

SUCCESS STORY

Water Supply Innovation

Partnering with a municipal power provider to create new water filtration solutions for the long-haul

CLIENT

Southern
California
Municipal Power
Provider

PRODUCTS

Microfiltration
pretreatment
Reverse osmosis
Service mixed bed
ion exchange

THE CHALLENGE

- Drought and potable water conservation requirements limit local use
- Municipal power plant needs viable new water sources for steam production and power generation
- Need innovative solutions for using reclaimed water sources

THE SOLUTION

- Design new system to treat reclaimed water and meet EPRI standards
- Install scalable solution for treating and purifying treated wastewater
- Manage and operate filtration and sanitation equipment to ensure a reliable clean and sustainable water source

THE RESULTS

- Industry leading solution delivers clean, usable, reclaimed water for sustainable power generation
- Renewed contract for maintaining and scaling water sanitation systems for ongoing success
- Municipal power plant continues to meet water efficiency and sustainability goals

THE CHALLENGE

Drought and water use restrictions force a Southern California municipal power plant to find a new water source for system cooling and steam generation.

After relying on the local community's potable water supply for decades, the plant needed to find a new water source and effective treatment options for high-purity steam production and power generation.

The local municipal sewage plant offered to provide an abundance of low-cost Title-22 tertiary treated wastewater, previously released as effluent.

But could the power plant safely use treated wastewater?

THE SOLUTION

Puretec created a system to treat the reclaimed water and meet the Electric Power Research Institute's (EPRI) rigorous water purity standards for combined cycle and steam generation power plants.

Our engineering team designed a water filtration solution using microfiltration pretreatment, reverse osmosis (RO), and service mixed bed ion exchange deionization.

Additionally, the plant engaged Puretec on a long-term service contract to operate and maintain the complex water filtration equipment and ensure a stable supply of purified reclaimed water.



SUCCESSFUL DELIVERY

This first-of-its-kind water reclamation for power generation succeeded in delivering the required high-purity water dramatically reducing the plant's potable water consumption.

Puretec provided bespoke water filtration equipment and expert design, installation, and maintenance services backed by quantity and quality guarantees under a 20-year Build-Own-Operate agreement.

The plant awarded Puretec a second contract when the first expired and we continue to operate this innovative and sustainable solution.

Together, the client and Puretec demonstrated our commitment to preserving critical potable water resources by taking calculated risks and working under a creative contract to develop viable alternative water sources.


The project demonstrated the feasibility of reclaiming wastewater for new applications and continues to provide a reliable clean water supply for power generation.



[Learn more](#) about Puretec's advanced water filtration options for the power industry.

Let's Build Something Together

Puretec has strategically located facilities in the Southwest to provide immediate service for your high purity water needs.

 **Oxnard, California**


3151 Sturgis Road
Oxnard, CA 93030

 **Anaheim, California**


1815 S. Lewis Street
Anaheim, CA 92805

 **San Diego, California**

7151 Ronson Road
San Diego, CA 92111

 **San Jose, California**

1291 Oakland Road
San Jose, CA 95112

 **Gilbert, Arizona**

1440 N. Hobson Street
Gilbert, AZ 85233

ABOUT PURETEC

We're an innovative industrial water service company providing high purity solutions with hundreds of uses across dozens of industries. Our pure water solutions include deionized water service, water softening, reverse osmosis, mobile trailers, and many other advanced filtration solutions.

An independent, family-owned business, Puretec believes in doing our best in everything we do, acting with integrity, and treating our clients and employees with respect. We're proud to be a certified "Great Place to Work."

It's not just water.

It's Puretec!

800.906.6060

contact@puretecwater.com

www.puretecwater.com