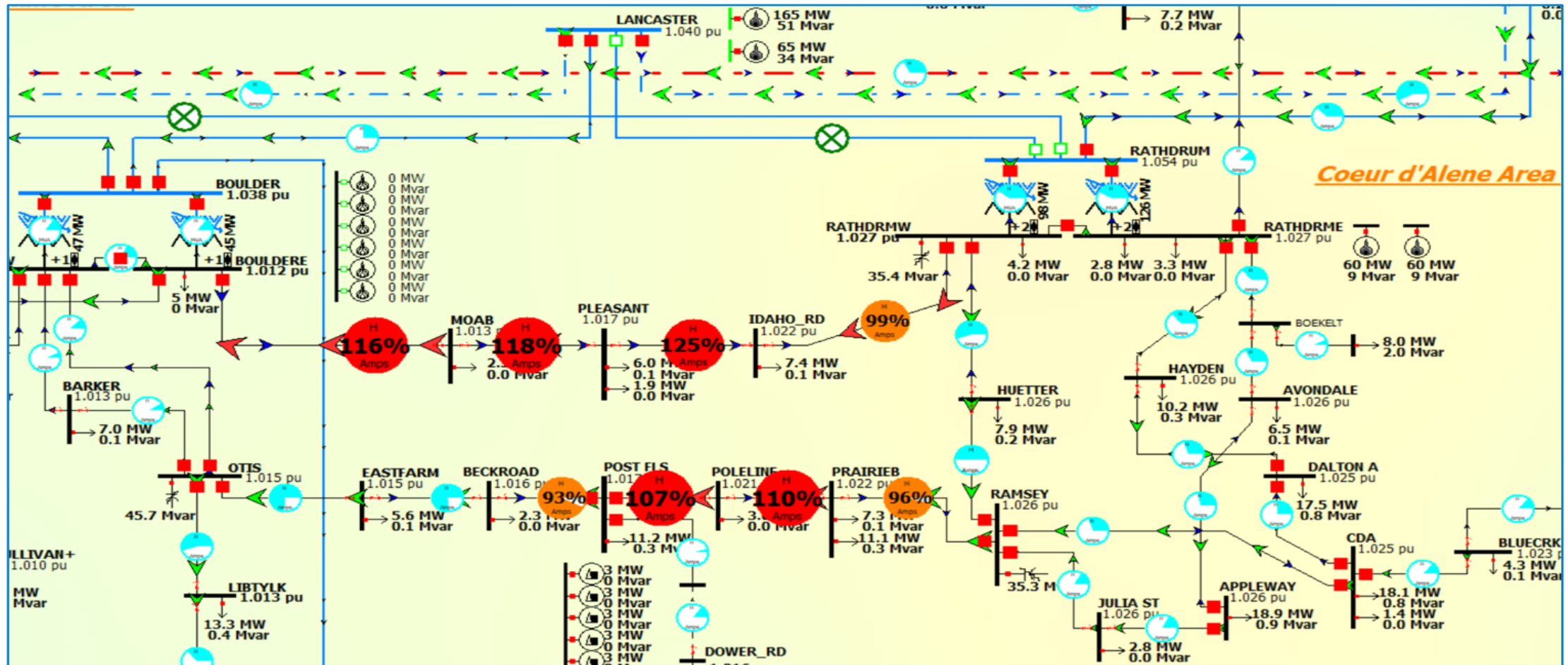


Figure 30: Beacon - Rathdrum 230kV and Boulder - Rathdrum 230kV Transmission Line Outage – 2030 Light Summer Scenario

West Spokane Transmission Reinforcement

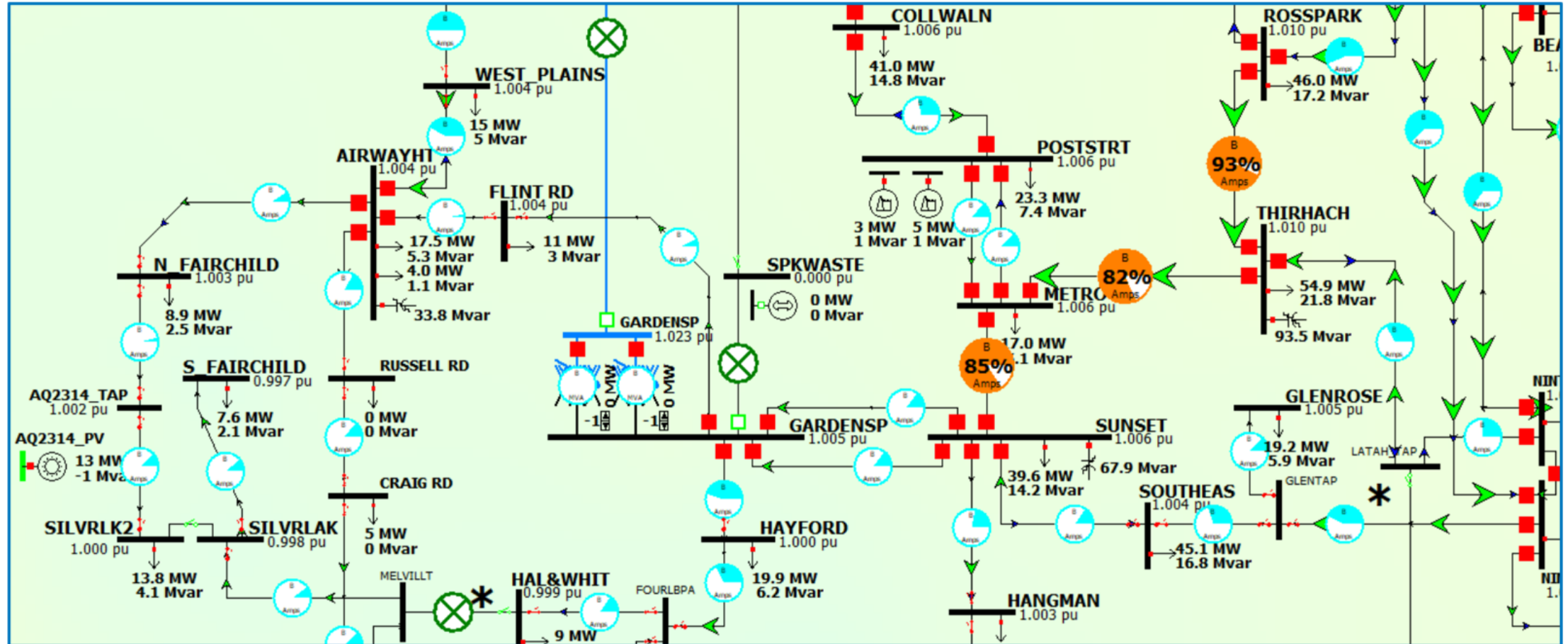


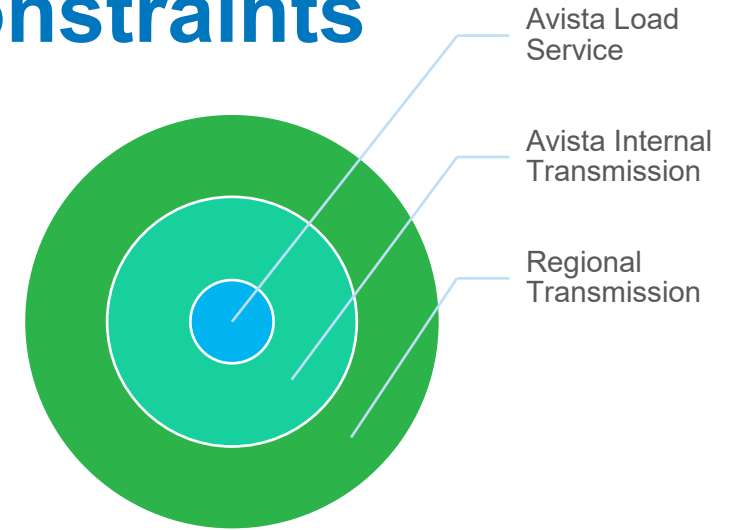
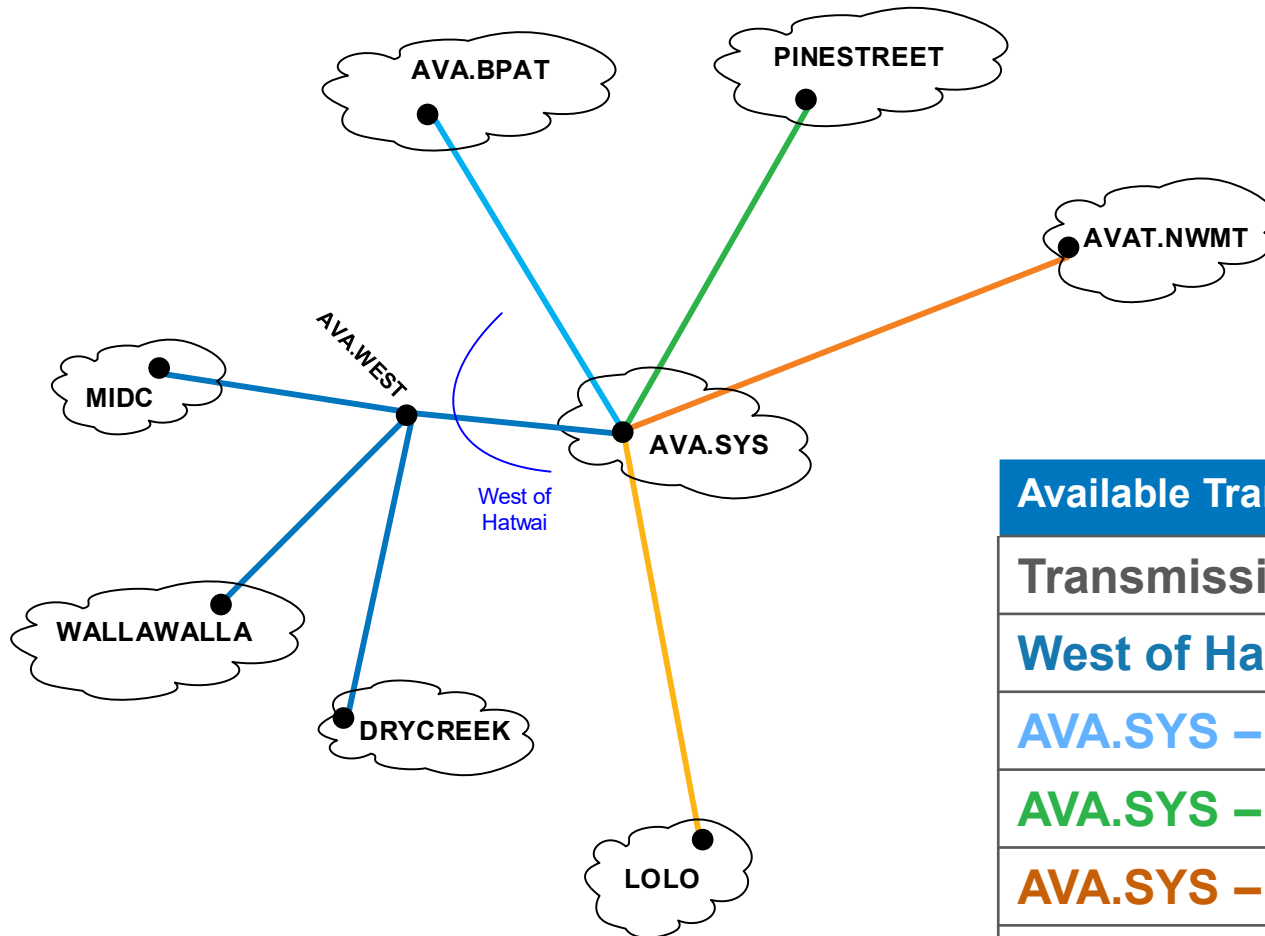
Figure 11: Blue Bird – Garden Springs 230kV and Garden Springs – Westside 115kV Transmission Line Outage – 2030 Heavy Summer Scenario

