UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

(Mark One) [X] ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2004
OR
[] TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]
For the transition period from to
Commission file number 1-15759
A. Full title of the plan and the address of the plan, if different from that of the issuer named below:
Cleco Power LLC 401(k) Savings and Investment Plan
B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office: CLECO CORPORATION
2030 Donahue Ferry Road, Pineville, Louisiana 71360-5226

Cleco Power LLC 401(k) Savings and Investment Plan

Financial Statements and Supplemental Schedule

December 31, 2004 and 2003

Cleco Power LLC 401(k) Savings and Investment Plan

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December 31, 2004 and 2003

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Note: Schedules other than those listed above as required by the Department of Labor's Rules and Regulations for Reporting and Disclosure have been omitted because they are either not required or not applicable.

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of the

Cleco Power LLC 401(k) Savings and Investment Plan

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of the Cleco Power LLC 401(k) Savings and Investment Plan (the "Plan") at December 31, 2004 and 2003, and the changes

in net assets available for benefits for the year ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ PricewaterhouseCoopers LLP

June 16, 2005

New Orleans, Louisiana

Cleco Power LLC 401(k) Savings and Investment Plan Statements of Net Assets Available for Benefits December 31, 2004 and 2003

		2	2004			2	003	
	Nonparticip Allocated	ant Directed Unallocated	Participant Directed	Total	Nonparticipa Allocated	ant Directed Unallocated	Participant Directed	Total
Investment in company convertible preferred stock, at fair								
value Mutual funds, at	\$38,614,069	\$ 4,927,556	\$ -	\$ 43,541,625	\$33,665,809	\$ 8,269,312	\$ -	\$ 41,935,121
fair value (see Note 2) Company common stock,	-	-	83,563,442	83,563,442	-	-	74,338,587	74,338,587
at fair value Participant loans,	-	-	18,124,243	18,124,243	-	-	17,731,884	17,731,884
at cost	-	-	3,465,230	3,465,230	-	-	3,298,866	3,298,866

	38,614,069	4,927,556	105,152,915	148,694,540	33,665,809	8,269,312	95,369,337	137,304,458
Cash and cash								
equivalents	1,098,147	140,135	-	1,238,282	872,235	214,247	10,530	1,097,012
Contributions								
receivable -								
Employee	-	-	211,589	211,589	-	-	111,227	111,227
Employer	-	711,410	-	711,410	-	1,494,741	-	1,494,741
Dividends								
receivable	428,799	54,719	-	483,518	421,291	103,481	-	524,772
	40,141,015	5,833,820	105,364,504	151,339,339	34,959,335	10,081,781	95,491,094	140,532,210
Interest payable	-	79,651	-	79,651	-	131,045	-	131,045
Note payable	-	4,651,885	-	4,651,885	-	7,616,685	-	7,616,685
	-	4,731,536	-	4,731,536	-	7,747,730	-	7,747,730
Net assets								
available for								
benefits	\$40,141,015	\$ 1,102,284	\$ 105,364,504	\$ 146,607,803	\$34,959,335	\$ 2,334,051	\$ 95,491,094	\$132,784,480

The accompanying notes are an integral part of the financial statements.

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Cleco Power LLC 401(k) Savings and Investment Plan Statement of Changes in Net Assets Available for Benefits Year Ended December 31, 2004

	Nonparticipa	int Directed	Participant	
	Allocated	Unallocated	Directed	Total
Income from investment activities				
Interest and dividends	\$ 1,663,020	\$ 316,766	\$ 3,339,112	\$ 5,318,898
Net appreciation in fair value				
of investments	4,761,522	336,044	8,380,012	13,477,578
Net investment income	6,424,542	652,810	11,719,124	18,796,476
Contributions				
Employer	-	711,410	-	711,410
Employee	-	-	5,681,372	5,681,372
Allocation of 22,573 shares of company				
convertible preferred stock	2,257,300	(2,257,300)	-	-
Total contributions	2,257,300	(1,545,890)	5,681,372	6,392,782
Total additions (deductions)	8,681,842	(893,080)	17,400,496	25,189,258
Employee distributions and withdrawals	2,316,528	-	8,710,720	11,027,248
Diversification of preferred stock	1,183,634		(1,183,634)	-
Interest expense	-	338,687	-	338,687
Total deductions	3,500,162	338,687	7,527,086	11,365,935
Increase (decrease) in net				
assets available for benefits	5,181,680	(1,231,767)	9,873,410	13,823,323
Net assets available for benefits,				
beginning of year	34,959,335	2,334,051	95,491,094	132,784,480
Net assets available for benefits,				
end of year	\$ 40,141,015	\$ 1,102,284	\$ 105,364,504	\$ 146,607,803

