

PUBLIC VERSION



April 11, 2017

The Honorable James Richard Perry
Secretary of Energy
United States Department of Energy
U.S. Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act

Dear Secretary Perry:

The Grand River Dam Authority (“GRDA”), an agency of the State of Oklahoma, hereby notifies the Department of Energy (“DOE” or “Department”) of an imminent shortage of generation resources in its service area that constitutes an emergency within the meaning of Section 202(c) of the Federal Power Act (“FPA”)¹ and requests that the Department invoke its emergency authority pursuant to Section 202(c) to alleviate such emergency.

This spring, because of a confluence of events that will result in the unavailability of all generation at GRDA’s principal generating facility, the Grand River Energy Center (“GREC”), GRDA will face an unexpected shortage of electric generation resources to address the reactive power needs of its service area. Specifically, from April 16, 2017 to July 15, 2017 (referred to herein as the “Emergency Period”), none of the GREC’s three generating units will be online due to: (i) the required closure of Unit No. 1 on April 15, 2017, pursuant to an Administrative Order issued by the Environmental Protection Agency (“EPA”); (ii) a lightning strike that seriously damaged Unit No. 2 on July 1, 2016, rendering it inoperable until August 2017; and (iii) unforeseen delays in the construction of a new generating unit (Unit No. 3) because of key supplier delays in the fabrication of essential project materials due to the August 2016 floods in Louisiana.

Without at least one of these three generating units available to generate electricity to provide reactive power needed for grid reliability during the Emergency Period, GRDA will be unable to meet the reactive power needs of its service area during any low-load, high voltage conditions that occur (hereinafter, GRDA refers to this shortage of available reactive power resources during the Emergency Period as the “Emergency”). This Emergency will require Southwest Power Pool, Inc. (“SPP”), the Reliability Coordinator for GRDA’s service area, to reconfigure the transmission system to mitigate the high voltage conditions by opening high voltage transmission lines. This method to address high voltage conditions on the transmission system is not as robust an engineering solution as the ability to operate a generator to provide

¹ 16 U.S.C. § 824a(c).



ADMINISTRATION
PO Box 409, Vinita OK 74301-0409
918-256-5545, 918-256-5289 Fax

COAL-FIRED COMPLEX
PO Box 609, Chouteau OK 74337
918-824-1074, 918-825-7791 Fax

ECOSYSTEMS & EDUCATION CENTER
PO Box 70, Langley OK 74350-0070
918-782-4726, 918-782-4723 Fax

ENGINEERING & TECHNOLOGY CENTER
9933 E 16th Street, Tulsa OK 74128
918-622-2228

ENERGY CONTROL CENTER
ROBERT S. KERR DAM
PO Box 772, Locust Grove OK 74352
918-479-5249, 918-825-1935 Fax

GRDA POLICE, PO Box 70, Langley OK
74350, 918-782-4726, 918-782-4723 Fax

OKLAHOMA CITY
201 NW 63rd St. Suite 305
Oklahoma City OK 73116
405-297-9963, 405-290-7631 Fax

PENSACOLA DAM, PO Box 70, Langley
OK 74350, 918-782-3382 Also Fax

SALINA PUMPED STORAGE PROJECT
PO Box 609, Salina OK 74365
918-434-5920 Also Fax

TRANSMISSION HEADQUARTERS
PO Box 1128, Pryor OK 74362
918-825-0280, 918-825-9416 Fax

PUBLIC VERSION

dynamic reactive power control; opening a transmission line offers only a static solution that poses more reliability risk to the system and does not follow good utility practice to keep the system intact.

Accordingly, GRDA hereby submits this application pursuant to FPA § 202(c) and Subpart W of Part 205 of the Department's regulations² for an emergency order to provide reactive power from Unit No. 1 of the GREC from April 16, 2017 to July 15, 2017 consistent with the conditions herein, in the event that Southwest Power Pool, Inc. ("SPP") determines that such generation is needed to maintain grid reliability. As explained below, GRDA is requesting that SPP have the ability to call on Unit No. 1, which would otherwise be offline but available (using natural gas igniters if necessary), only if SPP sees a need for Unit No. 1 to run to address reliability concerns relating to overvoltage conditions.

I. BACKGROUND

GRDA is an agency of the State of Oklahoma, primarily serving public power communities in Oklahoma. Approximately 70 percent of GRDA's total electric energy is generated by the Grand River Energy Center, which is located near Chouteau, Oklahoma. GREC Units No. 1 and 2 are coal-fired generating units (with natural gas-fired igniters), with generating capacities of 490 and 520 megawatts (MW), respectively.

Due in part to EPA's Mercury and Air Toxics Standards (MATS) requirements, which would have required substantial upgrades for Unit No. 1, GRDA determined to retire Unit No. 1 and to construct a new, lower-emitting, natural gas-fired generation unit (Unit No. 3). GRDA is currently in the process of constructing Unit No. 3, which is a highly efficient 495 MW natural gas combined cycle unit. When GRDA commenced construction of Unit No. 3, it was projected to come online in May 2017. To maintain grid reliability during Unit No. 3's construction, EPA issued an Administrative Order ("AO") granting GRDA a one-year extension of the compliance deadline for Unit No. 1 to comply with EPA's MATS requirements. The AO, attached hereto as Attachment A, requires Unit No. 1 to cease operation as a coal-fired unit on April 15, 2017.³ The AO, issued under Section 113(a)(4) of the Clean Air Act, is nonrenewable.

As GRDA's principal electric generating station, the GREC plays a critical role in meeting all aspects of GRDA's electric load and in providing ancillary services, including reactive power. In particular, Unit No. 1 has traditionally played a key role in generating reactive power to provide local voltage support in GRDA's service area, particularly when Unit No. 2 has been out of service.

In 2014, SPP on six occasions requested either additional capacitive or reactive voltage support from Unit No. 1 to address voltage problems on the transmission system. During a planned maintenance outage of GREC Unit No. 2 for the period October 15, 2014 through November 4, 2014, SPP created a Temporary Operating Guide for Unit No. 1 requiring it to be

² 10 C.F.R. Part 205, Subpart W (2016).

³ Attachment A also includes an Amendment to the AO to account for increased reliance on Unit No. 1 after the lightning strike at Unit No. 2.

PUBLIC VERSION

available for dispatch during instances of low load and high voltage. The Operating Guide, attached as Attachment B, stated that “[d]ue to the low load and high voltage in the GRDA area, GRDA Unit #1 generation will be needed. Generation needs to be online in order to ensure voltage stability until GRDA Unit #2 returns from outage.”⁴ Unit No. 1 was in fact called upon by SPP to provide reactive support during a substantial portion of the period Unit No. 2 was on outage. GRDA’s transmission system, along with the conditions that give rise to the need to maintain the availability of Unit No. 1 to address low load, high voltage conditions, have not changed materially since SPP issued the Temporary Operating Guide.

II. APPLICATION FOR EMERGENCY ORDER

As explained below, GRDA requests that DOE determine that an emergency exists within the meaning of FPA § 202(c) with respect to the unavailability of Unit No. 1 during the Emergency Period, and order GRDA to run Unit No. 1 for the purpose of providing reactive power during the Emergency Period in the event that neither Unit No. 2 nor Unit No. 3 is online, and SPP determines that reactive power from Unit No. 1 is needed for purposes of grid reliability.

A. An Emergency Exists Because a Lightning Strike at Unit No. 2, and Unforeseeable Construction Delays at Unit No. 3, Will Leave GRDA Without the Ability to Generate Electricity for Reactive Power During the Emergency Period.

FPA § 202(c) provides that if “an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes” DOE may issue an order requiring the temporary connections of facilities, and such generation, delivery, interchange, or transmission of electric energy as it deems appropriate to best meet the emergency and serve the public interest. DOE’s regulations provide additional detail about what constitutes an “emergency” for purposes of Section 202(c) at 10 C.F.R. § 205.371:

“Emergency” . . . is defined as an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power. Such events may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected “entity” to prevent. An emergency also can result from . . . a regulatory action which prohibits the use of certain electric power supply facilities. Actions under this authority are envisioned as meeting a specific inadequate power supply situation. Extended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities can result in an emergency as contemplated in these regulations. . . .

⁴ See SPP Temporary Operating Guide, “GRDA Unit #1 Manual Commitment,” Attachment B.