Transmission System Needs

Contractual Capacity and Integrated Resource Plan Support

Dean Spratt | Principal System Planning Engineer

Avista's Commercial Transmission Constraints

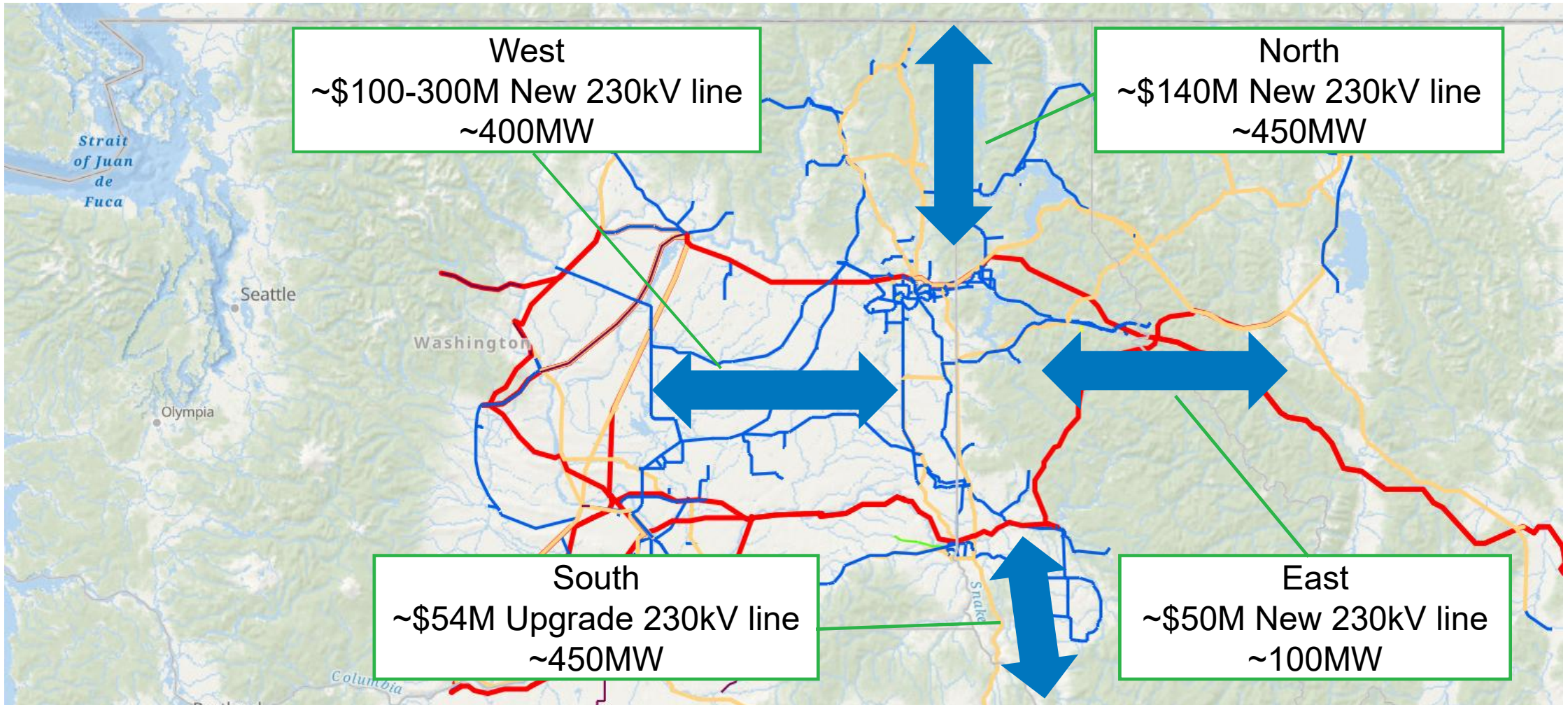


Available Transmission Capacity (ATC) by Path as of January 2026*

Transmission Path	Inbound ATC	Outbound ATC
West of Hatwai	0 MW	0 MW
AVA.SYS – AVA.BPAT	221 MW	1335 MW
AVA.SYS – PINESTREET	-	62 MW
AVA.SYS – AVA.NWMT	0 MW	382 MW
AVA.SYS – LOLO	33 MW	0 MW

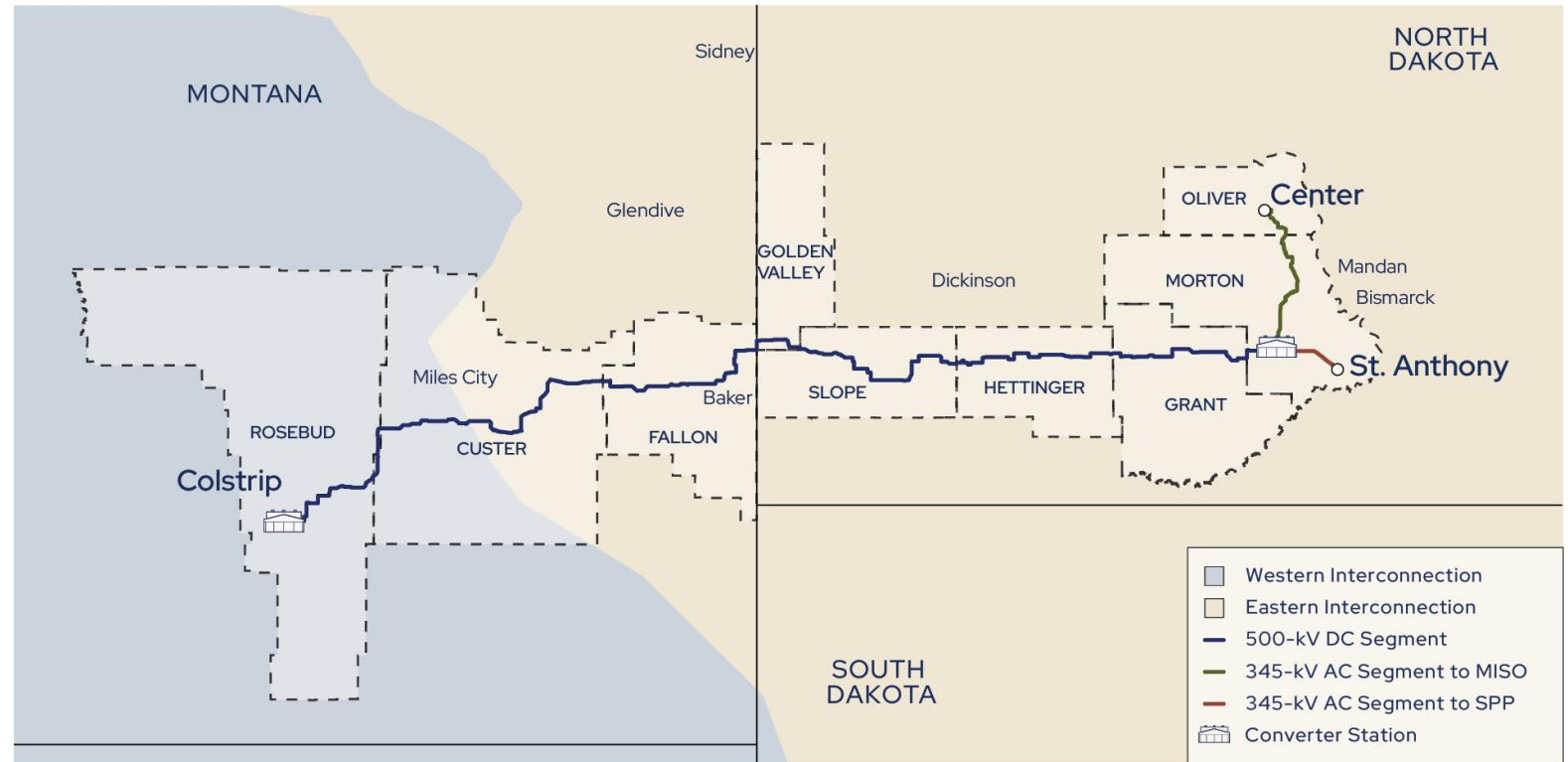
Representative information and should not be used for commercial purposes

Transmission Expansion Prospects



North Plains Connector

- 420-mile, up-to-525-kilovolt, high-voltage direct current transmission line connecting the eastern and western U.S. electric grids in North Dakota and Montana.
- The North Plains Connector will transport electrical power of all generation sources and bidirectionally move power along the line in response to demand.



North Plains Connector

Western Transmission Expansion Coalition

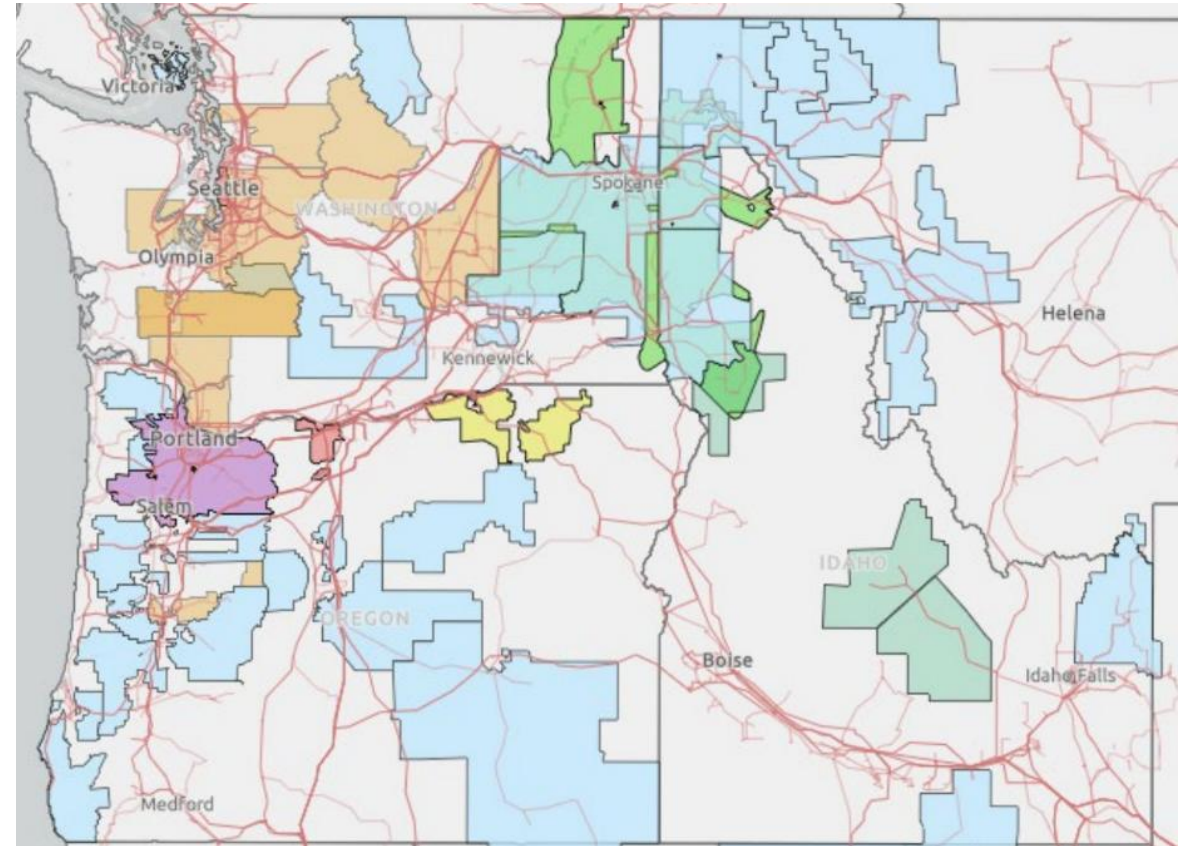
- Committee based coalition to identify a portfolio of transmission expansion projects that meets the region's forecasted needs through 2035.
- The 10-year horizon transmission portfolio includes 9,400 miles of planned major projects representing approximately \$47 billion in investment.



[Western Transmission Expansion Coalition | WPP](#)

Western Transmission Consortium

- Member-owned entity dedicated to building interregional and interjurisdictional transmission infrastructure across the eleven western states.
- TWTC fills the funding gaps in interjurisdictional transmission projects and brings forth creative solutions to drive collaboration, mitigate barriers, and meet state goals.



[The Western Transmission Consortium](#)

Facility Interconnections

Generation and Large Load Interconnections

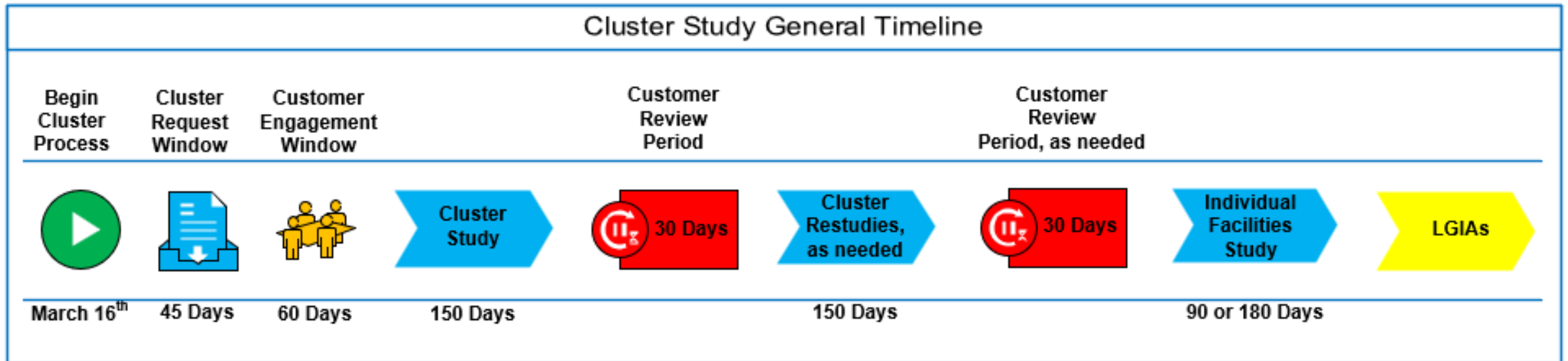
Cole Youngers | System Planning Engineer

