



INTERMOUNTAIN[®]

GAS COMPANY

A Subsidiary of MDU Resources Group, Inc.

INTEGRATED RESOURCE PLAN

AUGUST 2, 2023

INTERMOUNTAIN GAS RESOURCE ADVISORY COMMITTEE (IGRAC)

WELCOME

- Introductions
- Feedback Process
- Agenda

FEEDBACK SUBMISSIONS



- IRP.Comments@intgas.com
- Please provide comments and feedback within 10 days

AGENDA

- **Welcome & Introductions** – Brian Robertson (Supervisor, *Resource Planning*)
- **Safety Moment** – Devin McGreal (Sr, Resource Planning Economist)
- **Load Demand Curves** – *Brian Robertson (Supervisor, Resource Planning)*
- **Potential Capacity Enhancements** – Kathleen Campbell (*Engineer III, Engineering Services*)
- **Resource Optimization** – *Jenny De Boer (Resource Planning Economist I), Brian Robertson (Supervisor, Resource Planning)*
- **Questions/Discussion**

Demand

Supply & Delivery Resources

Economic Overview

Residential & Commercial Customer Growth

Residential & Commercial Usage Per Customer

Design Weather

Industrial Demand

Demand

Transportation Capacity & Storage

Natural Gas Supplies

Energy Efficiency:
Residential & Commercial

Distribution System Overview

Non-Traditional Resources

Supply & Deliverability

Load Demand Curves
Optimization Modeling
System Enhancements

Demand

Supply



SAFETY MOMENT

DEVIN MCGREAL

SR. RESOURCE PLANNING ECONOMIST

Lighting-How to Protect Yourself

If you hear thunder and see lightning, seek shelter right away; indoors when possible.

Listed below are several tips on staying safe before, during, and after a storm:

BEFORE THE STORM

- If planning any outdoor activities; check weather forecasts and alerts.
 - Cancel or postpone if bad weather seems likely.
- Make a lightning safety plan that includes where to seek shelter and the safest route to get there.
- Unplug electrical items to avoid power surges.
- Bring family pets indoors or put them into a fully enclosed building.

DURING THE STORM

- Avoid seeking shelter in sheds, picnic shelters, covered porches, tents or under trees.
 - Wait out the storm in a substantial building or hard-topped vehicle with windows rolled up.
- Avoid high ground, open spaces, and trees.
- Stay away from metal objects; they do not attract lightning, but conducts it.
- Keep clear of doors and windows.
- Plumbing can conduct electricity; wait until the storm passes to shower or bathe.
- If fishing, return to shore and seek a safe shelter as soon as possible.

AFTER THE STORM

- Charges of lightning can linger in the clouds; stay indoors for at least 30 minutes after the last sound of thunder.



LOAD DEMAND CURVES

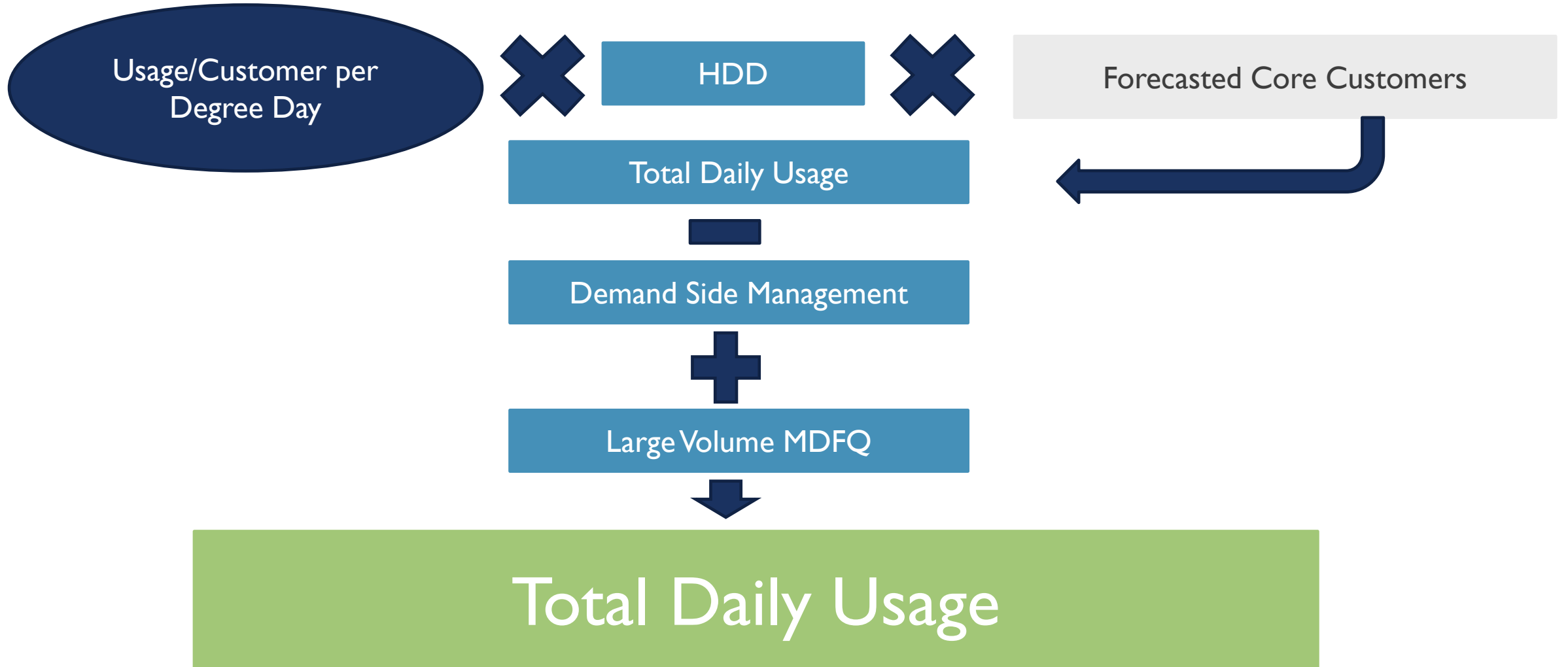
BRIAN ROBERTSON

SUPERVISOR, RESOURCE PLANNING

LOAD DEMAND CURVE KEY VARIABLES

- Based on Design Weather Conditions
- Low, Base and High Growth Core Market Customer Projections
- Customer Usage Per Degree Day
- MDFQ for Large Volume Customers

PEAK SEASON CORE MARKET LOAD DEMAND CURVE METHODOLOGY



LOAD DEMAND CURVE

- Load Demand Curve: A forecast of Daily Gas Demand Using ‘Design’ Temperatures, and Predetermined ‘Usage Per Customer’
- Designed to Measure Distribution Capacity at Our 5 Areas of Interest (AOIs)
- To Measure Total Company for Upstream Capacity
- Based on Current Resources or Resources Scheduled to be Available During the IRP Period
- Remedies for Any Constraints Will be Identified Later
- Storage Management

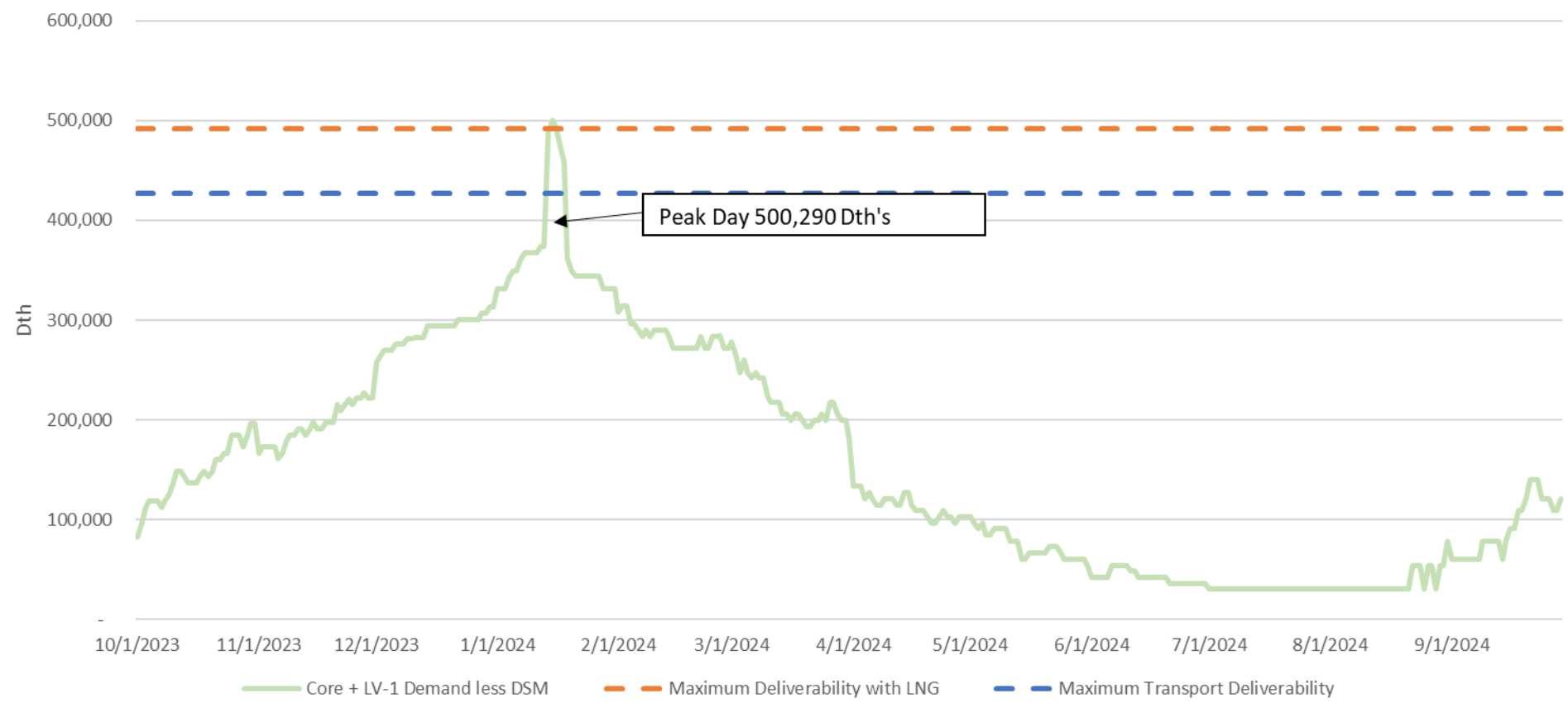
CAPACITY RESOURCES

Northwest Daily Maximum Transportation Capacity (MMBtu)

