

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

---

**FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

---

**CALPINE CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**77-0212977**  
(I.R.S. Employer  
Identification No.)

---

**50 West San Fernando Street, San Jose, California 95113  
717 Texas Avenue, Houston, Texas 77002  
(713) 830-8775**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

---

**W. Thaddeus Miller  
Executive Vice President, Chief Legal Officer and Secretary  
Calpine Corporation  
717 Texas Avenue  
Houston, Texas 77002  
(713) 830-2000**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

---

*Copies to:*  
**Joseph A. Coco, Peter C. Krupp, Richard C. Witzel, Jr.  
Skadden, Arps, Slate, Meagher & Flom LLP  
333 West Wacker Drive  
Chicago, Illinois 60606  
(312) 407-0700**

**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Accelerated filer ☐

Smaller reporting company ☐

---

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share <sup>(2)</sup>	166,924,198	\$15.74 <sup>(1)</sup>	\$2,627,386,877 <sup>(1)</sup>	\$103,256

- (1) Estimated solely for the purpose of computing the amount of the registration fee in accordance with Rule 457(c) of the Securities Act of 1933, based on \$15.74, the average of the high and low sale prices for shares of common stock as reported on the New York Stock Exchange on August 8, 2008.
- (2) Pursuant to Rule 416 under the Securities Act of 1933, this registration statement also covers such additional shares as may hereafter be offered or issued to prevent dilution resulting from stock splits, stock dividends, recapitalizations or certain other capital adjustments.

\_\_\_\_\_

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

**The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell the securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy the securities in any state where the offer or sale is not permitted.**

**Subject to completion, dated August 12, 2008**

**PROSPECTUS**

**CALPINE CORPORATION**

**166,924,198 Shares**

**COMMON STOCK**

---

This prospectus covers 166,924,198 shares of our common stock that may be offered for resale by the selling stockholders named in this prospectus and the persons to whom the selling stockholders may transfer their shares. The shares include 165,715,835 outstanding shares of common stock and 1,208,363 shares of common stock issuable upon the exercise of warrants that we previously issued to certain of the selling stockholders. No securities are being offered or sold by us pursuant to this prospectus. We will not receive any of the proceeds from the sale of these shares by the selling stockholders.

Our common stock is listed on the New York Stock Exchange under the symbol "CPN." On August 8, 2008, the last reported sale price of our common stock on the New York Stock Exchange was \$15.99 per share.

The selling stockholders and their successors, which term includes the selling stockholders' pledgees, donees, transferees, assignees or other successors, may from time to time sell, transfer or otherwise dispose of any or all of their shares of common stock directly to purchasers or through broker-dealers or agents. The common stock may be sold in one or more transactions at fixed prices, prevailing market prices at the time of sale, prices related to the prevailing market prices, varying prices determined at the time of sale or negotiated prices. See "Plan of Distribution" beginning on page 16 for more information about how the selling stockholders may sell or dispose of their shares of common stock. We do not know when or in what amount the selling stockholders or their successors may offer the shares for sale. The selling stockholders or their successors may sell any, all or none of the shares offered by the prospectus.

---

**Investing in our common stock involves risks. See "Risk Factors" beginning on page 2 of this prospectus and those set forth under the heading "Risk Factors" in our most recent Annual Report on Form 10-K, as well as any of our subsequently filed quarterly or current reports.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is \_\_\_\_\_, 2008

---

## TABLE OF CONTENTS

	<u>Page</u>
CALPINE CORPORATION	1
RISK FACTORS	2
USE OF PROCEEDS	7
DESCRIPTION OF CAPITAL STOCK	8
SELLING STOCKHOLDERS	12
PLAN OF DISTRIBUTION	14
LEGAL MATTERS	16
EXPERTS	16
WHERE YOU CAN FIND MORE INFORMATION	17

---

## ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission utilizing a “shelf” registration process. Under this shelf registration process, the selling stockholders or their successors may from time to time sell the shares of common stock described in this prospectus in one or more offerings.

We have not authorized anyone to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any shares other than the registered shares to which they relate, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy shares in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares are sold on a later date.

In this prospectus, the words “we,” “us,” “our,” and “Calpine” refer to Calpine Corporation and its subsidiaries.

## CALPINE CORPORATION

*This summary highlights information about Calpine Corporation. Because it is a summary, it does not contain all the information you should consider before investing in our common stock. You should read carefully this entire prospectus and the documents that we incorporate herein by reference, including the section entitled "Risk Factors" and our financial statements and related notes. You may obtain a copy of the documents that we incorporate by reference without charge by following the instructions in the section below entitled "Where You Can Find More Information."*

### **Our Business**

We are an independent power producer that operates and develops clean and reliable power generation facilities primarily in the U.S. Our fleet of power generation facilities, with nearly 24,000 megawatts of capacity as of June 30, 2008, makes us one of the largest independent power producers in the U.S. Our portfolio is comprised of two power generation technologies: natural gas-fired combustion (primarily combined-cycle) and renewable geothermal. We operate 60 natural gas-fired power plants capable of producing approximately 23,000 megawatts and 17 geothermal facilities in the Geysers region of northern California capable of producing 725 megawatts. Our renewable geothermal facilities are the largest producing geothermal resource in the U.S.

We are focused on maximizing value by leveraging our portfolio of power plants, our geographic diversity and our operational and commercial expertise to provide the optimal combination of products and services to our customers. To accomplish this goal, we seek to maximize asset performance, optimize the management of our commodity exposure and take advantage of growth and development opportunities that fit our core business and are accretive to earnings.

