

2022 SPP RESOURCE ADEQUACY REPORT

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Southwest Power Pool, Inc.

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1. EXECUTIVE SUMMARY¹

Attachment AA² of the Southwest Power Pool, Inc. (SPP) Open Access Transmission Tariff (Tariff) requires a Load Responsible Entity (LRE) to maintain adequate capacity to meet its Resource Adequacy Requirement for the upcoming Summer Season. Maintaining appropriate planning reserves ensures that SPP will have sufficient capacity to serve peak demand obligations. The purpose of this report is to provide the status of each LREs compliance with the Resource Adequacy Requirement as well as an SPP Balancing Authority (BA) Area outlook for the 2022–2027 Summer Seasons.

All LREs have complied with the Resource Adequacy Requirement for the 2022 Summer Season.

The Planning Criteria defines the Planning Reserve Margin (PRM) as 12% for each LRE, unless the LREs capacity is comprised of at least 75% hydro-based generation, in which case the PRM for the LRE is 9.89%.³ For the 2022 Summer Season, there are sixty (60) LREs with a 12% PRM requirement and one (1) LRE with a 9.89% PRM requirement.⁴ The SPP BA Area Planning Reserve Margin is 22.0% for the 2022 Summer Season and decreases to 13.6% by planning year 2027. The SPP BA Area Planning Reserve Margin determined from the 2022 Summer Season submissions has decreased 1.2% from the 2021 Summer Season when the Planning Reserve Margin was 23.2%. The slight decrease is mainly due to the increase in the aggregated LREs Peak Demand compared to the previous year's forecast.

The 2023 to 2027 yearly values do not reflect all possible future generation currently being analyzed in the Generation Interconnection (GI) Queue, reoccurring Deliverable Capacity contracts used to meet the Resource Adequacy Requirement, modification to the PRM, and the effects of the Effective Load Carrying Capability (ELCC) policy.

¹ Terms used throughout this report are as defined in the Tariff, SPP Planning Criteria, or Resource Adequacy Workbook Instruction Manual.

² Link to Attachment AA: https://spp.org/documents/58597/attachment%20aa%20tariff.pdf

³ Link to SPP Planning Criteria: https://www.spp.org/spp-documents-filings/?id=18162

⁴ Western Area Power Administration – Upper Great Plains (UGP) Region

2. ABOUT SPP

The SPP⁵ BA Area covers 552,885 square miles and encompasses all or parts of Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming. The SPP footprint has more than 70,000 miles of transmission lines, 842 generation resources, 5,087 transmission-class substations, and serves a population of 19 million people.



Figure 1: Map of SPP Balancing Authority area

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⁵ Link to SPP website: https://www.spp.org/about-us/

3. SPP 2022-2027 SUMMER SEASON OUTLOOK

The SPP BA Area Planning Reserve Margin is 22.0% for the 2022 Summer Season and decreases to 13.6% by planning year 2027. The SPP BA Area Planning Reserve Margin determined from the 2022 Summer Season submissions has decreased 1.2% from the 2021 Summer Season where the Planning Reserve Margin was 23.2%. The total capacity for the SPP BA has been determined to be 65,150 MW in 2022 and decreases to 63,273 MW in 2027. The accredited amount of purchased Deliverable Capacity utilized by LREs to meet their Resource Adequacy Requirement is 1,028 MW for the 2022 Summer Season and 282 MW for the 2023 Summer Season, in which accredited wind accounts for 573 MW in the 2022 Summer Season and 258 MW in the 2023 Summer Season. LREs are relying upon Deliverable Capacity to meet their RAR needs more in 2022 (1,028 MW) versus the amount being claimed in 2021 (550 MW).

The 2023 to 2027 yearly values do not reflect all possible future generation currently being analyzed in the Generation Interconnection (GI) Queue, reoccurring Deliverable Capacity contracts used to meet the Resource Adequacy Requirement, modification to the PRM, and the effects of the Effective Load Carrying Capability (ELCC) policy.



Figure 2: SPP BA Area Planning Reserve Margin Summary

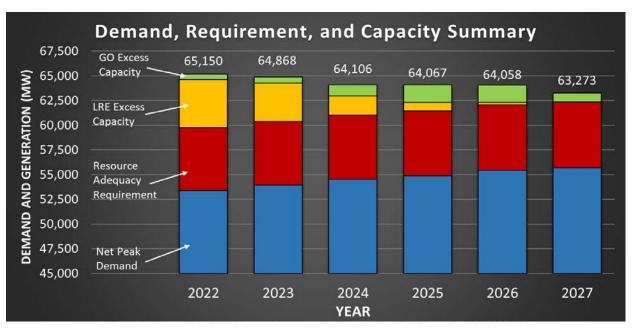


Figure 3: Demand, Requirement, and Capacity Summary. The top bar for 2027 shows Total Excess Capacity for the SPP footprint

Southwest Power Pool, Inc.

Table 1: SPP 2022 to 2027 Summer Season Outlook

Demand Summary (Units – MW)	2022	2023	2024	2025	2026	2027
Total LRE Forecasted Net Peak Demand	53,383	53,918	54,531	54,882	55,440	55,691
Controllable and Dispatchable Demand Response	448	750	795	843	921	963
Energy Efficiency and Conservation	144	225	305	376	435	487
Stand-by Load Under Contract	12.4	12.4	12.4	12.4	12.4	12.4
Capacity Summary (Units – MW)	2022	2023	2024	2025	2026	2027
Total Capacity ⁶	65,150	64,039	62,882	62,596	62,476	60,850
Capacity Resources ⁶	64,816	64,494	63,802	63,606	63,345	62,613
Confirmed Retirements	366	459	610	610	610	610
Unconfirmed Retirements	0	829	1,224	1,471	1,581	2,423
Other Capacity Adjustments – Additions	0	14	70	207	439	444
Other Capacity Adjustments – Reductions	174	174	174	174	174	174
External Firm Capacity Purchases	259	307	307	327	347	347
External Firm Capacity Sales	692	621	596	596	596	596
External Firm Power Purchases	1,314	1,314	1,314	1,314	1,314	1,256
External Firm Power Sales	5	5	5	5	5	5
SPP BA Area Planning Reserve ⁷	22.0%	20.3%	17.6%	16.7%	15.5%	13.6%
Planning Reserve Margin (As specified in SPP Planning Criteria)	12%	12%	12%	12%	12%	12%
Total LRE Resource Adequacy Requirement	59,759	60,359	61,041	61,433	62,059	62,340
Total LRE Excess Capacity	4,861	3,872	1,924	874	240	-824
Total Generator Owner Excess Capacity (Excludes Generator Owner uncommitted Deliverable Capacity of wind resources)	530	637	1,141	1,760	1,759	1,758

⁶ The Total Capacity and Capacity Resource values contain the Firm Capacity and Deliverable Capacity from LREs and Generator Owners. The equation for calculating the Total Capacity is as follows: Capacity Resources – Confirmed Retirements – Unconfirmed Retirements + Other Capacity Adjustments (Additions) – Other Capacity Adjustments (Reductions) + External Firm Capacity Purchases – External Firm Power Purchases – External Firm Power Sales

⁷ The SPP BA Area Planning Reserve is calculated by dividing the difference between the (Total Capacity + Unconfirmed Retirements) and the Total LRE Forecasted Net Peak Demand by the Total LRE Forecasted Net Peak Demand.

For the 2022 Summer Season, each LRE has to meet either a 9.89% or 12% Resource Adequacy Requirement. Figure 4 below breaks out three different Planning Reserve Margin percentages and reflects how many LREs fall within these percentages. The Planning Reserve Margin categories are 'between 12%-15%', 'between 15%-20%', and 'greater than 20%'. There are seven (7) LREs that had a Planning Reserve Margin in the 'between 12%-15%' category. There are fifteen (15) LREs that had a Planning Reserve Margin in the 'between 15%-20%' category. There are thirty-six (36) LREs that had a Planning Reserve Margin in the 'greater than 20%' category. In comparing these values, there were 20 LREs that had less than a 20% PRM in 2021 versus 22 LREs in the 2022 submissions.

