

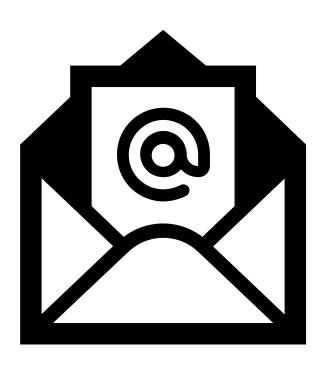
INTEGRATED RESOURCE PLAN

SEPTEMBER 17, 2025
INTERMOUNTAIN GAS RESOURCE ADVISORY COMMITTEE (IGRAC)

WELCOME

- Introductions
- Feedback Process
- Agenda

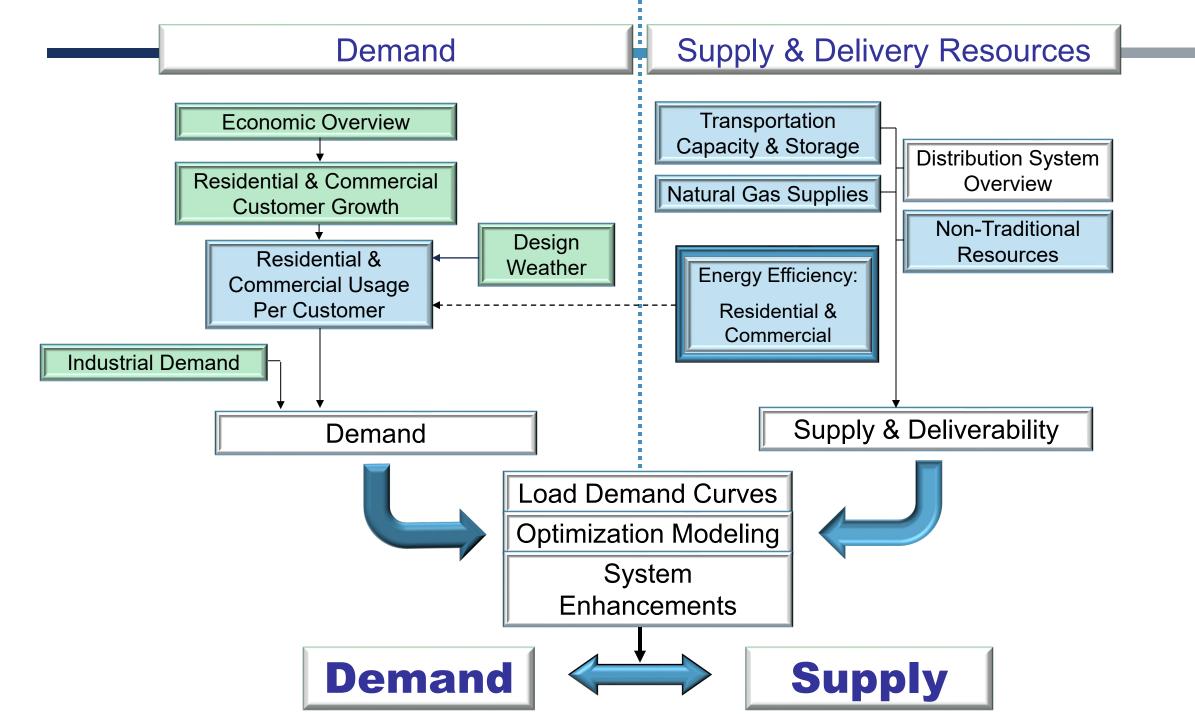
FEEDBACK SUBMISSIONS



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

AGENDA

- Welcome & Introductions Brian Robertson (Manager, Supply Resource Planning)
- Safety Moment Brian Robertson (Manager, Supply Resource Planning)
- Load Demand Curves Ryan Denton (Resource Planning Economist)
- Potential Capacity Enhancements Kathleen Campbell (Senior Engineer)
- Resource Optimization Brian Robertson (Manager, Supply Resource Planning)
- Questions/Discussion



SAFETY MOMENT

BRIAN ROBERTSON
MANAGER, SUPPLY RESOURCE PLANNING

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.

Article Reference: Druley, Kevin. "Protect yourself from lightning." Family Safety & Health Fall 2019. Print.

LOAD DEMAND CURVES

RYAN DENTON
RESOURCE PLANNING ECONOMIST

LOAD DEMAND CURVE KEY VARIABLES

- Customer usage per degree day.
- Low, base and high growth core market customer count projections.
- 'Design weather' conditions.
- Demand-side management (DSM).
- Maximum daily flow quantity (MDFQ) for large volume customers.

PEAK SEASON CORE MARKET LOAD DEMAND CURVE METHODOLOGY

Residential & Commercial Usage per Customer per **Customer Count** HDD Total Daily Usage Degree Day Residential & Commercial Total Daily Usage Demand-Side Management Large Volume MDFQ Total Daily Usage

LOAD DEMAND CURVE

- Load demand curve: A forecast of daily gas demand using weather normal, 'design temperatures', customer counts, and forecasted usage per customer.
- Designed to measure demand to compare to distribution capacity at our 5 areas of interest (AOI).
- To measure total company demand for upstream capacity decisions.
- Based on current resources or resources scheduled to be available during the IRP period.
- Remedies for any constraints will be identified later.
- Storage management.