The accompanying notes are an integral part of the financial statements.

Cleco Power LLC 401(k) Savings and Investment Plan

Notes to the Financial Statements December 31, 2004 and 2003

1. Summary of Significant Accounting Policies and Description of Plan

Plan Description

The Cleco Power LLC 401(k) Savings and Investment Plan (formerly known as the Cleco Corporation 401(k) Savings and Investment Plan) ("the Plan"), which was adopted January 1, 1985 and last amended and/or restated on January 1, 2004 (to include all amendments), is intended to provide eligible employees of Cleco Corporation and its subsidiaries ("Cleco") with long-term savings and investment opportunities. The Plan is a defined contribution plan. It includes a nonparticipant directed, leveraged employee stock ownership plan (the "ESOP"), and is designed to comply with Section 4975(e)(7) and the regulations thereunder of the Internal Revenue Code of 1986, as amended (the "Code"), and is subject to the applicable provisions of the Employee Retirement Income Security Act of 1974, as amended. Participants can contribute on a pre-tax basis up to 50% of their annual compensation not to exceed \$13,000 per year. The ESOP provides a 66-2/3% match with Cleco Corporation convertible Preferred Stock Series of 1991 with a par value of \$100 (the "preferred stock"). This match is limited to the first 6% of annual compensation contributed by participants. For tax years beginning after December 31, 2001, participants who were at least 50 years old by the end of the tax year may make an additional "catch-up" contribution (above the 401(k) annual deferral limit) in increments of \$1,000 annually starting in 2002 until the \$5,000 catch-up limit is reached in 2006. Participation in the Plan is voluntary. Active Cleco employees, eighteen years or older, are eligible to participate. For a complete description of the Plan, refer to the Cleco Power LLC 401(k) Savings and Investment Plan ("Plan Document").

The Plan purchased the preferred stock using the proceeds of a bank note, which was subsequently purchased by Cleco Power LLC ("Cleco Power") (see Note 4) and holds stock in a trust established under the Plan. The note shall be repaid over a period of seven years by fully deductible Cleco contributions to the trust fund. As the Plan makes each payment of principal, an appropriate percentage of preferred stock will be allocated to eligible employees' accounts in accordance with applicable regulations under the Code.

The note is collateralized by the unallocated shares of preferred stock. Cleco has no rights against shares once they are allocated under the ESOP. The financial statements of the Plan for the years 2004 and 2003 present separately the assets and liabilities and changes pertaining to:

- a) the accounts of employees with vested rights in allocated preferred stock (allocated);
- b) preferred stock not yet allocated to employees (unallocated); and
- c) the accounts of employees with vested rights in investments other than preferred stock (other).

Plan Administration

The administration of the Plan is the responsibility of an administrative committee (the "Committee") comprised of employees of Cleco. The Committee is appointed by Cleco Power's Board of Managers. Administrative expenses incurred by the Plan are borne by Cleco. Cleco Power is the Plan sponsor. The responsibilities for the investment, reinvestment, control and disbursement of the funds of the Plan rests with JPMorgan Chase Bank ("Trustee") and with JP Morgan Retirement Plan Services ("Agent") acting as the agent of the Trustee and recordkeeper to the Plan. UMB Bank, N.A. was the trustee of the plan until January 1, 2004.

