



**Facts on the Virgin Islands Water & Power Authority
Power Purchase Agreements
With
Alpine Energy Group**



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In the past several weeks there have been a number of letters and editorials in the print and electronic media regarding the Power Purchase Agreements which the Virgin Islands Water and Power Authority (“the Authority or WAPA”) entered into with Alpine Energy Group. Regrettably the information contained in these articles contained misinformation concerning the technology used for the projects, and failed to properly characterize the terms and conditions of the agreements between Alpine Energy Group and the Authority. On behalf of the Authority, I would like to take this opportunity to enlighten the Virgin Islands Community on the **“FACTS”** associated with the Authority’s two Power Purchase Agreements with Alpine Energy Group, clarify the misunderstandings related thereto and simultaneously correct the misinformation that has appeared in the print and electronic media.

Project History

On December 28, 2007, the Authority issued a Request for Proposal (“RFP”) for the purchase of up to 26 and 35 megawatts (“MW”) of electric energy on St. Croix and St. Thomas, respectively. The primary objectives of the procurement process were to solicit proposals that would reduce the cost of electricity to our customers, and decrease the Authority’s 100% dependence on fuel oil and the associated exposure to volatile oil market prices. The Authority’s goal was to enter into one, or more, Twenty (20) year Power Purchase Agreement(s) that would provide a guaranteed supply of energy at a cost that was lower than the Authority’s projected energy costs. The process was open to all renewable and alternative energy technologies, including generation from non-fuel oil sources such as coal and petroleum coke. Oil fired solutions were not eligible for consideration under this RFP process.

To accomplish the RFP objectives, an Evaluation Committee, consisting of high level internal management staff was formed, and was supported with globally recognized and experienced legal and technical advisors to assist with the evaluations and negotiations. The legal advisory team consisted of personnel from the law firms of Hunter, Cole and Bennet on St. Croix, and Skadden, Arps, Slate, Meagher, & Flom, LLP’ Washington, D.C. office. The technical advisory team consisted of personnel from Boston Pacific’s Washington D.C. office, and R. W. Beck’s Orlando, Florida and Boston, Massachusetts offices.

On the proposal due date, May 1, 2008, the Authority received fourteen (14) proposals that included projects with the following technologies: One Geo Thermal Project, One Coal Project, One Bio-Mass Project, One Compressed Natural Gas Project, One Inter Island (STT & STX) Interconnection Cable Project, Three Waste to Energy Projects, Two Wind Projects, One Solar & Wind Project Combined, One Solar Project and Two Ocean Thermal Energy Conversion (OTEC”) Projects. During the approximately twenty (20) months of due diligence and review, the fourteen proposals were narrowed down to six (6) proposals that met the Authority’s avoided cost. The six (6) short listed proposals were as follows: The selected proposal for St. Thomas was a geothermal solution proposed by West Indies Power Holdings, B.V. of Charlestown, Nevis.

Waste-to-energy facilities for St. Thomas and St. Croix were proposed by Alpine Energy Group of Englewood, Colorado and BioEnergy, Inc. of Cherry Hill, New Jersey. The selected proposals for St. Croix included a coal facility proposed by St. Croix Renaissance Group of the Virgin Islands, an ocean thermal energy conversion (OTEC) facility proposed by Sea Solar Power International of Washington, D.C., and a combined wind and solar facility proposed by Blue Wave Capital, LLC of Boston, Massachusetts in cooperation with St. Croix Renaissance Group in the Virgin Islands. The Evaluation Committee entered into negotiations with all parties. Very late in the negotiations, Sea Solar Power International withdrew its proposal. Blue Wave Capital, LLC withdrew the wind component of its proposal.

The Evaluation Committee, being satisfied that the Alpine Energy Group proposal met the objectives of the Request For Proposal to reduce the cost of energy and decrease the Authority's reliance on volatile oil prices, forwarded its findings to the Authority's Governing Board, recommending the proposal from Alpine Energy Group LLC to develop two projects, one on St. Croix and one on St. Thomas. On August 10, 2009, the Authority's Governing Board approved execution of two (2) separate twenty-year power purchase agreements and other ancillary agreements for the proposed projects.