### **Corporate Information**

Our principal executive offices are located at 50 West San Fernando Street, San Jose, California 95113 and 717 Texas Avenue, Suite 1000, Houston, Texas 77002, and our telephone number is (713) 830-8775. Our website is [www.calpine.com](http://www.calpine.com). The content of our website is not a part of this prospectus.

## RISK FACTORS

*Investing in our common stock involves risk. Before you decide whether to purchase any of our common stock, in addition to the other information in this prospectus and in the documents incorporated herein by reference, you should carefully consider the risk factors below and those set forth under the heading “Risk Factors” in our most recent Annual Report on Form 10-K, as well as any of our subsequently filed quarterly or current reports. For more information, see the section entitled “Where You Can Find More Information.”*

### **Risks Related to our Common Stock**

#### ***The market pricing of our common stock may be volatile.***

Our common stock began trading on the NYSE on a “when issued” basis on January 16, 2008, and began “regular way” trading on the NYSE on February 7, 2008. The liquidity of any market for our common stock will depend, among other things, upon the number of holders of our common stock and on our and our subsidiaries’ financial performance. The market price for our common stock has been volatile in the past, and the price of our common stock could fluctuate substantially in the future. Factors that could affect the price of our common stock in the future include general conditions in our industry, in the power markets in which we participate and in the world, including environmental and economic developments, over which we have no control, as well as developments specific to us, including fluctuations in our results of operations, our ability to comply with the covenants under our credit agreements and other debt instruments, our ability to execute our business plan, and other matters discussed in the risk factors set forth under the heading “Risk Factors” in our most recent Annual Report on Form 10-K.

In addition, the sale of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could significantly and negatively affect the market price for our common stock. Pursuant to our plan of reorganization, all shares of our common stock outstanding prior to the effective date of our plan of reorganization were canceled, and we authorized the issuance of 485 million shares of reorganized Calpine Corporation common stock, of which approximately 421 million shares have been distributed to holders of allowed unsecured claims, approximately 10 million shares are being held in escrow pending resolution of certain intercreditor matters and approximately 54 million shares remain in reserve for distribution to holders of disputed claims whose claims ultimately become allowed. We have also reserved 48.5 million shares for issuance upon exercise of the warrants distributed to the holders of our previously outstanding common stock and 15 million shares for issuance under our equity incentive plans. These warrants will expire on August 25, 2008. The distribution of these additional shares could have a dilutive effect on our current holders and may adversely affect the market price of our common stock. Accordingly, trading in our securities is highly speculative and poses substantial risks.

#### ***Transfers of our equity, or issuances of equity in connection with our reorganization, may impair our ability to utilize our federal income tax net operating loss carryforwards in the future.***

Under federal income tax law, net operating loss (“NOL”) carryforwards can be utilized to reduce future taxable income subject to certain limitations if we were to undergo an ownership change as defined by the Internal Revenue Code. We experienced an ownership change on the effective date of our plan of reorganization as a result of the distribution of our new common stock pursuant to our plan of reorganization. We do not expect the annual limitation from this ownership change to result in the expiration of the NOL carryforwards if we are able to generate sufficient future taxable income within the carryforward periods. If a subsequent ownership change were to occur as a result of future transactions in our stock, accompanied by a significant reduction in our market value immediately prior to the ownership change, our ability to utilize the NOL carryforwards may be significantly limited.

In accordance with our plan of reorganization, our common stock is subject to certain transfer restrictions contained in our amended and restated certificate of incorporation. These restrictions are designed to minimize the likelihood of any potential adverse federal income tax consequences resulting from an ownership change; however, these restrictions may not prevent an ownership change from occurring. These restrictions, which are designed to minimize the likelihood of an ownership change occurring and thereby preserve our ability to utilize our NOLs, are

not currently operative but could become operative in the future if certain events occur and the restrictions are imposed by our board of directors. However, there can be no assurance that our board of directors would choose to impose these restrictions or that such restrictions, if imposed, would prevent an ownership change from occurring.

***Our principal stockholders own a significant amount of our common stock, giving them influence over corporate transactions and other matters.***

The selling stockholders named in this prospectus, who together beneficially own approximately 40% of our common stock, may be able to exercise substantial influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate action, such as mergers and other business combination transactions should these stockholders retain a significant ownership interest in us. If two or more of these stockholders (or groups of stockholders) vote their shares in the same manner, their combined stock ownership may effectively give them the power to elect our entire board of directors and control our management, operations and affairs. Currently, two members of our board of directors, including the Chairman of our board of directors, are affiliated, directly or indirectly, with SPO Advisory Corp., one of these stockholders.

Circumstances may occur in which the interests of these stockholders could be in conflict with the interests of our other stockholders. This concentration of ownership may also have the effect of delaying or preventing a change in control over us unless it is supported by these stockholders, or could result in our entering into a change of control or other transaction supported by these stockholders. Accordingly, your ability to influence us through voting your shares may be limited or the market price of our common stock may be adversely affected.

***We do not intend to pay cash dividends on our common stock in the foreseeable future.***

We do not anticipate paying cash dividends on our common stock in the foreseeable future. Any payment of cash dividends will depend upon our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our board of directors. In addition, our exit credit facility and certain of our other debt instruments restrict our ability to pay dividends and other distributions with respect to our stock. We may incur additional indebtedness that may further restrict or prohibit the payment of dividends.