2025 Load Demand Curve Design Base Case Total Company

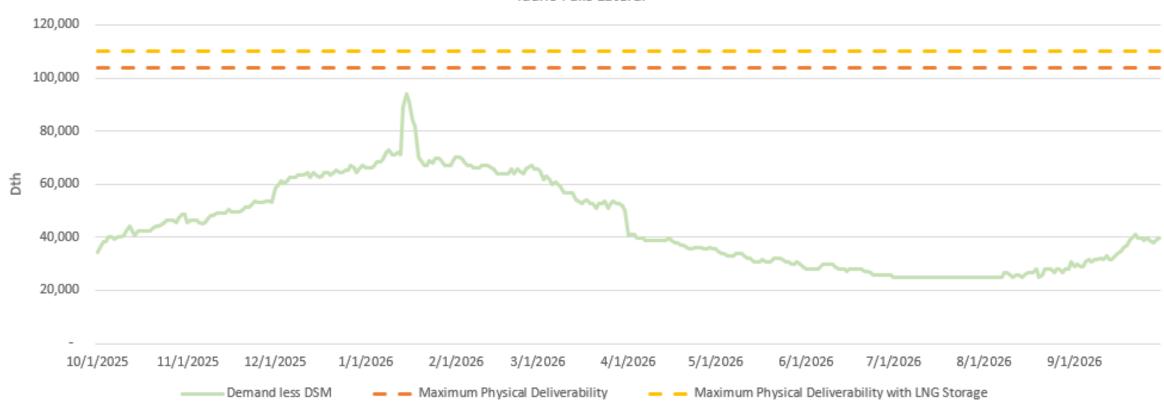


2030 Load Demand Curve Design Base Case Total Company

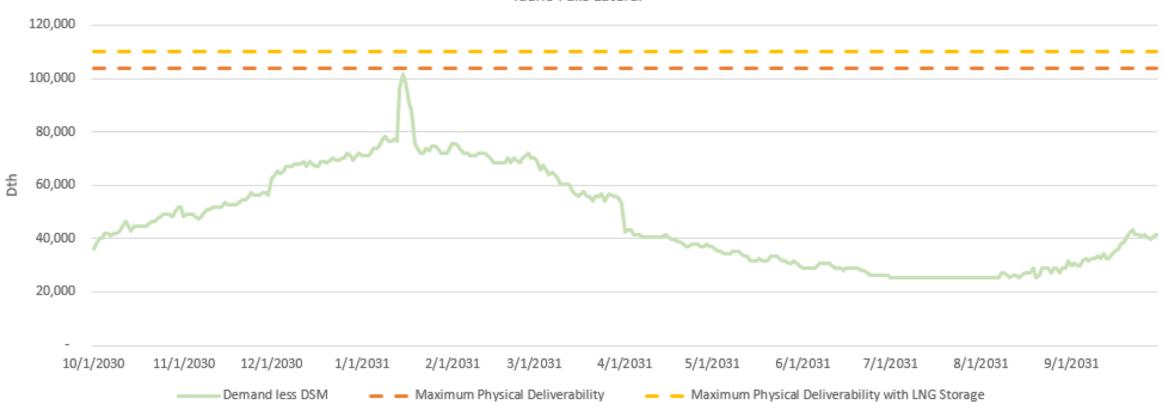


- Idaho Falls Lateral
- Sun Valley Lateral
- Canyon County Lateral
- State Street Lateral
- Central Ada County









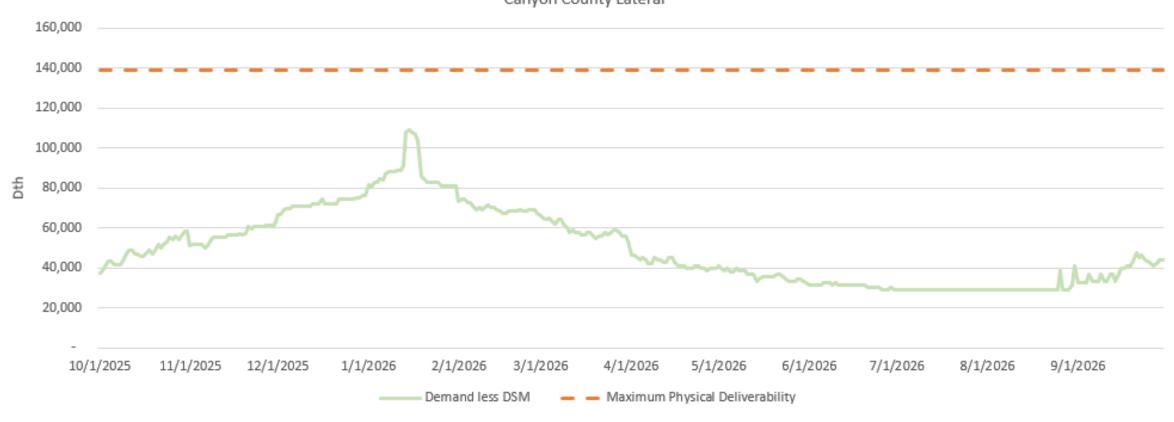




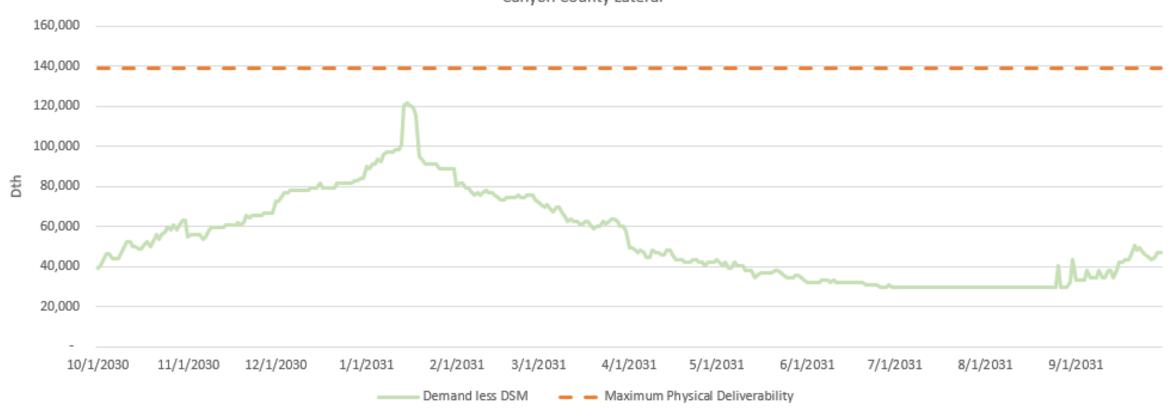




2025 Load Demand Curve Design Base Case Canyon County Lateral







2025 Load Demand Curve Design Base Case State Street Lateral



2030 Load Demand Curve Design Base Case State Street Lateral



2025 Load Demand Curve Design Base Case Central Ada Lateral



2030 Load Demand Curve Design Base Case Central Ada Lateral



QUESTIONS?