The AEG Projects

Alpine Energy Group intends to finance, build, own and operate two waste-to-energy projects, one each on St. Thomas and St. Croix, U.S. Virgin Islands (USVI). The St. Thomas facility will be located on the Bovoni Bay side of the Long Point peninsula on the south-eastern shore. The St. Croix facility will be located along the Martin Marietta Channel. Each project site will cover approximately 30 acres. The St. Thomas project will be capable of generating up to 33 MW, which represents approximately 40% of the current peak generation in the St. Thomas/St. John district. The St. Croix project will be capable of generating up to 16 MW, which represents approximately 20% of the current peak generation in the St. Croix district. The projects will each burn a blend of pelletized refuse-derived fuel ("PRDF") and petroleum coke in state of the art, low emissions fluidized bed steam generators ("FBSG"), and are **not incinerators, as has been incorrectly printed in the media.** Steam from the fluidized bed steam generators will be converted into electric energy in the steam turbine generators. Pelletized refuse derived fuel will be produced from local municipal solid waste that has been screened, shredded, sterilized and pelletized. The petroleum coke, which is a secondary fuel source, will be supplied from the HOVENSA's refinery. The projects will employ the best available air pollution control technologies to eliminate, minimize and/or control any discharge of pollutants into the atmosphere.

The Power Purchase Agreements with Alpine Energy Groups represent the most attractive projects for the Authority and the Territory as a whole, and fully met the objectives of the RFP. The Power Purchase Agreements provide a predominantly fixed rate for guaranteed power production. Alpine Energy Group, as developer of the projects, is contractually bound by a schedule of development milestones to assure that the projects meet specified development and construction target dates, including obtaining all required environmental permits. Further, Alpine Energy Group is required to post liquid security, in the form of letters of credit, and other credit support, in order to backup its duties to perform under the Power Purchase Agreements. Hence, in the event that Alpine Energy Group fails to meet its obligations pursuant to the milestones to complete construction of the project, or to provide the guaranteed electric output

for the 20-year term of the Power Purchase Agreements, the letters of credit will be available to the Authority to compensate it for penalties related to delays or damages for Alpine Energy Group's failure to perform.

The Alpine Energy Group projects offer significant opportunities and long term benefits to several Government agencies and, ultimately, the residents of the Territory. For the V.I. Water and Power Authority, the projects benefits include, but are not limited to, lower cost power, fuel diversity for power generation, and much needed electricity transmission stabilization, specifically in the St. Croix District. For the Virgin Islands Waste Management Authority, which also reviewed and evaluated Alpine's projects with its own highly regarded technical and legal consultants, the benefits of the projects bring a comprehensive and permanent solution for the management and disposal of the Territory's municipal solid waste and resolves long standing non-compliance issues. For the Virgin Islands Port Authority ("VIPA"), the projects avoid the FAA decertification, the possible closure of the Henry Rohlsen Airport on St. Croix; and allow for VIPA to maintain federal discretionary funding, which was disallowed in the past and was again at risk if a workable/permanent solution to the Anguilla landfill issues raised by the FAA were not resolved. Further, Consent Decrees and Orders with the United States Department of Justice and Environmental Protection Agency relative to Territory's landfills that could have potentially resulted in significant penalties to the Virgin Islands Government could soon be closed.

Financing

Alpine Energy Group will finance both projects. The Authority's financial obligation is LIMITED to preparing its infrastructure to accept the power output from the projects and to pay for a contracted minimum annual amount for the power it is required to purchase. Alpine Energy Group has advised the Authority that the projects estimated combined cost is \$440 million, and that the debt financing is being provided by a recognized U.S. bank. The equity financing will be provided by Energy Investors Fund, which has invested billions of dollars in the development of power projects throughout the United States.

