

2022 Transmission Rate Projection

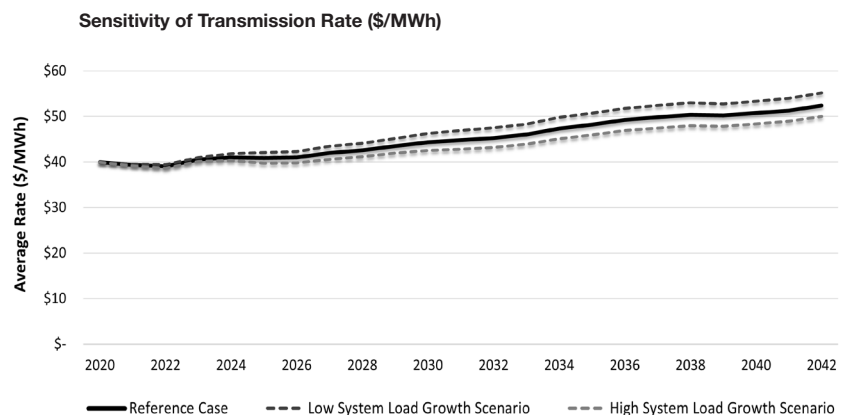

The AESO's role is to provide a safe and reliable grid for Albertans.

We have prepared the Transmission Rate Projection with the intention of providing information that may aid stakeholders with their long-term planning, and residential consumers with an approximate projection of how much they may pay for transmission in the future.

➤ BACKGROUND AND ASSUMPTIONS

- Transmission rates are charged based on a consumer's usage of electricity. As most electricity in Alberta is consumed by industry, the majority of transmission costs are paid for by industry.
- The AESO's projections start with data from current transmission utility tariff applications and incorporate forecasts and other assumptions to project rates in the future. Major forecasts and assumptions used in the projections include:
 - Updated costs and schedules for transmission projects in the AESO 2022 Long-term Transmission Plan
 - Recovery of transmission project costs over the life of the transmission equipment which generally can be between 30–60 years, as approved by the Alberta Utilities Commission
 - Forecast energy requirements and pool price
 - Inflation factors based on indices provided by the Conference Board of Canada
- The AESO has provided information on capital spend projections for system and connection transmission development as well as capital maintenance and replacement projects from current transmission utility tariff applications.
- Actual rates charged for transmission will be as approved by Alberta's regulator, the Alberta Utilities Commission.

Average Cost of Electricity For Transmission (\$/MWh)
Applicable to Average Consumer Connected to the Transmission System

AN AVERAGE RESIDENTIAL CONSUMER IN ALBERTA USES
600kWh
OF ELECTRICITY EACH MONTH

Based on our projections, this average residential consumer will pay approximately **\$25/month** in transmission charges in **2027**.



2022 CALCULATED AVERAGE TRANSMISSION RATE

APPROXIMATELY
\$39/MWh

1 MWh = 1,000 kWh



2027 PROJECTED AVERAGE TRANSMISSION RATE

APPROXIMATELY
\$42/MWh



5 Year PROJECTED CAPITAL SPEND ON TRANSMISSION SYSTEM PROJECTS

APPROXIMATELY
\$59 Million (inflight projects
and planned developments)

Transmission rate projections

	Near term projections (2022–2026)					Medium term projections (2027–2031)				
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Transmission system capital spend (nominal \$ Million) ¹	\$0	\$42	\$16	\$4	\$0	\$758	\$142	\$145	\$148	\$151
Transmission connection capital spend ² (nominal \$ Million)	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80
Capital maintenance and replacement ³ (2022 \$ Million)	\$335	\$335	\$335	\$335	\$335	\$335	\$335	\$335	\$335	\$335
Total revenue requirement ⁴ (nominal \$ Millions)	\$2,315	\$2,447	\$2,479	\$2,473	\$2,506	\$2,587	\$2,649	\$2,692	\$2,733	\$2,774
DTS energy forecast ⁵ (GWh)	59,316	60,379	60,436	60,500	61,124	61,599	62,201	61,889	61,669	61,963
Average transmission rate (nominal \$/MWh)	\$39	\$41	\$41	\$41	\$41	\$42	\$43	\$44	\$44	\$45
Average transmission portion (600kWh) of residential monthly bill (nominal \$)	\$23	\$24	\$25	\$25	\$25	\$25	\$26	\$26	\$27	\$27

¹ 2022 Long-term Plan transmission system capital spend is adjusted for expected inflation using sector-specific indices.

² Annual average from AESO's 2021 ISO tariff filing.

³ Information gathered from TFO General Tariff Applications.

⁴ Revenue requirement is the total transmission charge that is to be recovered from all consumers in that year. For a more detailed breakdown of information, please refer to the AESO's 2021 ISO Tariff Update Application.

⁵ DTS stands for Demand Transmission Service and the forecast is part of Reference Case Load scenario of AESO's 2021 Long-term Outlook.

➤ LOOKING FORWARD TO 2032–2042

While looking beyond 10 years can produce less certain projections, we have prepared our projections to 2042.

Key highlights from those projections are:

- Transmission system capital spend from 2032 to 2042 is projected to be up to \$1.2 Billion if all transmission projects proceed
- Average transmission rate in 2042 is estimated to be \$52/MWh assuming the \$1.2 Billion capital spend
- Average transmission portion of a residential monthly bill in 2042 is estimated to be \$31 (600 kWh/month)

➤ WHO IS THE AESO?

The Alberta Electric System Operator (AESO) plans and operates Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans. We are a not-for-profit organization with no financial interest or investment of any kind in the power industry.