

Grand River Dam Authority

Continuing Disclosure

For Twelve Months Ending December 31, 2020



June 11, 2021

Historical Operating Results
Debt Service Coverage
(Unaudited)

	2020	2019	2018	2017	2016
Operating Revenues:					
Municipal Power Sales	\$80,646,900	\$87,274,160	\$87,945,571	\$85,969,173	\$90,870,556
Off System Power Sales - Firm	73,069,666	73,274,605	73,918,540	73,548,915	73,674,711
Industrial Power Sales	75,964,094	66,203,662	62,143,687	53,387,490	48,771,715
Off System Power Sales - Spot	7,196,052	11,064,383	2,906,489	1,907,452	528,985
Tribal Power Sales	6,821	-	-	-	-
Other Power Sales	352,773	718,261	574,039	801,176	957,605
Electric Cooperative Power Sales	-	-	-	8,320,155	21,772,835
Interdepartmental Power Sales	482,623	-	-	-	-
Collection of Power Cost Adjustment and Fuel ¹	145,404,123	148,792,586	191,513,982	195,990,056	154,447,704
Gross Power Sales	\$383,123,052	\$387,327,657	\$419,002,308	\$419,924,417	\$391,024,111
(Over)/Under Recovered Fuel Cost	(3,007,697)	8,668,517	(19,513,952)	2,370,052	37,041,989
Other Operating Revenues	24,140,475	25,774,726	36,769,868	13,472,574	13,866,452
Rate Stabilization Fund	(31,703,098)	-	-	-	(21,000,000)
Total Operating Revenues²	\$372,552,732	\$421,770,900	\$436,258,224	\$435,767,043	\$420,932,552
Operating Expenses:					
Fuel - Gas	\$69,431,317	\$71,993,174	\$79,272,265	\$40,761,992	\$58,261,865
Purchased Power	57,243,356	53,482,884	77,161,680	126,634,292	72,262,052
Fuel - Coal	13,020,677	31,953,792	15,530,485	29,673,660	61,521,520
Capacity Purchases	10,919,472	11,381,287	11,617,572	11,767,448	6,077,745
Interdepartmental - Salina Hydro Fuel	2,701,075				
Electric Production (excluding fuel):					
Grand River Energy Center					
GREC 1 ³	272,298	502,876	599,977	3,106,583	10,362,387
GREC 2	11,763,102	10,927,497	12,083,492	14,070,517	11,164,680
GREC 3 ⁴	13,544,174	13,395,553	13,310,743	7,842,735	-
Redbud Plant ⁵	8,181,169	9,872,814	8,567,225	9,011,586	8,369,006
Pensacola Hydro	7,530,976	7,451,039	7,134,071	8,422,897	7,028,198
Markham Ferry Hydro	3,320,004	3,227,243	3,171,702	4,037,801	3,923,825
Salina Pumped Storage	2,269,102	2,173,532	2,153,712	2,156,562	2,354,965
Transmission	30,797,029	28,285,417	29,551,381	26,783,935	25,530,658
Transmission of Electric by Others	12,569,456	10,448,970	12,324,480	15,595,460	17,157,631
Administrative & General ⁶	24,092,765	22,828,968	21,747,590	19,788,615	16,048,057
Water Production ²	608,088	204,811	276,039	316,384	484,794
Total Operating Expenses⁷	\$268,264,060	\$278,129,857	\$294,502,414	\$319,970,467	\$300,547,383
Net Operating Revenues	\$104,288,672	\$143,641,043	\$141,755,810	\$115,796,576	\$120,385,169
Other Income ⁸	24,295,123	44,918,347	10,293,765	8,677,204	12,265,711
Net Revenues Available for Debt Service	\$128,583,795	\$188,559,390	\$152,049,575	\$124,473,780	\$132,650,880
Rate Stabilization Fund	-	-	-	-	21,000,000
Other Available Funds ⁹	-	-	-	133,053	-
Total Funds Available for Debt Service	\$128,583,795	\$188,559,390	\$152,049,575	\$124,606,833	\$153,650,880
Debt Service	82,921,130	78,649,723	68,111,102	66,853,861	74,915,875
Available for Capital Improvements or Other Authorized Purposes	\$45,662,665	\$109,909,667	\$83,938,473	\$57,752,972	\$78,735,005
Debt Service Coverage (Total Avail. Funds)¹⁰	1.55	2.40	2.23	1.86	2.05

Continuing Disclosure Requirements (xviii): Historical Operating Results

¹ Individual line amounts were restated for 2016-2018 for comparison, based on a change to include all fuel in Collection of PCA and Fuel, rather than \$0.023/kWh in base rates.

