AGENDA: MAY 19, 1998

DEPARTMENT OF PUBLIC WORKS

GOVERNMENTAL CENTER

JOHN A. FANTHAM DIRECTOR OF PUBLIC WORKS



COUNTY OF SANTA CRUZ

701 OCEAN STREET, SANTA CRUZ, CALIFORNIA 95060.4070 (408) 454-2160 FAX (408) 454-2385

May 14, 1998

SANTA CRUZ COUNTY BOARD OF SUPERVISORS 701 Ocean Street Santa Cruz, California 95060

SUBJECT: BUENA VISTA LANDFILL GAS POWER PROJECT

Members of the Board:

On December 13, 1994, your Board approved a contract with Brown, Vence and Associates (BVA) to conduct a landfill gas utilization study for the Buena Vista Landfill. The initial study focused on review of various types of landfill gas utilization technologies, preliminary cost/revenue analysis, electrical power generation markets (current and future), and an overall feasibility assessment of each option reviewed. The feasibility report was completed in July 1996 and recommended pursuing development of a landfill gas electrical generation plant over other reuse technologies. BVA did, however, recommend that the County adopt a wait-and-see approach to initiating any development of a landfill gas electrical generation plant to allow for the Public Utilities Commission to complete restructuring of the state electric utilities industry. In summer 1997, Public Works and BVA revisited the feasibility of continuing with project development as the PUC was preparing to implement the electric industry restructuring process. A final assessment report was provided to your Board on December 16, 1997, which recommended moving forward with Phase I Development of the Buena Vista Landfill Gas Power Project. The results of the Phase I work are included in this report for your Board's consideration and action.

The County is now at a major junction in the development process for this project. Prior to recommending investment of capital in the power plant infrastructure, four key milestones, discussed in detail later in this report, will need to be achieved. First, the County needs to submit a successful bid for the California Energy Commission's (CEC) New Renewable Resources Account (NRRA) auction. Second, if the County is successful in the bid auction, it will be necessary to negotiate and execute the NRRA agreement and submit all required project development permit applications. Third, the County would then enter into formal negotiations toward an agreement with a selected vendor for a power sales agreement for electricity produced from this project. Finally, the County would enter into formal negotiations and complete an agreement with a selected investor to take advantage of the Federal Section 29 tax credits available to this project. Upon successful completion of these four steps, the Department of Public Works will return to your Board for authorization to proceed with the capital investment in the project.

Achieving the first milestone of receiving the NRRA auction credits requires that the County submit the attached bid package no later than May 26, 1998. The CEC is requiring a 10% bidders bond in conjunction with the bid submittal. The cost of securing the bidder's bond is not anticipated to exceed \$17,000. If the bid is successful, the bond will obligate the County to proceed with negotiating an NRRA agreement and related project planning work which are anticipated to cost under \$20,000. Pursuing and receiving the NRRA auction credits is essential to the economic viability of this project. As your Board is aware, the Solid Waste Enterprise Fund currently expends approximately \$50-60,000 annually, operating and managing the state and federally mandated landfill gas control program at this site. If the County does not submit the bid package at this time, it is unlikely that an alternate use for the methane will be identified in the near future, resulting in continued waste of this resource. The department feels strongly that it is in the County's best interest from an economic and environmental perspective to submit the bid at this time.

The proposed Buena Vista Landfill Gas Power Project will provide both environmental and economic benefits to our County. Currently, up to 900 cubic feet per minute of landfill gas is collected, burned and flared into the atmosphere 24 hours per day, 365 days per year, which equates to nearly 500 million cubic feet of combustible methane gas per year. The volume of available landfill gas at this site will increase with time as the landfill continues to fill up and remain at a high level of generation for several decades to come. On an annual basis the cost of managing this waste decomposition by-product will also increase annually through the 20+ years of disposal life remaining. The gas power project proposes to utilize this waste by-product in a more cost-effective and beneficial manner through the generation and sale of electricity. While projects all across the country, such as this, cannot directly compete head-to-head economically with traditional petroleum based power production, there exists a high level of state and federal support for these programs through tax incentives, production credits, and other types of regulatory assistance.

The project, as proposed in the attached report, would allow for production of electricity over a 10 to 20-year period with a modest return on the County investment. Structuring this project to create a positive or neutral cash flow while utilizing this wasted resource in a beneficial manner has always been the primary objective. Any return on the project will be a financial and environmental improvement over the current gas control system of which the operating costs and flared gas provide no direct benefit to the County, state and local economy, or the environment. Public Works and the County's project consultant, Brown, Vence and Associates (BVA), have taken several significant measures to assure that this project poses a minimal financial and operational risk to the County.

A Request for Proposal was issued to more than 200 potential power marketers registered in California. We received several strong proposals to purchase electricity from this project. BVA conducted negotiations with the proposers on behalf of the County, the best proposal of which is reflected in the updated financial **pro-forma** for the project included with this report. The guarantees and pricing commitments contained in these proposals are a clear indication of the long term marketability of electricity from our proposed project.

A Request for Proposal was also issued to several experienced investors who specialize in development of the Federal Section 29 tax credit investments available to projects such as ours. These investment proposals verify the cash value of the Section 29 tax credits to our proposed project as reflected in the updated financial pro-forma contained herein. The risk associated with this type of investment strategy lays primarily with the investors, thus providing additional risk protection for the County. The results of the Section 29 proposals are still subject to County execution of an agreement with a selected investor and completion of the investor's required due diligence process. The proposals are being held in confidentiality at this time, pending County Counsel review, completion of the selection process, and final negotiations with a selected investor. Copies of the proposals are available for your Board's review upon request.

There have also been some questions regarding the potential for equipment failure and a resulting financial loss to the County, if such an event were to occur. Public Works and BVA have both reviewed numerous operating reports from the many existing landfill gas power plants across the country and in Europe. With modernization and more than two decades of development and technological advancements, the operating efficiency and reliability for available landfill gas cogeneration equipment is field-proven to be well over 90 percent, resulting in minimal down time, a relatively low level of operating and maintenance expense, and maximization of energy production. We recently toured the landfill gas power plant at the Marina Landfill 'in north Monterey County where they currently have four electrical generating units. There are three recognized major suppliers of landfill gas cogeneration equipment on the market today. Caterpillar, Wakashau and Jenbacher. The Marina Landfill has been using one generator set from each of these manufacturers in their plant which has provided the local solid waste industry with an excellent cross comparison of available equipment. While all units provided operating reliability in the 90 percent range, they have clearly indicated their equipment preference through their recent acquisition of a fourth generator set from Jenbacher (two total). Their opinion is that the Jenbacher's operating reliability and ease of maintenance is the highest of the three different units they have in operation. A final staff recommendation on the equipment selection process will be provided later on in the development process.

One outstanding issue that will require additional discussion and Board direction as we move farther along in this process is the project's ownership structure. As we have stated in previous correspondence, there are three basic development structures that have been considered, full public development, public/private joint development, and full private development. All three have pros and cons which are discussed in more detail in the attached report. Public Works and BVA are recommending development of this project as either fully public or as a public/private partnership. One of the key reasons for this recommendation is the availability of Renewable Energy Production Incentives, or REPIs, through the United States Department of Energy.

REPIs are only available to government agencies or nonprofit electrical cooperatives. The REPI's would only be available to the County as a publicly owned project or a properly structured public/private project. It is anticipated that Congress will continue funding this program into the future consistent with national and international efforts to reduce green house gas emissions and abate global warming trends through continued development of alternative energy production. With continued congressional funding, annual REPI payments would be available through the first ten years of the project and substantially increase the revenue stream for this

project. The Solid Waste Association of North America, the major professional organization representing our industry, is also strongly lobbying Congress to change current law to provide a long term fiscal commitment to the REPIs in order to guarantee a higher level of financial support and assurance for landfill gas power projects across the country. We have, however, not included the REPIs in our pro-forma analysis to present a more conservative view of the project's economics, as the REPIs are still subject to the annual congressional budget process under current law.

BVA's report also contains a discussion of risks for the project. Under a reasonable worst case scenario, the project would not fail, but would instead result in a relatively low average annual expenditure to maintain operations of the plant. Even considering this unlikely worst case scenarios for the project, it is Public Works' and BVA's opinion that the positive social and environmental benefits of the proposed project far outweigh the minimal risk associated with development of this project.

On May 5, 1998, your Board directed Public Works to return on May 19, 1998, with an updated report from staff and BVA regarding the Buena Vista Landfill Gas Power Project, a recommendation for continuation of project development, and a completed bid package for the CEC's NRRA auction. Attached for consideration is the BVA report which includes, as discussed above: 1) results from BVA's negotiations with power marketers who participated in a competitive bid process to purchase electricity from our proposed project; 2) results from a request for proposal to investors interested in securing Federal Production Tax Credits for our project; 3) an updated financial pro-forma reflecting the results from the above two proposal processes and updated engineering and project development costs; 4) a discussion of County risks; 5) a discussion of the pros and cons regarding potential project ownership structures including full public ownership, public/private partnerships, and full private ownership; and 6) a proposed schedule for continuing development of the project.

Public Works will also provide a brief presentation on the Buena Vista Landfill Gas Power Project covering the report subject matter discussed above, NRRA auction bid strategy, and the pros and cons of public versus private project development.

Attached is copy of the NRRA auction bid package for the project. This bid package is due at the CEC on May 26, 1998. We have included a copy of the May 5, 1998, staff report to your Board for reference regarding the NRRA auction process and bonding requirement. BVA also has provided a discussion of the bid process in their attached report. In order for this project to move forward, it will be necessary for your Board to approve funding of the bid bond for a not-to-exceed amount of \$170,000. The actual dollar value of the bond and the County's bid will be finalized as part of our presentation and discussions with your Board regarding bid strategies. Public Works has been working with the Auditor-Controller's office regarding the bid bond requirements and they are prepared to secure the bid bond immediately upon Board approval.

Funding for a bidder's bond under the CEC's NRRA Program was not anticipated in this year's budget and appropriations for this expense are insufficient. It will be necessary to transfer funds, in the amount of \$190,000, from unreserved fund balance to cover the cost of the bond and related bonding expenses. Sufficient funds are available in unreserved fund balance within the CSA-9C Refuse Capital Improvements budget for this purpose.



SANTA CRUZ COUNTY BOARD OF SUPERVISORS Page -5-

Based on the information contained in BVA's attached report, Public Works' due diligence on the project, and the reported successes of similar projects all across the country, Public Works is recommending continued development of the Buena Vista Landfill Gas Power Project and submission of the bid package for the CEC's NRRA auction.

It is therefore recommended that the Board of Supervisors take the following action:

- 1. Accept and file the attached report on the proposed Buena Vista Landfill Gas Power Project.
- 2. Approve the attached transfer of funds from CSA-9C Capital Projects, unreserved fund balance, to CSA-9C Capital Projects, Buena Vista Landfill Gas Cogeneration Development.
- 3. Authorize the Auditor-Controller to secure a not-to-exceed amount of \$170,000 in the name of the California Energy Commission to meet requirements for bid bonding under the New Renewable Resources Account auction.
- 4. Authorize the Director of Public Works to execute and submit a bid on behalf of the County for the California Energy Commission's New Renewable Resources Account auction.

Yours truly,

JOHN A. FANTHAM

Director of Public Works

RPM:mg

Attachments

RECOMMENDED FOR APPROVAL:

County Administrative Officer

copy to: Public Works

County Administrative Office (w/a)

Auditor-Controller (w/a) County Counsel (w/a) General Services (w/a)

Brown, Vence and Associates (w/a)

COUNTY OF SANTA CRUZ

REQUEST FOR TRANSFER **OR REVISION**OF BUDGET APPROPRIATIONS AND/OR FUNDS

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BUENA VISTA LANDFILL GAS POWER PROJECT PROJECT UPDATE REPORT

Completed by: Brown, Vence and Associates

For: Santa Cruz County, Department Of Public Works

May 11, 1998

BUENA VISTA LANDFILL GAS POWER PROJECT PROJECT UPDATE REPORT

BACKGROUND

This report updates the Santa Cruz County Board of Supervisors on the status of the Buena Vista Landfill Power Project. The proposed power project would use internal combustion engines fueled by LFG from the landfill over the next twenty years. If approved, the power plant would be in place in the third quarter of 1999 and would have two engines with an output of 2 megawatts (MW). A two engine power project is a conservative project forecasted to operate successfully. However, the Buena Vista Landfill has the potential capability to successfully expand operations to a three engine project with an output of 3 MW in the years following initial plant start-up. This report summarizes the progress on various aspects of the project, in preparation for submitting a request to the California Energy Commission for incentive payments for the project's renewable power production.

RENEWABLE POWER SALES

A source of revenue to the power project would be the sale of the generated electricity to a renewable power marketer. In the newly restructured utility industry, consumers are expected to be willing to pay a premium for electricity from environmentally sound fuel sources: such as landfill gas (LFG). Based on this expectation, a competitive bidding process was utilized to procure the best price for the power generated at Buena Vista Landfill. On behalf of the County, Brown, Vence and Associates (BVA) issued a Request for Proposals (RFP) to a broad range of energy service providers poised to participate in the California market (Attachment A). Development and execution of a power sales agreement with the selected power marketer would be subject to County approval.

Renewable Power RFP Results

Three proposals were submitted in response to the renewable power RFP. The responding firms were Automated Power Exchange, Preferred Energy Services/Clean n' Green, and Foresight Energy Company. The proposals were screened based on criteria including the proposed price and downside protection, experience of proposer, and financial strength and stability of proposer. Based on this screening and interviews, Foresight Energy Company was chosen as the best candidate to enter into a power sales agreement with the County. Foresight Energy was selected primarily due to the extensive experience of its key personnel, as well as its solid credit backing

through its allied partner, Enron Capital and Trade Corporation--a company with over \$19 billion in assets and approximately \$20 billion in annual revenues.'

Following discussions between BVA and Foresight Energy, the power marketer was able to submit a price offer for a ten-year power sales contract. The proposed contract would allow the County to benefit from a fixed power price of 3.3 l cents per kilowatt-hour (kWh) for the generated power in the first five years, and would provide downside protection with a premium in the remaining five years. Over the term of the contract, the County could receive an estimated \$4.7 million. Attachment B is the original proposal submitted by Foresight Energy, and Attachment C is the company's revised offer following discussions with BVA.

PRODUCTION TAX CREDITS

Another source of revenue to the power project would be production tax credits (PTC's). Section 29 of the United States. Tax Code provides for substantial tax credits for landfill gas, at a value of approximately \$1.073 per MMBtu in 1998. This is equivalent to about 1.5 cents per kWh. These tax credits are available to a taxpayer with an ownership interest in landfill gas (LFG) production facilities, on the first sale of such gas to an unrelated party for uses such as energy production. Depending on the date the gas collection facilities were placed in service, PTC's are available through either the year 2002 or 2007. Based on a legal review, the credits are believed to be available to the Buena Vista Landfill through 2007.

Because the County is not a taxpayer, in order for the power project to benefit from PTC's the County would have to enter into a transaction with a private investor. The investor must purchase landfill gas production rights and an ownership interest in the landfill gas production facilities (the network of wells, collectors,- blowers, and associated assets). The investor would then sell the collected gas to the County for use in the power plant, obtain federal tax credits on the sale of the gas, and yield a percentage of the value of the credit to the County. This type of transaction is well understood and therefore readily available from prospective private investors. One example is the Los Angeles County Sanitation District, which entered into a similar transaction in 1996 for a larger project that yielded approximately \$68 million in potential tax credits.

An independent assessment of the Buena Vista Landfill's PTC eligibility conducted by an expert tax counsel yielded an estimated nominal PTC value of \$2.9 million (Attachment D). The County could receive between 40-70% of this total value, or \$1.2 to \$2.0 million. The actual





Foresight Energy, based in Larkspur, California. plays a leading role in negotiating long term renewable power supply arrangements on behalf of Enron Capital and Trade Corporation (ECT). ECT is the wholesale electricity and gas trading. risk management and financing division of Enron Corporation. Enron would provide its full credit backing to any supply transaction executed by Foresight on its behalf.

value to the County within this range w-ill depend on- the type of investor selected to participate in the anticipated transaction. A number of small developers with relatively low requirements for legal and technical due diligence may yield a low percentage, such as 40 percent, of the value of the credits and pay the County over time as credits are generated. Conversely, a number of major institutional investors with a relatively high threshold of legal and technical due diligence may yield 70 percent of the total stream of tax credits to the County. In addition, some of these large investors may be willing to pay a significant portion of the total purchase price initially at the closing of the transaction. In order to justify the relatively high transaction costs, it may be necessary to bundle this project with two or three other unrelated landfill gas projects to sufficiently increase the potential tax credits to interest these major investors.

Production Tax Credits RFP

On behalf of the County, BVA conducted a competitive bidding process to solicit proposals from potential LFG facility investors. This RFP was for the purpose of selecting a firm fully qualified and best suited to place, structure, and close an LFG investment transaction and assist the County in availing of the financial benefits possible under Section 29 (Attachment E). On May 8, 1998, BVA received proposals from Palmer Capital Corporation', Zabren Alternative Power Corporation, and the National Landfill Gas Consortium, L.L.C. These proposals provide the County with an additional level of confidence'in Buena Vista Landfill's PTC value, as well as allow BVA to make a more accurate estimate of the PTC revenues for use in the economic analysis for the power project.² The County's most favorable proposal provides an estimated net yield of 80% of the total available tax credits. To remain conservative in our estimates a yield of 70% is used in the financial analysis. Placing the final PTC transaction with the selected private investor would be subject to County approval. Finalizing the transaction would be subject to completion of a due diligence process which would require approximately two months from the date of Board approval to go forward.

FEDERAL REPI's

The U.S. Department of Energy also offers a direct subsidy called renewable energy production incentives (REPI's) to public sector renewable energy projects. Public agencies can apply for a subsidy with a value in 1998 of up to 1.6 cents per kWh, escalating at the Consumer Price Index. The subsidy extends for ten years from the start of the project. Congress must appropriate funds for the program each year, and the level of subsidy per kWh depends on the annual appropriation. It is possible for a project to obtain both the Section 29 PTC's and the REPI's if it is structured correctly (as discussed in the section titled "Project Structuring Options, Public/Private Ownership"). The total nominal value of the REPI's for the Santa Cruz project is up to \$2.8

The contents of these proposals shall remain confidential during the selection process



million over ten years. In addition, REPI's are a priority area of the Solid Waste Association of North America.

STATE SUBSIDY

The last source of project revenues included in this report are State incentive payments to generators of renewable power. Assembly Bill 1890 (AB 1 890), which approved the radical restructuring of California's electric utility industry, also provided \$540 million for the support of renewable electricity generation technologies and for the development of a consumer market for renewable power. Thirty percent of these funds, or approximately \$162 million, is to be distributed to new renewable electricity generation projects through a competitive bidding process administered by the California Energy Commission (CEC).

This competitive process is taking the form of an auction, in which new renewable power projects submit bids to obtain incentive payments for their expected power generation over five years. The CEC will determine winners and losers based upon the simple cents per kWh incentive requests. Bids cannot exceed 1.5 cents/kWh and will be ranked in order of lowest incentive request to highest. Beginning with the lowest request, bids will be accepted as winners until funds are depleted. Assuming bids of the maximum possible 1.5 cents/kWh, the \$162 million of available funds could support a total of approximately 352 MW of new renewable power (including sources such as wind, solar, biomass, geothermal, and landfill gas). If bids are submitted at lower than 1.5 cents/kWh, the number of fundable megawatts of new renewable power would increase. A draft of the bid package the County would submit pending Board approval and will be provided under separate cover.

Determining the Bid Amount

The bid amount will be determined according to the County's strategy for obtaining State subsidies. If successful, a higher bid will result in a more profitable project. However, according to the CEC's method for awarding payments, lower bids have a higher probability of success. Table 1 below shows how the bid amount may impact the Buena Vista Landfill Power Project's economics for the Base Case scenario³.

The Base Case project scenario is explained in the section titled "Base Case Scenario".



Table 1 Bid Impact on Project NPV

CEC Bid	Net Present Value" of 10-Year Project				
1 .OO cents/kWh	\$258,000				
1.25 cents/kWh	\$409,000				
1.50 cents/kWh	\$561,000				

Forfeitable Bid Bond

Bidders must include a bid bond in the form of an irrevocable letter of credit or an escrow account agreement with their bids. The bid bonds are forfeitable and will be held by the Commission until after the auction. The bid bond must be equal to 10% of the expected total incentive payments in the bid, calculated as the incentive payment requested in the bid multiplied by the estimated generation in the bid over five years.

The Commission will hold the bid bond of winning bidders, and will return it after they have completed the first two milestones as discussed in the CEC Notice of Auction. At the completion of each of the two milestones, half of the bid bond would be returned to the County. The first two milestones following notification of a CEC award consist of the following:

- Preparing and adopting a project award package within one year of the date of the auction
- · Filing all relevant project construction applications, including filing for any environmental or land use permits.

Project Award Package

Preparing and adopting a Project Award Package consists of preparing a standard contract that follows the format shown in Attachment F. The Project Award Package simply details the information that is provided in the County's bid and commits the County to no new financial obligations.

Net Present Value (NPV) is the "present value" of future revenues from the project minus the amount of equity invested in the project today. Present value is an accounting concept that converts future cash flows into an equivalent value today, taking into account the "time value of money", i.e. that fact that a dollar in hand today is worth more than one received at some time in the future.



Filing for Applications and Permits

The second milestone consists of filing for all necessary construction applications, including any environmental or land use permits. The air permits to construct and operate are anticipated to be the only permits requiring significant effort. Obtaining approval for the applications and permits is not included under the second milestone's requirements.

BASE CASE SCENARIO

Attachment G shows a detailed version of the economic model over 20 years. The Base Case model has been updated to reflect the power purchase and PTC proposals, and is based on a conservative scenario in which future electricity prices are estimated at 25 percent less than a -published CEC forecast, the premium for renewable power is-estimated at 0.5 cents per kWh over the PX⁵, no REP1 benefits are obtained, a CEC subsidy of 1 .O cent per kWh is obtained, and the County invests initial equity totaling approximately \$1.45 million in the project. A summary of the model over 10 years is shown in Table 2. Table 2a, Project Cost Breakdown provides more detail on the project costs summarized in Table 2. A ten year period was selected because the financing period is ten years.



The Power Exchange (PX) is the independent State entity that will determine default market power rates on an hourly basis, based on the market clearing price from bids from various power providers. These power providers include all investor-owned utilities in California and those independent power producers that elect to bid into the PX market.

Table z

Expected Cash Flow for a County-Owned LFG Project

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Based on 1 o year financing, an initial equity contribution of \$1.45 million, debt or \$859,000. Simple payment of equity is accomplished withinfour years.