David Thompson | System Planning Engineer

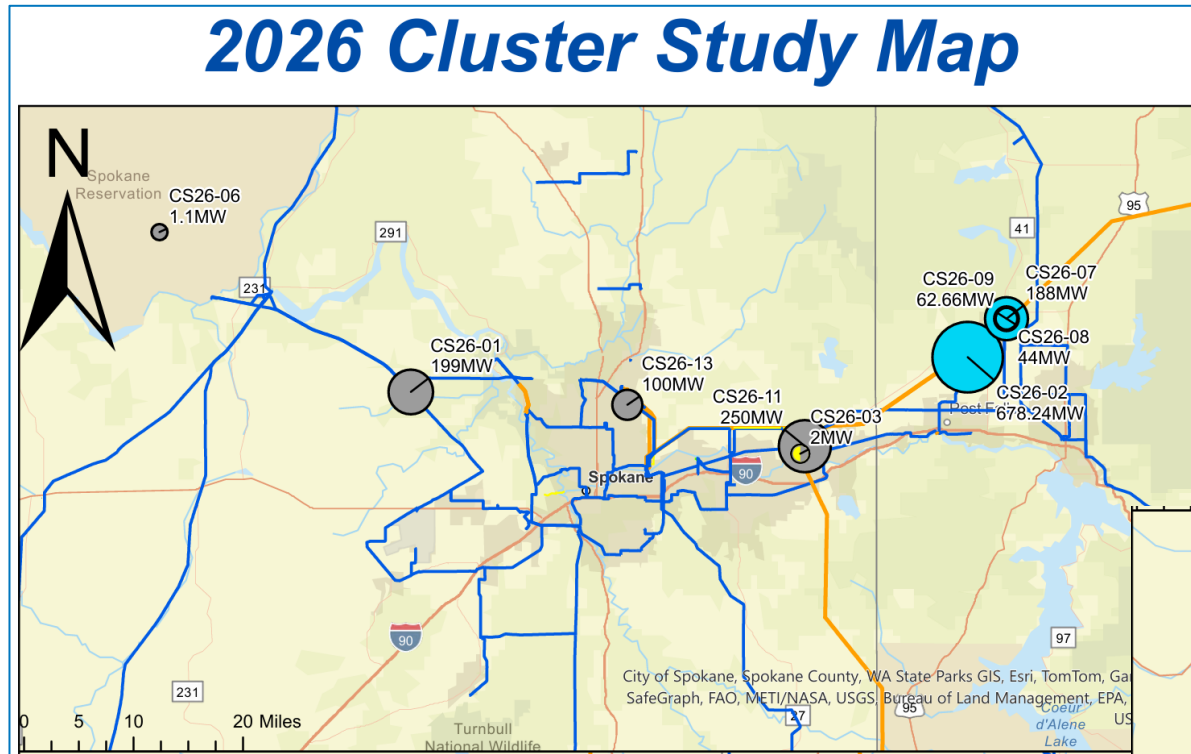
Generator Interconnection Studies

- What is it?
 - A series of technical studies that evaluate the impact of connecting new generation facilities to the grid and determine necessary upgrades to maintain reliability.
- Studies are required (by FERC and NERC) whenever a new generation facility seeks to connect to the electric grid.
- Avista follows our FERC Electric Tariff Volume No. 8
 - Last filed on March 13, 2026
 - Attachment N-1 for Standard Large Generator Interconnection Procedures (LGIP)
 - Attachment O-1 for Small Generator Interconnection Procedures (SGIP)

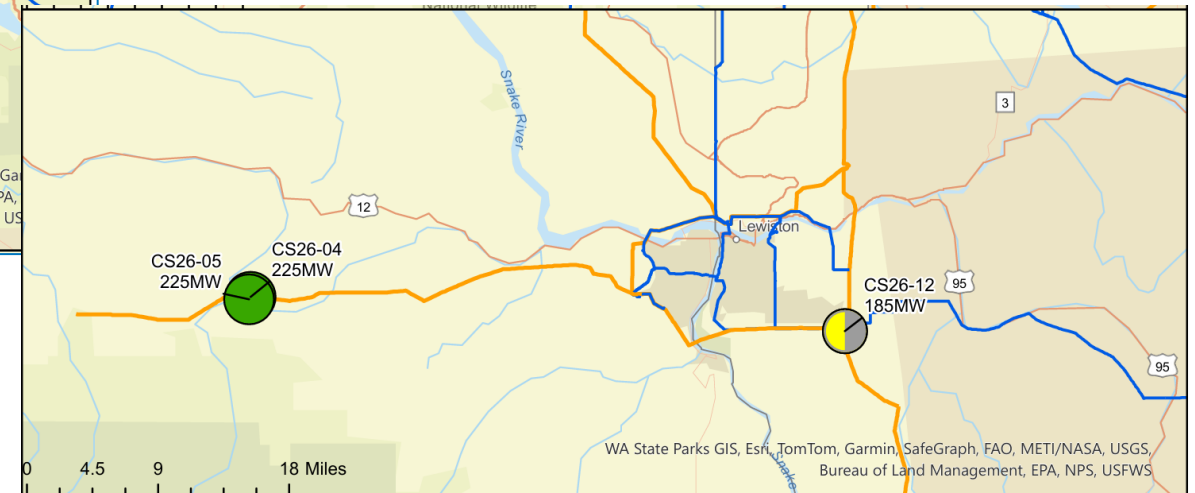
Process Overview



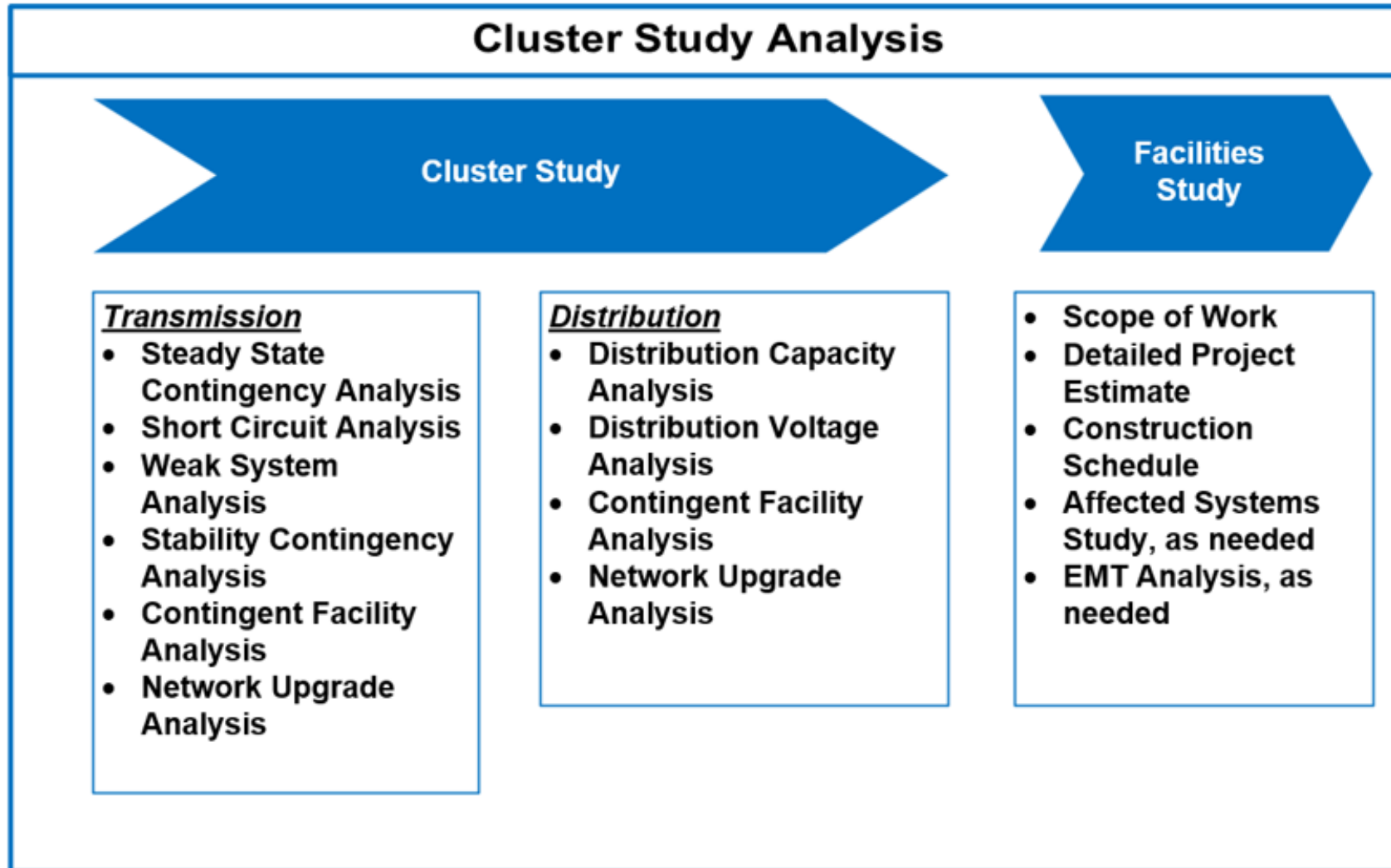
Cluster Study Map



The Cluster Study Map serves as a visual tool to identify geographic location of projects in the Cluster Study.



Scope of Study

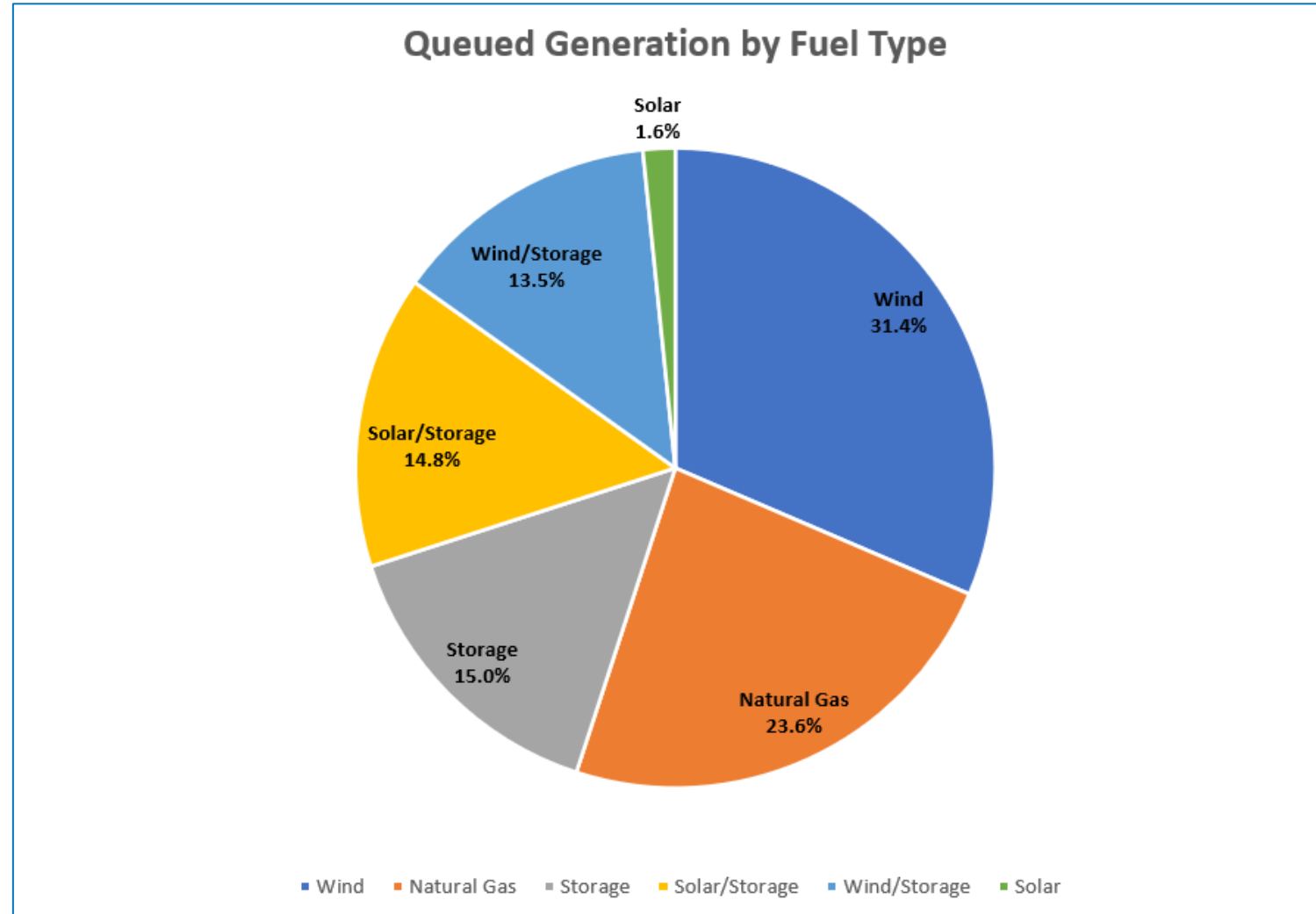


Generator Interconnection Queue

Cluster Number	Cluster Area	Request Status	MW Output	Type	County	State	POI	Requested COD
Q59	N/A	Suspended	60	Solar/Storage	Adams	WA	Roxboro 115kV Station	Suspended LGIA
TCS-03	T7a - Big Bend	Suspended	80	Solar/Storage	Adams	WA	Warden 115kV Station	Suspended LGIA
TCS-14	T6 - Lewis Clark	Construction	375	Wind/Storage	Garfield	WA	Dry Creek 230kV Station	12/1/2025
CS23-06	CA5 - Palouse	LGIA	220.5	Wind	Whitman	WA	Shawnee - Thornton 230kV	12/15/2025
CS23-12	CA7 - Big Bend	LGIA	199	Storage	Franklin	WA	Saddle Mountain - Walla Walla 230kV	1/10/2027
CS23-13	CA1 - West Plains	LGIA	40	Solar	Lincoln	WA	Davenport 115kV Station	6/31/2024
CS23-14	CA1 - West Plains	LGIA	40	Solar	Spokane	WA	Airway Heights - Silver Lake 115kV Tap	6/30/2027
CS24-01	CA8A - S. Othello	SGIA	0.999	Solar	Adams	WA	S. Othello 13kV	10/1/2024
CS24-02	CA8D - Third & Hatch	SGIA	0.5	Storage	Spokane	WA	Third & Hatch 13kV	8/1/2025
CS24-14	CA1 - West Plains	LGIA	40	Solar	Spokane	WA	South Fairchild Tap 115kV	6/30/2028
CS24-15	CA1 - West Plains	LGIA	300	Wind/Storage	Lincoln	WA	Bluebird 230kV Station	12/31/2027
CS25-04	CA3 - Coeur d'Alene	LGIA	101.5	Natural Gas	Kootenai	ID	Rathdrum 115kV Station	5/30/2027
CS25-05	CA3 - Coeur d'Alene	LGIA	101.5	Natural Gas	Kootenai	ID	Rathdrum 115kV Station	5/30/2029
CS25-07	CA5 - Palouse	Facilities Study	199	Wind	Whitman	WA	Thornton 230kV Station	12/16/2029
CS25-09	CA7 - Big Bend	Facilities Study	375	Solar & Storage	Adams	WA	Saddle Mountain - Wanapum 230kV	5/1/2030
CS25-11	CA6 - Lewis Clark	Facilities Study	300	Wind	Garfield	WA	Dry Creek - Talbot 230kV	12/1/2029
CS25-15	CA5 - Palouse	Facilities Study	200	Wind	Spokane	WA	Benewah 230kV Station	12/1/2030
CS25-17	CA1 - Spokane	Facilities Study	200	Wind	Spokane	WA	Bluebird 230kV Station	12/1/2030
CS26-01	TBD	Cluster Study	199	Storage	Spokane	WA	Bluebird 230kV Station	12/9/2029
CS26-02	TBD	Cluster Study	678.24	Natural Gas	Kootenai	ID	Rathdrum 230kV Station	8/1/2032
CS26-04	TBD	Cluster Study	225	Wind	Garfield	WA	Dry Creek - Talbot 230kV	12/31/2030
CS26-05	TBD	Cluster Study	225	Wind	Garfield	WA	Dry Creek - Talbot 230kV	12/31/2030
CS26-06	TBD	Cluster Study	1.1	Storage	Stevens	WA	Little Falls 34kV	7/1/2027
CS26-07	TBD	Cluster Study	188	Natural Gas	Kootenai	ID	Rathdrum 230kV Station	12/31/2030
CS26-08	TBD	Cluster Study	44	Natural Gas	Kootenai	ID	Rathdrum 230kV Station	12/31/2030
CS26-09	TBD	Cluster Study	62.66	Natural Gas	Kootenai	ID	Rathdrum 230kV Station	12/31/2030
CS26-11	TBD	Cluster Study	250	Storage	Spokane	WA	Boulder 230kV Station	12/31/2029
CS26-12	TBD	Cluster Study	185	Solar, Storage	Nez Perce	ID	Lolo 230kV Station	12/30/2030
CS26-13	TBD	Cluster Study	100	Storage	Spokane	WA	Northeast 115kV Station	12/31/2029