DISTRIBUTION SYSTEM ENHANCEMENTS

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

IGRAC #2 COVERED:

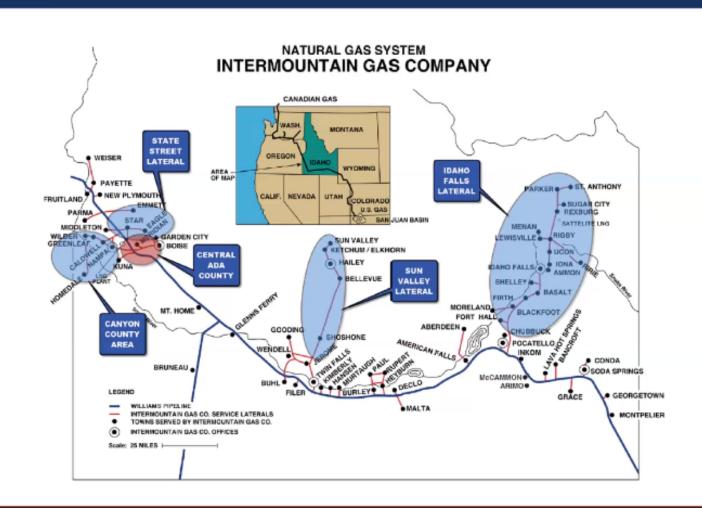
- System dynamics
- Synergi model process
- Identification of system deficits/constraints
- Distribution enhancement/reinforcement options to address deficit
- Enhancement considerations and selection process into 5-year budget

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 2030 growth predictions
 - Caldwell Reinforcement Chinden (HWY 20) from to Prescott Lane to Middleton Road
 - **2027**
 - New Plymouth Gate Upgrade
 - **2027**

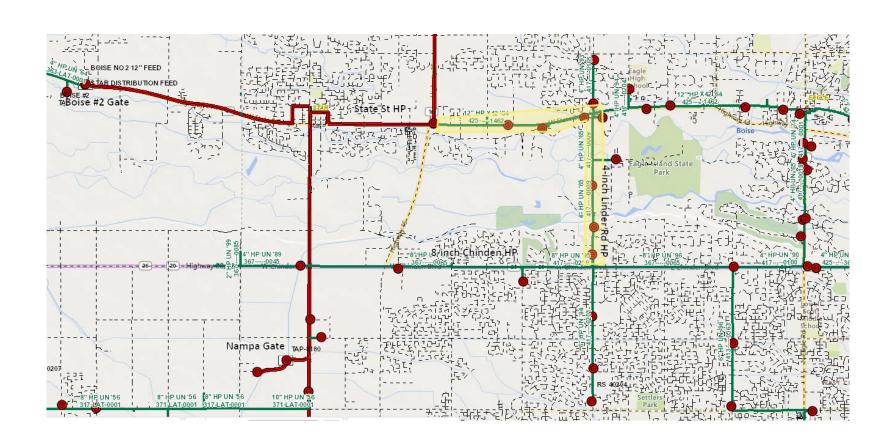
CANYON COUNTY AOI

- No reinforcements required to meet 2030 IRP growth predictions
- AOI Update
 - Ustick Phase 3 was completed in December 2024.

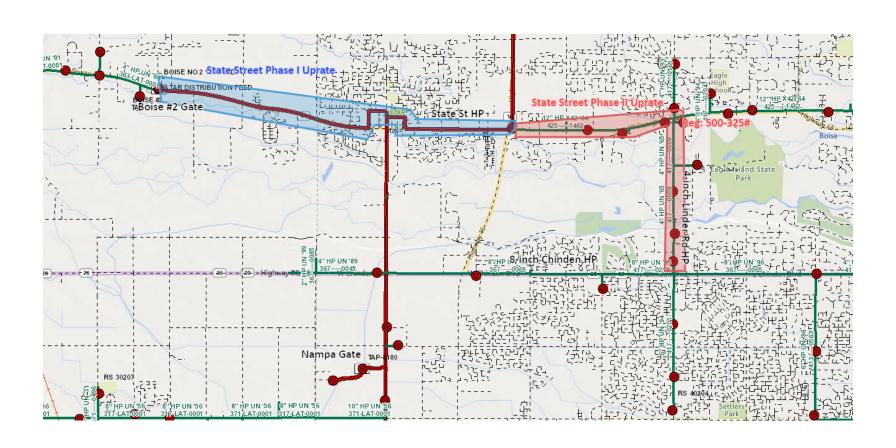
STATE STREET LATERAL AOI

- Requires reinforcements by 2026 & 2027 to meet IRP growth predictions
- AOI Capacity Limiter: I2-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 Uprate was selected in 2021 IRP and is budgeted for 2026
- State Penn Gate Upgrade is budgeted for 2026 Design and 2027 Construction

STATE STREET AOI - BOTTLENECK



STATE STREET PHASE II UPRATE

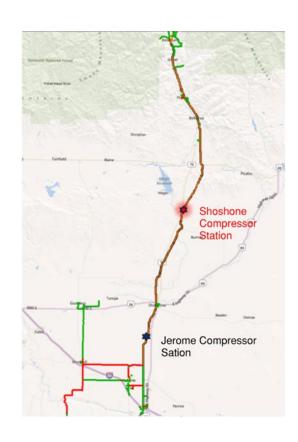


CENTRAL ADA COUNTY AOI

- No reinforcements required to meet 2030 IRP growth predictions
- AOI Update
 - 12-inch South Boise Loop was completed in 2023

