



5.A. 20-Year Financial Projection – Electric Utility

Power Supply and Financial Planning

**RPU Board: July 22, 2025
with 1898 & Co.**

Rochester Public Utilities Board Meeting
July 22, 2025





Purpose and Scope of Engagement

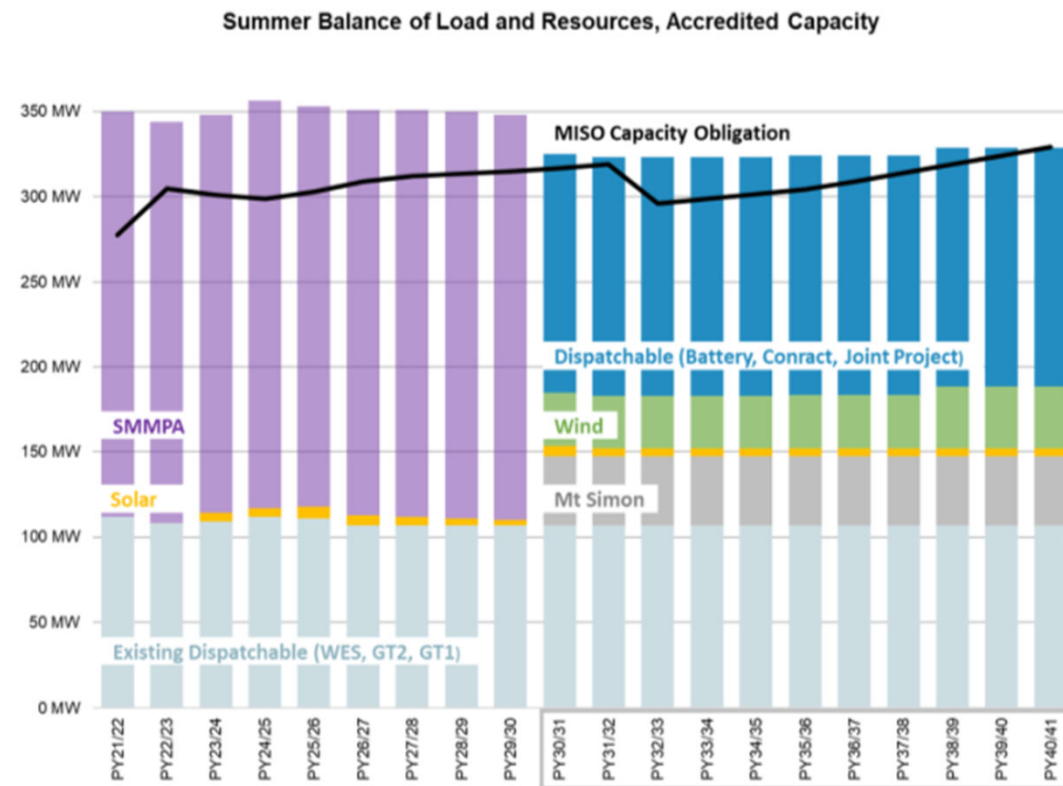
1. Evaluate the 2023 Resource Plan recommended path (new wind, new solar, new battery, new SSCT plant) within the total RPU financial forecast.
2. Incorporate results from **(1)** 2025 Renewable PPA RFI, **(2)** new SSCT plant cost estimates, **(3)** renewable project self build cost, and **(4)** Cascade Creek replacement cost.
3. Included all updated project costs and PPA costs, project start dates, and MW size changes into financial forecasts to assess impacts on rates and financials.
4. Consider project ownership options (RPU self build vs PPA), cost structures, tax credits, and cash flows for funding new generation.
5. Determine the level and timing of new bonds, use of cash, and required rate increases to meet RPU financial targets under various scenarios.
6. Evaluate the potential impact of **(1)** increased tariffs, **(2)** BESS accreditation loss, and **(3)** elimination of federal tax subsidies for solar, wind, and batteries.



IRP Background and Future Generation Plan

- Resource Plan completed in 2023
- SMMPA contract ends in 2030
- New generation online 2029-2033
 - 50 MW CT plant (2029)
 - 100 MW battery (2029)
 - 50 MW solar PV (2029)
 - 350 MW wind (2029)
 - 100 MW wind (2033)