Table 2a Project Cost Breakdown

Cost Item		(1998\$)
Capital		
Engineering fees/Construction mgt. Project management Contracts Permits Interconnect Concrete Fencing Site Preparation Storage Module (40'ISO container) Oil, Coolant , Lube Gas processing/blowers Gas piping Condensate management/piping Jenbacher Module Cranes on site including mobe/demobe. Engine module erection Transportation Jenbacher spare parts SIte electrical work/ conduits Additional Electrical equipment Transformer		100,000 10,000 20,000 20,000 150,000 40,000 15,000 20,000 1 1 1 , 0 0 0 0 4,000 75,000 2 0 , 0 0 0 3 , 5 0 0 1,300,000 13,000 10,000 6,000 85,000 80,000 45,000 70,000
Misc/contingency (10%) Subtotal Financing Transaction Costs	Subtotal	2097,500 209,750 2,307,250 5,000
Total Capital Cost		2,312,250
Annual Debt Service Equity Debt Annual Debt Service (at 5.5% over 10 years) Debt Service\$/kWh		1,450,000 859,000 113,919 0.008
Annual O&M costs Fixed Operating Expenses Engineering O&M Labor O&M Overtime Communications Electricity/Demand Utilities Other Site Expanses Permit/fees/license		5,000 40,000 5:000 500 1,500 500 10,000
Subtotal Fixed Operating Expenses		72,500
Variable Operating Expenses (Average)		217,143
Subtotal Operations and Maintenance Contingency (20%)		289,693 57,939
Total Average Annual O&M Costs (\$1998) Total O&MCost/kWh		3 4 7 , 6 3 1 0.023
Total Annual Debt Service and Operating Co Total Cost per kWh (\$1998)	osts	461,551 0.031



PROJECT RISKS

ings Kabu The remaining stages of project development have three main decision points for the County:

- 1. County decides to submit a bid in the AB 1890 auction.
- 2. If awarded an incentive, County decides to proceed with the final phase of project development.
- 3. County decides to proceed with construction of power plant.

The risks at each stage are summarized below.

1. County decides to submit a bid in the AB 1890 auction.

The County must obtain a forfeitable bid bond in an amount not to exceed \$170,000 to participate in the auction. The cost to obtain the bid bond is estimated to be \$5,000.

- a. If the County's bid <u>loses</u> in the auction, the bid bond is returned, and the only cost to the County is the \$5,000 cost of obtaining the bid bond.
- b. If the County's bid <u>wins</u> in the auction, and the County later decides <u>not to proceed</u> with the project, the County must pass two milestones to avoid forfeit of the bid bond. These milestones are signing an agreement with the CEC and submitting permit applications for the project. We estimate the cost to achieve these milestones is \$20,000. The agreement to be signed with the CEC creates no additional financial risks to the County if the project does not proceed.

Therefore, the total exposure to the County at this decision point is about \$25,000, if both milestones are passed. If the County fails to complete either one of both milestones, a loss of all or a portion of the forfeitable bid bond in an amount not to exceed \$170,000 will occur.

2. If awarded **AB** 1890 incentives, County decides to proceed with the final phase of project development.

The final phase of Project development includes:

- Negotiation and execution of power sales contracts and PTC contracts
- REPI application
- Obtaining financing
- Finalizing design
- Obtaining permits

The negotiation of power sales and PTC contracts is required to convert proposals into satisfactory final agreements and make the project economically viable. A level of risk exists in the County's



ability to successfully execute these agreements. The risks associated with the other items listed above are expected to be relatively low.

At this decision point, the County's risk exposure if the project is derailed for any reason is up to \$130,000, BVA's estimated cost for Phase 2 project development (beyond the first two CEC milestones). Note that BVA's work can be discontinued at any point during project development if the contract negotiation process breaks down or an unforseen critical project development issue arises.

3. County decides to proceed with construction of power plant.

At this stage, the County faces the risk that the economic benefits of the power plant will be less than projected. The risks can be divided into the following categories:

- Gas Production: The amount of gas generated by the landfill over the next 20 years falls below our estimates.
- . Technical: The power plant does not achieve the. level of reliability that we have assumed in our base case.
- Operations and maintenance: The cost of operating the power plant is higher than estimated.
- Capital cost: The cost of constructing the power plant is higher than estimated.
- Environmental: The permitting process causes delays in the start of the project or adds costly mitigation measures.
- . Power Sales: The power purchaser is offering a fixed price for five years followed by a price that is indexed to the market for green power. The risk is that prices for green power after Year 6 are lower than we have projected in our base case pro forma.
- PTCs: An IRS denial of the eligibility of some portion of the gas for production tax credits at some future date, leading to a reduction in the amount of PTC payments made to the project after that date.
- Finance Costs: We assumed lo-year financing through a municipal lease at a 5.5% interest rate based on current interest rates. That rate may increase by the time we secure financing on this project.





In Table 3, we have provided our opinion regarding the level of risk associated with each of these items. We have also performed a sensitivity analysis to quantify these risks, shown in the table. mitigation measures are also included for each risk category. The sensitivity analysis indicates that the project yields a reduced, yet positive, cash flow under most of the "downside" scenarios. Under the worst scenario we evaluated, in which both power sales. fall short of expectations and O&M costs exceed expectations, the impact is a (present value) loss to the County of \$229,000 over 10 years, equivalent to an annualized cost of about \$31,000 per year. Even if the project incurs this loss, the cost is more than offset by the avoided cost of maintaining the existing blowers, currently estimated to be about \$34,000 per year.

Table 3
Sensitivity Analysis

Case	Relative Risk	Sensitivity Assumptions	NPV ⁶ 10-yr (\$1,000)	Possible Mitigation Measures
Base case		No change	\$258	
Gas Production Decreases	Low	Gas production reduced 10 %	\$153	Proper management of gas field; size power plant with sufficient margin on landfill gas requirements
Technical Performance Decreases	Low	Plant availability reduced to 85%	\$37	Extended warrantee from engine manufacturer; good operation and maintenance program
Operations and Maintenance Cost (O&M) Incre	Medium a s e s	O& M costs increase by 10%	\$ 8	Good operation and maintenance program: select equip., vendor with proven track record
Environmental Requirements Increase	Low	Capital costs increase by 10%	\$32	Early discussions with Air Board and County Environmental Planning
Capital Costs Increase	Low	Capital costs increase by 10%	\$32	Request equipment and construction bids prior to financing

Net Present Value (NPV) is the "present value" of future revenues from the project minus the amount of equity invested in the project today. Present value is an accounting concept that converts future cash flows into an equivalent value today, taking into account the "time value of money".e. that fact that a dollar in hand today is worth more than one received at some time in the future.



PROJECT OWNERSHIP OPTIONS

The County can choose to develop, own, and operate the LFG power plant itself or enter into an agreement with a private developer who will own and operate the power plant. Alternatively, the County could enter into a public/private partnership with a private developer. The project economics are more favorable under public ownership than private, but the County assumes more financial risk as well.

Public ownership offers the following benefits:

- The project qualifies for federal REPI's worth up to \$2.8 million over 10 years of the project, credits not available to privately owned projects.
- Financing costs are considerably lower, and a low-interest loan of up to \$600,000 from the CEC, for publicly financed projects only, is potentially available.
- Costs of project development, construction and operations could be reduced through use of County personnel for some tasks.
- Participation in economic upside of project.

The main advantage of private ownership is that the County minimizes its financial risks. Therefore the County would not take the risk of the project not meeting its performance expectations. However under the private scenario, the County would not participate on any economic upside the project may realize and the project would not be eligible for REPI's.





Public Private Ownerships

An alternative to either full public ownerships or full private ownership is a joint public/private ownership option. In this way the County and private company would share a proportionate level of risk related to the financial liability incurred.

If the County is interested in reducing it's risk and inviting private participation to assist them in developing the LFG to electricity project BVA recommends a public/private cooperation since this will preserve options for the project to receive federal renewable energy production incentives (REPI) from DOE and provide the project with the most cost effective financing. In order to qualify for REPI the project must be wholly owned-by the County. The value of this subsidy amounts to about 1.6 cents per kWh in 1998 and escalates at the Consumers Price Index. We have not taken REP1 credits in our economic models because Congress must appropriate funds for each program year, and there is no certainty that the project would receive the benefits. However, there is interest from the Solid Waste Association of North America (SWANA) in lobbying Congress to increase funding and provide long term commitment to fund REPI's which could greatly benefit the Santa Cruz project. Therefore, by structuring the project so that the County owns the project and leases operations to a private sector company, the REPI's are preserved..

Under this arrangement the County would finance 100% of the electrical generating facility and lease back operations to private sector company. The lease payments would be sufficient to repay the financing and could also provide additional return beyond the cost-of capital for the County. Benefits and risk sharing between the County and a private sector company could be developed on a proportionate basis.

PROJECT SCHEDULE FOLLOWING CEC AUCTION

A summary of the anticipated project schedule is shown below. A more detailed schedule is shown on Attachment H.

June 1998 CEC award

August 1998 Board authorization for next project phase

November 1998 Permit applications approved, power sales and power grid

interconnection agreements completed

April 1999 Production Tax Credits and financing transactions completed,

revenues from Production Tax Credits begin

September 1999 Project construction completed and power generation commences,

revenues from power sales agreement begin

October 1999 CEC subsidy payments begin

ATTACHMENT A

RENEWABLE POWER SALES - REQUEST FOR PROPOSALS

DEPARTMENT OF PUBLIC WORKS

GOVERNMENTAL CENTER

JOHN A. FANTHAM DIRECTOR OF PUBLIC WORKS



COUNTY OF SANTA CRUZ

701 OCEAN STREET, SANTA **CRUZ,** CALIFORNIA **95060-4070**(408) 454-2160
FAX (408) 454-2385

February 11, 1998

TO:

ALL INTERESTED POWER PURCHASERS

SUBJECT:

REQUEST FOR PROPOSALS'FROM ENTITIES SEEKING TO PURCHASE RENEWABLE ENERGY FROM BUENA VISTA LANDFILL GAS POWER

PROJECT, SANTA CRUZ COUNTY PUBLIC WORKS DEPARTMENT,

CALIFORNIA

Santa Cruz County is seeking proposals from qualified entities for the purchase of electricity from a renewable power plant to be developed by the County. The power plant will be fueled by landfill gas from the County's Buena Vista Landfill.

If you are interested in being considered for this opportunity, please prepare and submit a response to the attached request for proposals. This request for proposals (RFP) is being managed on behalf of the County by Brown, Vence & Associates, Inc. (BVA). Proposals must be sent to the address given in the RFP by 5:00 p.m. on March 6, 1998. We request that you direct any questions to BVA, as indicated in the RFP (415-434-0900), rather than attempting to contact County staff directly.

Yours truly,

JOHN A. FANTHAM Director of Public Works

By:

R. Patrick Mathews

Solid Waste Division Manager

RPM:bbs

Attachments

RFPB

County of Santa Cruz Request for Proposals from Entities Seeking to Purchase Renewable Energy

RFP Purpose

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The County of Santa Cruz is developing a renewable power plant fueled by landfill gas (LFG) from the Buena Vista and Watsonville Landfills. The power plant will use internal combustion engines fueled by LFG over the next twenty years. The output will be between 2.0 and 3.0 MW, and the power plant will have more than one engine with an expected minimum availability of 87%.

The plant is planned to be located at the Buena Vista Landfill in Santa Cruz County, with electric power to be released into the power grid in Pacific Gas & Electric Company's (PG&E's) service territory. Sizing of the power plant will be finalized pending the completion of an in-depth gas field analysis, now underway. Plant construction is contingent upon the County's success in obtaining renewable energy production incentives through the upcoming New Renewable Resource Account Auction, which will be conducted by the California Energy Commission (CEC) in late March 1998, as well as final approval by the County Board of Supervisors.

This Request for Proposals (RFP) seeks proposals from entities wishing to purchase the renewable energy generated at the LFG power plant. The renewable power will be subject to certification by the California Energy Commission (CEC) and the Center for Resource Solutions "Green e" program. The estimated 2.0-3 .0 MW of renewable power is anticipated to be available for transmission in the first quarter of 1999. Santa Cruz County seeks a purchaser for the entire block of available capacity, with delivery beginning the day the renewable power is first available for transmission.

II. Proposal Elements

The County encourages innovative, concise proposals and invites the submission of relevant proposal elements required in this RFP. At a minimum, the following elements must be included in the following order:

- A. <u>Pronoser's Form</u> (attached): mandatory submission.
- B. <u>Proposed commodity price</u>: choice of fixed, indexed to the Power Exchange, indexed to a published renewable energy market 'price (specify), price floors, price collars, or other pricing structure of Proposer's choosing. Although not required, the County strongly encourages the use of price floors.

All transmission, distribution, and associated Independent System Operator (ISO) grid charges shall be borne by the Proposer, and proposed rates should be based on delivery of power into the grid in PG&E's service territory near the landfills.

County of Santa Cruz Request for Proposals from Entities Seeking to Purchase Renewable Energy

Proposer may submit more than one pricing option. A tiered rate structure is acceptable for the range of megawatts provided. The effective start date for power delivery shall be contingent upon final power sale contract with Proposer. Please specify rates for all possible start dates.

- C. <u>CEC Customer Credit</u>: Santa Cruz County assumes that Proposers will seek CEC Customer Credit Subaccount Renewable Funding for eligible energy and that any applicable subsidy will be reflected in proposal pricing. Please describe how this subsidy has been applied to bid price. Address how bid price will be affected by a reduction in the expected subsidy.
- D. <u>Purchaser's delivery/scheduling requirements</u>- describing Proposer's delivery, scheduling, data reporting, and metering requirements.
- E. <u>Proposed term of contract</u>: specifying one to ten years. Proposer may submit more than one contract term option. Include renewal options or conditions for contract extension, if applicable. Indicate the maximum length contract term Proposer offers. Address whether Proposer is willing to consider a ten-year or greater contract term, and what effect, if any, a ten-plus year contract term would have on the price bid.
- F. <u>Proposer's organization</u>: description of organization, including structure of organization and number of years in business. Please include resumes of key individuals in organization.
- G. <u>Proposer's existing business:</u> description of business, including number of clients and volume of existing megawatts Proposer has committed to purchase/sell at time of proposal.
- H. Relevant financial information: The County requires assurance that the Proposer has the financial ability to uphold its proposed obligations. Please explain how Proposer will provide this assurance: the County encourages Proposers to provide relevant financial information, such as net worth, annual revenues, and the most recent annual report.
- I. <u>Representative project:</u> description of existing business arrangement most closely resembling the proposed agreement, in which. Proposer has participated. Include number of megawatts involved, highlights of key terms and conditions, relevant dates and timelines, and reference with contact information (including name and telephone number) from the described arrangement.
- J. <u>Sample purchase agreement</u>: standard purchase agreement.
- K <u>Proposer's intentions for use or resale of renewable power</u>: description of existing or planned target market, marketing strategy, and other relevant information.

County of Santa Cruz

Request for Proposals from Entities Seeking to Purchase Renewable Energy

- L. <u>Tax-exemot bond financing</u>: description of how the County's use of tax-exempt bond financing for the construction of the proposed power plant would affect Proposer.
- M. <u>Power purchase</u>: description of how Proposer may approach future County interest in purchasing Direct Access power from the Proposer for the County's 15 million kwh annual energy consumption and 2.0 MW average load.
- N. <u>Additional information and supplementary elements</u>: including any other information that Proposer believes may be pertinent to the proposal.

III. Selection Criteria

The criteria used to evaluate proposals will include but is not limited the following:

- A. Rate and down side protection
- B. Flexibility and creativity of proposal
- C. Experience of Proposer
- D. Financial strength and stability of Proposer
- E. Length of proposed contract term-



Iv. Schedule. of selection

The following selection schedule is anticipated:

2/13/98	RFP release date
2/20/98	Inquiry deadline
2/25/98	Transcript of inquiries released
3/06/98	Proposal submission deadline
3/16/98	Date of notification of short-list status
3/20/98	Interviews (if required by County)
4/01/98	Selection finalized

V. Submission Requirements

Please submit one (1) original and three (3) copies of the proposal clearly marked as "Proposal to Santa Cruz" to Santa Cruz County's consultant, Brown, Vence & Associates, Inc. (BVA). Faxed proposals will not be accepted. Proposals must be received in the offices of BVA by 5 p.m. on March 6, 1998.

Ann Guy Brown, Vence & Associates, Inc. 120 Montgomery Street, Suite 1000 San Francisco, CA 94 104

County of Santa **Cruz**Request for Proposals from Entities Seeking to Purchase Renewable Energy

Proposals may be modified or withdrawn through written or faxed notification to BVA prior to submission deadline date and time.

VI. Consequence of Submission

Proposals must be valid from the submission deadline until three months after the date the County is notified of an award from the CEC New Renewable Resource Account Auction (estimated date of CEC award is June 15, 1998). Contingent upon award notification and approval by the County Board of Supervisors, the County will proceed with power plant development. Selected proposal must be valid through date of contract execution.

As a public agency conducting a public bid process, the County and the proposals submitted as part of this bid process are subject to the California Public Records Act. To the extent'that regulations allow, the County will hold confidential all information so marked.

Proposals will become the property of Santa Cruz County.

VII. Rejection of Proposals

Santa Cruz-County reserves right to select one, more than one, or none of the submitted proposals. The County also reserves the right to waive any irregularity in any proposal. Entities submitting unselected proposals will be provided with notifications that their proposals were not selected.

The County reserves the right to reject any and all proposals and terminate the RFP process or contract negotiations at any time. Issuing this RFP is not a commitment on the part of the County to enter into an agreement with any Proposer. The County shall not be liable for any pre-contractual expenses incurred by any Proposer. All negotiated agreements require majority approval by the County Board of Supervisors to become effective.

VIII. Inquiries

Inquiries regarding this RFP should be directed to Ann Guy, BVA at 415/434-0900 (ph) or 415/956-6220 (fax) by Friday, February 20, 1998, A transcript of inquiries and answers will be mailed to all potential Proposers by Wednesday, February 25, 1998. Names of entities submitting inquiries will not be revealed.

County of Santa Cruz Request for Proposals from Entities Seeking to Purchase Renewable Energy

PROPOSER'S FORM

Submission of this Proposer's Form with each proposal is mandatory.

P&poser Name	
Proposer Address	
Proposer Phone	
Proposer Fax	
Contact Name, Title	
Contact Phone	
	on: Please provide below the signature of an individual, general er authorized to submit this proposal and bind the proposing entity to be proposal.
Name, Title	Date

Please direct all inquiries and submit one (1) original and three (3) copies of the proposal to

Ann Guy Brow-n, Vence & Associates, Inc. 120 Montgomery Street, Suite 1000 San Francisco, CA 94 104 415/434-0900 (ph) 415/956-6220 (fax)



ATTACHMENT B

FORESIGHT ENERGY COMPANY - POWER PURCHASE PROPOSAL



Foresight Energy Company

Santa Cruz Landfill Power Purchase Proposal

March 6, 1998

Contact:

V 1041

Eric L. Miller, Chief Executive Officer Foresight Energy Company 700 Larkspur Landing Circle, Suite 125 Larkspur, CA 94939 Tel. '415-464-3665 Fax. 415-464-3669 emiller@forenergy.com http://www.forenergy.com

County of Santa Cruz Request for Proposals from Entities Seeking to Purchase Renewable Energy

PROPOSER'S FORM

Submission of this Proposer's Form with each proposal is mandatory.

Proposer name: Foresight Energy Company

Proposer Address: 700 Larkspur Landing Circle

Suite 125

Larkspur, CA 94939

Proposer Phone: 415/464-3660

Proposer Fax: 415/464-3669

Contact Name, Title: Eric Miller, Chief Executive Officer

Contact Phone: 415/464-3665

William.

Signature of Authorization: Please provide below the signature of an individual, general partner, or corporate officer authorized to submit this proposal and bind the proposing entity to the elements included in the proposal.

Name, Title Date

Please direct all inquiries and submit one (1) original and three (3) copies of the proposal to

Ann Guy
Brown, Vence & Associates, Inc.
120 Montgomery Street, Suite 1000
San Francisco, CA 94104
415/434-0900 (ph)
415/956-6220 (fax)

C.E.O

Introduction

In the fall of 1997, Foresight and ECT formed an alliance whereby Foresight plays a leading role in developing and marketing green wholesale electricity products and negotiating long term green supply arrangements on behalf of ECT. Under the alliance, Foresight is responsible for identifying, qualifying and negotiating terms of green power purchases and sales. ECT serves as the ultimate counterparty to any completed transactions and will be responsible for scheduling, settlements and overall contract management.

For the purposes of this document Foresight Energy Company and Enron Capital and Trade Corporation will be collectively referred to as "Proposer" and the issuer of the Request for Proposals shall be referred to as "Seller."

B. Proposed commodity price

Proposer offers the following indicative pricing term. In the event that this Proposal is selected, Foresight and ECT would be pleased to enter into negotiations for definitive contract terms and pricing. The pricing below is indicative only, and is subject to revision until completion of definitive contract terms.

Pricing Summary

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A long term price collar is suggested to provide the most aggressive pricing for the project, while providing the downside protection you have requested. The price would be fixed to travel no less than the floor, and no greater than the ceiling for a 10 year period commencing on project startup. The floor and ceiling are:

Price Floor: \$21.50/MWh
Price Ceiling: \$30.50/MWh

In addition to the floor and ceiling, Foresight proposes that the rate paid to seller would be indexed to the Power Exchange, and include an adder intended to share the market premium available on renewable power sales. At the Seller's option, such a premium would either be fixed at a level of approximately \$8/MWh, or float as a percentage (60 to 70%) of the margin above the Power Exchange generated from sales of the project energy. The actual price paid would float within the floor and ceiling as the PX and green market values change through time.

These rates are intended for power purchases commencing in the first quarter of 1999.

C. CEC Customer Credit

The potential receipt of subsidies from the CEC Customer Credit Subaccount Renewable Funding has been internalized on a risk adjusted basis in the proposed bid pricing. Seller would face no price risk'in the event of a reduction in the expected subsidy.

D. Pm-chaser's delivery/scheduling requirements

ECT intends to provide the full range of scheduling coordinator services. Please refer to the attached Master Energy Purchase and Sale Agreement (Attachment B) for details on terms and conditions.. Such agreement will incorporate the particulars of any transaction negotiated with the Seller. ECT will accept delivery for all energy produced at the project substation, and accept all responsibility for scheduling coordination and interaction with the ISO. Initial acceptance of the energy is contingent on Foresight's ability to arrange any necessary interconnection and distribution services with the local distribution utility to provide delivery of the power to the nearest ISO interconnection node.

E. Proposed term of contract

ECT is prepared to offer Seller up to a lo-year contract term to facilitate the financing and development of the Project. Shorter terms are available if preferred.

F. Proposer's organization

Foresight Energy Company is responsible for identifying, qualifying and negotiating terms of green power purchases and sales. ECT serves as the ultimate counter-party to any completed transactions and will be responsible for scheduling, settlements and overall contract management.

Enron Capital and Trade Corporation Background

Enron Capital and Trade Corporation (ECT) is the wholesale electricity and gas trading, risk management and financing division of Enron Corporation. Enron Corporation has over \$19 billion in assets and approximately \$20 billion in annual revenues. In 1997 ECT completed over 130 million megawatt-hours of power sales in 1997.

Enron Corporation has the following divisions:

- Enron Capital & Trade Corporation has three subdivisions:
 - ECT North America provides long-term, structured transactions, operates Enron's intrastate pipelines and provides energy management, power quality and reliability, as well as, electric facility design, construction and maintenance. Enron Finance Corporation is responsible for originating finance transactions.
 - ECT Commodity & Trading Services provides trading and risk management transactions involving domestic natural gas and electricity. Internationally, they provide global risk management overseeing Enron's commodity and interest rate positions.



- ECT Europe is responsible for growing Enron's business in the United Kingdom and Europe as energy markets open
- Enron Oil & Gas Company is one of the largest independent oil and gas companies in the U.S.
- Enron Gas Pipeline Group operates Enron's interstate pipelines.
- Enron Ventures Corporation provides world-wide engineering and construction services.
 - **Enron** International is a leading developer and provider of merchant and finance services for integrated energy projects.
 - Enron Renewable Energy Corporation is a leading low-cost supplier of renewable energy using solar and wind power resources.
 - Enron Energy Services is charged with developing and implementing Enron's retail business in deregulating markets.
 - Portland General Electric (PGE) is Enron's electric utility that provides electricity to nearly 700,000 customers (1.4 million people) in Oregon.