***Provisions of our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could delay or prevent an acquisition of us, even if the acquisition would be beneficial to our stockholders, and could make it more difficult for our stockholders to change management.***

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including a proposal that might result in the payment of a premium over prevailing market prices for our common stock. In addition, these provisions may frustrate or prevent any attempt by our stockholders to replace or remove our current management by making it more difficult to replace or remove our board of directors. These provisions include:

- a prohibition on stockholder action through written consent;
- limitation of our stockholders entitled to call special meetings of stockholders;
- an advance notice requirement for stockholder proposals and nominations; and
- the authority of our board of directors to issue preferred stock with such terms as our board of directors may determine.

In addition, Delaware law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person who, together with its affiliates, owns or within the last three years has owned 15% of our voting stock, for a period of three years after the date of the transaction in

which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. Accordingly, Delaware law may discourage, delay or prevent a change in control of our company.

Provisions in our amended and restated certificate of incorporation, amended and restated bylaws and other provisions of Delaware law could limit the price that investors are willing to pay in the future for shares of our common stock.



## CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

In addition to historical information, this prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Exchange Act. We use words such as “believe,” “intend,” “expect,” “anticipate,” “plan,” “may,” “will” and similar expressions to identify forward-looking statements. Such statements include, among others, those concerning our expected financial performance and strategic and operational plans, as well as all 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. Such risks and uncertainties include, but are not limited to:

- our ability to implement our business plan;
- financial results that may be volatile and may not reflect historical trends;
- seasonal fluctuations of our results and exposure to variations in weather patterns;
- potential volatility in earnings associated with fluctuations in prices for commodities such as natural gas and power;
- our ability to manage liquidity needs and comply with covenants related to our exit credit agreement and other existing financing obligations;
- our ability to complete the implementation of our plan of reorganization and the discharge of our cases under Chapter 11 of the United States Bankruptcy Code (“Chapter 11”), including successfully resolving any remaining claims;
- disruptions in or limitations on the transportation of natural gas and transmission of electricity;
- the expiration or termination of our power purchase agreements and the related results on revenues;
- risks associated with the operation of power plants, including unscheduled outages;
- factors that impact the output of our geothermal resources and generation facilities, including unusual or unexpected steam field well and pipeline maintenance and variables associated with the waste water injection projects that supply added water to the steam reservoir;
- risks associated with power project development and construction activities;
- our ability to attract, retain and motivate key employees, including filling certain significant positions within our management team;
- our ability to attract and retain customers and counterparties;
- competition;
- risks associated with marketing and selling power from plants in the evolving energy markets;
- present and possible future claims, litigation and enforcement actions;

- effects of the application of laws or regulations, including changes in laws or regulations or the interpretation thereof; and
- other risks identified in our most recent Annual Report on Form 10-K, which is incorporated herein by reference, as well as any of our subsequently filed quarterly or current reports, all of which are incorporated by reference into this prospectus.

You should also carefully review other reports that we file with the SEC. We undertake no obligation to update any forward-looking statements, whether as a result of new information, future developments or otherwise.

## USE OF PROCEEDS

The selling stockholders will receive all of the proceeds from the sale of the shares of our common stock offered by this prospectus, and we will not receive any of such proceeds.

## DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 1,400,000,000 shares of common stock, \$0.001 par value, and 100,000,000 shares of preferred stock, \$0.001 par value. As of August 8, 2008, there were 422,969,381 shares of our common stock outstanding that were held of record by approximately 129 stockholders. No shares of our preferred stock are outstanding.

The following is a summary of the material rights of our capital stock and related provisions of our amended and restated certificate of incorporation, amended and restated bylaws and the provisions of applicable law. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our amended and restated certificate of incorporation and amended and restated bylaws, which we have included as exhibits to our most recent Annual Report on Form 10-K.

### Common Stock

*Dividends.* The holders of common stock are entitled to receive dividends, paid from our assets legally available for that purpose if and when declared from time to time by our board of directors.

*Liquidation.* Upon our liquidation, dissolution and/or winding up, after all securities ranking senior to our common stock have been paid in full, the holders of our outstanding common stock will be entitled to receive, pro rata, our remaining assets available for distribution to our stockholders.

*Voting Rights.* Each outstanding share of common stock entitles the holder thereof to one vote on each matter on which stockholders generally are entitled to vote.

*Potential Trading Restrictions.* Our amended and restated certificate of incorporation provides that prior to the fifth anniversary of our emergence from Chapter 11 bankruptcy protection, which occurred January 31, 2008, in the event that both (i) the Market Capitalization (which means, as of any date, our market capitalization calculated using the rolling 30-day weighted average trading price of our common stock) has decreased (as adjusted for any extraordinary dividends, as determined in good faith by our board of directors) by at least 35% from the Emergence Date Market Capitalization (which means our market capitalization calculated using the weighted average trading price of our common stock over the 30-day period following the date on which we emerge from Chapter 11 bankruptcy protection (which we determined to be approximately \$8.6 billion, as reported on our Current Report on Form 8-K filed with the SEC on March 25, 2008)) and (ii) at least 25 percentage points of “owner shift” (for purposes of Section 382 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations promulgated thereunder (collectively, “Section 382”)) has occurred with respect to our equity since our most recent “owner shift” as reasonably determined by us (in consultation with outside counsel) in accordance with Section 382, then our board of directors shall meet on an expedited basis to determine whether to impose restrictions on the trading of our stock in accordance with our amended and restated certificate of incorporation and to determine the definitive and ancillary terms of such restrictions, so long as such terms are consistent with the provisions of our amended and restated certificate of incorporation. In accordance with our amended and restated certificate of incorporation, we will make a prompt announcement if our board of directors determines that trading restrictions are required and the terms of such trading restrictions, which we expect would include:

- any acquisition of our stock by a person or entity who is not a 5% stockholder will be null and void *ab initio* as to the purchaser to the extent such acquisition causes such person or entity to become a 5% stockholder, unless the acquisition of such stock (i) was previously approved in writing by our board of directors or (ii) will not result in an increase in an “owner shift” for purposes of Section 382 in excess of any “owner shift” that would have occurred if the seller had sold the same amount of stock through general public market transactions (e.g., because the stock is purchased from another 5% stockholder whose stock acquisition had caused an “owner shift”) (a “Permitted Acquisition”); and

- any person or entity who is a 5% stockholder shall not be permitted to acquire any additional stock without the prior written consent of our board of directors, unless the acquisition is a Permitted Acquisition, and any such acquisition of stock that is not a Permitted Acquisition will be null and void *ab initio* as to the purchaser.