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Cleco Power LLC 401(k) Savings and Investment Plan Notes to the Financial Statements December 31, 2004 and 2003

Contributions

Participant contributions are recorded in the period that Cleco makes payroll deductions from participants. Unless otherwise restricted by law, participants may contribute on a pretax basis up to 50% of annual compensation, not to exceed \$13,000. For tax years beginning after December 31, 2001, participants who were at least 50 years old by the end of the tax year may make an additional "catch-up" contribution (above the 401(k) annual deferral limit) in increments of \$1,000 annually starting in 2002 until the \$5,000 catch-up limit is reached in 2006. Cleco's matching contribution is 66-2/3% of the employees' total pretax basic contribution, up to the first 6% of the participant's annual compensation. Cleco Power contributions, paid annually, are made in amounts necessary to satisfy debt service requirements, after considering dividends received on the Cleco Corporation preferred stock. The Trustee, in accordance with the participants' directives, invests the employee contributions in one or more of twelve publicly traded mutual funds, in one self-directed account with access to over 1,000 mutual funds, and in Cleco Corporation's \$1 par value common stock. Certain qualified 401(k) rollovers are permitted under the Plan.

Participants' Accounts

The agent maintains accounts on behalf of each Plan participant. Each account is credited with (a) the participant's pretax, after tax or rollover contribution, (b) the matching contribution of allocated shares and (c) the participant's share of Plan earnings. Allocations are based on participant compensation or account balances, as defined.

Vesting

Participants are fully vested in their accounts at all times.

Withdrawals and Loans

Funds in participants' accounts may be distributed upon death or separation from service in either a lump-sum amount equal to the value of their accounts or as a distribution in kind of shares held for their account in the ESOP fund or common stock fund. A participant is entitled to receive a whole number of common shares. The amounts of any fractional shares are distributed in cash. Under IRS regulations, active employees may withdraw funds from their accounts after age 59-1/2 or in the case of certain defined financial hardships.

Loans are available to participants up to specified limits. The term of loans shall not exceed five years and the interest rate is calculated based on the prime rate published in the Wall Street Journal on the first day of the month before the loan is requested plus 2%. Interest rates on participant loans ranged from 6.00% to 11.50% in 2004 and 2003.

Benefits payable for terminations and withdrawals are included in net assets available for benefits and are charged to net assets available for benefits when paid.

Diversification

Diversification is offered to participants close to retirement so that they may have the opportunity to move part of the value of their investment in preferred stock into investments which are more diversified. Participants who are at least age 45 with at least 5 years of participation in the Plan may elect to diversify a portion of their account. Diversification is offered to each eligible participant over a six-year period. In each of the first five years, a participant

may diversify up to 25 percent of the number of shares allocated to his or her account, less any shares previously diversified. In the sixth year, the percentage changes to 50 percent. Participants who elect to diversify can invest the proceeds from the sale of the preferred stock in the investment options offered by the Plan.

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Cleco Power LLC 401(k) Savings and Investment Plan

Notes to the Financial Statements December 31, 2004 and 2003

Voting Rights

Each participant is entitled to exercise voting rights attributable to the shares of preferred stock allocated to his or her account and is notified by the Trustee prior to the time that such rights are to be exercised. The Trustee is not permitted to vote any allocated shares of preferred stock for which instructions have not been given by a participant. The Trustee is required, however, to vote any unallocated shares of preferred stock on behalf of the collective best interest of plan participants and beneficiaries.

Investment Valuation

Investments in securities and mutual funds traded on national securities exchanges are valued based on the last reported sales price as of the end of each fiscal year. The JPMorgan Money Market Fund is valued at cost plus reinvested interest. Participant loans are valued at cost, which approximates fair value. The Cleco preferred stock is valued based on the greater of quoted market value of the equivalent shares of Cleco common stock or par value of the Cleco convertible preferred stock. As of December 31, 2004 and 2003, the Cleco preferred stock was valued based on the quoted market value of the equivalent shares of Cleco common stock.

