Grand River Dam Authority Facility Overview

Pensacola Dam- The first hydroelectric facility constructed in Oklahoma, GRDA completed Pensacola Dam in 1940. It is located between the communities of Langley and Disney, spanning a mile across the Grand River Valley and holding back the water that forms Grand Lake o’ the Cherokees. There are six units at Pensacola Dam, that have a combined generation capacity of 126 megawatts. There are 21 floodgates on the main spillway, with 21 additional making up the east spillways.

Salina Pumped Storage Project- The third hydroelectric project constructed by GRDA, the Salina Pumped Storage Project was constructed along the Saline Creek arm of Lake Hudson. The first phase was completed in 1968, with three more pump/turbine generators added in 1971, giving a total capacity of 260 megawatts. The facility’s ability to pump water uphill from Lake Hudson into the upper reservoir is essentially like recharging a battery. The water in the reservoir is potential energy that can be used for generation at a moment’s notice.

Grand River Energy Center- In the late 1970s, GRDA needed additional capacity to meet its ever growing needs, and approval came from the Oklahoma Legislature giving authorization to begin construction on a 1,245-acre site, located adjacent to the MidAmerica Industrial Park. Unit 1 was completed in 1981, with Unit 2 coming online in 1985. Construction for Unit 3, a combined cycle, gas-fired unit, began in 2015 and will be online in 2017.

Ecosystems and Education Center- Although producing and distributing electricity is our main function, GRDA is also responsible for conserving and maintaining the waters of the Grand River system in Northeast Oklahoma. Completed in 2010, the Ecosystems and Education Center is a testament to GRDA’s commitment to study and preserve the biologic viability of the watershed and its natural habitats, protecting and managing wildlife within our boundaries and providing a safe and healthy environment for tourists.