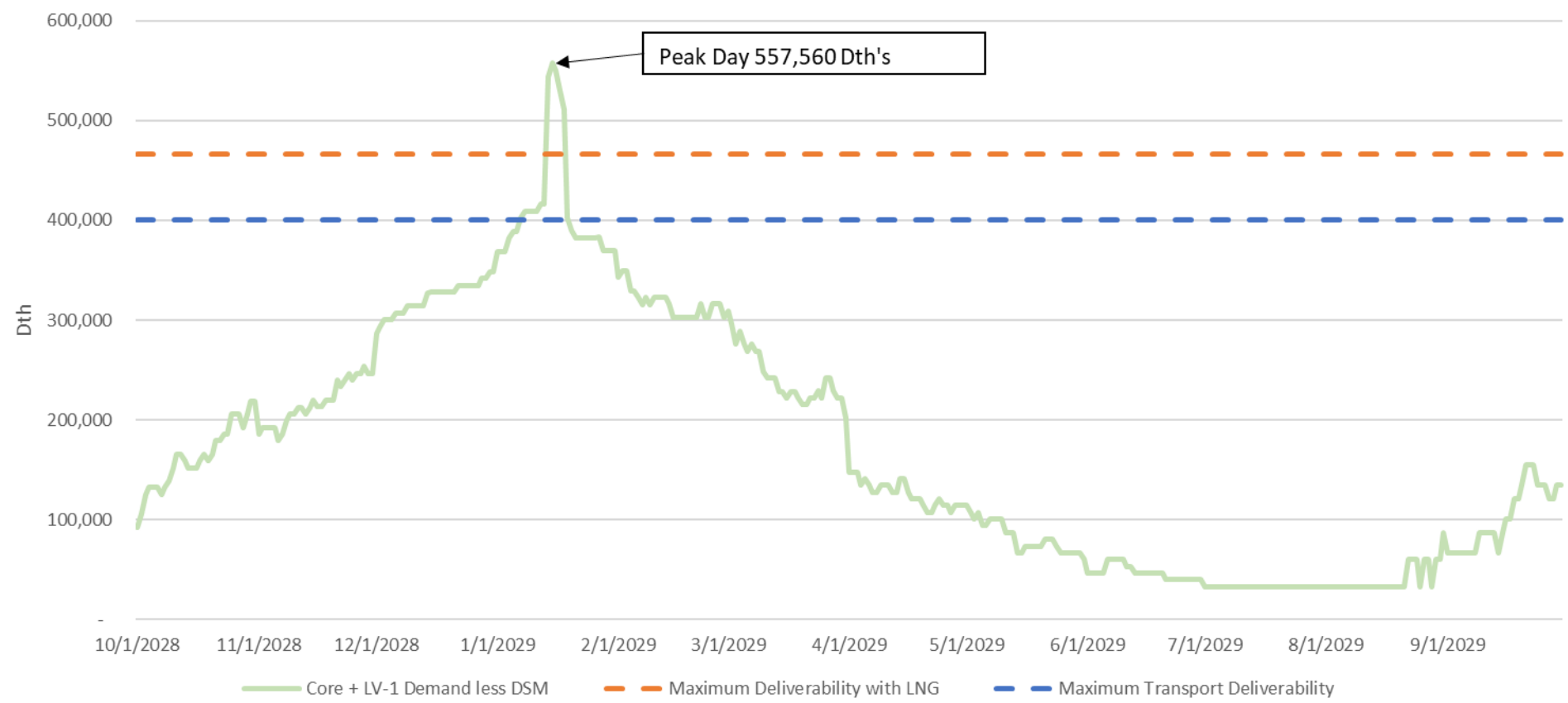
	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
Sumas (3k is winter only)	3,000	0	0	0	0	0
Stanfield	221,565	221,565	221,565	221,565	221,565	221,565
Rockies	106,478	106,478	106,478	59,328	59,328	59,328
Citygate	10,000	10,000	10,000	-	-	-
Total Capacity	341,043	338,043	338,043	280,893	280,893	280,893
Storage Withdrawals with Bundled Capacity	185,512	185,512	185,512	155,175	155,175	155,175
Maximum Deliverability	526,555	523,555	523,555	436,068	436,068	436,068

- Intermountain has segmented capacity from Sumas to IGC at Stanfield. Intermountain owns Stanfield to IGC.
- Stanfield Capacity is dependent on GTN, including GTN Xpress which is expected to be online in 2023.
- Intermountain is receiving approximately 21,000 dth/day capacity on NOVA, Foothills, and GTN on April 1, 2024.
- On-System Storage is 65,000 dth/day.

2023 Load Demand Curve
Design Base Case
Total Company



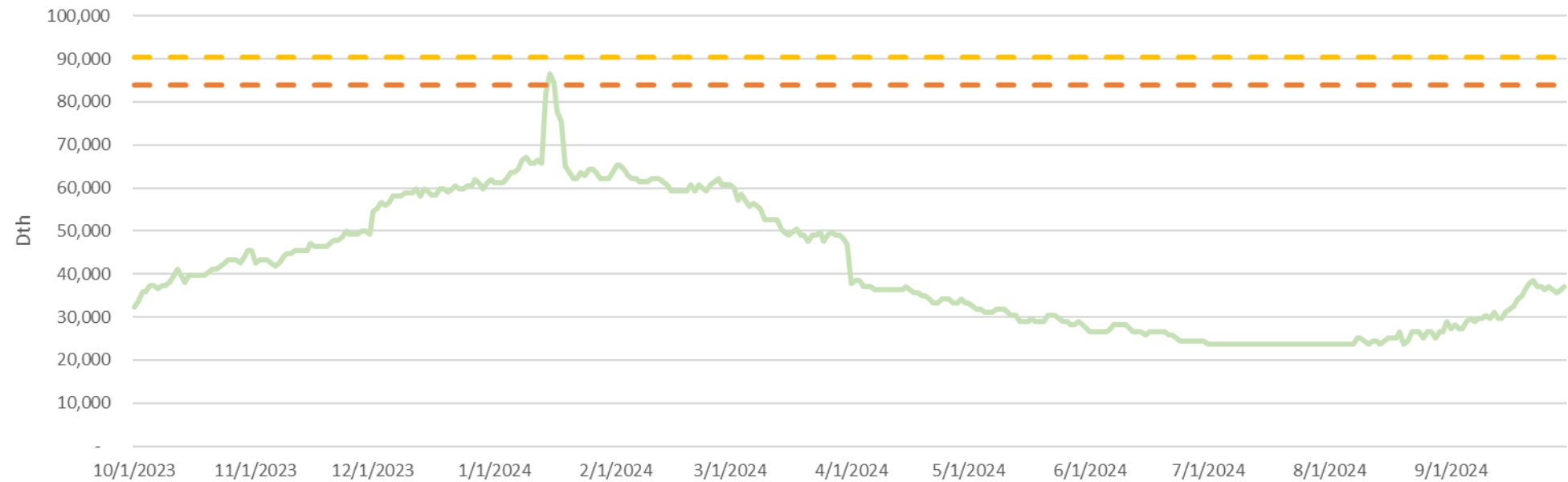
2028 Load Demand Curve
Design Base Case
Total Company



DESIGN CAPACITY OF DISTRIBUTION SYSTEM

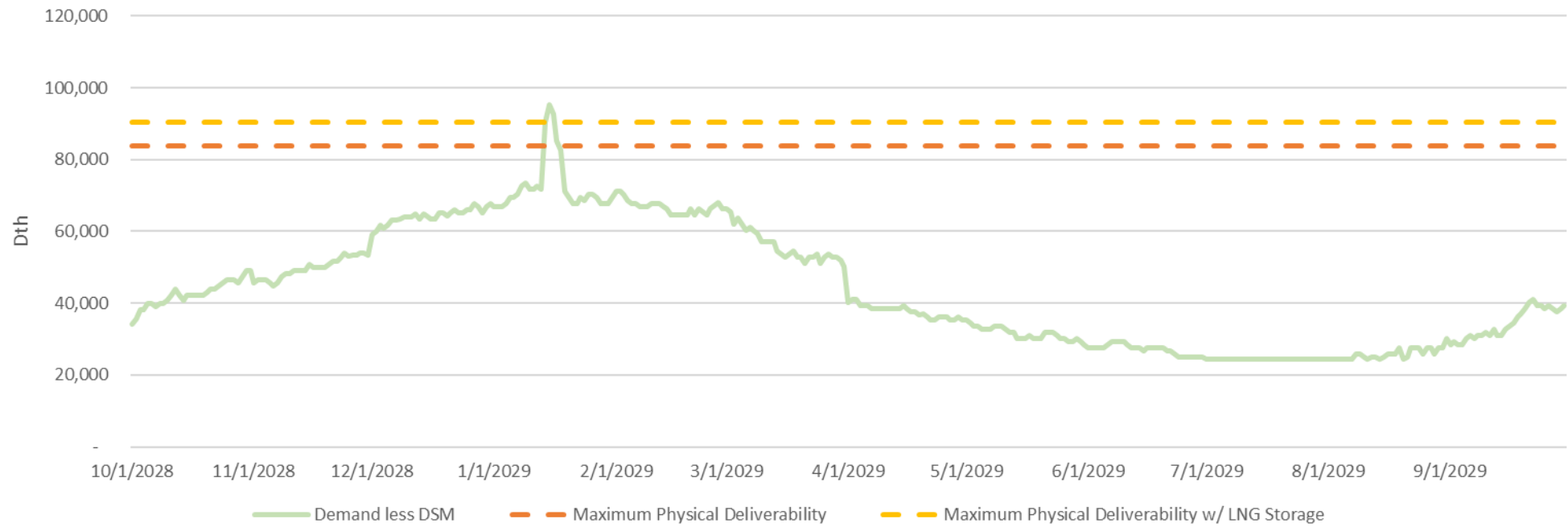
- Idaho Falls Lateral
- Sun Valley Lateral
- Canyon County Lateral
- State Street Lateral
- Central Ada County

2023 Load Demand Curve
Design Base Case
Idaho Falls Lateral

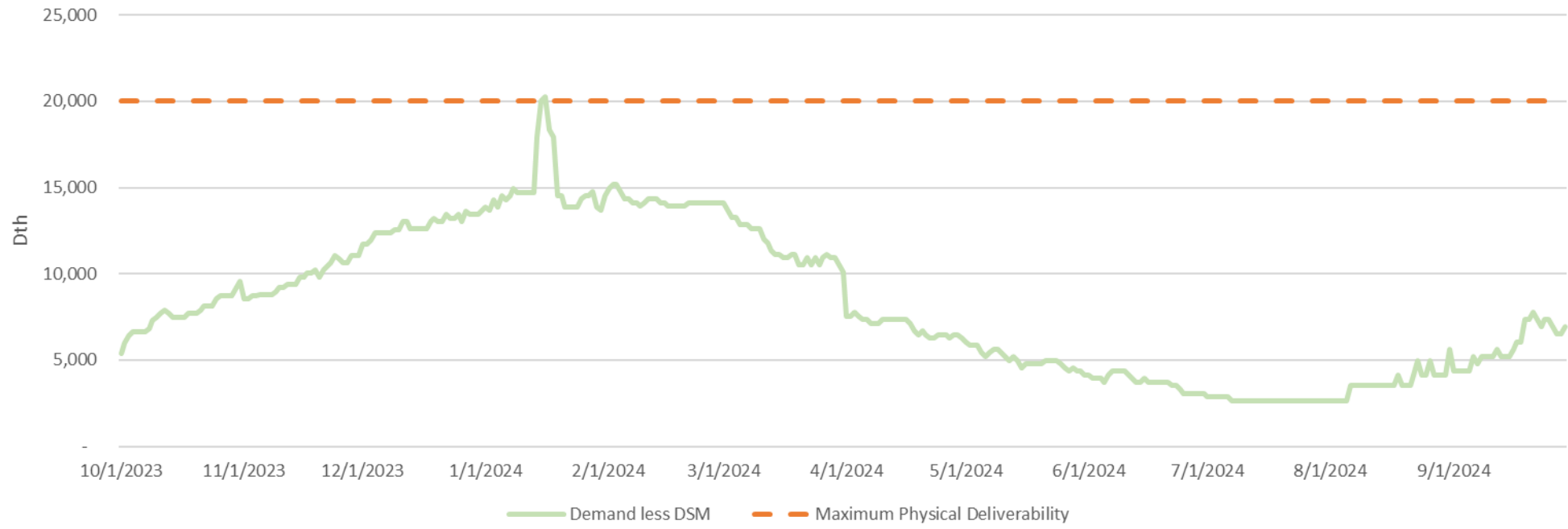


— Demand less DSM - - - Maximum Physical Deliverability - - - Maximum Physical Deliverability w/ LNG Storage