In accordance with our amended and restated certificate of incorporation, if trading restrictions are applied, we will make a prompt announcement if our board of directors determines that trading restrictions are no longer required or if the trigger provisions are no longer satisfied; provided that if trading restrictions shall be imposed following a decline in the value of our Market Capitalization, any increase in the value of our stock shall not result in the lapse of such trading restrictions unless such increase (calculated using the rolling 30-day weighted average trading price of our common stock) shall be at least 10% greater than the trigger price.

*Shares of Common Stock Not Subject to Calls or Assessments.* No personal liability will attach to holders of our common stock under the laws of the State of Delaware (our state of incorporation) or of the State of Texas (the state in which our principal place of business is located).

*Other.* Our common stock is not convertible into, or exchangeable for, any other class or series of our capital stock. Holders of our common stock have no preemptive or other rights to subscribe for or purchase additional securities. Our amended and restated certificate of incorporation does not contain any sinking fund provisions or redemption provisions with respect to our common stock. There is no classification of our board of directors.

### **Preferred Stock**

Our board of directors is authorized to provide for the issuance of shares of preferred stock in one or more series, and to fix for each series the associated powers (including voting rights, if any), preferences and relative, participating, optional or other special rights, if any, and such qualifications, limitations or restrictions as provided in a resolution or resolutions adopted by our board of directors.

Holders of preferred stock are not entitled to vote on any matter except as required by law or as is expressly granted by our amended and restated certificate of incorporation.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, may have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock.

### **Certain Anti-Takeover Provisions**

*Effect of Delaware Anti-Takeover Statute.* We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a merger or other business combination with any interested stockholder for a period of three years following the date that the stockholder becomes an interested stockholder, unless:

- prior to the time the stockholder becomes an interested stockholder, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, subject to certain exclusions; or

- on or subsequent to the time the stockholder becomes an interested stockholder, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 of the Delaware General Corporation Law defines an “interested stockholder” as: any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation; any entity or person that is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within the three-year period prior to the date on which it is sought to be determined whether such person is an interested stockholder; and the affiliates or associates of any such entities or persons.

The provisions of Section 203 of the Delaware General Corporation Law described above could have the effect of:

- delaying, deferring or preventing our change in control;
- delaying, deferring or preventing the removal of our existing management;
- deterring potential acquirers from making an offer to our stockholders; and
- limiting any opportunity of our stockholders to realize premiums over prevailing market prices of our common stock in connection with offers by potential acquirers.

This could be the case even if a majority of our stockholders might benefit from a change of control or offer.

*Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws.* Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that may have the effect of discouraging, delaying or preventing a change of control or an unsolicited acquisition proposal that a stockholder might consider favorable, including a proposal that might result in the payment of a premium over prevailing market prices for our common stock. In addition, these provisions may adversely affect the prevailing market prices of our common stock. These provisions are summarized in the following paragraphs.

*No Stockholder Action by Written Consent.* Our amended and restated certificate of incorporation and amended and restated bylaws provide that stockholder action can be taken only at an annual or special meeting of stockholders and precludes stockholders from initiating or effecting any action by written consent in lieu of a meeting.

*Special Meetings of Stockholders.* Our amended and restated bylaws provide that special meetings of our stockholders may be called only by the Chairman of our board of directors, by order of a majority of our whole board of directors or by the holders of a majority of our outstanding common stock entitled to vote generally in the election of directors. Stock ownership for these purposes may be evidenced in any manner prescribed by Rule 14a-8(b)(2) of the Exchange Act.

*Advance Notice Procedures.* Our amended and restated bylaws provide an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our corporate secretary timely written notice, in proper form, of the stockholder’s intention to bring that business before the meeting. Although our amended and restated bylaws will not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding

other business to be conducted at a special or annual meeting, our amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

*Authorized but Unissued Shares.* Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval, subject to the rules and regulations of the New York Stock Exchange. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

*Potential Trading Restrictions.* As described under “—Common Stock—Potential Trading Restrictions,” under certain circumstances our board of directors may impose trading restrictions on our common stock which may prevent a change in control.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Inc.

#### **Listing**

Our common stock is listed on the New York Stock Exchange under the symbol “CPN.”

## SELLING STOCKHOLDERS

In connection with our plan of reorganization, we entered into a registration rights agreement on January 31, 2008, with certain of our stockholders who, together with their affiliates, received shares of our common stock constituting 10% or more of the issued and outstanding shares of our common stock immediately following the consummation of our plan of reorganization. Pursuant to the registration rights agreement, we agreed, among other things, to file a shelf registration statement covering the resale on a delayed or continuous basis of the common stock received by such stockholders. This prospectus covers 166,924,198 shares of our common stock that may be offered for resale by the selling stockholders named in this prospectus and the persons to whom the selling stockholders may transfer their shares. The shares include 165,715,835 outstanding shares of common stock and 1,208,363 shares of common stock issuable upon the exercise of warrants that we previously issued to certain of the selling stockholders.