Note: Resources online mid-2029





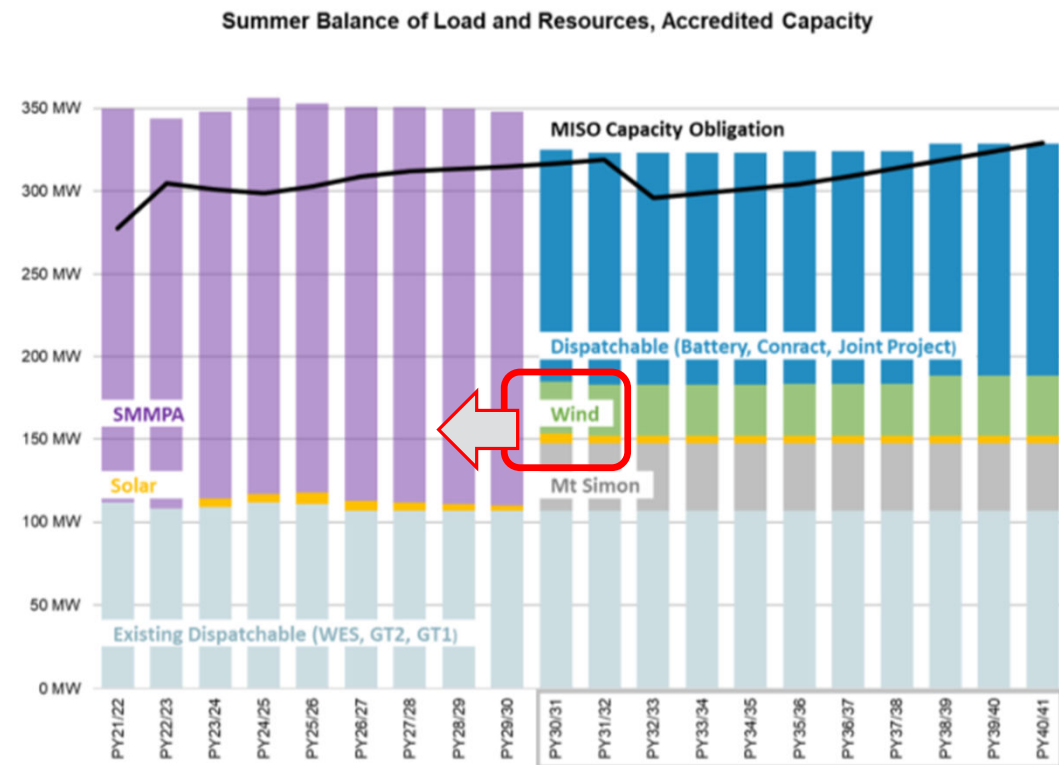
Recent Key Developments

1. Wind PTC discontinued post 2028. 200 MW of wind PPAs move forward to 2027
2. Solar ITC discontinued post 2028. 100 MW of solar PPAs move forward to 2027
3. Cascade Creek #1 CT failure requires 30 MW CT replacement (+\$60M)
4. Mt Simon CT 50MW CT plant cost increase from \$120M to \$170M (+\$50M)
5. RPU self build 100MW BESS cost decrease from \$200M to \$165M (-\$35M)
6. RPU self build 100MW BESS can be completed in time to obtain 40% ITC*
7. RPU self build 100MW solar cannot be completed in time to obtain 40% ITC
8. Solar, Wind, Battery PPA bidder prices are inline with 2024 PPA estimates



IRP Background and Future Generation Adjustments

- Adjustments to Capacities and Costs
- SMMPA contract still ends in 2030
- New generation online 2027-2033
 - 50 MW CT plant (2029)
 - **30 MW CT plant (2029)***
 - 100 MW battery (2029)
 - **100 MW solar PV (2027)***
 - **200 MW wind (2027)***
 - 100 MW wind (2030)
 - 100 MW wind (2033)





Options for Future Generation Ownership

	200MW WIND (2028)		100MW WIND (2030)		100MW WIND (2033)*		50MW CT + 30MW CT (2029)		100MW BESS (2029)		100MW SOLAR*		100MW CAPACITY PPA (2029)	
Scenario 1	PPA \$/MWh		PPA \$/MWh		PPA \$/MWh		BUILD \$	\$ 230,000,000	BUILD \$ - 40% ITC \$	\$ 165,500,000	BUILD \$ (2030 COD)	\$ 183,000,000		
Scenario 2	PPA \$/MWh		PPA \$/MWh		PPA \$/MWh		BUILD \$	\$ 230,000,000	BUILD \$ - 40% ITC \$	\$ 165,500,000	PPA \$/MWh (2028 COD)			
Scenario 3	PPA \$/MWh		PPA \$/MWh		PPA \$/MWh		BUILD \$	\$ 230,000,000	PPA \$/kW-mo		PPA \$/MWh (2028 COD)			
Scenario 4	PPA \$/MWh		PPA \$/MWh		PPA \$/MWh		BUILD \$	\$ 230,000,000			PPA \$/MWh (2028 COD)		PPA \$/kW-mo	
Scenario 5 (MN 2040 Carbon Free Standard)*	PPA \$/MWh				PPA \$/MWh		BUILD \$	\$ 230,000,000			PPA \$/MWh (2028 COD)		PPA \$/kW-mo	