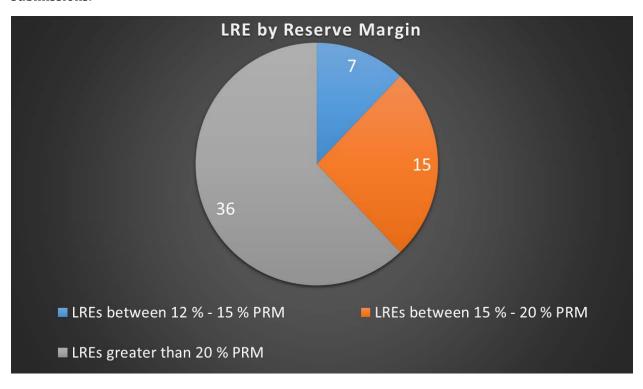


Figure 4: LRE by Reserve Margin

Figure 5 below is a breakdown of the amount of capacity in MW for the Net Peak Demand that makes up each Planning Reserve Margin category. The Planning Reserve Margin categories considered are 'between 12%-15%', 'between 15%-20%', and 'greater than 20%'. There are 6,620 MWs of Net Peak Demand from LREs which had a Planning Reserve Margin 'between 12%-15%'. There are 22,578 MWs of Net Peak Demand from LREs which had a Planning Reserve Margin 'between 15%-20%'. There are 24,185 MWs of Net Peak Demand from LREs which had a Planning Reserve Margin 'greater than 20%'. In comparing these values, there were 20,089 MWs of Net Peak Demand by LREs that had less than a 20% PRM in 2021 versus 29,198 MWs in the 2022 submissions. Thus more LREs are planning closer to the PRM in the 2022 submissions.

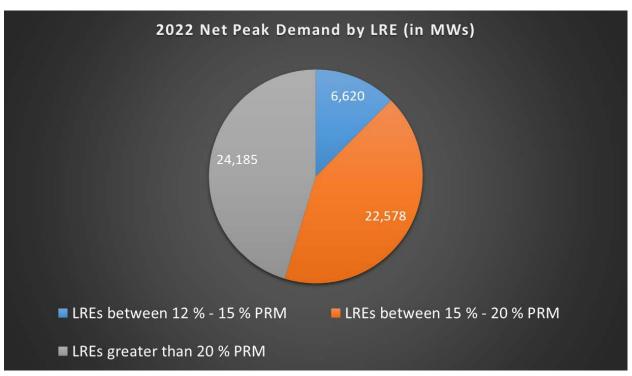


Figure 5: Net Peak Demand by LRE

4. FUEL TYPE SUMMARY

The values shown below are the accredited LRE and Generator Owner generation for the 2022-2027 Summer Seasons. All values reflect LRE and Generator Owner accredited capacity, which includes the consideration of generator retirements and Firm Power and Firm Capacity purchases and sales external to the SPP BA. The accredited wind and solar values below reflect capacity used to serve the LREs Resource Adequacy Requirement. SPP LREs and Generator Owners expect to retire 2,835 MWs by the end of 2027, when considering retirements since October 1, 2021. However, the amount of actual retirements in future years could be greater due to environmental regulation policy or specific company decisions. The 2022 Summer Season wind accreditation is 4,543 MW which is an increase of 593 MW from the 3,950 MW claimed for 2021.

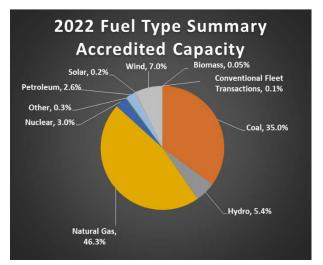


Figure 7: 2022 Summer Season Fuel Type Summary

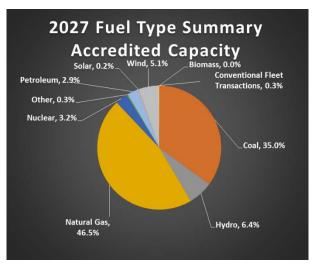


Figure 6: 2027 Summer Season Fuel Type Summary

Table 2: Summer Season Fuel Type Summary

Fuel Type	Unit	2022	2023	2024	2025	2026	2027
Biomass	MW	31	32	27	27	27	27
Coal	MW	22,540	22,524	21,809	21,809	21,809	21,344
Hydro ⁸	MW	3,490	3,980	3,922	3,922	3,922	3,921
Natural Gas	MW	29,869	29,718	29,449	28,656	28,546	28,316
Nuclear	MW	1,949	1,949	1,949	1,949	1,949	1,949
Other	MW	194	194	194	194	194	194
Petroleum	MW	1,685	1,794	1,794	1,794	1,794	1,794
Solar ⁹	MW	138	148	150	150	131	128
Wind ⁹	MW	4,543	3,577	3,300	3,278	3,147	3,114
Conventional Based Net External	MW	47	166	166	186	206	156
Transactions	IVIVV	47	100	100	100	200	150
Total Accredited Capacity	MW	64,486	64,082	62,760	61,965	61,725	60,943

Table 3: Summer Season Resource Retirement Summary

Confirmed Retirements	Unit	2022	2023	2024	2025	2026	2027
Coal	MW	313	313	313	313	313	313
Natural Gas	MW	45	138	289	289	289	289
Petroleum	MW	8	8	8	8	8	8
Unconfirmed Retirements	Unit	2022	2023	2024	2025	2026	2027
Coal	MW	0	675	675	675	675	1,140
Natural Gas	MW	0	152	547	721	831	1,208
Petroleum	MW	0	2	2	76	76	76
Total Resource Retirements	MW	366	1,288	1,834	2,081	2,191	3,033

⁸ Includes Hydro Based external Firm Capacity and Firm Power transactions

⁹ Excludes Generator Owner uncommitted Deliverable Capacity of wind and solar resources. Future values of wind and solar do not consider the current approved SPP ELCC Policy

5. LOAD RESPONSIBLE ENTITIES

A list of LREs is provided below, followed by calculation and fuel type summaries for the 2022 Summer Season for each LRE. The fuel type summaries consider resource retirements and Firm Power and Firm Capacity purchases and sales external and internal to the SPP BA where there is a specific fuel type associated with the transaction. Some LREs listed below do not have a fuel type summary because the LREs Net Peak Demand is being met with controllable and dispatchable demand response programs and/or controllable and dispatchable behind-the-meter generation not registered as a Resource, or internal Firm Power purchases which places the load and planning reserve obligation on the selling entity.

American Electric Power Arkansas Electric Cooperative Corporation Basin Electric Power Cooperative Big Rivers Electric Corporation Carthage Water & Electric Plant, Missouri City of Beatrice, Nebraska

City of Chanute, Kansas

City of Falls City Utilities, Nebraska

City of Fremont, Nebraska

City of Grand Island Utilities, Nebraska

City of Hastings Utilities, Nebraska

City of Malden Board of Public Works, Missouri

City of Nebraska City Utilities, Nebraska

City of Neligh, Nebraska

City of Nixa, Missouri

City of Piggott - Municipal Light Water & Sewer, Arkansas

City of Poplar Bluff Municipal Utilities, Missouri

City of Pratt, Kansas

City of Scribner, Nebraska

City of South Sioux City, Nebraska

City of Superior, Nebraska

City of West Plains Board of Public Works, Missouri

City Utilities of Springfield, Missouri

East and North Texas Electric Cooperatives

Empire District Electric Company (Liberty Utilities)

Golden Spread Electric Cooperative

Grand River Dam Authority

Harlan Municipal Utilities

Heartland Consumers Power District

Independence Power & Light

Kansas City Board of Public Utilities

Southwest Power Pool, Inc.

Kansas City Power & Light (includes Greater Missouri Operations Company)

Kansas Electric Power Cooperative

Kansas Municipal Energy Agency - EMP1

Kansas Municipal Energy Agency - EMP2

Kansas Municipal Energy Agency - EMP3

Kansas Municipal Energy Agency - Eudora

Kansas Power Pool

Kennett, Missouri Board of Public Works

Lincoln Electric System

MidAmerican Energy Company

Midwest Energy, Inc.