² Sales and expenses of Raw Water and Regulatory Credits are excluded from Operating Revenue.

³ As of April 15, 2017, GREC 1 discontinued coal generation and had limited generation capability using natural gas. As of December 31, 2020, GREC 1 was retired.

⁴ GREC 3 went into service April 1, 2017 and reached substantial completion July 15, 2017.

⁵ Reflects the Authority's 36% undivided ownership of Redbud combined-cycle natural gas fired plant near Luther, Oklahoma.

⁶ Excludes Governmental Accounting Standards Board Statement (GASB) No. 68 Accounting and Financial Reporting for Pensions and GASB Statement No. 75 Accounting for Other Post Employment Benefits, as these do not require a cash outlay.

⁷ Excludes depreciation, which does not require a cash outlay.

⁸ Consists primarily of interest income and contributions in aid of construction. Excludes change in fair value on investments, interest income restricted for special purposes, capitalized construction interest, and non-utility expense and revenue not part of the electric system.

⁹ Other Available Funds consists of excess from the Debt Service Reserve Fund that were used for Debt Service Payments.

¹⁰ Total Funds Available for Debt Service divided by Debt Service.

Selected Cash and Investment Fund Balances
(Unaudited)

	2020	2019	2018	2017	2016
<u>Unrestricted</u>					
Revenue Fund and General Reserve Fund	\$302,684,730	\$284,370,975	\$273,037,494	\$217,608,675	\$175,088,943
<u>Restricted</u>					
Board Designated Funds	40,381,000	39,998,000	39,615,000	39,232,000	38,849,000
Rate Stabilization Fund	31,703,098	19,703,098	21,000,000	21,000,000	21,000,000
Debt Service Account	26,530,229	25,662,405	19,158,577	12,523,712	18,524,343
Insurance Proceeds	-	2,166,076	1,505,309	16,421,397	78,733,893
Debt Service Reserve Account	97,068,036	93,026,843	88,992,603	86,807,297	86,628,908
Pensacola Fish & Wildlife Mitigation Fund ¹	2,145,252	2,159,412	2,173,538	2,203,264	2,350,982
The Nature Conservancy Fund ²	26,740	27,000	27,000	27,000	27,000
Third Party Private Grant	-	-	1,458	-	-
Riparian Lease Grants	107,125	107,125	107,125	-	-
Total Cash and Investments	\$500,646,210	\$467,220,934	\$445,618,104	\$395,823,345	\$421,203,069

Continuing Disclosure Requirements (xix): Selected Cash and Investment Fund Balances

**Cash Reserves (In Millions), Days Cash on Hand,
And Fixed Charge Coverage**
(Unaudited)

	2020	2019	2018	2017	2016
General Operating Unrestricted	302.7	284.3	273.0	217.6	175.1
Board Designated	40.4	40.0	39.6	39.2	38.8
Rate Stabilization Fund	31.7	19.7	21.0	21.0	21.0
Other Special Purpose	2.3	2.2	2.2	2.2	2.4
Total	377.1	346.2	335.8	280.0	237.3
Days Cash on Hand (General & Board Designated)	487	448	414	317	285
Fixed Charge Coverage	1.42	2.25	2.06	1.69	1.97

Continuing Disclosure Requirements (xx): Cash Reserves (In Millions), Days Cash on Hand, and Fixed Charge Coverage

¹ Required by Pensacola Dam operating license.

² Required by Pensacola Dam operating license to be funded up to a balance of \$27,000 on January 1 of each year to provide assistance to the Nature Conservancy for certain endangered species.

