

CALPINE CORP

Reported by **DEIDIKER JIM D**

FORM 3

(Initial Statement of Beneficial Ownership)

Filed 11/22/10 for the Period Ending 11/15/10

Address 717 TEXAS AVENUE

SUITE 1000

HOUSTON, TX 77002

Telephone 7138302000

CIK 0000916457

Symbol CPN

SIC Code 4911 - Electric Services

Industry Electric Utilities

Sector Utilities

Fiscal Year 12/31



UNITED STATES SECURITIES AND EXCHANGE **COMMISSION**

Washington, D.C. 20549

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF **SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person * DEIDIKER JIM D	Statement (MM/DD/	2. Date of Event Requirin Statement (MM/DD/YYYY) 11/15/2010		3. Issuer Name and Ticker or Trading Symbol CALPINE CORP [CPN]						
(Last) (First) (Middle)	4. Relation	4. Relationship of Reporting I			g Person(s) to Issuer (Check all applicable)					
C/O CALPINE CORPORATION, 717 TEXAS AVENUE, STE. 1000	X Or	Director X Officer (give title below) SVP, CHIEF ACCOUNTIN			10% Owner Other (specify below) NG OFFICER /					
(Street) HOUSTON, TX 77002 (City) (State) (Zip)	Original F	5. If Amendment, Date Original Filed (MM/DD/YYYY)			6. Individual or Joint/Group Filing (Check Applicable Line) _X_Form filed by One Reporting PersonForm filed by More than One Reporting Person					
	Table I - N	on-Derivativ	ve Securities nt of Securitie			Owned				
1.Title of Security (Instr. 4)	Security			es	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) 4. Natr Owner (Instr.		rship	ct Beneficial		
Common stock, par value \$0.001 per share			1000							
Table II - Derivative Secu	ırities Benefi	cially Owned	l (<i>e.g.</i> , puts,	, calls,	, warran	ıts, op	tions, o	convertible :	securities)	
· · · · · · · · · · · · · · · · · · ·		ration Date SDD/YYYY) S		3. Title and Amou Securities Underly Derivative Securit (Instr. 4)		Conversion or Exercise Price of			6. Nature of Indirect Beneficial Ownership (Instr. 5)	
	Date Exercisable	I I		Amo Num Shar		Security		Direct (D) or Indirect (I) (Instr. 5)		
Non-Qualified Stock Option (Right to Buy) (1)	1/7/2010	1/7/2019	Common Stock	50000		\$8.25		D		
Non-Qualified Stock Option (Right to Buy) (2)	2/24/2013	2/24/2020	Common Stock	39	963	\$11	.24	D		

Explanation of Responses:

- (1) Grant of option pursuant to the Issuer's 2008 Equity Incentive Plan. The option is 33-1/3% annually vested and exercisable from the grant date.
- (2) Grant of option pursuant to the Issuer's 2008 Equity Incentive Plan. The option is 100% vested and exercisable on the third anniversary

date of the grant date.

Reporting Owners

Paparting Owner Name / Address	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
DEIDIKER JIM D							
C/O CALPINE CORPORATION							
717 TEXAS AVENUE, STE. 1000			SVP, CHIEF ACCOUNTING OFFICER				
HOUSTON, TX 77002							

Signatures

Jim D. Diediker	11/22/2010		
** Signature of Reporting Person	Date		

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.