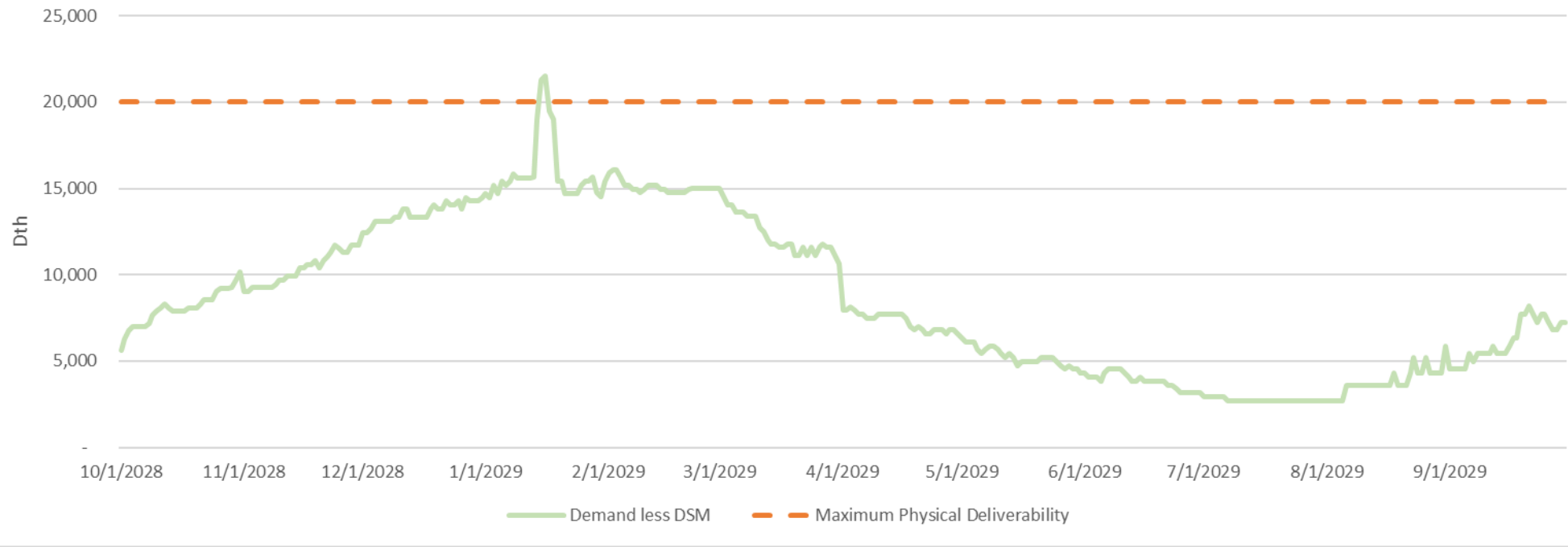
2028 Load Demand Curve
Design Base Case
Idaho Falls Lateral



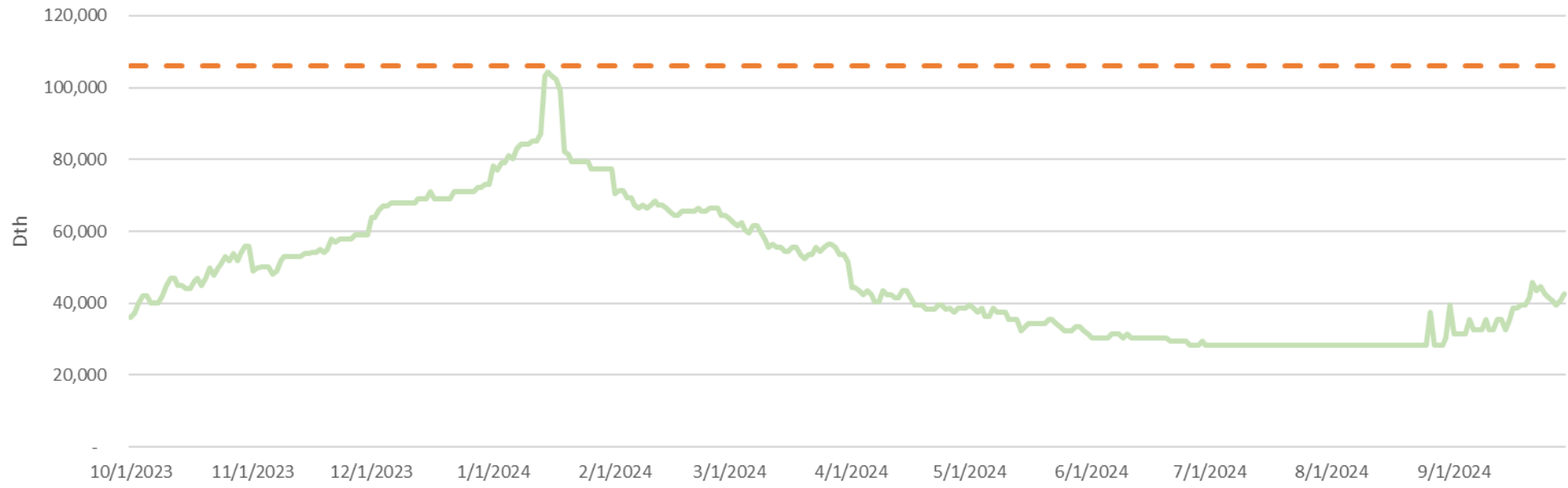
2023 Load Demand Curve
Design Base Case
Sun Valley Lateral



2028 Load Demand Curve
Design Base Case
Sun Valley Lateral

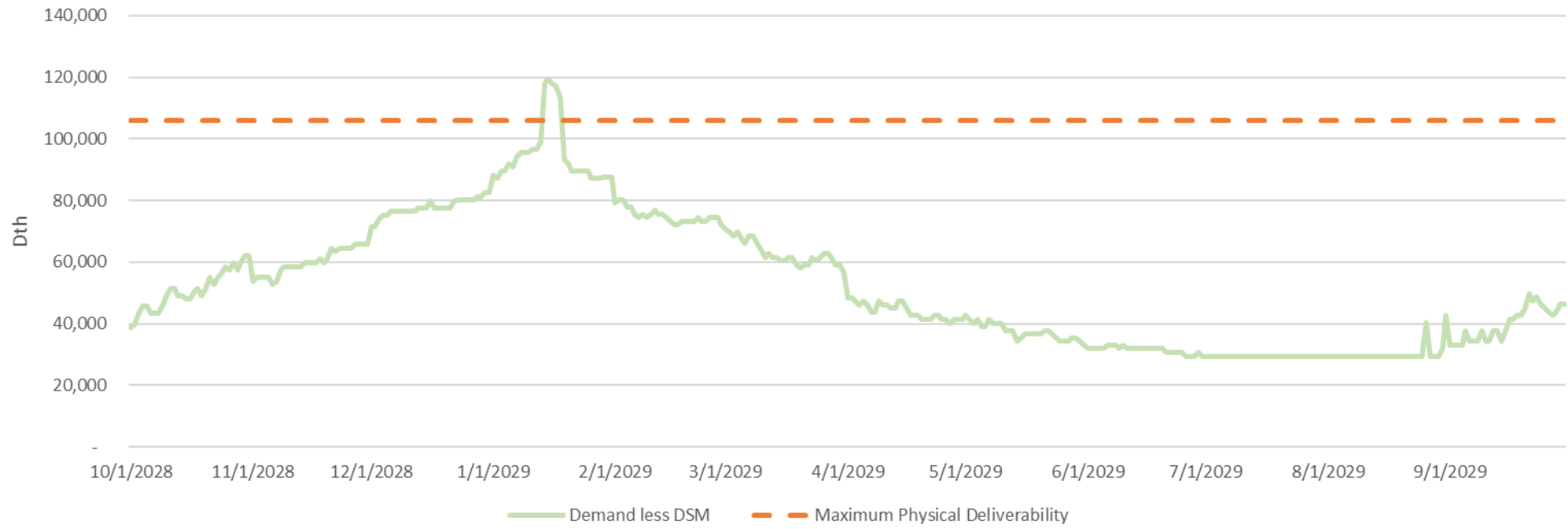


2023 Load Demand Curve
Design Base Case
Canyon County Lateral

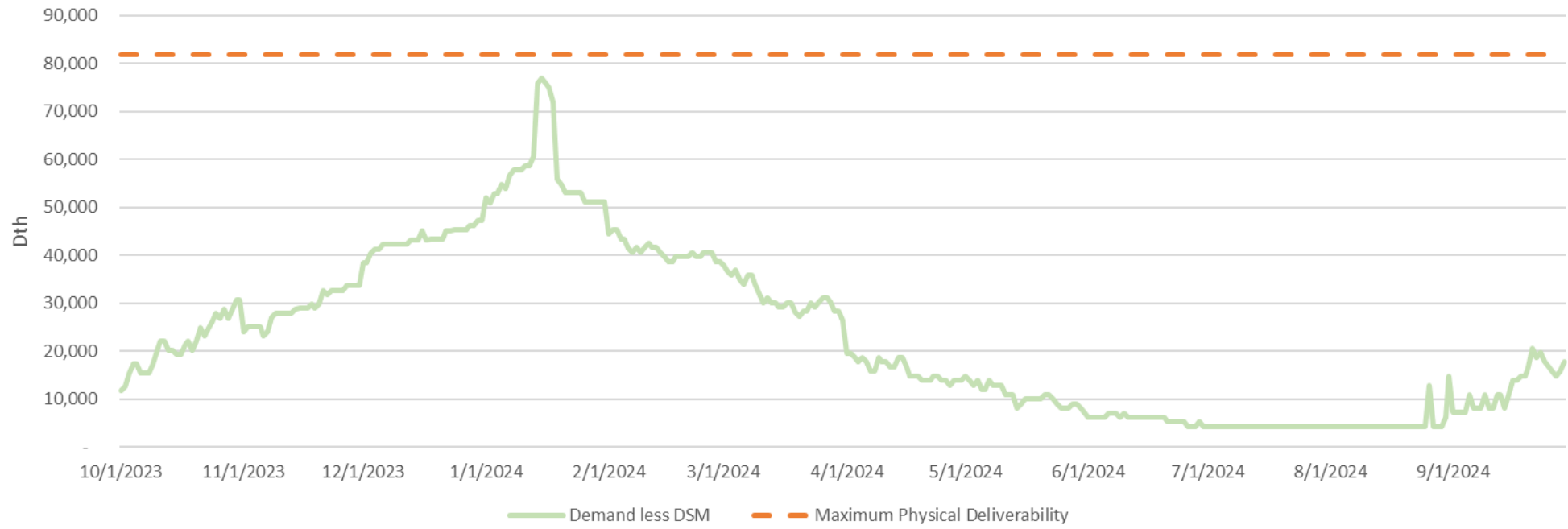


— Demand less DSM - - - Maximum Physical Deliverability

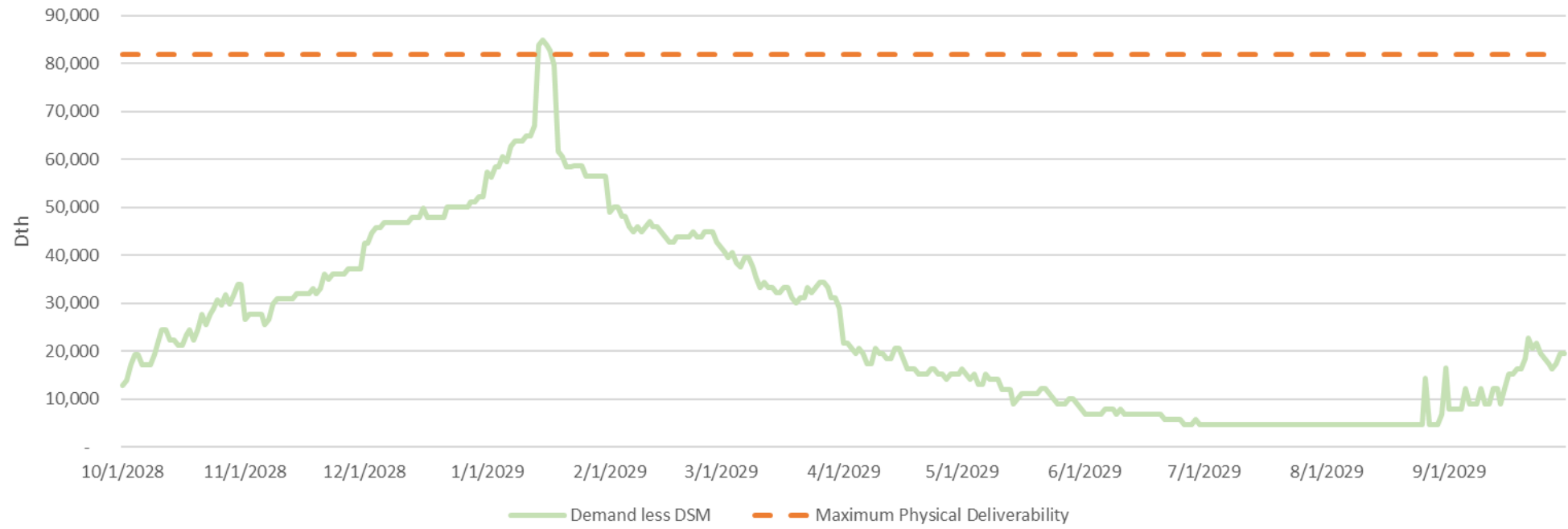
2028 Load Demand Curve
Design Base Case
Canyon County Lateral