Grand River Energy Center (GREC)
Capacity Factors
(Unaudited)

Year	GREC 1 ¹	GREC 2	GREC 3
2016	39%	14%	N/A
2017	8%	4%	31%
2018	0%	9%	53%
2019	0%	2%	52%
2020	0%	1%	60%

Continuing Disclosure Requirements (ii): GREC Capacity Factors

Equivalent Availability Percentages
Coal-Fired Plants
(Unaudited)

Year	GREC 1 ¹	GREC 2 ²	NERC ³
2016	77.4%	27.4%	79.5%
2017	31.7%	24.1%	77.2%
2018	0.0%	91.1%	77.0%
2019	0.0%	56.3%	78.5%
2020	0.0%	33.9%	NA ⁴

Continuing Disclosure Requirements (iii): Equivalent Availability Percentages-Coal Fired Plants

GREC Delivered Cost of Energy
(dollars per million BTU)
(Unaudited)

YEAR	COAL
2016	2.20
2017	2.90
2018	2.43
2019	3.29
2020	3.65

Continuing Disclosure Requirements (iv): GREC Delivered Cost of Energy including handling.

¹ As of April 15, 2017, GREC 1 was discontinued as a coal-fired generating unit. As of December 31, 2020 GREC 1 was retired.

² 2016 and 2017 reflect an outage beginning July 1, 2016, due to impairment of unit caused by fire, and return to service September 2017. On July 29, 2019, GREC 2 experienced a mechanical outage that lasted until June 9, 2020.

³ Percentages from NERC Website for Coal Primary Units with 400-599 MW Nameplate.

⁴ Not available

Equivalent Availability Percentages
Combined-Cycle Natural Gas Generating Facilities
(Unaudited)

YEAR	REDBUD 1 ¹	REDBUD 2 ¹	REDBUD 3 ¹	REDBUD 4 ¹	GREC3	NERC ²
2016	86.9%	86.8%	84.2%	87.7%	0.0%	85.2%
2017	82.5%	79.1%	82.5%	75.3%	0.0%	84.2%
2018	69.2%	62.5%	63.7%	66.9%	88.8%	85.1%
2019	98.0%	98.0%	99.0%	99.0%	78.3%	85.1%
2020	97.4%	99.1%	99.6%	97.6%	84.1%	NA ³

Continuing Disclosure Requirements (v): Equivalent Availability Percentages-Redbud Generating Facility

Operating Revenues
For Twelve Months Ending December 31, 2020
(Unaudited)

	SALES (MWH)	BASE REVENUES (BEFORE PCA)	AUTHORITY REVENUES (AFTER PCA)
Municipal Power Sales	2,959,080	\$80,646,900	\$134,461,236
Industrial and Commercial Power Sales	2,970,244	75,964,094	129,847,771
Tribal Power Sales	72	6,821	8,197
Sub-Total Load Following Contract Power Sales	5,929,396	\$156,617,815	\$264,317,204
Off System Power Sales - Firm	1,681,835	73,069,666	100,419,560
(Over)/Under Recovered Fuel Cost	-	-	(3,007,697)
Other Power Sales ⁴	2,828	815,050	815,050
Total Contract Power Sales	7,614,059	\$230,502,531	\$362,544,117
Off System Power Sales - Spot	504,926	14,387,541	14,387,541
Interdepartmental Power Sales	235,757	3,183,697	3,183,697
Total Power Sales	8,354,742	\$248,073,769	\$380,115,355
Other Operating Revenues ⁵	-	24,140,475	24,140,475
Rate Stabilization Fund	-	(31,703,098)	(31,703,098)
Total Operating Revenues	8,354,742	\$240,511,146	\$372,552,732

Continuing Disclosure Requirements (vi): Operating Revenues

¹ Percentages provided by Oklahoma Gas and Electric Company (Redbud Operator/Majority Owner).

² Percentages from NERC Website for Combined Cycle Units All Sizes.

³ Not Available.

⁴ Includes sales to Oklahoma Municipal Power Authority (OMPA). OMPA's portion includes fuel cost, fixed and variable operating expenses, administrative and general expenses, and capital improvements.

⁵ Sales of Water are excluded from Other Operating Revenues.