PUBLIC VERSION

The unavailability of Units No. 1, 2, and 3 at the GREC during the Emergency Period constitutes an emergency within the meaning of Section 202(c) and DOE's regulations. First, without the availability of at least one of these three generating units at the GREC, GRDA will be unable to provide reactive power for local voltage support to maintain grid stability in GRDA's service area in low load, high voltage conditions. In the past, Unit Nos. 1 and 2 have traditionally met GRDA's needs for reactive power. However, these generating units will be offline during the Emergency Period, and Unit No. 3 will still be under construction and therefore not yet online. GRDA has no other means to procure or provide adequate reactive power for local voltage support in its service area during the Emergency Period. GRDA does not own, or have control over, other resources that can provide sufficient reactive power in GRDA's service area to provide adequate voltage support under low load, high voltage conditions. GRDA cannot rely on temporary generation to produce the needed reactive power because of the quantity of potential reactive power that might be needed under low load, high voltage conditions. (For instance, SPP called upon Unit No. 1 to provide more than 100 MVars of reactive power in 2016 under low load, high voltage conditions.)

Further, SPP's ability to address the reactive power needs of GRDA's service area without Unit No. 1 is limited and inadequate. SPP has the ability to reduce reactive power needs during the Emergency Period through reconfiguring its transmission system by opening transmission lines. However, this is not an optimal solution, because it would not allow SPP to maintain its system in an intact state consistent with good utility practice. Opening transmission lines is a less reliable means of addressing reactive power needs than through dynamic reactive power generation resources because of the relative reliability risk it poses; reactive power cannot be controlled as easily through system configuration as it can through dynamic resources to respond to unexpected events, and the system is more vulnerable to outages because the system is not intact. Thus, SPP's ability to address reactive power needs in GRDA's service area without Unit No. 1 is a limited and less robust method to ensure reliability.

Second, this shortage of resources to generate reactive power during the Emergency Period was unexpected and unforeseeable by GRDA, which originally expected to have Unit No. 2 available, and Unit No. 3 coming online, during the Emergency Period. However, Unit No. 2 sustained extensive damage on July 1, 2016 from a fire caused by a lightning strike, which took Unit No. 2 offline. Repairs to Unit No. 2 are ongoing and will not be completed until August 2017. This lightning strike causing the fire at Unit No. 2 was an unforeseeable act of God, the effects of which were not within the power of GRDA to prevent.⁵ Likewise, Unit No. 3's commercial operation date has been delayed because of another unforeseeable act of God – the Louisiana floods of August 2016 – which delayed the ability of a key supplier to meet contractual commitments for critical materials for Unit No. 3's construction. Although GRDA planned for the shutdown of Unit No. 1 due to EPA's AO, DOE's regulations note that an emergency can result from “a regulatory action which prohibits the use of certain electric power supply facilities.”⁶ Collectively, the unavailability of the GREC's three generating units, each for different reasons, over the Emergency Period gives rise to a “shortage of facilities for

⁵ 10 C.F.R. § 205.371.

⁶ 10 C.F.R. § 205.371.

PUBLIC VERSION

generating electric energy” within the meaning of Section 202(c) of the FPA for GRDA’s service area.

B. GRDA’s Shortage of Reactive Power Resources During the Emergency Period Will Imperil Grid Reliability

During low load, high voltage conditions, an inability to provide sufficient reactive power for voltage support can imperil grid reliability by allowing the grid to exceed the range of acceptable system voltage.⁷ The inability to schedule sufficient reactive power can constitute a reliability standards violation, because under NERC Reliability Standard VAR-001-4.1 (Voltage and Reactive Control), transmission operators “shall schedule sufficient reactive resources to regulate voltage levels under normal and Contingency conditions.”⁸ A deficiency of reactive power can lead to disruption of service, because transmission facilities operating at voltages in excess of system voltage limits must be disconnected from other elements of the grid.⁹ If transmission facilities operating at excessive voltages are not disconnected, the overvoltages can cause electric arcing due to insulation “flash overs,” which can in turn result in physical damage to transmission facilities.¹⁰

GRDA’s impending shortage of reactive power resources increases the risk of service disruption to GRDA’s customers due to overvoltage, because the only means SPP will have to address reactive power needs is through reconfiguring the transmission system by opening a transmission line – a step that will mean the system is no longer intact. Good utility practice calls for the system to be maintained intact if possible. Without an intact system, GRDA’s system will be more vulnerable to disruption of service or outages as a result of unexpected events. SPP recognized the risks presented by a lack of reactive power resources at the GREC in 2014 when Unit No. 2 was on outage by issuing its Temporary Operating Guide for Unit No. 1. SPP has reaffirmed the importance of maintaining Unit No. 1 beyond April 15, 2017 for mitigation of system voltage issues and local grid reliability in a letter of support for this request, attached hereto as Attachment C.

C. GRDA Provides Power to Significant Regions in Oklahoma, Including Customers of National Significance

⁷ At low levels of electric system load, energized transmission lines may act as a capacitive load that increases system voltage.

⁸ NERC Reliability Standard VAR-001-4.1 (Voltage and Reactive Control), R1 (“Each Transmission Operator shall schedule sufficient reactive resources to regulate voltage levels under normal and Contingency conditions. Transmission Operators can provide sufficient reactive resources through various means including, but not limited to, reactive generation scheduling, transmission line and reactive resource switching, and using controllable load.”).

⁹ See Reliability Standard TOP-008-1 (Response to Transmission Limit Violations), R3 (“The Transmission Operator shall disconnect [an] affected facility if the overload on a transmission facility or abnormal voltage or reactive condition persists and equipment is endangered.”).

¹⁰ FERC Reliability Primer at 25 (“[H]igh voltages can exceed the insulation capabilities of equipment and cause dangerous electric arcs known as “flashovers.” These conditions can occur when there is light loading on the system (e.g., less customer demand), causing an excess of reactive power that elevates the voltage beyond safe operating limits.”).

PUBLIC VERSION

GRDA provides electric power on its transmission system to both retail and wholesale customers. GRDA provides retail electric service to 80 industrial and commercial customers, most of which are located in the MidAmerica Industrial Park (MAIP) near Pryor. [REDACTED]

[REDACTED] The 9,000 acre MAIP is home to over 80 companies employing over 4,500 people. There are also urgent care, emergency and life flight services within the MAIP boundaries. On the wholesale side, GRDA's largest customer is Western Farmers Electric Cooperative (WFEC) which is responsible for supplying power to [REDACTED] 18 member Oklahoma distribution cooperatives. GRDA provides power directly to over 16 municipalities, including [REDACTED] Coffeyville, Kansas, which has a strong industrial base, and the City of Stillwater, which is primarily residential and commercial service. There are 15 hospitals with a combined 1000+ bed-capacity in these cities. GRDA also provides electricity to the Oklahoma Municipal Power Authority (OMPA). Through support of OMPA, GRDA's generation provides a portion of the electric power to an additional 35 participating cities in Oklahoma. Directly and indirectly, GRDA provides electric power support to some portion of 75 of the Oklahoma's 77 counties.

D. Information Required By Section 205.373

Herein, GRDA sets forth the information required under Section 205.373 of DOE's regulations.¹¹ To ensure that DOE has the information it needs to evaluate GRDA's application, GRDA is providing certain additional information that GRDA deems salient to its application.

- (a) Legal Name of Applicant. The applicant is Grand River Dam Authority.
- (b) Person to Whom Correspondence Should Be Addressed. Correspondence with respect to this application should be directed to:

Daniel S. Sullivan
Chief Executive Officer
Grand River Dam Authority
P.O. Box 409
Vinita OK 74301-0409
(918)256-5545
dsullivan@grda.com

¹¹ Certain elements of Section 205.373 address the circumstances of an applicant facing a shortage of real power and the prospect of firm customer curtailment, but do not address GRDA's emergency circumstances, which involve a shortage of reactive power generation during light load conditions. GRDA has indicated where these requirements are Section 205.373 are not applicable to GRDA's circumstances.

PUBLIC VERSION

(c) Political Subdivision in Which GRDA Operates and Business Conducted. GRDA operates in 24 counties in Northeast Oklahoma. GRDA sells electricity to three customer classes in its service area: municipals, electric cooperatives and industries.

(d) Baseline Data.

(1) Daily peak load and energy requirements for each of the past 30 days, and projections for each day of the Emergency Period: These requirements are not applicable to GRDA's request, which contemplates relief in light load conditions. GRDA is providing information about the reactive power provided by Unit No. 1 in February 2017, the most recent month for which data is available, in Attachment D. GRDA provided reactive power pursuant to an SPP Temporary Operating Guide in the fall of 2014 period to maintain grid reliability. GRDA is providing data on the reactive power provided by Unit No. 1 during this time frame in Attachment E.

(2) All capacity and energy receipts or deliveries to other electric utilities for each of the past 30 days: Not applicable.

(3) The status of all interruptible customers for each of the past 30 days, and anticipated status during the Emergency Period: GRDA does not expect to interrupt any customers during the Emergency Period due to a lack of available energy. Interrupting load during the Emergency Period would exacerbate, rather than remedy, the low load, high voltage conditions that present an emergency for GRDA.

(4) All scheduled capacity and energy receipts or deliveries to other electric utilities during the Emergency Period. Not applicable.