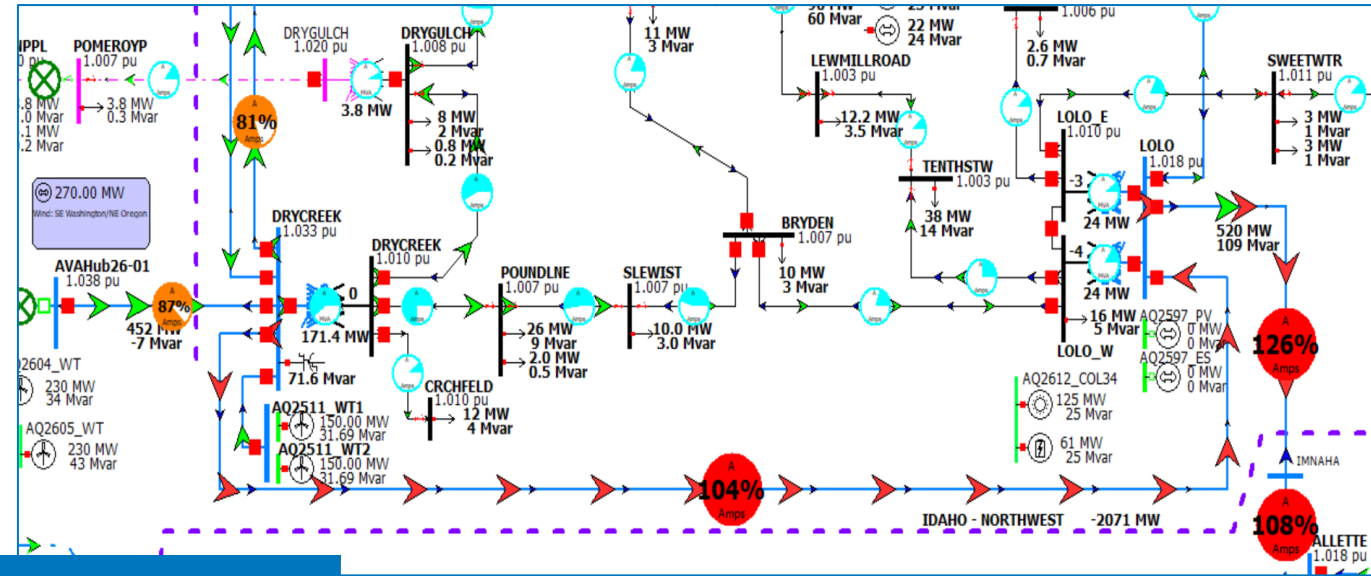
Active studies for 4,991 MWs of non-Avista owned generation through 2030

Generation Interconnection Queue



2025 Cluster Studies

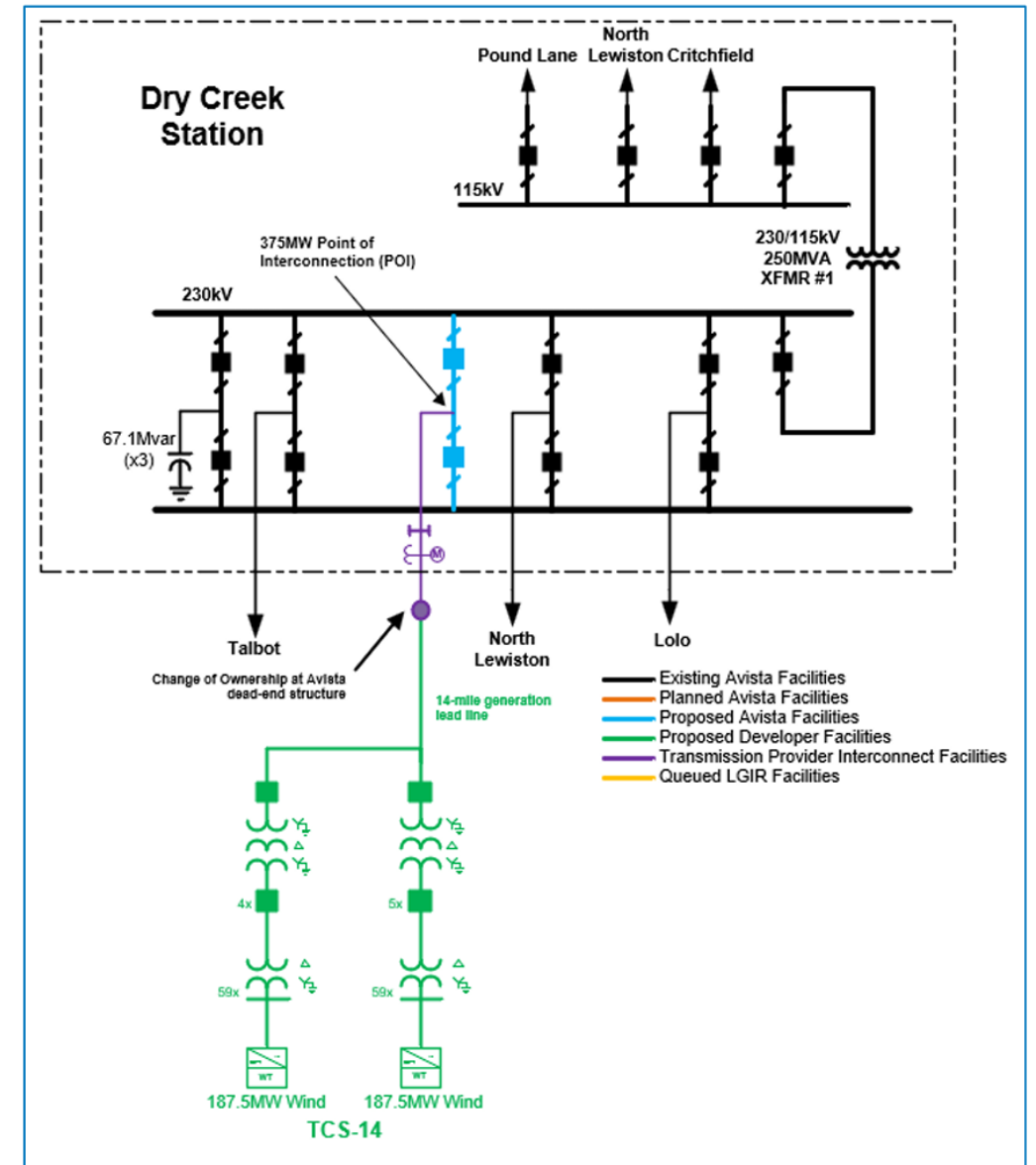
Cluster Area 7 (Big Bend) – Cost Estimate Example



	Transmission Provider Interconnection Facilities	Station Equipment Network Upgrades	Shared Network Upgrades	Total
CS25-02	\$800,000	\$2,150,000	\$62,275,000	\$65,225,000
CS25-09	\$775,000	\$11,425,000	\$185,350,000	\$197,550,000
CS25-13	\$725,000	\$12,575,000	\$74,150,000	\$87,450,000
CS25-14	\$975,000	\$9,500,000	\$98,375,000	\$108,850,000
CS25-16	\$975,000	\$9,500,000	\$74,150,000	\$84,625,000
Total	\$4,250,000	\$45,150,000	\$494,300,000	\$543,700,000

TCS-14 Project

- The TCS-14 project is a planned 375MW facility being developed in southeast Washington.
- The first Generation Interconnection project to move forward, since Avista's transition to the Cluster Study Process in 2022.
- In that time, Avista has studied 77 individual interconnection requests for a total of 11,204 MW of generation integration.



Large Load Interconnection Studies

- Custom application and request process for Large Load projects
- Large Loads classified as greater than 1.5MVA, distribution or transmission
- Integration of natural gas based on customer requirements
- Considerations of energy supply and transmission
- As of September, pause in processing *large data center* applications
 - Community Conversations
 - Moratoriums by cities and counties within Avista's service territory
 - Active policy proceeding with the WUTC

Large Load Interconnection Studies

Large Load Request Process Overview (Any Load Request Size Exceeding 1.5 MVA)

1 Application 30 Days	2 Scoping 30 Days	3 Study 30 – 180 Days	4 Review 30 Days	5 Execute												
- Fill out Large Load Request Application, available at myavista.com/about-us/large-load-service-request. - Avista will provide notification within 3 business days of receiving the application.	- Prepare your project overview information and questions for the scoping meeting. - Avista Large Power Solution Team will provide you answers and guide you to the next step.	- You will have 30 days after the scoping meeting to commit to study agreement. - Please refer to the “Required Study Details” table below for information.	- Any material changes to the original study input will require a new study if Avista is able to provide service. - You will have 30 days to decide whether to proceed with service agreement if Avista is able to provide service.	<table><tr><th>Large Power Request Size</th><th>Required Study</th><th>Deposit</th></tr><tr><td>1.6 - 8 MVA</td><td>Capacity Study</td><td>\$5,000</td></tr><tr><td>8.1 - 25 MVA or Insufficient Grid Capacity</td><td>Distribution Impact Study</td><td>\$20,000</td></tr><tr><td>Over 25 MVA or Transmission Service Requested</td><td>Transmission Impact Study</td><td>\$40,000</td></tr></table>	Large Power Request Size	Required Study	Deposit	1.6 - 8 MVA	Capacity Study	\$5,000	8.1 - 25 MVA or Insufficient Grid Capacity	Distribution Impact Study	\$20,000	Over 25 MVA or Transmission Service Requested	Transmission Impact Study	\$40,000
Large Power Request Size	Required Study	Deposit														
1.6 - 8 MVA	Capacity Study	\$5,000														
8.1 - 25 MVA or Insufficient Grid Capacity	Distribution Impact Study	\$20,000														
Over 25 MVA or Transmission Service Requested	Transmission Impact Study	\$40,000														

www.myavista.com/about-us/large-load-service-request

www.myavista.com/about-us/data-centers-and-energy

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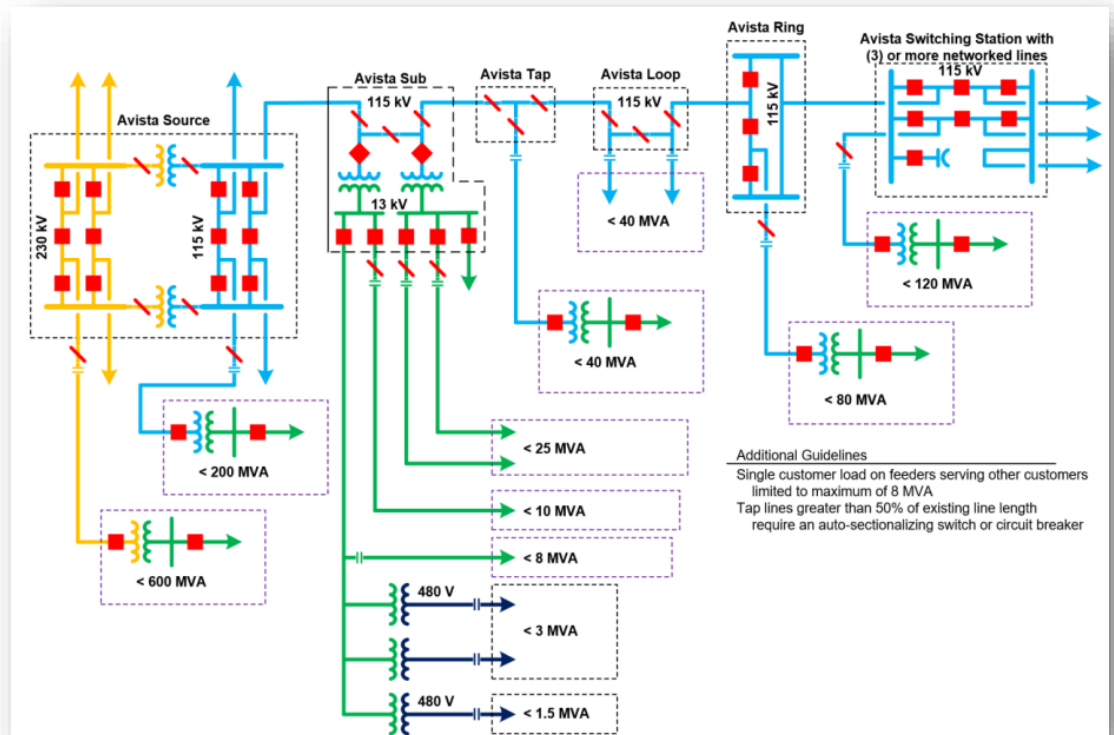
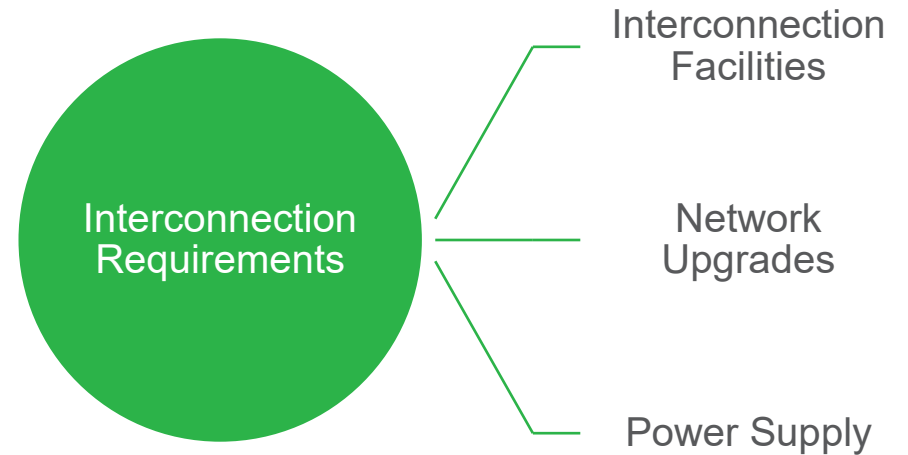
Large Load Requests