Municipal Revenues
For Twelve Months Ending December 31, 2020

(Unaudited)

CUSTOMER	CUSTOMER SINCE	CONTRACT EXPIRES	% REVENUES	AUTHORITY REVENUES ¹
City of Coffeyville, Kansas	1999	2042	8%	\$30,820,002
Stillwater Utilities Authority	1987	2042	6	23,369,004
Claremore Public Works Authority	1946	2042	4	14,178,659
City of Siloam Springs, Arkansas	1989	2042	3	12,947,126
Tahlequah Public Works Authority	1947	2042	3	9,415,502
Miami Public Utilities Board	1947	2042	2	8,758,942
Sallisaw Municipal Authority	1952	2042	2	5,862,736
Cushing Municipal Authority	1953	2042	1	5,086,817
City of Pryor Creek Municipal Utility Board	1951	2042	1	5,060,633
Wagoner Public Works Authority	1947	2042	1	4,006,050
Stilwell Area Development Authority	1950	2042	1	3,987,720
Collinsville Municipal Authority	2003	2042	1	2,784,492
Skiatook Public Works Authority	1977	2042	1	2,014,944
Mannford Public Works Authority	2003	2042	1	1,979,341
Stroud Utilities Authority	1986	2042	1	1,869,708
Lindsay Public Works Authority	2000	2025	0	1,291,215
Pawnee Public Works Authority	1953	2042	0	1,028,345
Total Municipal Power Sales			36%	\$134,461,236

Continuing Disclosure Requirements (vii): Municipal Revenues

Industrial and Commercial Revenues
For Twelve Months Ending December 31, 2020

(Unaudited)

CUSTOMER	PRODUCT	CUSTOMER SINCE	CONTRACT EXPIRES	% REVENUES	AUTHORITY REVENUES ¹
Google Inc.	Internet Search Engine	2007	2023	24%	\$89,478,400
Pryor Chemical Company	Chemical Products	2004	2023	3	11,084,295
Solae, LLC	Food Supplements	1975	2023	2	5,871,228
Air Products Manufacturing Corporation	Industrial Gases	1976	2023	1	4,114,458
Cascades Tissue Group - Oklahoma	Paper Products	1975	2023	1	3,426,962
American Castings, LLC	Iron Castings	2003	2023	1	3,259,615
NGC Industries, LLC	Building Products	1950	2023	1	2,859,923
Berry Plastics Corporation	Plastic Bags	1990	2023	1	2,627,132
Oklahoma Ordnance Works Authority	Administration	1978	2023	0	1,240,257
Cabot Norit Americas Inc.	Chemical Products	1996	2023	0	855,047
All Other Industrial (22)				1	4,746,461
All Other Commercial (53)				0	283,993
Total Industrial and Commercial Power Sales				35%	\$129,847,771

Continuing Disclosure Requirements (viii): Industrial and Commercial Revenues

¹ Represents revenues after Power Cost Adjustment (PCA).

Tribal Revenues
For Twelve Months Ending December 31, 2020
(Unaudited)

CUSTOMER	CUSTOMER SINCE	CONTRACT EXPIRES	% REVENUES	AUTHORITY REVENUES ¹
Citizen Potawatomi Nation Utility Authority	2019	2024	0%	\$8,197
Total Tribal Power Sales			0%	\$8,197

Off System Revenues - Firm
For Twelve Months Ending December 31, 2020
(Unaudited)

CUSTOMER	CUSTOMER SINCE	CONTRACT EXPIRES	% REVENUES	AUTHORITY REVENUES ¹
Western Farmers Electric Cooperative ²	2010	2025	8%	\$29,683,068
Kansas Municipal Energy Agency	2000	2026	6	24,027,684
Paragould, Arkansas, Light and Water Commission	1992	2038	6	22,666,760
Oklahoma Municipal Power Agency ³	2007	2040	3	12,678,512
City of Poplar Bluff, Missouri	1992	2039	3	11,363,536
Total Off System Power Sales - Firm			26%	\$100,419,560

Continuing Disclosure Requirements (x): Off System Revenues-Firm

Other Revenues-Unit Output Agreement
For Twelve Months Ending December 31, 2020
(Unaudited)

CUSTOMER	CUSTOMER SINCE	CONTRACT EXPIRES	% REVENUES	AUTHORITY REVENUES
Oklahoma Municipal Power Agency ⁴	1985	2036	0%	\$815,050
Total Other Power Sales			0%	\$815,050

Continuing Disclosure Requirements (xi): Other Revenues-Unit Output Agreement

¹ Represents revenues after power cost adjustment (PCA).