Foresight Energy Company Background

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Foresight Energy Company is exclusively dedicated to developing deregulated markets for renewable power nationwide. It actively solicits and structures transactions on both the supply and demand sides of the industry. Founded in early 1996, it has developed unparalleled relationships with generators and retail marketers of renewable power.

Foresight is staffed by highly experienced professionals who share a sincere commitment to environmental improvement. Its management has industry-leading experience in the fields of renewable power production, finance, and marketing, as well as environmental science and advocacy. Foresight principals have developed over 250 megawatts of renewable and conventional energy facilities, and have been leaders in the electricity industry-restructuring debate, including playing a leading role in the negotiation and passage of the California Legislature's bills AB 1890 and SB 1305. Foresight principals have been actively working to promote the marketing of green electricity to retail customers since 1992.

In September of 1997, Foresight Energy Company completed a strategic alliance with Enron Capital and Trade Resources Corporation. Enron is a leading power marketer nationwide, and brings unmatched power marketing, risk management, and credit resources to the alliance. Enron will serve as the scheduling coordinator as needed and will provide its full credit backing to any supply transaction executed by the alliance.

Foresight Energy Company acts as the sales and supply broker for and the negotiator of green power agreements for Enron Capital and Trade. However, the form and substance of these agreements are subject to Enron Capital and Trade Resources Corporation's approval. Enron Capital and Trade serves as the contracting party.

Qualifications of Key Foresight Personnel

Eric Miller, President and CEO, brings world-class experience in the independent electricity supply industry, particularly in "green," renewable power. He has thirteen years of experience holding key marketing and project development positions with major independent power developers including the AES Corporation and Kenetech Windpower, Inc. While at AES, Mr. Miller consulted to electric utilities on long range resource strategies; conceived, founded and ran a new subsidiary focused on developing landfill methane energy projects; led AES's initial investigation of the Asia power market; and led the on-site development efforts for a highly successful \$380 million cogeneration facility.

As director of business development for Kenetech Windpower, Mr. Miller was responsible for all sales, marketing, project development, acquisitions, governmental affairs, and community relations in the Western US. Mr. Miller acquired and redeveloped several existing wind power facilities, creating over \$48 million in revenue. Mr. Miller also secured a backlog of executed purchase contracts worth an additional \$60 million, and secured final awards for wind projects totaling \$960 million. He received the *Maximizing Shareholder Value Award*, Kenetech's top employee honor.

As a consultant to the U.S. Senate, Mr. Miller played an important role in the development of cost effective emissions control strategies for acid rain causing emissions; his recommendations were adopted in the 1992 Energy Policy Act. As Secretary-Treasurer of the Center for Energy Efficiency and Renewable Technologies, Mr. Miller is recognized as a leading advocate and lobbyist for the development of customer-driven green power markets and played a major role in the opening up of California's electricity market to competition. Mr. Miller co-authored the key green power provisions of AB 1890, California's landmark electric utility restructuring law. Mr. Miller continues to play a central role in the development of market rules for retail electricity competition.

Mr. Miller has experience with public financial markets through participation in Kenetech's issuance of public debt securities and initial public offering. While at AES, he participated in the development of the company from early revenue stage to shortly before initial public offering. He holds a Bachelor's Degree in Physics from Colorado College and a Master of Science in Resource Systems from Dartmouth College, Thayer School of Engineering.

Warren Byrne, Executive Vice President, brings marketing, business start-up, strategic planning and analytical skills from his work across a range of industries, as well as substantial knowledge of the electricity industry, and a background in environmental

advocacy. Mr. Byrne has seven years experience in business development and strategic management consulting in industries including consumer goods, consumer credit, telecommunications, transportation, and energy; in positions with Booz, Allen & Hamilton, Inc., the Caithness Corporation, and as Managing Director of his own consulting firm.

Mr. Byrne focused exclusively on opportunities in the developing retail electricity markets over the past two years. For a large renewable power producer he tracked electric industry restructuring, fossil fuel markets, and retail market formation, and developed strategic plans based on detailed economic analysis. He led a study for a major credit card company that segmented the residential and small commercial customer classes by electricity usage patterns and developed a market entry and technology strategy to exploit specific niche characteristics. For E-Source, a leading electricity research organization, Mr. Byrne co-authored an in-depth study of cutting-edge customer load control technologies and utility real-time-pricing methodologies. For major industrial clients, he has developed energy procurement and load management strategies.

With Booz, Allen & Hamilton's Energy and Chemicals Group, Mr. Byrne assessed markets and developed strategic plans for companies in the consumer products, hazardous waste, electricity, and telecommunications industries. In a multi-year assignment for a \$1 billion household goods manufacturer, he assisted in the redesign of manufacturing and distribution processes, as well as product lines. This project improved performance and cut costs by 35%.

With the Caithness Corporation, Mr. Byrne was the key marketing staff person in the start-up of a natural-gas-vehicle equipment manufacturer and a pipeline repair product manufacturing business. He conducted initial market analyses as well as developed and implemented pilot programs with major customers for these businesses. Both companies are currently the leaders in their field. As regional sales representative for a marketer of engineered metal parts, he turned a moribund region around, generating over \$40 million in new sales.

Mr. Byrne has three years experience in environmental education and advocacy including work with the Natural Resources Defense Council, the Environmental Defense Fund, and as captain and marine ecology instructor aboard a teaching schooner. He holds a -Bachelor's Degree with honors in Liberal Studies (Economics and Biology) from the University of California in Santa Barbara; and a Master's Degree in Environmental Studies, Industrial Environmental Management, from the Yale School of Forestry and Environmental Studies, where he was a Switzer Environmental Leadership Fellow.





Most recently, she was Director of Corporate and Project Finance at KENETECH Windpower, where she had line responsibility for negotiating key contracts, financing new development, managing operations at existing facilities, as well as lender marketing and relations. As financial analyst for Chevron Corporation, Ms. Lochart set strategy to manage foreign exchange and interest rate risk and reviewed and implemented new financial instruments for achieving this purpose. With Intel's planning department she analyzed product costs and margins by developing computer models to consolidate and project divisional performance and to integrate market projections with manufacturing constraints. At Merrill Lynch, Ms. Lochart was the lead analyst for the limited partnership group that developed over \$1 billion in sales within two years for clients in the airlines, cable television, wood products, and independent power industries.

Ms. Lochart holds an MBA in Finance and Marketing from the Haas School of Business at the University of California, Berkeley, and BA in Humanities and Natural Science, Summa cum Laude and Phi Beta Kappa from the University of Texas in Austin.

G. Proposer's existing business

Foresight and ECT have completed or are in negotiation on contracts to purchase approximately 46 megawatts of renewable supply from a number of generators and to sell approximately 40 megawatts of renewable power to a current list of 14 retail power marketers. The list of retail power marketer clients is expected to grow considerably.

H. Relevant financial information

See Attachment A, Enron Financial Information

I. Representative project

Foresight Energy is actively engaged in negotiations with other landfill methane generation projects for the purchase of renewable energy on similar terms and conditions. Such negotiations are confidential and disclosure of proposed terms would be inappropriate at this time.

J. Sample purchase agreement

Please refer to Attachment B, Master Energy Purchase and Sale Agreement.





K. Proposer's intentions for use or resale of renewable power

Foresight and ECT actively market wholesale renewable and commodity power to retail power marketer clients along with a full range of value-added products and services including forecasting, scheduling coordination, energy price risk management, energy-efficiency and on-site generation products and equipment, financing, metering, billing, data management, and consulting services.

L. Tax-exempt bond financing

It is assumed that Seller will seek the most cost effective financing that is available. ECT is prepared to enter into a purchase agreement with the Seller under a variety of capital structures. The prices indicated for energy purchases are based on an estimation of the value of renewable power in the marketplace, and would not be affected by the Seller's financing source.

M. Power purchase

ECT is currently the largest seller of wholesale electricity in the U.S. Foresight as a broker of power sales agreements for ECT would be pleased to provide pricing and begin negotiations to supply power to cover the seller's requirements.

If seller is willing to accept a lower maximum purchase price for the landfill project output, buyer would be willing to deliver energy for seller's needs at below market rates.

N. Additional information and supplementary elements:

None



ATTACHMENT A

ENRON FINANCIAL INFORMATION



ENRON's extensive financial information statement is on file with Public Works.

Selected Financial and Statistical Information (Unaudited)

	1996	1995	1994	1993	1992	1991
Operating revenues (millions)	\$13,289	\$ 9,189	\$ 8,984	\$ 7,986	\$ 6,415	\$ 5,698
Total assets (millions)	\$16.137	\$13,239	\$ 11,966	\$ 11,504	\$ 10,312	\$ 10,070
Common stock statistics						
Income from continuing operations(a)						
Total (millions)	\$ 584	\$ 520	\$ 453	\$ 387	\$ 329	\$ 232
Per share -primary	2.31	2.07	1.80	1.55	1.39	1.03
Per share • fully diluted	2.16	1.94	1.70	1.46	1.30	0.98
Earnings on common stock ^(a)						
Total (millions)	568	504	438	370	284	207
Per share - primary	2.31	2.07	1.80	1.55	1.29	1.03
Per share • fully diluted	2.16	i.94	1.70	1.46	1.21	0.98
Dividends						
Total (millions)	212	205	192	171	148	127
Per share	0.86	0.81	0.76	0.71	0.66	0.63
Book value per share	13.81	12.01	10.94	10.01	9.61	8.16
Shares outstanding (millions)						
Actual at year-end(b)	251	245	244	242	237	202
Average for the year	246	244	243	239	220	202
Market price range						
High	\$ 471/2	\$ 39%	\$ 34%	\$ 37	\$ 25	\$ 191/4
Low	345/4	28	26%	221/8	15%	123%
Market price ratios(c)	_					,
Dividend payout	37.3%	39.3%	42.4%	45.8%	47.7%	60.9%
Yield	2.1%	2.4%	2.5%	2.4%	3.3%	4.0%
Price/earnings ratio	17.8X	16.3X	17.0X	19.1X	14.5X	15.4X
Market price as a % of book value	297.4%	280.5%	280.6%	295.3%	209.5%	193.7%
Capitalization (millions)						
Long-term debt	\$ 3.349	\$ 2.065	f 2005	¢ 2.661	\$ 2.450	¢ 2.100
Company-obligated preferred	♥ 3.349	\$ 3,065	\$ 2,805	\$ 2,661	\$ 2,459	\$ 3,109
stock of subsidiaries	592	377	377	214		
Minority interests	755		290	196	179	101
Shareholders' equity	3,723	549 2 165	2,880		2.518	1,901
Total capitalization	\$ 8,419	3,165 \$ 7,156	\$ 6,352	2,623 \$ 5,694		·
Total captainzation	ψ 0,417	4 /,130	3 0,332	3 3,094	\$ 5,156	\$ 5,11.1
Profitability indicators						
Income as a % of operating revenues ^(d)	4.4%	5 . 7	% 5.0%	4.8%	5.1%	4.1%
Return on average capitalization@	10.4%	10.9%	10.8%	11.1%	10.9%	9.6%
Return on average shareholders'		1017/0	10.070	11.1/0	10.7/0	7.0/0
equity ^(d)	17.0%	17.2%	16.5%	15.0%	14.9%	12.4%
Interest coverage(f)		2.12/0	10.570	15.070	11.7/0	12.7/0
Before extraordinary items						
Before income taxes	4.1X	3.8X	3.3x	2.6X	2.3X	1.9X
After income taxes	3.1X	2.8X	2.6X	2.3X	2.0X	1.6X

⁽a) The 1993 amounts exclude effects of a \$54 million (\$0.23 per share) primarily non-cash charge to income for the increase in the corporate Federal income tax rate from 34% to 35%.

⁽b) Excludes shares held by flexible equity trust beginning in 1993.

⁽d) The mean market price and primary earnings per share from continuing operations were used in the computation of these ratios wherever applicable.

⁽a) Income from continuing operations before extraordinary items was used in the computation of these ratios.

⁽c) Income from continuing operations before extraordinary items and before interest expense and related charges, net was used in the computation of this ratio.

⁽¹⁾ Interest expense and related charges, net and income from continuing operations before extraordinary items or net income, as appropriate, were used in the computation of this ratio.

ATTACHMENT B

MASTER ENERGY PURCHASE AND SALE AGREEMENT



MASTER ENERGY PURCHASE AND SALE AGREEMENT

This Master Energy Purchase and Sale Agreement (this "Master Agreement" and together with all
Transactions, collectively, the "Agreement") is entered into effective as of the day of, 19(the
"Effective Date") by and between Enron Power Marketing, Inc., a Delaware corporation ("EPMI"), and
a Company ("Counterparty"). Each of EPMI and Counterparty may also be referred
to individually as "Party" or collectively as "Parties." The definitions set forth in Appendix "1" shall apply to this
Agreement.

SECTION 1. SCOPE OF AGREEMENT

- 1.1. **Scope of Agreement.** From time to time, the Parties may, but shall not be obligated to, enter into Transactions for the purchase or sale of Energy hereunder. Each Transaction shall be effectuated and evidenced in accordance with this Master Agreement and shall constitute a part of this Master Agreement. The Parties are relying upon the fact that all Transactions, together with **this** Master Agreement, shall constitute a single integrated agreement, and that the Parties would not otherwise enter into any Transaction. Any conflict between this Master Agreement and a Transaction shall be resolved in favor of the Transaction. This Master Agreement shall govern all Transactions between the Parties from and after the Effective Date unless expressly stated otherwise and shall govern all transactions between the Parties entered into prior to the date hereof that relate to the purchase and sale of Energy or options thereon.
- **Transaction Procedures.** During the term of this Agreement, the Parties may notify each other that Energy is available for purchase or sale. Each Transaction shall be effectuated and evidenced (i) by a written Transaction Agreement executed by the Parties or (ii) in a telephone conversation between the Parties whereby an offer and acceptance shall constitute the agreement of the Parties; provided, however, each Party may stipulate by prior notice to the other Party that any particular contemplated Transaction shall be effectuated and formed only by means of procedure (i) above. The specific terms to be established by the Parties for each Transaction shall include the Buyer and Seller, the Period of Delivery, the Contract Price, the Delivery Point, the Contract Quantity, whether the Transaction is Firm or Non-Firm and such other terms as the Parties shall agree upon that are not in conflict with this Master Agreement. EPMI may confirm a telephonic Transaction by forwarding to Counterparty a Confirmation, which shall be executed by Counterparty (with any objections noted thereon) and returned to EPMI within two (2) Business Days of Counterparty's receipt of it or else be deemed correct as sent. Failure by EPMI to send a Confirmation shall not invalidate any Transaction agreed to by the Parties. The Parties agree not to contest or assert any defense to the validity or enforceability of telephonic Transactions entered into in accordance with this Master Agreement under laws relating to whether certain agreements are to be in writing or signed by the Party to be thereby bound, or the authority of any employee of the Party to enter into a Transaction. Each Party consents to the recording of its representatives' telephone conversations without any further notice. All recordings may be introduced into evidence and used to prove oral agreements between the Parties.
- 1.3. <u>Term of Agreement.</u> The term of this Master Agreement shall commence on the Effective Date and shall remain in effect until terminated by either Party upon 30 days prior written notice; provided, however, that this Master Agreement shall remain in effect with respect to any Transaction(s) entered into prior to the effective date of the termination until both Parties have fulfilled all their obligations with respect to such Transaction(s).

SECTION 2.REPRESENTATIONS AND WARRANTIES

On the Effective Date and the date of entering into each Transaction, each Party represents and warrants to the other Party that: (i) it is duly organized, validly existing and in good standing under the **laws** of the jurisdiction of its formation and is qualified to conduct its business in each jurisdiction in which a Transaction will be performed by it, (ii) it has all regulatory authorizations necessary for it to legally perform its obligations under this Master Agreement and each Transaction, (iii) the execution, delivery and performance of this Master Agreement and each Transaction are within its powers, have been duly authorized by all necessary action and do not violate



any of the terms and conditions in its governing documents, any contracts to which it is a party or any Law applicable to it, (iv) this Master Agreement and each Transaction when entered into in accordance with this Master Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses, (v) there are no Bankruptcy Proceedings pending or being contemplated by it or, to its knowledge, threatened against it, (vi) there are no Legal Proceedings that materially adversely affect its ability to perform its obligations under this Master Agreement and each Transaction, and (vii) it has knowledge and experience in financial matters and the electric industry that enable it to evaluate the merits and risks of entering'into this Master Agreement and each Transaction. Each **Party** covenants that **it** will cause these representations and warranties to be true and correct throughout the term of the Agreement.

SECTION 3. OBLIGATIONS AND DELIVERIES

- 3.1. <u>Seller's and Buver's Obligations.</u> With respect to each Transaction and subject to the terms of this Master Agreement, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, at the Delivery Point the Contract Quantity, and Buyer shall pay Seller the Contract Price. Seller shall be responsible for any costs or charges imposed on or associated with the delivery of the Contract Quantity (excluding any Stranded Costs), including control area services, inadvertent energy flows, transmission losses and loss charges relating to the transmission of the Contract Quantity (excluding any Stranded Costs), up to the Delivery Point. Buyer shall be responsible for any costs or charges imposed on or associated with the Contract Quantity, including control area services, inadvertent energy flows, transmission losses and loss charges relating to the transmission of the Contract Quantity, at and from the Delivery Point.
- **3.2.** Transmission and Scheduling. Seller shall arrange and be responsible for transmission service to the Delivery Point and shall Schedule or arrange for Scheduling services with its Transmission Providers to deliver the Energy to the Delivery Point. Buyer shall arrange and be responsible for transmission service at and from the Delivery Point and shall Schedule or arrange for Scheduling services with its Transmission Providers to receive the Energy at the Delivery Point. Each Party shall designate authorized representatives to effect the Scheduling of the Contract Quantity of Energy.
- 3.3. <u>Title. Risk of Loss and Indemnity.</u> As between the Parties, Seller shall be deemed to be in exclusive control (and responsible for any damages or injury caused thereby) of the Energy prior to the Delivery Point and Buyer shall be deemed to be in exclusive control (and responsible for any damages or injury caused thereby) of the Energy at and from the Delivery Point. Seller warrants that it will deliver to Buyer the Contract Quantity free and clear of all liens, claims and encumbrances arising prior to the Delivery Point. Title to and risk of loss related to the Contract Quantity shall transfer from Seller to Buyer at the Delivery Point. Seller and Buyer shall each indemnify, defend and hold harmless the other Party from any Claims arising. from any act or incident occurring when title to the Energy is vested in the indemnifying Party.
- **3.4. Force Maieure.** If either Party is rendered unable by Force Majeure to carry out, in whole or part, its obligations under a Transaction and such Party gives notice and full details of the event to the other Party as soon as practicable after the occurrence of the event, then during the **pendency** of such Force Majeure but for no longer period, the obligations of the Party affected by the event (other than the obligation to make payments then due or becoming due with respect to performance prior to the event) shall be suspended to the extent required; provided, however, Buyer shall be obligated to pay Demand Charges, if any, with respect to a Transaction notwithstanding the Force Majeure. The Party affected by the Force Majeure shall remedy the Force Majeure with all reasonable dispatch; provided, however, that this provision shall not require Seller to deliver, or Buyer to receive, Energy at points other than the Delivery Point.

3.5. Failure to Deliver/Receive in Firm Transactions.

(a) Unless excused by Force Majeure or Buyer's failure to perform, if Seller fails to deliver all or part of the Contract Quantity pursuant to a Firm Transaction, Seller shall pay Buyer, on the date payment would otherwise be due to Seller, an amount for each MWh of such deficiency equal to the positive difference, if any, obtained by subtracting the Contract Price from the Replacement Price. "Replacement

Price" means the price at which Buyer, acting in a commercially reasonable manner, purchases substitute Energy not delivered by Seller (plus any additional transmission charges, if any, incurred by Buyer to the Delivery Point) or, absent a purchase, the market price for such quantity at such Delivery Point as determined by Buyer in a commercially reasonable manner; provided, however, in no event shall the Replacement Price include any penalties, ratcheted demand or similar charges or any Stranded Costs.

- (b) Unless excused by Force Majeure or Seller's failure to perform, if Buyer fails to receive (i) the minimum requirement of the Contract Quantity, if any, as required to be received pursuant to a Firm Transaction or (ii) amounts of Energy that the Parties agreed to Schedule pursuant to a Firm Transaction, Buyer shall pay Seller, on the date payment would otherwise be due, an amount for each MWh of such deficiency equal to the positive difference, if any, obtained by subtracting the Sales Price from the Contract Price. "Sales Price" means the price at which Seller, acting in a commercially reasonable manner, resells (if at all) the Energy not received by Buyer (including additional transmission charges, if any, incurred by Seller).
- (c) Disagreements pursuant to this Section 3.5 shall be submitted to arbitration in accordance with the arbitration procedures set forth in Exhibit "D".
- **3.6.** <u>Failure to Deliver/Receive in Non-Firm Transactions.</u> A Party may be excused from delivering or receiving the Contract Quantity, in whole or in part, in a Non-Firm Transaction for any reason without liability unless otherwise provided in a Transaction.

SECTION 4. DEFAULTS AND REMEDIES

4.1. Events of Default. An "Event of Default" shall mean with respect to a Party ("Defaulting Party"): (i) the failure by the Defaulting Party to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within three (3) Business Days after written notice of such failure is given to the Defaulting Party by the other Party ("Non-Defaulting Party") and provided the payment is not the subject of a good faith dispute as described in Section 6 or (ii) any representation or warranty made by the Defaulting Party herein shall at any time prove to be false or misleading in any material respect or (iii) the failure by the Defaulting Party to perform any covenant set forth in this Agreement (other than the events that are otherwise specifically covered in this Section 4.1 as a separate Event of Default or its obligations to deliver or receive Energy a remedy for which is provided in Section 3), and such failure is not excused by Force Majeure or cured within five Business Days after written notice thereof to the Defaulting Party or (iv) the Defaulting Party shall be subject to a Bankruptcy Proceeding or

4.2. Remedies upon an Event of Default.

If an Event of Default occurs with respect to a Defaulting Party at any time during the term of this Agreement, the Non-Defaulting Party may, for so long as the Event-of Default is continuing, (i) establish a date (which date shall be between 5 and 10 Business Days after the Non-Defaulting Party delivers notice) ("Early Termination Date") on which any or all Transactions selected by it shall terminate (individually a "Terminated Transaction" and collectively the "Terminated Transactions") and (ii) withhold any payments due in respect of the Terminated Transactions; provided, however, upon the occurrence of any Event of Default listed in item (iv) of Section 4.1 as it may apply to any **Party**, all Transactions and this Agreement in respect thereof shall automatically terminate, without notice, and without any other action by either Party as if an Early Termination Date had been declared immediately prior to such event. If an Early Termination Date has been designated, the Non-Defaulting Party shall in good faith calculate its Gains, Losses and Costs resulting from the termination of the Terminated Transactions. The Gains, Losses and Costs shall be determined by comparing the value of the remaining term, Contract Quantities and Contract Prices under each Terminated Transaction had it not been terminated to the equivalent quantities and relevant market prices for the remaining term either quoted by a bona fide third-party offer or which are reasonably expected to be available in the market under a replacement contract for each Terminated Transaction. To ascertain the market prices of a replacement contract, the Non-Defaulting Party may





consider, among other valuations, any or all of the settlement prices of NYMEX Power futures contracts, quotations from leading dealers in energy swap contracts and other bona fide third party offers, all adjusted for the length of the remaining term and differences in transmission. It is expressly agreed that a Party shall not be required to enter into replacement transactions in order to determine the Termination Payment. The Non-Defaulting Party shall aggregate such Gains, Losses and Costs with respect to all Transactions into a single net amount ("Termination Payment") and notify the Defaulting Party. If the Non-Defaulting Party's aggregate Losses and Costs exceed its aggregate Gains, the Defaulting Party shall, within five (5) Business Days of receipt of such notice, pay the net amount to the non-Defaulting Party, which amount shall bear interest at the Interest Rate from the Early Termination Date until paid. If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of the Terminated Transactions, the Non-Defaulting Party shall pay such excess to the Defaulting Party on or before the later of (1) ten (10) days after the end of the month ending on or after the Early Termination Date and (2) the date five (5) Business Days after receipt by the Defaulting Party of the Non-Defaulting Party's notice given above, which amount shall bear interest at the Interest Rate from the Early Termination Date until paid. If the Defaulting Party disagrees with the calculation of the Termination Payment, the issue shall be submitted to arbitration in accordance with the arbitration procedures set forth in Exhibit "D" and the resulting Termination Payment shall be due and payable within three (3) Business Days after the award.