Distribution

- Generally 1.5 to 10MVA
- Served with existing or expanded distribution capacity

Transmission

- Project requests from 10 to 500MVA+
- Connected at 115kV or 230kV, likely with new substation as point of service
- Potential Network Upgrades include transmission lines or taps



Data Center Development Standards

- Significant utility industry effort and attention
 - Standardization of interconnection requirements
 - Performance standards for maintain reliable operation of the transmission system
- NERC
 - Computational Load standards expected before the end of 2026
- NATF
 - Reliable Addition of Large Datacentric Loads program

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Q&A

Solving future energy system challenges today

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Distribution System Reinforcements

2026 Distribution Planning Advisory Meeting

Kyle Hausam, P.E. – Senior Distribution Planning Engineer

Evaluating the Distribution System

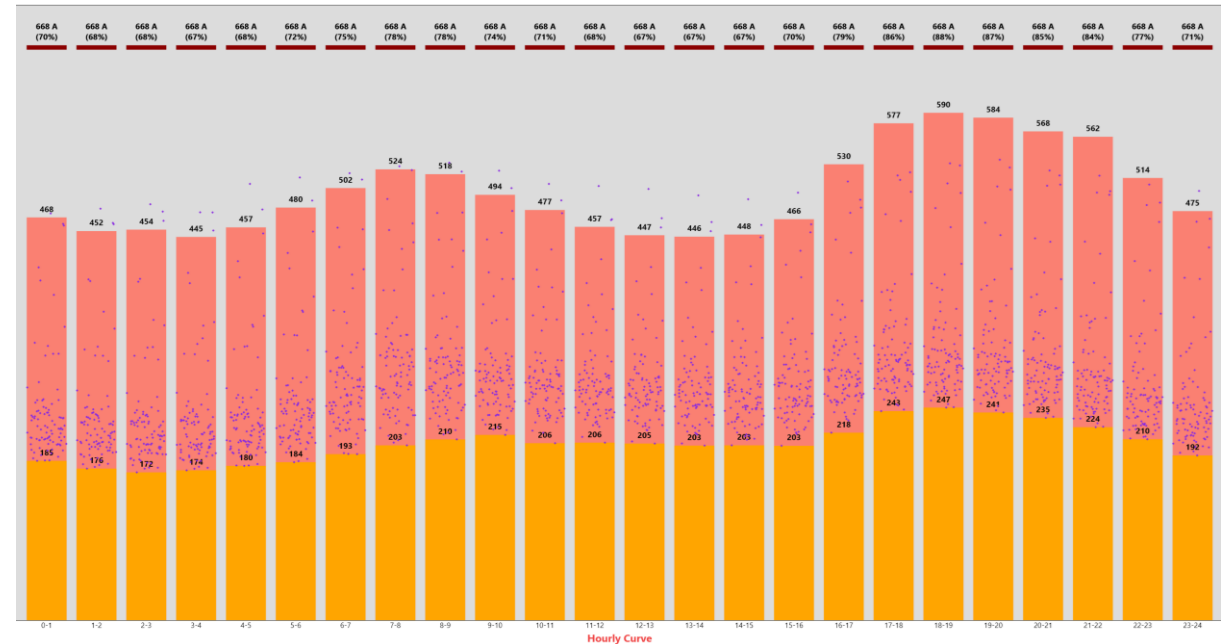
System metrics

- 430 feeders, 190 transformers
- 1 in 10 conditions adjusted for weather normalization

Forecasted Demand

- Use three years of historical measurement
- Multi-variable regression at feeder level
- Known Developments

Location	Heavy Summer	Heavy Winter
Colville	103°	-19°
Sandpoint	102°	-10°
Lewiston	108°	-10°
St Maries	102°	-14°
Spokane	104°	-17°
Othello	108°	-15°
Silver Valley	102°	-14°



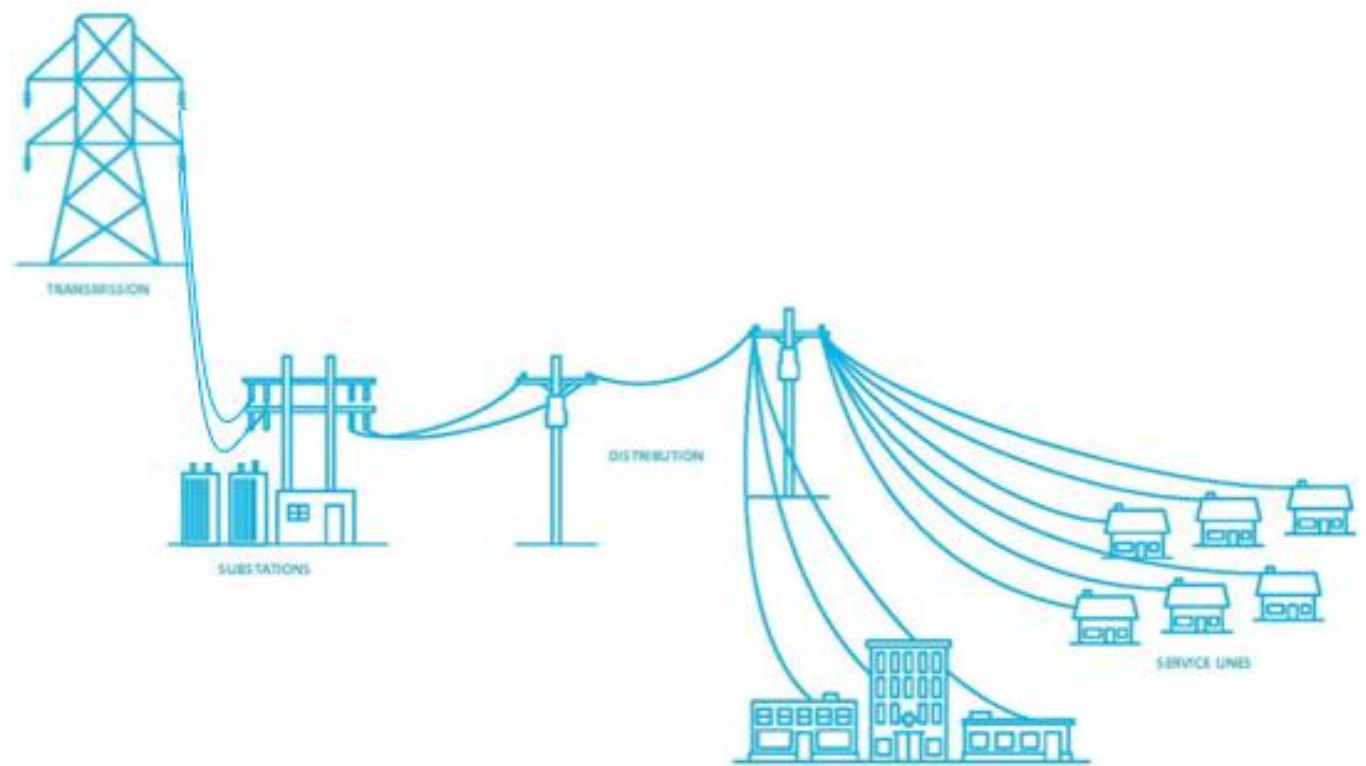
Distribution System Performance Criteria

Category ²	Outage ³	Thermal Performance	Voltage Performance ⁴	Regulator Performance	Current Imbalance	Voltage Imbalance	Customers Experiencing Interruption ⁵	Customers Experiencing Sustained Outage Longer than 2 Hours ⁶	Notes
D0 - No Contingency	None	< 80% Continuous ⁷	118V < Volt < 127V	-12 < tap < +12	Line loading > 90%: 5% Line loading >70%: 15% Line loading < 70%: 20%	3%	N/A	N/A	• Seasonal load transfers can be used
D1 - Feeder Contingency	Loss of one of the following:	< 95% Continuous	114V ⁸ < Volt < 127V < 4V Deviation ⁹	-15 < tap < +15	Line loading > 90%: 10% Line loading < 90%: NA	5%			- Field switching can be used to restore customers - Generator curtailment may be required for restoration
	1. Feeder Lockout						3000 or 10MVA	Suburban: 500 Rural: 1500	
	2. Generator Outage/Off						0	0	
	3. Automatic Transfer Switch Operation						N/A	N/A	
D2 – Multiple Contingency (Common Structure ¹⁰)	Loss of one of the following:	< 95% Continuous	114V < Volt < 127V		None	5%	4000	500	
	1. Loss of two feeders on common structure								
	2. Loss of three feeders on common structure								
D3 - Substation Contingency	Loss of one of the following:	< 95% Continuous	114V < Volt < 127V	-15 < tap < +15	None	5%			Feeder breaker and/or regulator bypass is acceptable
	1. Feeder Regulator						3000	0	
	2. Feeder Breaker						3000	0	
	3. Substation Transformer						6000	Suburban: 0 Rural: 3000	

Corrective Action Plans

Solutions

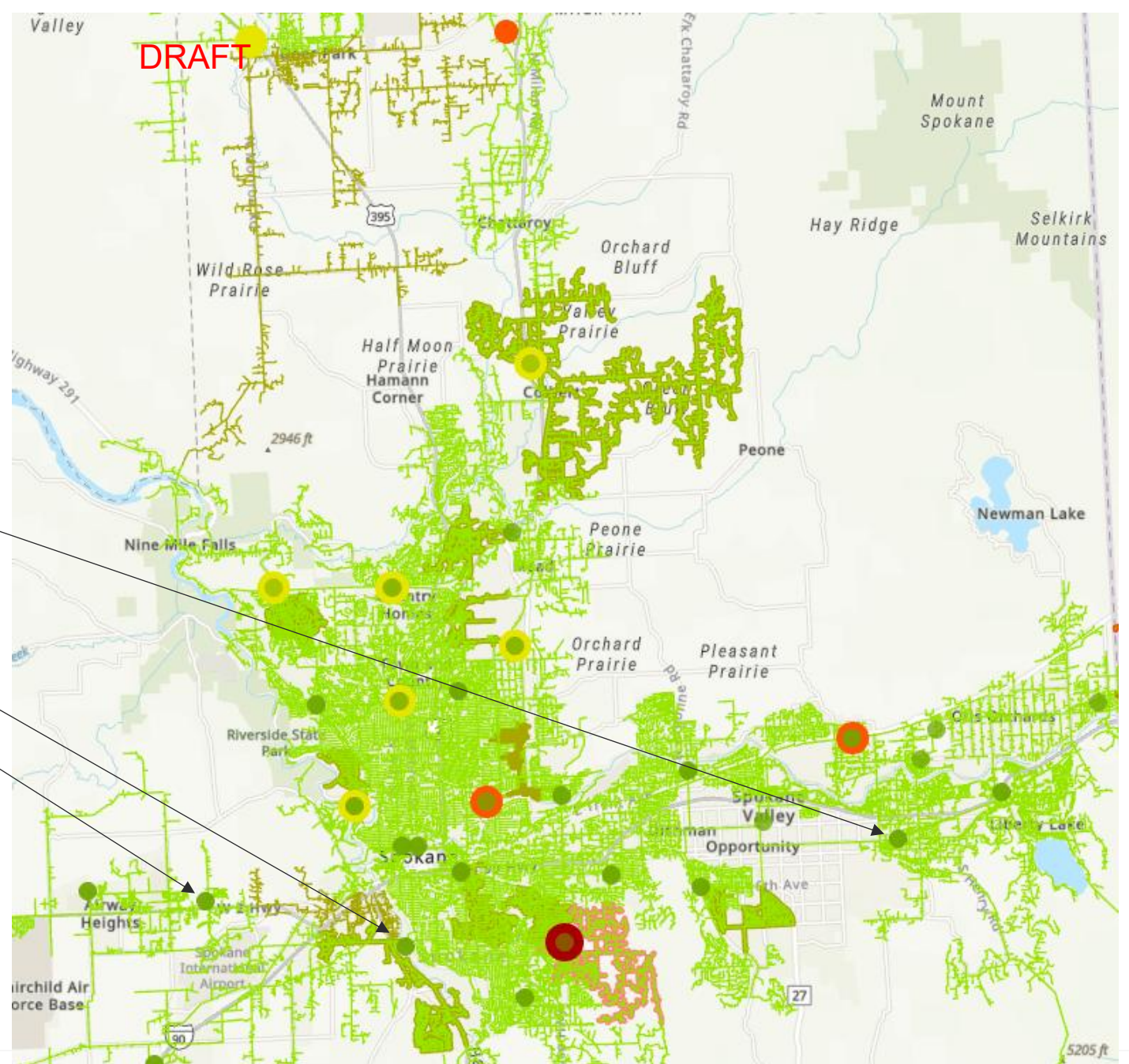
- Operational
 - Phase Balance
 - Load Transfer
- Non-Wire Alternatives
- Equipment Sizing
- Feeder addition
- Substation Expansion
- New Substation



