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Calpine Obtains Permit to Build Nation's First Power Plant with Federal Limit on Greenhouse Gas Emissions

HAYWARD, Calif. – February 4, 2010 – Calpine Corporation (NYSE: CPN) today received approval to build the nation's first power plant with a federal limit on greenhouse gas emissions – putting both the plant and the company at the forefront of the fight against global warming.

As national and world leaders continue to move toward regulation of global warming pollutants, Calpine, long a leader in generating environmentally responsible renewable and natural gas fired electric power, has worked to establish a first-of-its-kind limit on emissions of carbon dioxide (CO₂) and other greenhouse gases from the company's planned 600-megawatt Russell City Energy Center located in the City of Hayward in Alameda County, Calif. Construction of the natural gas-fired power plant is expected to begin later this year.

Today's action by the Bay Area Air Quality Management District (BAAQMD) to grant a Prevention of Significant Deterioration (PSD) permit is the final federal regulatory approval needed for the project to move forward. This action comes the day after the U.S. Environmental Protection Agency's senior policy advisory committee voted on guidelines for issuing permits to major sources of greenhouse gas emissions that contribute to global climate change, such as power plants and oil refineries. At the committee's meeting in Washington, DC, the groundbreaking PSD permit for Russell City Energy Center was presented as a "case study" for how the existing Clean Air Act can be used to regulate emissions of heat-trapping pollutants.

"Since our inception in 1984, Calpine has been an environmental leader investing in power plants that use modern emissions control technology and consistently outperform conventional fossil-fueled plants in curbing emissions that contribute to global warming," said Jack A. Fusco, president and chief executive officer of Calpine. "By utilizing these environmentally responsible technologies, at plants such as Russell City, Calpine will help meet California's growing demand for electricity while dramatically decreasing emissions."

The Russell City facility will be designed to operate in a way that produces 50 percent fewer greenhouse gas emissions than even the most advanced coal-fired plants and 25 percent fewer greenhouse gas emissions than the standard set by the California Public Utilities Commission.

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“Once again California is demonstrating leadership on greenhouse gas related issues. We applaud the BAAQMD and Calpine for going beyond existing federal law and being the first in the nation to require an enforceable greenhouse gas limit,” said Linda Adams, California State Secretary for Environmental Protection. “This action furthers efforts at a statewide level to balance our economic needs while meeting our environmental challenges. Aggressive and early action like this is needed to fight global warming and is critical to our economic recovery.”

Using the most advanced emissions control technology available today for a natural gas-fired power plant, Russell City Energy Center will be an energy efficient supplier of electricity to the Bay Area. The facility is expected to play a critical role in helping to meet the region's growing demand for cleaner energy as older, emissions-intensive power plants are shut down.

“Carbon emissions have clearly emerged as a critical indicator of environmental performance for power plants, and we commend Calpine for acknowledging as much by securing the first plant-specific mandatory limits on greenhouse gas emissions,” said Ralph Cavanagh, Energy Program Co-Director for the Natural Resources Defense Council (NRDC). “We look forward to the not-too-distant day when all power plants will operate under greenhouse gas performance standards.”

The California Independent System Operation (CAISO), the nonprofit public benefit organization that operates the state's electric transmission grid, has been enthusiastic and supportive of the project.

“CAISO is encouraged by plants such as the Russell City facility which help ensure the reliable and efficient delivery of power to hundreds of thousands of consumers in the Bay Area,” said Jim Detmers, CAISO's Vice President of Operations. “In addition to the plant's environmental benefits, Russell City Energy Center will assist with successful integration of California's ambitious renewable portfolio.”

Powered by cleaner burning natural gas, plants like the Russell City Energy Center that use advanced combined-cycle technology are significantly cleaner than older power plants currently in operation. By providing a reliable backstop for intermittent renewable generating resources, such as wind and solar, these plants will help meet Governor Schwarzenegger's aggressive goals that, by 2020, 33 percent of California utilities' power be generated by renewable sources and statewide greenhouse gas emissions be reduced by 15 percent from current levels.

In addition to the environmental benefits, Russell City Energy Center will produce significant economic benefits for the City of Hayward and the Bay Area, creating 650 union construction jobs, injecting millions into the local economy and generating approximately \$30 million in one-time tax revenue and more than \$5 million annually in property tax revenue to help fund local government services.

The facility also will use 100 percent reclaimed water from the City of Hayward's Water Pollution Control Facility for cooling and boiler makeup. This environmentally responsible process conserves water and prevents nearly four million gallons of wastewater per day from being discharged into San Francisco Bay.

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Russell City Energy Center also will donate \$10 million to help build a new library for Hayward and is working with stakeholders to make improvements and support programs that enhance the enjoyment of the San Francisco Bay shoreline.

The California Energy Commission granted a license for the plant in September 2007, and the California Public Utilities Commission approved a 10-year power purchase agreement in April 2009 under which PG&E will purchase the electricity generated by the plant.

The Russell City project is jointly owned by Calpine Corporation, which holds a 65 percent equity interest and serves as development manager, and an affiliate of GE Energy Financial Services, which holds a 35 percent equity interest.

For more information about Russell City Energy Center, visit www.russellcityenergycenter.com.

Details about PSD permit can be found at www.baaqmd.gov.

Calpine's Commitment to California

Calpine has built and operated power plants in the State of California for 25 years and prides itself in developing innovative and environmentally responsible energy solutions for the people of California. Taken as a whole, Calpine's projects produce enough electricity to satisfy the power needs of more than six million California households.

Calpine remains committed to California by providing clean, efficient and renewable power generation. With 5,800 megawatts in operation, including the newly commissioned, state-of-the-art 600 MW Otay Mesa Energy Center in San Diego, additional development projects include the 600 MW Russell City Energy Center in Hayward discussed above, the Los Esteros Critical Energy Center upgrade project and continuing expansion at The Geysers.

About Calpine

Calpine Corporation is helping meet the needs of an economy that demands more and cleaner sources of electricity. Founded in 1984, Calpine is a major U.S. power company, currently capable of delivering nearly 25,000 megawatts of clean, cost-effective, reliable and fuel-efficient electricity to customers and communities in 16 states in the United States and Canada. Calpine owns, leases, and operates low-carbon, natural gas-fired, and renewable geothermal power plants. Using advanced technologies, Calpine generates electricity in a reliable and environmentally responsible manner for the customers and communities it serves. Please visit www.calpine.com for more information.

Forward-Looking Information

This release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Words such as "believe," "intend," "expect," "anticipate," "plan," "may," "will" and similar expressions identify forward-looking statements. Such statements include, among others, those concerning expected financial performance and strategic and operational plans, as well as assumptions, expectations, predictions, intentions or beliefs about future events. You are cautioned that any such forward-looking statements are not guarantees of future performance and that a number of risks and uncertainties could cause actual results to differ materially from those anticipated in the forward-looking statements. Please see the risks identified in this release or in

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Calpine's reports and registration statements filed with the Securities and Exchange Commission, including, without limitation, the risk factors identified in its Quarterly Report on Form 10-Q for the three months ended September 30, 2009, and its Annual Report on Form 10-K for the year ended December 31, 2008. These filings are available by visiting the Securities and Exchange Commission's web site at www.sec.gov or Calpine's web site at www.calpine.com. Actual results or developments may differ materially from the expectations expressed or implied in the forward-looking statements, and Calpine undertakes no obligation to update any such statements.

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