Income Recognition

Purchases and sales of securities are recorded on a trade-date basis. The Plan presents in the Statement of Changes in Net Assets Available for Benefits, the net appreciation in the fair value of its investments which consists of the realized gains or losses and the unrealized appreciation on those investments. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Priority Upon Termination of Plan

The Plan may be terminated at any time by Cleco Power's Board of Managers. Upon termination, all assets are to be distributed to Plan participants or their beneficiaries. Participants would receive their proportionate share of the assets as determined by individual account balances on the date of termination.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cleco Power LLC 401(k) Savings and Investment Plan

Notes to the Financial Statements December 31, 2004 and 2003

2. Investments

Information relative to investments as of December 31, 2004 and 2003, respectively, is as follows:

Description	2004	2003
Mutual Funds:		
* American Century Income & Growth Fund	\$ 27,676,295	\$ 25,966,392
JP Morgan Prime Money Market Fund	3,125,771	3,461,966
American Century GNMA Fund	4,196,003	3,825,608
* Dodge & Cox Balanced Fund	17,415,976	14,983,057
American Century Vista Fund	5,149,985	4,517,791
American Century International Growth Fund	-	3,752,394
American Century Strategic Allocation:		
Conservative Fund	804,738	658,333
American Century Strategic Allocation:		
Moderate Fund	1,364,498	1,181,157
American Century Strategic Allocation:		
Aggressive Fund	2,026,941	1,591,729
* American Century Growth Fund	9,080,477	8,310,214
American Century Equity Income Fund	2,657,849	1,742,071
American Century Equity Index Fund	4,764,730	3,657,292
Morgan Stanley International Equity Fund	4,448,590	-
Schwab Personal Choice Retirement Account	851,589	690,583
Total mutual funds	83,563,442	74,338,587
Cleco Corporation Common Stock	18,124,243	17,731,884
Cleco Corporation Convertible Preferred Stock		
Series of 1991**	43,541,625	41,935,121
Participant loans	3,465,230	3,298,866
	\$ 148,694,540	\$ 137,304,458

^{*}Denotes investment exceeds 5% of the net assets available for benefits.

^{**}Nonparticipant-directed investment

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Cleco Power LLC 401(k) Savings and Investment Plan

Notes to the Financial Statements December 31, 2004 and 2003

The Plan's holding in the preferred stock which has not been allocated to participants was 25,335 and 47,908 shares as of December 31, 2004 and 2003, respectively, is as follows:

	2004	2003
Cleco Corporation Convertible Preferred Stock		
Series of 1991:		
Cost	\$ 2,533,496	\$ 4,790,814
Market Value	\$ 4,927,556	\$ 8,269,312

Each share of the preferred stock is convertible into 9.6 shares of Cleco Corporation common stock. The preferred stock is redeemable at the option of Cleco Corporation at the redemption price of \$100.00 per share. The dividend rate on the preferred stock was 8.64% in 2004.

The Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value by \$13,477,578 for the year ended December 31, 2004, as follows:

Cleco Corporation common stock	\$ 1,915,493
Cleco Corporation convertible preferred stock	5,097,566
Mutual funds	6,464,519
	\$ 13,477,578

3. Related Party Transactions

Certain Plan investments are managed by the Agent. The Agent is the recordkeeper as defined by the Plan. Participants may elect to invest in the common stock of Cleco Corporation. In 2004, the Plan purchased 297,300 shares of Cleco Corporation common stock with a market value of \$5,684,376 and sold 312,049 shares of Cleco Corporation common stock with a market value of \$5,966,377.

In 2004, the Plan allocated 22,573 shares of the preferred stock with a cost of \$2,257,300 and a market value of \$4,390,393 on account of Cleco's matching contribution for 2004. At December 31, 2004 and 2003, the ESOP held 198,534 and 195,042 shares of the preferred stock with a fair value of \$38,614,069 and \$33,665,809, respectively, which had been allocated to participants' accounts.

4. Note Payable

On April 2, 1991, the Plan entered into a \$30 million borrowing agreement with the Bank of New York (the Bank) to finance the purchase of 300,000 shares of a new issue of Cleco Corporation convertible preferred stock, 1991 series, \$100 par value. Cleco Power purchased the outstanding principal balance of the loan. The ESOP makes debt service payments to Cleco Power from dividends received on the convertible preferred stock and, if necessary, from additional contributions by Cleco Power in amounts necessary to satisfy debt service requirements. No debt service payments are required under the borrowing agreement until the year 2008; however, as noted below the Plan has made early payments on the debt.