(e) **A description of the emergency situation, any contingency plan of GRDA, and the current level of implementation.** The emergency situation GRDA faces is described above in Section II.A of this Application. Until GRDA can bring GREC Unit No. 2 or No. 3 online, GRDA does not have any contingency plan to provide reactive power for voltage support without Unit No. 1. As explained above in Section II.B, SPP's ability to address GRDA reactive power needs in low-load, high voltage conditions without Unit No. 1 is limited and poses increased reliability risks for GRDA's service area compared to operating Unit No. 1 for voltage support.

(f) **A showing that adequate electric service to firm customers cannot be maintained without additional power transfers.** Not applicable.

(g) **A description of any conservation or load reduction actions that have been implemented.** Not applicable. Reducing load via conservation or other load reduction actions under low load, high voltage circumstances would exacerbate, rather than mitigate, emergency overvoltage conditions.

(h) **A description of efforts made to obtain additional power through voluntary means and the results of such efforts.** GRDA does not have the ability to provide additional

PUBLIC VERSION

reactive power resources to alleviate the Emergency. GRDA is required to cease operation of Unit No. 1 as a coal-fired unit after April 15, 2017 pursuant to an Administrative Order under Section 113(a)(4) of the Clean Air Act. An order issued under Section 113(a)(4) is nonrenewable, and therefore, EPA does not have authority to extend the compliance deadline in the AO and further delay compliance with MATS for Unit No. 1. Unit No. 2 is undergoing repairs as quickly as possible, but the unit will not be available during the Emergency Period. Construction on Unit No. 3 is not expected to be completed until sometime in June 2017, at the earliest, and may not be available at all during the Emergency Period.

- (i) **A listing of proposed sources and amounts of power necessary from each source to alleviate the emergency and a listing of any other “entities” that may be directly affected by the requested order.** The only generation source that GRDA proposes to alleviate the Emergency is Unit No. 1 of the GREC. Based on historical data, GRDA expects that it could be called upon to absorb up to 120 MVar or more from the grid if called on by SPP for local voltage support in low load, high voltage conditions.

Two entities would be directly affected by GRDA’s requested order. First, SPP manages grid operations for GRDA’s transmission assets, and thus would be directly responsible for addressing any grid instability resulting from the Emergency. If DOE grants GRDA’s request for relief herein, SPP would be able to dispatch Unit No. 1 to absorb reactive power if it determines that such generation is necessary to maintain grid reliability. Second, EPA would be directly affected, because running Unit No. 1 after April 15, 2017, would contravene the terms of EPA’s AO and the Clean Air Act, which require GRDA to cease coal-fired operations at Unit No. 1 after April 15, 2017.

- (j) **Specific proposals to compensate the supplying “entities” for the emergency services requested and to compensate any transmitting “entities” for services necessary to deliver such power.** GRDA proposes that, during the Emergency Period, it be compensated for any generation from Unit No. 1 directed by SPP pursuant to a DOE Section 202(c) Order consistent with the terms of the SPP Tariff.

- (k) **A showing that, to the best of the applicant's knowledge, the requested relief will not unreasonably impair the reliability of any “entity” directly affected by the requested order to render adequate service to its customers.** To GRDA’s knowledge, ordering reactive power generation from Unit No. 1, which is currently an SPP generating resource, will not impair the reliability of any entity.

- (l) **Description of the facilities to be used to transfer the requested emergency service to the applicant's system.** Not applicable.

- (m) **A general or key map on a scale not greater than 100 kilometers to the centimeter showing, in separate colors, the territory serviced by each “entity” named in the application; the location of the facilities to be used for the generation and transmission of the requested emergency service; and all connection points between systems.** This information is attached as Attachment F.

(n) An estimate of the construction costs of any proposed temporary facilities and a statement estimating the expected operation and maintenance costs on an annualized basis. Not applicable

(o) Supplemental Information. A letter from SPP in support of GRDA's request for action under FPA Section 202(c) is attached as Attachment C.

E. Compliance with Applicable Environmental Laws Under Section 202(c)(2).

Section 202(c)(2) of the FPA provides that when DOE issues an order under Section 202(c) that results in a conflict with Federal, State, or local environmental law, DOE is required to ensure that the order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with applicable Federal, State, or local environmental law and minimizes any adverse environmental impacts.¹² Herein, GRDA is requesting authorization to generate electricity to provide reactive power support from Unit No. 1 of the GREC after April 15, 2017, which would contravene EPA's Administrative Order on MATS Compliance for Unit No. 1.¹³

To ensure compliance with the AO to the maximum extent possible and minimize environmental impacts pursuant to Section 202(c)(2), GRDA commits that, in the event DOE issues a Section 202(c) order directing the generation of reactive power from Unit No. 1 of the GREC, GRDA will generate from Unit No. 1 only when called upon by SPP pursuant to DOE's order, and will otherwise keep Unit No. 1 offline. Although Unit No. 1 must burn coal to generate reactive power, GRDA Unit No. 1 has natural gas igniters available to keep Unit No. 1 in a ready state, if necessary. This will ensure compliance with EPA's AO to the maximum extent possible given that the AO does not prohibit the use of natural gas at Unit No. 1. Because GRDA can keep Unit No. 1 ready, Unit No. 1 does not need to maintain a minimum generation level or be synchronized to the grid to be ready to respond if called upon by SPP to provide reactive power. Unit No. 1 can be brought online to generate reactive power from an offline state within 24 hours, which is within the window of notice that SPP would give GRDA to generate reactive power.

Additionally, GRDA commits to cease all generation from Unit No. 1 as soon as GREC Unit No. 3 or Unit No. 2 is brought online, in which case either unit would be able to act as a reactive power resource for GRDA.

F. Request for Designation of Critical Electrical Infrastructure Information

Pursuant to Section 215A of the FPA, GRDA requests that the Department designate the bracketed information in Section II.C as critical electrical infrastructure information protected

¹² 16 U.S.C. § 824a(c)(2).

¹³ See Attachment A at P 31.

PUBLIC VERSION

from disclosure under the Freedom of Information Act and other public disclosure laws.¹⁴ The bracketed information includes information relating to the production, generation, and transmission of energy that could be useful to a person in planning an attack on critical infrastructure.¹⁵

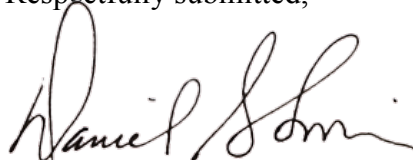
G. Requested Order

As explained herein, GRDA respectfully requests that DOE issue an emergency order directing the generation of electricity to provide reactive power from Unit No. 1 of the GREC from April 16, 2017 to (i) July 15, 2017, or (ii) the date on which GREC No. 3 or No. 2 is brought online, whichever is earlier, in the event that Southwest Power Pool, Inc. (“SPP”) determines that generation from Unit No. 1 is needed to maintain grid reliability, subject to the requirements that Unit No. 1 remain offline unless requested to generate by SPP pursuant to a DOE Section 202(c) order.

III. CONCLUSION

GRDA respectfully requests that DOE take the emergency action requested herein as soon as possible to address the imminent shortage of reactive power that GRDA faces in its service area. GRDA stands ready to answer any questions that DOE may have, and to provide any additional information that DOE requires.

Respectfully submitted,



Daniel S. Sullivan
Chief Executive Officer
Grand River Dam Authority

Cc: Patricia A. Hoffman, Principal Deputy Assistant Secretary and Acting Assistant Secretary, DOE Office of Electricity Delivery & Energy Reliability

Attachments

¹⁴ 16 U.S.C. § 824a(c)(2).

¹⁵ See 18 C.F.R. § 388.113(d)(1)(i). GRDA requests the bracketed information be designated critical electric infrastructure information for as long as permissible. See 18 C.F.R. § 388.113(d)(1)(ii).

PUBLIC VERSION

CERTIFICATE OF SERVICE

I hereby certify that I have this 11th day of April, 2017, caused copies of the foregoing documents to be served on the parties listed below by causing copies of the same to be sent via overnight delivery.

Michael Bardee
Director, Office of Electric Reliability
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Administrator Scott Pruitt
U.S. Environmental Protection Agency
Mail code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Southwest Power Pool, Inc.
c/o Lanny Nickell, Vice President, Engineering
415 North McKinley Street, Suite 140
Little Rock, AR 72205

Ronald W. Ciesiel
General Manager
Southwest Power Pool Regional Entity
201 Worthen Drive
Little Rock, AR 72223

/s/ Nathan Reese

Nathan Reese
Assistant General Counsel
Grand River Dam Authority

Attachment A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR ENFORCEMENT DIVISION, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE
BEFORE THE ADMINISTRATOR

In the Matter of:

Grand River Dam Authority,

Respondent.