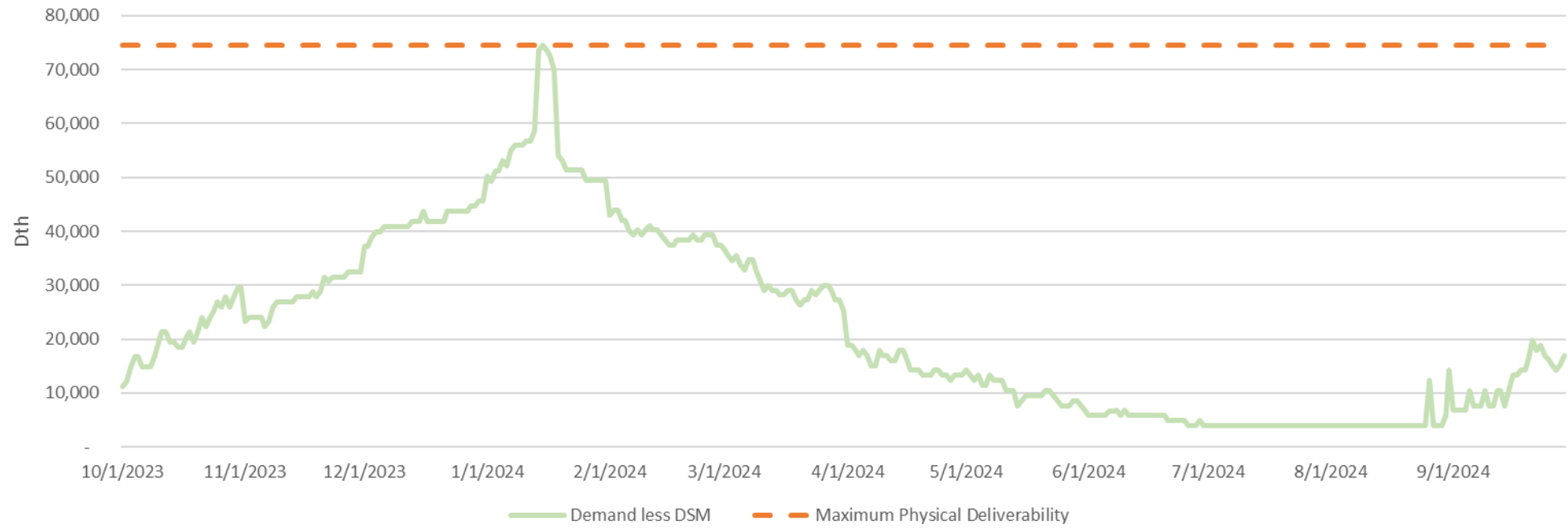
2023 Load Demand Curve
Design Base Case
State Street Lateral



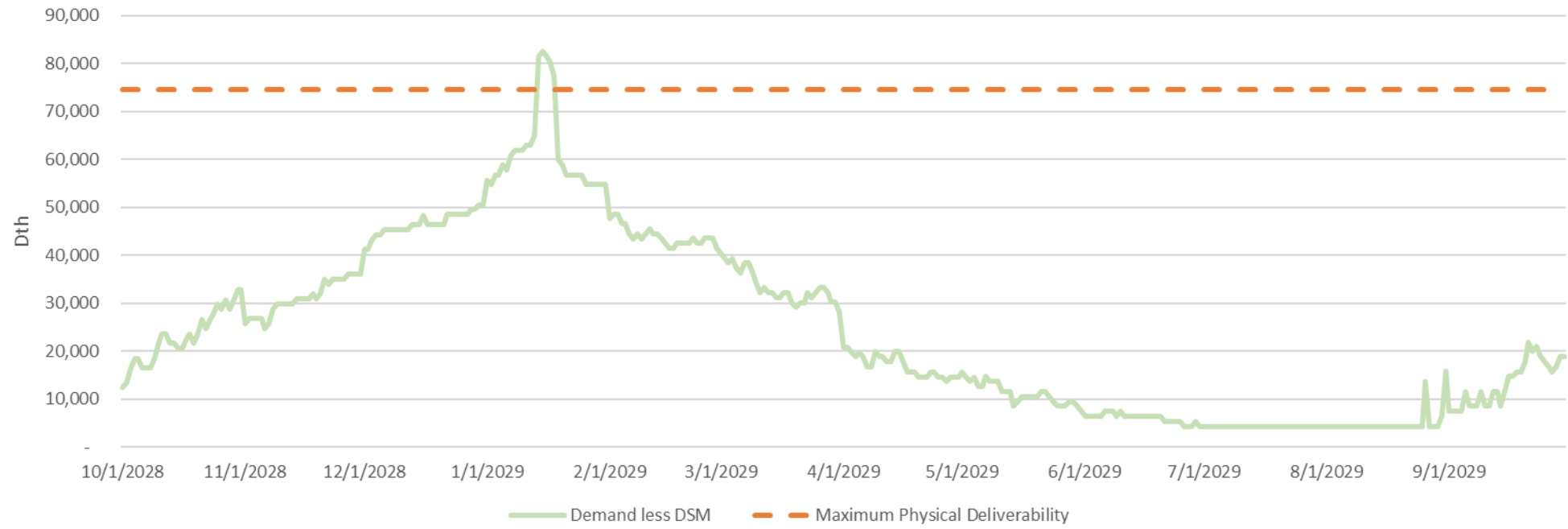
2028 Load Demand Curve
Design Base Case
State Street Lateral



2023 Load Demand Curve
Design Base Case
Central Ada Lateral



2028 Load Demand Curve
Design Base Case
Central Ada Lateral





QUESTIONS?

DISTRIBUTION SYSTEM ENHANCEMENTS

KATHLEEN CAMPBELL, P.E. - SENIOR ENGINEER - ENGINEERING SERVICES
ZACHARY SOWARDS - ENGINEER III – ENGINEERING SERVICES

IGRAC #2 COVERED:

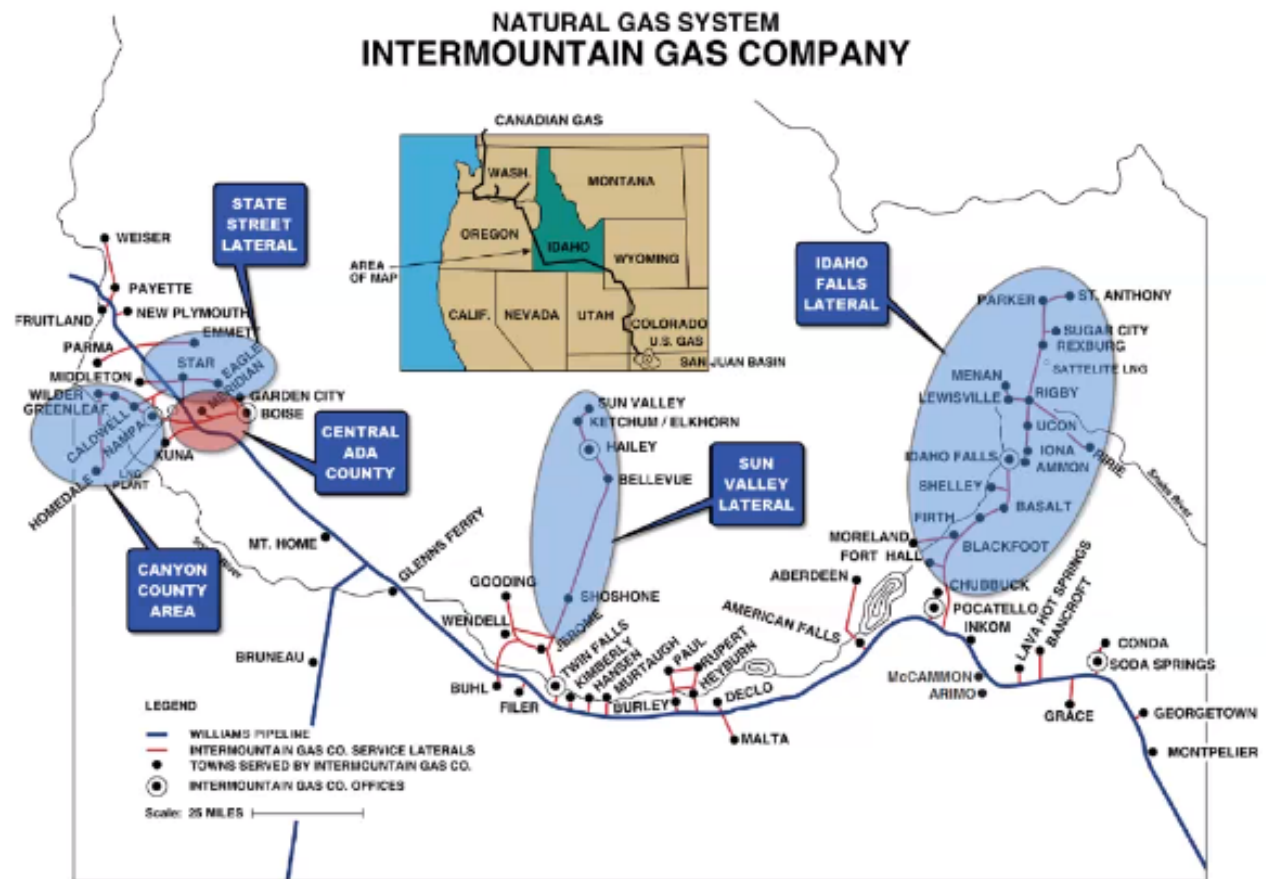
- System dynamics
- Synergi model process
- Identification of system deficits/constraints
- Distribution enhancement/reinforcement options to address deficit
- Enhancement considerations and selection process into 5-year budget

THIS PRESENTATION WILL COVER:

- Project needs to support core growth for each AOI
- Alternative Analysis to resolve deficit (if it has not already been covered in a previous IRP)
- Timing, Cost and capacity gained for each project/alternative.

AREAS OF INTEREST (AOI)

- Distribution System Segments:
 - Canyon County
 - Central Ada County Lateral
 - “North of State Street” Lateral
 - Sun Valley Lateral
 - Idaho Falls Lateral
 - All Other Customers



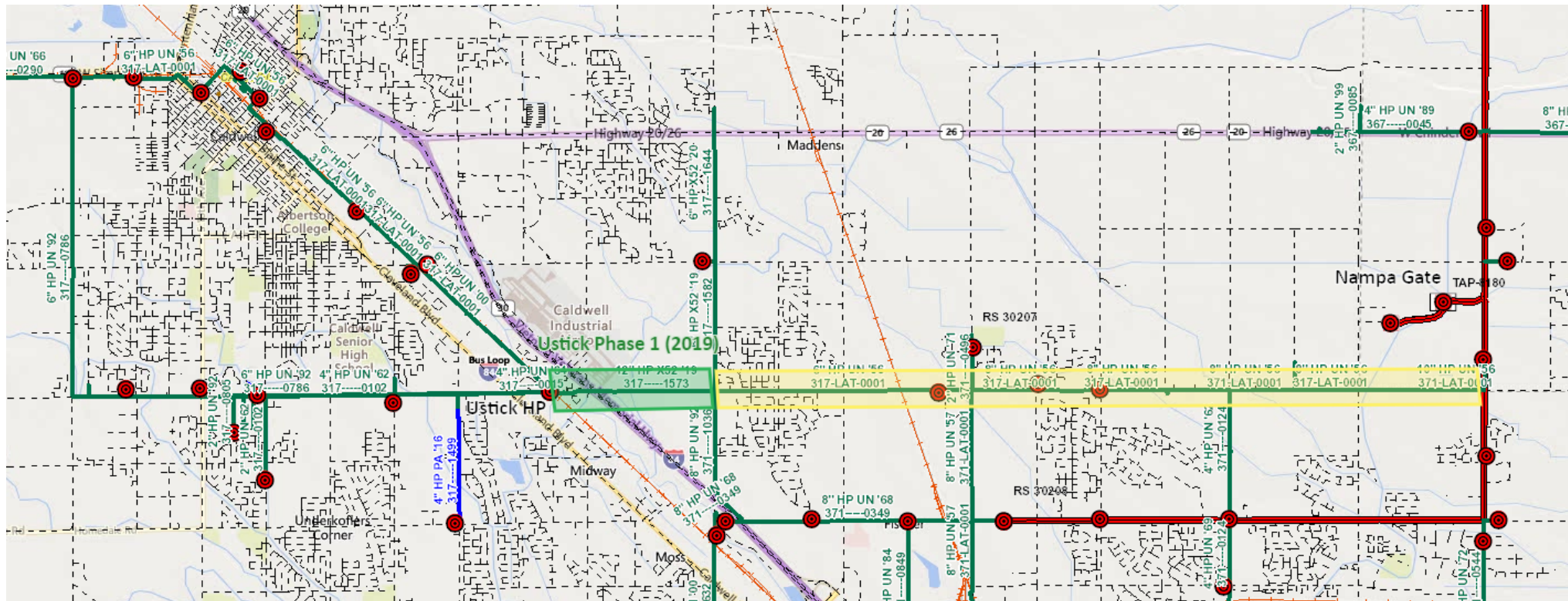
OTHER AOI

- Reinforcements required to meet 2028 growth predictions
 - Payette Gate Upgrade
 - 2024 - \$3.49M
 - New Plymouth Gate Upgrade
 - 2024 - \$2.67M