*50MW Scenario 5

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ITC = INVESTMENT TAX CREDIT
PTC = PRODUCTION TAX CREDIT
PPA = POWER PURCHASE AGREEMENT
CT = COMBUSTION TURBINE
BESS = BATTERY ENERGY STORAGE
COD = COMMERCIAL OPERATION DATE

	YEAR 100% RENEWABLE
SCENARIO 1	2030
SCENARIO 2	2030
SCENARIO 3	2030
SCENARIO 4	2030
SCENARIO 5*	2040



RPU Financial Assumptions and Targets

Assumptions

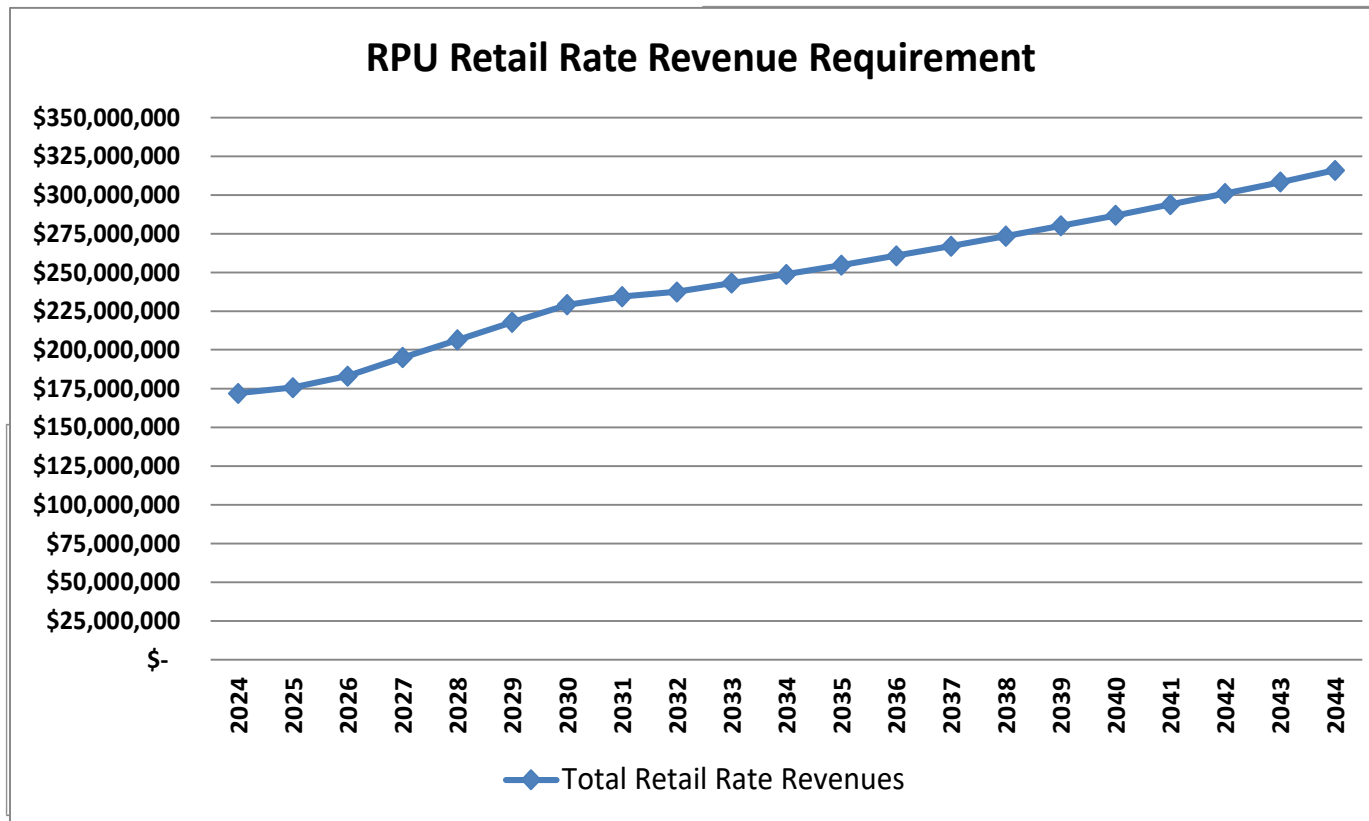
- 25-year debt at 6.0%
- Short term financing during construction
- Long term financing at completion
- Solar self build projects 0% ITC
- Battery self build projects 40% ITC
- Use \$50M RPU reserves to support projects
- Use \$55M SMMPA wholesale savings to support projects (2026 Sherco debt retired)
- RPU 5-year budgets used through 2030
- General inflation 2-3% per year over 20 years
- \$30M in Tranche 1 Transmission Projects

Targets

- Cash balance: 250 days
- Net cash flow: Positive
- Equity ratio: 30%+
- Rate increases: gradual
- Debt coverage: 1.25 ~ 1.50
- Debt structure to align with ITC



Scenario 1 (Wind PPAs)