In accordance with our plan of reorganization, the warrants were issued to the selling stockholders on February 15, 2008, in respect of shares of our previously outstanding common stock held by such stockholders that was canceled on the effective date of our plan of reorganization. Each warrant represents the right to purchase a single share of our common stock at \$23.88 per share and will expire on August 25, 2008.

Information below with respect to beneficial ownership has been furnished by each selling stockholder and we have not sought to verify such information. Except as stated in the footnotes below, none of the selling stockholders nor any of their affiliates, officers, directors or principal equity holders has held any position or office or has had any material relationship with us or any of our predecessors or affiliates within the past three years.

The following table sets forth information with respect to the selling stockholders and the shares of our common stock beneficially owned by the selling stockholders as of August 12, 2008 that may from time to time be offered or sold pursuant to this prospectus. Unless otherwise indicated, we deem warrants that are exercisable within 60 days of August 12, 2008, to be outstanding and beneficially owned by the person holding the warrants for the purpose of computing percentage ownership of that person, but we do not treat them as outstanding for the purpose of computing the ownership percentage of any other person.

Information concerning the selling stockholders may change from time to time and any changed information will be set forth in supplements to this prospectus if and when necessary. The selling stockholders may offer all, some or none of their shares of common stock. We cannot advise you as to whether the selling stockholders will in fact sell any or all of such shares of common stock. In addition, the selling stockholders listed in the table below may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, shares of our common stock in transactions exempt from the registration requirements of the Securities Act after the date on which they provided the information set forth on the table below.

Name of Selling Stockholder	Shares Beneficially Owned Before the Offering		Number of Shares Being Offered	Shares Beneficially Owned After the Offering <sup>(1)</sup>	
	Number	Percent <sup>(2)</sup>		Number	Percent <sup>(2)</sup>
Harbinger Capital Partners Master Fund I, Ltd. <sup>(3)</sup>	68,463,000	16.2%	68,463,000	—	—
Harbinger Capital Partners Special Situations Fund L.P. <sup>(4)</sup>	34,361,237	8.1%	34,361,237	—	—
SPO Partners II, L.P. <sup>(5)</sup>	60,895,208	14.4%	60,895,208	—	—
San Francisco Partners II, L.P. <sup>(6)</sup>	3,204,753	0.8%	3,204,753	—	—

(1) Assumes that the applicable stockholder exercise all warrants and sells all of the shares of our common stock set forth in the column entitled “Number of Shares Being Offered” and does not acquire any additional shares.

(2) Calculated based on 422,969,381 shares of our common stock outstanding as of August 8, 2008.

(3) The address for Harbinger Capital Partners Master Fund I, Ltd. (the “Master Fund”), is c/o International Fund Services (Ireland) Limited, Third Floor, Bishop’s Square, Redmond’s Hill, Dublin 2, Ireland. The indicated



amount includes (i) 61,556,337 shares of common stock registered in the name of the Master Fund, (ii) 6,189,645 shares of common stock registered in the name of Kelson Investments, Sàrl, an indirect wholly owned subsidiary of the Master Fund and Harbinger Capital Partners Special Situations Fund, L.P. (discussed in footnote (4) below), and (iii) 717,018 shares of common stock issuable upon exercise of warrants held by the Master Fund. Harbinger Capital Partners Offshore Manager, L.L.C. (“Harbinger Management”) is the investment manager of the Master Fund. HMC Investors, L.L.C. (“HMC Investors”) is the managing member of Harbinger Management. Philip Falcone, Raymond J. Harbert and Michael D. Luce are members of HMC Investors and have shared power to vote or direct the vote of the shares. Mr. Falcone is also the portfolio manager of the Master Fund. Each of Harbinger Management, HMC Investors, Philip Falcone, Raymond J. Harbert and Michael D. Luce disclaims beneficial ownership of these shares, except to the extent of their pecuniary interest therein.

- (4) The address for Harbinger Capital Partners Special Situations Fund, L.P. (the “Special Fund”) is 555 Madison Avenue, 16th Floor, New York, New York 10022. The indicated amount includes (i) 30,777,289 shares of common stock registered in the name of the Special Fund, (ii) 3,092,603 shares of common stock registered in the name of Kelson Investments, Sàrl, an indirect wholly owned subsidiary of the Special Fund and Harbinger Capital Partners Master Fund I, Ltd. (discussed in footnote (3) above), and (iii) 491,345 shares of common stock issuable upon exercise of warrants held by the Special Fund. Harbinger Capital Partners Special Situations GP, LLC (“HCPSS”) is the general partner of the Special Fund. HMC-New York, Inc. (“HMCNY”) is the managing member of HCPSS. Harbert Management Corporation (“HMC”) wholly owns HMCNY. Philip Falcone, Raymond J. Harbert and Michael D. Luce are shareholders of HMC and have shared power to vote or direct the vote of the shares. Mr. Falcone is also the portfolio manager of the Special Fund. Each of HCPSS, HMCNY, HMC, Philip Falcone, Raymond J. Harbert and Michael D. Luce disclaims beneficial ownership of these shares, except to the extent of their pecuniary interest therein.
- (5) The address for SPO Partners II, L.P., or SPO, is 591 Redwood Highway, Suite 3215, Mill Valley, California 94941. SPO Advisory Partners, L.P. is the sole general partner of SPO. SPO Advisory Corp. is the sole general partner of SPO Advisory Partners, L.P. John H. Scully, William E. Oberndorf, William J. Patterson and Edward H. McDermott are the four controlling persons of SPO Advisory Corp. and share voting and investment control over the shares held by SPO. Mr. Patterson is the chairman of the board of directors of Calpine Corporation. J. Stuart Ryan serves in an advisory capacity to SPO Advisory Corp. with respect to investments by SPO and is also on the board of directors of Calpine Corporation. Each of these individuals disclaims beneficial ownership of these shares, except to the extent of their pecuniary relationship therein.
- (6) The address for San Francisco Partners II, L.P., or SFP, is 591 Redwood Highway, Suite 3215, Mill Valley, California 94941. SF Advisory Partners, L.P. is the sole general partner of SFP. SPO Advisory Corp. is the sole general partner of SF Advisory Partners, L.P. John H. Scully, William E. Oberndorf, William J. Patterson and Edward H. McDermott are the four controlling persons of SPO Advisory Corp. Mr. Patterson is also the chairman of the board of directors of Calpine Corporation. J. Stuart Ryan serves in an advisory capacity to SPO Advisory Corp. with respect to investments by SFP and is also on the board of directors of Calpine Corporation. Each of these individuals disclaims beneficial ownership of these shares, except to the extent of their pecuniary relationship therein.

