



ALAMEDA
MUNICIPAL POWER

POWERED BY 100% CLEAN ENERGY

Alameda Municipal Power: Delivering Clean Power for Alameda's Future

The background image is a composite. The top half shows the Alameda City Hall, a red brick building with arched windows and a large archway. The words "CITY HALL" are visible on the facade. The bottom half shows a white AMP service truck with a green stripe and the AMP logo. The truck has "ALAMEDA MUNICIPAL POWER" and "www.alamedaamp.com" written on its side.

AMP: Leading the Way in Clean Energy

Founded in 1887, Alameda Municipal Power (AMP) is California's oldest municipal electric utility and one of the oldest in the nation. Governed by an independent Public Utilities Board since 1930, AMP remains under local control, ensuring community ownership and governance.

For over 135 years, AMP has powered Alameda's residents, and today, it continues to advance its mission as a pioneer in delivering 100% clean power. Since January 2020, AMP has been at the forefront of Alameda's Climate Action and Resiliency Plan (CARP), delivering electricity from a clean energy mix that includes geothermal, hydroelectric, wind, and landfill recovery from plants and stations throughout Northern California.

As a publicly owned and locally governed utility, AMP exemplifies what is possible in the utility industry. It provides 100% clean power while maintaining lower rates than neighboring investor-owned utilities, saving Alameda's customer base millions annually. Alameda is among the few American cities that has achieved its 100% clean power goals well before state and federal mandates.

AMP serves over 38,000 residential and commercial accounts in the diverse community of Alameda and is proud to pioneer programs and services that uplift underserved communities, promote energy efficiency, and support customer electrification.

Generation Resources: AMP's Commitment to Clean Power



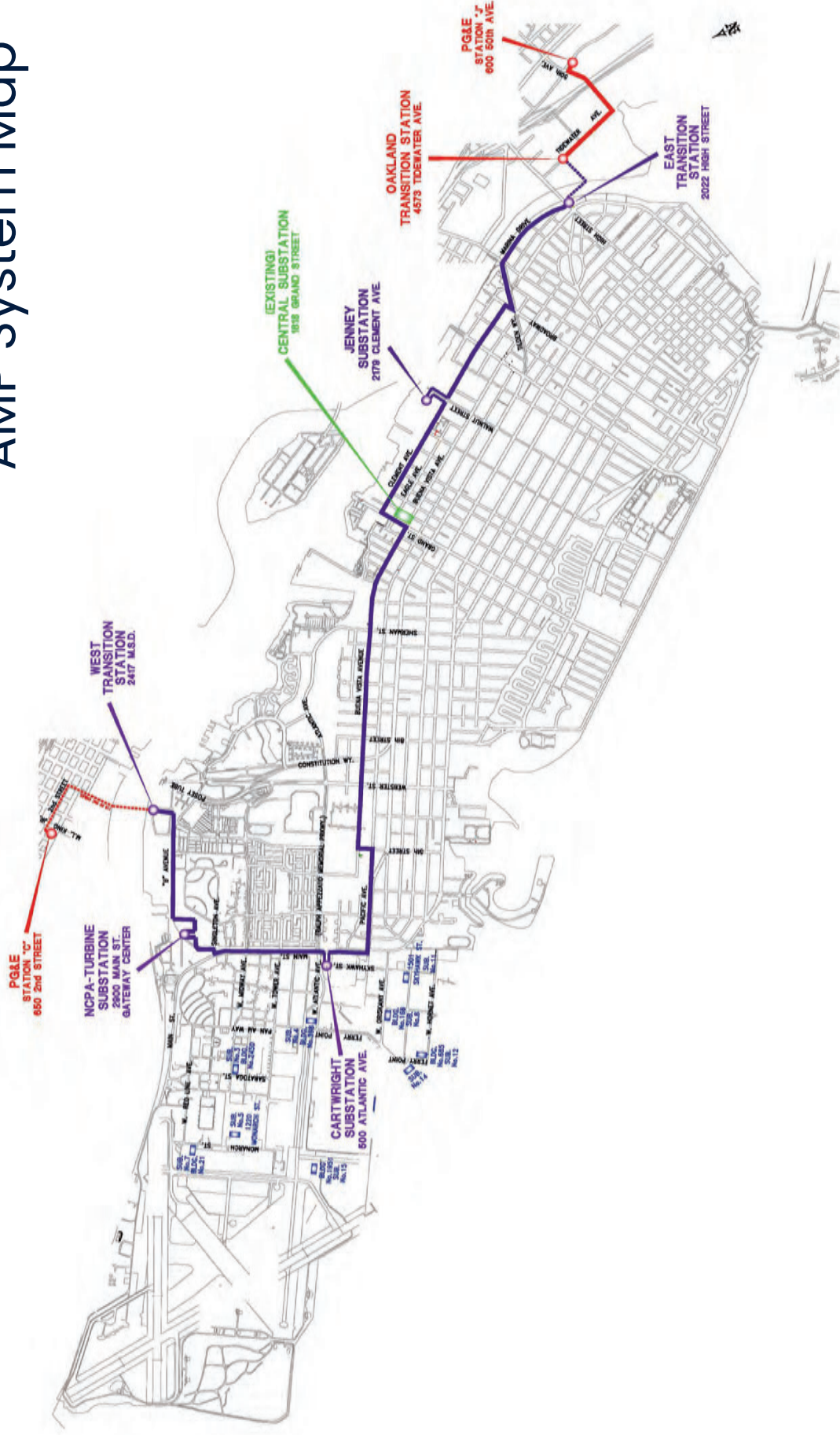
Over 40 years ago, AMP began establishing a long-term commitment to renewable energy by acquiring substantial ownership interests in the Northern California Power Agency's geothermal and hydroelectric projects. Following the California energy crisis, AMP significantly increased its efforts to secure cost-effective renewable energy sources, driven by both environmental benefits and the financial protection against volatile gas and power market prices.