Revenue Requirement Changes

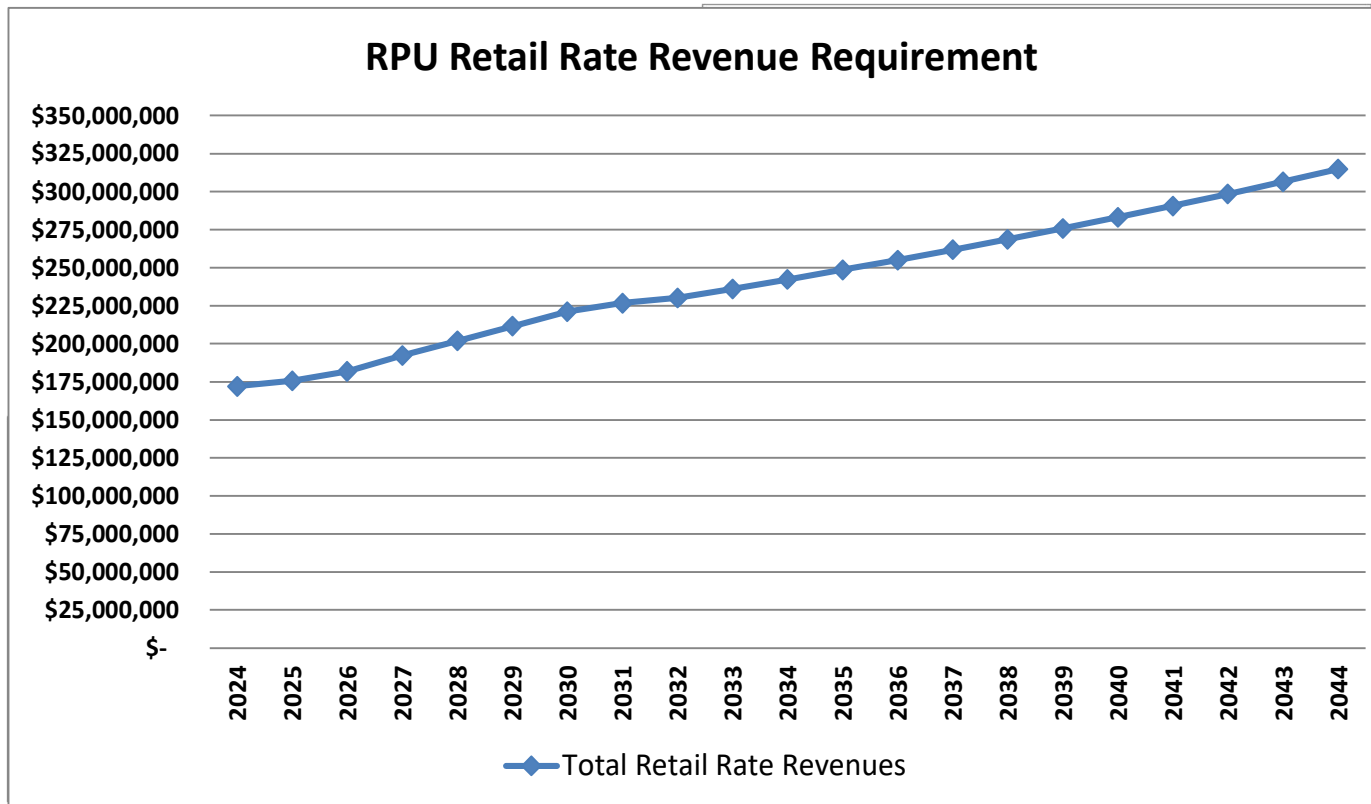
- 2026-2030 4.75%
- 2031-2044 1.60%
- Levelized Rate \$0.1876/kWh
- Min DSC: 1.31
- Revenue NPV: \$3.19B

Key Assumptions

- Wind: **25-year PPAs**
- Solar: RPU financed
- BESS: RPU financed - 40%ITC
- SSCTs: RPU financed
- Total borrowed: **\$552M**



Scenario 2 (Wind and Solar PPAs)