Missouri Joint Municipal Electric Utility Commission

Missouri River Energy Services

Municipal Energy Agency of Nebraska

Nebraska Public Power District

Northwestern Energy - NWMT

Northwestern Energy - NWPS

NSP Energy Marketing

Oklahoma Gas & Electric Company

Oklahoma Municipal Power Authority

Omaha Public Power District

Otter Tail Power Company

Paragould, Arkansas Light & Water Commission

People's Electric Cooperative

Southwestern Public Service Company

Sunflower Electric Power Corporation

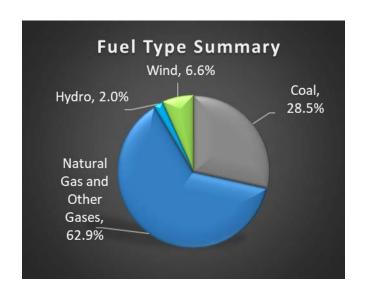
Westar Energy

Western Area Power Administration - UGP

Western Farmers Energy Services

West Texas Municipal

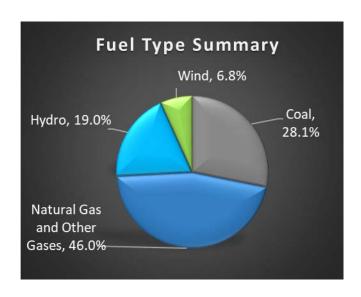
AMERICAN ELECTRIC POWER



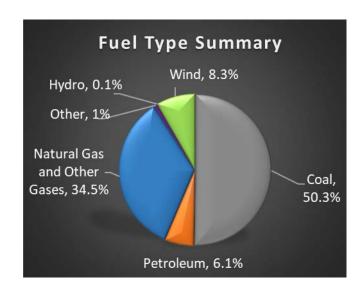
Capacity Summary	Unit	2022
Capacity Resources	MW	8,517
Firm Capacity Purchases	MW	1,391
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	123
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	10,031
Demand Summary		
Forecasted Peak Demand	MW	8,679
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	102
Controllable and Dispatchable DR	MW	14
Net Peak Demand	MW	8,563
Requirements Summary		
Resource Adequacy Requirement	MW	9,591
Excess Capacity	MW	441
Deficient Capacity	MW	0
LRE planning reserve margin	%	17.14
Planning Reserve Margin	%	12.00

ARKANSAS ELECTRIC COOPERATIVE CORPORATION

Capacity Summary	Unit	2022
Capacity Resources	MW	727
Firm Capacity Purchases	MW	251
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	212
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	1,189
Demand Summary		
Forecasted Peak Demand	MW	976
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	976
Requirements Summary		
Resource Adequacy Requirement	MW	1,093
Excess Capacity	MW	96
Deficient Capacity	MW	0
LRE planning reserve margin	%	21.80
Planning Reserve Margin	%	12.00



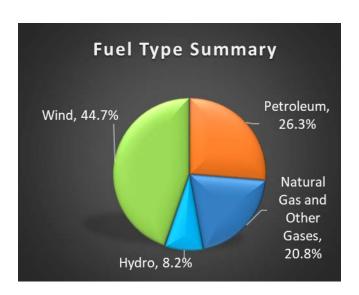
BASIN ELECTRIC POWER COOPERATIVE



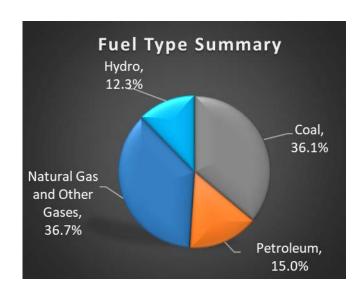
Capacity Summary	Unit	2022
Capacity Resources	MW	3,562
Firm Capacity Purchases	MW	659
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	4,221
Demand Summary		
Forecasted Peak Demand	MW	3,390
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	4
Controllable and Dispatchable DR	MW	21.9
Net Peak Demand	MW	3,364
Requirements Summary		
Resource Adequacy Requirement	MW	3,768
Excess Capacity	MW	453
Deficient Capacity	MW	0
LRE planning reserve margin	%	25.47
Planning Reserve Margin	%	12.00

BIG RIVERS ELECTRIC CORPORATION

Conscitut Summany	Linis	2022
Capacity Summary	Unit	2022
Capacity Resources	MW	25
Firm Capacity Purchases	MW	82
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	107
Demand Summary		
Forecasted Peak Demand	MW	97
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	7
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	89
Requirements Summary		
Resource Adequacy Requirement	MW	100
Excess Capacity	MW	7
Deficient Capacity	MW	0
LRE planning reserve margin	%	19.83
Planning Reserve Margin	%	12.00



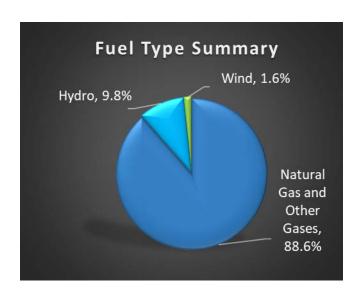
CARTHAGE WATER & ELECTRIC PLANT, MISSOURI



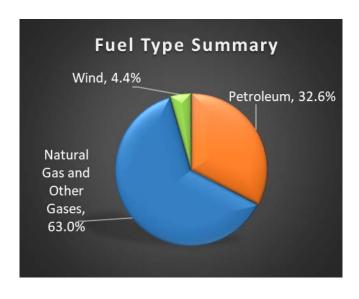
Capacity Summary	Unit	2022
Capacity Resources	MW	33
Firm Capacity Purchases	MW	33
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	8
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	74
Demand Summary		
Forecasted Peak Demand	MW	63
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	63
Requirements Summary		
Resource Adequacy Requirement	MW	70
Excess Capacity	MW	4
Deficient Capacity	MW	0
LRE planning reserve margin	%	18.06
Planning Reserve Margin	%	12.00

CITY OF BEATRICE, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	44
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	44
Demand Summary		
Forecasted Peak Demand	MW	40
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	5
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	35
Requirements Summary		
Resource Adequacy Requirement	MW	39
Excess Capacity	MW	4
Deficient Capacity	MW	0
LRE planning reserve margin	%	24.62
Planning Reserve Margin	%	12.00



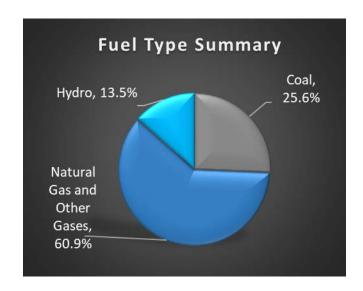
CITY OF CHANUTE, KANSAS



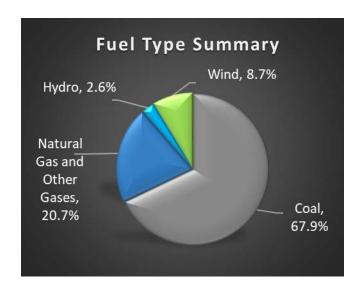
Capacity Summary	Unit	2022
Capacity Resources	MW	123
Firm Capacity Purchases	MW	6
Firm Capacity Sales	MW	15
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	114
Demand Summary		
Forecasted Peak Demand	MW	98
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	2
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	96
Requirements Summary		
Resource Adequacy Requirement	MW	108
Excess Capacity	MW	7
Deficient Capacity	MW	0
LRE planning reserve margin	%	18.89
Planning Reserve Margin	%	12.00

CITY OF FALLS CITY UTILITES, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	14
Firm Capacity Purchases	MW	6
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	19
Demand Summary		
Forecasted Peak Demand	MW	13
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	3
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	10
Requirements Summary		
Resource Adequacy Requirement	MW	11
Excess Capacity	MW	8
Deficient Capacity	MW	0
LRE planning reserve margin	%	88.47
Planning Reserve Margin	%	12.00



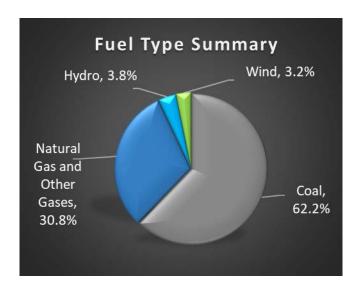
CITY OF FREMONT, NEBRASKA



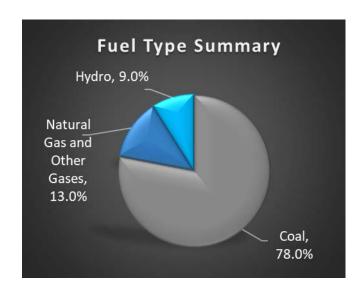
Capacity Summary	Unit	2022
Capacity Resources	MW	161
Firm Capacity Purchases	MW	16
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	176
Demand Summary		
Forecasted Peak Demand	MW	117
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	5
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	112
Requirements Summary		
Resource Adequacy Requirement	MW	126
Excess Capacity	MW	51
Deficient Capacity	MW	0
LRE planning reserve margin	%	57.09
Planning Reserve Margin	%	12.00

CITY OF GRAND ISLAND UTILITIES, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	195
Firm Capacity Purchases	MW	41
Firm Capacity Sales	MW	7
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	229
Demand Summary		
Forecasted Peak Demand	MW	156
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	9
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	147
Requirements Summary		
Resource Adequacy Requirement	MW	165
Excess Capacity	MW	64
Deficient Capacity	MW	0
LRE planning reserve margin	%	55.33
Planning Reserve Margin	%	12.00



