



Relicensing Brief: OPERATIONS

- The Lloyd Shoals Dam is a modified run-of-river project consisting of Lloyd Shoals Dam and Lake Jackson. Water for generation at Lloyd Shoals Dam comes from rainfall in the Ocmulgee River basin upstream. Lloyd Shoals Dam generates during peak power demand hours and discharges directly into the Ocmulgee River.
- During normal operations, Lloyd Shoals Dam is operated to maintain lake elevations between approximately 530 and 527 feet year-round, excluding planned drawdowns and drought. The lake rises slightly as inflow is temporarily stored during hours which are outside peak power demand hours. As Georgia Power's customers demand more power during the peak power period, Lloyd Shoals Dam is operated to release water through the powerhouse turbines and produce energy from the plant generators. This cycle repeats daily depending on peak power demand periods, which vary from season to season.
- At all times, the Lloyd Shoals Dam releases a continuous minimum flow of 400 cubic feet per second (cfs), or inflow, whichever is less, through the turbines into the Ocmulgee River below. During low flow periods or extended drought, calculated inflows often drop below the 400 cfs minimum flow requirement. During these times, Georgia Power maintains a minimum of 250 cfs in the river below the dam to support stream flows for aquatic life and uses further downstream such as the Butts County and Macon Water Authority intakes.
- During high flow events at Lloyd Shoals Dam, all flows are first run through the turbine/generator units where electricity is generated. If inflows into the plant exceed the maximum hydraulic powerhouse capacity of the plant, then spillway gates are opened incrementally to approximate inflow. In 2012, Georgia Power replaced its existing spillway flashboards with Obermeyer Gates. These gates provide better control of the lake level during high flow operations by allowing Georgia Power to closely match releases from the dam with inflows into the dam.
- Detailed operations explanations are provided in the Lloyd Shoals Operations Primer.

Bottom Line Take Away: Georgia Power proposes to continue operating Lloyd Shoals Dam in its current manner.

Issue Contact: Courtenay O'Mara and Melissa Crabbe