With unwavering support from AMP's Public Utilities Board and the community's dedication to environmental stewardship, AMP has systematically expanded its green portfolio. Since January 2020, AMP has provided electricity generated entirely from clean power sources, aligning with the City of Alameda's climate action and resiliency plan. AMP's power generation includes a clean energy mix derived from geothermal, hydroelectric, wind, and landfill recovery plants and stations throughout Northern California.

AMP attributes its sustained 100% clean energy status to consistent and diligent clean energy procurement on an annual basis.



AMP System Map



AMP's System Components

AMP's clean power is moved from its generation resources into the transmission network operated by the California Independent System Operator (CAISO). AMP is interconnected into the CAISO system via two 115kV substations in Oakland owned by PG&E. 115kV cables from these substations run underwater to connect with AMP's East and West Alameda transition stations. Metal conductor cables with capacity to carry 115kV of electricity run power to AMP's two substations, Jenney and Cartwright. Each AMP substation is equipped with two 115kV/12kV transformers, 12kV switchgear, and 55MVA transformers, resulting in a maximum system capacity of 220MVA. These two substations distribute electricity to Alameda through a network of 12kV distribution lines.



AMP East and West Transition Stations

AMP's 115kV cables run underwater and first reach Alameda at AMP's two transition stations.



Transmission Lines

Metal conductor lines that have the capacity to carry 115kV of electricity continue on overhead lines from AMP's transition station towers to AMP's two substations.

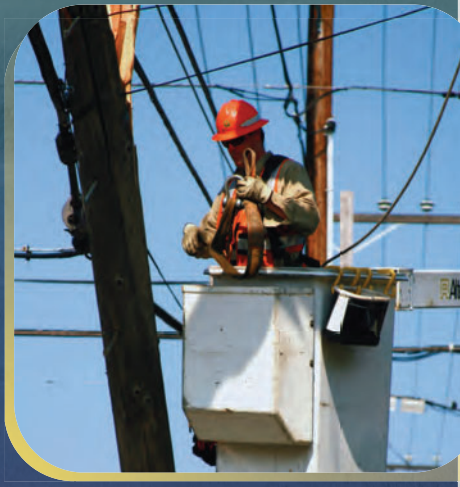


Jenney and Cartwright Substations

AMP's two substations distribute power to Alameda by converting 115kV transmission voltage to 12kV distribution voltage. Equipped with transformers, circuit breakers, isolators, and switchgear panels, Jenney and Cartwright substations serve as the powerhouses that prepare efficient electricity delivery.

Distribution Lines

Metal conductors that distribute 12kV voltage throughout Alameda's neighborhoods through overhead and undergrounded lines before being stepped down in voltage once more by transformers to typical service voltages (120V, 240V, 480V).





AMP's System Study: Ensuring Reliability for the Long Run

AMP's Cartwright and Jenney substations and the 115kV transmission system were constructed in the 1980s to meet growing power needs and provide more localized control over reliability. To address changes as the island's energy distribution and customer energy uses evolve, AMP recently conducted a comprehensive study to ensure the system's resilience over the next 20 years.

Study outcomes indicated that overall AMP's infrastructure is robust for at least the next decade, however, some distribution lines will need upgrades to accommodate future load growth. Additionally, the study highlighted the need for further enhancements to maintain reliability, particularly in areas of Alameda where load growth is significant.

AMP's system includes various redundancies, such as multiple transmission sources and substation reconfigurations. Despite these safeguards, increasing loads in Alameda certain geographic areas, such as Bay Farm, present challenges in contingency scenarios. AMP engineering teams continue to explore solutions to load growth, which could involve additional voltage regulation equipment, more distribution lines, or even a new substation.

The need for infrastructure upgrades will depend on future electricity consumption patterns. AMP is committed to re-evaluating the system every five years or more frequently if new, large commercial customers emerge.

This proactive approach ensures AMP can continue to deliver 100% clean energy reliably, supporting Alameda's climate objectives and fostering a sustainable, resilient local economy.



Alameda Municipal Power: Powering Alameda's Tomorrow

AMP's commitment to delivering 100% clean energy and maintaining a reliable system supports Alameda in achieving its climate objectives and strategic business development goals, and fosters a vibrant, electrification-forward future for the community.

As AMP continues to evaluate and update its infrastructure, it prioritizes affordability and resilience, ensuring that Alameda's energy system remains adaptable and reliable for years to come. The utility will focus on cost-effectiveness, while continuing its support for building and transportation electrification, new community projects that utilize clean energy resources, and robust programs and incentives that will empower Alamedans to electrify.

Through these efforts, AMP contributes to shaping a prosperous and sustainable future for Alameda.



*Our Mission: To increase value to Alameda
by providing safe, reliable, cost-effective,
and environmentally responsible electricity.*



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