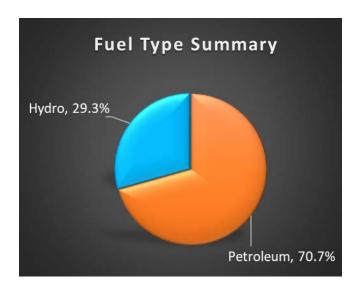
CITY OF HASTINGS UTILITIES, NEBRASKA



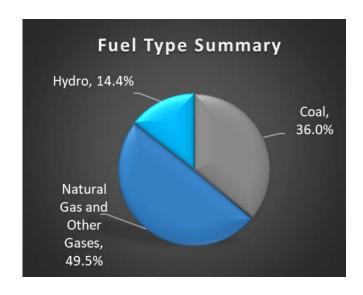
Capacity Summary	Unit	2022
Capacity Resources	MW	123
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	123
Demand Summary		
Forecasted Peak Demand	MW	94
Internal Firm Power Sales	MW	7
Internal Firm Power Purchases	MW	12
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	88
Requirements Summary		
Resource Adequacy Requirement	MW	99
Excess Capacity	MW	24
Deficient Capacity	MW	0
LRE planning reserve margin	%	38.93
Planning Reserve Margin	%	12.00

CITY OF MALDEN BOARD OF PUBLIC WORKS, MISSOURI

Capacity Summary	Unit	2022
Capacity Resources	MW	14
Firm Capacity Purchases	MW	4
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	6
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	23
Demand Summary		
Forecasted Peak Demand	MW	11
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	11
Requirements Summary		
Resource Adequacy Requirement	MW	12
Excess Capacity	MW	11
Deficient Capacity	MW	0
LRE planning reserve margin	%	110.00
Planning Reserve Margin	%	12.00



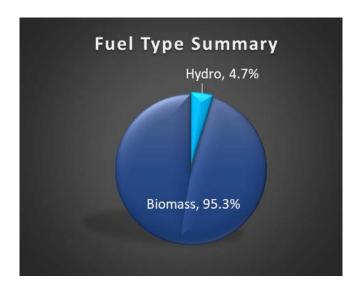
CITY OF NEBRASKA CITY UTILITIES, NEBRASKA



Capacity Summary	Unit	2022
Capacity Resources	MW	38
Firm Capacity Purchases	MW	10
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	48
Demand Summary		
Forecasted Peak Demand	MW	32
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	8
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	24
Requirements Summary		
Resource Adequacy Requirement	MW	27
Excess Capacity	MW	20
Deficient Capacity	MW	0
LRE planning reserve margin	%	94.67
Planning Reserve Margin	%	12.00

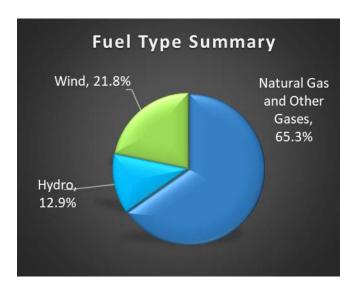
CITY OF NELIGH, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	6
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	6
Demand Summary		
Forecasted Peak Demand	MW	5
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	5
Requirements Summary		
Resource Adequacy Requirement	MW	5
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	22.41
Planning Reserve Margin	%	12.00

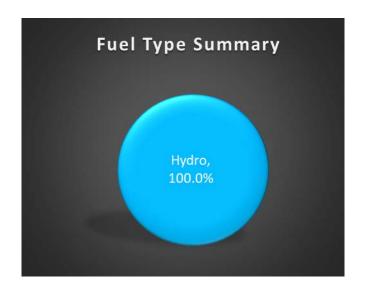


CITY OF NIXA, MISSOURI

Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	55
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	6
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	61
Demand Summary		
Forecasted Peak Demand	MW	52
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	52
Requirements Summary		
Resource Adequacy Requirement	MW	58
Excess Capacity	MW	3
Deficient Capacity	MW	0
LRE planning reserve margin	%	17.18
Planning Reserve Margin	%	12.00



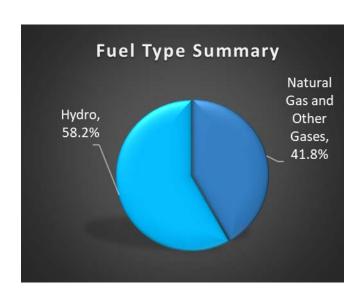
CITY OF PIGGOTT – MUNICIPAL LIGHT WATER & SEWER, ARKANSAS



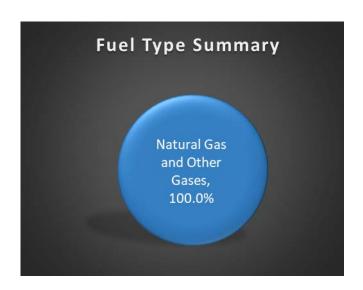
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	6
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	5
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	11
Demand Summary		
Forecasted Peak Demand	MW	10
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	10
Requirements Summary		
Resource Adequacy Requirement	MW	11
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	14.88
Planning Reserve Margin	%	12.00

CITY OF POPLAR BLUFF MUNICIPAL UTILITIES, MISSOURI

Capacity Summary	Unit	2022
Capacity Resources	MW	32
Firm Capacity Purchases	MW	20
Firm Capacity Sales	MW	40
External Firm Power Purchases	MW	44
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	56
Demand Summary		
Forecasted Peak Demand	MW	72
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	40
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	32
Requirements Summary		
Resource Adequacy Requirement	MW	36
Excess Capacity	MW	20
Deficient Capacity	MW	0
LRE planning reserve margin	%	74.91
Planning Reserve Margin	%	12.00



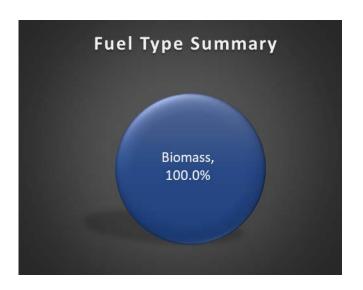
CITY OF PRATT, KANSAS



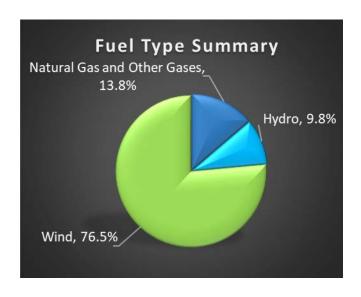
Capacity Summary	Unit	2022
Capacity Resources	MW	26
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	10
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	17
Demand Summary		
Forecasted Peak Demand	MW	21
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	6
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	15
Requirements Summary		
Resource Adequacy Requirement	MW	16
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	14.92
Planning Reserve Margin	%	12.00
Planning Reserve Margin	%	12.00

CITY OF SCRIBNER, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	3
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	3
Demand Summary		
Forecasted Peak Demand	MW	2
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	2
Requirements Summary		
Resource Adequacy Requirement	MW	3
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	30.43
Planning Reserve Margin	%	12.00



CITY OF SOUTH SIOUX CITY, NEBRASKA



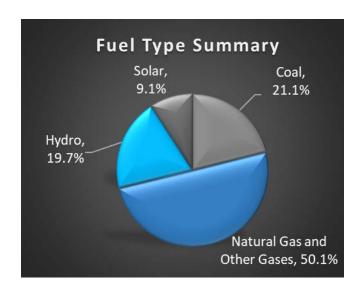
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	46
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	46
Demand Summary		
Forecasted Peak Demand	MW	41
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	5
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	36
Requirements Summary		
Resource Adequacy Requirement	MW	41
Excess Capacity	MW	5
Deficient Capacity	MW	0
LRE planning reserve margin	%	26.34
Planning Reserve Margin	%	12.00

CITY OF SUPERIOR, NEBRASKA

Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	0
Demand Summary		
Forecasted Peak Demand	MW	8
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	7
Controllable and Dispatchable DR	MW	1.2
Net Peak Demand	MW	0
Requirements Summary		
Resource Adequacy Requirement	MW	0
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	N/A
Planning Reserve Margin	%	12.00



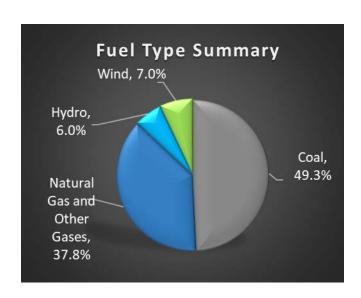
CITY OF WEST PLAINS BOARD OF PUBLIC WORKS, MISSOURI



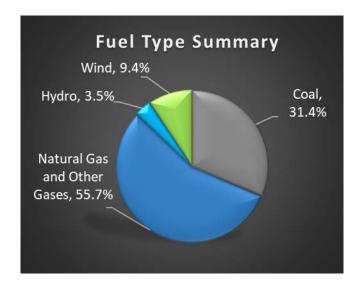
Capacity Summary	Unit	2022
Capacity Resources	MW	51
Firm Capacity Purchases	MW	18
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	17
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	85
Demand Summary		
Forecasted Peak Demand	MW	42
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	42
Requirements Summary		
Resource Adequacy Requirement	MW	47
Excess Capacity	MW	38
Deficient Capacity	MW	0
LRE planning reserve margin	%	103.29
Planning Reserve Margin	%	12.00

