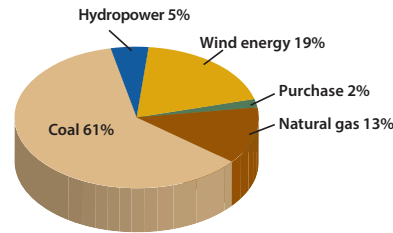


Associated Electric Cooperative

Balanced, diverse resources meet members' needs

Associated's resources include gas, coal, wind and hydropower, complemented by its Take Control & Save energy-efficiency program.

2022 member load resources



Coal-based fleet

New Madrid Power Plant – New Madrid, Mo.

Unit 1 – 1972, Unit 2 – 1977  
Brown-Boveri turbines, 600 MW each  
Coal burn rate 7,150 tons/day per unit

Thomas Hill Energy Center – Clifton Hill, Mo.

Unit 1 – 1966  
General Electric turbine, 180 MW  
Coal burn rate 2,340 tons/day

Unit 2 – 1969  
Westinghouse turbine, 303 MW

Coal burn rate 3,785 tons/day

Unit 3 – 1982  
Westinghouse turbine, 670 MW

Coal burn rate 8,480 tons/day

Combined-cycle gas fleet

Chouteau Power Plant – Pryor, Okla.

Chouteau 1 – 2000, two Siemens combined-cycle, gas-based units, 176 MW each; one steam turbine, 170 MW

Chouteau 2 – 2011, two Siemens combined-cycle, gas-based units, 176 MW each; one steam turbine, 188 MW

Plant operated by Siemens.

Dell Power Plant – Dell, Ark.

Units 1 and 2 – 2007, dual-fuel (gas and oil)  
Two General Electric combined-cycle, gas-based units, 185 MW each; one steam turbine, 252 MW

St. Francis Power Plant – Glennonville, Mo.

Unit 1 – 1999, Siemens combined-cycle, gas-based unit, 176 MW; one steam turbine, 69 MW

Unit 2 – 2001, Siemens combined-cycle, gas-based unit, 176 MW; one steam turbine, 80 MW

Plant operated by Siemens.

Simple-cycle gas fleet

Essex Power Plant – Idalia, Mo.

Unit 1 – 1999  
Siemens simple-cycle, gas-based unit, 107 MW

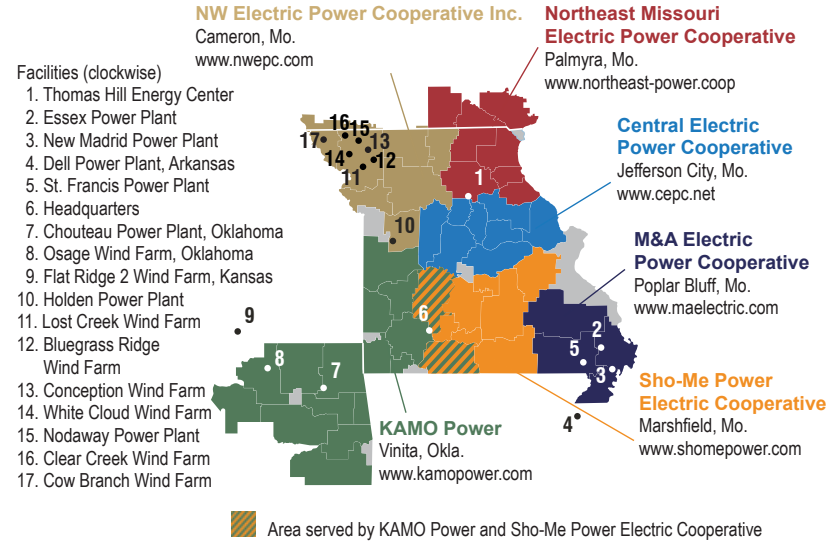
Holden Power Plant – Holden, Mo.

Units 1, 2 and 3 – 2002  
Siemens simple-cycle, dual-fuel (gas and oil) units, 107 MW each

Nodaway Power Plant – Maryville, Mo.

Units 1 and 2 – 1999  
Siemens simple-cycle, gas-based units, 91 MW each

G&Ts' service areas & AECl facilities



Diverse power sources

Owned sources	Capacity (MW)
Chouteau Power Plant	1,062
Dell Power Plant	622
Essex Power Plant	107
Holden Power Plant	321
New Madrid Power Plant	1,200
Nodaway Power Plant	182
St. Francis Power Plant	501
Thomas Hill Energy Center	1,153
Subtotal	5,148
<b>Contract sources</b>	
SWPA hydropower peak	478
<b>Total</b>	<b>5,626</b>

**Wind energy**  
Associated contracts with eight wind farms totaling 1,240 MW of nameplate capacity. Wind capacity is not included for peak planning purposes.

Associated sells and does not retain or retire all of the environmental attributes of energy generated by 1,240 megawatts of contracted wind facilities. This brings in revenue that helps keep members' electricity affordable.