- (b) As used herein with respect to each Party: (i) "Costs" shall mean, with respect to a Party, brokerage fees, commissions and other similar transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction, and attorneys' fees, if any, incurred in connection with enforcing its rights under this Agreement; (ii) "Gains" shall mean, with respect to a Party, an amount equal to the present value of the economic benefit (exclusive of Costs), if any, to it resulting from the termination of its obligations with respect to a Terminated Transaction, determined in a commercially reasonable manner; and (iii) "Losses" shall mean, with respect to a Party, an amount equal to the present value of the economic loss (exclusive of Costs), if any, to it resulting from the termination of its obligations with respect to a Terminated Transaction, determined in a commercially reasonable manner. In no event, however, shall a Party's Gains, Losses or Costs include any penalties, ratcheted demand or similar charges or any Stranded Costs. At the time for payment of any amount due under this Section 4.2, each Party shall pay to the other Party all additional amounts payable by it pursuant to this Agreement, but all such'amounts shall be netted and aggregated with any Termination Payment payable hereunder.
- (c) Notwithstanding any other provision of this Agreement, if Buyer or Seller fails to pay to the other Party any amounts when due, the aggrieved Party shall have the right to (i) suspend performance under any or all Transactions until such amounts plus interest at the Interest Rate have been paid and/or-(ii) exercise any remedy available at law or in equity to enforce payment of such amount plus interest at the Interest Rate; provided, however, if the non-paying Party, in good faith, shall dispute the amount of any such billing or part thereof and shall pay such amounts as it concedes to be correct, no suspension shall be permitted.
- 4.3. Other Events. In the event Buyer is' regu'lated by a federal, state or local regulatory body, and such body shall disallow all or any portion of any costs incurred or yet to be incurred by Buyer under any provision of this Agreement, such action shall not operate to excuse Buyer from performance of any obligation nor shall such action give rise to any right of Buyer to any refund or retroactive adjustment of the Contract Price provided in any Transaction. Notwithstanding the foregoing, if a Party's activities hereunder become subject to regulation of any kind whatsoever under any law (other than with respect to Stranded Costs) to a greater or different extent than that existing on the Effective Date and such regulation either (i) renders this Agreement illegal or unenforceable or (ii) materially adversely affects the business of the Defaulting Party, with respect to its financial position or otherwise, then in the case of(i) above, either Party, and in the case of (ii) above, only the Defaulting Party, shall at such time have the right to declare an Early Termination Date in accordance with the provisions hereof; provided,





notwithstanding the rights of the Parties to declare an Early Termination Date as above stated, the Defaulting Party shall be liable for payment of the Termination Payment calculated by the Non-Defaulting Party as provided in <u>Section 4.2</u>.

4.4. Security.

SECTION 5. LIMITATIONS; DUTY TO MITIGATE

- Limitation of Remedies. Liability and Damages. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY HEREIN PROVIDED, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. See Rider Anticipatory Repudiation UNLESS EXPRESSLY HEREIN PROVIDED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE LIQUIDATED DAMAGES CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.
- 5.2. <u>Duty to Mitigate.</u> Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of this Agreement.
- 5.3. <u>UCC</u>. Except as otherwise provided for herein, the provisions of the Uniform Commercial Code ("UCC") of the state whose laws shall govern this Agreement shall be deemed to apply to all Transactions and Energy shall be deemed to be a "good" for purposes of the UCC. EXCEPT AS EXPRESSLY SET FORTH HEREIN, SELLER EXPRESSLY NEGATES ANY OTHER REPRESENTATION OR WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY WITH RESPECT TO CONFORMITY TO MODELS OR SAMPLES, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE.

SECTION 6. BILLING; PAYMENT

6.1. <u>Billing and Payment.</u> Seller shall render to Buyer (by regular mail, facsimile or other acceptable means pursuant to <u>Section 8.3</u>) for each calendar month during which purchases/sales are made, a statement setting forth the total quantity of Energy that was Scheduled or that Buyer was obligated to purchase and any other charges due Seller, including Demand Charges or payments or credits between the Parties pursuant to <u>Section 3.5</u>, under this Agreement during the preceding month and the amounts due to Seller from Buyer therefor. Billing and payment will be based on Scheduled hourly quantities. On or before five (5) days after receipt of Seller's statement or if such day is not a Business Day, the immediately following Business Day, Buyer shall render, by wire transfer, the amount set forth on such statement to the payment address provided in <u>Exhibit "A"</u>. Overdue payments shall accrue interest from, and including, the due date to, but excluding, the date of payment at the Interest Rate. If



Buyer, in good faith, disputes a statement, Buyer shall provide a written explanation of the basis for the dispute and pay the portion of such statement conceded to be correct no later than the due date. If any amount disputed by Buyer is determined to be due to Seller, it shall be paid within ten days of such determination, along with interest accrued at the Interest Rate until the date paid.

- **Netting/Setoff**. If Buyer and Seller are each required to pay an amount in the same month, then such amounts with respect to each Party may be aggregated and the Parties may discharge their obligations to pay through netting, in which case the Patty, if any, owing the greater aggregate amount may pay to the other Party the difference between the amounts owed. Each Party reserves to itself all rights, **setoffs**, counterclaims and other remedies and defenses consistent with <u>Section 5</u> (to the extent not expressly herein waived or denied) which such Party has or may be entitled to arising from or out of this Agreement. All outstanding Transactions and the obligations to make payment in connection therewith or under this Agreement or any other agreement between the Parties may be offset against each other, set off or recouped therefrom.
- **6.3.** Audit. Each Party (and its representative(s)) has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. If requested, a Party shall provide to the other Party statements evidencing the quantities of Energy delivered at the Delivery Point. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be promptly made and shall bear interest calculated at the Interest Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of two years from the rendition thereof; and provided further that this agreement will survive any termination of the Agreement for a period of two years from the date of such termination for the purpose of such statement and payment objections.

SECTION 7. TAXES

7.1. Taxes The Contract Price shall include full reimbursement for, and Seller is liable for and shall pay, or cause to be paid, or reimburse Buyer if Buyer has paid, all Taxes applicable to a Transaction arising prior to the Delivery Point. If Buyer is required to remit such Tax, the amount shall be deducted from any sums due to Seller. Seller shall indemnify, defend and hold harmless Buyer from any Claims for such Taxes. The Contract Price does not include reimbursement for, and Buyer is liable for and shall pay, cause to be paid, or reimburse Seller if Seller has paid, all Taxes applicable to a Transaction arising at and from the Delivery Point, including any Taxes imposed or collected by a taxing authority with jurisdiction over Buyer. Buyer shall indemnify, defend and hold harmless Seller from any Claims for such Taxes. Either Party, upon written request of the other, shall provide a certificate of exemption or other reasonably satisfactory evidence of exemption if either Party is exempt from taxes, and shall use reasonable efforts to obtain and cooperate with obtaining any exemption from or reduction of any Tax. Each Party shall use reasonable efforts to administer this Agreement and implement the provisions in accordance with the intent to minimize Taxes.

[7.2. <u>New' Taxes</u>.

- (a) Notwithstanding any other provision of this Agreement to the contrary, if (i) a New Tax is imposed <u>and</u> (ii) Buyer or Seller would be responsible for such New Tax <u>and</u> (iii) such New Tax is (as a result of laws, regulations and applicable contracts of Buyer in effect as of the effective date of the New Tax) of the type that Buyer can pass directly through to, or be reimbursed by, another person or entity, Buyer shall pay or cause to be paid, or reimburse Seller if Seller has paid, all such New Taxes and Buyer shall indemnify, defend and hold harmless Seller from any Claims for such New Taxes.
- (b) If (i) a New Tax occurs <u>and</u> (ii) Buyer or Seller would be responsible for paying such New Tax <u>and</u> (iii) Paragraph (a) does not apply, the Party responsible for the New Tax ("Affected Party") shall be entitled to declare an Early Termination Date with respect to those Transactions affected by the New Tax ("Affected Transactions") in accordance with the provisions of this Agreement subject to the following conditions: (a) the Affected Party must give the other Party ("Non-Affected Party") at least thirty (30)



days prior written notice (the "Agreement Period") of its intent to declare an Early Termination Date (which notice shall be given no later than ninety (90) days after the later of the enactment or effective date of the relevant New Tax), and prior to the proposed Early Termination Date, Buyer and Seller shall attempt to reach a mutual agreement as to the sharing of the New Tax, (b) if a mutual sharing agreement is not reached, the Non-Affected Party shall have the right, but not the obligation, upon written notice to the Affected Party within the Agreement Period, to pay the New Tax for any continuous period it so elects on a month to month basis, and in such case the Affected Party shall not have the right during such continuous period to declare the Early Termination Date on the basis of the New Tax, (c) should the Non-Affected Party at its election agree to pay the New Tax on a month to month basis, then upon 30 days prior written notice to the Affected Party of its election to cease payment of such New Tax, the Affected Party shall then be liable for the payment of the New Tax and the Parties shall again be subject to this Section 7.2 as if the New Tax had an effective date as of the date the Non-Affected Party ceases payment of such New Tax, (d) if a mutual sharing agreement is not reached and the Non-Affected Party does not elect to pay the New Tax for any period of time within the Agreement Period, the Early Termination Date shall take effect and all Affected Transactions must be terminated and be subject to the same Early Termination Date, (e) the Early Termination Date shall be effected as if an Event of Default had occurred; provided, both Seller and Buyer shall calculate in a commercially reasonable manner their net Gain (amount of Gain after netting Losses and Costs) or net Loss (amount of Losses and Costs after netting Gains) resulting from the termination of all Affected Transactions as if they each were a Notifying Party; and provided further, that each Party's Gains and Losses shall be determined without taking into effect the impact of the New Taxes, (f) (i) if both Parties have a net Gain, the party with the greater net Gain shall pay to the other party fifty percent (50%) of the difference between the two (2) net Gains; (ii) if both Parties have a net Loss, the party with the lesser net Loss shall pay to the other party fifty percent (50%) of the absolute value of the difference between the two (2) net Losses; and (iii) if one party shall have a net Gain and the other party shall have a net Loss, the party with the net Gain shall pay to the other party fifty percent (50%) of the sum of the absolute value of the net Gain and the absolute value of the net Loss and (g) such payment shall be payable as provided in Section 4.2 and its calculation shall be subject to arbitration in accordance with the procedures set forth in Exhibit "D". Prior to and including the initial Agreement Period invoked under this Section 7.2, New Taxes shall be allocated as if they were Taxes as provided in Section 7.1. The intent of this Section 7.2 is to leave neither party with an unfair burden as a result of New Taxes.]

, SECTION 8. MISCELLANEOUS

8.1. Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party; provided, however, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements, (ii) transfer or assign this Agreement to an Affiliate of such Party, or (iii) transfer or assign this Agreement to any person or entity succeeding to all or substantially all of the assets of such Party; provided, however, that in each such case, any such assignee shall agree to in writing be bound by the terms and conditions hereof.

8.2. Financial Information. If requested by Counter-party, EPMI shall deliver (i) with	hin 120 days following
the end of each fiscal year, a copy of the annual report of Enron Corp. containing audited	d consolidated financial
statements for such fiscal year certified by independent certified public accountants and (ii) within 60 days after
the end of each of its first three fiscal quarters of each fiscal year, a copy of the quarterly	y report of Enron Corp.
containing unaudited consolidated financial statements for such fiscal quarter. If requested	by EPMI, Counterparty
or its Guarantor shall deliver (i) within 120 days following the end of each fiscal year; a co	opy of the annual report
of containing audited consolidated financial statements for such	fiscal year certified by
independent certified public accountants and (ii) within 60 days after the end of each	of its first three fiscal
quarters of each fiscal year, a copy of the quarterly report of	_ containing unaudited
consolidated financial statements for such fiscal quarter. In all cases the statements shall	be for the most recent



accounting period and prepared in accordance with GAAP or such other principles then in effect; provided, should any such statements not be available timely due to a delay in preparation or certification, such delay shall not be considered a default so long as such Party diligently pursues the preparation, certification and delivery of the statements.

- 8 . <u>Notices</u>, All notices, requests, statements or payments shall be made as specified in <u>Exhibit "A"</u>. Notices required to be in writing shall be delivered by letter, facsimile or other documentary **form**. Notice by facsimile or hand delivery shall be deemed to have been received by the close of the Business Day on which it was transmitted or hand delivered (unless transmitted or hand delivered after close in which case it shall be deemed received at the close of the next Business Day). Notice by overnight mail or courier shall be deemed to have been received two Business Days after it was sent. A Party may change its addresses by providing notice of same in accordance herewith.
- **8.4.** Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW.
- 8.5. Winding Up Arrangements. All indemnity and audit rights shall survive the' termination of this Agreement. All obligations provided in this Agreement shall remain in effect for the purpose of complying herewith.
- 8.6. General. This Master Agreement, the Exhibits and Appendices hereto, if any, and each Transaction, constitute the entire agreement between the Parties relating to the subject matter contemplated by this Agreement. No amendment or modification to this Master Agreement shall be enforceable unless reduced to writing and executed by both Parties. [The conduct of the Parties in accordance with the Transaction Procedures shall evidence a course of dealing and a course of performance accepted by the Parties in furtherance of this Agreement and all Transactions entered into by the Parties.] This Master Agreement shall not impart any rights enforceable by any third-party other than a permitted successor or assignee bound to this Agreement. No waiver by a Party of any default by the other Party shall be construed as a waiver of any other default. Nothing in this Master Agreement shall be construed to create a partnership or joint venture between the Parties. Any provision declared or rendered unlawful by any applicable court of law or regulatory agency or deemed unlawful because of a statutory change will not otherwise affect the remaining lawful obligations that arise under this Agreement. The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation. The headings used herein are for convenience and reference purposes only.

The Parties have executed this Master Agreement in multiple counterparts to be construed as one effective as of the Effective Date.

ENRON POWER MARKETING, INC.

3y:	
Name:	
Citle:	
COUNTERPARTY]	
By:	
Name:	_
Pitle:	



APPENDIX "1" - DEFINITIONS to the MASTER ENERGY PURCHASE AND SALE AGREEMENT

All references to Articles and Sections are to those set forth in this Agreement. Reference to any document means such document as amended from time to time and reference to any Party includes any permitted successor or assignee thereof. The following definitions and any terms defined internally in this Agreement shall apply to this Agreement and all notices and communications made pursuant to this Agreement.

"Affiliate" means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or-is under common control with, such person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

"Bankruptcy Proceeding" means with respect to a Party or entity, such Party or entity (i) makes an assignment or any general arrangement for the benefit of creditors, (ii) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy or similar law for the protection of creditors, or has such petition filed against it and such petition is not withdrawn or dismissed for 30 days after such filing, (iii) otherwise becomes bankrupt or insolvent (however evidenced) or (iv) is unable to pay its debts as they fall due.

"<u>Business Day</u>" means a day on which Federal Reserve member banks in New York City are open for business; and a Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for each Party's principal place of business.

"<u>Buver</u>" means the Party to a Transaction who is obligated to purchase and receive, or cause to be received, Energy during a Period of Delivery.

"<u>Claims</u>" means all claims or actions, threatened or filed and whether groundless, false or <u>fraudulent</u>, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses, attorneys' fees and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination of this Agreement.

"Confirmation" means a written notice confirming the specific terms of a Transaction which may be in any form adequate at law; an example of a Confinmation which may be utilized hereunder is shown in "Exhibit B-l".

"<u>Contract Price</u>" means the price in \$U.S. per MWh (unless otherwise provided for) to be paid by Buyer to Seller for the purchase of Energy, including the Energy Price, Demand Charges, Transmission Charges and any other charges, if any, pursuant to a Transaction.

"Contract Quantity" means that quantity of Energy that Seller agrees to sell and deliver, or cause to be delivered, to Buyer, and that Buyer agrees to purchase and receive, or cause to be received, from Seller, pursuant to the terms of a Transaction,

"Costs" shall have the meaning defined in Section 4.2(b)(i).

"Delivery Point" means the agreed point of delivery and receipt of Energy pursuant to a Transaction.

"Demand *Charges*" mean the amount, if any, to be paid by Buyer to Seller for capacity as agreed to by the Parties in a Transaction.

"Energy" means Merchantable Energy expressed in megawatt hours (MWh) or capacity to the extent designated in the Confirmation.

"Energy Price" means the price in \$U.S. (unless otherwise provided for) per MWh to be paid by Buyer to Seller for Energy in a Transaction [(excluding Demand Charges and Transmission Charges, if any)].



"<u>Equitable Defenses</u>" means any bankruptcy, insolvency, reorganization and other laws affecting creditor's rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

"Event of Default" shall have the meaning defined in Section 4.1.

"<u>Firm</u>" means, with respect to a Transaction, that the only excuse for the failure to deliver Energy by Seller or the failure to receive Energy by the Buyer pursuant to a Transaction is Force Majeure or the other Party's non-performance.

"Force Majeure" means (with respect to Firm Transactions) an event not anticipated as of the Effective Date, which is not within the reasonable control of the Party (or in the case of third party obligations or facilities, the third party) claiming suspension (the "Claiming Party"), and which by the exercise of due diligence the Claiming Party, or third party, is unable to overcome or obtain or cause to be obtained a commercially reasonable substitute therefor. Force Majeure may include, but is not restricted to: acts of God; fire; civil disturbance; labor dispute; labor or material shortage; sabotage; action or restraint by court order or public or governmental authority (so long as the Claiming Party has not applied for or assisted in the application for, and has opposed where and to the extent reasonable, such government action); provided, that neither (i) the loss of Buyer's markets nor Buyer's inability economically to use or resell Energy purchased hereunder nor (ii) Seller's ability to sell Energy to a market at a more advantageous price, shall constitute an event of Force Majeure.

"GAAP" means generally accepted accounting principles, consistently applied.

"Gains" shall have the meaning defined in Section 4.2(b)(ii).

"Guarantor" means, as to EPMI, Enron Corp., and as to Counterparty, _____

"Interest Rate" means, foi any date, two percent over the per annum rate of interest equal to the prime lending rate as may from time to time be published in the Wall Street Journal under "Money Rates"; provided, the Interest Rate shall never exceed the maximum lawful rate permitted by applicable law.

"<u>Law</u>" means any law, rule, regulation, order, writ, judgment, decree or other legal or regulatory determination by a court, regulatory agency or governmental authority of competent jurisdiction.

"Legal Proceedings" means any suits, proceedings, judgments, rulings or orders by or before any court or any governmental authority.

'Losses' shall have the meaning defined in Section 4.2(b)(iii).

"Material Adverse Change" Definition pending COUNTERPARTY credit review by Enron.

"<u>Merchantable Energy</u>" means electric energy of the character commonly known as three-phase, sixty-hertz electric energy that is delivered at the nominal voltage of the Delivery Point.

"<u>New Taxes</u>" means (i) any Taxes enacted and effective after the Effective Date, including, without limitation, that portion of any Taxes or New Taxes that constitutes an increase, or (ii) any law, order, rule or regulation, or interpretation thereof, enacted and effective after the Effective Date resulting in the application of any Taxes to a new or different class of parties.

"Non-Firm" means, with respect to a Transaction, that delivery or receipt of Energy may be interrupted for any reason, without liability by either Party, including, without limitation, price fluctuations.

"<u>Period</u> of <u>Delivery</u>" means the period of time from the date physical delivery of the Energy is to commence to the date physical delivery is to terminate under a Transaction.

"<u>Regulatory Approvals"</u> means all current and future valid and applicable Laws, orders, statutes, and regulations of courts or regulatory bodies (state or federal) having jurisdiction over a Party or any Transaction.

"Replacement Price" shall have the meaning defined in Section 3.5(a).



"Sales *Price*" shall have the meaning defined in <u>Section 3.5(b)</u>.

"<u>Scheduling</u>" or "<u>Schedule</u>" means the acts of Seller, Buyer and/or their designated representatives, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other the quantity and type of Energy to be delivered hourly on any given day or days during the Period of Delivery at a specified Delivery Point.

"Seller" means the Party to a Transaction who is obligated to sell and deliver or cause to be delivered Energy during a Period of Delivery.

"<u>Stranded Costs</u>" means any charges or costs that are assessed or levied by any entity, including local, state or federal regulatory or taxing authorities or any Transmission Providers, in order to recoup the expenses and liabilities associated with stranded investments and that would affect an ongoing Transaction, either directly or indirectly; provided, -however, such charges or costs must be uniformly applied in a nondiscriminatory manner and applicable to all similarly situated parties.

"<u>Taxes</u>" means any or all ad valorem, property, occupation, severance, generation, first use, conservation, Btu or energy, transmission, utility, gross receipts, privilege, sales, use, consumption, excise, lease; transaction, and other taxes or New Taxes, governmental charges, licenses, fees, permits and assessments, or increases therein, other than taxes based on net income or net worth.

"Transaction" means a particular transaction agreed to by the Parties relating to the purchase and sale of Energy pursuant to this Master Agreement.

"<u>Transaction Agreement</u>" means a written agreement executed by the Parties to form and effectuate a Transaction which shall be substantially in the form of <u>Exhibit "B-2"</u>.

"<u>Transmission Charges</u>" means the amount, if any, to be paid by Buyer to Seller for transmission services as agreed to by the Parties in a Transaction.



"<u>Transmission Providers</u>" means the entity or entities transmitting Energy on behalf of Seller or Buyer [(but not including Buyer or Seller)] to or from the Delivery Point in a particular Transaction.

EXHIBIT "A" to the MASTER ENERGY PURCHASE AND SALE AGREEMENT

NOTICES AND PAYMENT

'PAYMENTS:

T7T TATT.

NOTICES & CORRESPONDENCE:

Enron Power Marketing, Inc. P. 0. Box 4428 Houston, Texas 77210-4428 Attn.: Power Contract Documentation Manager FAX #: (7 13) 646-2443	NationsBank of Texas-Dallas for: Enron Power Marketing, Inc. ABA Routing # 111000012 Account #375 046 9312 Confirmation: Enron Power Marketing, Inc. Credit and Collections
	(7 13) 853-5667
INVOICES: Enron Power Marketing, Inc.	(, 15) 655 5667
1400 Smith Street	
P. 0. Box 4428	
Houston, Texas 77210-4428	
Attn.: Power Contract Settlements Manager	
Counterparty:	
NOTICES & CORRESPONDENCE:	PAYMENTS:
	ABA No.:
	Account No.:
Attn.:	Confirmation:
FAX No.: ()	Phone No.: ()
Phone No.: ()	
BRIOICEC	
<u>INVOICES</u> :	
Attn.:	
FAX No.: ()	
Phone No.: ()	

or to such other address as Counterparty or EPMI shall from time to time designate by letter properly addressed.