Completed Distribution Projects

Spokane Area

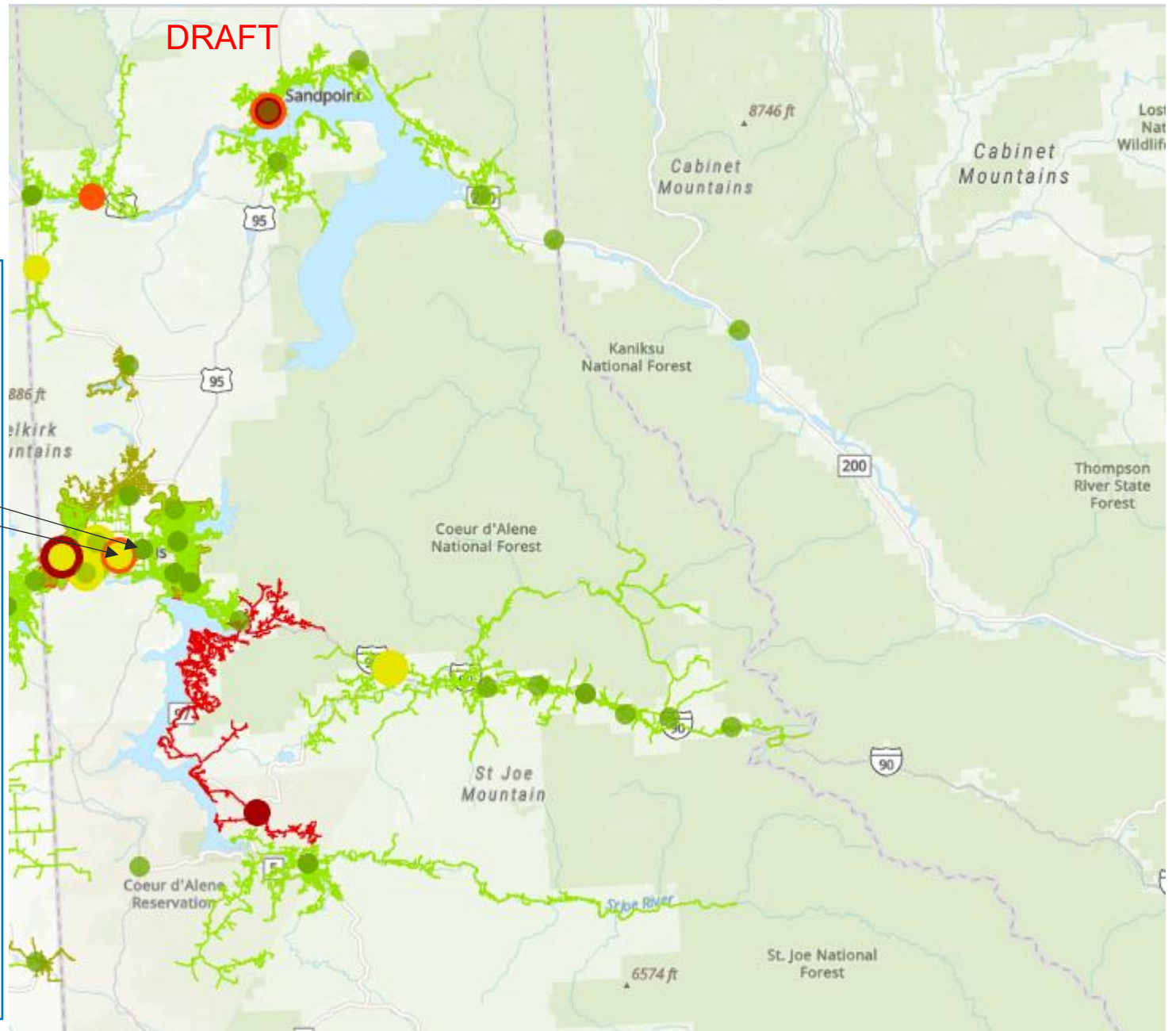
- Green Acres
- Sunset
- Flint Road



Completed Distribution Projects

East Area

- Huetter
- Poleline

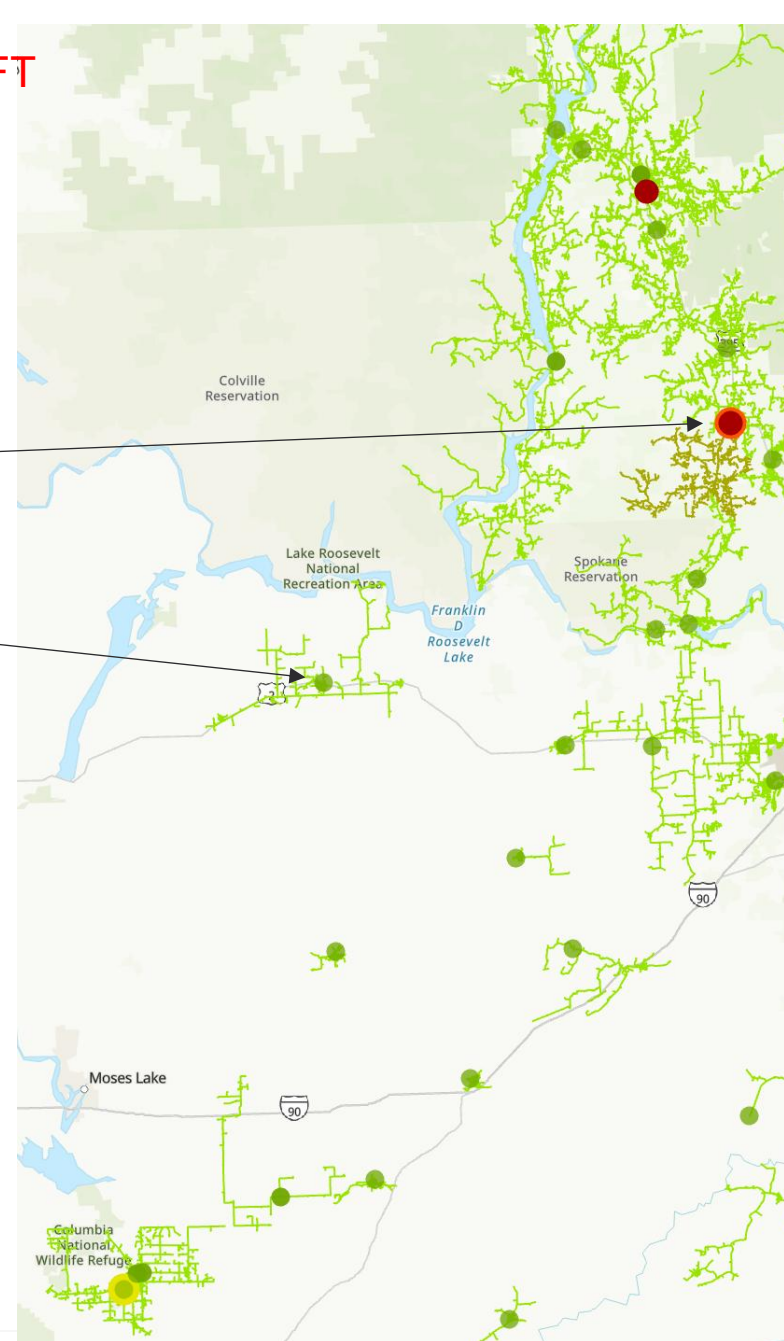


Completed Distribution Projects

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West Area

- Valley
- Wilbur



Planned Distribution Projects

5-Year Planned Projects

• Metro Station	2027
• Bronx	2027
• Northeast*	2027
• Rathdrum	2027
• Carlin Bay	2028
• Pleasantview	2028
• Bunker Hill*	2028
• Moscow**	2028
• O’Gara	2029
• Glenrose	2029
• Orin	2029
• Irvin*	2029
• Melville*	2030
• Lewiston	2030