CITY UTILITIES OF SPRINGFIELD, MISSOURI

Capacity Summary	Unit	2022
Capacity Resources	MW	818
Firm Capacity Purchases	MW	66
Firm Capacity Sales	MW	70
External Firm Power Purchases	MW	56
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	870
Demand Summary		
Forecasted Peak Demand	MW	713
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	713
Requirements Summary		
Resource Adequacy Requirement	MW	799
Excess Capacity	MW	71
Deficient Capacity	MW	0
LRE planning reserve margin	%	22.02
Planning Reserve Margin	%	12.00



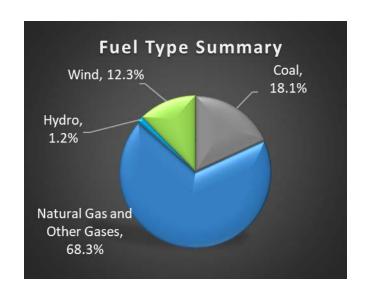
EAST AND NORTH TEXAS ELECTRIC COOPERATIVES



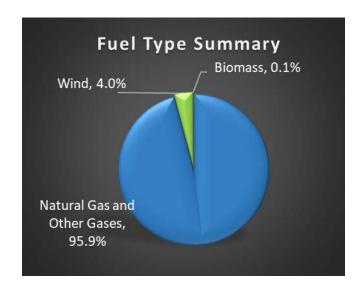
Capacity Summary	Unit	2022
Capacity Resources	MW	669
Firm Capacity Purchases	MW	65
Firm Capacity Sales	MW	459
External Firm Power Purchases	MW	117
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	393
Demand Summary		
Forecasted Peak Demand	MW	219
Internal Firm Power Sales	MW	102
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	321
Requirements Summary		
Resource Adequacy Requirement	MW	359
Excess Capacity	MW	33
Deficient Capacity	MW	0
LRE planning reserve margin	%	22.39
Planning Reserve Margin	%	12.00

EMPIRE DISTRICT ELECTRIC COMPANY (LIBERTY UTILITIES)

Capacity Summary	Unit	2022
Capacity Resources	MW	1,302
Firm Capacity Purchases	MW	67
Firm Capacity Sales	MW	78
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	1,291
Demand Summary		
Forecasted Peak Demand	MW	1,096
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1,096
Requirements Summary		
Resource Adequacy Requirement	MW	1,228
Excess Capacity	MW	63
Deficient Capacity	MW	0
LRE planning reserve margin	%	17.76
Planning Reserve Margin	%	12.00



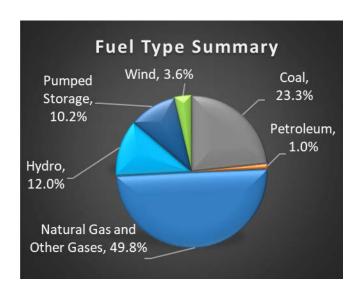
GOLDEN SPREAD ELECTRIC COOPERATIVE



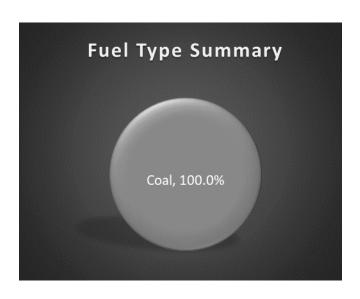
Capacity Summary	Unit	2022
Capacity Resources	MW	1,489
Firm Capacity Purchases	MW	236
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	1,724
Demand Summary		
Forecasted Peak Demand	MW	1,485
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1,485
Requirements Summary		
Resource Adequacy Requirement	MW	1,663
Excess Capacity	MW	61
Deficient Capacity	MW	0
LRE planning reserve margin	%	16.13
Planning Reserve Margin	%	12.00

GRAND RIVER DAM AUTHORITY

Capacity Summary	Unit	2022
Capacity Resources	MW	2,018
Firm Capacity Purchases	MW	77
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	14
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	2,110
Demand Summary		
Forecasted Peak Demand	MW	1,080
Internal Firm Power Sales	MW	465
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1,545
Requirements Summary		
Resource Adequacy Requirement	MW	1,730
Excess Capacity	MW	380
Deficient Capacity	MW	0
LRE planning reserve margin	%	36.60
Planning Reserve Margin	%	12.00



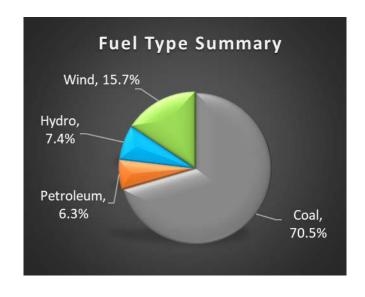
HARLAN MUNICIPAL UTILITIES



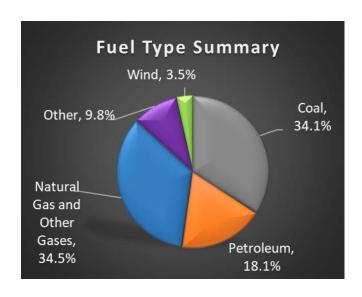
Capacity Summary	Unit	2022
Capacity Resources	MW	6
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	6
Demand Summary		
Forecasted Peak Demand	MW	5
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	5
Requirements Summary		
Resource Adequacy Requirement	MW	6
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	14.24
Planning Reserve Margin	%	12.00

HEARTLAND CONSUMERS POWER DISTRICT

Capacity Summary	Unit	2022
Capacity Resources	MW	84
Firm Capacity Purchases	MW	15
Firm Capacity Sales	MW	42
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	57
Demand Summary		
Forecasted Peak Demand	MW	45
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	45
Requirements Summary		
Resource Adequacy Requirement	MW	50
Excess Capacity	MW	7
Deficient Capacity	MW	0
LRE planning reserve margin	%	26.63
Planning Reserve Margin	%	12.00



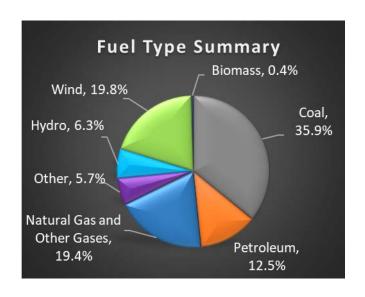
INDEPENDENCE POWER & LIGHT



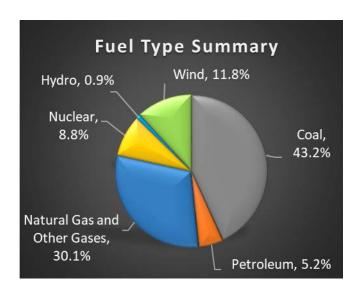
Capacity Summary	Unit	2022
Capacity Resources	MW	157
Firm Capacity Purchases	MW	167
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	324
Demand Summary		
Forecasted Peak Demand	MW	282
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	282
Requirements Summary		
Resource Adequacy Requirement	MW	316
Excess Capacity	MW	8
Deficient Capacity	MW	0
LRE planning reserve margin	%	14.88
Planning Reserve Margin	%	12.00

KANSAS CITY BOARD OF PUBLIC UTILITIES

Capacity Summary	Unit	2022
Capacity Resources	MW	518
Firm Capacity Purchases	MW	141
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	43
External Firm Power Sales	MW	5
Confirmed Retirements	MW	0
Total Capacity	MW	697
Demand Summary		
Forecasted Peak Demand	MW	459
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	459
Requirements Summary		
Resource Adequacy Requirement	MW	514
Excess Capacity	MW	183
Deficient Capacity	MW	0
LRE planning reserve margin	%	51.82
Planning Reserve Margin	%	12.00



KANSAS CITY POWER & LIGHT



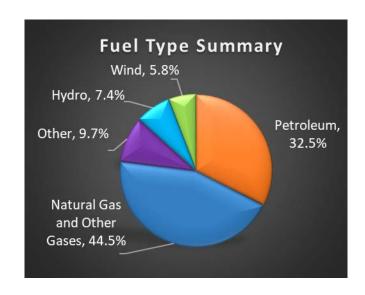
Capacity Summary	Unit	2022
Capacity Resources	MW	5,522
Firm Capacity Purchases	MW	767
Firm Capacity Sales	MW	55
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	6,234
Demand Summary		
Forecasted Peak Demand	MW	5,389
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	5,389
Requirements Summary		
Resource Adequacy Requirement	MW	6,036
Excess Capacity	MW	198
Deficient Capacity	MW	0
LRE planning reserve margin	%	15.68
Planning Reserve Margin	%	12.00