Under the Power Purchase Agreements, the Authority commits to purchase a specified minimum amount of power at the contracted price. This commitment is necessary to support the financing of the projects, assuring the lenders and equity investors that so long as Alpine Energy Group meets its own obligations under the Power Purchase Agreements, it will have a stable source of revenue from which to repay the debt borrowed by AEG to finance its construction of the plants. After the Authority purchases the minimum amount of energy required under the Power Purchase Agreements, it only pays 70% of the base cost of electricity for any additional energy it purchases.

With respect to the construction of the dock facility on St. Thomas, the Authority shares the financial obligations. Alpine Energy Group is responsible for the first \$8,000,000 in costs. If the cost of the docking facilities is between \$8,000,000 and \$10,000,000, then WAPA is responsible for only 50% of such excess or a total of up to \$1,000,000. If the costs to construct the dock facilities exceed \$10,000,000 then the parties must meet to determine the feasibility of the construction of those facilities. Note that if the cost for the dock facility is less than \$8,000,000, Alpine Energy Group must pay the Authority the difference between the lower cost and the \$8,000,000. Similarly, Alpine Energy Group is responsible for the first \$5,000,000 for the acquisition and preparation of the site on St. Thomas. If site acquisition costs between

\$5,000,000 and up to \$7,000,000 the Authority is only responsible for 50% of such excess or a total of \$1,000,000. And again, AEG must pay the Authority the difference between the lower cost and the \$5,000,000.

With regards to tax credits, should Alpine Energy Group qualify for any such credits or incentives made available from the American Recovery and Reinvestment Act, signed into law by President Obama for the production of electricity from alternative energy facilities, the Authority will receive 90% of that tax credit or incentive.

Based on the terms and conditions of our agreement outlined above, it is evident that the risks associated with the projects, particularly the financing risks and associated costs, are wholly borne by Alpine Energy Group. It is not an uncommon business practice in any project for a party to assume limited, well thought out, risk with minimal exposure to accomplish set goals and objectives. The information that has been disseminated by opponents of the projects have vastly overstated the Authority's risks and in many instances provided incorrect information. It should be emphasized that Alpine Energy Group **cannot**, as some have indicated in the media, raise the price of power to the Authority if their project costs are higher than projected.

Technical Analysis & Economic Analysis

R. W. Beck, Inc., a globally recognized engineering firm, performed a detailed technical review and economical analysis of each project.

The major highlights of the Technical Review concluded that:

- Alpine Energy Group, and the other project participants, demonstrated that they had the capability and/or relevant experience and expertise to perform their proposed projects.
- The principal fuels proposed for the Alpine Projects, Pelletized Refuse-Derived Fuel and Pet Coke, are commonly used for electric power generation, and are capable of providing the energy to generate the electric output specified in the Power Purchase Agreements.
- The conversion of household Municipal Solid Waste ("MSW") into benign biomass material (Fluff[®]) and pelletized refuse derived fuel, using Bouldin's WasteAway technology, is a demonstrated technology and is capable of supporting the performance specified in the Power Purchase Agreements.
- Energy Products of Idaho's ("EPI") Fluidized Bed Steam Generator technology has been successfully demonstrated on many applications and is capable of supporting the performance specified in the Power Purchase Agreements.
- If the Bovoni and Anguilla Projects are designed, constructed, operated, and maintained as currently proposed by Alpine Energy Groups, and burn the specified fuels, they will be capable of achieving the performance requirements specified in the Power Purchase Agreements..
- The Alpine projects, as currently proposed, are capable of controlling emissions to the expected permit limits while burning the specified fuels. Alpine Energy Group anticipates an 8- to 12-month review process to issue the key permits, based on indications by the Environmental Protection Agency ("EPA") that they will review the applications in a timely manner.
- The current budget estimates for the Alpine Projects are similar to other such projects in the U.S. that are generally comparable to the Projects. The basis for the budget estimates

is consistent with industry practice for projects that are in the early stages of development.

