

Regulation for Hydrocycling

Hydropower plants are often operated in a variable manner, usually in a start-and-stop pattern, known as “hydrocycling”. Hydrocycling can be done for a number of reasons, such as operating a hydropower plant at peak efficiency (the point at which the most generation is produced per unit volume of water) or to meet a particular demand for power. Hydrocycling results in variable flow rates through a hydropower plant.

Currently, during the irrigation season, hydrocycling of the J-2 Hydro is limited by need of the Phelps Canal for a relatively steady flow of water. A regulatory agreement between Central and the U.S. Fish and Wildlife Service also imposes restrictions on hydrocycling of the J-2 Hydro during the whooping crane spring and fall migration seasons. The U.S. Fish and Wildlife Service has further expressed concerns about the environmental impacts of hydrocycling outside of the periods covered by the agreement.

The J-2 Reservoirs would enable hydrocycling of the J-2 Hydro while providing for relatively stable flows to the Phelps Canal and the J-2 Return.