Administrative Compliance Order on Consent
AED-CAA-113(a)-2016-0002

ADMINISTRATIVE COMPLIANCE ORDER

A. PRELIMINARY STATEMENT

1. This Administrative Compliance Order (“Order”) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (“EPA”) by Section 113(a) of the Clean Air Act (the “CAA” or “Act”), 42 U.S.C. § 7413(a)(3) and (4).
2. On the EPA’s behalf, Phillip A. Brooks, Division Director of the Air Enforcement Division, Office of Civil Enforcement, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, is delegated the authority to issue this Order under Section 113(a) of the Act.
3. Respondent is Grand River Dam Authority, an agency of the state of Oklahoma. Respondent is a “person” as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e). Respondent owns and/or operates the Grand River Energy Center (hereafter, the “Facility”), located in the state of Oklahoma.
4. Respondent signs this Order on consent.

B. STATUTORY AND REGULATORY BACKGROUND

5. Section 112 of the CAA, 42 U.S.C. § 7412, authorizes the Administrator of EPA to regulate hazardous air pollutants (“HAPs”) which may have an adverse effect on health or the environment.

6. Pursuant to Section 112 of the CAA, the EPA finalized National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Subpart UUUUU on December 16, 2011, 77 FR 9304 (Feb. 16, 2012) (40 C.F.R. Part 63 Subpart UUUUU), commonly known as the “Mercury and Air Toxics Standards.” *Id.* (hereafter, “MATS”). The MATS adopt emission limits on mercury, acid gases and other toxic pollutants for affected coal and oil-fired electric generating utility units (“EGUs”).
7. Pursuant to 40 C.F.R. § 63.9981, the MATS applies to owners or operators of coal-fired EGUs or oil-fired EGUs as defined in 40 C.F.R. § 63.10042.
8. Pursuant to 40 C.F.R. § 63.2, “owner or operator” is defined as “any person who owns, leases, operates, controls, or supervises a stationary source.”
9. Section 111(a)(3) of the Act, 42 U.S.C. § 7411(a)(3), and 40 C.F.R. § 63.2 defines a “stationary source” as “any building, structure, facility, or installation which emits or may emit any air pollutant.”
10. Pursuant to 40 C.F.R. § 63.2, “affected source” is defined as “the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a Section 112(c) source category or subcategory for which a Section 112(d) standard or other relevant standard is established pursuant to Section 112 of the Act.”
11. Pursuant to 40 C.F.R. § 63.9982, the affected source to which the provisions of the MATS, 40 C.F.R. Part 63, Subpart UUUUU, applies is the collection of all existing coal- or oil-fired EGUs, as defined in 40 C.F.R. § 63.10042, within a subcategory, [and] ... each new or reconstructed coal- or oil-fired EGU, as defined in 40 C.F.R. § 63.10042.
12. On December 16, 2011, in parallel with finalizing the MATS, the Office of Enforcement and Compliance Assurance issued a policy memorandum describing its intended approach regarding issuance of Section 113(a) administrative orders (“Orders”) to sources that are unable to comply

with the MATS but that may need to operate for up to a year to address a specific and documented reliability concern. See The Environmental Protection Agency's Enforcement Response Policy For Use Of Clean Air Act Section 113(a) Administrative Orders In Relation To Electric Reliability And The Mercury and Air Toxics Standard (hereafter, "2011 MATS Enforcement Policy"). The 2011 MATS Enforcement Policy is limited in application to units that are critical for reliability purposes.

13. In issuing the 2011 MATS Enforcement Policy, the EPA believed that there would be few, if any, cases in which affected sources would not be able to comply with the MATS within the compliance period specified by Section 112(i)(3) of the CAA (including, as applicable, any extensions permitted under Section 112(i)(3)(B)), which has proven to be the case. Nonetheless, the EPA acknowledged that there may be isolated instances in which the deactivation or retirement of a unit or a delay in installation of controls due to factors beyond the owner's/operator's control could have an adverse, localized impact on electric reliability that could not be timely predicted or planned for with specificity. In such instances, sources could find themselves in the position of either operating in noncompliance with the MATS or halting operations and thereby potentially impacting electric reliability. Thus, although the EPA generally does not speak publicly to the intended scope of its enforcement efforts in advance of the date when a violation may occur, the Agency issued the 2011 MATS Enforcement Policy to describe the EPA's intended enforcement response in such instances and to provide confidence with respect to electric reliability. The policy is informed, as are EPA's enforcement actions in general, by the need to find an appropriate balance between critical public interests, bearing in mind the resources and process time required for any enforcement response.
14. The 2011 MATS Enforcement Policy specifies that to qualify for an Order in connection with it, an owner/operator must, in summary, provide early written notice of its compliance plans to

the Planning Authority¹ for the area in which the source is located, timely request an Order and provide notice of such request to the EPA, FERC, its Planning Authority, any state public utility or service commission, and any state, tribal or local environmental agencies, with jurisdiction over the area in which the EGU is located, and submit a complete request for an Order.

15. A complete request pursuant to the 2011 MATS Enforcement Policy must include the following elements: copies of the early notice provided to the Planning Authority; written analysis of the reliability risk, which demonstrates that operation of the unit after the MATS Compliance Date is critical to maintaining electric reliability; written concurrence with the reliability analysis by the relevant Planning Authority (or a written explanation of why such concurrence cannot be provided); copies of any written comments received from third parties in favor of, or opposed to, operation of the unit after the MATS Compliance Date; a plan to achieve compliance with the MATS no later than one year after the MATS Compliance Date; and identification of the level of operation required to avoid the reliability risk and proposed operational limits and/or work practices to minimize or mitigate emissions to the extent practicable during non-compliant operation.
16. With respect to the demonstration of reliability risk, the 2011 MATS Enforcement Policy states that the analysis provided in an Order request should demonstrate that operation of the unit after the MATS Compliance Date is critical to maintaining electric reliability, and that failure to operate the unit would: (a) result in the violation of at least one of the reliability criteria required to be filed with the Commission, and, in the case of the Electric Reliability Council of

¹ Planning Authorities are the entities tasked, under NERC reliability standards, with addressing electric reliability through grid planning. In the 2011 MATS Enforcement Policy, Planning Authority was defined as “the entity defined as such in the “Glossary of Terms Used in NERC Reliability Standards,” available at: http://www.nerc.com/docs/standards/rs/Reliability_Standards_Complete_Set.pdf, or any successor term thereto approved by FERC, and includes, in relevant jurisdictions, RTOs and ISOs.”

Texas, with the Texas Public Utility Commission; or (b) cause reserves to fall below the required system reserve margin.

17. Although the EPA's issuance of an Order is not conditioned upon the approval or concurrence of any entity, in light of the complexity of the electric system and the local nature of many reliability issues, for purposes of using its Section 113(a) Order authority in connection with the 2011 MATS Enforcement Policy, the EPA has sought advice in the identification and/or analysis of reliability risks, as necessary and on a case-by-case basis from reliability experts, including, but not limited to, the Federal Energy Regulatory Commission ("FERC"), Regional Transmission Operators ("RTOs"), Independent System Operators and other Planning Authorities, as EPA indicated it would do in the 2011 MATS Enforcement Policy.
18. The 2011 MATS Enforcement Policy specifically stated that an owner/operator interested in receiving a Section 113(a) administrative order pursuant to the policy should provide FERC with a copy of its complete and timely written request to the EPA.
19. On May 17, 2012, FERC issued a policy statement explaining how it intended to provide advice to the EPA on requests for an administrative order pursuant to the 2011 MATS Enforcement Policy. See Policy Statement of the Commission's Role Regarding the Environmental Protection Agency's Mercury and Air Toxics Standards, 139 FERC ¶ 61,131 (2012) ("FERC Policy Statement"). The FERC Policy Statement provided that the Commission will advise the EPA by submitting written Commission comments to the EPA based on the Commission's review of the information provided in an informational filing containing the copy of the request for the administrative order provided to the Commission in an AD docket. *Id.* at Paragraph 21. Further, the FERC Policy Statement indicated that the Commission's comments would provide advice to the EPA on whether, based on the Commission's review of the informational filing, there might be a violation of a Commission-approved Reliability Standard, and may also identify issues

within its jurisdiction other than a potential violation of a Commission-approved Reliability Standard. *Id.*