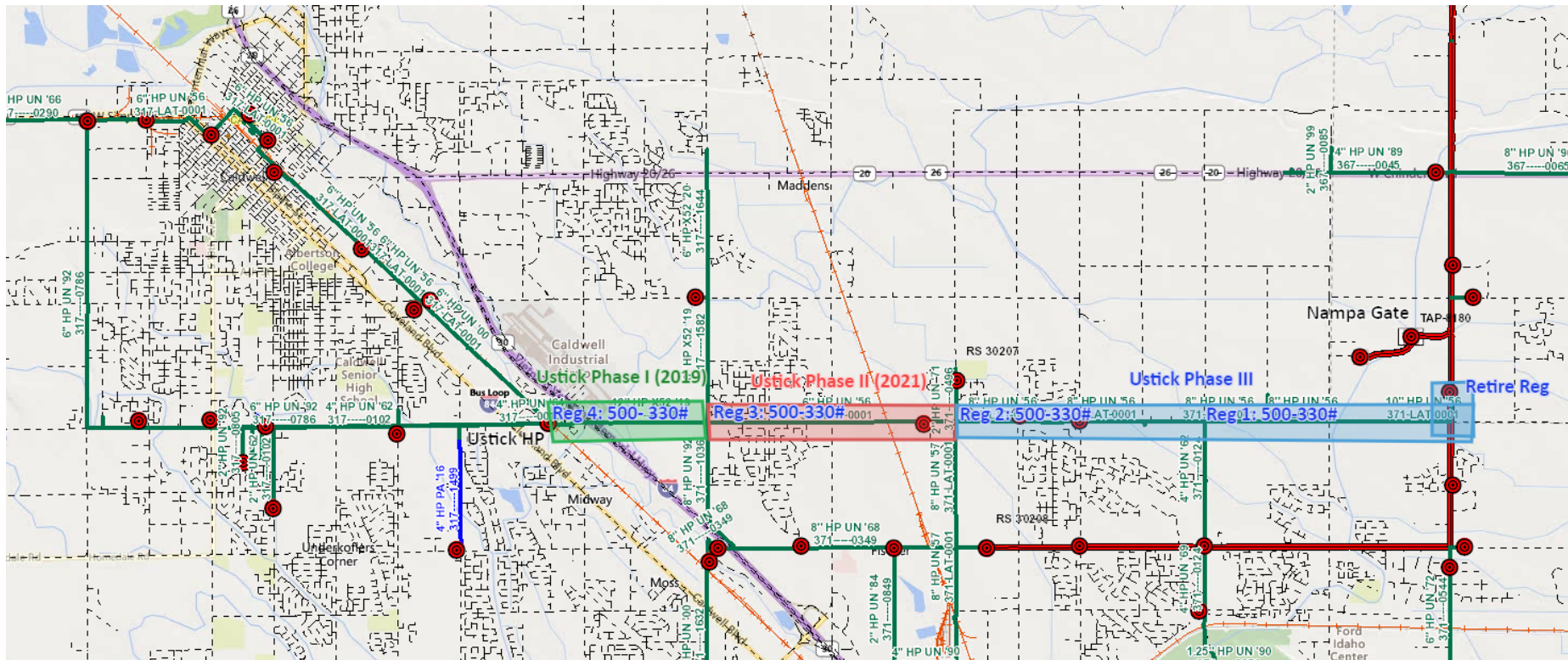
CANYON COUNTY AOI

- Requires reinforcements by 2023 to meet IRP growth predictions
- AOI capacity limiter: 6-inch, 8-inch and 10-inch HP bottleneck on Ustick Rd
- Alternatives considered were discussed in 2021 IRP
- Ustick Phase III was selected in 2021 IRP
- Ustick Phase III has been designed and permitted and will begin construction in August 2023
- Ustick Phase III is estimated to cost \$12.8M

CANYON COUNTY - BOTTLENECK



CANYON COUNTY : USTICK PHASE III



STATE STREET LATERAL AOI

- Requires reinforcements by 2025 & 2026 to meet IRP growth predictions
- AOI Capacity Limiter: 12-inch HP bottleneck on State Street and 4 in HP bottleneck on Linder Rd & State Penn (Boise #2) Gate Capacity
- Alternatives considered for 12-inch HP & 4- HP bottleneck were discussed in 2021 IRP
- State Street Phase II Upgrade was selected in 2021 IRP
- State Street Phase II is budgeted for 2024
- State Street Phase II is estimated to cost \$902K
- State Penn Gate Upgrade is budgeted for 2025 Design and 2026 Construction
- State Penn Gate Upgrade is estimated to cost \$2.73M

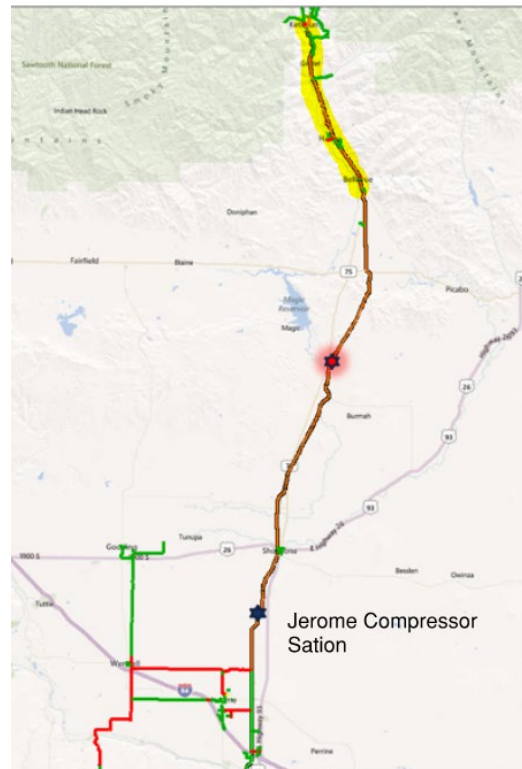
CENTRAL ADA COUNTY AOI

- Requires reinforcements by 2023 to meet IRP growth predictions
- AOI Capacity Limiter: 10-inch and 8-inch HP bottleneck on Meridian Rd and Victory Rd
- Alternatives considered were discussed in 2021 IRP
- 12-inch South Boise Loop was selected in 2021 IRP
- 12-inch South Boise Loop will be online in Fall of 2023
- 12-inch South Boise Loop is estimated to cost \$17.9M

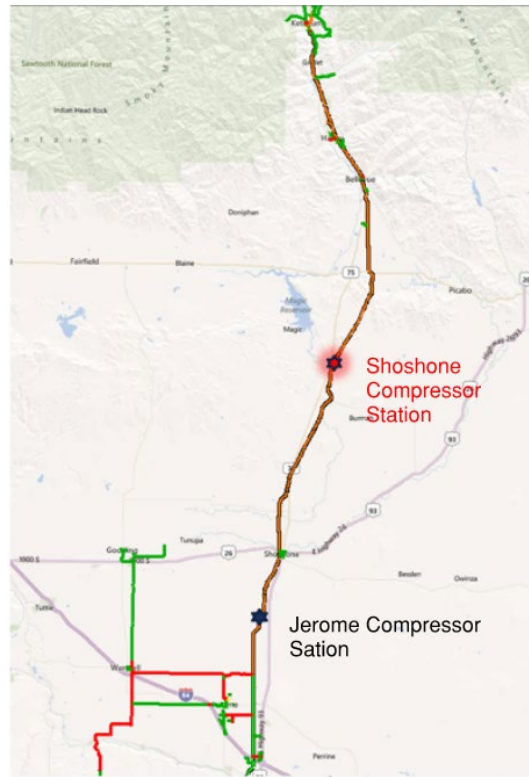
SUN VALLEY LATERAL AOI

- Requires reinforcements by 2023 to meet IRP growth predictions.
- AOI Capacity Limiter: End of line pressure to Ketchum area
- Alternatives considered were discussed in the 2019 IRP
- Shoshone Compressor Station was selected in 2019 IRP
- Shoshone Compressor Station is scheduled for commissioning in August
- Shoshone Compressor Station is estimated to cost \$6.7M

SUN VALLEY LATERAL AOI - BOTTLENECK



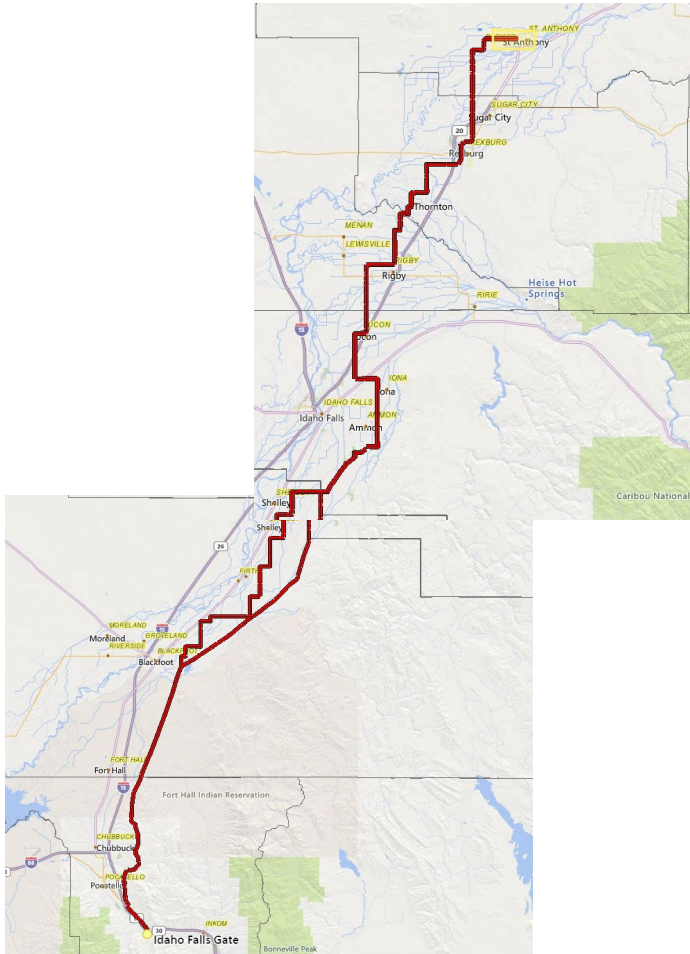
SHOSHONE COMPRESSOR STATION



IDAHO FALLS LATERAL AOI

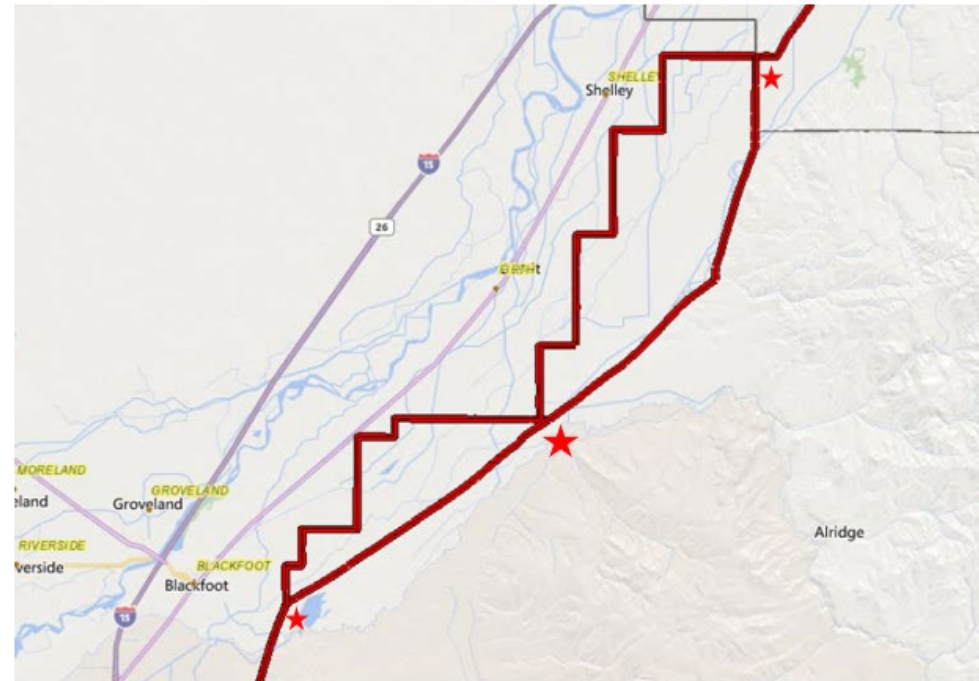
- Requires reinforcements by 2024 to meet IRP growth predictions.
- AOI Capacity Limiter: End of line pressure to St. Anthony's
- Alternatives considered were discussed in the 2021 IRP
- Blackfoot Compressor Station was selected in 2021 IRP
- Blackfoot Compressor Station has been ordered and will be installed in 2024
- Blackfoot Compressor Station is estimated to cost \$20M