## PLAN OF DISTRIBUTION

The selling stockholders and their successors, which term includes their pledges, donees, transferees, assignees or their respective successors, may from time to time sell, transfer or otherwise dispose of any or all of their shares of common stock directly to purchasers or through broker-dealers or agents. The common stock may be sold in one or more transactions at fixed prices, prevailing market prices at the time of sale, prices related to the prevailing market prices, varying prices determined at the time of sale or negotiated prices. The selling stockholders may use any one or more of the following methods when disposing of the shares or interests therein:

- on any national securities exchange or quotation service on which our common stock may be listed or quoted at the time of sale, including the New York Stock Exchange;
- in the over-the-counter market;
- in transactions otherwise than on such exchanges or services or in the over-the-counter market; or
- through the writing of options.

These transactions may include block transactions or crosses. Crosses are transactions in which the same broker acts as agent on both sides of the trade.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time under this prospectus, or under a supplement to this prospectus amending the list of selling stockholders to include the pledgee, transferee or other successors-in-interest as selling stockholders under this prospectus.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the pledgees, donees, transferees, assignees or other successors will be the selling beneficial owners for purposes of this prospectus and may sell the shares of common stock from time to time under this prospectus after we have filed a supplement to this prospectus amending the list of selling stockholders to include such pledgee, donee, transferee, assignee or other successor as a selling stockholder under this prospectus.

Upon our being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing the name of each such selling stockholder and of the participating broker-dealers, the number of shares involved, the price at which such shares of common stock were sold, the commissions paid or discounts or concessions allowed to such broker-dealers, where applicable, that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and other facts material to the transaction.

In connection with the sale of the shares of common stock or interests in shares of common stock, the selling stockholders may enter into hedging transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of common stock short after the effective date of the registration statement of which this prospectus is a

part and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions or participated in the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

Selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

Two of the selling securityholders are affiliates of broker-dealers. Each of these selling securityholders has informed us that: (1) such selling securityholder purchased its notes in the ordinary course of business and (2) at the time that the notes were purchased, the selling securityholder had no agreements or understandings, directly or indirectly, with any person to distribute the notes.

In order to comply with the securities laws of some states, if applicable, the shares must be sold in those states only through registered or licensed brokers or dealers. In addition, some states may restrict the selling stockholders from selling shares unless the shares have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

We have advised the selling stockholders that they are required to comply with Regulation M promulgated under the Exchange Act during such time as they may be engaged in a distribution of the shares. The foregoing may affect the marketability of the common stock.

We are required to pay all expenses arising from or incident to the registration of the shares of common stock held by the selling stockholders, exclusive of underwriting fees, discounts, selling commissions and applicable stock transfer taxes, and certain other expenses of the selling stockholders. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act or otherwise.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus is a part effective until December 31, 2018. However, a selling stockholder’s right to sell shares of our common stock pursuant to the registration statement of which this prospectus is a part will terminate as to such selling stockholder at such time as such selling stockholder can sell all of its remaining securities under Rule 144 of the Securities Act within a three month period.

We cannot assure you that the selling stockholders will sell all or any of the common stock offered under the registration statement.

## **LEGAL MATTERS**

The validity of the shares of common stock will be passed upon for us by Skadden, Arps, Slate, Meagher & Flom LLP.

## **EXPERTS**

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2007 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act that registers the common stock to be sold by the selling stockholders. This prospectus does not contain all of the information set forth in the registration statement and the exhibits filed as part of the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits filed as part of the registration statement. Statements contained or incorporated by reference in this prospectus concerning the contents of any agreement or any other document are not necessarily complete. If an agreement or document that has been filed as an exhibit to the registration statement, we refer you to the copy of such agreement or document that has been filed. Each statement in this prospectus relating to an agreement or document filed as an exhibit is qualified in all respects by the filed exhibit.

In addition, we file annual, quarterly and periodic reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's public reference room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the SEC's public reference facilities by calling the SEC at 1-800-SEC-0330. You can request copies of these documents, upon payment of a duplicating fee, by writing to the SEC at its principal office at 100 F Street NE, Room 1580, Washington, D.C. 20549-1004. The SEC maintains an Internet website at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our SEC filings are accessible through the Internet at that website. Our reports on Forms 10-K, 10-Q and 8-K, and amendments to those reports, are also available for download, free of charge, as soon as reasonably practicable after these reports are filed with the SEC, at our website at [www.calpine.com](http://www.calpine.com). The content of our website is not a part of this prospectus.