Revenue Requirement Changes

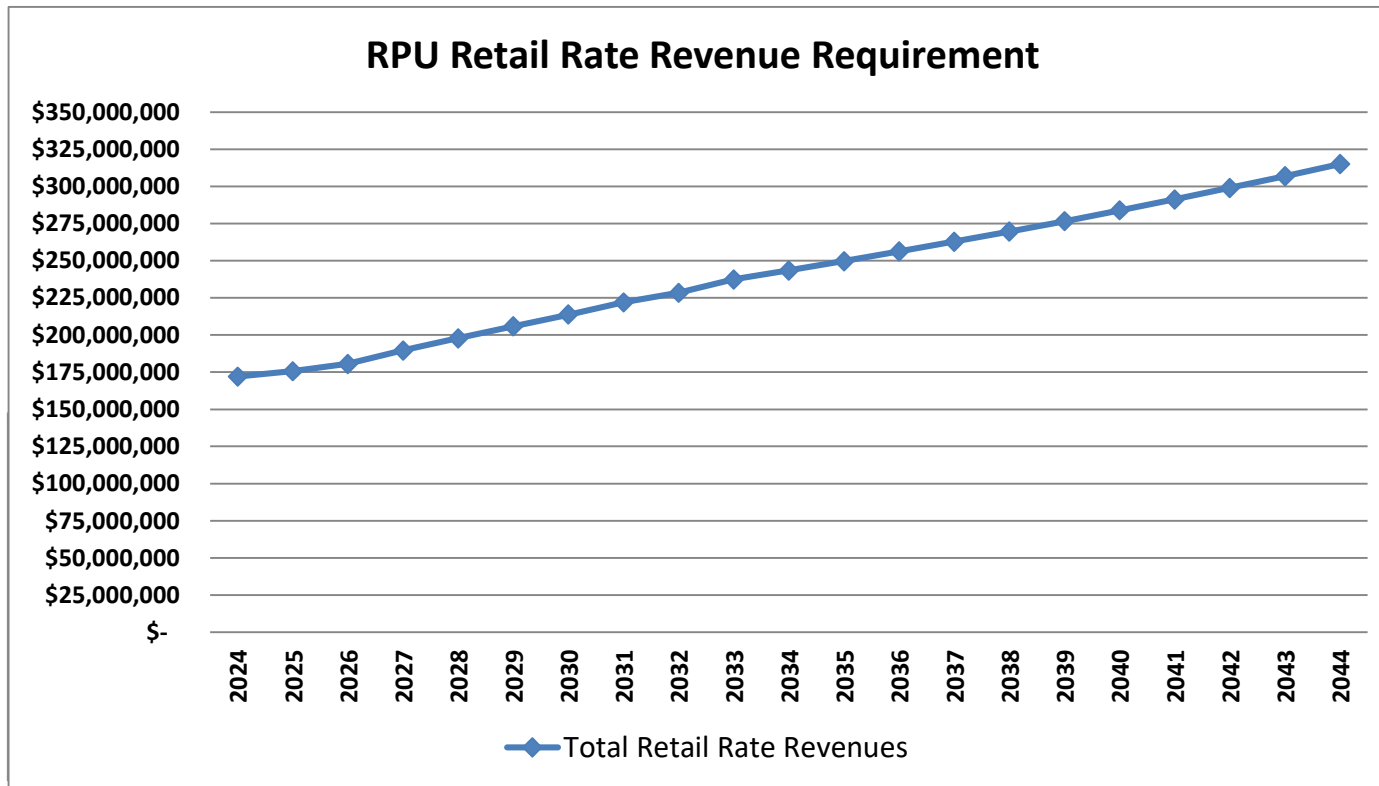
- 2026-2030 4.00%
- 2031-2044 1.85%
- Levelized Rate \$0.1840/kWh
- Min DSC: 1.31
- Revenue NPV: \$3.14B

Key Assumptions

- Wind: **25-year PPAs**
- Solar: **25-year PPAs**
- BESS: RPU financed - 40% ITC
- SSCTs: RPU financed
- Total borrowed: **\$350M**



Scenario 3 (Wind, Solar, and Battery PPAs)