IDAHO FALLS AOI - BOTTLENECK



BLACKFOOT COMPRESSOR STATION

3 Potential Compressor Locations:



AOI CAPACITY SUMMARY AND TIMING NEEDS:

Year	Ada County AOI Capacity (th/day)	Ada County AOI Reinforcement Required	State Street Lateral AOI Capacity (th/day)	State Street Lateral AOI Reinforcement Required	Canyon County AOI Capacity (th/day)	Canyon County AOI Reinforcement Required	Sun Valley Lateral AOI Capacity (th/day)	Sun Valley AOI Reinforcement Required	Idaho Falls Lateral AOI Capacity (th/day)	Idaho Falls AOI Reinforcement Required
2023	870,000	12-inch S Boise Loop	820,000	None	1,390,000.00	12-inch Ustick Phase III	247,500	Shoshone Compressor Station	904,000.00	None
2024	870,000	None	820,000	None	1,390,000.00	None	247,500	None	1,093,000.00	IFL Compressor Station
2025	870,000	None	950,000	State Street Uprate	1,390,000.00	None	247,500	None	1,093,000.00	None
2026	870,000	None	950,000	State Penn Gate Upgrade	1,390,000.00	None	247,500	None	1,093,000.00	None
2027	870,000	None	950,000	None	1,390,000.00	None	247,500	None	1,093,000.00	None
2028	870,000	None	950,000	None	1,390,000.00	None	247,500	None	1,093,000.00	None



QUESTIONS?



IRP OPTIMIZATION MODEL

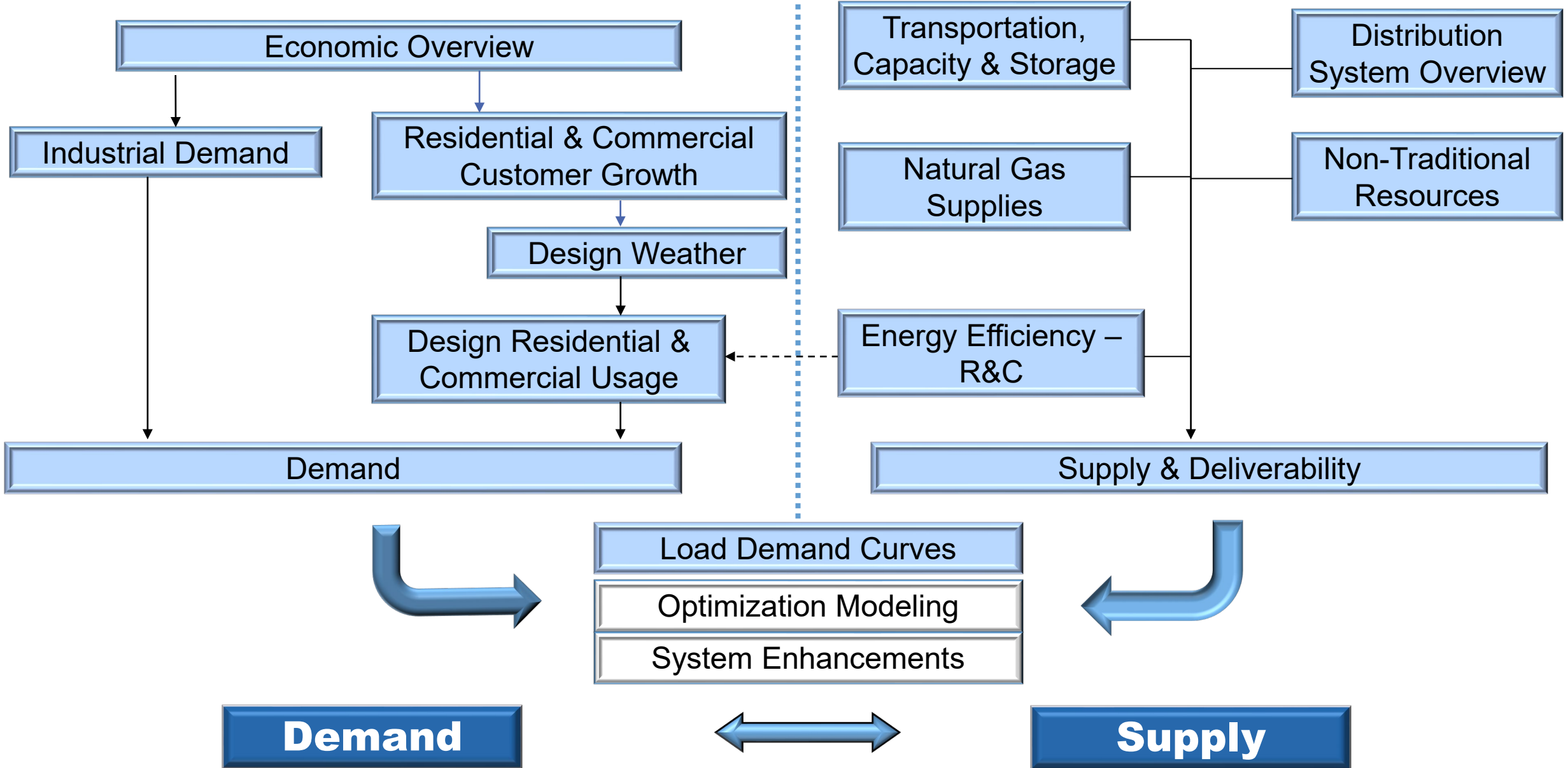
Draft Design Base Results

JENNY DE BOER; RESOURCE PLANNING ECONOMIST I

BRIAN ROBERTSON; SUPERVISOR, RESOURCE PLANNING

Demand

Supply & Delivery Resources



IRP OPTIMIZATION MODELING

- **IGC IRP Model “Integrates”/Coordinates all the main functional elements of IGC operation:**
 - Gas Demand/Load, how much & where is gas consumed, “Load Duration Curve” (LDC) by area of interest.
 - Gas Supply, from where, how much, and what price is gas supplied to meet demand (LDC).
 - Gas Transport, how does gas move from supply to demand area given pipeline size and prices.
 - Demand Side Management (DSM), cost effective energy efficiency is used to reduce demand
 - Local Gas Distribution, local lateral sizing is explicitly modeled to meet demand & ensure reliability
 - The IRP model utilizes PLEXOS[®], a linear optimization model, to determine the least cost manner to have loads served by supply, transport, DSM & laterals.

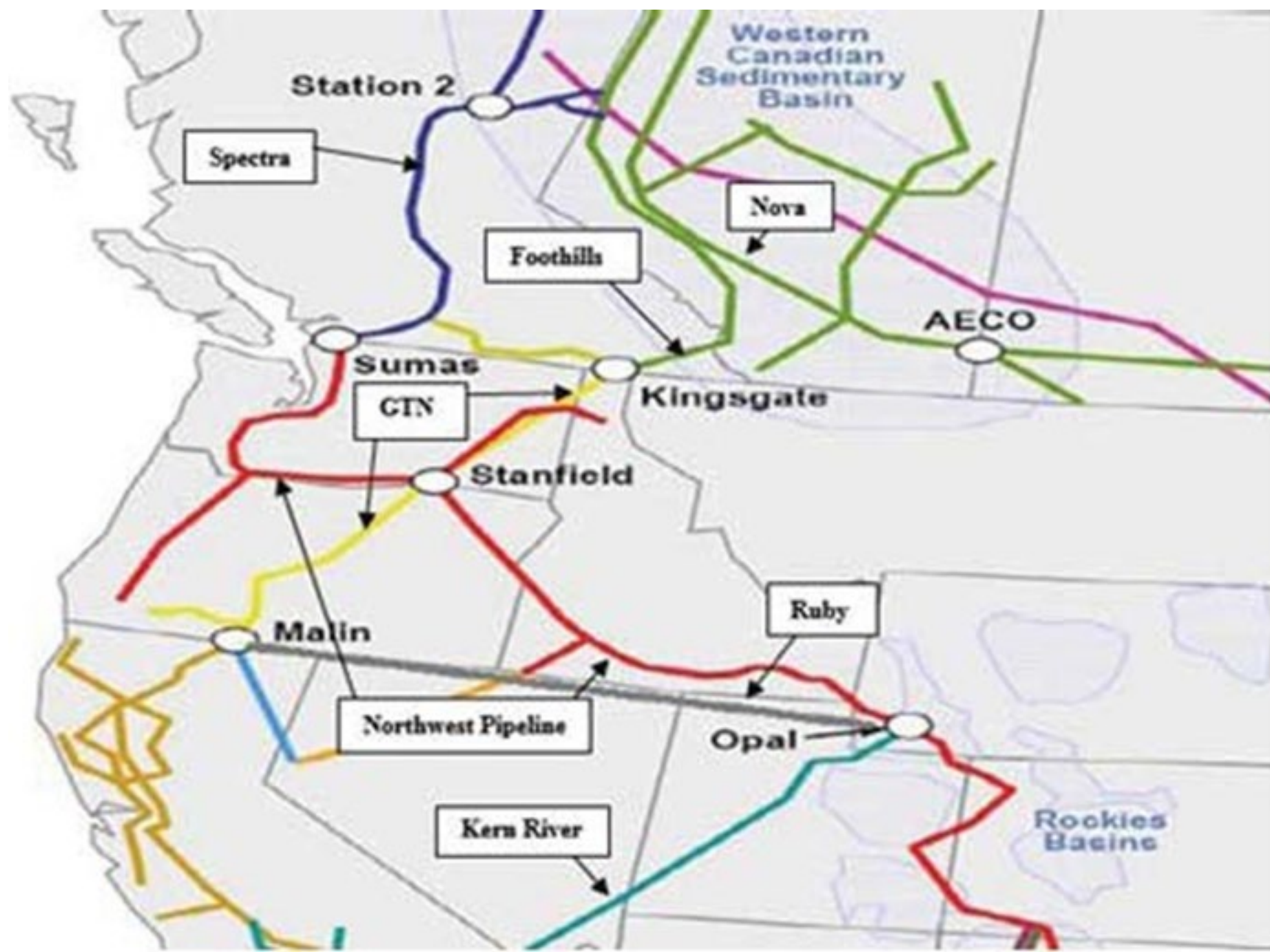
All results presented here are draft subject to further IGC review.

WHAT IS OPTIMIZATION?

- Utilizes a ***standard*** mathematical technique called “linear programming” ...to optimize over all possible combinations.
- The model knows the exact load and price for every day of the planning period based on the analyst’s input and can therefore minimize costs in a way that would not be possible in the real world.
- Therefore, it is important to recognize that linear programming analysis provides helpful but not perfect information to guide decisions.
- Selects from a mix of resources over planning horizon to meet forecasted loads.