SUN VALLEY LATERAL AOI

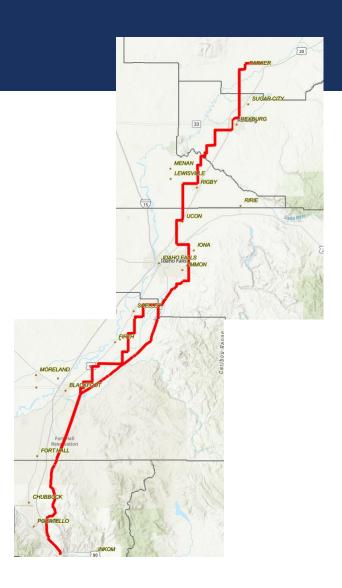
- No reinforcements required to meet 2030 IRP growth predictions
- AOI Update
 - Shoshone Compressor was completed in 2023



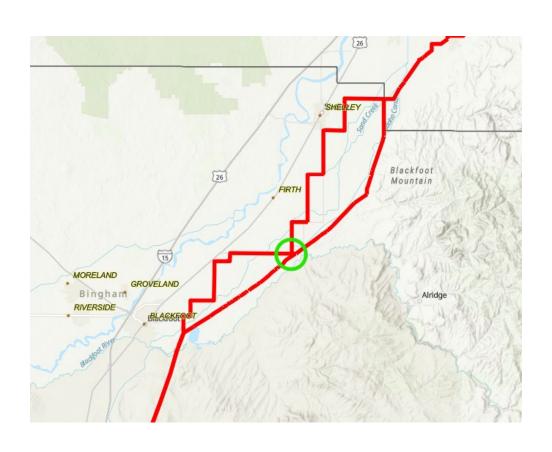
IDAHO FALLS LATERAL (IFL) - AOI

- Requires reinforcements by 2030 to meet IRP growth predictions.
- AOI Capacity Limiter: Suction line pressure to the Wapello Compressor
- Wapello Compressor Station expected to be operational in 2026

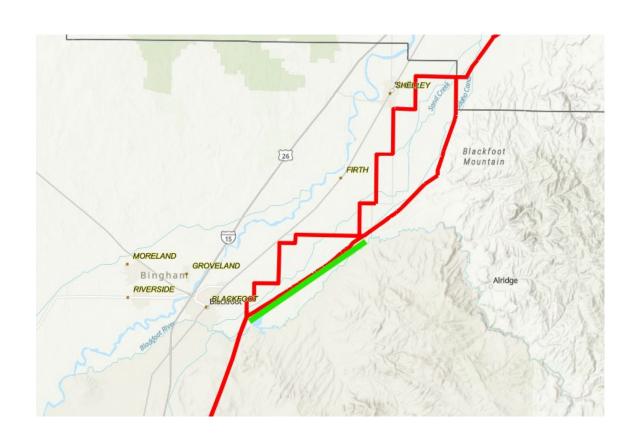
IDAHO FALLS - AOI



WAPELLO COMPRESSOR STATION – 2026



IDAHO FALLS – COMPRESSOR SUCTION PIPELINE 2030



AOI CAPACITY SUMMARY AND TIMING NEEDS:

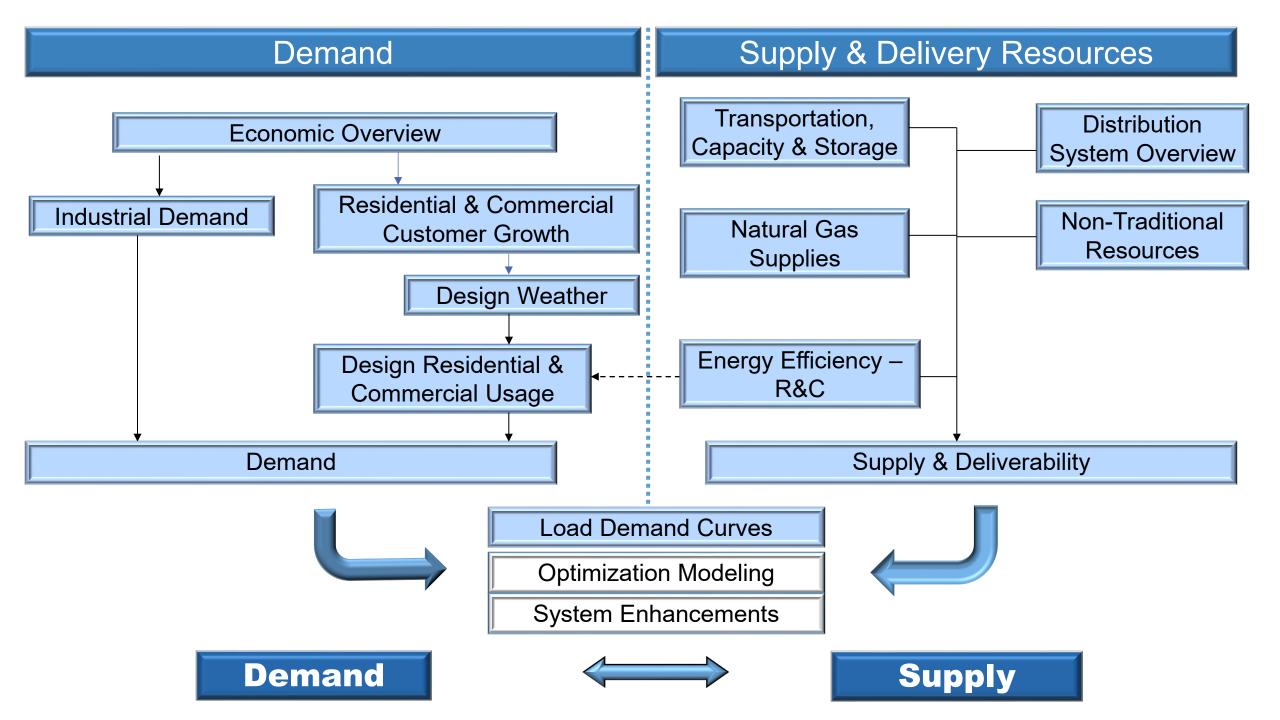
Year	Ada County AOI Capacity (th/day)	Ada CountyAOI Reinforcemen t Required	State Street Lateral AOI Capacity (th/day)	State Street Lateral AOI Reinforcement Required	Canyon County AOI Capacity (th/day)	Canyon County AOI Reinforcement Required	Sun Valley Lateral AOI Capacity (th/day)	Sun Valley AOI Reinforcement Required	Idaho Falls Lateral AOI Capacity (th/day)	Idaho Falls AOI Reinforcement Required
2026	870,000	None	950,000	State Street Uprate	1,390,000	None	247,500	None	1,037,000	IFL Compressor Station
2027	870,000	None	950,000	State Penn Gate Upgrade	1,390,000	None	247,500	None	1,037,000	None
2028	870,000	None	950,000	None	1,390,000	None	247,500	None	1,037,000	None
2029	870,000	None	950,000	None	1,390,000	None	247,500	None	1,037,000	None
2030	870,000	None	950,000	None	1,390,000	None	247,500	None	1,122,000	IFL Compressor Suction Project