C. FINDINGS

20. Respondent owns and/or operates an existing coal-fired electric utility steam generating unit, as defined in 40 C.F.R. § 63.10042.
21. Respondent's operation at the Facility is subject to the MATS.
22. On November 28, 2012, Respondent received a one year extension pursuant to 40 C.F.R. 63.6(i)(4)(i)(A) from its permitting authority, extending the date by which it must comply with the MATS to April 15, 2016. *See* November 28, 2012 Letter from Steven A. Thompson, Oklahoma Department of Environmental Quality to Grand River Dam Authority.
23. On February 19, 2015, Respondent submitted a timely and complete request for an Order pursuant to the 2011 MATS Enforcement Policy to the EPA, with a copy to FERC. That request can be found in the FERC AD docket, AD15-6-000 (hereafter "Order Request").
24. Pursuant to the Order Request, Respondent seeks an Order from April 16, 2016 through April 15, 2017, on the grounds that it will not be able to comply with the MATS at Unit No. 1 of the Grand River Energy Center located near Chouteau, Oklahoma, without violating its system reserve margin of 12%, until the construction of a new, highly efficient natural gas-fired combined cycle combustion turbine (Unit No. 3) is completed as a replacement for Unit No. 1. Unit No. 3 will not be operational until shortly after April 16, 2017. *See id.*
25. More specifically, the Order Request states that Respondent, "a load serving member of the Southwest Power Pool (SPP) [Respondent's Planning Authority], states that it will be unable to meet its required reserve margin of 12 percent capacity if Unit No. 1 is retired before new Unit No. 3 becomes operational. Order Request at 6; *see also*, Southwest Power Pool, Criteria 2.1.9 (Minimum Required Capacity Margin) (revised July 29, 2014), available at

<http://www.spp.org/publications/SPP%20Criteria%20&%20Appendices%20July%2029,%202014.pdf>. Respondent indicates that the untimely loss of Unit No. 1 would prevent it from meeting its basic load obligations by 245 MW. *Id.* Additionally, Respondent states that Unit No. 1 has been used for local voltage support, noting that “there were six instances in 2014 where the GRDA System Operator requested either additional capacitive or reactive voltage support from Unit No. 1 to address voltage problems on the transmission system.” Order Request at 7. Respondent further claims that it has “experienced problems under certain conditions obtaining firm or non-firm transmission service to deliver power purchases from outside of the GRDA balancing area” when one or both of its existing units are offline, and without an administrative order, it “is concerned that transmission constraints will make importing sufficient replacement capacity and energy very difficult.” *Id.*

26. In a memorandum attached to Respondent’s submission, SPP concurred with Respondent’s reserve margin assessment. *See* Order Request, Attachment C (SPP January 27, 2014 Memorandum) at 2 (“[a] review of GRDA’s supply adequacy without GRDA unit 15-1 indicates that the firm resources available to GRDA fall below their 12% minimum capacity margin requirement in 2016”). Additionally, SPP concurred that SPP “has observed, over the last year, the need to commit GRDA Unit 1 for relief from high voltages ... [and that] SPP concurs with GRDA’s assessment regarding GRDA Unit 1’s criticality for reliability absent other system changes.” Order Request, Attachment E (SPP February 6, 2015 Letter) at 1.
27. FERC reviewed the reliability risk presented in the request in accordance with the FERC Policy Statement and on April 16, 2015 found that “the loss of GRDA’s Unit No. 1 would result in GRDA falling below the 12 percent capacity reserve requirement stipulated in SPP Criteria 2.1.9 unless GRDA is able to procure replacement capacity for the unit and associated firm transmission service,” and “[a]bsent a significant change in future circumstances, [FERC’s] view is that GRDA’s

Unit No. 1 is needed as requested by GRDA to maintain electric reliability.” See Commission Comments On Grand River Dam Authority’s Request For EPA Administrative Order (April 16, 2015), p. 4, Docket No. AD15-6-000. Additionally, FERC notes that “the reliability of the Bulk-Power System depends in part on whether utilities meet an appropriate planning reserve margin.” *Id.*

28. Respondent proposes to minimize emissions by implementing a bidding approach with SPP, in a manner consistent with the SPP Tariff and market rules, to limit the total electricity generated by Unit No. 1 while maintaining its reserve margin. See Order Request at 12-13. Specifically, Respondent shall bid Unit No. 1 to achieve a total annual capacity factor of not more than 50% during the period from April 16, 2016 up to April 16, 2017, which is lower than its historical operation as a base load facility of approximately 70% annual capacity. *Id.* Although the monthly capacity factor of Unit No. 1 would vary to allow Respondent to meet its reserve margin requirements throughout the period covered by this Order, Respondent states that reducing the annual capacity factor to 50% will result in approximately 30% lower total emissions during the period from April 16, 2016 up to April 16, 2017. *Id.*

D. ORDER

29. Respondent is ordered to take the actions described in this section of this Order.
30. From April 16, 2016 through April 15, 2017, Respondent shall implement a bidding approach with SPP, while maintaining Respondent’s reserve margin, in a manner consistent with the SPP Tariff and market rules, to limit the total electricity generated by Unit No. 1 to achieve a total annual capacity factor of not more than 50% during the period from April 16, 2016 through April 15, 2017.
31. By 11:59 pm April 15, 2017, Respondent shall achieve full compliance with the MATS at Unit No. 1 at the Facility by permanently ceasing operation as a coal-fired unit.

32. Within 30 days of achieving full compliance with the MATS at the Facility, Respondent shall provide written notice to the EPA indicating that compliance has been achieved and the date by which it was achieved, pursuant to the process specified in paragraph 39 of this Order.

E. OTHER TERMS AND CONDITIONS

33. Respondent admits the jurisdictional allegations contained in Sections A (Preliminary Statement) and B (Statutory and Regulatory Background) of this Order.

34. Respondent neither admits nor denies the findings in Section C (Findings) of this Order.

F. GENERAL PROVISIONS

35. Any violation of this Order may result in a civil administrative or judicial action for an injunction or civil penalties of up to \$37,500 per day per violation, or both, as provided in Sections 113(b)(2) and 113(d)(1) of the Act, 42 U.S.C. §§ 7413(b)(2) and 7413(d)(1), as well as criminal sanctions as provided in Section 113(c) of the Act, 42 U.S.C. § 7413(c). The EPA may use any information submitted under this Order in an administrative, civil judicial, or criminal action.

36. Nothing in this Order shall relieve Respondent of the duty of achieving and maintaining compliance with all applicable provisions of the Act or other federal, state or local laws or statutes, nor shall it restrict the EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on, or determination of, any issue related to any federal, state, or local permit.

37. Nothing herein shall be construed to limit the power of the EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.

38. The provisions of this Order shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns. From the Effective Date of this Order until the Termination Date as set out in paragraph

44 below, Respondent must give written notice and a copy of this Order to any successors in interest prior to any transfer of ownership or control of any portion of or interest in the Facility. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to the EPA. In the event of any such transfer, assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this Order unless the EPA has provided written approval of the release of said obligations or liabilities.

39. Unless this Order states otherwise, whenever, under the terms of this Order, written notice or other documentation is required to be given, it shall be directed to the individuals specified at the addresses below unless those individuals or their successors give notice of a change of address to the other party in writing:

Phillip A. Brooks
Division Director of the Air Enforcement Division, Office of Civil Enforcement, Office of Enforcement and Compliance Assurance, US Environmental Protection Agency
Mail Code 2242A, Room 1119
1200 Pennsylvania Ave, NW
Washington, DC 20460 mail or 20004 courier (note Room 1119 on courier packages)

Anupa Ahuja
Air Enforcement Section
Mail Code 6EN-AA
US EPA Region 6
1445 Ross Ave
Dallas, TX 75202
Phone: (214)665-2701

Daniel S. Sullivan
Grand River Dam Authority
P.O. Box 409
226 West Dwain Willis Avenue
Vinita, OK 74301
Phone: (918)256-5545

Britt S. Fleming
Van Ness Feldman, LLP
1050 Thomas Jefferson Street, NW
Washington, DC 20007
Phone: (202)298-1863

All notices and submissions shall be considered effective upon receipt.

40. To the extent this Order requires Respondent to submit any information to the EPA, Respondent may assert a business confidentiality claim covering part or all of that information, but only to the extent and only in the manner described in 40 C.F.R. Part 2, Subpart B. The EPA will disclose information submitted under a confidentiality claim only as provided in 40 C.F.R. Part 2, Subpart B. If Respondent does not assert a confidentiality claim, the EPA may make the submitted information available to the public without further notice to Respondent.
41. Each undersigned representative of the Parties certifies that he or she is authorized to enter into the terms and conditions of this Order to execute and bind legally the Parties to this document.

G. EFFECTIVE DATE AND OPPORTUNITY FOR A CONFERENCE

42. Pursuant to Section 113(a)(4) of the Act, an Order does not take effect until the person to whom it has been issued has had an opportunity to confer with the EPA concerning the alleged violations. By signing this Order, Respondent acknowledges and agrees that it has been provided an opportunity to confer with the EPA prior to issuance of this Order. Accordingly, this Order will take effect immediately upon signature by the latter of Respondent or the EPA.