EXHIBIT "B-I" to the MASTER ENERGY PURCHASE AND SALE AGREEMENT

FORM OF CONFIRMATION FOR TRANSACTIONS FORMED UNDER SECTION 1.2(ii)

[DATE]

Attn.:				
		CONFIRMATIO	ON LETTER	
-		\boldsymbol{c}	nron Power Marketing, l	, 19 between Inc. ("EPMI") regarding the
SELLER:				
BUYER:				
COMMODITY:				
ENERGY:				
OTHER (e.g., Capa	acity):			
CONTRACT QUA	NTITY:			
DELIVERY POINT	Γ:			
CONTRACT PRIC ENERGY PR DEMAND C TRANSMISS	RICE:			
NATURE OF TRA FIRM NON-FIRM	ANSACTION:			
PERIOD OF DELI	VERY:			
OTHER:				

and EPMI, and constitutes part of and is subject to all of the terms and provisions of such Master Agreement. Terms used but not defined herein shall have the meanings ascribed to them in this Master Agreement.

Please confirm that the terms stated herein accurately reflect the agreement between you and EPMI by returning an executed copy of this letter by facsimile to EPMI. If you do not return this Confirmation Letter or object to this Confirmation Letter within two Business Days of your receipt of it, you will have accepted and agreed to all of the terms included herein, including the terms and provisions of the Agreement.

"COUNTERPARTY"	"EPMI" EN-RON POWER MARKETING, INC.		
By:	Bv:		
Title:	Tido		
Date:	Date: .		

EXHIBIT "B-2" to the MASTER ENERGY PURCHASE AND SALE AGREEMENT

FORM OF TRANSACTION AGREEMENT FOR TRANSACTIONS FORMED UNDER <u>SECTION 1.2(i)</u>

[DATE]

(LDDDDDGG	
[ADDRESS]	
Attn.:	
TRANSAC	CTION AGREEMENT
	form and effectuate the current proposal between Enron Power Marketing, Inc. ("EPMI") regarding the purchase conditions:
SELLER:	
BUYER:	
COMMODITY:	
ENERGY:	
OTHER (e.g., Capacity):	
CONTRACT QUANTITY:	
DELIVERY POINT:	
CONTRACT PRICE: ENERGY PRICE: DEMAND CHARGES: TRANSMISSION CHARGES:	
NATURE OF TRANSACTION: FIRM NON-FIRM	
PERIOD OF DELIVERY:	
OTHER:	
This Transaction Agreement is being pro Purchase and Sale Agreement dated	vided pursuant to and in accordance with the Master Energy

and EPMI, and constitutes part of and is subject to Terms used but not defined herein shall have the mean	all of the terms and provisions of such Master Agreement. nings ascribed to them in this Master Agreement.
who has the authority to cause Counterparty to enter	nd return an executed copy to EPMI no later than a.m. on ion should reflect the appropriate party in your organization er into this Transaction. In the event Counter-party fails to the Notification Time or alters the terms of this Transaction n pursuant to' this Transaction Agreement.
"COUNTERPARTY"	"EPMI" ENRON POWER MARKETING, INC.
By:	By: Title: Date:

EXHIBIT "C-2"

to the

MASTER ENERGY PURCHASE AND SALE AGREEMENT

COUNTERPARTY FORM OF GUARANTEE AGREEMENT

Guarantee Agreement
This Guarantee Agreement (this "Guarantee"), dated-as of, 1997, is made and entered inro by, acorporation ("Guarantor").
WITNESSETH:
WHEREAS, (the "Company") will enter into a Master Energy Purchase and Sale Agreement (the "Agreement") effective as of the date of this Guarantee with Enron Power Marketing, Inc. ("Counterparty") pursuant to which Company and Counterparty may enter into transactions related to the purchase and sale of energy; and
WHEREAS, Guarantor will directly or indirectly benefit from the Agreement.
NOW THEREFORE, in consideration of Counterparty entering into the Agreement, Guarantor hereby covenants and agrees as follows:
1. <u>GUARANTY.</u> Subject to the provisions hereof, Guarantor hereby irrevocably and unconditionally guarantees the timely payment when due of the obligations of Company (the "Obligations") to Counterparty in accordance with the Agreement. To the extent that Company shall fail to pay any Obligations, Guarantor shall promptly pay to Counterparty the amount due. This Guarantee shall constitute a guarantee of payment and not of collection. The liability of Guarantor under the Guarantee shall be subject to the following:
(a) Guarantor's liability hereunder shall be and is specifically limited to payments expressly required to be made in accordance with the Agreement (even if such payments are deemed to be damages) and, except to the extent specifically provided in the Agreement, in no event shall Guarantor be subject hereunder to consequential, exemplary, equitable, loss of profits, punitive, tort, or any other damages, costs, or attorney's fees.
(b) The aggregate amount covered by this Guarantee shall not exceed Million U.S. Dollars (\$).
2. <u>DEMANDS AND NOTICE</u> . If Company fails or refuses to pay any Obligations, Counterparty shall notify Company in writing of the manner in which Company has failed to pay and demand that payment be made by Company. If Company's failure or refusal to pay continues for a period of fifteen (15) days after the date of Counterparty's notice to Company, and Counterparty has elected to exercise its rights under this Guarantee, Counterparty shall make a demand upon Guarantor (hereinafter referred to as a "Payment Demand"). A Payment Demand shall be in writing and shall reasonably and briefly specify in what manner and what amount Company has failed to pay and an explanation of why such payment is due, with a specific statement that Counterparty is calling upon Guarantor to pay under this Guarantee. A Payment Demand satisfying the foregoing requirements shall be deemed sufficient notice to Guarantor that it must pay the Obligations. A single written Payment Demand shall be

3. <u>REPRESENTATIONS AND WARRANTIES.</u> Guarantor represents and warrants that:



effective as to any specific default during the continuance of such default, until Company or Guarantor has cured such default, and additional written demands concerning such default shall not be required until such default is cured.

(a)	it is a corporati	on duly organized	d and validly exist	ng under the laws of	of the State of
` '	•		•	•	provisions of the Guarantee;

- (b) no authorization, approval, consent or order of, or registration or filing with, any court or other governmental body having jurisdiction over Guarantor is required on the part of Guarantor for the execution and delivery of this Guarantee; and
- (c) this Guarantee constitutes a valid and legally binding agreement of Guarantor, except as the enforceability of this Guarantee may be limited by the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity.
- 4. <u>SETOFFS AND COUNTERCLAIMS</u>. Without limiting Guarantor's own defenses and rights hereunder, Guarantor reserves to itself all rights, setoffs, counterclaims and other defenses to which Company or any other affiliate of Guarantor is or may be entitled to arising from or out of the Agreement or otherwise, except for defenses arising out of the bankruptcy, insolvency, dissolution or liquidation of Company.
- 5. <u>AMENDMENT OF GUARANTY</u>. No term or provision of this Guarantee shall be amended, modified, altered, waived, or supplemented except in a writing signed by the parties hereto.
- 6. <u>WAIVERS</u>. Guarantor hereby waives (a) notice of acceptance of this Guarantee; (b) presentment and demand concerning the liabilities of Guarantor, except as expressly hereinabove set forth; and (c) any right to require that any action or proceeding be brought against Company or any other person, or except as expressly hereinabove set forth, to require that Counterparty seek enforcement of any performance against Company or any other person, prior to any action against Guarantor under the terms hereof.

Except as to applicable statutes of limitation, no delay of Counterparty in the exercise of, or failure to exercise, any rights hereunder shall operate as a waiver of such rights, a waiver of any other rights or a release of Guarantor from any obligations hereunder.

Guarantor consents to the renewal, compromise, extension, acceleration or other changes in the time of payment of or other changes in the terms of the Obligations, or any part thereof or any changes or modifications to the terms of the Agreement.

Guarantor may terminate this Guarantee by providing written notice of such termination to Counterparty and upon the effectiveness of such termination, Guarantor shall have no further liability hereunder, except as provided in the last sentence of this paragraph. No such termination shall be effective until five (5) business days after receipt by Counterparty of such termination notice. No such termination shall affect Guarantor's liability with respect to any Transaction (as defined in the Agreement) entered into prior to the time the termination is effective, which Transaction shall remain guaranteed pursuant to the terms of this Guarantee.

7. <u>NOTICE.</u> Any Payment Demand, notice, request, instruction, correspondence or other document to be given hereunder by any party to another (herein collectively called "Notice") shall be in writing and delivered personally or mailed by certified mail, postage prepaid and return receipt requested, or by telegram or telecopier, as follows:

To Counterparty:	Enron Power Marketing, Inc. P. 0. Box 4428 Houston, Texas 772104428 Attn.: Power Contract Documentation Manage Fax No. (7 13) 646-2443		
To Guarantor:	Attn.:Fax No.:		



Notice given by personal delivery or mail shall be effective upon actual receipt. Notice given by telegram or telecopier shall be effective upon actual receipt if received during the recipient's normal business hours, or at the beginning of the recipient's next business day after receipt if not received during the recipient's normal business hours. All Notices by telegram or telecopier shall be confirmed promptly after transmission in writing by certified mail or personal delivery. Any party may change any address to which Notice is to be given to it by giving notice as provided above of such change of address.

8. MISCELLANEOUS. THIS GUARANTEE SHALL IN ALL RESPECTS BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS. This Guarantee shall be binding upon Guarantor, its successors and assigns and inure to the benefit of and be enforceable by Counterparty, its successors and assigns. The Guarantee embodies the entire agreement and understanding between Guarantor and Counterparty and supersedes all prior agreements and understandings relating to the subject matter hereof. The headings in this Guarantee are for purposes of reference only, and shall not affect the meaning hereof. This Guarantee may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

EXECUTED as of the day and year first above written.

By:		
By: Name:		
Title:		
11110.		





EXHIBIT "D" to the MASTER ENERGY PURCHASE AND SALE AGREEMENT

ARBITRATION

ANY DISPUTE OR NEED OF INTERPRETATION ARISING OUT OF THIS AGREEMENT PERTAINING TO THE CALCULATION OF A TERMINATION PAYMENT OR A PAYMENT REQUIRED PURSUANT TO SECTION 3.5 SHALL BE SUBMITTED TO BINDING ARBITRATION BY ONE ARBITRATOR WHO HAS NOT PREVIOUSLY BEEN EMPLOYED BY EITHER PARTY, AND DOES NOT HAVE A DIRECT OR INDIRECT INTEREST IN EITHER PARTY OR THE SUBJECT MATTER OF THE ARBITRATION. SUCH ARBITRATOR SHALL EITHER BE AS MUTUALLY AGREED BY THE PARTIES WITHIN THIRTY (30) DAYS AFTER WRITTEN NOTICE FROM EITHER PARTY REQUESTING ARBITRATION, OR FAILING AGREEMENT, SHALL BE SELECTED UNDER THE EXPEDITED RULES OF THE AMERICAN ARBITRATION ASSOCIATION (THE "AAA"). SUCH ARBITRATION SHALL BE HELD IN ALTERNATING LOCATIONS OF THE HOME OFFICES OF SELLER AND BUYER, COMMENCING WITH SELLERS OFFICE. THE RULES OF THE AAA SHALL APPLY TO THE EXTENT NOT INCONSISTENT WITH THE RULES HEREIN SPECIFIED. EITHER PARTY MAY INITIATE ARBITRATION BY WRITTEN NOTICE TO THE OTHER PARTY AND THE ARBITRATION SHALL BE CONDUCTED ACCORDING TO THE FOLLOWING: (a) NOT LATER THAN SEVEN (7) DAYS PRIOR TO THE HEARING DATE SET BY THE ARBITRATOR EACH PARTY SHALL SUBMIT A BRIEF WITH A SINGLE PROPOSAL FOR SETTLEMENT, (b) THE HEARING SHALL BE CONDUCTED ON A CONFIDENTIAL BASIS WITHOUT CONTINUANCE OR ADJOURNMENT, (c) THE ARBITRATOR SHALL BE LIMITED TO SELECTING ONLY ONE OF THE TWO PROPOSALS SUBMITTED BY THE PARTIES, (d) EACH PARTY SHALL DIVIDE EQUALLY THE COST OF THE ARBITRATOR AND THE HEARING AND EACH PARTY SHALL BE RESPONSIBLE FOR ITS OWN EXPENSES AND THOSE OF ITS COUNSEL AND REPRESENTATIVES AND (e) EVIDENCE CONCERNING THE FINANCIAL POSITION OR ORGANIZATIONAL MARE-UP OF. THE PARTIES, ANY OFFER MADE OR THE DETAILS OF ANY NEGOTIATION PRIOR TO ARBITRATION AND THE COST TO THE PARTIES OF THEIR REPRESENTATIVES AND COUNSEL SHALL NOT BE ADMISSIBLE.

EACH PARTY UNDERSTANDS THAT THIS AGREEMENT CONTAINS AN AGREEMENT TO ARBITRATE WITH RESPECT TO ANY DISPUTE OR NEED OF INTERPRETATION PERTAINING TO THE CALCULATION OF A TERMINATION PAYMENT OR A PAYMENT REQUIRED PURSUANT TO <u>SECTION 3.5</u> OF THIS AGREEMENT. AFTER SIGNING THIS AGREEMENT, EACH PARTY UNDERSTANDS THAT IT WILL NOT BE ABLE TO BRING A LAWSUIT CONCERNING ANY DISPUTE THAT MAY ARISE WHICH IS COVERED BY THE ARBITRATION PROVISION. INSTEAD, EACH PARTY AGREES TO SUBMIT ANY SUCH DISPUTE TO AN IMPARTIAL ARBITRATOR.





ATTACHMENT C

FORESIGHT ENERGY COMPANY - REVISED POWER PURCHASE PROPOSAL

ENERGY

COMPANY

· April 20, 1998

Annette C. Guy Brown, Vence and Associates, Inc. 120 Montgomery Street, Suite 1000 San Francisco, CA 94104

Re: Continued discussions on BVA Job No. 95003.01, 97052, 98003

Dear Anne:

This letter is to continue our discussions on pricing for energy from landfill gas projects (the "Projects") located in California, which are under development by your clients. We have reviewed our supply acquisition strategy with Enron Capital and Trade ("ECT"), and have determined our willingness to negotiate purchase agreements at this time. In general, we are prepared to discuss fixed pricing for up to 2 MW of supply, with the remainder to be determined by demand in the green market. We understand the challenge of developing a project as a true merchant plant, and so will offer a floor based on the commodity value of the energy.

Please note that the following proposal assumes successful and timely negotiate of agreements. Our interest in purchasing energy at prices above the commodity value is driven by our current balance of supply and demand contracts for green power, which changes over time. This letter does not constitute an offer to buy, but sets forth indicative terms and pricing for our continued discussions.

Fixed Pricing

For the first 2 MW of supply, we can accommodate your pricing requirement of \$33.10/MWh fixed for a five-year term. We are open to a term of up to ten years (pending validation of appropriate gas resources), but would require a different pricing structure for the remaining five. We suggest a conversion to the structure described below.

Market-based Pricing

For the remainder of the megawatts, we would structure a contract designed to capture value from three sources: scheduling coordination services, commodity power marketing, and green power marketing.

(1) <u>Scheduling Coordination Services.</u> ECT is prepared to offer scheduling coordination services to the Projects for all energy deliveries. Depending upon operational flexibility, the Projects may earn additional revenues for adjustments



to energy deliveries based on real-time market needs. While such operational flexibility is probably limited for a landfill gas project, we are ready to pursue these opportunities to the fullest extent possible to maximize the value of your assets.

- (2) Commodity Energy Purchases. ECT is prepared to purchase all power generated by the Projects at the Power Exchange rate., Given that ECT has a market view of the future rates on the PX, and is willing to sign agreements based on that view, we can discuss a price collar relative to the commodity value of the energy. For energy deliveries in 1998, an indicative collar would have a floor of \$22/MWh and a cap of \$27/MWh. This establishes the range of commodity value only: the green premium would be additional. Thus, while the Projects would cap potential upside from commodity prices, they would retain the opportunity to fully realize values from development of the green market.
- (3) Green Market Premium. The parties would agree at the time of plant start-up (and from time to time thereafter) on a green premium to be earned by the Projects, This might include a percent of CEC funds received by ECT from the customer credits, or simply be a flat \$/MWh premium above the PX. The premium would be driven by ECT's position as a supplier to green power resellers. If the Projects felt that ECT was not creating the most value for them, they would be free to sell their energy to another purchaser. ECT would still offer scheduling coordination services for a nominal fee (\$.25/MWh).

We believe this proposed structure offers significant value to the Projects in terms of downside protection, assured services and marketing flexibility. We hope it is of sufficient merit to continue our discussions, and look forward to hearing your response.

Sincerely,

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Kathryn W. Lochart

Lally Inhat

CFO and VP, Business Development

CC: Eric Miller - Foresight Energy

Paul Koehler - ECT

ATTACHMENT D

INDEPENDENT ASSESSMENT OF BUENA VISTA LANDFILL'S PRODUCTION TAX CREDIT ELIGIBILITY



MEMORANDUM

McGUIREWOODS
BATTLE & BOOTHELLE

TO: **Thomas D. Vence,** P.E.

FROM: Richard H. Sedgley

CONFIDENTIAL

DATE: April 1, 1998

RE: Santa Cruz County

Landfill Gas-to-Energy Projects

The following is our advice concerning the potential availability to Santa Cruz County of financial benefits from Section 29 of the U.S. Tax Code, relating to landfill gas produced at the Buena Vista and Watsonville Landfills. For the reasons discussed below, such benefits should be available for gas produced at Buena Vista, but not Watsonville. Although there are tax issues that potential investors are likely to raise, based on the information we have been provided, it appears that 'all or much of the gas at Buena Vista would qualify for Section 29 tax credits in a properly structured transaction, and that the total value of tax credits (unadjusted for present value) could be as much as approximately \$2,900,000.

INTRODUCTION

We understand that the County owns and operates the Buena Vista Landfill which, with a properly developed landfill gas production and collection system, is expected to produce approximately 1,000 scfm. We also understand that the Watsonville Landfill, owned and operated by another municipality, is nearby, and that it may be practical to pipe landfill gas to supplement a Buena Vista Landfill power project. Brown, Vence & Associates ("BVA") is evaluating for the County the viability of landfill gas-based power projects.

As you know, Section 29 of the Tax Code provides for substantial tax credits for landfill gas and certain other alternative energy projects. The value of the credits is currently approximately \$1.073 per MMBtu. Section 29, tax credits are available to a taxpayer with an ownership interest in landfill gas production facilities, on the first sale of such gas to an unrelated party. For this purpose, the sale of gas must involve the utilization of the gas by the purchaser for energy production or for another economically viable purpose.

Depending on the date on which a landfill gas production system is "placed in service" (a term of art for tax purposes), tax credits are available for the gas sold through either the year 2002 or 2007. To the extent that any portions of a landfill gas production system (but not including flare stations, electrical generation capacity, or other generation-side assets) were financed through municipal bonds or other tax-exempt financing, the availability of the tax



¹ The attachment notes the specific year-to-year gas projections that have been provided for us.

² Based an credits applied against 1998 income, and assuming a 1998 CPI increase of 2%.

credits is reduced in proportion to the fraction of the total' cast of the **landfill** gas production facilities financed in that manner.

Because municipal landfills typically produce substantial volumes of relatively bigh quality gas, municipal landfills are frequently involved in tax-advantaged energy transactions. However, because a municipality is not a taxpayer, the municipality is not able to directly take advantage of Section 29 tax credits. Rather, a municipality must enter into a transaction with a private entity which wishes to utilize the tax credits. Such transactions are at this time **well** developed, and can be structured to provide for relatively minimal risk to the municipality in comparison with the financial benefits.

AVAILABILITY OF TAX CREDITS

We understand from the BVA analysis that municipal bonds or other tax-free financing have not been used to fund the landfill gas production facilities at Buena Vista or Watsonville. BVA has outlined the approximate dates and costs of incremental portions of the gas productian facilities at each landfill. Gas production facilities placed in service prior to January 1, 1993 are eligible far tax credits through 2002³; and facilities placed in service after December 3 I, 1992 and before January 1, 1997 are eligible for credits through 2007. Also, facilities constructed pursuant to binding contractual provisions entered into by a landfill owner or another party by December 3 1, 1996, if constructed and placed in service by June 30, 1998, qualify far credits through 2007.

Buena Vista Landfill

The BVA outline-indicates that landfill gas production facility assets (primarily gas wells) were installed before 1993 at a cast (excluding assets subsequently closed) of approximately \$26,000. The outline also shows that the value of the assets installed after December 3 1, 1992 (not including (1) the new blower and flares or (2) the 17 new 1998 wells) involved expenditures of approximately \$129,000. The outline further reflects that these later assets were installed pursuant to a "master contract" with CH2MHill, functioning as general contractor or construction manager, executed in June 1996, with a "task order" authorizing the construction in December, 1996. We interpret the master contract combined with the task order to constitute a binding contractual commitment by the County to install those assets, and an acceptance by the contractor to complete the installation in accordance with the provisions of the master contract. Accordingly, even though the assets were not installed until 1997, the existence of commitments for such installation by December 3 1, 1996 allows us to consider those assets to represent "qualified" landfill gas production facilities. Based on this, the value of the past- 1992 assets appears to represent approximately 83 % of the assets in place by mid-1 997. Pursuant to existing **IRS** precedents, this substantial percentage will qualify the entire gas production facility (to the extent that it is a fully functioning facility) with a post-1992 "placed in service" date, and gas from the facility will qualify far tax credits through 2007 (with the reservations noted below).



³ Gas production facilities placed in service after December 31, 1979, and prior to January 1, 1993 are eligible for credits through 2002.

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However, there are several issues that an investor will consider before concluding that all the Buena Vista gas qualifies for tax credits through 2007. There is a substantial body of precedent on **Section** 29 issues from IRS Private Letter Rulings, although there is no current precedent that allows us to definitively resolve these particular issues. Nonetheless, we are able to provide our best current view on these issues which, at worst, involve the possible loss of tax credits from portions of the gas, rather than the disqualification of the gas production facilities as a whole. The direction that an investor takes as to each of these issues will depend on the tax opinion it receives from its tax counsel.

1 The New Blower

We note that additional work in 1997 involved the installation of a larger replacement blower and a flare station at a cost of approximately \$360,000. We presume that the installation of the upgraded blower was necessary to produce the volumes of landfill gas necessary to support a viable energy project (or at least to produce 1000 scfm).

For the blower to be considered part of a qualifying 2007 gas production facility, and for the facility as it is currently constituted to itself be considered as qualifying, the blower must have been purchased and installed pursuant to binding contractual commitments in effect by December 31, 1996. The outline notes a September, 1996 purchase order, and contract award in December, 1996, but notes that the contract was not executed until January, 1997. We understand from BVA that the blower itself was purchased by the County in 1996. However, the contract execution date (since it is after the "binding contract" date of December 3 1, 1996) will raise questions from institutional investors. To the extent that the County's contracting procedures can be properly interpreted as involving a binding commitment for blower installation by both the County and contractor, an investor should conclude that the requirement is met. Factors leading to this conclusion may include an irrevocable commitment by the County's governing body or the affected Department to proceed with the installation, a deposit or performance bond from the contractor submitted by December 3 1, 1996, or other provisions evidencing some certainty that the blower would in fact be installed or, at least, that substantial economic penalties would be suffered if installation was not completed.

Presuming that we can establish to an investor's satisfaction that there was a binding contractual commitment for blower installation by December 3 1, 1996, the landfill gas production facility as a whole will qualify for credits through 2007. If the investor is not satisfied as to that issue, we would probably lose the incremental portion of the tax credits attributable to the difference between (gas production from) the old and new blower capacities.