Revenue Requirement Changes

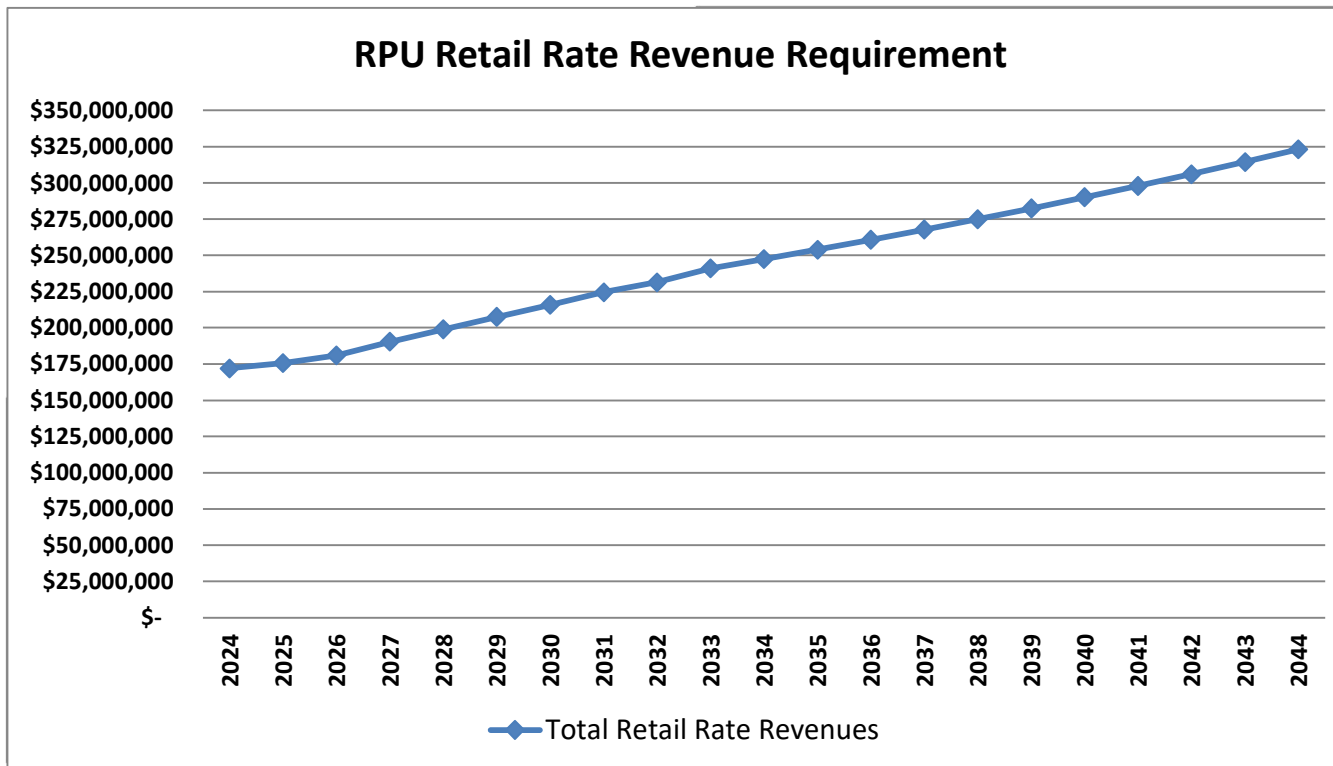
- 2026-2033 3.30%
- 2034-2044 1.80%
- Levelized Rate \$0.1828/kWh
- Min DSC: 1.67
- Revenue NPV: \$3.08B

Key Assumptions

- Wind: **25-year PPA**
- Solar: **25-year PPA**
- BESS: **20-year PPA**
- SSCTs: RPU financed
- Total borrowed: **\$223M**



Scenario 4 (Wind, Solar, Battery, and CT PPAs)



Revenue Requirement Changes

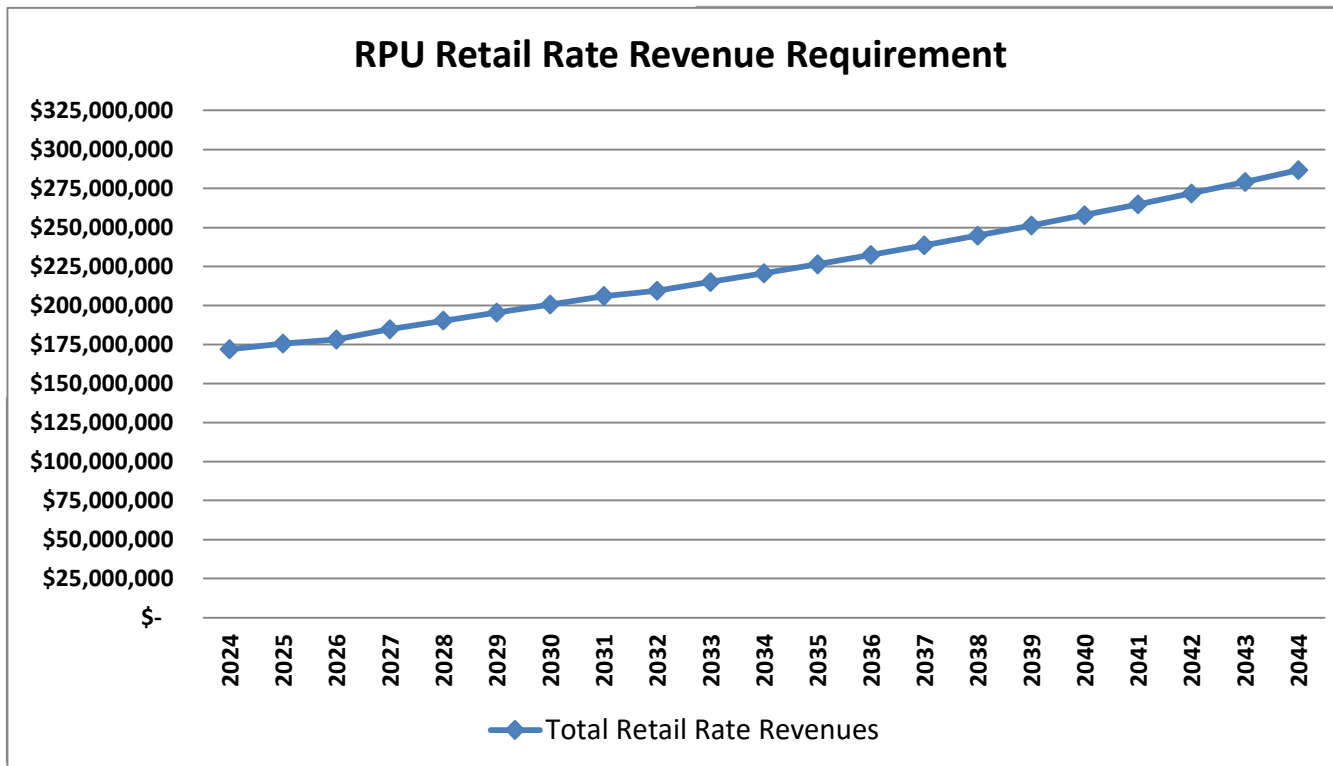
- 2026-2033 3.50%
- 2034-2044 1.90%
- Levelized Rate \$0.1853/kWh
- Min DSC: 1.62
- Revenue NPV: \$3.11B