H. JUDICIAL REVIEW

43. Respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1).

I. TERMINATION

44. This Order shall terminate on the earlier of the following (the "Termination Date") at which point Respondent shall operate in compliance with the Act:

- a. 11:59 pm April 15, 2017;
- b. The effective date of any determination by the EPA that Respondent has achieved compliance with all terms of this Order; or
- c. Immediately upon receipt by Respondent of notice from the EPA finding that an imminent and substantial endangerment to public health, welfare, or the environment has occurred.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR ENFORCEMENT DIVISION, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE
BEFORE THE ADMINISTRATOR

In the Matter of:

Grand River Dam Authority,

Respondent.

Administrative Compliance Order on Consent
AED-CAA-113(a)-2016-0002

For United States Environmental Protection Agency, Air Enforcement Division, Office of Enforcement and Compliance Assurance:

4/16/2016

Date



Phillip A. Brooks
Division Director of the Air Enforcement Division, Office of Civil Enforcement, Office of Enforcement and Compliance Assurance, US Environmental Protection Agency
Mail Code 2242A, Room 1119
1200 Pennsylvania Ave, NW
Washington, DC 20460 mail or 20004 courier (note Room 1119 on courier packages)

For Grand River Dam Authority:



Signature

April 7, 2016

Date

Printed Name: Daniel S. Sullivan
Title: General Manager/CEO
Address: P.O. Box 409, 226 West Dwain Willis Avenue, Vinita, OK 74301

CERTIFICATE OF SERVICE

I certify that the foregoing "Administrative Compliance Order" in the Matter of Grand River Dam Authority, Order AED-CAA-113(a)-2016-0002, was filed and copies of the same were mailed to the parties as indicated below.


Certified Mail

Daniel S. Sullivan
Grand River Dam Authority
P.O. Box 409
226 West Dwain Willis Avenue
Vinita, OK 74301
Phone: (918)256-5545

Britt S. Fleming
Van Ness Feldman, LLP
1050 Thomas Jefferson Street, NW
Washington, DC 20007
Phone: (202)298-1863

Eddie Terrill
Director, Air Quality Division Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677

4/18/16
Date


Tawanna Cathey

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR ENFORCEMENT DIVISION, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE
BEFORE THE ADMINISTRATOR

In the Matter of:

Grand River Dam Authority,

Respondent.

Amendment
Administrative Compliance Order on Consent
AED-CAA-113(a)-2016-0002

AMENDMENT – ADMINISTRATIVE COMPLIANCE ORDER

A. PRELIMINARY STATEMENT

1. This is an amendment (the “Amendment”) to the Administrative Compliance Order on Consent, AED-CAA-113(a)-2016-0002, (“Order”) issued on April 16, 2016 by the U.S. Environmental Protection Agency (“EPA”) to the Grand River Dam Authority (“Respondent”). A copy of the Order is attached to this Amendment as Attachment A. Unless otherwise indicated, defined terms in this Amendment have the same meaning as in the Order.

B. FINDINGS

2. From July 1, 2016 to July 2, 2016, a series of events arose from causes beyond the control of Respondent that require amendment to the terms of the Order. Specifically, during a storm, there was a lightning strike at the Facility, which resulted in a significant fire that severely damaged Unit 2 and moderately damaged Unit 1. Unit 1 returned to service on July 20, 2016. Unit 2 is not expected to return to service until after Unit 1 permanently ceases operation as a coal-fired unit on April 15, 2017.
3. As a result of Unit 2, a 520 MW unit, being out of service during the period covered by the Order, Respondent will not be able to meet the terms of operation of Unit 1 detailed in the Order without violating the reliability risks described in paragraphs 24 – 28 of the Order. To address those reliability risks, it is necessary to amend the Order to allow for increased

operation of Unit 1. During the period in July when both units were out of service, voltage support was not required and Respondent was able to make other short term power purchases to meet basic load requirements.

C. ORDER

4. Paragraph 30 of the Order is replaced with the following requirement: From April 16, 2016 through April 15, 2017, Respondent shall implement a bidding approach with SPP, while maintaining Respondent's reserve margin, in a manner consistent with the SPP Tariff and market rules, to limit the total electricity generated by Unit No. 1 to achieve a total annual capacity factor of not more than 80% during the period from April 16, 2016 through April 15, 2017.

D. GENERAL PROVISIONS

5. Unless explicitly modified in this Amendment, all provisions of the Order remain in effect.
6. Each undersigned representative of the Parties certifies that he or she is authorized to enter into the terms and conditions of this Amendment to execute and bind legally the Parties to this document.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR ENFORCEMENT DIVISION, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE
BEFORE THE ADMINISTRATOR

In the Matter of:


Grand River Dam Authority,

Respondent.


Amendment
Administrative Compliance Order on Consent
AED-CAA-113(a)-2016-0002

For United States Environmental Protection Agency, Air Enforcement Division, Office of Enforcement and Compliance Assurance:

9/14/2016
Date


Phillip A. Brooks
Division Director of the Air Enforcement Division, Office of Civil Enforcement, Office of Enforcement and Compliance Assurance, US Environmental Protection Agency
Mail Code 2242A, Room 1119
1200 Pennsylvania Ave, NW
Washington, DC 20460 mail or 20004 courier (note Room 1119 on courier packages)

For Grand River Dam Authority:


Signature

Sept. 8, 2016
Date

Printed Name: Daniel S. Sullivan
Title: General Manager/CEO
Address: P.O. Box 409, 226 West Dwain Willis Avenue, Vinita, OK 74301

CERTIFICATE OF SERVICE

I certify that the foregoing "Amendment" to the Administrative Compliance Order in the Matter of Grand River Dam Authority, Amendment AED-CAA-113(a)-2016-0002, was filed and copies of the same were mailed to the parties as indicated below.

Certified Mail

Daniel S. Sullivan
Grand River Dam Authority
P.O. Box 409
226 West Dwain Willis Avenue
Vinita, OK 74301
Phone: (918)256-5545

Britt S. Fleming
Van Ness Feldman, LLP
1050 Thomas Jefferson Street, NW
Washington, DC 20007
Phone: (202)298-1863

Eddie Terrill
Director, Air Quality Division Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677

Date

Tawanna Cathey

Attachment B

Temporary Operating Guide

Title: GRDA Unit #1 Manual Commitment

System Conditions: Intact

Written by: Patrick deLassus (SPP)

Reviewed by: Kevin Sanson (SPP), Jason Smith (SPP), Terry Oxandale (SPP), Will Tootle (SPP), Jeff Wells (GRDA), Mike Stafford (GRDA)

Op-Guide: Effective on: 10/15/2014

Expires on: 11/04/2014

I. Purpose/Background

Due to the low load and high voltage in the GRDA area, GRDA Unit #1 generation will be needed. Generation needs to be online in order to ensure voltage stability until GRDA Unit #2 returns from outage.

II. Monitoring

IDC FG #	Monitored Element	Contingent Element	Owner	Rating (MVA)
xxxxx	GRDA area (Voltage)	System Intact	GRDA	xxx

III. Mitigation

SPP BA will manually commit the GRDA Unit #1 (GRDA_UNIT_1) in order to provide relief from high voltage. Low load and high voltage are also contributing factors to this commitment. This requirement will be terminated once load levels permit.

If the generation from GRDA Unit #1 is unavailable, or otherwise unable to supply voltage support, reconfiguration plans may be needed. If reconfiguration is deemed necessary, GRDA will determine where to reconfiguration will be effective.

IV. Unit Commitment Details

RESOURCE NAME: GRDA_UNIT_1

Unit Start Time: 10/16/2014 00:00

Unit Online Time (Dispatchable):): **** Extension – Unit is Already Online ****

Unit Release Time (Shutdown): 11/04/2014 00:00 (This will be re-evaluated once GRDA_UNIT_2 returns to service.)

Commit Reason: SPP: LOCAL

The SPP RCs are not obligated to use the directions given above in the recommended order. Depending on the circumstances, the SPP RCs will make the decision on the best and most efficient option that would provide relief adequately.

Attachment C

March 1, 2017

United States Department of Energy
1000 Independence Ave, SW
Washington, DC 20585

Re: Contribution of GRDA Unit 1 to local grid reliability as demonstrated by recent operating experience in SPP

Dear Sir/Madam:

The Southwest Power Pool, Inc. (SPP) Reliability Coordinator (RC) has observed, historically, the need to commit GRDA Unit 1 for relief from high voltages. In fact, the RC created a Temporary Operating Guide for the period October 15 through November 4 of 2014 stating that during a planned maintenance outage of GRDA Unit 2, GRDA Unit 1 must be available for dispatch during instances of low load and high voltage. GRDA Unit 1 was called upon to provide reactive support during the entire period of the Operating Guide. Although SPP no longer requires the Temporary Operating Guide, it nevertheless continues to believe that during future light load conditions when GRDA Unit 2 is unavailable, the commitment and dispatch of GRDA Unit 1 will be a critical resource in maintaining proper system voltage. Moreover, in the absence of GRDA Unit 2 and until GRDA Unit 3 comes online, SPP believes GRDA Unit 1 provides a valuable contribution to the local area's overall grid reliability. Based on the above, SPP concurs with GRDA's assessment regarding GRDA Unit 1's importance for reliability absent other system changes or until GRDA's Unit 2 and Unit 3 are in service.