2. 17New 1998 Wells

BVA's outline indicates that 17 new wells were installed in 1998, and we understand that there was no contractual commitment for installation before 1998. A standard tax analysis will disqualify gas produced from these wells as ineligible for tax credits, because they were not installed pursuant to a pre-1997 contractual commitment. However, there are good arguments available that the gas should be eligible based on (I) a natural continuation of the landfill development, and (2) regulatory (or landfill permit) requirements mandating the new wells.



3. Extraction Wells 23 to 3 I

We understand that EW-23 through -3 1 are not yet connected to the common elements of the gas production facilities. Although there is no existing **IRS** precedent holding that the connection of otherwise qualifying (1996-1997 construction) wells incorporates such wells into an otherwise qualifying facility, we believe that (as long as the expense for making the connections is minimal, and is made before July 1, 1998) those wells should result in gas qualifying for tax credits. If **an** investor were to decide that those wells do not qualify, as with the analysis for the new 1998 wells above, the fraction of the gas produced by such **wells** would not count in tax credits calculations. However, even in that case, **the** 'County should be able to connect the wells and productively use the extra gas volumes, without disturbing the **qualification** of the original parts of the gas production facilities.

Although we are not able to predict how an investor's tax counsel will address these issues, we believe that some institutional investors would decline to take some of the tax credits because of the issues. On the other hand, there are **landfill** gas developers who will probably not be concerned with these issues.

Watsonville Landfill

The BVA summary shows landfill gas well installation in 1995 at an approximate cost of \$73,000. It also shows additional well **installation** and placement in service in December, 1997, pursuant to a contract signed in May, 1997. Because the majority of the current gas facility appears not to have been constructed pursuant to a qualifying contract, it does not appear that gas produced at the Watsonville Landfill will qualify for tax credits.

INVESTOR EXPECTATIONS

Based on assumptions described more **fully** below, we estimate **total** tax credits available from gas produced at Buena Vista through 2007 at approximately **\$2,900,000**. This also assumes that the three tax issues addressed above are resolved to the investor's satisfaction.

Different investors who may be brought into the transaction with the County will have markedly different expectations as to the level of benefits they are able to provide to the County, in return for the stream of Section 29 tax credits and other tax benefits (principally depreciation). There are a number of small developers operating nationwide who will enter into these transactions with a relatively low threshold of technical and legal due diligence. For example, for such investors, we would not anticipate substantial concerns over the "binding contract" issue as to the blower at Buena Vista, and accordingly as to the qualifying nature of the gas production facilities at that landfill. However, because these developers are investing in projects that they view as relatively risky (some of which they anticipate ultimately failing on IRS review), the landfill owner's yield is generally no more than 40 percent of the value of the credits, to be paid to the landfill owners over time as credits are generated.



At the other end of the spectrum are a small number of major U.S. institutional investors who routinely invest in large Section 29 transactions for their own portfolio, in order to shelter a fraction of their corporate income. The current market for high quality projects for such investors is approximately 80 percent to 85 percent of the total value of the stream of tax credits to the landfill owner. 'Also, for high quality projects, some of these investors will pay a substantial portion of the total purchase price initially at closing of the transaction. However, because major corporate investors have a higher threshold of legal and technical due diligence, yields at this level appear to be available only when the total amount of tax credits is several times the total available from Buena Vista. To alleviate this problem, we would anticipate bundling Buena Vista with two or three other (unrelated) landfill gas projects, to provide an investor with a total package above its investment threshold. Although the addition of unrelated projects does not entirely alleviate the investor's extra due diligence! efforts and expenses, we anticipate the bundling approach to be sufficient to interest such investors and to bring about for the County a relatively high yield.

Although we are not aware of any substantial continuum of different types of Section 29 investors between the two extremes described, there is some possibility that either type of investor could be brought into a transaction yielding for the County something between the extremes described above. For example, for a high quality project with (for a single landfill) \$3 million in credits, the County may be able to obtain from a small developer a return above the 40 percent quoted. Similarly, if we are not able to bundle Buena Vista with other landfill projects, it may be possible to interest a major corporate investor in the single project, at a lower yield to the County reflecting the investor's decreased level of interest and the relative level of due diligence efforts.

NET YIELD TO THE COUNTY

The attached "Tax Credits Yield Hypothetical" illustrates possible payments to the County based on a range of possible return as a percentage of total credits value. You will note that our analysis is predicated on (I) a closing with an investor by October 1, 1998, (2) gas production at the projected levels, and (3) 50 percent methane concentration. The hypothetical first outlines payments to the County, at three different levels of yield, paid as credits are generated. Next, the hypothetical illustrates a possible substantial payment at closing, along with a reduced stream of payments as credits tie earned. These hypothetical yields are modeled on other current Section-29 landfill transactions. With the transmittal of this memorandum, we are also e-mailing to you the tax credits yield hypothetical in Microsoft Excel format. You may adjust landfill gas flow, percent methane, and return as a percentage of credits value to calculate other hypothetical yields, or we can adjust the hypothetical to reflect a different closing date.

The hypothetical is based on the eligibility for credits of all the gas produced at Buena Vista. This, of course, assumes a positive resolution of the three tax issues discussed under "Availability of Tax Credits" above. It also assumes that most of the gas is productively used, rather than being flared. To the extent that a reasonable percentage of the gas is excess gas or is flared during power production out-of-service periods, an investor should still consider all the gas to be eligible.

CONTRACTUAL ARRANGEMENTS

Tax credits are not sold. Rather, an investor must purchase landfill gas production rights and an ownership interest in the landfill gas production facilities (the network of wells, collectors, headers, blowers, and associated assets) and operate the gas facility as an ongoing business. Typically, the investor will form a special purpose investment entity (a **limited** partnership or limited liability company) to hold those assets, and **will** contract back with the landfill owner to provide, on the investor's behalf, **the hands-on** operations and management services needed to run the gas production facilities on a continuing basis.

In the case of Buena Vista, we anticipate a transaction involving the following principal contractual elements.

Landfill Gas Lease

- Lease by the County to the investment entity of gas exploration and production rights at the landfill, comparable to natural gas exploration and development rights.
- Lease term through, e.g., 2017, or another period representing the anticipated period of gas yield in **commercially useful** volumes.

Gas Production Facilities Conveyance Agreement

- A conveyance ranging from (1) an outright sale with a transfer of title, to (2) a long-term lease, of the landfill gas production facilities.
- Payment to the County would be structured as payment for the acquired assets and gas production rights, and would be based on evaluation of the project including the value to the investor of tax credits and other tax advantages,
- Both parties would typically anticipate the transference of gas facilities and gas production rights back to the landfill owner in 2008 at fair market value, based on an appraisal at that time. However, reliable mechanisms are available to limit fair market value so that the landfill owner would not be substantially at risk for a meaningful out-of-pocket expense to reacquire the gas facilities. Alternatively, some investors will wish to retain ownership for a longer term, and the initial pricing will reflect that factor. For example, the investor may be a power utility or a power marketer who will wish to retain the "green power" in its portfolio.

Operations and Management Agreement

- Providing for continuing operations and management services of the gas production facilities by the landfill owner.
- **O&M** fee to be paid by the investor to the landfill owner.



Gas Sales Agreement

- Agreement by the investor to sell, and by the landfill owner to purchase, landfill gas as produced (a "take or pay" contract) for the **owner's** productive use in energy generation facilities.
- Sale of gas at a price per MMBtu established at'closing, possibly with a CPI-based escalator

Although the tax credits yield hypothetical expresses payments to the landfill owner as a specific number, in reality no such distinct stream of payments occurs. Rather, the yield to the owner is subsumed within the various transaction payments. In effect, the payments for tax credits are represented **by** the purchase price for gas **production** facilities and gas production rights, plus O&M payments, minus the gas purchase payments **made** by the County.

RISKS TO THE COUNTY

A properly structured transaction will present minimal risks to the County. Although an investor will request substantial indemnifications from the landfill owner (to the extent that California law allows a county to give such indemnifications) for environmental matters, in reality, the landfill owner is not assuming any environmental liabilities beyond those liabilities it has anyhow as a matter of state and federal law. Also, the investor will expect strong representations and warranties relating to factual issues affecting landfill gas production facilities "placed in service dates," and relating to the non-use by the owner of tax-exempt funding sources for the gas facilities. However, such facts should be readily ascertainable by the owner. Accordingly, such representations and warranties should not involve substantial risks to the County.

Although we do not view the issue as a substantial risk to the landfill owner, the Potential repurchase of the gas facilities in 2008 or thereafter by the landfill owner is typically the most difficult issue in these transactions. As noted **above**, restraining factors **can** be incorporated within the transaction documentation to substantially reduce the risk to the owner of the necessity to m&e any meaningful out-of-pocket expenditure to reacquire the facilities. Also, continued ownership of the facilities will necessarily be burdened with the obligation for the investor to continue to operate and maintain the facilities to serve the need to control gas migration at and around the landfill; Factors such as this, and a possible relatively low price for continued sale of gas beginning in 2008, are used to minimize the fair market value of the assets.

THE INVESTMENT PROCESS

We have not considered whether a tax-advantaged landfill gas-to-energy transaction by a municipality in California will require a competitive procurement process or some alternative such as competitive negotiation. If such a process is required, we anticipate several additional months for the successful completion of the formal process. However, unless state or county law requires a deposit or bond with proposals with such projects, that process should not add to the **difficulty** of the transaction. In terms of the process, we anticipate the following.

Without A Competitive Solicitation Process

- The County would employ one or more consultants to assist with identification of an investor, and with structuring and closing the transaction.
- The consultant contacts a number of institutional investors to gauge their interest in the transaction.
- Based on potential investors' initial reaction, the consultants would negotiate a preliminary Term Sheet **specifying** the general terms (financial and contractual) upon which both the investor and the County would be willing to proceed. The Term Sheet would provide for a limited exclusivity period in which the County would not actively negotiate with any other potential investor.
- After signature of the Term Sheet, the investor would proceed with its technical and legal due diligence on the project.
- Simultaneous with the due diligence process, the consultant and the investor would develop and negotiate the specific transaction contractual arrangements.
- After the majority, but not all, of the investor's due diligence is completed, the investor and the County would enter into a more formalized commitment to proceed to closing.
- After finalization of due diligence and transaction documentation, the transaction would close.
- At or shortly following closing, any up-front payment to the County would be made. Continuing payments (both to and from the County) would continue on monthly and quarterly bases through 2007.

With A Competitive Procurement Process

If a competitive procurement process if required, we would envision that process proceeding in **its usual fashion to** a decision point, at which time the selected investor **and** the County would proceed as above.

Timing

The process of bringing in an investor **and** closing the transaction can take between one and six months. However, it appears that there is adequate time for the County to proceed with its project, and to close on the transaction at the time (or shortly **before**) the energy production facilities **are** placed **in service**. An investor will not close (at least not if **there** are up-front payments) until energy production facilities are at least planned and financed, with all necessary permits in place.

Transaction Costs

We generally prefer (particularly with municipalities) transactions where each party agrees to bear its own technical and legal transaction costs. We would anticipate that arrangement with a small developer. However, some (but not all) major institutional investors, as a matter of corporate policy, will not sign a Ten-n Sheet without the owner agreeing to pay the



April 17, 1998 Page 9

investor's third party transaction costs, even if the transaction (for some unforeseen reason) does not close. The investor's costs for a project of this size would probably be between \$50,060 and \$75,000.

The landfill owner will also have its own transaction costs for legal and investment assistance. These costs are, of course, in addition to the County's costs for engineering work and for developing the power project (or other productive use of landfill gas). The owner's transaction costs could be handled on either (I) a straight fee basis, or (2) a contingent fee at closing, calculated as a percentage of the **owner's** total tax credits yield. On a straight fee basis, we would estimate legal fees at \$60,000 (for documenting and closing the transaction), and investment advice at \$40,000 (for identifying and negotiating with potential investors, and for detailed financial analysis of the transaction for the owner).

The same consultants may also agree to do the work on a contingent basis, with their fee to be paid at closing and to be based on a percentage of the owner's total yield over time. For a transaction of this size, we would anticipate consultants to expect (cumulatively) a fee of between 7.5 and 9.0 percent. The hypothetical illustrates such possible fees. At 7.5 percent (based on a 60 percent credits yield to the owner) the fee would be approximately \$135,000 for a transaction without up-front payments to the owner, and (based on an 80 percent yield) approximately \$150,000 for a transaction with an up-front payment. Alternative fee arrangements are also possible with, for example, fees based on present value to the owner of the anticipated stream of tax credits payments.



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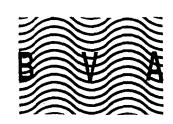


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ATTACHMENT E

PRODUCTION TAX CREDITS - REQUEST FOR PROPOSALS





April 24, 1998

Dear Potential Investor:

Brown, Vence & Associates, Inc. is assisting the County of Santa Cruz in developing a landfill gas-to-electricity project at the Buena Vista Landfill. The County has asked BVA to solicit proposals from potential landfill gas facility investors best qualified to place, structure, and close a landfill gas investment transaction and assist the County in availing of the financial benefits possible under Section 29 of the U.S. Tax Code. We hope you will find this project of interest to your firm, and we look forward to receiving your proposal.

Sincerely.

Thomas D. Vence

Corporate Vice President

Brown, Vence &

Associates, Inc.

Energy and

Waste Management

Engineers

120 Montgomery Street

Suite 1000

San Francisco CA 94104

415/434-0900

415/956-6220 FAX

An Equal Opportunity

. Employer

Printed on

Recycled

Paper

County of Santa **Cruz**Request for Proposals from Landfill Gas Facility Investors

I. **RFP** Purpose

Brown, Vence & Associates, Inc. is assisting the County of Santa Cruz in developing a landfill gas-to-electricity project. Section 29 of the United States Tax Code provides for substantial production tax credits (PTC) for landfill gas, at a value of approximately \$1.073 per MMBtu in 1998. Section 29 tax credits are available to a taxpayer with an ownership interest in landfill gas (LFG) production facilities, on the first sale of such gas to an unrelated party for uses such as energy production or other economically viable purposes. The County has asked BVA to solicit proposals from LFG facility investors.. This RFP is for the purpose of selecting a firm fully qualified and best suited to place, structure, and close an LFG investment transaction and assist the County in availing of the financial benefits possible under Section 29.

The County of Santa Cruz is developing a renewable power plant fueled by LFG from the Buena Vista Landfii. The power plant will use internal combustion engines fueled by LFG over the next twenty years. The output will be between 1.9 and 2.9 MW, requiring 776 to 1,164 standard cubic feet per minute (scfm) of LFG. The power plant is expected to be in place in the first quarter of 1999 and will have two to three engines with an expected minimum availability of 90 %.

Facilities capable of extracting, conveying, and metering the necessary quantity of gas to fuel the two to three engines will be in place by June 30, 1998. Currently, approximately 700 scfm of landfill gas is being flared at Buena Vista. The County is interested in acting as a contractor to handle the operations and management of the gas production facilities on a continuing basis. Municipal bonds or other tax-free financing tools have not been used to fund the landfill gas production facilities at Buena Vista or Watsonville. Attachment B describes the gas collection facility to be placed in service by June 30, 1998. Attachment C shows the gas production expected at the landfill.

Plant construction is contingent upon a number of factors, including the County's success in obtaining renewable energy production incentives through the upcoming New Renewable Resource Account Auction, which will be determined by the California Energy Commission (CEC) in June 1998, as well as **final** approval by the County Board of Supervisors. Upon award **notification** and approval by the County Board of Supervisors, the County will request a more detailed proposal or negotiations with the selected **firm**.

II. Proposal Elements

The County encourages innovative, concise proposals and invites the submission of relevant proposal elements required in this **RFP**. The following elements must be included in the following order:



County of Santa Cruz

Request for Proposals from Landfii Gas Facility Investors

- A. **Proposer's Form:** Attachment A.
- B. **PT** Eligibility: Based on the information provided in Attachments B and C, please provide your assessment for the following:
 - 1. Period of eligibility for **PTC's**.
 - 2. Quantity of gas eligible for sale and PTC's from this gas production facility through the period of eligibility.
 - 3. *Proposer's* estimate of **total** tax credits available from gas produced through the period of eligibility.
- C. Estimated Return to the County: Describe the percentage of the total value of the stream of expected PTC's that the Proposer will return to the County.
- D. <u>Payment Structure</u>: Describe investment option(s) proposed for the County. Include description of applicable payment amounts and payment schedule for each option.
- E. <u>Risks and Due Diligence</u>: Describe potential project risks perceived by the Proposer and explain your due diligence requirements. Define any risks that would be borne by the County. Describe additional information that the County must provide for subsequent negotiations.
- F. <u>Contractual Arrangements</u>: Describe the investment and closing process. Include a description of the applicable leases, agreements, and other contractual elements. Include lengths of proposed leases and agreements.
- **G.** Investor Identification: If Proposer is not anticipated to be the actual investor, describe the process the Proposer will implement to identify a corporate or other investor who will purchase LFG development rights and ownership interests in the **LFG** project. An identification of one or more potential investors may be included.
- H. <u>Sample Agreements (Optional)</u>: Please provide representative examples of standard agreements applicable to the proposed transaction.
- I. **Schedule:** Indicate the schedule the proposed transaction would follow.
- J. Fees: Describe the anticipated transaction costs and fees, including third party fees, and who will be responsible for paying any applicable transaction costs.
- K. <u>Proposer's Organization</u>: Describe Proposer's organization, including structure of organization and number of years in business. Please include resumes of key individuals in organization.



County of Santa Cruz

Request for Proposals from Landfii Gas Facility Investors

- L. **Key Personnel:** Describe the qualifications and experience of principal personnel who would be assigned to coordinate the transaction. Include the availability of such personnel.
- M. Relevant Financial Information: The County requires assurance that the Proposer or the investor group has the financial ability to uphold its proposed obligations. Please explain how Proposer will provide this assurance.
- N. References: List at least three (3) references familiar with the Proposer's relevant experience and abilities. Include contact information.
- O. Representative Project: Describe a business arrangement most closely resembling the proposed agreement, in which Proposer has participated. Include value of tax credits involved, highlights of key terms and conditions, relevant dates and time lines, and reference with contact information (including name and telephone number) from the described arrangement.
- P. Additional information and supplementary elements: Include any other information that Proposer believes may be pertinent to the proposal.

III. Selection Criteria



The criteria used to evaluate proposals will include but is not limited the following:

Estimated return to the County and down side protection Risks involved in transaction Structure of transaction and agreements Range of options presented Experience of Proposer Financial strength and stability of Proposer

IV. Schedule of selection

4/24/98

The following selection schedule is anticipated:

RED release date

5/08/98	Proposal submission deadline
5/01/98	Transcript of inquiries released
4/30/98	Inquiry deadline
7127170	M'A Telease date



County of Santa Cruz

Request for Proposals from Landfill Gas Facility Investors

V. Submission Requirements

Please submit one (1) original and three (3) copies of the proposal clearly marked as "Proposal to Santa Cruz" to Santa Cruz County's consultant, Brown, Vence & Associates, Inc. (BVA). Faxed proposals will not be accepted. Proposals must be received in the offices of BVA by 5 p.m. on May 8, 1998.

Ann Guy

Brown, Vence & Associates, Inc. 120 Montgomery Street, Suite 1000 San Francisco, CA 94104

Proposals may be modified or withdrawn through written or **faxed** notification to BVA prior to submission deadline date and time.

VI. Consequence of Submission

Project development is contingent upon a number of factors, including the County's receiving a CEC New Renewable Resource Account award (estimated date of CEC award is June 15, 1998). Upon award notification and approval by the County Board of Supervisors, the County will request a more detailed proposal or negotiations with the selected firm.

The County will not be held responsible for any costs associated with submitting a proposal through this RFP process. Proposals will become the property of Santa Cruz County.

VII. Rejection of Proposals

Santa Cruz County reserves right to select one or none of the submitted proposals. The County also reserves the right to waive any irregularity in any proposal. The County reserves the nght to reject any and all proposals and terminate the RFP process or contract negotiations at any time. Issuing this RFP is not a commitment on the part of the County to enter into an agreement with any Proposer. All negotiated agreements require majority approval by the County Board of Supervisors to become effective.

VIII. Inquiries

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Inquiries regarding this RFP should be directed to Arm Guy, BVA at 415/434-0900 (ph) or 415/956-6220 (fax) by Thursday, April 30, 1998. A transcript of inquiries and answers will be mailed to all potential Proposers by Friday, May 1, 1998. Names of entities submitting inquiries will not be revealed.



ATTACEIMENT A. PROPOSER'S FORM

Submission of this Proposer's Form with each proposal is mandatory.

	Proposer Name		
	Proposer Address		
	Proposer Phone		
	Proposer Fax		
	Contact Name, Title		
(187 7-10	Contact Phone		
		Please provide below the signatural authorized to submit this proposal proposal.	
	Name, Title		Date

Please direct all inquiries and submit one (1) original and three (3) copies of the proposal to

Ann Guy
Brown, Vence & Associates, Inc.
120 Montgomery Street, Suite 1000
San Francisco, CA 94104
415/434-0900 (ph)
415/956-6220 (fax)

ATTACHMENT B. LANDFILL DATA FOR DETERMINING PTC ELIGIBILITY

ľ	Equipment	Number of	Date Placed in		Estimated	Replaced Old		Date Old Wells
	Identification	Wells	Service*	Date of Contract for Installation	Installed Value	Wells? (Y/N)	Reason for Replacement	Installed
1	BUENA VISTA LANDFI	ILL					•	
	Wells							
	EW-1 to EW-8	8	6/86	Not applicable - County crews used	\$22,960	N	Not applicable	Not applicable
	EW-9 to EW-10	CLOSED	8/90	Not applicable - County crews used	\$5,740	CLOSED	CLOSED	CLOSED
	EW-11	1	8/90	Not applicable - County crews used	\$2,870	N	Not applicable	Not applicable
	EW-12-EW14	3	1/93 - 10/93	Not applicable - County crews used	\$8,610	N	Not applicable	Not applicable
	EW-15	CLOSED	1 /93 - 10/93	Not applicable - County crews used	\$2,870	CLOSED	CLOSED	CLOSED
	EW-16-22	7	1 /93 - 10/93	Not applicable - County crews used	520,090	N	Not applicable	Not applicable
\$	EW-23-31	3 9	before 6/98 5	Not applicable - County crews used	6	M	Not 8applicable	Not applicable
	MD-1 to MD-3	3	7 <i>1</i> 97	Master contract 6/96, Task order specifying	\$15,624	Υ	Replaced slope "T" collectors EW-	EW 9, 10 8/90;
				work on MD wells dated 12/96			9, 10 & 15 which failed due to	EW-15 1/93-
							sefflement or pipe collapse	10/9 3
7	MD-4 to MD-6	3	7 <i>1</i> 97	Master contract 6/96, Task order specifying	\$15,624	Υ	Settlement and damage during	6/8 6
				work on MD wells dated 12/96			final cover placement	
	MD-7	1	7 <i>1</i> 97	Master contract 6/96, Task order specifying	\$4,173	Υ	Settlement and damage during	6/8 5
				work on MD wells dated 12/96			final cover placement	
	MD-8	CLOSED		Master contract 6/96, Task order specifying	\$4,173	CLOSED	CLOSED	CLOSED
				work on MD wells dated 1 2/96				
	OLD-I	CLOSED		Installed 1984	unknown	CLOSED	CLOSED	CLOSED
	OLD-2 -OLD-8	7	1/97	Master contract 6/96, Task order specifying	\$29,214	Υ.	Settlement, collapse, or damage	1984
				work on OLD wells dated 12/96			due to earthquake debris storage	
							& disposal	
	New Wells 1-17	17	before 6/98	Not applicable - County crews used	\$45,009	N	Not applicable	Not applicable
ſ	Blower,Flare		1997	Purchase Order for equipment dated 9/96,	\$359,558	Υ	Replaced old blower and flare with	8/8
	(capacity 1800			County Board of Supervisors awarded			a capacity of 750 cfm	
	cfm)			Contract for installment 12/96, Contract				
				execution mid-1/97				

^{*}Connected together and started routine gas flow,



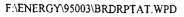
ATTACHMENT C. GAS PRODUCTION ESTIMATES

v	Santa Cruz	
Y e a r	LFG(cfm) •	
1998	799	
1999	829	
2000	859	
2001	889	
2002	919	
2003	949	
2004	980	
2005	1 0 1 0	
2006	1041	
2007	1072	
2008	1103	
2009	1135	
2 0 1 0	1167	
2011	1199	
2012	1231	
2013	1264	
2014	1297	
2015	1330	
2016	1364	
2017	1398	
2018	1433	
2019	1468	
2020	1412	

^{*}Assume LFG with an energy content of $500\ \text{Btu/scfm}$.