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The following documents are incorporated by reference in this prospectus:

- Our Annual Report on Form 10-K for the year ended December 31, 2007;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008 and June 30, 2008;
- Our Current Reports on Form 8-K filed with the SEC on February 1, 2008 (excluding Item 7.01 and related exhibits), February 6, 2008, February 22, 2008, March 18, 2008, March 25, 2008, May 8, 2008, May 28, 2008, June 5, 2008, July 3, 2008, July 14, 2008, July 22, 2008, and August 12, 2008; and
- The description of our common stock set forth in our registration statement on Form 8-A filed with the SEC on January 15, 2008.

We also incorporate by reference all documents we may subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the initial filing date of the registration statement of which this prospectus is a part and prior to the termination of the offering. The most recent information that we file with the SEC automatically updates and supersedes older information. The information contained in any such filing will be deemed to be a part of this prospectus, commencing on the date on which the document is filed.

Information furnished under Items 2.02 or 7.01 (or corresponding information furnished under Item 9.01 or included as an exhibit) in any past or future current report on Form 8-K that we file with the SEC, unless otherwise specified in such report, is not incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered a copy of any or all of the information that we have incorporated by reference into this prospectus but not delivered with this prospectus, at no cost to the requestor. To receive a free copy of any of the documents incorporated by reference in this prospectus, other than exhibits, unless they are specifically incorporated by reference in those documents, call or write:

Calpine Corporation  
717 Texas Avenue, Suite 1000  
Houston, Texas 77002  
Attention: Corporate Communications  
Tel: (713) 830-8775

# **CALPINE CORPORATION**

## **COMMON STOCK**

---

### **PROSPECTUS**

---

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 14. Other Expenses of Issuance and Distribution

The estimated expenses in connection with this offering to be paid by us are as follows:

	<b>Amount To Be Paid</b>
SEC registration fee	\$ 103,256
Legal fees and expenses	100,000
Accounting fees and expenses	40,000
Miscellaneous (including any applicable listing fees and transfer agent's fees and expenses)	6,744
Total	<u>\$ 250,000</u>

#### Item 15. Indemnification of Directors and Officers

The registrant's amended and restated certificate of incorporation and amended and restated bylaws provide that the registrant will indemnify its directors and officers, and may indemnify its employees and agents, against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred in such capacities as a result of being a party, or being threatened to be made a party, to any threatened, pending or completed action, suit or proceeding, including liabilities under the Securities Act of 1933, as amended, to the fullest extent permitted by the Delaware General Corporation Law; provided, however, that, except with respect to proceedings to enforce rights to indemnification, the registrant will only indemnify a proceeding initiated by a director, officer, employee or agent if the proceeding was authorized by the registrant's board of directors. The registrant's amended and restated bylaws also require that the registrant (in the case of a director or officer) and permit the registrant (in the case of an employee or agent) to advance, to the maximum extent permitted by law, expenses incurred in connection with any such action, suit or proceeding so long as the director or officer undertakes to repay any advanced amounts if it is ultimately determined that he or she is not entitled to be indemnified.

Under Delaware General Corporation Law section 145, the registrant may indemnify its directors and officers (other than in connection with actions by the registrant or on behalf of the registrant) only if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the registrant and, in the case of a criminal proceeding (including preliminary), had no reason to believe his or her conduct was unlawful. The registrant may not indemnify a director or officer for expenses of an action brought by the registrant or on behalf of the registrant if the director or officer is adjudged liable to the corporation, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses.

In addition to the indemnification rights described above, the registrant's amended and restated certificate of incorporation eliminates, in certain circumstances, a director's liability for monetary damages for breach of fiduciary duty as a director. These provisions do not eliminate a director's liability for the following: any breach of the director's duty of loyalty to us or our stockholders; acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; unlawful payment of dividends or unlawful stock repurchases or redemptions; and any transaction from which the director derived an improper personal benefit.

The registrant maintains standard policies of insurance under which coverage is provided to its directors, officer, employees and agents to insure them against liability for actions or omissions occurring in their capacity as a director, officer, employee or agent, subject to certain exclusions and limitations.



## Item 16. Exhibits

Exhibit No.	Document
2.1	Debtors' Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the United States Bankruptcy Code (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on December 27, 2007).
2.2	Findings of Fact, Conclusions of Law, and Order Confirming Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the Bankruptcy Code (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed with the SEC on December 27, 2007).
4.1	Registration Rights Agreement, dated January 31, 2008, among the Company and each Participating Shareholder named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on February 6, 2008).
4.2	Series A Warrant Agreement, dated February 15, 2008, among the Company, Computershare Inc. and Computershare Trust Company, N.A., as warrant agent, including form of warrants (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on February 22, 2008).
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).

## Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and of the estimated maximum offering price may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement; provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time to be deemed the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is a part of the registration statement will, as to a purchaser with a time of contract sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was a part of the registration statement or made in any such document immediately prior to such effective date.

(b) That for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on August 12, 2008.