Key Assumptions

- Wind: **25-year PPA**
- Solar: **25-year PPA**
- BESS/CT: **20-year PPA**
- SSCTs: RPU financed
- Total borrowed: **\$223M**



Scenario 5 (MN 2040 Carbon Free Standard)



Revenue Requirement Changes

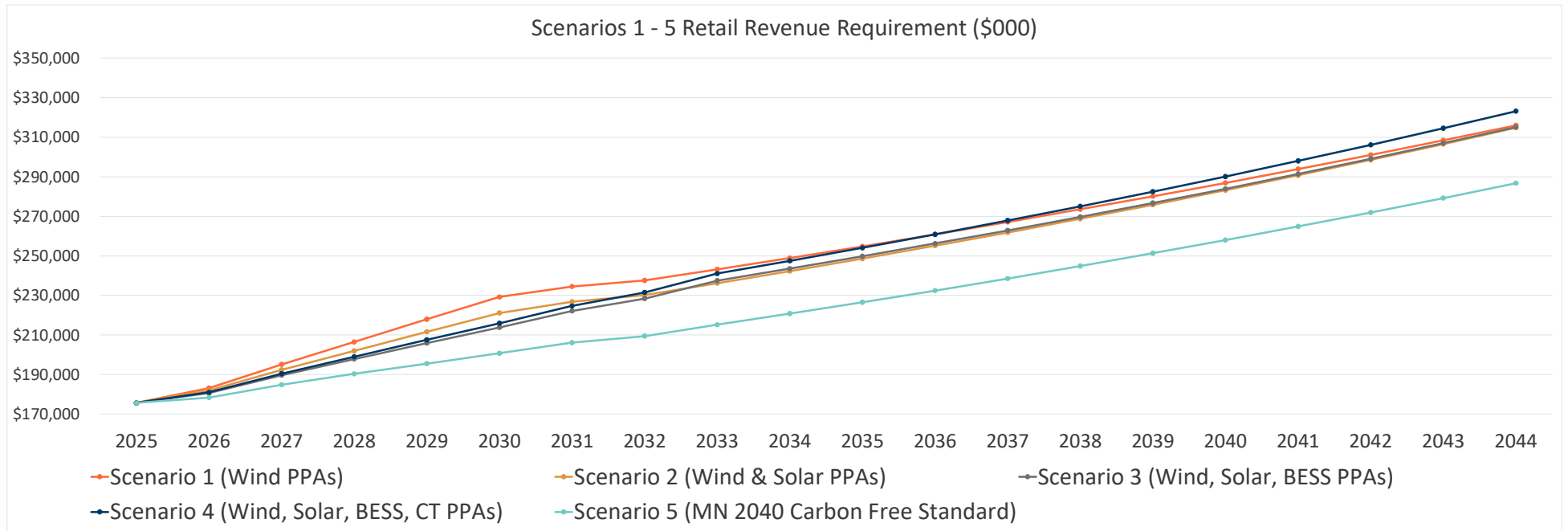
- 2026-2033 2.00%
- 2034-2044 1.85%
- Levelized Rate \$0.1705/kWh
- Min DSC: 1.83
- Revenue NPV: \$2.85B

Key Assumptions

- Wind: **25-year PPA**
- Solar: **25-year PPA**
- BESS/CT: **20-year PPA**
- SSCTs: RPU financed
- Total borrowed: **\$223M**