QUESTIONS?

IRP OPTIMIZATION MODEL

Draft Design Base Results

BRIAN ROBERTSON; MANAGER, SUPPLY RESOURCE PLANNING



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.

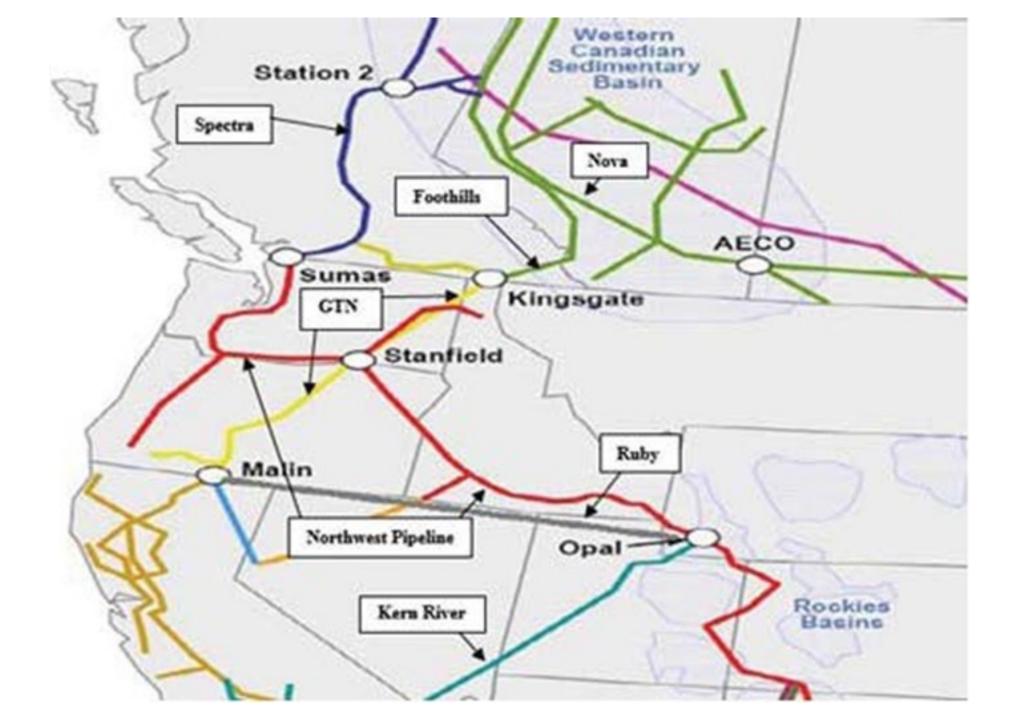
All results presented here are draft subject to further IGC review.

WHAT IS OPTIMIZATION?

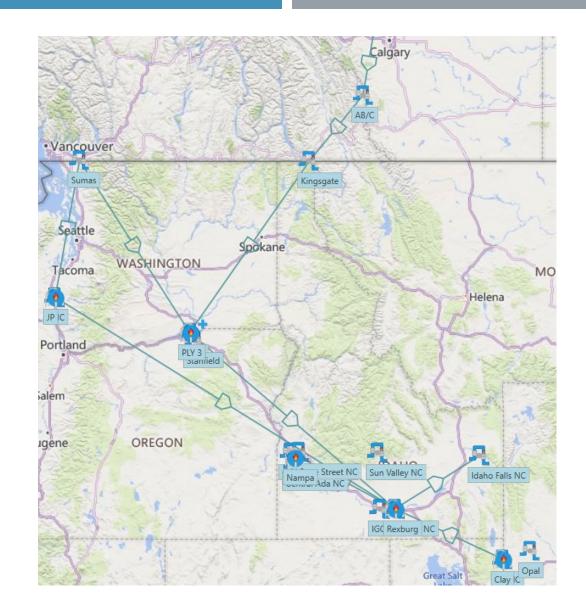
- Utilizes a standard mathematical technique called "linear programming" ...to optimize over all possible combinations.
- The model knows the exact load and price for every day of the planning period based on the analyst's input and can therefore minimize costs in a way that would not be possible in 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.