$\label{eq:attachment} \text{ATTACHMENT} \ \ \text{F}$ $\text{SAMPLE} \ \ \text{CEC} \ \ \text{PROJECT} \ \ \text{AWARD} \ \ \text{PACKAGE}$







COMMITTEE AWARD

State of California	
---------------------	--

The Resources Agency of Califor

Memorandum

) :	Date:	
	Telephone: ()

om: Renewables Program Committee California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

ubject: Conditional Funding Awards under Notice of Auction 500-97-506

At its January 21, 1998 Business Meeting, the Commission adopted the Renewable Resource Trust Fund Guidelines (Volume 1 through 4 and the Overall Guidelines) mandated by Senate Bill 90 (Chp. 905, Stats. 97) and delegated authority to the Renewables Program Committee, Michal C. Moore, Presiding, and Jananne Sharpless, Associate, to approve individual funding awards from New Renewable Resources Account based on the criteria and the Notice of Auction process delineated in the guidelines for this account (Volume 2).

Pursuant to this delegation of authority the Renewable Program Committee conducted Notice of Auction 500-97-506 and based on the results of this auction hereby conditionally approves the following companies for funding awards from the New Renewable Resources Account. These funding awards are based on the projects described in the winning bids, are subject to the qualifications set forth in Notice of Auction 500-97-506, and shall only take effect once a Project Award Package has been prepared and adopted for each company as required by Volume 2 of the Commission Guidelines and the Notice of Auction 500-97-506.

Company, Incentive Estimated Generation Total Funding Project Address Rate Bid Yr. 1/ Yr. 2/ Yr. 31 Yr. 4/ Yr. 5 Award Over 5 yrs

MICHAL C. MOORE

Commissioner and Presiding Member

Commissioner and Associate Member

Commissioner and Presiding Member Con Renewables Program Committee Ren

Commissioner and Associate Member Renewables Program Committee

PROJECT DESCRIPTION

A detailed description of the project, including: 1) identifying the project site and related facilities, the location of the site or transmission routes, the type, size and capacity of generating or transmission facilities, fuel characteristics, fuel supply, water supply, pollution control systems, and other general project characteristics; 2) identification of the location of the proposed project site and related facilities by section, township, range county, and assessor's parcel numbers; 3) a description of project operation and electrical power generation over the first five years of operation; 4) a description of and maps depicting the region, the vicinity, and the site and its immediate surroundings; 5) a list of all owners and operators of the project site(s), the project-related facilities; and 6) a complete explanation of the project's financial structure. This description is intended to expand upon the information provided in the Site Control and Project Feasibility Form.



PROJECT SCHEDULE

Detailed schedule describing project milestone and corresponding dates of anticipated completion.



PROJECT PERMITS

Detailed listing identifying all project-related permits, licenses, and approvals needed from federal, state, regional, and local agencies needed to construct and operate the project, the permitting-agencies and their address and contact persons, the dates upon which the permits, licenses, or approvals will be applied for, and the dates upon which agency approval is anticipated. This listing is intended to expand upon the information provided in the Site Control and Project Feasibility Form,



ELIGIBILITY TO RECEIVE INCENTIVE PAYMENTS

Documentation of project's eligibility to receive incentive payments from the New Renewable Resources Account as required by the Commission's Renewable Resource Trust Fund Guidelines and explained in the project Milestone section of. the NOA. For example, such documentation could include proof that existing S02, IS04, or similar negotiated power purchase contracts have been terminated.

Project Award Package

Funding Award Agreement

1.	purpose of creating a funding awar Fund Guidelines ("Renewable Guidewas selected as a winning bidder u	rement ("Agreement'? is entered into between and the California Energy Commission ("Commission") for the dipursuant to the Commission's Renewable Resource Trust lelines") and Notice of Auction 500-97-506 ("NOA"). Awardee nder the NOA and must comply with the terms and conditions to the Agreement to be eligible for funding from the unt.
2.		ther the Commission's Renewable Guidelines nor the NOA prated by reference and made a part of this Agreement.
3. i		al amount of awardee's funding award under this Agreement awardee's bid of cent/kWh incentive request and le electrical power generation.
	Year 1 Generation	kWh
	Year 2 Generation	kWh
	Year 3 Generatio <u>n</u>	
	Year 4 Generation	
	Year 5 Generation	
	Total	kWh

Should awardee's project fail to generate eligible electrical power at these levels, Awardee's funding award may be canceled or reduced as specified in the NOA.

Term. The term of this Agreement shall be from the date of execution by both awardee and the Commission to the sooner of five year after the project's on-line date or December 31, 2006, which ever occurs first, unless terminated earlier by the Commission pursuant to the Renewable Guidelines or the NOA.

40 (66)

- 5. **Non-Transferability of** Funding Award. The funding award created by this Agreement is specific to awardee and the project described in the attached Project Description, which is hereby incorporated by reference. This funding award is not transferable or assignable to another project or entity.
- **Assignment.** Awardee shall not assign its rights nor delegate its duties under this Agreement without the Commission's advance written approval.
- 7. Indemnification. Awardee agrees to indemnify, defend and save harmless the Commission, its officers, agents and employees from any and all claims and losses accruing and resulting to any and all contractors, subcontractors, materialmen, laborers, and any other person, firm or corporation furnishing or supplying work, services, materials, or supplies in connection with this funding agreement award, and from any and all claims and losses accruing or resulting to any person, firm or corporation who.may be injured or damaged by the awardee in the performance of work under this award.
- a. Review and Disclaimer. Review by the Commission of the design, operation, or maintenance of awardee's project or related interconnection or generation facilities shall not constitute any representation as to the economic or technical feasibility, operational capacity or reliability of such facilities. Awardee shall in no way represent to any third party that the Commission's review of awardee's project is a representation by the Commission as to the project's economic

or technical feasibility, operational capability, or reliability. Awardee is solely responsible for its project's the economic and technical feasibility, operational capability, and reliability.

9. Project Schedule. Awardee shall complete the project milestones by the dates identified in the Proiect Schedule, attached hereto and incorporated by reference. Failure to do so may result in awardee's funding award being canceled or reduced as specified in the NOA. 10. Eligibility **Status.** Awardee shall provide proof of project eligibility as specified in the **NOA** by providing the following proof no later than ______ Failure to do so may result in awardee's funding award being canceled or reduced as specified in the NOA. 11. Bid Bond Forfeiture. Awardee acknowledges that its bid bond, or any portion thereof, may be forfeited to the Commission under the conditions specified in the NOA and the bid bond security agreement. 12. Funding Award Cancellation. Awardee acknowledges that its funding award or funding award payments may be reduced or canceled pursuant to the Renewable Guidelines and the NOA. 13. Funding Award Payments. Awardee acknowledges that its eligibility to receive funding award payments under this Agreement shall be contingent upon its satisfaction of all terms and conditions set forth in the Renewable Guidelines, the NOA and this Agreement, including construction and operation of the project as described in the Project Description attached hereto. 14. **Invoicing.** Awardee shall invoice for payments under this Agreement in accordance with the. procedures specified in the applicable Renewable Guidelines. 15. **Records Retention.** Unless stated otherwise in the applicable Renewable Guidelines, awardee shall: 1) keep all records relating to and verifying the accuracy of information stated in an invoice for payment submitted pursuant to this Agreement for a period not less than three years after the end of the calendar year in which payment for the invoice is made; 2) keep all records relating to and verifying the accuracy of information stated in a report submitted to the Commission pursuant to the Renewable Guidelines for a period not less than three years after the end of the calendar year in which the report is submitted; and 3) keep all records relating to and verifying the overall usage, on a total energy input basis, of all fossil fuels and non-fossil fuels used to generate electricity in a given calendar year for a period not less than four years after the end of that calendar year. 16. **Awardee Contact.** Awardee's Contact under this Agreement shall tie Any notice to Awardee under this Agreement shall be forwarded to the awardee contact at the following address.

(C - 5%

California Energy Commiss	sion
1516 Ninth Street, MS	
Sacramento, California 95	814
Attn:	

- 18. Understanding of Renewable Guidelines and Their Application. Awardee warrants that it has read and understands the Commission's Renewable Guidelines applicable to the New Renewable Resources Account, and acknowledges that these guidelines govern the payment of any funds under this Agreement and authorize the Commission to cancel or reduce awardee's funding award or funding award payment, to conduct random audits of awardee's invoices, to conduct inspections of awardee's facilities and books as part of these audits, to initiate enforcement actions to recover any funding award payments the awardee was not otherwise entitle to receive, to initiate investigations of awardee to verify fraud or misrepresentation in connection with awardee's application for or receipt of its funding award or a funding award payment, or to take action as otherwise authorized by the Renewable Guidelines to properly administer the Renewable Resource Trust Fund. Awardee further understands that the Commission's Renewable Guidelines are subject to change and that any changes made to the Renewable Guidelines shall apply to awardee and its funding award under this Agreement.
- 19. **Law Governing.** This Agreement shall be interpreted, governed and construed under the laws of the State of California.

Signature Block

ATTACHMENT G

AB1890 Production Credit

Credit

	3:00% cVvVh Subsidy - c/kVvh Escalation
Лелс	Production Tax Credits
	Electricity Prices Percent IncreaseDecrease from CEC Forecast Wrough 2002 Percent Increase Stome Section CEC Forecast 2002-2008 3% Additional Value Pet KWh for Self Use Additional Value Pet KWh for Self Use 0.00
	Discount rate used for net present value calc Discount rate used for net present value calc Discount rate used for net present value calc Cincount rate used for net present value calc
	O&M Costs (see sitached sheet) Insurance 0.00% Of Revenue Insurance 0.00% Of Capital Costs Management Fees 0.00% Of Capital Costs Escalation (Ops.) 3.0% Escalation (F Tax) 2.0% Escalation (F Tax) 2.0%
	Capital Investment (see attached sheet) Capital Equity (%) Equity (%) Capital Financing Itansaction Costs on Debt \$5,000 Total Costs are in dollars for year: \$12,312,250
	Gross Paint size (gross butbut,kW); 1974 Plaint Persaitics (%) 2,5% Total Hours per Quarter 1,000 Total Hours per Qu
Case: 12 Moderalely Supportive Conditions, 10 year financing, public ownership & equity Rate Case: 6 Forestight Energy, new offer, renewable premium = 0.5 Vaniable CEC Case: 6 75% of CEC Price Forecast CEC Case: 1,00 cents/kwh A814990 Bild: 1,00 cents/kwh A914990 Bild: 1,00 cents/kwh	General

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SNOIT4MUSSA

LANDFILL GAS TO ELECTRICAL ENERGY PROJECT CASHFLOW ANALYSIS

35

TOTAL COSTS/KWH DEB12ERVICE/KWH

8600 \$ 860 0 \$ 0000 \$ 6200 \$ 7000 \$ 7000 \$ 1700 \$ 9200 \$ 9200 \$ 9200 \$ 9200 \$ 8600 \$ 8 **UPERATIONS COSTAWH** \$ 0.000 \$ 2000 \$ 0.000 REVENUEAWWH KWHBASIS %0L RETURN ON INVESTMENT 20 years %11 KELOKA DA JAKEZI WEAL JO JESTS NET PRESENT VALUE (\$1000) 20 years 7.07 897 NET PRESENT VALUE (\$1000) 10 years DEB! SERVICE COVERAGE W/N A/N A/N V/N ₩/N ₩. A/N A/N ₩N. A/N 00.F 1,00 99°t 84.1 2.33 3.17 61.4 09'7 86.4 99.4 76'9 5014 SHEL /98 1800 1961 2602 **97.7** 2812 2170 5423 **∀977**. 0812 97.17 1/6L 17.11 1364 **5**96 949 OPL DEBI SEKAICE RESERAE QI. Λ7٠ 60 MEL 8/ 19 LDL 191 LOL **Z9** ££-001-71 99 191 242 293 014 ROP 90t OPL **7971-**68 ANNUAL DEBT SERVICE 0 ٥ 0 0 0 a 0 а 0 114 PIL DLL PLL b11 114 DLL 111 PIL 82 81oz-GROSS OPERATING MARGIN U 199 565 190 116 229 070 691 9/ 19 lbl. 191 191-79 23 13 891 954 LOGSI COSES 00430 89900 0 6240 079 00 6700 0 37100 0,4960 04940 09100 00/9 05840 00282 61200 0.49 0 XAT 9099 SPHOO 60400 96400 979 00 2,4500 60000 90000 **JUNAMUSNI** n **MANAGEMENT FEES** 582 C67 562 092 OPERATIONS COST (Variable) 91.5 463 £67 £6† 220 520 320 920 320 862 238 862 681 681 681 GÞ 841 140 411 110 OPERATIONS COST (Fixed) 193 771 135 154 201 104 101 86 96 26 06 22 (000,t \$) STSOO) 26.2 Operating costkWhr (cents) 18.5 21.6 GE'Z 68.Z 81.4 6b'7 82.2 b77 88.1 91.4 £1.4 15% 2.45 60.5 10'6 3.04 92'Z 68.f do F 87.1 289 209 19610'0 TOTAL REVENUES 0 181 941 191 1453 1/1 ß 0 0 O ٥ n Ω n Ω n 181 991 901 701 b) 2014 а ٥ ۵ 0 0 ٥ 0 ۵ 0 0 Λ 0 Λ O Λ 113 091 120 091 190 86 197 AB 1890 PRODUCTION CREDIT Ō ñ ñ DOE SUBSIDY OTHER ELECTRIC SALES n n n SELF-USE ŽES 205 248 119 /8Þ £/\$ 69t 955 433 450 110 195 977 431 916 267 **46**t Z61 **467** £99¢ 154 SALES 10-yr contract KEVENUE (\$1,000) 11'564 810,81 810,61 810'91 810,81 810,81 810,61 810,61 810,61 810,21 810,81 16,018 810'91 810,81 15,018 810,81 15,018 810,81 15,018 810'91 3,755 PROJECTED SALES (KWHRS/YR (1,000's)) PROJECTED SELF-USE (KWHRS/YR (1,000's)) **597'11** BIU,CF RL0'CL STU,CT RIO'CL RIOGE 810'01 810,61 810,61 810'GL 810,81 BLU, CL BLO,CF 15,018 15,018 810,81 810,61 STU,CI **367,6** TOTAL PRODUCTION (KWHRS/YR (1,000's)) 3.65 998 #9E 3.44 488 3.24 3.15 90'8 76.2 88 Z 08.2 318 20€ 18 Z SELF-USE PRICE FOR THIS PROJECT 16.6 15.5 15.5 39€ 3'08 88.2 3.18 307 96°Z SELLING PRICE FOR THIS PROJECT 187 112 15.5 16.6 15.5 15.5 TE.E 3.65 99.€ \$9£ 3 44 3.34 3.24 3.15 3.06 167 88.5 08.5 95.5 89 Z 197 12.7 MARKET CLEARING PRICE FORECAST 15.2 S 0.2 00.2 **#6**1 PU.S. 9061 9061 906'L 906'1 906'L 906'1 906'1 906'1 906'1 906 L 906'1 9061 906'1 906'1 406°L 9061 G06 L 906'1 906'L 906'1 906'1 KW OUTPUT z No of Engines Electricity Production

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CASHFLOW ANALYSIS

YEAR OF OPERATION

Gas Production

YEAK

GAS AVAILABLE FOR SALE TO GENCO (CFM)

TOTAL GAS USED BY POWER PLANT (CFM)

GASPRODUCED ATLANDFILL 2(CFM)

GAS PRODUCED AT LANDFILL 1 (CFM)

QUARTERS AVAILABLE PER YEAR

YEAR OF EVALUATION PERIOD

CUMULATIVE QUARTERS OF OPERATION

TOTAL GAS PRODUCED (CFM)

ATTACHMENT H

ESTIMATED PROJECT SCHEDULE

 $\mathbf{v}_{i_1} \oplus .$

Santa Cruz	Months	May-98	Jun-98	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sen-99	Oct-99	Sen-04
CEC Award and Board Authorization			****			,	_		-		1	1	1.12.		-		Triag ou	0000		
CEC award notification	Milestone			T													ı	i i		
CEC award package preparation	2		XXXX		*******		1	l		I	1	1	ł		1				,	
CEC award package Board approval	Milestone				•															
Board authorization for next project phase	Milestone				•	 				 	 	 -	 	 	 		 -		 -	
Permits			****					333333			_	-	-						 	
Minor variation to Land Use Permit	1.5					1	************	*********			 			 			 		 	
CEQA Negative Declaration	4						****			 	 	ļ	 	 					 	
Air Permits (Construct/Operate) preparation	1										 	 			ļ ——	 -		 	 	
Air Permits (Construct/Operate) processing	1			 		 		******			 	 -		 	 		 	 		
Air Permits (Construct/Operate) approval	Milestone					 		•			 	 		 			 			
Power Sales and Interconnection Agreements	· · · · ·										 	-								
Contingent Power Sales Agreement (PSA)	3.5																 			
PG&E system study	2										 								 	
PG&E Special Facilities Agreement	Milestone				•															
PG&E Standard Operating Agreement	1																			
Execute ISO Participating Generator Agreement	Milestone					•													\vdash	
Execute ISO Metered Service Agreement	Milestone					•														
Execute Schedule Coordination Agreement	Milestone					•													 	
Schedule Coordinator/ISO Agreements	11																			
Final Power Sales Agreement	Milestone							•												
Production Tax Credits and Financing												******						سرست سست		
Financing development	Variable			***************************************									***********							
PTC transaction structuring	2					· ****														
Contingent financing obtained	Milestone					ļ ———														
Board approval of PSA, PTC, Financing contracts	Milestone							•												
Final Financing Agreement	Milestone						!	٠							,			·		
PTC transaction closed	Milestone]]									•							
Design, Construct, and On-line																				
Preliminary design	11															***************************************				
Final design	2																			
Equipment on order	6.							****	**********	*********				****						
Construction	4															***********	****			
PG&E system upgrades	3																			
PG&E pre-parallel inspection	Milestone																•		=	
Interconnection established	Milestone																			
Testing Transmission access/On-line date	1 1																	****		
	Milestone			{														•		
Revenues Begin		I	I																	
Revenues from PTC's begin	On-going															*****				••••
Revenues from power sales begin	On-going																		******	••••••
CEC payments	60																 †		****** !	•••••
,																			Account to the second	***************************************



CALIFORNIA ENERGY COMMISSION NEW RENEWABLE RESOURCE ACCOUNT AUCTION

DRAFT BID PACKAGE



ATTACHMENT 2

CEC- 1890B-1, 3/98



Please submit form to: California Energy Commission Renewable Technology Program 1516 Ninth Street, MS-45 Sacramento, CA 95814-5512 Please print or type. Please complete both sides of form in its entirety including attachments.

FORM CEC-18	390B-1 MU	ST BE IN	CLI	JDED WIT	H BID	SUE	MISS	ION
-				4 14-y 2 11 5 1				en de la companya de
1. Cents/kWh Incentive Req	uested		2. (Capacity of Pr	oject _	1974	1	kW
Stimated Annual Average Generation of Project for first five years after initial on-line date	Year 1 ^{15,0} Year 2 ^{15,0}			Year 3 ^{15,0} Year 4 ^{15,0}	18,000	hs		5,018 _{KWns}
	inty of Sai	nta Cruz,	, De	partment	of Pub	olic	Works	
5. Business Address 701	Ocean St	reet		Telephone	(408)	-454	1-2160	
City Santa Cruz	State CA	Zip 95060)	Telefax	(408)	-454	1-2385	
6. Contact Person (authorita	ative)	ck Mathe	vs	Telephone	(408)) -45	4-2377	
7. Contact Person (technica Thomas Vence, Vic	e-Preside			Telephone			1-0900	·
13. Expected On-Line Date 09/15/99 Month/Day/Year								
	§3. Exact Location of Facility (facility must be wholly located within California) Provide metes and bounds or I atitude and longitude description if applicable.							
Facility boundaries and-metes and bounds description are included								
under Attachment "G"								
	· .	•						
10. Energy Source (check	one)							
☐ Biomass ☐ Digester (☐ Photovoltaic ☐ Small F				dfill Gas 🖵 M Waste Tire	lunicipal Wind	Solid	Waste	
Other (specify)								<u></u>

1. Classification as a New Project
Project is or will be first placed in operation on or after September 26, 1996
Project is or will be repowered on or after September 26, 1996 such that at least 80% of the fair market value of the project derives from new generation equipment installed as part of the repower
Project is or will be a separable improvement to or enhancement of an operating existing facility first placed in operation prior to September 26, 1996 such that proposed incremental generation is contractually available for sale, separately metered from existing generation, and not associated with a utility contract providing fixed energy or fixed capacity payments. Fixed energy or capacity payments are defined as payments to a generator on a price per unit measure that was known or ascertainable at the time the contract was entered into. Fixed payments cannot be based on market conditions, such as short-run avoided <i>costs</i> , since these conditions were not known or ascertainable at the time the power purchase contract was entered into .
12. Does the energy produced from any portion of your project receive fixed energy or capacity payments? ☐ Yes XI No
13. Identify the type of contract your project is currently under for any portion of the energy from the project. ☐ SO1 ☐ SO2 ☐ SO3 ☐ ISO4 ☐ Negotiated ☒ None ☐ Other (Specify)
14. You must include a bid bond with your bid equal to 10% of the expected total incentive payments in the bid,
calculated as the requested incentive payment multiplied by estimated generation over the first five years of
project operation. The bid bond you provide must take the form of either an irrevocable letter of credit or an escrow account and must substantially conform to the sample letter of credit or escrow accountprovided in
Attachments 4.1 and 5.1, respectively. As part of the bid bond requirement, you must also complete and execute
the related security agreement provided in Attachments 4.0 and 5.0. Complete the security agreement for either
the irrevocable letter of credit or the escrow account, but not both. Failure to provide a bid bond as specified in
the Notice of Auction, including an executed security agreement, will result in disqualification from the auction.
15. Please provide information on form CEC-1890B-2, Site Control and Project Feasibility Form.
76. If there is any information in this bid that you wish to remain confidential, you must mark it clearly as such and include a formal letter to the Energy Commission requesting confidentiality treatment under the Commission's regulations.
I, (print name and title) , declare under penalty of perjury that the information provided in this form and all information included in and submitted as part of the attached bid is true and correct to the best of my knowledge. I acknowledge that the eligibility and receipt of any payments from the New Renewable Resources Account is based upon the requirements and conditions set forth in the Commission's guidelines, including the bid protocols and any conditions imposed as part of a Project Award Package, and agree to abide by these requirements and conditions, to the extent applicable, as a bidder in Notice of Auction 500-97-506 and at all times while receiving payments from the New Renewable Resources Account.
Dated this day of, 19, at (day) (month) (year) (place of execution)
(uay) (month) (year) (place of execution)
Signature:



Please print or type. Complete both sides of the form and all pages in their entirety, including attachments. If the space provided for answers is not adequate, you may provide additional attachments which clearly refer to the question being answered. In the form, "you" refers to the bidder signing the attached Bid Form. CEC-1890B-1.