KANSAS ELECTRIC POWER COOPERATIVE

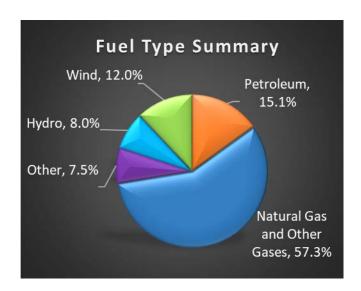
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	47
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	47
Demand Summary		
Forecasted Peak Demand	MW	40
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	40
Requirements Summary		
Resource Adequacy Requirement	MW	44
Excess Capacity	MW	3
Deficient Capacity	MW	0
LRE planning reserve margin	%	18.99
Planning Reserve Margin	%	12.00

KANSAS MUNICIPAL ENERGY AGENCY – EMP1

Capacity Resources Firm Capacity Purchases Firm Capacity Sales Firm Capacity Sales External Firm Power Purchases External Firm Power Sales Confirmed Retirements MW 0 Total Capacity MW 98 Demand Summary Forecasted Peak Demand Internal Firm Power Sales Internal Firm Power Purchases Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement Excess Capacity MW 0 LRE planning reserve margin Planning Reserve Margin MW 6 6 MW 7 8 93 MW 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Capacity Summary	Unit	2022
Firm Capacity Sales External Firm Power Purchases External Firm Power Sales MW 0 Confirmed Retirements MW 0 Total Capacity MW 98 Demand Summary Forecasted Peak Demand Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 109 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 73 Requirements Summary Resource Adequacy Requirement Excess Capacity MW 0 LRE planning reserve margin MW 34.95	Capacity Resources	MW	93
External Firm Power Purchases MW 0 External Firm Power Sales MW 0 Confirmed Retirements MW 0 Total Capacity MW 98 Demand Summary Forecasted Peak Demand MW 109 Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Firm Capacity Purchases	MW	6
External Firm Power Sales Confirmed Retirements MW 0 Total Capacity MW 98 Demand Summary Forecasted Peak Demand Internal Firm Power Sales Internal Firm Power Purchases Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement Excess Capacity MW 0 LRE planning reserve margin MW 0 34.95	Firm Capacity Sales	MW	3
Confirmed Retirements MW 98 Total Capacity MW 98 Demand Summary Forecasted Peak Demand MW 109 Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	External Firm Power Purchases	MW	2
Total Capacity MW 98 Demand Summary Forecasted Peak Demand MW 109 Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	External Firm Power Sales	MW	0
Pemand Summary Forecasted Peak Demand MW 109 Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Confirmed Retirements	MW	0
Forecasted Peak Demand MW 109 Internal Firm Power Sales MW 0 Internal Firm Power Purchases MW 36 Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Total Capacity	MW	98
Internal Firm Power Sales Internal Firm Power Purchases Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin MW 34.95	Demand Summary		
Internal Firm Power Purchases Controllable and Dispatchable DR MW 0 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Forecasted Peak Demand	MW	109
Controllable and Dispatchable DR MW 73 Net Peak Demand MW 73 Requirements Summary Resource Adequacy Requirement MW 82 Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Internal Firm Power Sales	MW	0
Net Peak DemandMW73Requirements SummaryResource Adequacy RequirementMW82Excess CapacityMW17Deficient CapacityMW0LRE planning reserve margin%34.95	Internal Firm Power Purchases	MW	36
Requirements SummaryResource Adequacy RequirementMW82Excess CapacityMW17Deficient CapacityMW0LRE planning reserve margin%34.95	Controllable and Dispatchable DR	MW	0
Resource Adequacy RequirementMW82Excess CapacityMW17Deficient CapacityMW0LRE planning reserve margin%34.95	Net Peak Demand	MW	73
Excess Capacity MW 17 Deficient Capacity MW 0 LRE planning reserve margin % 34.95	Requirements Summary		
Deficient CapacityMW0LRE planning reserve margin%34.95	Resource Adequacy Requirement	MW	82
LRE planning reserve margin % 34.95	Excess Capacity	MW	17
	Deficient Capacity	MW	0
Planning Reserve Margin % 12.00	LRE planning reserve margin	%	34.95
	Planning Reserve Margin	%	12.00



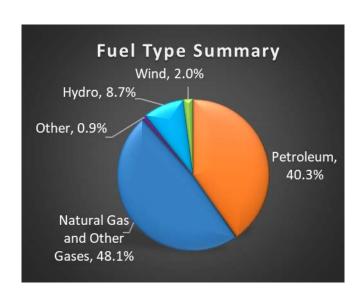
KANSAS MUNICIPAL ENERGY AGENCY - EMP2



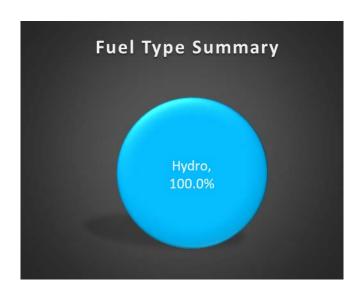
Capacity Summary	Unit	2022
Capacity Resources	MW	145
Firm Capacity Purchases	MW	21
Firm Capacity Sales	MW	3
External Firm Power Purchases	MW	1
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	164
Demand Summary		
Forecasted Peak Demand	MW	159
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	25
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	133
Requirements Summary		
Resource Adequacy Requirement	MW	149
Excess Capacity	MW	14
Deficient Capacity	MW	0
LRE planning reserve margin	%	22.77
Planning Reserve Margin	%	12.00

KANSAS MUNICIPAL ENERGY AGENCY – EMP3

Capacity Summary	Unit	2022
Capacity Resources	MW	81
Firm Capacity Purchases	MW	23
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	2
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	106
Demand Summary		
Forecasted Peak Demand	MW	117
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	24
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	93
Requirements Summary		
Resource Adequacy Requirement	MW	104
Excess Capacity	MW	2
Deficient Capacity	MW	0
LRE planning reserve margin	%	14.31
Planning Reserve Margin	%	12.00



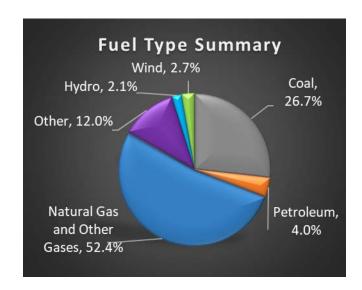
KANSAS MUNICIPAL ENERGY AGENCY – EUDORA



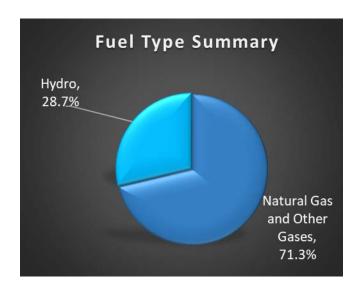
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	15
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	15
Demand Summary		
Forecasted Peak Demand	MW	13
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	1
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	12
Requirements Summary		
Resource Adequacy Requirement	MW	14
Excess Capacity	MW	1
Deficient Capacity	MW	0
LRE planning reserve margin	%	20.05
Planning Reserve Margin	%	12.00

KANSAS POWER POOL

Capacity Summary	Unit	2022
Capacity Resources	MW	201
Firm Capacity Purchases	MW	65
Firm Capacity Sales	MW	50
External Firm Power Purchases	MW	5
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	221
Demand Summary		
Forecasted Peak Demand	MW	210
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	18
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	192
Requirements Summary		
Resource Adequacy Requirement	MW	215
Excess Capacity	MW	6
Deficient Capacity	MW	0
LRE planning reserve margin	%	15.21
Planning Reserve Margin	%	12.00



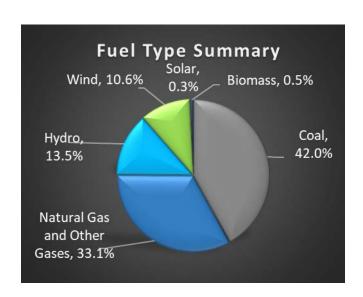
KENNETT, MISSOURI BOARD OF PUBLIC WORKS



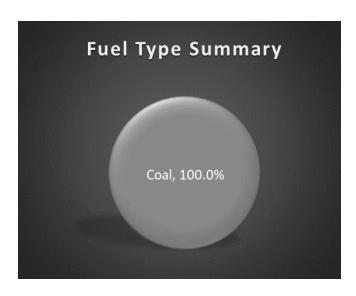
Capacity Summary	Unit	2022
Capacity Resources	MW	31
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	12
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	43
Demand Summary		
Forecasted Peak Demand	MW	29
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	29
Requirements Summary		
Resource Adequacy Requirement	MW	32
Excess Capacity	MW	10
Deficient Capacity	MW	0
LRE planning reserve margin	%	48.00
Planning Reserve Margin	%	12.00