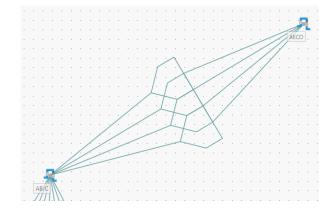


Transport, Storage, Supply, & Demand Areas to Idaho (IGC))



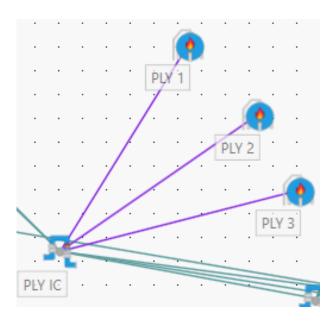
Transport

- 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 (D1 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 D1 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.



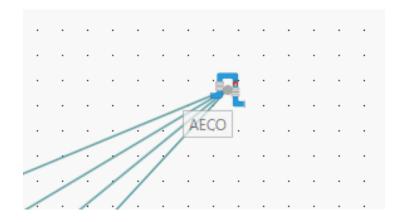
Storage

- 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 50,000 dth per day from Nampa and 5,500 dth per day from Rexburg for a total of approximately 55,500 dth per day of on-system storage.

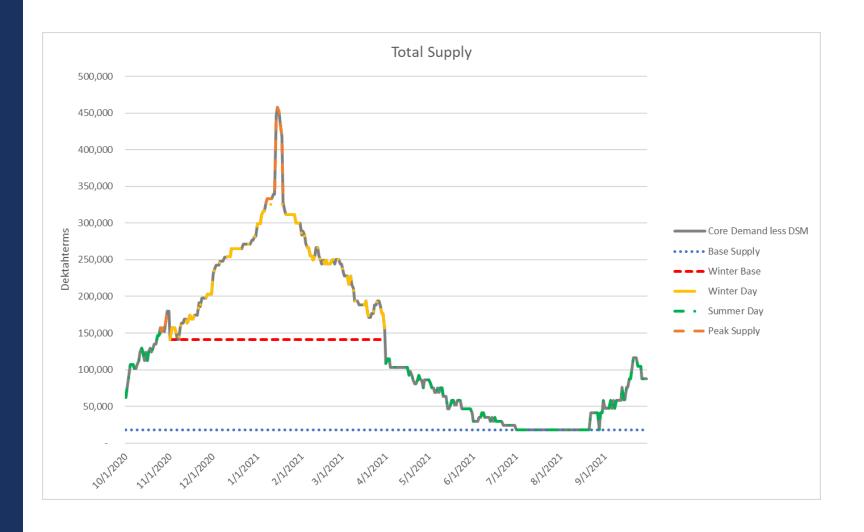


Supply

- 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.

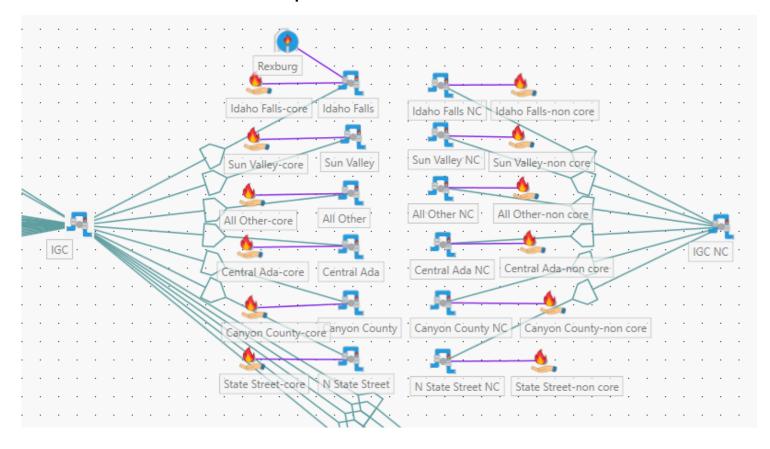


Supply



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, W	<u> Veather: Design</u> , Growth: Normal
2025	Base Vear (Dth)

2023	base real (Dtil)					
			% of Existing	Planned Capacity	Evicting +	% of Existing +
Area of Interest	Total Peak Day	Existing Capacity			Upgrade Capacity	Ŭ
IDAHO FALLS	86,121	90,400	95%	18,900	109,300	79%
SUN VALLEY	19,994	20,000	100%	4,750	24,750	81%
CANYON COUNTY	101,399	103,200	98%	35,800	139,000	73%
STATE STREET	75,346	82,000	92%	-	82,000	92%
CENTRAL ADA	72,996	74,500	98%	12,500	87,000	84%
ALL OTHER	276,942					

2026	Year 2 (Dth)					
				Planned Capacity	Existing +	% of Existing +
Area of Interest	Total Peak Day	Existing Capacity	% of Capacity	Upgrade	Upgrade Capacity	Upgrade Capacity
IDAHO FALLS	86,555	109,300	79%	-	109,300	79%
SUN VALLEY	20,247	24,750	82%	-	24,750	82%
CANYON COUNTY	104,221	139,000	75%	-	139,000	75%
STATE STREET	76,853	82,000	94%	-	82,000	94%
CENTRAL ADA	74,489	87,000	86%	-	87,000	86%
ALL OTHER	280,541					

2027	Year 3 (Dth)					
Area of Interest	Total Peak Dav	Existing Capacity		Planned Capacity Upgrade		% of Existing + Upgrade Capacity
IDAHO FALLS	88,310	109,300	81%		109,300	81%
SUN VALLEY	20,497	24,750	83%	-	24,750	83%
CANYON COUNTY	107,241	139,000	77%	-	139,000	77%
STATE STREET	78,362	82,000	96%	-	82,000	96%
CENTRAL ADA	75,984	87,000	87%	-	87,000	87%
ALL OTHER	283,670					