- It is reasonable to expect that the Alpine Projects, as currently proposed, should be capable of achieving the Commercial Operations Date (COD) within 42 months from the signing of the Power Purchase Agreements in August 2009, assuming that there are no unexpected delays in obtaining the permits, or delays in equipment procurement or contract execution.

With regards to the Economic Analysis, also performed by R.W. Beck Inc., the following was concluded:

- The projected savings associated with the Alpine Project is projected to range from \$10 million dollars to \$275 million or 0.3 percent to 7 percent on a Net Present Value (“NPV”) basis over the range of assumptions about oil fuel prices, pet coke fuel prices and carbon legislation. On a cumulative nominal basis, the projected savings associated with the AEG Project is projected to range from \$67 million to \$715 million dollars or 1 percent to 9.5 percent over the range of assumptions about oil fuel prices, pet coke fuel prices and carbon legislation.
- When fully operational the two proposed generating projects from Alpine are estimated to supply between 31% to 36% and 28% to 32% of the total annual electric energy requirements on the islands of St. Thomas and St. Croix, respectively.
- The two proposed projects will displace approximately 625,000 barrels of fuel oil on both islands combined.
- Emissions of CO₂ are projected to be slightly higher on a per mega watt basis, but there are offsets that will mitigate this increase. (See General Environmental Overview below)
- When fully operational the two proposed generation projects will reduce the Authority’s dependence on its oil fueled generation equipment, which will result in lower overall fuel costs to be recovered from customers, and will provide more stability to the Authority’s cost of fuel.

General Environmental Overview

Clearly the public has a right to know the Environmental “FACTS” related to the projects and any potential impact or benefit that may result from same. Being cognizant of the community’s Right-to-Know, the Authority is committed to providing public education and outreach on the environmental issues associated with this project. Additionally, the Authority retained a consultant to objectively evaluate the public concerns and verify representations and environmental commitments made by Alpine Energy Group.

An environmental review of Alpine Energy Group’s projects specifically focusing on air quality reveals the following:

The initial major environmental permits required for the Alpine projects are: (a) the U.S. Environmental Protection Agency’s (“EPA”) Prevention of Significant Deterioration (PSD) Air Quality Permit, (b) Department of Planning and Natural Resources’ Coastal Zone Management Permit and (c) the U.S. Army Corps of Engineers’ Permit. Alpine Energy Group has already initiated the due diligence process to secure these permits in a timely manner. The public will be afforded an opportunity to provide comments in support of or in opposition to each respective application.

The Authority’s environmental review has concluded that Alpine’s projects will not, as has been alleged, deteriorate overall air quality in the Territory, but will instead provide a significant environmental benefit. The reason the air quality will improve is because older generation equipment at the Authority’s plants will no longer be used to meet the Territory’s electric demands, thereby resulting in a net emissions reduction for all criteria pollutants and virtually all hazardous air pollutants. The more modern Alpine equipment has state of the art efficiency control systems, and will use the latest air pollution control technology on its processing equipment, hence releasing fewer pollutants than the Authority’s aging facilities. It is not possible for the Authority to install control technology on its older boilers and turbines. For example, Alpine Energy Group will use a selective non-catalytic reduction (SNCR) systems to control nitrogen oxides in its EPI Thermal Oxidizers, but such post combustion NOx reduction technologies are, according to EPA, not feasible for application to WAPA's existing combustion turbines.

Substituting municipal solid waste and pet coke for the fuel oil currently used in generating electricity will result in annual savings of more than 625, 000 barrels of fuel oil per year for the Authority’s plants. Assuming that this reduction in oil use is realized at some of the Authority’s least efficient units, Alpine projects will reduce criteria pollutant emissions from the Authority’s plants by the estimated amounts shown in the following table:

Island	Emission Reductions (tons per year)				
	NOx	SO2	PM	CO	VOC
St. Thomas	-274	-133	-18	-47	-7
St. Croix	-146	-62	-21	-63	-23

In addition to reducing criteria pollutant emissions, any impact on the communities near the existing WAPA plants will be greatly diminished, because of the reduced amount of emissions from less fuel oil combustion. Ground level impacts near the Authority’s existing plants will be reduced when the Alpine Energy Group facilities come on line because of the separate locations of the plants. All federal and local health standards are based on ground level impacts, so the fact that the Alpine facilities will be several miles away from the Authority’s facilities plays a key role in improving air quality in the community. It is estimated from our air modeling that air quality levels in St. Thomas will improve by about 30% and levels in St. Croix will improve by about 15%, thus producing a significantly healthier environment.