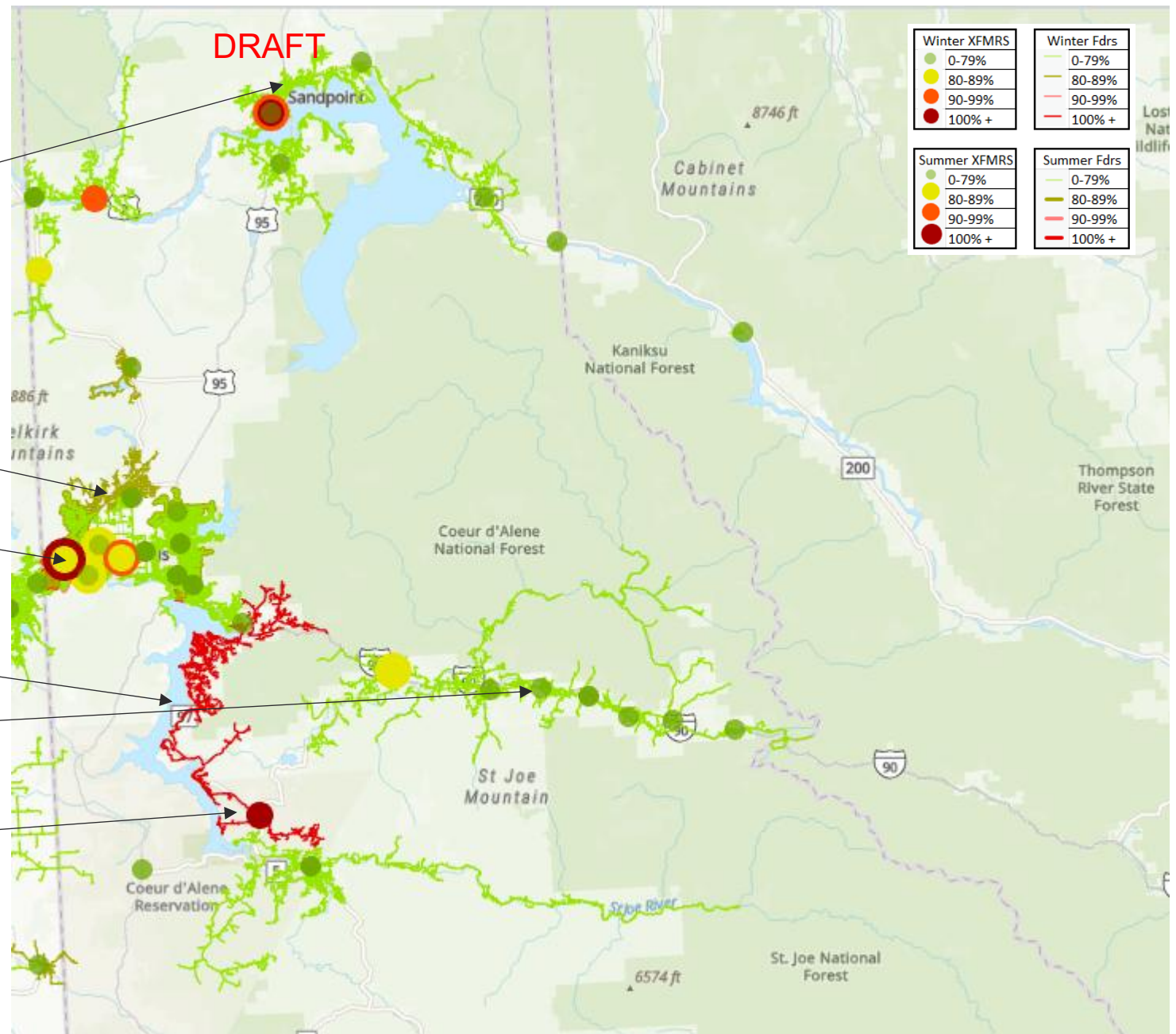


Metro Station, Spokane, Washington

*Large Load Requests

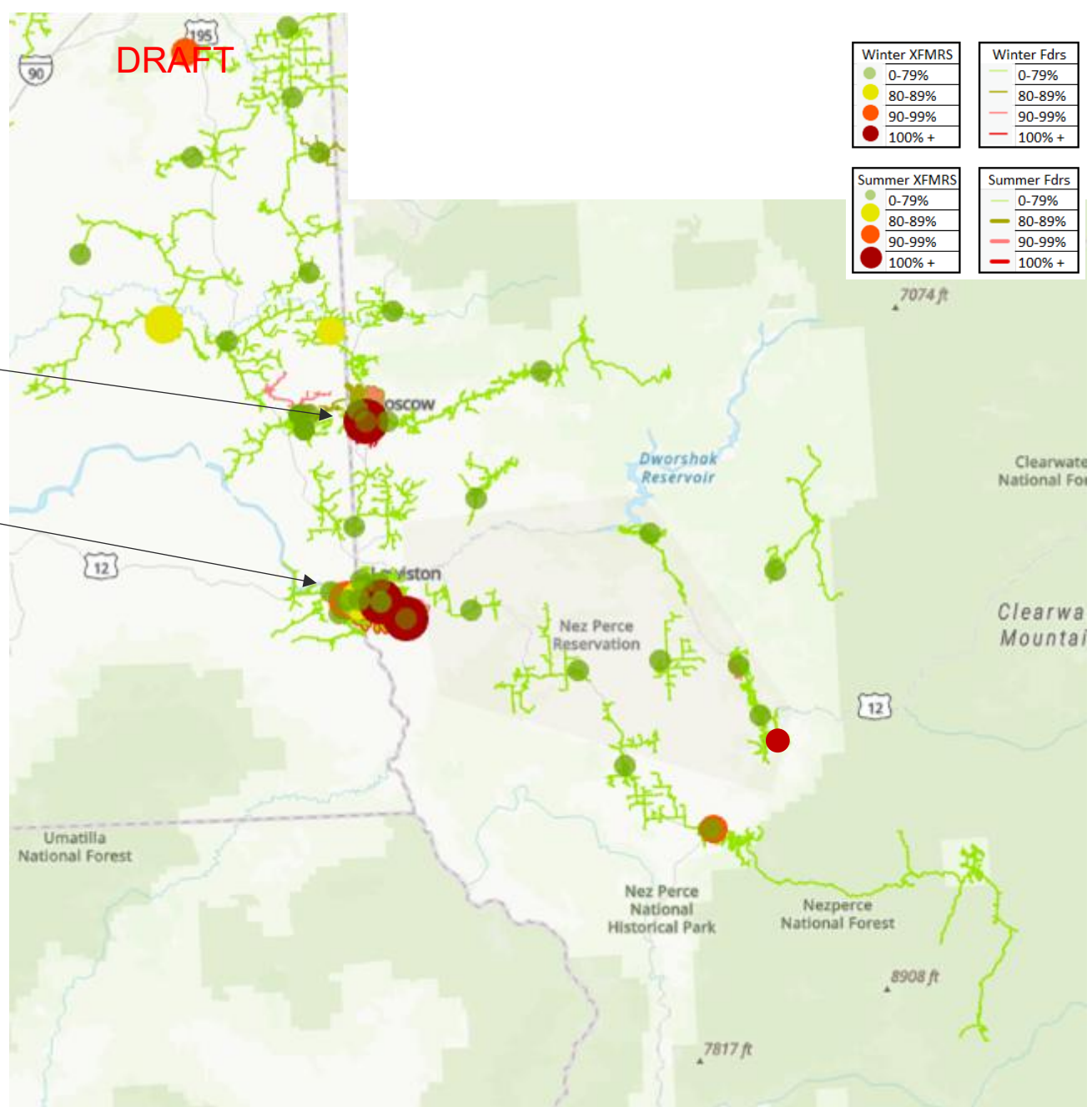
System Needs East

- Bronx
- Rathdrum
- Pleasant View
- Carlin Bay
- Bunker Hill
- O'Gara



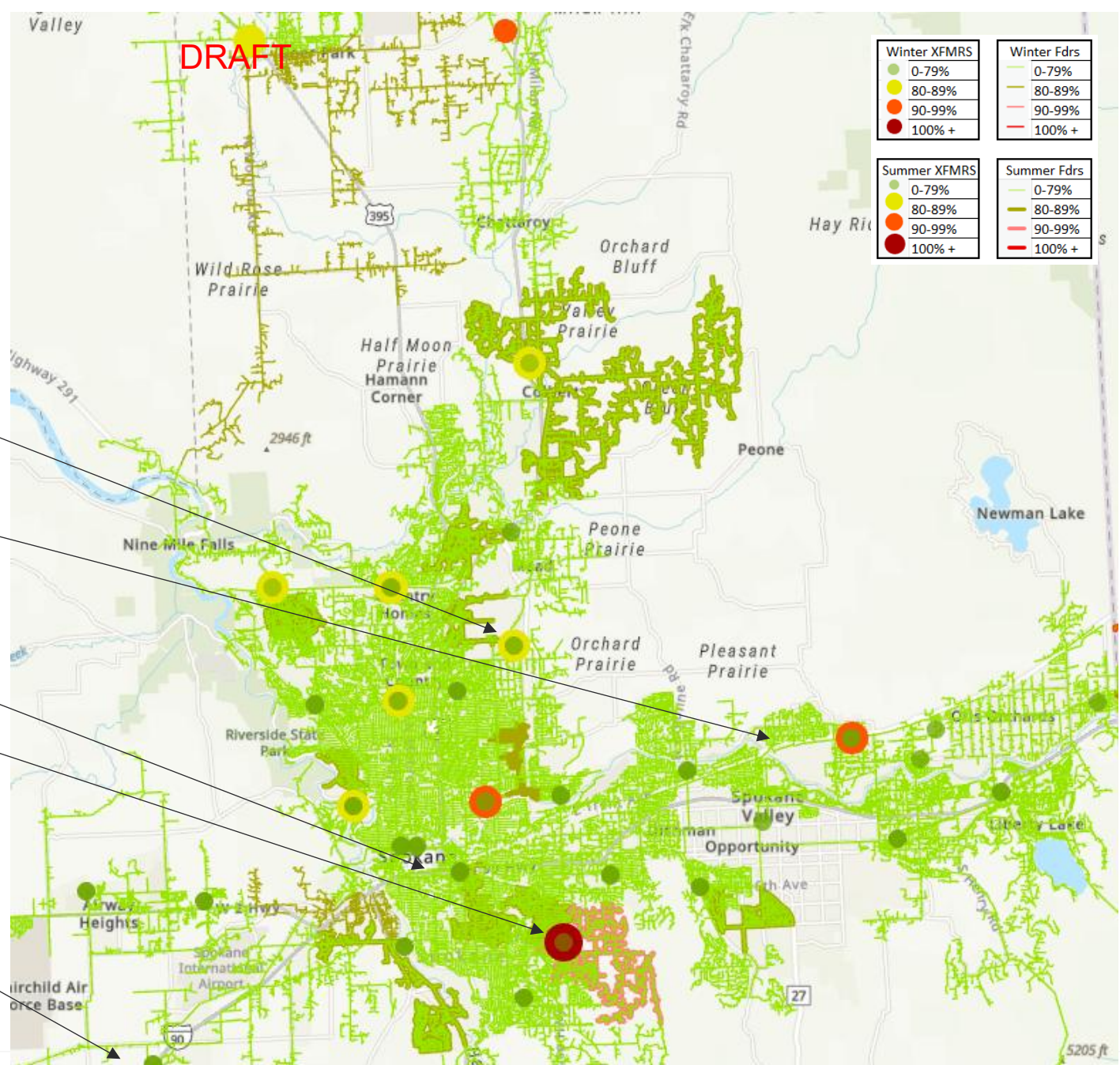
System Needs South

- Moscow
- Lewiston



System Needs Spokane

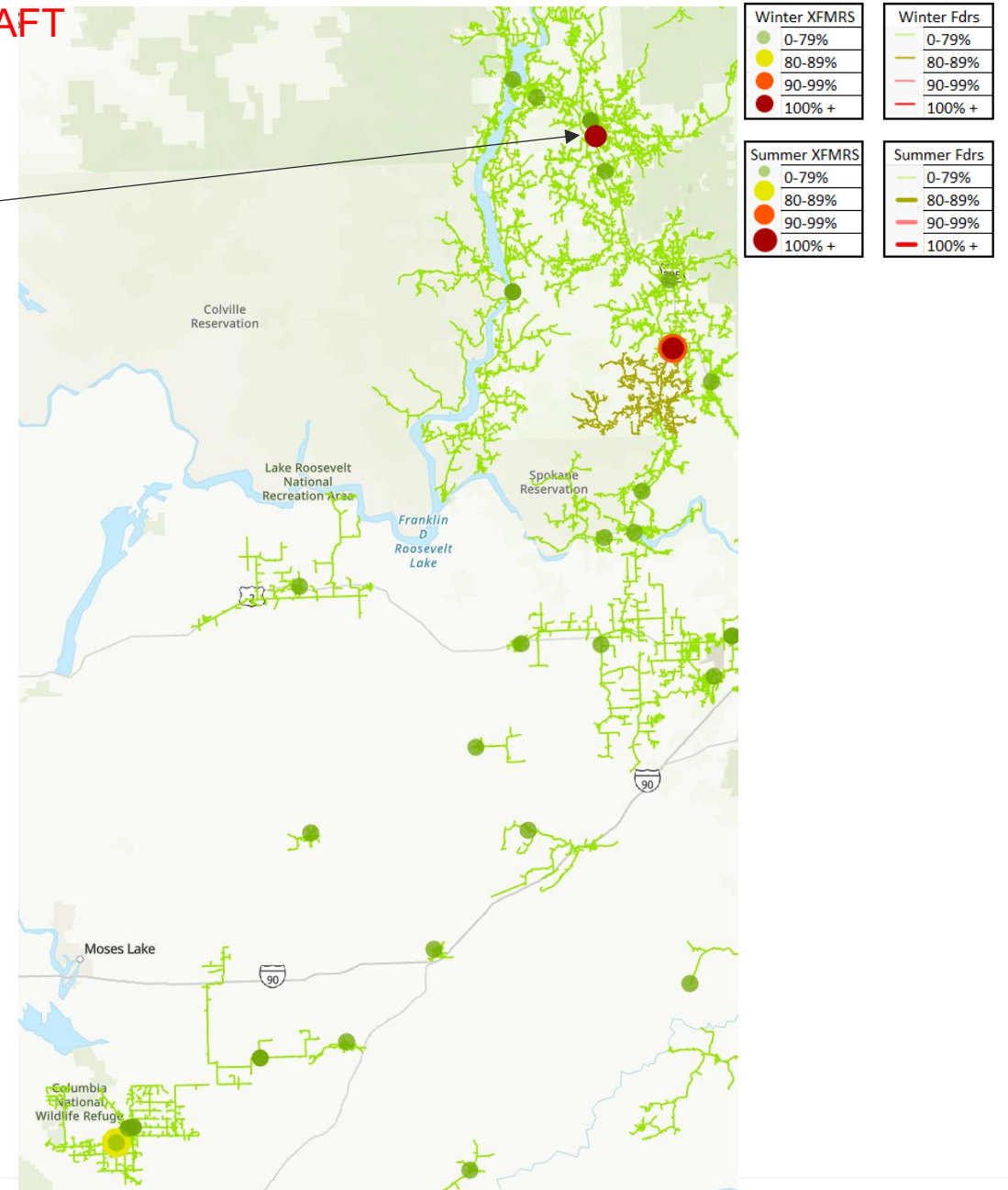
- Northeast
- Irvin
- Metro
- Glenrose
- Melville



System Needs West

DRAFT

- Orin



Identified Distribution Projects

Projects under study

- Avondale – Add 2nd distribution power transformer & 2 feeders
- Coeur d'Alene – Do nothing, analyze in upcoming System Assessment
- Idaho Road – new Riverbend Station or expand Idaho Road Station
- Post Falls – new Riverbend Station or expand Idaho Road Station
- Priest River – Upgrade to 30MVA transformer
- Kooskia (K34) - ICLP coordination, rebuild Kooskia station
- Spangle – Add cooling fans to existing transformer
- South Lewiston – new Bryden Canyon Station
- Pound Lane – needs rebuild, need more data for analysis
- Turner (TUR116) – Load transfer – **COMPLETE**
- South Othello – Add 2nd distribution power transformer or new Bruce Station

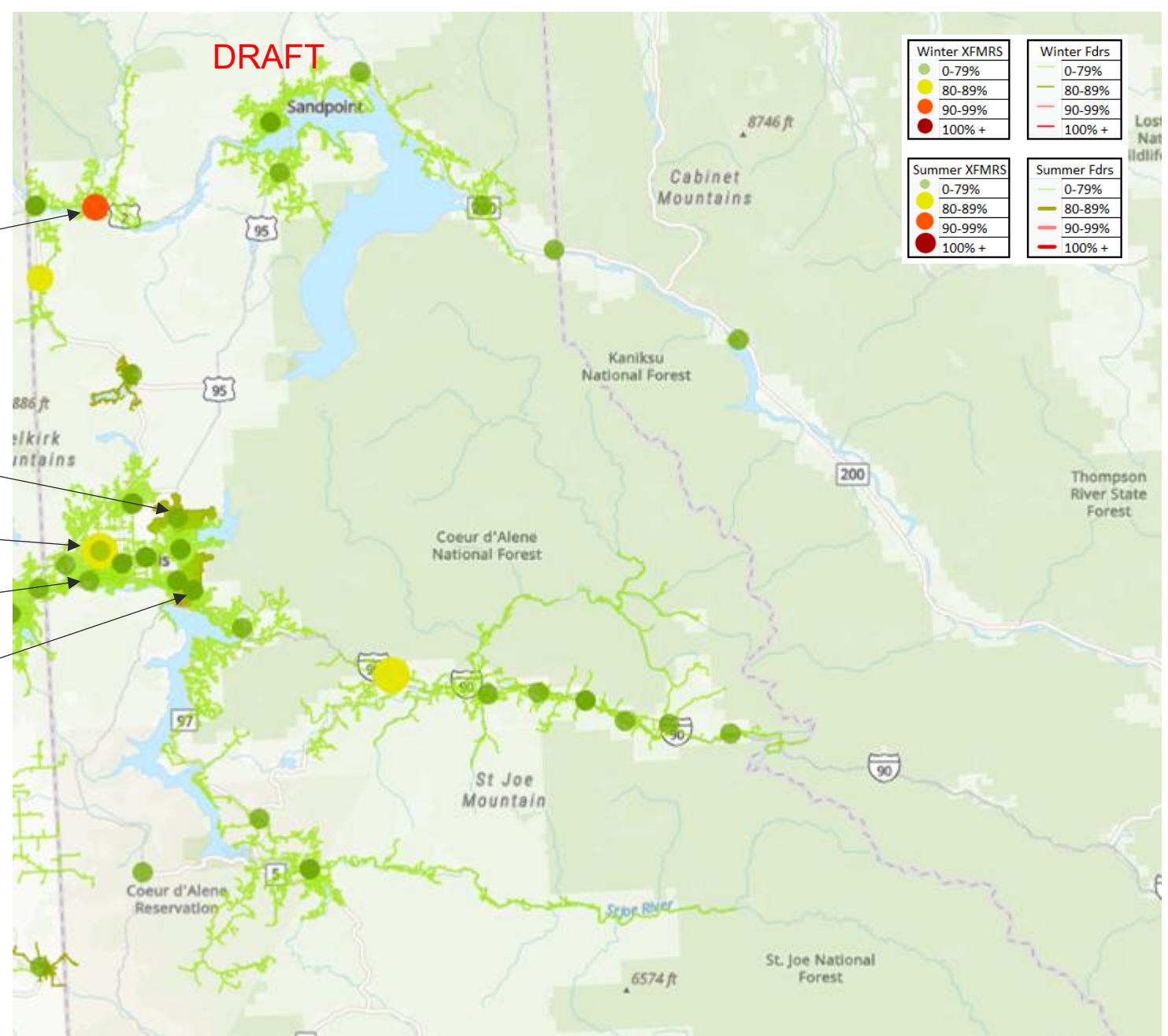
Identified Distribution Projects

Projects under study

- Milan – Coordination with IP&L
- Colbert - TBD
- Deer Park - TBD
- Indian Trail - TBD
- Downriver – Phase Load Balancing - **COMPLETE**
- Liberty Lake – Rebuild with two 30MVA transformers and 6 feeders