DRAFT MODEL RESULTS LATERALS

2028	Year 4 (Dth)					
Area of Interest	Total Peak Day	Existing Capacity		Planned Capacity Upgrade		% of Existing + Upgrade Capacity
IDAHO FALLS	89,942	109,300	82%	-	109,300	82%
SUN VALLEY	20,740	24,750	84%	-	24,750	84%
CANYON COUNTY	110,237	139,000	79%	-	139,000	79%
STATE STREET	79,870	82,000	97%	-	82,000	97%
CENTRAL ADA	77,478	87,000	89%	-	87,000	89%
ALL OTHER	287,240					

2029	Year 5	(Dth)

Area of Interest	Total Peak Day	Existing Capacity		Planned Capacity Upgrade		% of Existing + Upgrade Capacity
IDAHO FALLS	91,611		84%	-	109,300	84%
SUN VALLEY	20,984	24,750	85%	-	24,750	85%
CANYON COUNTY	113,068	139,000	81%	-	139,000	81%
STATE STREET	81,379	82,000	99%	-	82,000	99%
CENTRAL ADA	78,974	87,000	91%	-	87,000	91%
ALL OTHER	291,026					

2030 Year 6 (Dth)

2030	Teal o (Dill)					
Area of Interest	Total Peak Day	Existing Capacity		Planned Capacity Upgrade		% of Existing + Upgrade Capacity
IDAHO FALLS	93,230	109,300	85%	-	109,300	85%
SUN VALLEY	21,224	24,750	86%	-	24,750	86%
CANYON COUNTY	115,926	139,000	83%	-	139,000	83%
STATE STREET	82,892	82,000	101%	-	82,000	101%
CENTRAL ADA	80,473	87,000	92%	-	87,000	92%
ALL OTHER	294,269					

DRAFT MODEL RESULTS -LATERALS

DISTRIBUTION SYSTEM SHORTFALL SOLVES AND RECENT UPGRADES

- ADA County Bend 12-inch S Boise Loop
- State Street State Street Uprate and State Penn Gate Upgrade
- Canyon County 12-inch Ustick Phase III
- Sun Valley Lateral Shoshone Compressor Station and Suction line pressure to the Wapello Compressor
- Idaho Falls IFL Compressor Station

TRANSPORTATION SHORTFALL SOLVES

- Contract Renewals
- Rockies Connector
- Alternative Transportation Uptake
- Renewable Natural Gas
- Others?

Lateral Capacity Summary By Year, Weather:	: Design, Growth: Normal
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2025	Base Year	(Dth)
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			% of Existing	Planned Capacity	Existing +	% of Existing +
Area of Interest	Total Peak Day	Existing Capacity	Capacity	Upgrade	Upgrade Capacity	Upgrade Capacity
IDAHO FALLS	86,121	90,400	95%	18,900	109,300	79%
SUN VALLEY	19,994	20,000	100%	4,750	24,750	81%
CANYON COUNTY	101,399	103,200	98%	35,800	139,000	73%
STATE STREET	75,346	82,000	92%	-	82,000	92%
CENTRAL ADA	72,996	74,500	98%	12,500	87,000	84%
ALL OTHER	276,942					

2026 Year 2 (Dth)

	1					
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SUN VALLEY	20,247	24,750	82%	-	24,750	82%
CANYON COUNTY	104,221	139,000	75%	-	139,000	75%
STATE STREET	76,853	82,000	94%	-	82,000	94%
CENTRAL ADA	74,489	87,000	86%	-	87,000	86%
ALL OTHER	280,541					

2027 Year 3 (Dth)

2027	rear 3 (Dth)					
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SUN VALLEY	20,497	24,750	83%	-	24,750	83%
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STATE STREET	78,362	82,000	96%	13,000	95,000	82%
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ALL OTHER	283,670					

DRAFT MODEL RESULTS LATERALS

2028	Year 4 (Dth)					
Area of Interest	Total Peak Day	Existing Capacity		Planned Capacity Upgrade		% of Existing + Upgrade Capacity
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STATE STREET	79,870	95,000	84%	-	95,000	84%
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202	9 Year 5 (Dth)					
				Planned Capacity	Existing +	% of Existing +
Area of Interest	Total Peak Day	Existing Capacity	% of Capacity	Upgrade	Upgrade Capacity	Upgrade Capacity
IDAHO FALLS	91,611	109,300	84%	-	109,300	84%
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STATE STREET	81,379	95,000	86%	-	95,000	86%
CENTRAL ADA	78,974	87,000	91%	-	87,000	91%
ALL OTHER	291 026					

2030	Year 6 (Dth)					
Area of Interest	Total Peak Day	Existing Capacity		Planned Capacity Upgrade	Existing + Upgrade Capacity	% of Existing + Upgrade Capacity
IDAHO FALLS	93,230	109,300	85%	2,900	112,200	83%
SUN VALLEY	21,224	24,750	86%	-	24,750	86%
CANYON COUNTY	115,926	139,000	83%	-	139,000	83%
STATE STREET	82,892	95,000	87%	-	95,000	87%
CENTRAL ADA	80,473	87,000	92%	-	87,000	92%
ALL OTHER	294,269					

DRAFT MODEL RESULTS -LATERALS

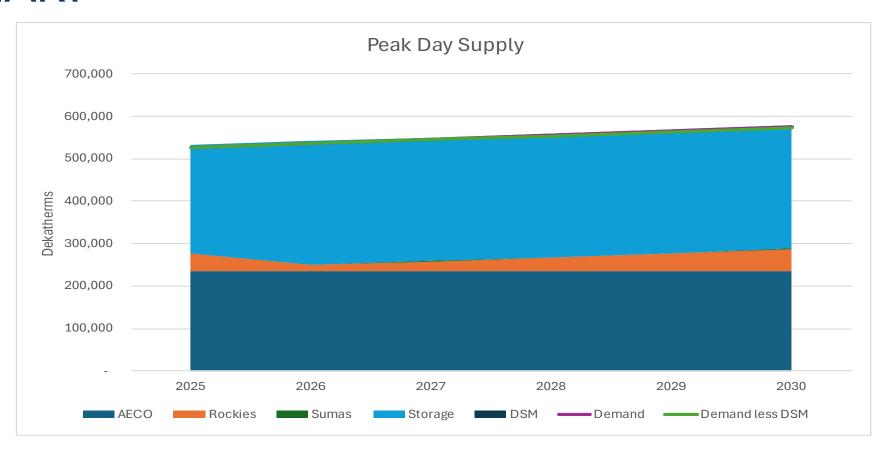
DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY

Supply Area	10/1/2025	11/1/2025	12/1/2025	1/1/2026	2/1/2026	3/1/2026	4/1/2026	5/1/2026	6/1/2026	7/1/2026	8/1/2026	9/1/2026
AECO	5,020,377	6,065,968	7,147,872	7,147,872	6,456,143	6,761,047	3,341,270	2,457,540	1,285,824	1,096,245	1,299,113	2,957,778
Rockies	306,475	331,189	498,059	615,107	375,951	432,228	1,195,720	2,297,534	631,189	218,811	250,288	631,189
Sumas	-	-	-	450	-	92,605	300,000	2,335,719	300,000	-	-	-
All Other	2,737	2,649	2,737	2,737	2,472	2,737	2,649	2,737	2,649	2,737	2,737	2,649
Canyon County	2,031	1,965	2,031	2,031	1,834	2,031	1,965	2,031	1,965	2,031	2,031	1,965
Central Ada	2,373	2,296	2,373	2,373	2,143	2,373	2,296	2,373	2,296	2,373	2,373	2,296
Idaho Falls	1,541	1,491	1,541	1,541	1,392	1,541	1,491	1,541	1,491	1,541	1,541	1,491
State Street	2,345	2,270	2,345	2,345	2,118	2,345	2,270	2,345	2,270	2,345	2,345	2,270
Sun Valley	232	224	232	232	209	232	224	232	224	232	232	224
Storage	-	7,541	2,110,606	4,702,679	1,848,802	123,489	-	-	-	-	-	-

DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY

Supply Area	10/1/2030	11/1/2030	12/1/2030	1/1/2031	2/1/2031	3/1/2031	4/1/2031	5/1/2031	6/1/2031	7/1/2031	8/1/2031	9/1/2031
AECO	4,881,307	5,331,070	6,792,507	7,147,872	6,456,143	6,331,960	3,624,443	1,614,240	1,313,353	1,117,970	1,341,912	2,110,613
Rockies	1,352,297	1,337,862	1,386,590	1,535,949	1,252,404	1,464,858	1,641,862	1,386,590	1,341,862	1,263,051	1,294,619	1,341,862
Sumas	108,590	105,087	108,590	108,590	98,081	108,590	405,087	418,590	405,087	418,590	418,590	405,087
All Other	14,112	13,657	14,112	14,112	12,746	14,112	13,657	14,112	13,657	14,112	14,112	13,657
Canyon County	8,750	8,468	8,750	8,750	7,903	8,750	8,468	8,750	8,468	8,750	8,750	8,468
Central Ada	12,236	11,841	12,236	12,236	11,052	12,236	11,841	12,236	11,841	12,236	12,236	11,841
Idaho Falls	12,328	11,930	12,328	12,328	11,135	12,328	11,930	12,328	11,930	12,328	12,328	11,930
State Street	12,094	11,704	12,094	12,094	10,923	12,094	11,704	12,094	11,704	12,094	12,094	11,704
Sun Valley	2,682	2,595	2,682	2,682	2,422	2,682	2,595	2,682	2,595	2,682	2,682	2,595
Storage	-	135,684	2,270,407	4,714,616	1,582,433	89,975	-	-	-	-	-	-

DRAFT MODEL RESULT GENERAL SUPPLY BALANCE SUMMARY



CAPACITY RESOURCES

Northwest Daily Maximum Transportation Capacity (MMBtu)

	2025	2026	2027	2028	2029	2030
Stanfield	224,565	224,565	224,565	224,565	224,565	224,565
Rockies	59,328	59,328	59,328	59,328	59,328	59,328
Citygate	10,000	10,000	10,000	10,000	10,000	10,000
Total Capacity	293,893	293,893	293,893	293,893	293,893	293,893
Storage Withdrawals with Bundled Capacity	155,175	155,175	155,175	155,175	155,175	155,175
JP TF-2 Capacity	30,337	30,337	30,337	30,337	30,337	30,337
Nampa and Rexburg	55,500	55,500	55,500	55,500	55,500	55,500
Maximum Deliverability	534,905	534,905	534,905	534,905	534,905	534,905

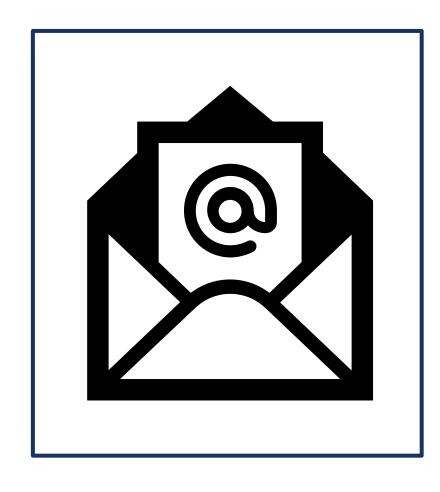
- Intermountain has segmented capacity from Sumas to IGC at Stanfield. Intermountain owns Stanfield to IGC.
- Intermountain recently added Stanfield Capacity via the GTN Xpress project.
- Intermountain is actively participating in a Rockies expansion to meet peak day shortfalls.
- On-System Storage is 55,000 dth/day.

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