Associated Electric Cooperative

Associated is owned by and provides affordable, reliable and responsible electricity to six regional and 51 local electric cooperative systems in Missouri, southeast Iowa and northeast Oklahoma that serve about 935,000 meters.

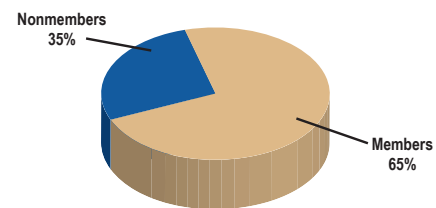
P.O. Box 754 • Springfield, MO 65801-0754  
417-881-1204 • www.aeci.org

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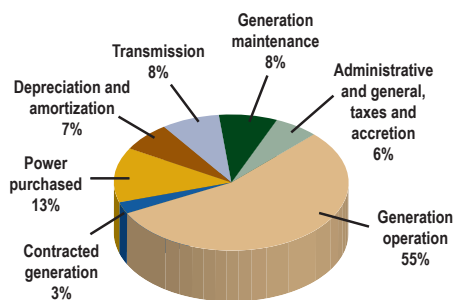
2022 financial highlights

(in thousands)	
Operating revenue	\$ 1,573,263
Operating expenses	\$ 1,491,164
Interest expense on long-term debt (less interest capitalized)	\$ 60,243
Net nonoperating income	\$ 3,091
Net margin	\$ 24,947
Investment in facilities	\$ 4,875,542
Long-term debt, excluding current maturities	\$ 1,677,918
Total assets	\$ 3,202,660

Operating revenue



Operating expenses



2022 statistical highlights

Net generation (coal & gas)	24,554,809 MWh
Member sales	20,809,048 MWh
Fuel, operations and maintenance	35.47 mills/kWh
Summer peak demand* (7-5-22)	4,538 MW
Winter peak demand* (12-23-22)	5,899 MW
*Peak hour member demand	

Revenue from members (per MWh)	\$48.95
Total part- and full-time employees	652
Dell Power Plant	22
Headquarters	258
Gas plants	14
New Madrid Power Plant	164
Thomas Hill Energy Center	214

Associated's and its six G&T owners' integrated, high-voltage transmission system enables Associated to reliably and economically serve member load, as well as transact business with investor-owned and municipal utilities, electric cooperatives, power marketing firms and regional transmission organizations.

Transmission lines owned by AECl and six G&T owners:	
69-kV – 7,134 miles	345-kV – 760 miles
138-kV – 275 miles	500-kV – 46 miles
161-kV – 2,073 miles	<b>Total – 10,288</b>

2022 operating statistics

Coal burned	8.4 million tons
Coal units' availability factor	82.5%
<i>(Percentage of time units are available to generate electricity)</i>	
Coal units' unplanned-outage factor	12.7%
AECl three-year average	9.3%
Industry three-year average for peer group	7.5%
Coal units' capacity factor	69.6%
<i>(Actual generation as percent of full-load capacity)</i>	
Coal units' net heat rate	9,914 Btu/kWh
<i>(weighted average)</i>	
Gas fleet capacity factor	39.2%
Gas fleet starting reliability	98.8%
<i>(with 1,620/1,640 starts)</i>	
Gas fleet availability factor	87%
Gas fleet accumulated unit hours of operation	68,457
Natural gas burned	72.5 Bcf

**Focus fixed on safety**  
Associated targets zero injuries. Its 2022 recordable incident rate was 1.18 per 200,000 hours worked.

Associated Electric Cooperative

David J. Tudor, CEO and general manager

Headquarters, 417-881-1204

Accounting and Finance – Meredith T. Roberts  
Energy Risk Management – Scott E. Thompson  
Engineering and Operations – Roger S. Clark  
General counsel and compliance – Brian A. Prestwood  
Human Resources – Shawn P. Calhoun  
Information Services – Christopher D. Lazzaro  
Member Services and Corporate Communications – Joseph E. Wilkinson  
Power Production – Kenneth S. Wilmot

Dell Power Plant, 870-564-9169

Ed Taylor, plant manager

Gas plant operations, 417-371-5873

Rick D. Armfield, senior manager

New Madrid Power Plant, 573-643-2211

Andrew J. Cofas, senior plant manager

Thomas Hill Energy Center, 660-261-4211

Joe T. Foster, senior plant manager

AECl board of directors

Emery O. Geisendorfer, president  
John B. Killgore, vice president  
Larry E. Culwell, secretary  
John R. Bledsoe, treasurer  
Douglas H. Aeilts  
Theodore J. Hilmes

Thomas W. Howard  
David L. McDowell  
John T. Richards  
Dan A. Singletary  
Daryl R. Sorrell  
Christopher M. Turner

**BALANCE**  
*Reliable • Affordable • Responsible*

**SYSTEM FACTS**  
**April 2023**

**Associated Electric Cooperative Inc.**  
A Touchstone Energy Cooperative