90,000 GPM Floating Bypass Protects Dam from Extreme Snowmelt Flooding



Twelve pumps removed 200 CFS of excess water from the lake to relieve pressure from aging dam infrastructure.

PROJECT SCOPE

Custom bypass system required to pump 200 CFS from lake, flooded by extreme snowmelt.

CLIENT

Power Company

INDUSTRY SEGMENT

Power / Municipality

EOUIPMENT

- Floating barge with six 18" and six 12" pumps
- 20" HDPE discharge pipe with accessories
- RiteFlo® wireless gauge

BACKGROUND

After a winter of unusually-severe weather in California, Lake Agnew, located at an 8,500' elevation in the Sierra Nevada Mountains, was inundated by unprecedented snowmelt. The power company managing the dam required a 90,000 GPM system that would remove excess water and reduce stress on the aging dam infrastructure.

OUTCOME

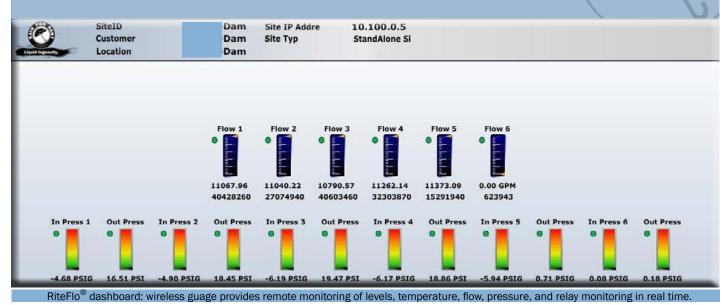
Within three weeks of surveying the site, Rain for Rent Engineering and Operations teams designed a customized bypass system along with a mobilization plan that included airlifting 12 pumps to the remote location. The pumps, fuel, and all necessary parts, were safely delivered by helicopter and assembled on the floating barge weeks ahead of the customer's expectations, enabling them to get a head-start on relieving pressure from the dam at 200 CFS.

HIGHLIGHTS

- Due to the remote location, Rain for Rent Operations personnel were flown in by helicopter each day to provide 24/7 system management and maintenance service
- Wireless RiteFlo® gauges provided real-time remote monitoring of the system's flow and pressure data.
- The system remains in position, operating as needed for the next year to ensure safety for the dam and downstream communities.



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HIGHLIGHTS CONT.

• Rain for Rent's 24/7 Pump watch team utilized the RiteFlo® system to manage the project flows and provide valuable at-a-glance information to the dam's management team, including: a summary of which pumps were on or off, the rate, volume, and pressure at intake and discharge points.

CUSTOMER FEEDBACK

The smooth and safe manner in which the project is progressing has been valuable to the dam's management group who shared that Rain for Rent's equipment performance and Engineering and Operations services have provided the leverage they needed to meet the challenges of this project.



