Calpine’s commitment to environmental excellence in power generation is fundamental to our corporate philosophy and culture. It defines who we are as a company and how we serve our customers. Today, Calpine is America’s largest generator of electricity from natural gas and geothermal resources, and our power plant fleet is among the cleanest in the nation.

North America’s Largest Geothermal Operation
Calpine Corporation is the nation’s largest renewable geothermal power producer. The company operates 14 geothermal power plants in The Geysers region of northern California and is capable of generating up to 725 megawatts of green energy around the clock. Calpine uses a natural, clean energy source — heat from the earth’s interior — to produce electricity. Because geothermal power plants do not burn fossil fuel, they have an inherent environmental advantage and are helping meet California’s clean air goals.

The Geysers Geothermal Operation
Located north of San Francisco in the Mayacamas Mountains, The Geysers is the single largest geothermal electrical operation in the world. A geothermal resource occurs when water deep below the earth’s surface is heated by exposure to hot, porous and permeable rock resulting in dry steam or hot water. At The Geysers, dry or superheated steam is produced.

Steam production wells, some deeper than two miles, are drilled to tap this naturally occurring steam. Once the steam reaches the surface, it is piped overland to a network of interconnected power plants, where it spins conventional steam turbines that drive generators to produce clean, reliable electricity for California.

Benefitting the Community and the Environment
The Geysers provides substantial long-term support to local economies through wages, the purchase of supplies and services, property taxes and royalties. Calpine also provides support to community improvement projects and local 911 services and encourages its employees to participate in many volunteer efforts.

Recognizing the importance of The Geysers, Calpine is expanding and sustaining production from this renewable resource through wastewater recharge projects in which clean, reclaimed wastewater from local municipalities is recycled into the geothermal resource where it is converted into steam for electricity production. This provides an environmentally sound wastewater discharge solution for neighboring cities and increases the long-term productivity of The Geysers resource. Calpine is also working with the U.S. Department of Energy on a demonstration project using Enhanced Geothermal System (EGS) technology. The results to date are very encouraging. A positive outcome will be beneficial for not only The Geysers but for potential EGS sites around the world that require this water-injection reservoir technology for successful geothermal resource development.

About Calpine
Calpine Corporation is America’s largest generator of electricity from natural gas and geothermal resources. Our fleet of 87 power plants in operation or under construction represents nearly 27,000 megawatts of generation capacity. Serving customers in 18 states and Canada, we specialize in developing, constructing, owning and operating natural gas-fired and renewable geothermal power plants that use advanced technologies to generate power in a low-carbon and environmentally responsible manner. Our clean, efficient, modern and flexible fleet is uniquely positioned to benefit from the secular trends affecting our industry, including the abundant and affordable supply of clean natural gas, stricter environmental regulation, aging power generation infrastructure and the increasing need for dispatchable power plants to successfully integrate intermittent renewables into the grid. We focus on competitive wholesale power markets and advocate for market-driven solutions that result in nondiscriminatory forward price signals for investors. Please visit www.calpine.com to learn more about why Calpine is a generation ahead – today.