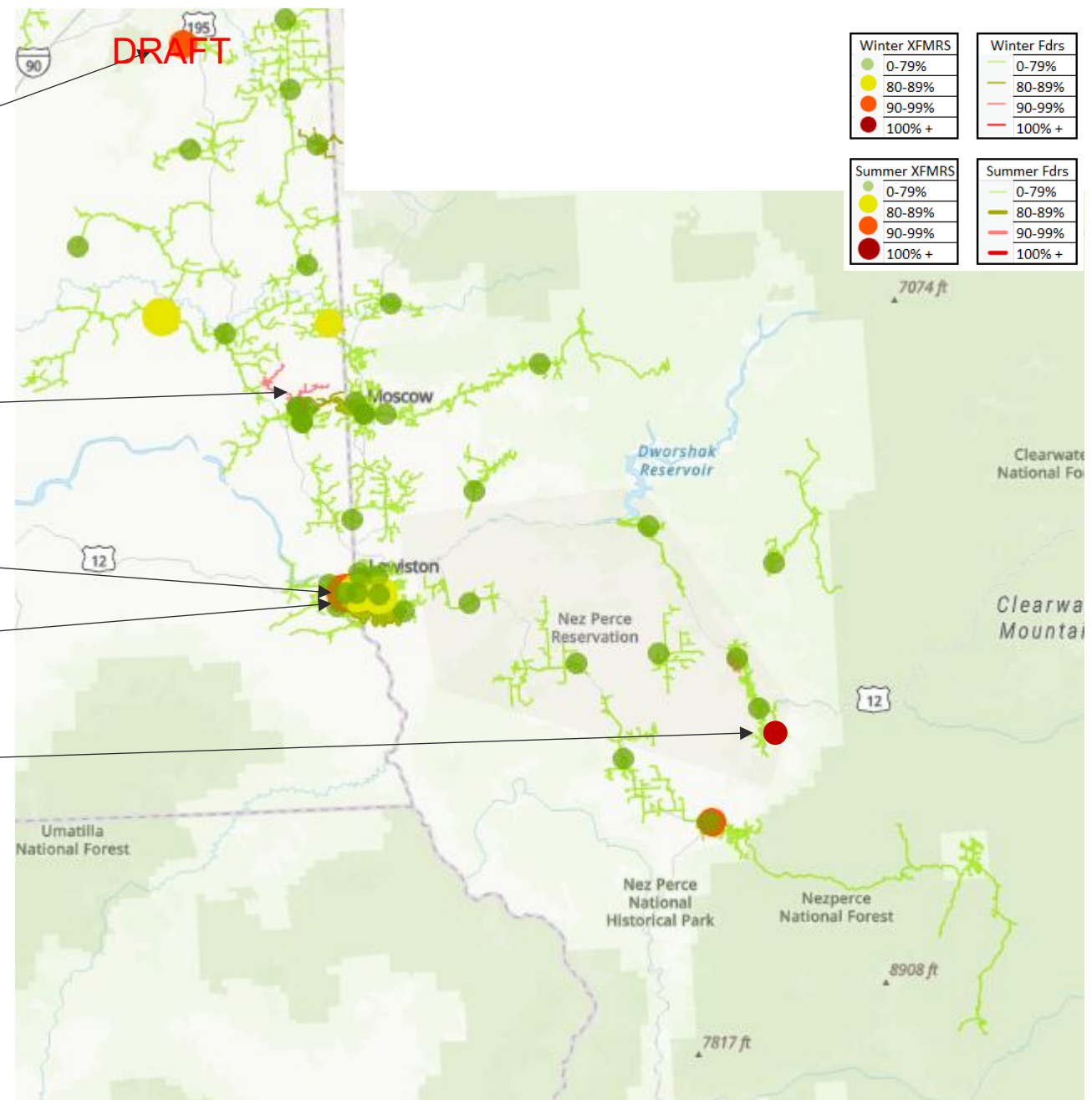
System Needs East

- Priest River
- Avondale
- Idaho Road
- Post Falls
- Coeur d'Alene



System Needs South

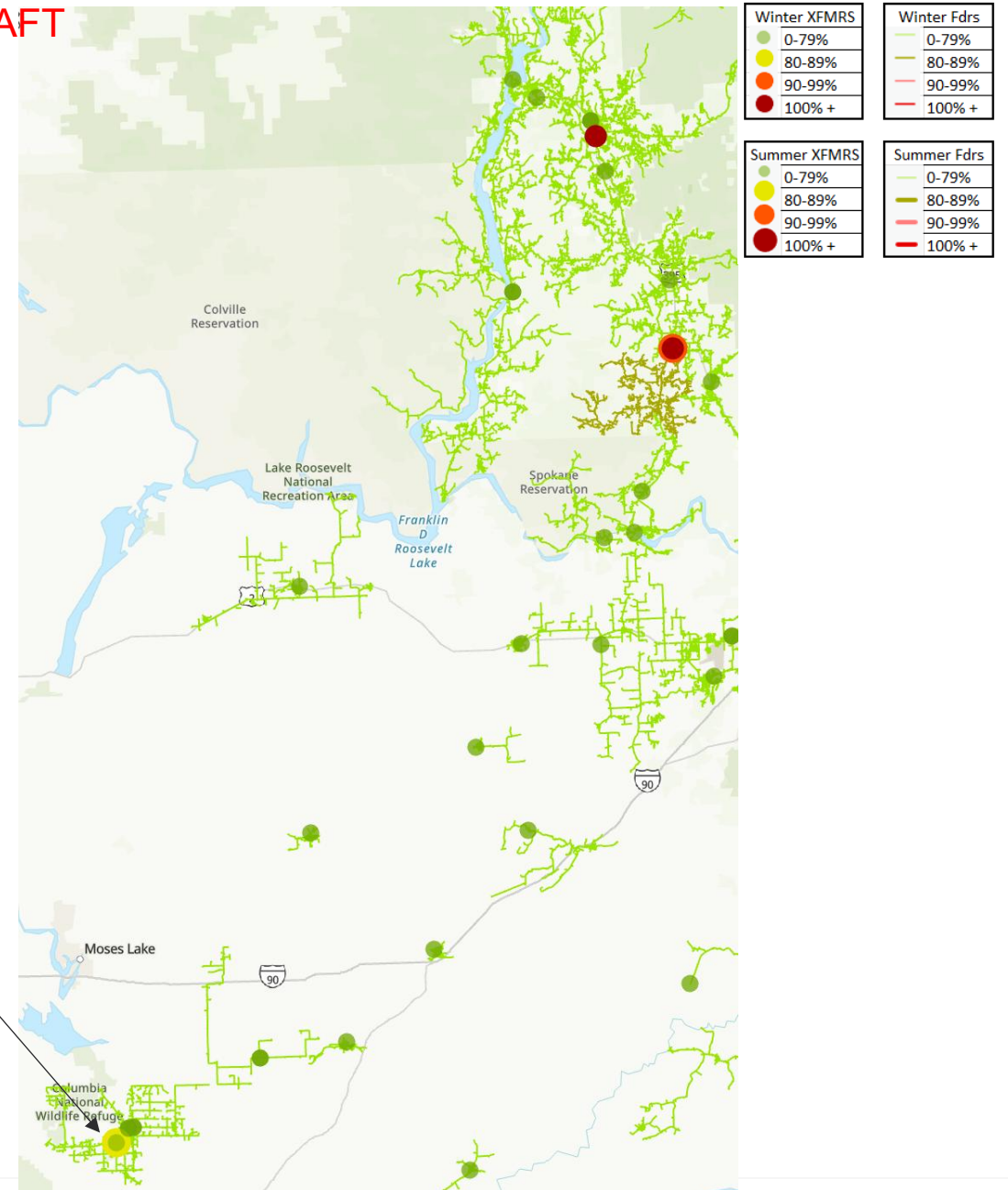
- Spangle
- Turner
- Pound Lane
- South Lewiston
- K34



System Needs West

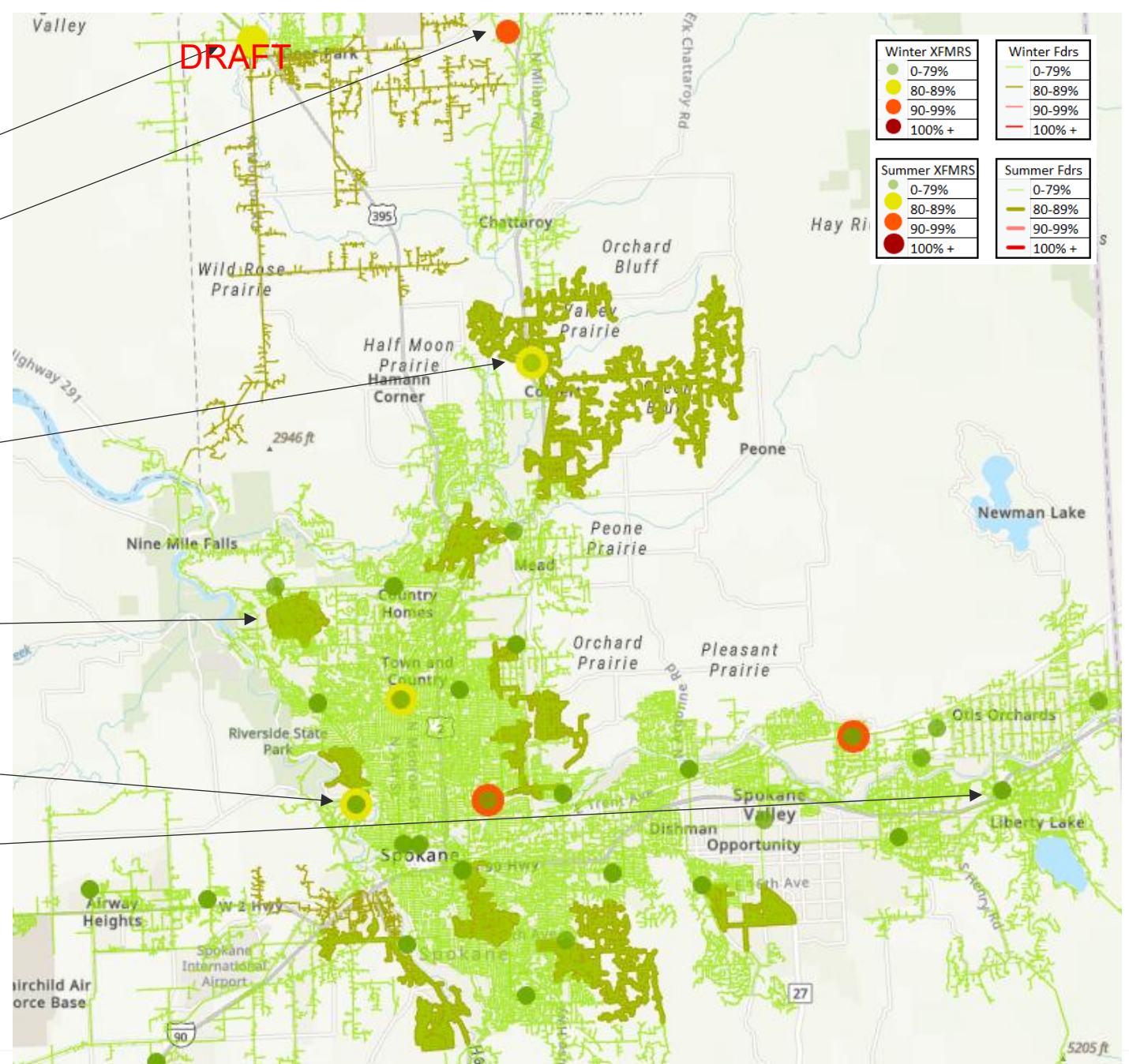
- South Othello

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System Needs Spokane

- Deer Park
- Milan
- Colbert
- Indian Trail
- Downriver
- Liberty Lake



DER Interconnections & Activities

Recent Project Studies & Status

- MLK Jr. Community Center Microgrid
- Pullman High School – 200kW PV solar
- Boulder Park Low Income Solar & Storage
- CS26-06 Microgrid – Wellpinit, WA
- Microgrid Study Framework
- Microgrid Prefeasibility Study
- DER Valuation Framework
- DER Screening Flowchart

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Q&A

Solving future energy system challenges today