## Grand River Dam Authority (82 O.S. § 861)

Agency Code 980

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Administration Kevin A. Easley, General Manager, Chief Executive Officer;

Carolyn Dougherty, Chief Financial Officer/Treasurer; Charles J. Barney, Assistant General Manager, Thermal Generation; Mike Herron, Assistant General Manager of Engineering, System Operations and Reliability; Dale Willis, Assistant General Manager of Transmission and Engineering; Michael Kiefner, Chief Operating Officer; Gretchen Zumwalt-Smith, General Counsel; Tamara Jahnke, Assistant General Counsel; Donna M. Jones, Secretary

Personnel 390 classified, 60 unclassified, 11 temporary

History and Function The Grand River Dam Authority was created by the Fifteenth Oklahoma Legislature in 1935 to serve as a conservation and reclamation district for the waters of the Grand River. The Grand River Dam Authority Act (SB 395) established GRDA as a state agency and authorized it to build dams on the Grand River for the purposes of hydroelectric production, recreation, and flood control. Development of natural resources for Oklahoma were also responsibilities included in the act. The powers and functions of GRDA are exercised by a seven-member board of directors.

Dams The Pensacola Dam hydroelectric project was completed in 1940. At 5,680 feet in length, it is one of the longest multiple-arch dams in the world. Pensacola Dam creates Grand Lake O' the Cherokees (Grand Lake) with 46,500 surface acres, a 1,300-mile shoreline, and a 66-mile channel. Six Francis-type hydroelectric turbines at Pensacola Dam's powerhouse have a total capacity of 112,000 kW. Pensacola Dam impounds 1,672,000 acre-feet of water and has a floodwater storage capacity of 540,000 acre-feet.

In 1964, GRDA completed construction on the Markham Ferry project. Also known as the Robert S. Kerr Dam, the project created Lake Hudson. This 12,000-surface-acre lake has a 200-mile shoreline and contains thirty channel miles of the Grand River in a fairly constant lake level, maintained the year round. Four Kaplan-type hydroelectric turbines at the Kerr Dam powerhouse have a total capacity of 114,000 kW, and an average water year can provide 211,000,000 kWh.

The Salina Pumped Storage Project was planned to be developed in four stages, 130,000 kW each. Two stages have been completed, the first in 1968 and the second in 1971. These two stages combine for a total capacity of 260,000 kW. The project is used for storing energy in the form of water pumped from Lake Hudson to the west.

W.R. Holway Reservoir, formed by an earthen dam, which stretches 2,300 feet across the Chimney Rock Hollow southeast of Salina. The Salina Pumped Storage Project also supplies energy during peak loads and supplies emergency power to the system.

In 1976, the Oklahoma Legislature authorized bonds to be issued to construct a 490,000 kW coal-fired power generating unit (GRDA 1). Construction was begun in 1978 and completed in 1981 when the legislature authorized bonds to be issued to construct a second coal-fired generating station (GRDA 2) near Chouteau, adjacent to GRDA 1. GRDA 2 is jointly owned by the authority (62%) and KAMO Power, Inc., an electric cooperative (38%). The unit is rated at 520,000 kW. Construction began on GRDA 2 in 1981 and was completed in March 1986. The two facilities comprise the Coal-Fired Generating Complex (CFC).

In addition to these projects, GRDA operates and maintains an integrated electric transmission system including approximately 2,090 miles of line and related switching stations and transformer substations.