² The Authority and Western Farmers Electric Cooperative entered an interchange agreement for emergency and replacement energy exchanges in 1983. Off-System Firm Sales began in 2010.

³ Sales began in 1985 with a unit contingent output agreement from GREC 2. Off-System Firm Sales began in 2007.

⁴ These sales include share of Authority fuel costs, fixed and variable operating expenses, administrative and general expenses, and capital improvements.

Off System Revenues-Spot
For Twelve Months Ending December 31, 2020
(Unaudited)

CUSTOMER	REVENUES				
	2020	2019	2018	2017	2016
Southwest Power Pool	\$ 14,387,541	\$ 19,497,781	\$ 8,265,043	\$ 3,929,617	\$ 3,206,456
Oklahoma Gas and Electric Company ¹	-	700,000	-	-	-
Total Off System Power Sales - Spot	\$14,387,541	\$20,197,781	\$8,265,043	\$3,929,617	\$3,206,456

Continuing Disclosure Requirements (xii): Off System Revenues-Spot

Other Operating Revenues
For Twelve Months Ending December 31, 2020
(Unaudited)

SOURCE	REVENUES				
	2020	2019	2018	2017	2016
Other Transmission and Ancillary Services	\$15,233,356	\$17,578,032	\$25,540,888	\$1,249,542	\$682,531
Base Plan Funded Transmission Revenues	6,160,945	6,184,740	9,024,113	10,531,059	11,204,681
Renewable Energy Certificates	1,713,530	1,235,764	1,231,950	708,313	786,707
Other Operating Revenues	1,032,644	776,190	972,916	983,660	1,192,533
Total Other Operating Revenues²	\$24,140,475	\$25,774,726	\$36,769,867	\$13,472,574	\$13,866,452

Continuing Disclosure Requirement (xiii): Other Operating Revenues

Average Annual Contract Sales Price (Cents/kWh)
(Unaudited)

	2020	2019 ³	2018	2017	2016
Average Annual Base Rate	2.57	2.98	5.13	5.02	5.05
Average Annual PCA	1.82	1.96	0.05	0.08	(0.53)
Average Annual Total	4.39	4.94	5.18	5.10	4.52

Continuing Disclosure Requirements (xiv): Average Annual Contract Sales Price

¹ Sale of short term capacity only.

² Sales of Water are excluded from Other Operating Revenue.

³ In April 2019, the fuel base of \$0.023 in base rates was reduced to a fuel base of \$0.00, such that all fuel is now collected in PCA.

Historical Energy Resources (MWh) (Unaudited)

Year	Conventional Hydro Generation	Pumped- Storage Hydro Generation	Combined- Cycle Gas Generation	Coal-Fired Thermal Generation	Long-Term Wind Purchase	Other Purchased Power	Municipals' SPA Allocation ¹	Total Resources
	726,954	89,060	2,625,974	2,306,516	981,175	2,318,847	36,543	9,085,069
2016	619,522	138,133	3,240,163	507,698	986,837	3,099,589	30,316	8,622,258
2018	517,421	151,625	4,237,428	399,495	1,393,896	1,890,274	31,634	8,621,773
2019	1,378,635	92,342	4,498,505	59,666	1,367,024	1,034,124	49,054	8,479,350
2020	849,286	108,555	4,576,147	26,658	1,328,836	1,519,740	45,271	8,454,493

Continuing Disclosure Requirements (xv): Historical Energy Resources

GRDA Historic Dispatch (GWh) (Unaudited)

	2020	2019	2018	2017	2016
GREC 1	(16.993)	(17.760)	(22.394)	323.301	1,672.822
GREC 2	43.651	77.426	421.889	184.397	633.694
GREC 3	2,452.600	2,146.008	2,280.922	1,358.873	-
Redbud	2,123.547	2,352.497	1,956.506	1,881.290	2,625.974
Pensacola	511.416	829.386	341.110	370.950	475.255
Markham Ferry	337.870	549.249	176.311	248.572	251.699
Salina	108.555	92.342	151.625	138.133	89.060
Wind Purchases	1,328.836	1,367.024	1,393.895	986.837	981.175
Other Purchases	1,565.011	1,083.178	1,921.909	3,129.905	2,355.390
Total	8,454.493	8,479.350	8,621.773	8,622.258	9,085.069

Continuing Disclosure Requirements (i): GRDA Historic Dispatch (GWh)

¹ GRDA is the scheduling agent for Skiatook's and Coffeyville's allocation of SPA (Southwestern Power Administration) hydro power.