Greenhouse gas emissions will be about the same once the Alpine plants become operational, primarily because the Municipal Solid Waste burned will not be disposed in the landfill and therefore will not generate additional emissions of methane. Methane is also a greenhouse gas, but has a global warming potential that is 21 times that of CO₂. Although the CO₂ emissions from the AEG plants may exceed the reduction achieved at the WAPA plants, the reduction in methane emissions will balance that increase, resulting in about the same greenhouse emissions when the AEG plants begin operation.

Summary

Certain members of this community have voiced their concern that the Alpine Energy Group’s proposed projects are not “green” enough; that there ought to be more “renewables” in the mix, and that there are many companies with renewable technology that can sell power to the Authority. What these individuals fail to take into consideration is the Authority’s need to

generate and maintain baseload power to its customers of 80 plus megawatts on St. Thomas/St. John and 50 plus megawatts on St. Croix. Base load power is the demand for energy that must be delivered to customer twenty-four (24) hours each day, regardless of peak and swing periods. Wind and solar power are not reliable sources to meet baseload power, particularly with standalone (i.e. not connected to grid) systems such as the ones operated by the Authority. Let's remember that, the sun is only available when it shines and the wind, when it blows.

What has also not been taken into consideration by those concerned about the projects is that the Authority is mandated by law to secure goods and services in a competitive process that requires the Authority to select the most responsive bidder. As such, absent exigent circumstances, the Authority must select from among those goods and services that are proposed in the procurement process. The Alpine projects were the results of a public and transparent procurement process that was open to all viable technologies that met the stated objectives of the procurement. Only oil based solutions were ruled out. Therefore, the market place determined the projects that were before the Authority for consideration, and only those projects could be evaluated. Subsequent analysis, review and negotiations that occurred during the RFP process narrowed down the number of projects that met the Authority's objectives and that were capable of being financed. Alpine's projects met the objectives of the RFP, however these projects are the beginning, and not the end of the Authority's efforts to diversify its generation portfolio. The Authority is committed to continuing its effort to add more renewable to its generation mix. In fact, the power supply stability that the Alpine projects provide will make our systems easier to integrate with renewables, such as wind and solar, which suffer low capacity factors. The Authority has already embarked on plans to release solar and wind RFPs in calendar year 2010.

At the end of the day, the Authority has delivered two projects that, based on our professional evaluations, are technologically and economically feasible; financially viable; address a significant portion of our generation needs; reduces the Authority's and the Territory's dependence on fuel oil, limits the ratepayer's exposure to fuel price volatility; and save the ratepayers a significant amount of money. Also of critical importance, these projects are the solution to the very real and very serious and pressing municipal solid waste disposal problem.

The Authority looks forward to bringing the Alpine projects to conclusion. We acknowledge and respect the rights of all members of the public to voice their concerns about the projects as we embark on this journey. We sincerely hope that the members of the public will similarly respect and acknowledge the Authority's right to inform the public about the FACTS surrounding the Alpine projects and correct any misinformation or mischaracterization that is disseminated. **I wish to assure this community that the Virgin Islands Water and Power Authority, its Governing Board, Management and its 600 plus employees, would NEVER propose or formulate any solution, unless we are convinced it is in the Territory's best interest.** The Authority will continue its public outreach and education to keep the members of the public informed on all aspects of the AEG projects, and sincerely believes that once the Alpine projects are operational, those who currently oppose them will have a greater appreciation for the projects and the benefits that they will bring to the people of the Virgin Islands.