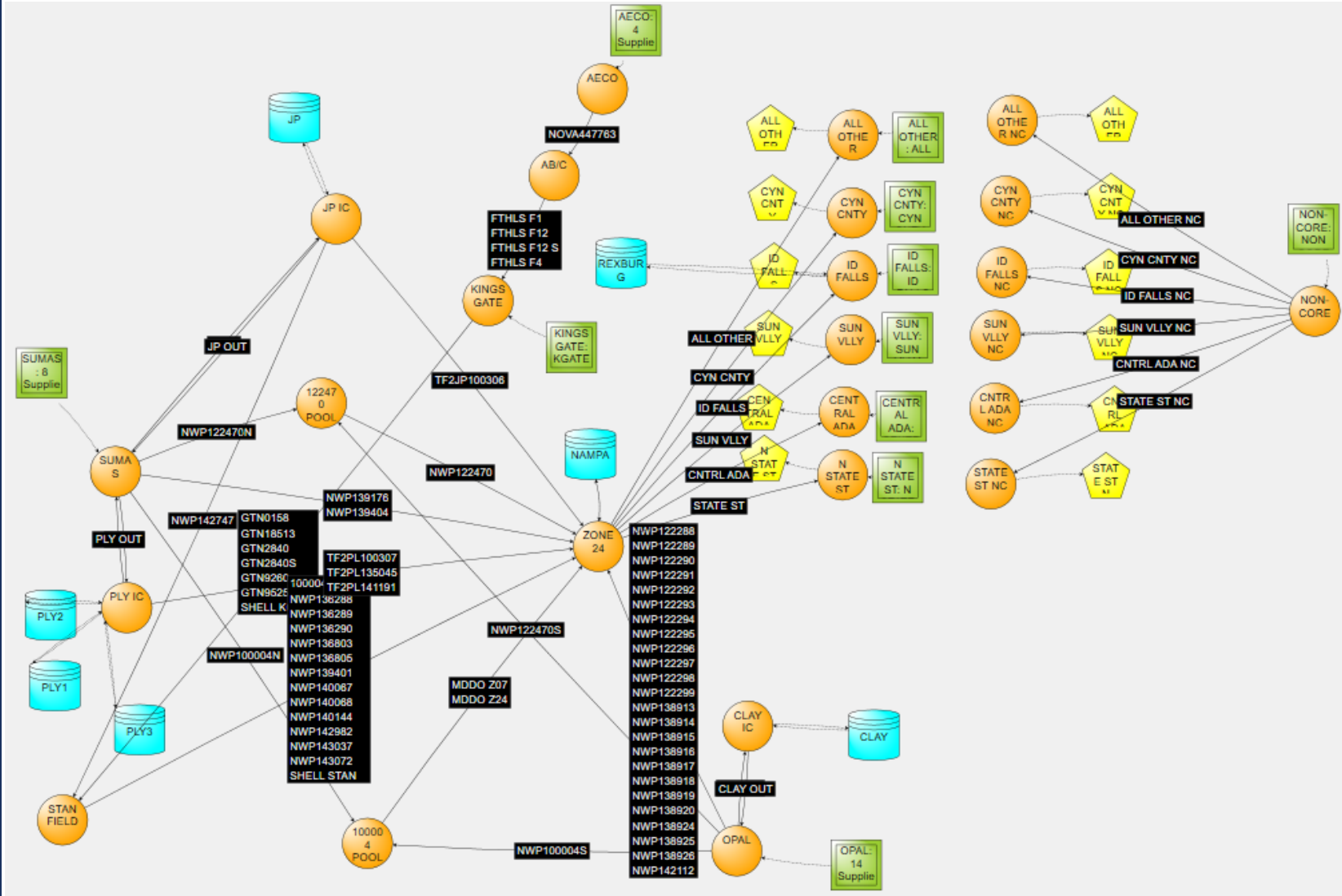
MODEL ELEMENTS

- Functional components:
 - Demand forecast (Area's of Interest)
 - Traditional supply resources
 - Existing and potential gas supplies by basin
 - Storage resources
 - Transportation capacity resources
 - Price forecast
 - Non-traditional supply e.g., new distribution capacity, RNG, DSM etc.



MODEL STRUCTURE

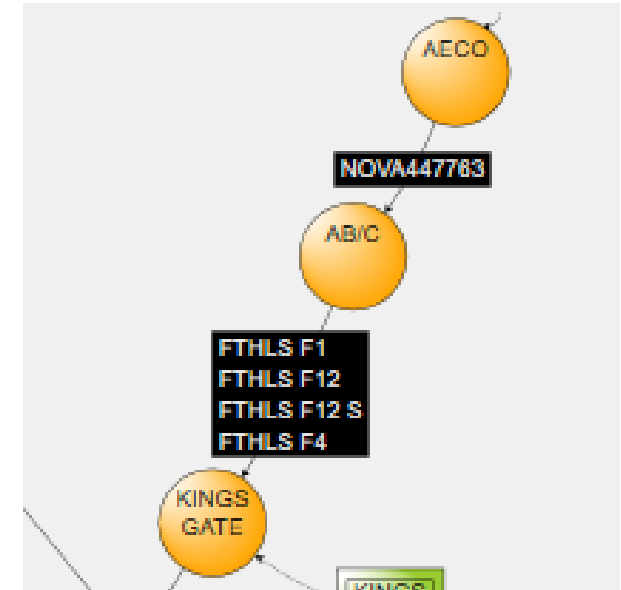
Transport, Storage, Supply, & Demand Areas to Idaho (IGC)



MODEL STRUCTURE

Transport

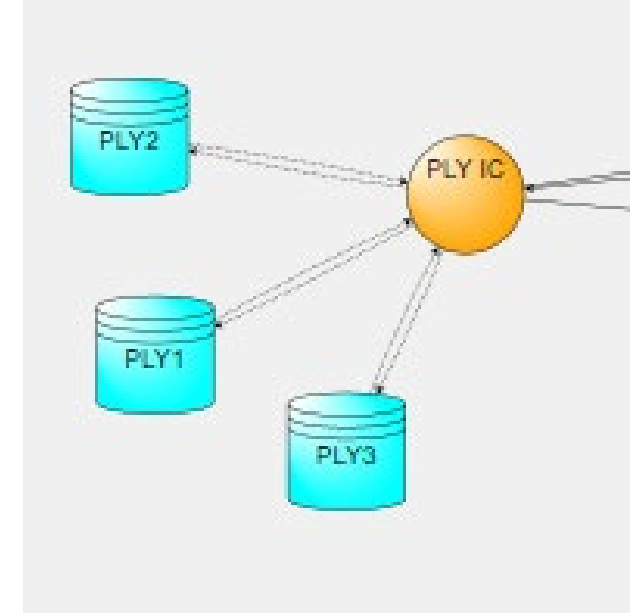
- Transportation contracts are the means of how Intermountain gets the gas from the supplier to the end user.
- Transportation has an MDQ, a Reservation Charge (DI rate), a Flow Charge (transportation rate), and a fuel loss percentage.
- A maximum delivery quantity (MDQ) which is the maximum amount of gas Intermountain can move on the pipeline on a single day.
- A DI rate which is the reservation rate to have the ability to move the MDQ amount on the pipeline.
- A transportation rate which is the rate per dekatherm that is actually moved on the pipeline.
- The fuel loss percentage is the statutory percent of gas based on the tariff from the pipeline that is lost and unaccounted for from the point of where the gas was purchased to the citygate.



MODEL STRUCTURE

Storage

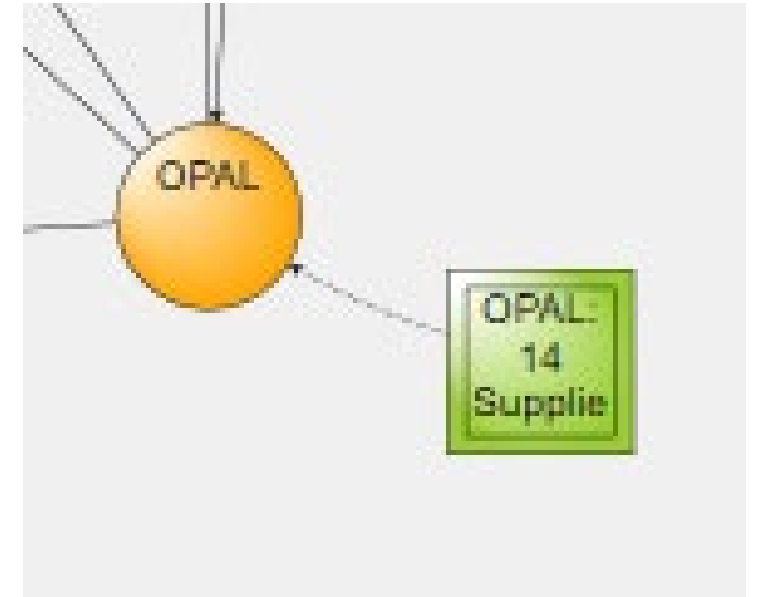
- Intermountain has storage at 5 locations: Jackson Prairie (JP), Plymouth (Ply), Clay Basin, Nampa, and Rexburg.
- Storage injections targets are set at 35% by the end of June, 80% by the end of August, and 100% by the end of September to emulate cycling storage for non-needle peaking storage.
- Intermountain can withdrawal approximately 30,377 dth per day from JP, 155,175 dth per day from Plymouth, and 70,144 dth per day from Clay Basin for a total of approximately 255,626 dth per day of off-system storage.
- Intermountain can withdrawal approximately 60,000 dth per day from Nampa and 5,500 dth per day from Rexburg for a total of approximately 65,500 dth per day of on-system storage.



MODEL STRUCTURE

Supply

- Intermountain can purchase gas at three markets; AECO, SUMAS, and OPAL.
- At each market Intermountain can purchase gas at different locations along the pipeline.
- For each year, Intermountain uses Base, Winter base, Summer and Winter day gas, and Peak day incremental supplies as inputs.
- Over the planning horizon, the contracts are renewed in November and April.



MODEL STRUCTURE

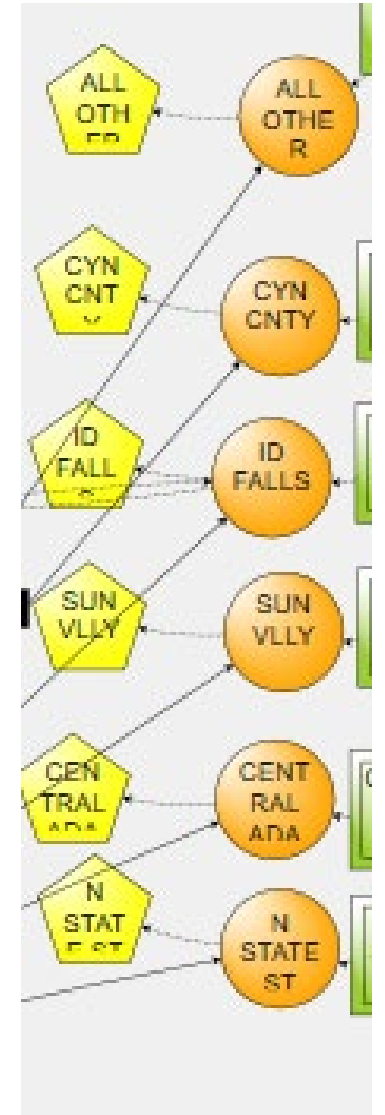
Supply



MODEL STRUCTURE

Demand Area

- Demand is forecasted at the five areas of interest, as well as all other customers.
- Demand is determined by the load demand curves.
- Each area of interest has DSM, which decrements demand at the avoided cost price.



