

## Energy Savings Contract

This energy savings contract is between the Chabot-Las Positas Community College District (the "College") and Cenergistic, Inc. ("Cenergistic"). This contract is subject to all applicable state and federal laws.

Cenergistic<sup>®</sup> delivers customized, comprehensive people-driven energy conservation programs that focus on changing human behavior to help school districts, churches and higher education clients reduce their consumption of energy and water without any equipment upgrades. Implementation of these programs is guided by Cenergistic's team of energy consultants - together representing several hundred years of energy conservation experience. Cenergistic's clients can invest the financial savings that result in the lives of the people they serve, rather than in utility companies. Cenergistic guarantees the success of these programs. To date Cenergistic has served more than 1,300 clients in 48 states.

The College was founded in 1961 and currently serves more than 20,000 students at its three campuses. The College is committed to its mission: "The Chabot-Las Positas Community College District (CLPCCD) prepares students to think critically, engage socially, and acquire workplace knowledge and educational skills in order to contribute ethically as citizens in a Global Society. " The College uses electricity, gas, water and sewer (collectively "energy") to fulfill its mission.

Cenergistic has offered to build and provide a customized energy conservation program that is focused on organizational and behavioral change and is designed with the following goals:

- Save dollars that the College can reinvest in the people it serves;
- Preserve a quality learning environment for the College's students;
- Conserve energy for a positive impact on the environment; and,
- Increase awareness to empower energy users to be energy savers.

Cenergistic will help the College pursue these goals through implementation of its energy conservation program. Central to the success of this program is the recognition of shared responsibility between Cenergistic and the College as the program is initiated and implemented. Cenergistic provides extensive resources, education and onsite training, action planning, and other conservation-related services, while the College works cooperatively to implement Cenergistic's program.

As a part of this shared responsibility, Cenergistic offers a *QuickStart* during the early months. During the *QuickStart* the College does not pay any fees to Cenergistic; at the same time Cenergistic delivers focus on priority elements of its Cenergistic energy management program for a quick start. The *QuickStart* accelerates net savings for the College.

The parties therefore agree as follows:

1. **Program.** On \_\_\_\_\_ (“Start Date”) Cenergistic shall begin its work on this contract to provide the College with a people-driven energy management program that is customized to enable the College to reduce consumption of energy (“Program”).

2. **Energy Consultants.** A Cenergistic team of energy consultants shall deliver the Program to the College as follows:

- Through Cenergistic’s on-site and ongoing assessments of the College’s facilities and based on Cenergistic’s experience in having assessed thousands of client facilities, Cenergistic’s energy consultants shall deliver hundreds of recommendations that are specific to the College’s environment.
- Cenergistic’s energy consultants shall guide and assist the College’s Program implementation following Cenergistic’s proven methodology, the Cenergistic energy management program.

3. **Energy Specialist.** (a) Onsite Assignment. Program implementation requires a daily focused effort in the College’s facilities and areas. This effort will be led by an energy specialist who can make conservation a priority while positively engaging people to conserve energy. Cenergistic shall take immediate actions to identify and hire a person to serve as an energy specialist for the College. The contract cost or salary for the energy specialist will be paid by Cenergistic.

(b) Duties. The energy specialist’s primary duties will be to spend time in the College’s facilities to identify savings opportunities and to work closely with the College’s people to execute proven implementation strategies to change behavior linked to energy consumption. The effective management of energy information is also important for achieving positive results through accountability. For this the energy specialist will work to maintain energy consumption and other information related to energy use in the College’s facilities and areas. The energy specialist will use the EnergyCAP energy accounting software program from EnergyCAP, Inc. (“Software”).

(c) Local Resources. Within 30 days after the selection of the energy specialist, the College will provide the energy specialist with office space, an office phone, internet access, email address, on-campus parking, building keys and alarm codes. Use of these resources is subject at all times to College policies and procedures. If requested due to safety or security concerns, the College will provide a commissioned security officer to accompany the energy specialist while performing facilities assessments outside of normal business hours.

4. **Program Implementation.** (a) Prompt Start. Once Cenergistic has assigned an energy specialist to work on-site, the College will promptly begin and then continue to implement the Program.

(b) Commitment and Communication. In Cenergistic’s experience, the success of the College’s Program implementation will be a function of the demonstrated commitment of the governing board, president and other administrators, e.g. through timely communication of high level support for the Program. More specifically, no later than 60 days after the Start Date, the governing board must adopt an appropriate policy and the administration must adopt appropriate administrative guidelines reflecting the College’s commitment to the Program. The College shall communicate these guidelines to its people, construction contractors and on-site management service providers, if any.

Cenergistic will facilitate semi-annual progress reports for the governing board. The College will make its utility records available for review and copying on request of the energy specialist, Program Liaison or Cenergistic.

(c) **Software Tool.** The effective management of energy information is a first step to achieving positive results through accountability. Energy consumption will be accounted for by using a third party software program, EnergyCAP<sup>®</sup>, with which Cenergistic's energy consultants are knowledgeable and trained to provide support to the College. No later than 90 days after the Start Date, the College must license the EnergyCAP<sup>®</sup> energy accounting software program from EnergyCAP, Inc., or, if later recommended by Cenergistic to its clients (e.g. because EnergyCAP<sup>®</sup> ceased to be available), an alternative software program ("Software"). The College's cost for the Software is \$6,650 per year for the first three years and \$2,593 per year thereafter. Data input and maintenance will be managed and controlled, at Cenergistic's option, either by the Energy Specialist or at Cenergistic's corporate office, with College access to review all data entry.