Average RPU Retail Rate by Scenario





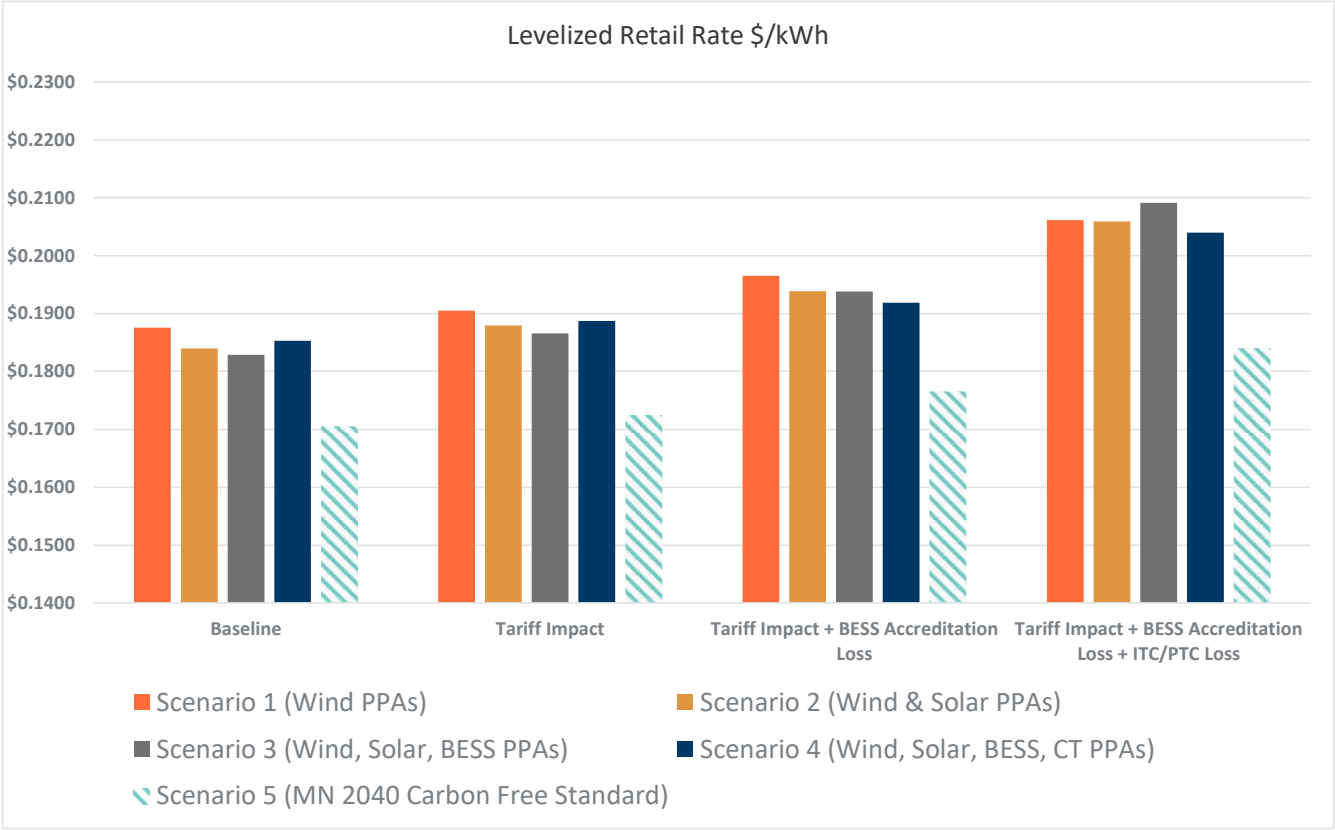
Sensitivity Analysis

Considered Multiple Futures from Baseline Scenarios:

- Tariff Impacts on Projects & PPAs
- Tariff Impacts on Projects & PPAs + 50% BESS Accreditation Loss
- Tariff Impacts on Projects & PPAs + 50% BESS Accreditation Loss + ITC/PTC Loss



Sensitivity Analysis



*SCENARIO 5 – MN 2040 CARBON FREE STANDARD



Conclusions

- Wind and solar PPAs are assumed to be online in late 2027
- RPU should review final Federal Budget Reconciliation Bill before moving forward
- All Scenarios comply with existing MN state renewable requirement
- Scenario 1 & 2 require steepest rate increases short term due to RPU debt
- Scenario 5 is least cost 100% renewable by 2040 plan
- Scenario 3 is least cost 100% renewable by 2030 plan
- Scenario 4 is least cost 100% renewable by 2030 plan with BESS at 50% accreditation
- Revised budget cycle assumes Scenario 4



Next Steps

- August 5, 2025 – 2026/2027 Recommended Budget (Scenario 4)
 - 200 MW Wind – 2028; 100MW Wind – 2030; 100MW Wind-2033
 - 50 MW Construct firm dispatchable
 - 30 MW Construct firm dispatchable (repair/replace GT1)
 - 100 MW Solar - 2028
 - 50 MW Battery; 50 MW Capacity PPA - 2029
- Budget updated capital and operation costs - inflation
- Financing
 - Spend \$50M of cash reserves
 - Bonding \$241M - 2027