Lateral Capacity Summary By Year

2023 Base Year (Dth)						
Area of Interest	Core Peak Day	Deliverability	% of Deliverability	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	66,430	65,434	102%	86,121	90,400	95%
SUN VALLEY	18,074	17,803	102%	19,784	20,000	99%
CANYON COUNTY	77,739	76,572	102%	101,399	103,200	98%
STATE STREET	74,536	73,418	102%	75,346	82,000	92%
CENTRAL ADA	72,896	71,803	102%	72,996	74,500	98%
ALL OTHER	179,722	177,025	102%	276,942		

2024 Year 2 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	68,118	68,022	100%	86,609	90,400	96%
SUN VALLEY	18,330	18,304	100%	20,040	20,000	100%
CANYON COUNTY	80,650	80,536	100%	104,310	103,200	101%
STATE STREET	76,141	76,034	100%	76,951	82,000	94%
CENTRAL ADA	74,488	74,383	100%	74,588	74,500	100%
ALL OTHER	183,036	182,777	100%	280,656		

2025 Year 3 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	69,832	68,195	102%	88,423	90,400	98%
SUN VALLEY	18,586	18,150	102%	20,296	20,000	101%
CANYON COUNTY	83,549	81,591	102%	107,409	103,200	104%
STATE STREET	77,743	75,920	102%	78,553	82,000	96%
CENTRAL ADA	76,077	74,294	102%	76,177	74,500	102%
ALL OTHER	186,272	181,905	102%	283,892		

DRAFT MODEL RESULTS - LATERALS

DRAFT MODEL RESULTS - LATERALS

2026 Year 4 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	71,533	57,738	124%	90,124	90,400	100%
SUN VALLEY	18,838	15,205	124%	20,548	20,000	103%
CANYON COUNTY	86,620	69,916	124%	110,480	103,200	107%
STATE STREET	79,343	64,042	124%	80,153	82,000	98%
CENTRAL ADA	77,664	62,687	124%	77,764	74,500	104%
ALL OTHER	189,530	152,980	124%	287,570		

2027 Year 5 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	73,239	57,862	127%	91,870	90,400	102%
SUN VALLEY	19,093	15,084	127%	20,803	20,000	104%
CANYON COUNTY	89,520	70,725	127%	113,380	103,200	110%
STATE STREET	80,942	63,948	127%	81,752	82,000	100%
CENTRAL ADA	79,251	62,612	127%	79,351	74,500	107%
ALL OTHER	192,821	152,337	127%	291,461		

2028 Year 6 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	74,943	57,977	129%	93,574	90,400	104%
SUN VALLEY	19,348	14,968	129%	21,058	20,000	105%
CANYON COUNTY	92,441	71,513	129%	116,301	103,200	113%
STATE STREET	82,542	63,856	129%	83,352	82,000	102%
CENTRAL ADA	80,838	62,537	129%	80,938	74,500	109%
ALL OTHER	196,116	151,718	129%	294,806		

DISTRIBUTION SYSTEM SHORTFALL SOLVES

- ADA County – Bend 12-inch S Boise Loop
- State Street – State Street Upgrade and State Penn Gate Upgrade
- Canyon County – 12-inch Ustick Phase III
- Sun Valley Lateral – Shoshone Compressor Station
- Idaho Falls – IFL Compressor Station

TRANSPORTATION SHORTFALL SOLVES

- Contract Renewals
- GTN Xpress
- Alternative Transportation Uptake
- Renewable Natural Gas
- Others?

Lateral Capacity Summary By Year

2023 Base Year (Dth)						
Area of Interest	Core Peak Day	Deliverability	% of Deliverability	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	66,430	76,156	87%	86,120	90,400	95%
SUN VALLEY	18,070	20,716	87%	19,780	24,750	80%
CANYON COUNTY	77,740	89,122	87%	101,400	139,000	73%
STATE STREET	74,540	85,454	87%	75,350	82,000	92%
CENTRAL ADA	72,900	83,574	87%	73,000	87,000	84%
ALL OTHER	179,720	206,034	87%	276,940		

2024 Year 2 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	68,060	78,775	86%	86,550	109,300	79%
SUN VALLEY	18,320	21,204	86%	20,030	24,750	81%
CANYON COUNTY	80,560	93,243	86%	104,220	139,000	75%
STATE STREET	76,040	88,012	86%	76,850	82,000	94%
CENTRAL ADA	74,390	86,102	86%	74,490	87,000	86%
ALL OTHER	182,920	211,719	86%	280,540		

2025 Year 3 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	69,720	78,982	88%	88,310	109,300	81%
SUN VALLEY	18,570	21,037	88%	20,280	24,750	82%
CANYON COUNTY	83,380	94,457	88%	107,240	139,000	77%
STATE STREET	77,550	87,852	88%	78,360	95,000	82%
CENTRAL ADA	75,880	85,960	88%	75,980	87,000	87%
ALL OTHER	186,050	210,766	88%	283,670		

DRAFT MODEL RESULTS - LATERALS

2026 Year 4 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	71,350	75,440	95%	89,940	109,300	82%
SUN VALLEY	18,810	19,888	95%	20,520	24,750	83%
CANYON COUNTY	86,380	91,332	95%	110,240	139,000	79%
STATE STREET	79,060	83,592	95%	79,870	95,000	84%
CENTRAL ADA	77,380	81,816	95%	77,480	87,000	89%
ALL OTHER	189,200	200,046	95%	287,240		

2027 Year 5 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	72,980	75,587	97%	91,610	109,300	84%
SUN VALLEY	19,050	19,731	97%	20,760	24,750	84%
CANYON COUNTY	89,210	92,397	97%	113,070	139,000	81%
STATE STREET	80,570	83,449	97%	81,380	95,000	86%
CENTRAL ADA	78,870	81,688	97%	78,970	87,000	91%
ALL OTHER	192,390	199,264	97%	291,030		

2028 Year 6 (Dth)						
Area of Interest	Core Peak Day	Transport	% of Transport	Total Peak Day	Capacity	% of Capacity
IDAHO FALLS	74,600	75,714	99%	93,230	109,300	85%
SUN VALLEY	19,290	19,578	99%	21,000	24,750	85%
CANYON COUNTY	92,070	93,445	99%	115,930	139,000	83%
STATE STREET	82,080	83,306	99%	82,890	95,000	87%
CENTRAL ADA	80,370	81,570	99%	80,470	87,000	92%
ALL OTHER	195,580	198,501	99%	294,270		

DRAFT MODEL RESULTS - LATERALS

DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY

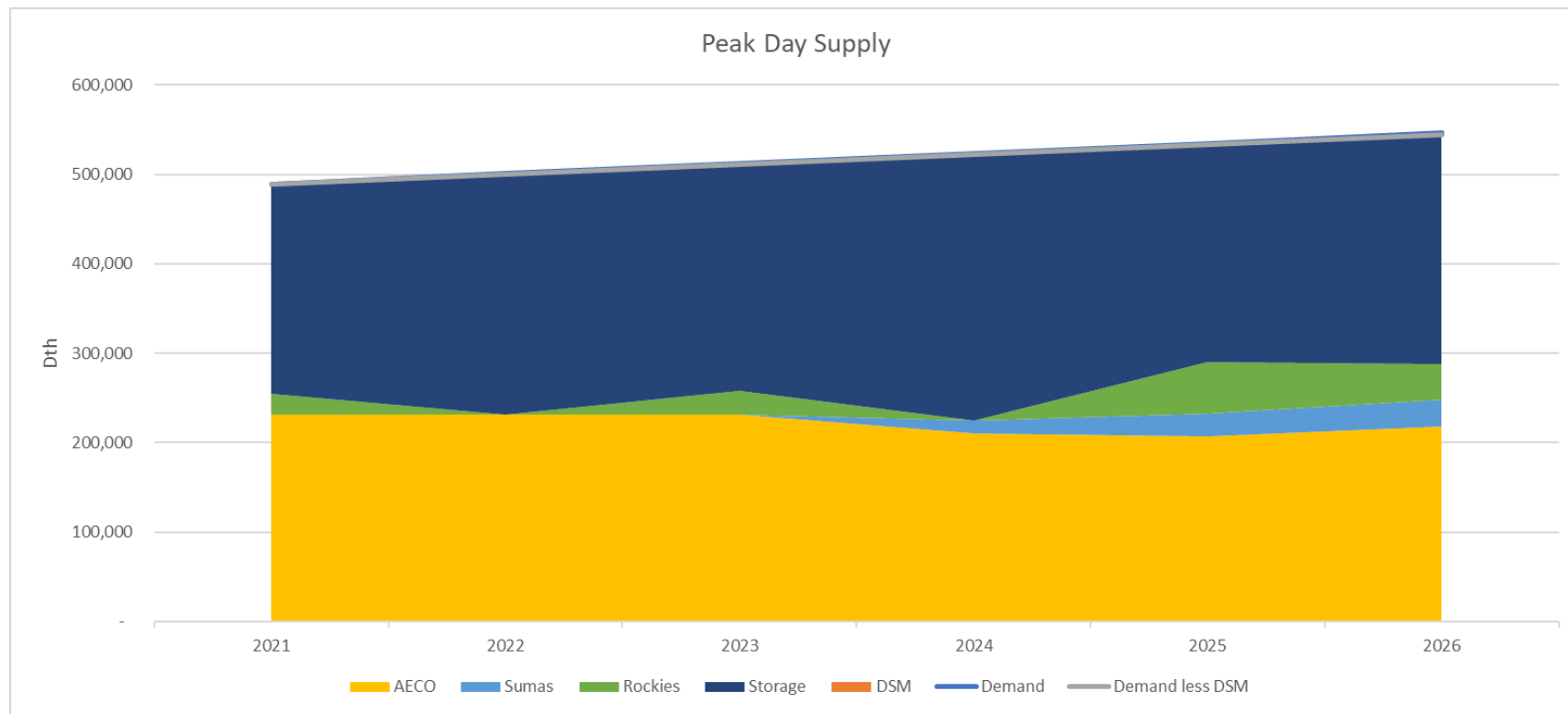
Supply Area	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
AECO	4,574,030	5,911,230	7,178,870	7,178,870	6,715,720	6,641,870	3,437,110	2,328,310	1,331,320	1,266,320	1,402,300	2,804,780
Sumas	310,000	-	-	-	-	90,000	300,000	744,440	300,000	310,000	310,000	300,000
Rockies	310,000	-	-	-	-	-	300,000	310,000	300,000	310,000	310,000	300,000
ALL OTHER	3,540	3,430	3,540	3,540	3,320	3,540	3,430	3,540	3,430	3,540	3,540	3,430
CENTRAL ADA	3,070	2,970	3,070	3,070	2,870	3,070	2,970	3,070	2,970	3,070	3,070	2,970
CYN CNTY	2,750	2,660	2,750	2,750	2,570	2,750	2,660	2,750	2,660	2,750	2,750	2,660
ID FALLS	1,660	1,600	1,660	1,660	1,550	1,660	1,600	1,660	1,600	1,660	1,660	1,600
N STATE ST	3,040	2,940	3,040	3,040	2,840	3,040	2,940	3,040	2,940	3,040	3,040	2,940
SUN VLLY	180	180	180	180	170	180	180	180	180	180	180	180
Storage	0	-	1,874,520	4,408,850	1,610,840	121,550	0	0	0	0	0	0

DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY

Year 6

Supply Area	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28
AECO	2,556,690	3,104,670	6,277,900	6,160,670	5,843,340	4,014,720	1,544,050	1,423,950	1,233,110	1,274,210	1,284,210	1,508,470
Sumas	1,224,890	887,000	916,570	916,570	857,440	916,570	1,187,000	1,026,270	887,000	916,570	919,940	1,057,150
Rockies	1,232,980	1,193,210	1,232,980	1,232,980	1,153,430	1,232,980	1,493,210	1,232,980	1,193,210	1,232,980	1,232,980	1,193,210
ALL OTHER	16,640	16,100	16,640	16,640	15,570	16,640	16,100	16,640	16,100	16,640	16,640	16,100
CENTRAL ADA	14,430	13,960	14,430	14,430	13,500	14,430	13,960	14,430	13,960	14,430	14,430	13,960
CYN CNTY	11,630	11,250	11,630	11,630	10,880	11,630	11,250	11,630	11,250	11,630	11,630	11,250
ID FALLS	10,640	10,300	10,640	10,640	9,960	10,640	10,300	10,640	10,300	10,640	10,640	10,300
N STATE ST	14,260	13,800	14,260	14,260	13,340	14,260	13,800	14,260	13,800	14,260	14,260	13,800
SUN VLLY	1,830	1,770	1,830	1,830	1,710	1,830	1,770	1,830	1,770	1,830	1,830	1,770
Storage	0	1,199,150	1,385,180	4,270,210	1,164,770	1,239,120	0	0	0	0	0	0

DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY



SUMMARY

- Employs Utility Standard Practice Method To Optimize System
- Models DSM & Storage
- Handles storage withdrawal and injection across seasons
- Provides a check on need for lateral expansion.
- Provides a check on transport and supply capacity



QUESTIONS?

FEEDBACK SUBMISSIONS



- IRP.Comments@intgas.com
- Please provide comments and feedback within 10 days