LINCOLN ELECTRIC SYSTEM

Capacity Summary	Unit	2022
Capacity Resources	MW	737
Firm Capacity Purchases	MW	258
Firm Capacity Sales	MW	190
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	805
Demand Summary		
Forecasted Peak Demand	MW	770
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	126
Controllable and Dispatchable DR	MW	4
Net Peak Demand	MW	640
Requirements Summary		
Resource Adequacy Requirement	MW	717
Excess Capacity	MW	88
Deficient Capacity	MW	0
LRE planning reserve margin	%	25.70
Planning Reserve Margin	%	12.00



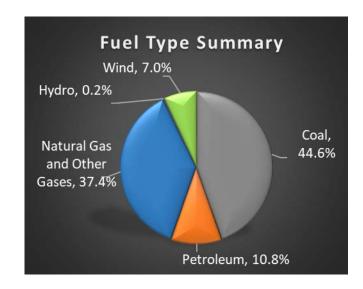
MIDAMERICAN ENERGY COMPANY



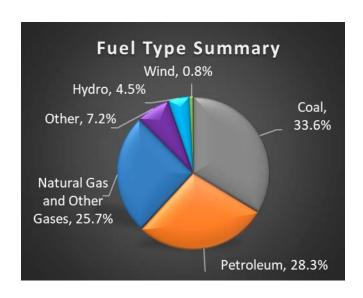
Capacity Summary	Unit	2022
Capacity Resources	MW	60
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	60
Demand Summary		
Forecasted Peak Demand	MW	49
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	49
Requirements Summary		
Resource Adequacy Requirement	MW	55
Excess Capacity	MW	5
Deficient Capacity	MW	0
LRE planning reserve margin	%	22.18
Planning Reserve Margin	%	12.00

MIDWEST ENERGY, INC.

Capacity Summary	Unit	2022
Capacity Resources	MW	162
Firm Capacity Purchases	MW	293
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	1
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	456
Demand Summary		
Forecasted Peak Demand	MW	390
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	7
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	383
Requirements Summary		
Resource Adequacy Requirement	MW	429
Excess Capacity	MW	27
Deficient Capacity	MW	0
LRE planning reserve margin	%	19.08
Planning Reserve Margin	%	12.00



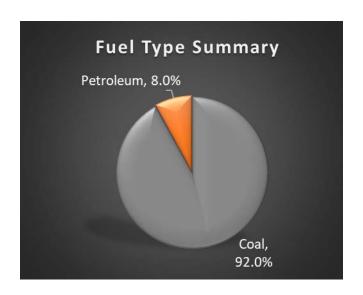
MISSOURI JOINT MUNICIPAL ELECTRIC UTILITY COMMISSION



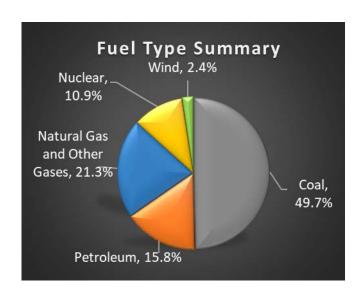
Capacity Summary	Unit	2022
Capacity Resources	MW	599
Firm Capacity Purchases	MW	190
Firm Capacity Sales	MW	99
External Firm Power Purchases	MW	26
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	716
Demand Summary		
Forecasted Peak Demand	MW	613
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	613
Requirements Summary		
Resource Adequacy Requirement	MW	687
Excess Capacity	MW	30
Deficient Capacity	MW	0
LRE planning reserve margin	%	16.87
Planning Reserve Margin	%	12.00

MISSOURI RIVER ENERGY SERVICES

Capacity Summary	Unit	2022
Capacity Resources	MW	489
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	189
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	300
Demand Summary		
Forecasted Peak Demand	MW	233
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	233
Requirements Summary		
Resource Adequacy Requirement	MW	261
Excess Capacity	MW	39
Deficient Capacity	MW	0
LRE planning reserve margin	%	28.78
Planning Reserve Margin	%	12.00



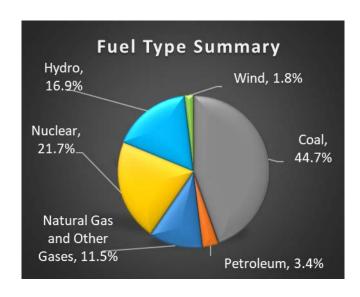
MUNICIPAL ENERGY AGENCY OF NEBRASKA



Capacity Summary	Unit	2022
Capacity Resources	MW	183
Firm Capacity Purchases	MW	56
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Other Capacity Adjustments - Reductions	MW	5
Total Capacity	MW	233
Demand Summary		
Forecasted Peak Demand	MW	157
Internal Firm Power Sales	MW	56
Internal Firm Power Purchases	MW	20
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	193
Requirements Summary		
Resource Adequacy Requirement	MW	216
Excess Capacity	MW	17
Deficient Capacity	MW	0
LRE planning reserve margin	%	20.73
Planning Reserve Margin	%	12.00

NEBRASKA PUBLIC POWER DISTRICT

Capacity Summary	Unit	2022
Capacity Resources	MW	3,013
Firm Capacity Purchases	MW	289
Firm Capacity Sales	MW	410
External Firm Power Purchases	MW	6
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	2,898
Demand Summary		
Forecasted Peak Demand	MW	2,943
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	462
Controllable and Dispatchable DR	MW	71
Net Peak Demand	MW	2,410
Requirements Summary		
Resource Adequacy Requirement	MW	2,699
Excess Capacity	MW	199
Deficient Capacity	MW	0
LRE planning reserve margin	%	20.27
Planning Reserve Margin	%	12.00

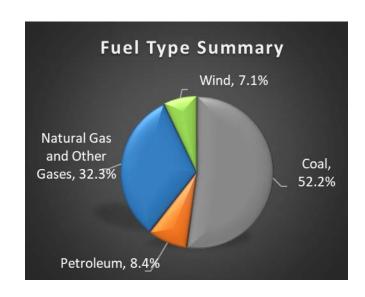


NORTHWESTERN ENERGY - NWMT

Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	0
Demand Summary		
Forecasted Peak Demand	MW	0
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	0
Requirements Summary		
Resource Adequacy Requirement	MW	0
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	N/A
Planning Reserve Margin	%	12.00

NORTHWESTERN ENERGY - NWPS

Capacity Summary	Unit	2022
Capacity Resources	MW	377
Firm Capacity Purchases	MW	26
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	403
Demand Summary		
Forecasted Peak Demand	MW	331
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	331
Requirements Summary		
Resource Adequacy Requirement	MW	371
Excess Capacity	MW	32
Deficient Capacity	MW	0
LRE planning reserve margin	%	21.66
Planning Reserve Margin	%	12.00

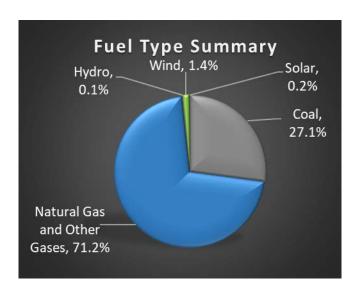


NSP ENERGY MARKETING

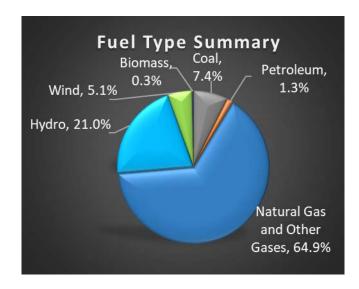
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	2
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	2
Demand Summary		
Forecasted Peak Demand	MW	1
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1
Requirements Summary		
Resource Adequacy Requirement	MW	1
Excess Capacity	MW	1
Deficient Capacity	MW	0
LRE planning reserve margin	%	66.67
Planning Reserve Margin	%	12.00

OKLAHOMA GAS & ELECTRIC COMPANY

Capacity Summary	Unit	2022
Capacity Resources	MW	6,704
Firm Capacity Purchases	MW	220
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	7
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	6,930
Demand Summary		
Forecasted Peak Demand	MW	6,417
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	235
Net Peak Demand	MW	6,182
Requirements Summary		
Resource Adequacy Requirement	MW	6,924
Excess Capacity	MW	7
Deficient Capacity	MW	0
LRE planning reserve margin	%	12.11
Planning Reserve Margin	%	12.00



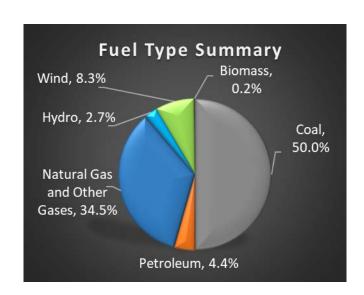
OKLAHOMA MUNICIPAL POWER AUTHORITY



Capacity Summary	Unit	2022
Capacity Resources	MW	565
Firm Capacity Purchases	MW	93
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	137
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	794
Demand Summary		
Forecasted Peak Demand	MW	723
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	60
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	663
Requirements Summary		
Resource Adequacy Requirement	MW	743
Excess Capacity	MW	52
Deficient Capacity	MW	0
LRE planning reserve margin	%	19.79
Planning Reserve Margin	%	12.00