Effective in January 1993, the rate of interest on the note payable was fixed at 7.4%. Principal payments began in January 1999 and are to continue until January 2006. In January 2005 and 2004, the Plan made principal payments of approximately \$2,346,850 and \$2,964,800 respectively. The unallocated preferred shares have been pledged as collateral for the loan. Pursuant to the Employee Retirement Income Security Act of 1974 regulations, debt service payments must be made to unencumbered shares for allocation to participant accounts.

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Cleco Power LLC 401(k) Savings and Investment Plan

Notes to the Financial Statements December 31, 2004 and 2003

5. Tax Status

The Plan is qualified under Sections 401(a) and 401(k) of the Internal Revenue Code and, accordingly, the associated trust is exempt from Federal income taxes under provision of Section 501(a). The Internal Revenue Service has determined and informed Cleco Power by letter dated April 30, 2003, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code.

Participants' pretax contributions, Cleco's contributions, rollover contributions as well as interest, dividends and profits earned by the Plan are not subject to Federal income taxes until these amounts are distributed.

Although the Plan has been amended since receiving the determination letter, the Plan administrator and the Plan's tax counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the Internal Revenue Code.

6. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such charges could materially effect participants' account balances and the amounts reported in the statement of net assets available for benefits.

7. Subsequent Events

Beginning July 1, 2005, Plan participants may choose whether to have dividends on Cleco Corporation common stock distributed in cash or reinvested in additional shares of Cleco Corporation common stock. Dividends on the preferred stock will continue to be reinvested in additional shares of the preferred stock.

Effective in 2005, the United States Department of Labor issued new automatic rollover guidelines. For 401(k) account balances less than \$1,000, the participant must cash out of the respective 401(k) plan.

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Cleco Power LLC 401(k) Savings and Investment Plan

Schedule H, line 4i - Schedule of Assets (Held at End of Year) December 31, 2004

EIN: 72-0244480

Identity of issuer, borrower, lessor or similar party	Description of investment, including maturity date, rate of interest, collateral par, and maturity value	Cost	Current Value
Mutual funds:			
*American Century	Income & Growth Fund		\$ 27,676,295
*JP Morgan Prime	Money Market Fund		3,125,771
*American Century	GNMA Fund		4,196,003
Dodge & Cox	Balanced Fund		17,415,976
*American Century	Vista Fund		5,149,985
*American Century	International Growth Fund		-
*American Century	Strategic Allocation: Conservative Fund		804,738
*American Century	Strategic Allocation: Moderate Fund		1,364,498
*American Century	Strategic Allocation: Aggressive Fund		2,026,941
*American Century	Growth Fund		9,080,477
*American Century	Equity Income Fund		2,657,849
*American Century	Equity Index Fund		4,764,730
*Morgan Stanley	International Equity Fund		4,448,590
Schwab Personal Choice			
Retirement Account	Participant Directed Brokerage Account		851,589
Total mutual funds	-		\$ 83,563,442
*Cleco Corporation	Common Stock		\$ 18,124,243
*Cleco Corporation	Convertible Preferred Stock		
•	Series of 1991	\$ 22,386,900	\$ 43,541,625
*Participant loans	Participant loan accounts with interest rates ranging from 6.00% to 11.5% and		
	maturity dates ranging from 2004 to 2009		\$ 3,465,230
	Total Assets Held		\$ 148,694,540
*Denotes party-in-interest.			, ,
	10		

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

CLECO POWER LLC 401(k) SAVINGS AND INVESTMENT PLAN

Date: June 17, 2005 By: /s/ Kathleen Nolen

(Kathleen Nolen, Chairman of the Retirement Committee

of Cleco Corporation, Plan Administrator)

EXHIBIT

INDEX

Exhibit Number	Description
23	Consent of PricewaterhouseCoopers LLP
99	Section 906 Certification of Kathleen Nolen