### CALPINE CORPORATION

By: /s/ ZAMIR RAUF  
Name: Zamir Rauf  
Title: Interim Executive Vice President and  
Interim Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JACK A. FUSCO</u> Jack A. Fusco	President, Chief Executive Officer and Director (principal executive officer)	August 12, 2008
<u>/s/ ZAMIR RAUF</u> Zamir Rauf	Interim Executive Vice President and Interim Chief Financial Officer (principal financial officer)	August 12, 2008
<u>/s/ STEVEN F. HODKINSON</u> Steven F. Hodkinson	Interim Corporate Controller (principal accounting officer)	August 12, 2008
<u>/s/ FRANK CASSIDY</u> Frank Cassidy	Director	August 12, 2008
<u>/s/ ROBERT C. HINCKLEY</u> Robert C. Hinckley	Director	August 12, 2008
<u>/s/ DAVID C. MERRITT</u> David C. Merritt	Director	August 12, 2008
<u>/s/ W. BENJAMIN MORELAND</u> W. Benjamin Moreland	Director	August 12, 2008
<u>/s/ DENISE M. O'LEARY</u> Denise M. O'Leary	Director	August 12, 2008
<u>/s/ WILLIAM J. PATTERSON</u> William J. Patterson	Director	August 12, 2008
<u>/s/ J. STUART RYAN</u> J. Stuart Ryan	Director	August 12, 2008

## EXHIBIT INDEX

Exhibit No.	Document
2.1	Debtors' Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the United States Bankruptcy Code (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on December 27, 2007).
2.2	Findings of Fact, Conclusions of Law, and Order Confirming Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the Bankruptcy Code (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed with the SEC on December 27, 2007).
4.1	Registration Rights Agreement, dated January 31, 2008, among the Company and each Participating Shareholder named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on February 6, 2008).
4.2	Series A Warrant Agreement, dated February 15, 2008, among the Company, Computershare Inc. and Computershare Trust Company, N.A., as warrant agent, including form of warrants (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on February 22, 2008).
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).

## SKADDEN, ARPS, SLATE, MEAGHER &amp; FLOM LLP

FOUR TIMES SQUARE

NEW YORK 10036-6522

----

TEL: (212) 735-3000

FAX: (212) 735-2000

www.skadden.com

FIRM/AFFILIATE  
OFFICES

----

BOSTON  
CHICAGO  
HOUSTON  
LOS ANGELES  
PALO ALTO  
SAN FRANCISCO  
WASHINGTON, D.C.  
WILMINGTON

----

BEIJING  
BRUSSELS  
FRANKFURT  
HONG KONG  
LONDON  
MOSCOW  
MUNICH  
PARIS  
SHANGHAI  
SINGAPORE  
SYDNEY  
TOKYO  
TORONTO  
VIENNA

August 12, 2008

Calpine Corporation  
717 Texas Avenue  
Houston, Texas 77002Re: Calpine Corporation  
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Calpine Corporation, a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-3 (the "Registration Statement"), to be filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the sale from time to time by certain selling stockholders (the "Selling Stockholders") of up to an aggregate of 166,924,198 shares of common stock, par value \$0.001 per share, of the Company (the "Common Stock"), including 165,715,835 shares of common stock (the "Common Shares") presently outstanding and 1,208,363 shares of common stock (the "Warrant Shares") issuable upon the exercise of outstanding warrants (the "Warrants"). The Common Shares and the Warrant Shares are collectively referred to herein as the "Shares."

This opinion is being furnished to you in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In rendering the opinions set forth herein, we have examined and relied on originals or copies, certified or otherwise identified to our satisfaction, of (a) the Registration Statement in the form it is to be filed with the Commission on the date hereof, (b) a specimen certificate evidencing the Common Stock, (c) the Series A Warrant Agreement, dated February 15, 2008, among the Company, Computershare Inc. and Computershare Trust Company, N.A., as warrant agent (the

“Warrant Agreement”), including the form of Warrants issued under the Warrant Agreement, (d) the Company’s Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the United States Bankruptcy Code, dated December 19, 2007, (e) the Findings of Fact, Conclusions of Law, and Order Confirming Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the Bankruptcy Code, dated December 19, 2007, (f) the Amended and Restated Certificate of Incorporation of the Company, as amended to the date hereof and as certified by the Secretary of State of the State of Delaware, (g) the Amended and Restated Bylaws of the Company, as currently in effect, and (h) certain resolutions of the Board of Directors of the Company.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates of public officials, certificates of officers or other representatives of the Company and others, and such other documents, certificates and records as we have deemed necessary or appropriate as a basis for the opinions set forth herein.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies, and the authenticity of the originals of such copies. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. In rendering the opinion set forth in paragraph 1 below, we have assumed that (i) the Company has received the entire amount of the consideration contemplated by the resolutions of the Board of Directors of the Company authorizing the issuance of the Common Shares; (ii) that the registrar and transfer agent for the Common Stock duly registered the issuance of the Common Shares and countersigned the stock certificates evidencing such Common Shares; and (iii) that such stock certificates conform to the specimen certificate examined by us. In rendering the opinion set forth in paragraph 2 below, we have assumed that (i) the Warrant Shares will be issued upon the exercise of the Warrants in accordance with the terms of the Warrants; (ii) the registrar and transfer agent for the Common Stock will duly register such issuance and countersign the stock certificates evidencing such Warrant Shares; and (iii) such stock certificates will conform to the specimen certificate examined by us. As to any facts material to the opinions expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials.

Members of our firm are admitted to the bar in the State of New York, and we do not express any opinion as to the laws of any other jurisdiction other than

---

the corporate laws of the State of Delaware, and we do not express any opinion as to the effect of any other laws on the opinions stated herein. The Shares may be offered and sold by the Selling Stockholders from time to time on a delayed or continuous basis, and this opinion is limited to the laws as in effect on the date hereof, which laws are subject to change with possible retroactive effect.

Based upon and subject to the foregoing, we are of the opinion that:

1. The Common Shares have been duly authorized and validly issued and are fully paid and nonassessable.
2. The Warrant Shares have been duly authorized and, when issued upon exercise of the Warrants and paid for in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. We also consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission. This opinion is expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable laws.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated February 28, 2008 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in Calpine Corporation's Annual Report on Form 10-K for the year ended December 31, 2007. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP  
Houston, Texas  
August 12, 2008