A. Expected Project Construction Schedule

	Maria Cara Service Control of the Service Con	
A1)	Construction begin	4/15/99
A2)	Construction complete	4/15/99 8/15/99
A3)	Testing begin	8/15/99
A4)	Testing complete	9/15/99
A5)	On-line date	9/15/99

	0:4-	0-	
В	Site	(\cdot, \cap)	ntroi

B1) Check appropriate box. NOTE: You must promptly notify the Energy Commission if there is any change in the status of site control. In the attachment, the bidder demonstrates that he/she or affiliated parties have: Please see Attachment A. Proof of

Ownership interest in the project location Site Control.

Leasehold interest in the project location

☐ Exclusive and irrevocable option to obtain ownership or leasehold of project location

B2) If an affiliated party has site control, explain the name of the party and the nature of the relationship between you and that party. If the bidder is the individual with site control, state "bidder has site control."

Bidder	has	site	control.

83) If the term of the site control does not extend to five years after the on-line date given in A5, provide the site control end date.

N/A	(month/	vear
			, ,

C. Financing Structure of Project

Cl) Describe your anticipated financing plan from the construction begin date given in A1 to five years after the on-line date given in A5.

Please	see	Attachment	В.	Financing	Plan.
					_

D. Anticipated Permit Requiremen	D.	. Anticip	oated	Permit	Rec	uiremer	nts
----------------------------------	----	-----------	-------	--------	-----	---------	-----

D1) Is this project exempt from Energy Commission Site Certification? Yes Cl No 🖾

D2) Has the project already received all permit and license approvals needed to operate? Yes □ No ☑

If you answer No to D2, you must answer D3 through D5, otherwise skip to E1.

D3) Identify in an attached exhibit titled, Example of Permitted Project an example or examples of similarly situated projects that have been successfully licensed and permitted under existing law *Please see Attachment C. Example of Permitted

D4) List any major permitting issues, such as rezoning, noise problems environmental impact mitigation requirements, or hazardous materials use requirements you encountered or expect to encounter.

None	anticipated.

D5) List all anticipated permits, licenses, and/or government approvals needed for the construction and operation of your project (include as many as needed include attachment if needed) and/or those already obtained, permitting agency date (month/year) permit/license/approval is expected to be or was applied for with the permitting agency, and date (month/year) permit/license/approval is expected to be or was granted by the permitting agency:

Type of Permit	Permitting Agency		Expected pproval
1	Planning Dept. Santa Cruz Cnty	6/15/98	7/31/98
CEQA: Negative Dec.	Lead Agency: Santa Cruz Cnty	6/1 5/98	10/15/98
Air Permits to Construct and Operate	Monterey ^{Bay} Jnified Air	10/15/98	11/15/98
	Pollution Control Distric	t	



E. Fossil Fuel Requirements El) Do you anticipate using any fossil fuel in the daily operation of this project? Yes No No
If you answer Yes to EI, answer E2 and E3, otherwise skip to F1.
E2) Describe why fossil fuel- is needed.
N/A
E3) Describe measures you are taking to allow the Energy Commission to verify that in any given year the percentage of fossil fuel used will not exceed 25% of the total energy input of the facility on an annual calendar basis.
N/A
F. Fuel Sources
F1) Describe options that you anticipate for the fuel service as applicable if the data

request is not applicable to your project, state "not applicable."

F.1.a	Describe your fuel delivery mechanism	Landfill gas will be collected through a system of installed gas wells on-site. The gas will be utilized by the power project on-site.
F.1.b	Identify your	The fuel supplier will be a private investor
	expected fuel supplier and	The fuel supplier will be a private investor - that enters into a PTC transaction with the
	transporter	County. No transporter is required.
F.1.c	, , , , , , , , , , , , , , , , , , , ,	L All-gas collected will be utilized immediate11
	site storage capability of fuel	by the power project. No fuel storage is
	capaziii, or idoi	necessary.
		_





G. Transmission AG1) Have you secure agreement? Yes	Access d transmission access to No 🖫	o the grid throug	gh a legally binding	
G2) If you answer ye your expected on-line	s to G1, does the terms date? Yes Q N	of the agreeme o □	nt extend to five yea	rs after
If you answer No to C	1 or G2, answer G3 an	d G4, other wise	e skip to G5 .	
G3), what are your plaagreement?	ans for connecting to the	e'grid and secur	ing a transmission a	ccess
Pl	ease see Attachm	ent D. Grid	l Interconnecti	.on
ar	d Transmission A	ccess.		
				_
G4) What is your ex	pected schedule for sec	uring a transmis	ssion access agreem	ent?
Please see Atta	chment E. Sche	dul e		
of Transmission	Access.			
G5) Provide your ex (name of substation	pected or already achie or location)	ved point of inte	rconnection with the	grid
The point of	interconnection	shall be	determined by	PG&E
following the	submission of a	formal app	plication and	study
deposit by t	the County.			
G6) Other relevant i	nformation (optional)			
~				



Optional Submittal:

H. Description and Qualifications of Bidder
Provide an attachment not to exceed one page titled, *Description and Qualifications of Bidder*, to describe the bidder's applicable experience and ability to successfully manage the project, including the applicable areas below:

- engineering and design
- · permitting/environmental
- construction
- operation and maintenance
- fuel management

Please see Attachment F. Descriptions and Qualifications of Bidder.

ATTACHMENT A PROOF OF SITE CONTROL

The County of Santa Cruz has control over the Buena Vista Landfill site, which is also the site of the proposed landfill gas-to-electricity power project. Proof of site control can **be** provided upon request.



ATTACHMENT B FINANCING PLAN

The financing for the Buena Vista Landfill Power Project will begin immediately following notification of a CEC New Renewable Resources Account award. The County will either utilize its own funds or its borrowing capacity to finance the project. All relevant components of the financing plan are described below.

June 15, 1998	Anticipated CEC Award Date.
June 15, 1998	Begin financing development
June 15, 1998	Begin contract development with a renewable power marketer for the sale of generated power at the landfill. The renewable power marketer selected to enter into a power sales agreement with the County was chosen through a competitive Request for Proposals (RFP) process, in which marketers submitted price proposals to the County in anticipation of successful construction of the County's landfill gas power project.
September 15, 1998	Begin placing and structuring a landfill gas investment transaction with a private investor, to obtain financial benefits from Production Tax Credits available under Section 29 of the U.S. Tax Code.

November 15, 1998 Contingent financing obtained.

November 15, 1998 All relevant permits obtained.

November 1998 Obtain County Board of Supervisors approval to execute Power Sales
Agreement, Production Tax Credit agreement, and financing contracts.

November 1998 Execute power sales contract with power marketer.

November 1998 Finalize financing agreement.

November 1998 Equipment Ordered

April 15, 1999 Construction commences

April 15, 1999 Close the landfill gas PTC investment transaction and revenues from

private landfill gas investor begin.



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ATTACHMENT **B FINANCING** PLAN (continued)

August 15, 1999 Construction complete.

September 15, 1999 On-line power generation begins: payments from power marketer begin.

October 1999 Anticipated stream of payments from the CEC begins.

September 2004 Anticipated stream of payments from the CEC ends.



ATTACHMENT C EXAMPLE OF PERMITTED PROJECT

Landfill gas (LFG) to electricity projects have been developed across the United States. These energy projects are prevalent in California due to various factors, including the regulatory environment that encourages effective capture of landfill gas. In 1992, the U.S. had 110 LFG energy projects. Of these 110 LFG energy projects, about 34% were located in California.' By 1996, 140 LFG energy systems were in place in the U.S.²

Listed below are several LFG energy projects located in both Northern and Southern California that have been successfully licensed or permitted and are similar to the LFG energy project proposed in this bid. Each project uses electricity generation technology similar to that contemplated for the Riverside Waste Management District project.

Example 1. Marina **Landfill** Gas-to-Energy Project, Monterey County
The Marina Landfill Project is a landfill gas-t&electricity project in Monterey County. The two
megawatt project uses reciprocating engines to generate electricity. The project odtained all
necessary permits and successfully commenced operations. The most recent engine installment
occurred in 1997.

Example 2. Olinda Landfill Gas-to-Energy Project, Orange County
The Olinda Landfill Project is a landfill gas-to-electricity project in Orange County. The five
megawatt project uses three reciprocating engines to generate electricity. The project obtained all
necessary permits and successfully commenced operations in 1985.

Example 3. Penrose Landfill Gas-to-Energy Project, Los Angeles County The Penrose Landfill Project is a landfill gas-to-electricity project in Los Angeles County. The approximately ten megawatt project uses reciprocating engines to generate electricity. The project obtained all necessary permits and successfully commenced operations in 1985.

Example 4. **Toyan** Landfill Gas-to-Energy Project, Los Angeles County The **Toyan** Landfill Project **is** a landfill gas-to-electricity project in Los Angeles County. The approximately ten megawatt project uses reciprocating engines to generate electricity. The project obtained all necessary permits and successfully commenced operations in 1982.



Susan Thomeloe, 17th Annual Landfill Gas Symposium, March 1994.

² EPA Landfill Methane Outreach Program, Project Handbook, September 1996.

ATTACHMENT D GRID INTERCONNECTION AND TRANSMISSION ACCESS

Grid Interconnection

The County will submit an application and monetary deposit to Pacific Gas & Electric Company (PG&E), the investor-owned utility responsible for providing distribution services in the territory including the landfill. The application will request an interconnection with the PG&E distribution system. Application approval and interconnection will follow the process described in the "PG&E Interconnection Handbook" (December 1997).

The general process of establishing interconnection is outlined in Figure 1, titled "Process Overview Diagram". The key components of a grid interconnection with the PG&E system will include submitting the application for interconnection, PG&E's system impact study, completing a PG&E Special Facilities Agreement, completing a PG&E Standard Operating Agreement, completing the necessary PG&E system upgrades, completing the PG&E pre-parallel inspection, and establishing the interconnection.

Transmission Access

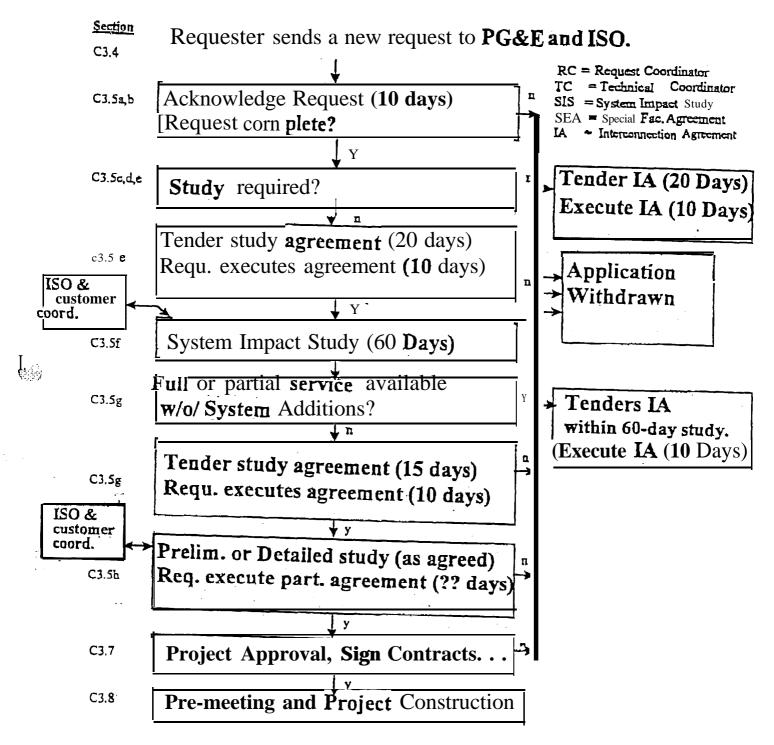
If required, interconnection to the ISO-controlled transmission grid would follow a process persuant to the Independent System Operator (ISO) Tariff, Section 5.7.1. The tariff specifies that the County would, submit a request for ISO interconnection to the transmission owner (PG&E), and all aspects of interconnection would then be coordinated by the transmission owner. However, because this project will not be connecting to the ISO-controlled grid at transmission level voltage, it will not be necessary to obtain an interconnection with the ISO.

Access to transmission services will be obtained through the project's Schedule Coordinator, as required by the ISO. The County will be primarily responsible for executing a "Participating Generator Agreement" and a "Metered Service Agreement" with the ISO, and following the terms and conditions included in those agreements. The renewable power marketer selected to enter into a power sales agreement with the County will assume all responsibility for scheduling coordination and other interaction with the ISO.



FIGURE!

PROCESS OVERVIEW DIAGRAM



ATTACHMENT E SCHEDULE OF TRANSMISSION ACCESS

June 15 -August 15, 1998 PG&E system impact study

August 1998 Execute PG&E Special Facilities agreement
September 1998 Execute PG&E Standard Operating agreement

September 1998 Execute standard ISO Participating Generator Agreement

September 1998 Execute standard ISO Metered Service Agreement
September 1998 Execute standard Schedule Coordination Agreement
September 1998 Schedule Coordinator/ISO Agreements completed

August 15, 1999 PG&E system upgrades complete

August **1999** PG&E pre-parallel inspection complete

September **15**, **1999** Testing complete and on-line access obtained





ATTACHMENT F DESCRIPTIONS AND QUALIFICATIONS OF BIDDER

The Buena Vista Landfill is owned and operated by the County of Santa Cruz, "a political sub-division of the State of California". The Department of Public Works has operated the facility since 1950. The Public Works Department has extensive experience in development, design, engineering and permitting of large scale project such as the proposed Buena Vista Landfill Gas Power Project. Public Works staff have been involved in numerous permitting processes with a wide variety of federal, state and local agencies including County Land Use Authorities, local air district, Regional Water Quality Control Board, California Integrated Waste Management Board, Department of Toxic Substances Control, Department of Fish and Game, and U.S. Army Corps of Engineers. The following is a synopsis of several recent projects completed by the Public Works Department, Solid Waste Division:

1. Project: Buena Vista Landfill Gas Flare Facility

Budget: \$365,000 flare acquisition and installation

\$35,000 facility design and engineering

\$15,000 site permitting

Project included development of flare facility specifications: bid procurement, air district permitting, construction management, and interconnection to landfill gas well field system.

2. Project: Ben Lomond Landfill Gas Control System

Budget: \$125,000 flare acquisition and well field installation

\$25,000 facility design and engineering

\$15,000 site permitting

Project included development of flare facility specifications, bid procurement, air district permitting, construction management, and drilling and installation of 22 LFG collection wells and related transmission system.

3. Project: Buena Vista Landfill Closure, Modules 1 and 2

Budget: \$1,700,000 construction

\$125,000 engineering, materials testing and construction management This project encompassed placement of final cover system on completed fill slopes of two landfill cells. Work included engineering and design, permitting, soil testing in lab and in-situ, placement of foundation liner, placement compacted low permeability clay liner, placement of vegetative, construction of drainage structures, vegetative cover and site access roads.

4. Project: Buena Vista Landfill Gas Well Field Construction

Budget: Ongoing annual funding \$25,000 - \$100,000

Trained engineering and operational staff undertake all aspects of well field design, construction, transmission and interconnection. All work is done in-house with the exception of drilling services which are sub-contracted. Staff also operates, balances and maintains the well field which encompasses up to 50 LFG extraction wells and over 5,000 feet of transmission piping and the flare system. The flare system is designed to handle up to 1,800 cfm of LFG and included a condensate destruction system design and constructed in-house.



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Facility Boundaries

The site includes a closed landfill on a 37 acre parcel of which 24 acres have been landfilled and closed. Adjacent to the active landfill is a 93 acre parcel shared by the landfill and Sheriffs detention facilities. For purposes of this report approximately 25 acres is dedicated to the landfill activity and the remainder is used by the County Sheriffs Department. Of the 25 landfill acres 13 have been landfilled and partially closed. This landfill area backs up directly against the current active site encompassing approximately 72 acres. 52 acres of this active site are being landfilled or planned for landfilling.

The following legal description includes both the closed and permitted active landfill sites:

Being part of Section 1, Township 12, South, Range 1 East, Mount Diablo Base and Meridian (MDB & M), and more particularly bounded and described as follows: Beginning at the intersection of the northerly right of way of Harkins Slough Road and the easterly right of way of Buena Vista Drive, formerly Whiskey Hill road, this point being marked by a 1/2" pipe, as recorded on January 25, 1967, in Volume 45 of Maps Page 60, Santa Cruz County Records; thence, from said point of beginning North 38" 30' East, a distance of 470.3 1 feet to a 1/2" pipe; thence, North 5° 00' West, a distance of 809.11 feet to a 1/2" pipe; thence, North 5° 3.5' East, a distance of 41.08 feet to a 1/2" pipe; thence, leaving the easterly right of way of Buena Vista Drive, North 89" 59' East, a distance of 2933.26 feet to a 4" x 6" redwood post set in concrete and tagged "L.S. 2362", as indicated on the above said map; thence, South 3" 21' West a distance of 2382.42 feet more or less to the northerly right of way of Harkins Slough Road; thence, along said right of way North 78" 45' West a distance of 900 feet more or less to a point where a line of bearing approximately South 11° West falls on an existing wooden fence; thence, from above last point, following the above mentioned wooden fence, approximately South 11° West for a distance 200 feet more or less; approximately North 79" West for a distance of 320 feet more or less; approximately South 11 ° West for a distance of 450 feet more or less; approximately South 52" West for a distance of 360 feet more or less to a 4" x 4" post marked "R.E. 2603" as recorded March 13, 1952, in Volume 32 of Maps at Page 4, Santa Cruz County Records; thence, as shown on the above last mentioned Map, along the following routes:

South 49" 57' 30" West, 200.00 feet to a 4" x 4" post marked "R.E. 2603; South 49" 57' 30" West, 236.22 feet to the northerly right of way of the Southern Pacific Railroad Track; along the northerly right of way of the railroad track to the intersection of this right of way with a straight line passing through the two most westerly 4" x 4" posts marked "R.E. 2603"; North 21" 18' 30" West, 220.07 feet to a 4" x 4" post marked "R.E. 2603"; North 21" 18' 30" west, 53.70 feet to a spike in 9" x 13" gate post on the southerly right of way of Buena Vista Drive; along the southerly right of way of Buena Vista Drive back to the point of beginning. The above described land contains 130.4 acres more of less with, the current permitted active landfill (Assessors Parcel No. 052-021-33) comprising 72 acres more or less, and the closed landfill (Assessors Parcel No. 52-06 1-O 1 and portions of 52-06 1-25) comprising 58 acres more or less. B.





DEPARTMENT OF PUBLIC WORKS

GOVERNMENTAL CENTER

JOHN A. FANTHAM DIRECTOR OF PUBLIC WORKS



COUNTY OF SANTA CRUZ

701 **OCEAN** STREET, SANTA CRUZ; CALIFORNIA 950604070
(408) 454-2160
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April 30, 1998

SANTA CRUZ COUNTY BOARD OF SUPERVISORS ... 701 Ocean Street
Santa Cruz, California 95060

SUBJECT: BUENA VISTA LANDFILL GAS POWER PROJECT

Members of the Board:

On January 13, 1998, your Board approved commencement of Phase 1 development of the Buena Vista Landfill Gas Power Project which included a consultant services agreement with Brown, Vence and Associates (BVA). The process for development of this project calls for a phased approach to thoroughly define risks and benefits prior to investing any public funds in the power plant facilities. Phase 1 includes tasks to more clearly define project economics such as, securing buyers for the project's electrical power, establishing all public/private participants, maximizing energy recovery from the landfill, and preparation of bids for the California Energy Commission's (CEC) New Renewable Resources Account auction.

The CEC's New Renewable Resources Account (NRRA) auction was the result of Assembly Bill 1890 which provided \$540 million for support of renewable electricity generation technologies.' These funds, or energy credits, are being distributed to qualifying projects through a competitive bid process. Each qualifying project can bid up to a maximum of \$0.015 per kWh of electricity produced. The CEC will award bids starting with the Iowest unit price per kWh. The unit price is then multiplied by the total energy output for the first 5 operating years of the project. This award process will continue from lowest to highest unit (kWh) bid until all available funding has been allocated.' Dependent upon the number of bids received, those projects bidding at or near the maximum cap of \$0.015 per kWh, may or may not be funded based on the cumulative energy production from other competing projects receiving credits through the program. The County's goal is to bid high enough to assure financial stability for the project, but not so high as to preclude funding. While the proposed County project may still be financially feasible without the CEC energy credits, the project's long term financial risk would be considerably higher. The estimated value of these credits to the County, dependent upon the final unit pricing used in the bid; will be between \$1.3 and \$1.7 million.





The bid process for the NRRA auction has been delayed several times since your Board's January 13, 1998, meeting during which the CEC was working to finalize the bid process. The final Notice of Auction, which included all bid directions, was distributed to interested bidders in late March. A copy of the March 1998, Notice of Auction for the New Renewable Resources Account is on file with the Clerk of the Board for your reference. Under the final process directions, the CEC is requiring a forfeitable bidder's bond in the amount of 10% of the energy credit values being bid for by each project. The forfeitable bidder's bond is intended to provide a guarantee of performance in the auction, indicating that the bidder is proposing a serious, viable project that is fully expected to be built upon winning the auction. The bidder's bond is refundable upon completion of two milestones:

Milestone #1 Complete development and adoption of a project award package

with the CEC within one year of notice of award. Upon CEC adoption of the award package, 50% of the bid bond will be

released.

Milestone #2 Provide proof of filing of all relevant project construction

applications, including filing for any air quality, environmental or land use permits. Upon proof of application for all relevant

permits, the remaining 50% of the bid bond will be released.

BVA and Public Works are currently working to complete the NRRA auction bid package for your Board's consideration at your May 19, 1998 meeting. The bid package is due at the CEC on May 26, 1998. Prior to committing any additional funds to this project, however, it' will be important to provide your Board with an updated report on the project's financial viability, associated risks and ownership/partnership options. BVA and County staff have been working to complete the tasks outlined under the scope of work in BVA's January 13, 1998, consultant services agreement. A report on these project development tasks was originally scheduled to be submitted to your Board in June or August of this year. However, due to the substantial financial commitment necessary for the NRRA auction bid bond at this time, the work required to complete the report has been accelerated to provide the information needed to assist your Board in deliberating the future course of this project.

This report will be included in the May 19, 1998, agenda and will contain the following information: 1) results of BVA's negotiations with power marketers who competed in a competitive bid process to purchase electricity from our proposed project; 2) results from a request for proposal to investors interested in securing Federal Production Tax Credits for our project; 3) an updated financial pro-forma reflecting the above two market conditions and revised engineering and project development costs; 4) a discussion of County risks; 5) a discussion of the project structuring options including full public ownership, public/private joint ownership and full private ownership; and 6) a proposed schedule for continuing development of the project. Should your Board elect to continue forward with the project, on May 19, 1998, we will also be requesting your authorization for the Auditor-Controller to secure the bid bond for the NRRA auction for a not-to-exceed amount of \$170,000.

It is therefore recommended that the Board of Supervisors take the following actions:

- 1. Accept and file this status report on the Buena Vista Landfill Gas Cogeneration Project.
- 2. Direct Public Works to return on May 19, 1998, with a report on the financial viability of the proposed project, a summary of the associated financial risks, ownership/partnership options, and associated documents; and, if applicable, the California Energy Commission's New Renewable Resources Account auction bid package.

fam Could

Director of Public Works

RPM:bbs

RECOMMENDED FOR APPROVAL:

County Administrative Officer

Copy to: Brown, Vence and Associates

General Services

Public Works Department