OMAHA PUBLIC POWER DISTRICT

Capacity Summary	Unit	2022
Capacity Resources	MW	2,723
Firm Capacity Purchases	MW	506
Firm Capacity Sales	MW	343
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	2,886
Demand Summary		
Forecasted Peak Demand	MW	2,614
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	80
Controllable and Dispatchable DR	MW	100
Net Peak Demand	MW	2,434
Requirements Summary		
Resource Adequacy Requirement	MW	2,726
Excess Capacity	MW	160
Deficient Capacity	MW	0
LRE planning reserve margin	%	18.56
Planning Reserve Margin	%	12.00

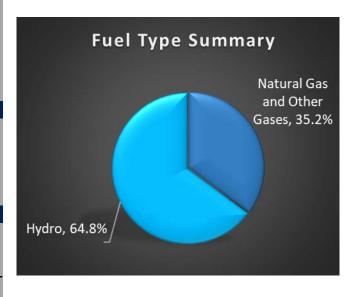


OTTER TAIL POWER COMPANY

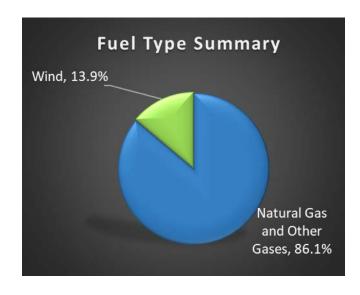
Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	0
Demand Summary		
Forecasted Peak Demand	MW	0
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	0
Requirements Summary		
Resource Adequacy Requirement	MW	0
Excess Capacity	MW	0
Deficient Capacity	MW	0
LRE planning reserve margin	%	N/A
Planning Reserve Margin	%	12.00

PARAGOULD, ARKANSAS LIGHT & WATER COMMISSION

Capacity Summary	Unit	2022
Capacity Resources	MW	31
Firm Capacity Purchases	MW	0
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	57
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	87
Demand Summary		
Forecasted Peak Demand	MW	108
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	80
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	28
Requirements Summary		
Resource Adequacy Requirement	MW	31
Excess Capacity	MW	56
Deficient Capacity	MW	0
LRE planning reserve margin	%	211.61
Planning Reserve Margin	%	12.00



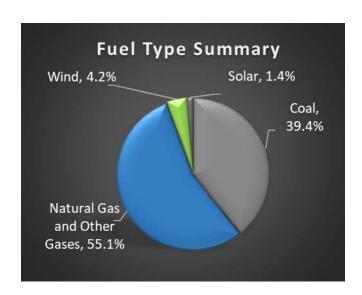
PEOPLE'S ELECTRIC COOPERATIVE



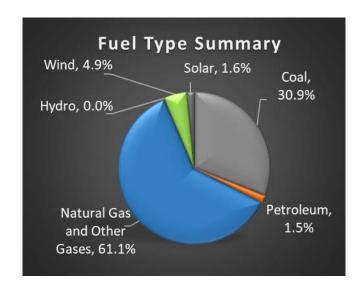
Capacity Summary	Unit	2022
Capacity Resources	MW	71
Firm Capacity Purchases	MW	124
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	195
Demand Summary		
Forecasted Peak Demand	MW	147
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	147
Requirements Summary		
Resource Adequacy Requirement	MW	165
Excess Capacity	MW	30
Deficient Capacity	MW	0
LRE planning reserve margin	%	32.12
Planning Reserve Margin	%	12.00

SOUTHWESTERN PUBLIC SERVICE COMPANY

Capacity Summary	Unit	2022
Capacity Resources	MW	4,302
Firm Capacity Purchases	MW	1,083
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	5,385
Demand Summary		
Forecasted Peak Demand	MW	3,989
Internal Firm Power Sales	MW	125
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	4,114
Requirements Summary		
Resource Adequacy Requirement	MW	4,608
Excess Capacity	MW	777
Deficient Capacity	MW	0
LRE planning reserve margin	%	30.89
Planning Reserve Margin	%	12.00



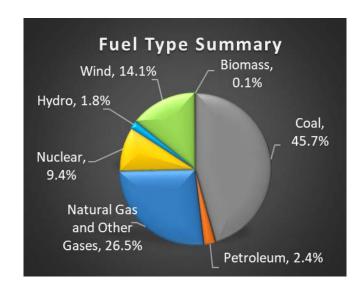
SUNFLOWER ELECTRIC POWER COOPERATION



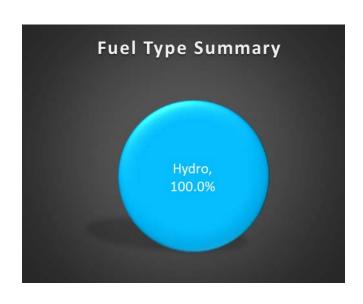
Capacity Summary	Unit	2022
Capacity Resources	MW	1,106
Firm Capacity Purchases	MW	67
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	1,172
Demand Summary		
Forecasted Peak Demand	MW	931
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	7
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	923
Requirements Summary		
Resource Adequacy Requirement	MW	1,034
Excess Capacity	MW	138
Deficient Capacity	MW	0
LRE planning reserve margin	%	26.99
Planning Reserve Margin	%	12.00

WESTAR ENERGY

Capacity Summary	Unit	2022
Capacity Resources	MW	5,981
Firm Capacity Purchases	MW	1,039
Firm Capacity Sales	MW	659
External Firm Power Purchases	MW	116
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	6,478
Demand Summary		
Forecasted Peak Demand	MW	5,230
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	15
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	5,215
Requirements Summary		
Resource Adequacy Requirement	MW	5,841
Excess Capacity	MW	637
Deficient Capacity	MW	0
LRE planning reserve margin	%	24.21
Planning Reserve Margin	%	12.00



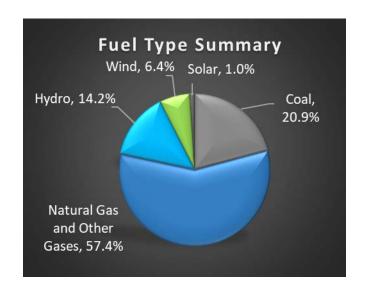
WESTERN AREA POWER ADMINISTRATION – UGP



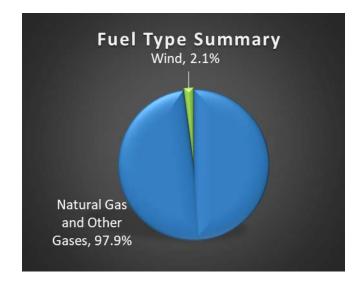
Capacity Summary	Unit	2022
Capacity Resources	MW	2,092
Firm Capacity Purchases	MW	3
Firm Capacity Sales	MW	441
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	1,654
Demand Summary		
Forecasted Peak Demand	MW	675
Internal Firm Power Sales	MW	746
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1,421
Requirements Summary		
Resource Adequacy Requirement	MW	1,561
Excess Capacity	MW	92
Deficient Capacity	MW	0
LRE planning reserve margin	%	16.39
Planning Reserve Margin	%	9.89

WESTERN FARMERS ENERGY SERVICES

Capacity Summary	Unit	2022
Capacity Resources	MW	1,321
Firm Capacity Purchases	MW	433
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	291
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	2,045
Demand Summary		
Forecasted Peak Demand	MW	2,008
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	325
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	1,683
Requirements Summary		
Resource Adequacy Requirement	MW	1,885
Excess Capacity	MW	160
Deficient Capacity	MW	0
LRE planning reserve margin	%	21.52
Planning Reserve Margin	%	12.00



WEST TEXAS MUNICIPAL



Capacity Summary	Unit	2022
Capacity Resources	MW	0
Firm Capacity Purchases	MW	37
Firm Capacity Sales	MW	0
External Firm Power Purchases	MW	0
External Firm Power Sales	MW	0
Confirmed Retirements	MW	0
Total Capacity	MW	37
Demand Summary		
Forecasted Peak Demand	MW	33
Internal Firm Power Sales	MW	0
Internal Firm Power Purchases	MW	0
Controllable and Dispatchable DR	MW	0
Net Peak Demand	MW	33
Requirements Summary		
Resource Adequacy Requirement	MW	37
Excess Capacity	MW	1
Deficient Capacity	MW	0
LRE planning reserve margin	%	13.97
Planning Reserve Margin	%	12.00