Historical Demand Requirements and Resources (MW)
(Unaudited)

Year	Contract Demand Requirements			Rated Capability of Resources							
	Contract Peak Demand	Required Capacity Margin ¹	Contract Demand plus Required Margin	Conventional Hydro Generation ²	Pumped-Storage Hydro Generation	Combined-Cycle Gas Generation ³	GREC Thermal Generation ⁴	Purchased Power ⁵	Municipals' Wind Capacity ⁶	SPA Allocation ⁷	Total Resources
2016	1,531	184	1,715	254	258	439	1,010	142	17	13	2,133
2017	1,408	169	1,577	254	258	907	545	171	17	13	2,165
2018	1,478	177	1,655	254	258	901	545	171	25	13	2,167
2019	1,499	180	1,679	254	258	902	492	172	75	13	2,165
2020	1,541	185	1,726	254	258	924	492	172	67	13	2,180

Continuing Disclosure Requirements (xvi): Historical Demand Requirements and Resources (MW)

Historical Sales by Customer Group (MWh)

(Unaudited)

Year	Cooperative	Tribal	Municipal	Industrial	Off System ⁸		Contract Power Sales	Off System Spot	Total Power Sales			Total Requirements
					Firm	Other ⁹			Pumping	Other ¹⁰		
2016	621,128	-	3,192,044	1,769,842	2,978,366	10,125	8,571,505	191,999	8,763,504	178,286	143,279	9,085,069
2017	226,978	-	3,015,320	1,952,204	2,938,895	6,902	8,140,299	103,239	8,243,538	257,707	121,013	8,622,258
2018	-	-	3,053,614	2,340,245	2,517,703	14,994	7,926,556	301,377	8,227,933	288,843	104,997	8,621,773
2019	-	-	3,081,466	2,515,759	2,003,561	3,965	7,604,751	567,446	8,172,197	198,592	108,561	8,479,350
2020	-	72	2,959,080	2,970,244	1,681,835	2,828	7,614,059	504,926	8,118,985	228,339	107,169	8,454,493

Continuing Disclosure Requirements (xvii): Historical Sales by Customer Group (MWh)

¹ Minimum Required Capacity Margin is 12% of net peak demand, per SPP Criteria 2.1.9.

² The total of Pensacola and Markham Ferry capability.

³ Includes the Authority's 36% ownership interest in Redbud gas plant near Luther, Oklahoma, purchased October 1, 2008. Beginning in 2017, includes GREC 3, a combined-cycle natural gas unit, located in Chouteau, Oklahoma.

⁴ As of January 1, 2019, all other GREC thermal generation capacity was retired. Represents GRDA's 100% ownership of GREC 2.

⁵ Includes 86 MW capacity contract with City of Coffeyville, Kansas, 21 MW capacity contract with Cushing Municipal Authority, and 64 MW capacity contract with Stillwater Utilities Authority.

⁶ Includes 6.93 MW capacity of the 138.6 MW nameplate rating from Red Dirt, 30 MW capacity of the 98.1 MW nameplate rating from Breckinridge, 23 MW capacity of the 98.9 MW nameplate rating from Kay Wind, and 7 MW capacity of the 45.6 MW nameplate rating of Canadian Hills.

⁷ GRDA is the scheduling agent for Skiatook and Coffeyville's allocation of SPA (Southwestern Power Administration) hydro power.

⁸ A reduction in the MWhs reflect a change of financial settlement of energy outside of the SPP Integrated Marketplace.

⁹ GREC 2 Output Power Sales to Oklahoma Municipal Power Authority.

¹⁰ GRDA internal use and system losses.