Please do not hesitate to contact me should you have questions or would like to request additional information.

Respectfully submitted,



Lanny Nickell
Vice President, Engineering
(501) 614-3232 • Fax: (501) 482-2022 • lnickell@spp.org

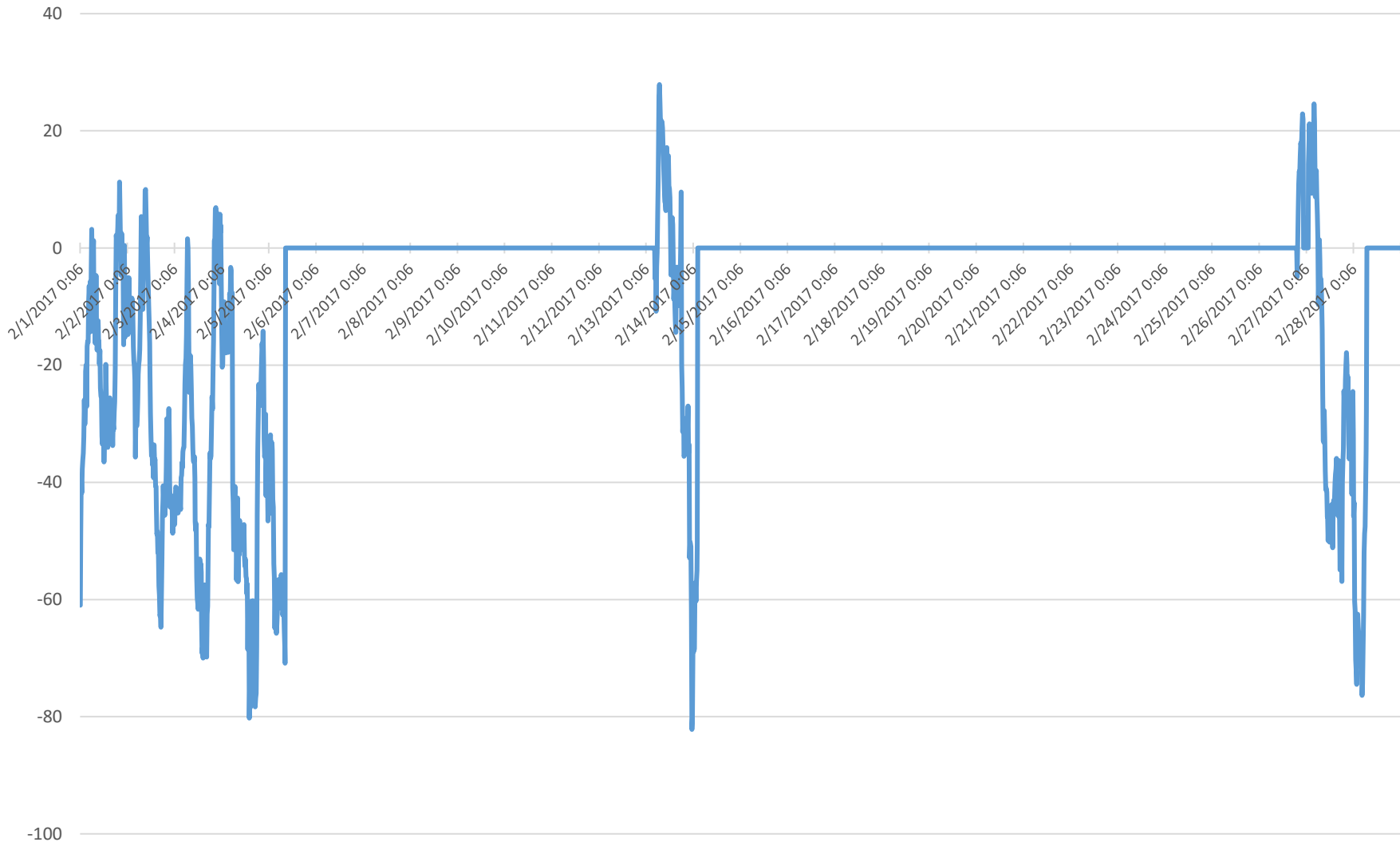
Attachment D

GRDA Unit No. 1 - Reactive Power Production in February 2017

Sum of 2:6832:MVAR CFP #1:O:GRDA #1

Total

Total



Time

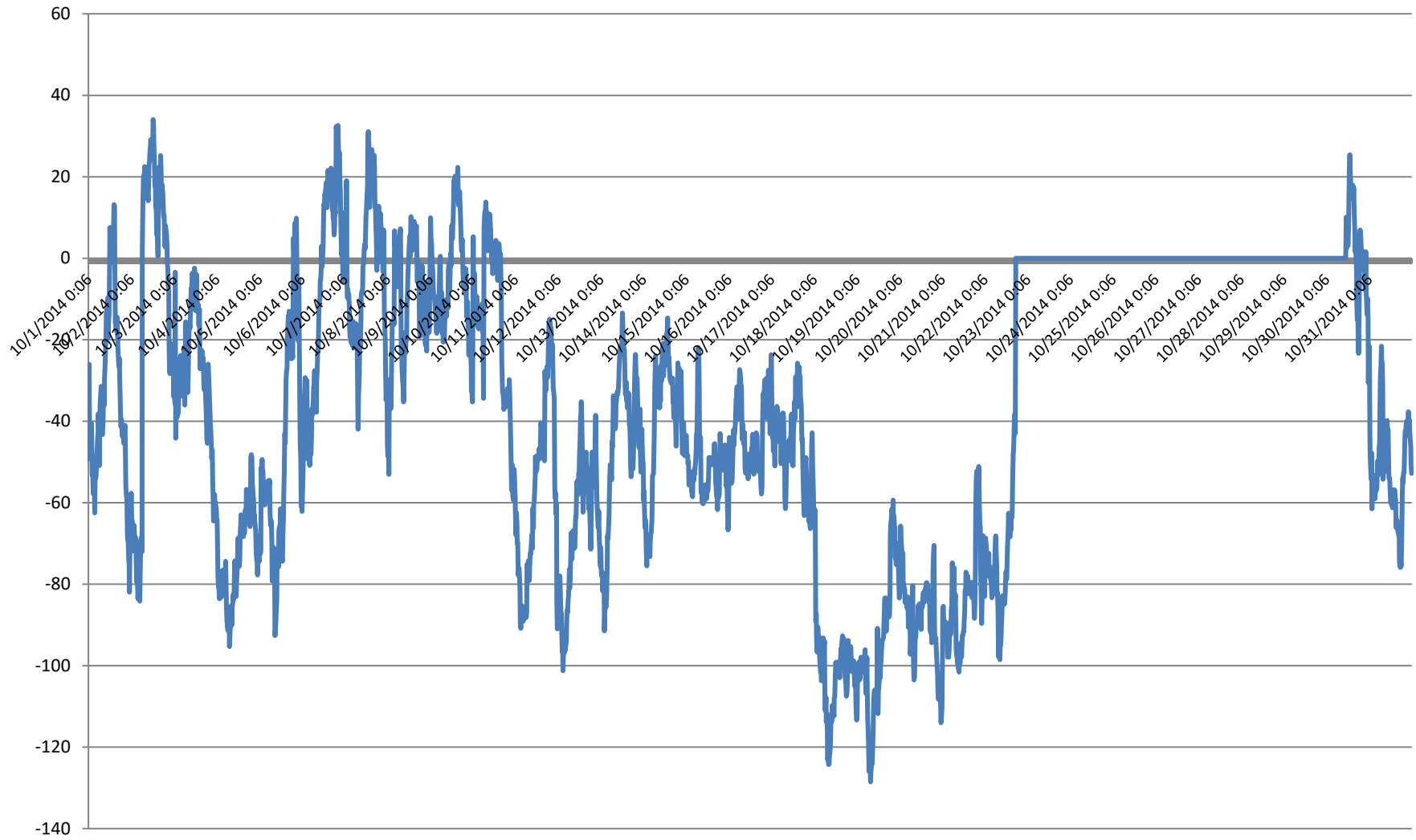
Attachment E

GRDA Unit No. 1 Reactive Power Production in October and November 2014

Sum of 2:6832:MVAR CFP #1

Total

— Total



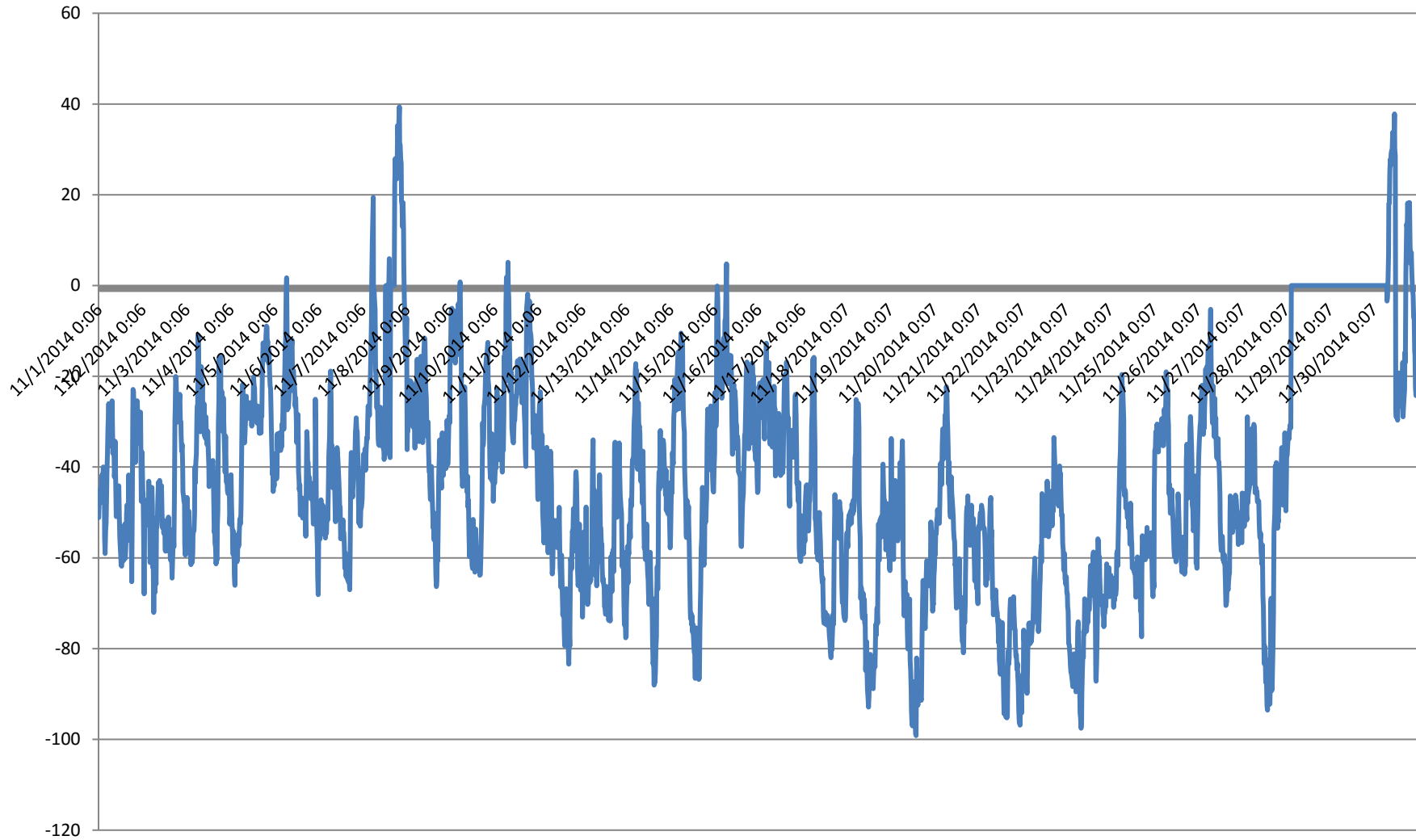
Time

GRDA Unit No. 1 Reactive Power Production in October and November 2014

Sum of 2:6832:MVAR CFP #1

Total

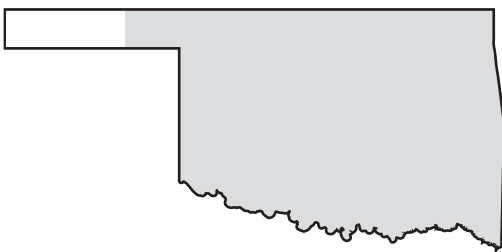
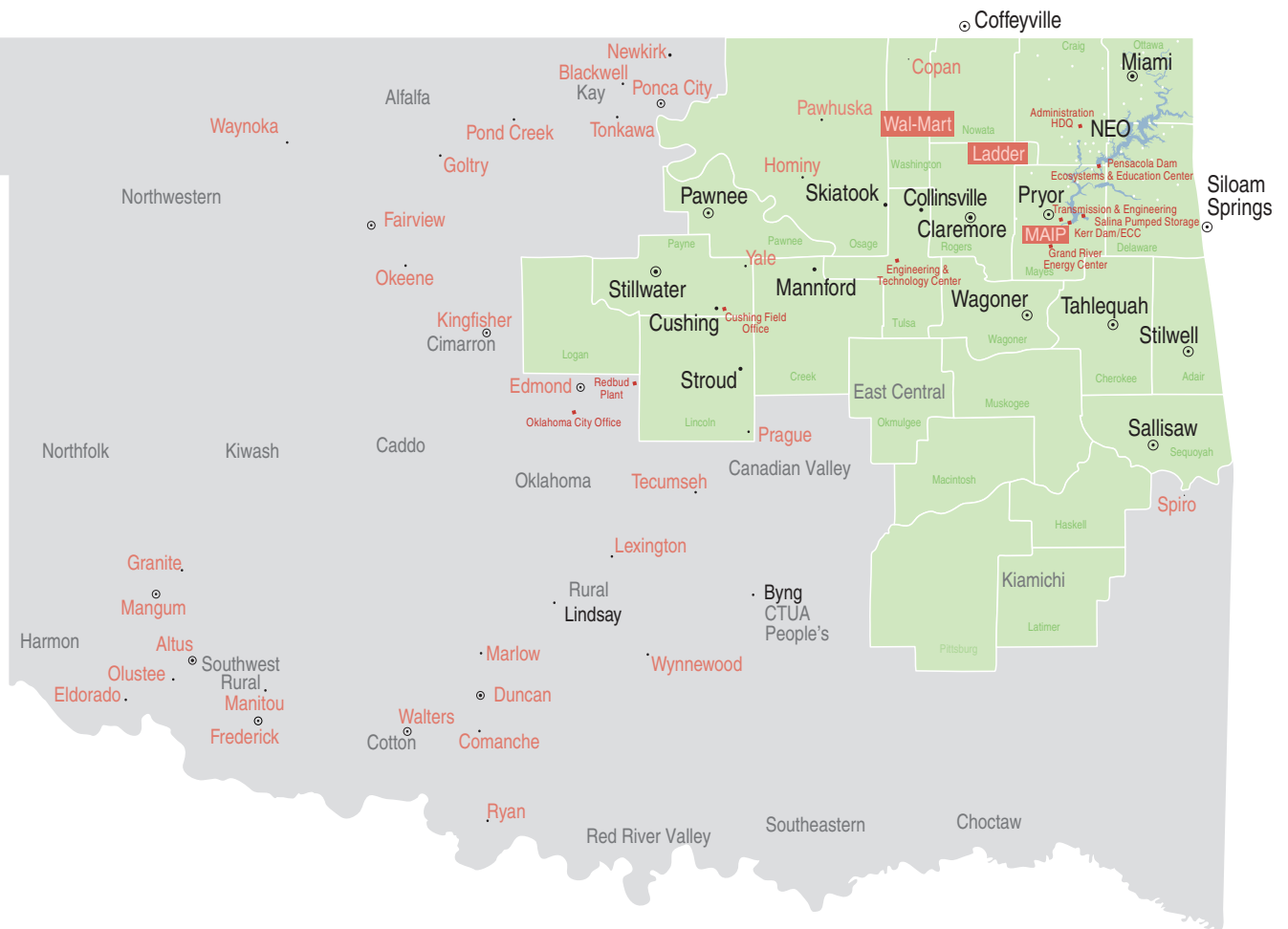
— Total



Time

Attachment F

MAP OF CUSTOMERS AND GRDA FACILITIES



GRDA directly or indirectly provides electricity to some portion of all counties in Oklahoma except for two counties in the panhandle.

Municipal Customers - Served by GRDA in BLACK lettering; many served since 1940s.

Northeast Electric Cooperative - Represented by WHITE DOTS, served since 1946.

Industrial Customers - Represented by ORANGE BOX, Majority located in MidAmerica Industrial Park (MAIP).

Oklahoma Municipal Power Authority - Served since 1985. OMPA's customers in LIGHT ORANGE lettering.

Western Farmers Electric Cooperative - Served since 1983. WFEC's customers in GRAY lettering.

GRDA Facilities - Shown in RED lettering.

See Notes to Financial Statements, Utility Plant for additional information on capital assets.

Source: Grand River Dam Authority