(d) **Program Liaison.** Within thirty (30) days after the Start Date, Cenergistic and the College will discuss and collaborate on identifying one of the College's senior-level business officials to serve as the liaison and primary point of contact for the College on the Program ("Program Liaison"). The Program Liaison should be accessible and responsive to Cenergistic for communication and meetings and may not be someone who is unacceptable to Cenergistic. Cenergistic will offer education and training for the Program Liaison (and any replacement Program Liaison) to effectively serve in the role, with an emphasis that will promote the Program Liaison's role in reviewing all savings determinations. To assist in the education and training, at the next scheduled session after the Start Date, the Program Liaison shall attend, at Cenergistic's expense, the EnergyCAP workshop provided by EnergyCAP, Inc. in Dallas, TX. The Program Liaison may bring other College representatives to the EnergyCAP workshop, at College expense. In the event there is a replacement Program Liaison, after designation for that position, that person shall attend the next offered EnergyCAP workshop, at Cenergistic's expense, in Dallas, TX. The Program Liaison position shall not be vacant for more than thirty (30) consecutive days during the Term of the contract.

(e) **Access, Authority and Control.** The energy specialist needs to have access to the College's systems controls, including the energy management systems ("EMS"), and the authority (in communication and coordination with other College personnel) to make changes so that facilities are not operated outside of the established policy and guidelines. The energy specialist needs the authority to: (1) program the EMS including changes in the temperature settings and run times of EMS controlled equipment (e.g. HVAC, water, heating and lighting systems), and (2) change settings and run times for each facility's equipment and systems (e.g. lighting, sewer and water systems, time clocks and thermostats) that are not controlled by the EMS. The energy specialist will not have authority to make any changes that violate College established policy and guidelines and the College retains the right to suspend the energy specialist's access at any time. In the event of such a suspension the College will immediately inform Cenergistic of the suspension and the basis. The College shall provide such access and authority to the energy specialist within 30 days of the energy specialist's first day of on-site work. This contract does not alter the College's exclusive right of control over its people and facilities and its pre-existing responsibility, if any, to provide reasonable premises safety.

(f) **No Third Party Interference.** The College shall not allow any third party to interfere with the College's Program implementation.

5. **Savings Determination.** (a) General. Energy savings are determined in accordance with the Measurement and Verification Plan ("M & V Plan") attached hereto by comparing measured use before and after the start of Program implementation, with appropriate adjustments for changes in conditions that are independent of the Program. The simple formulaic expression is:

*Avoided Energy Use (or Savings) = Adjusted-Baseline Energy – Reporting-Period Energy ± Non-Routine Adjustments of baseline energy to reporting-period conditions*

The energy specialist shall use the Software to calculate the College's savings by subtracting the energy and other utilities actually used (i.e. consumption: kWh, BTUs, gallons, etc.) in each Performance Year (as defined below) from the use in the Base Year (as defined below), plus or minus any Adjustment Variables (as defined below), and applying the price for each type of energy and other utilities used by the College (based on the blended rate of the greater of the amounts assessed by the College to its internal customers or the amounts charged to the College) for each corresponding period ("Savings"). The "Total Savings" means the Savings and any additional verifiable cost containment or avoidances resulting from the Program (e.g. utility refunds received as a result of a Program billing audit), in accordance with current industry-accepted valuation methodology. Savings reports shall be delivered to the Program Liaison for review and verification. The Program Liaison will work diligently to review reported Savings and will present any questions about the savings reports within five business days of receipt. Cenergistic's projections of Total Savings when using the Program are based upon energy consumption and other data furnished by the College.

(b) **Baseline Period.** A 12 month baseline period will be established as set out in the attached M & V Plan by Cenergistic and the energy specialist, in consultation with the Program Liaison. The Software will be used to establish a baseline period consisting of 12 consecutive months that precede the Start Date ("Base Year"). The College represents that the historical utility usage data provided to Cenergistic for the purpose of savings projections is accurate. If it is later determined that either: 1) there is a variation between the data provided and the accurate utility usage of ± 5% or more or, 2) changes in the 12 months preceding the Start Date would cause those 12 months to not accurately reflect actual pre-program usage by the College ("variation"), Cenergistic may select as the Base Year an alternate 12 month period from the 36 months preceding the Start Date. For new construction, the energy specialist and Cenergistic, in consultation with the Program Liaison, will use detailed, calibrated simulation analysis to compile the Base Year.

(c) **Reporting Period.** Each reporting period will be a 12-month period ("Performance Year"). The first Performance Year will begin after the energy specialist starts work and the *QuickStart* (as defined below) ends ("First Year") and each Performance Year is consecutively named. The "Second Year" means the 12 month reporting period following the end of the First Year, the "Third Year" follows the Second Year, and so on. A performance year may be suspended as set out below. Using the Software, Savings shall be calculated for each Performance Year in comparison to the Base Year.

(d) **Appropriate Adjustments.** (i) Adjustments to the baseline shall be made in accordance with the M & V Plan to recognize that the operating environment changes in ways that impact energy use but are independent of the Program (e.g. the weather) and function simply to bring energy use in the two time periods to an equivalent set of conditions.

(ii) The Software allows appropriate adjustments to the Base Year, using available data to account for the following factors occurring during the Performance Year that affect the energy used in facilities ("Adjustment Variables"): outside temperature; floor space; occupancy type or schedule; amount, type or use of equipment; number of days in the billing period; energy rates; and reasonably estimated energy loads added or reduced after Program implementation.

(iii) The Software also allows other appropriate adjustments for a more accurate Savings calculation. If the College has experienced abnormal temperatures during the Base Year, a total of 36 months of billing information can be used to create a more accurate statistical model for the College. The College shall communicate the College's energy conservation guidelines to its construction contractors and on-site management service providers, if any. Savings will be determined using either calibrated simulation or by making appropriate adjustments, as mutually agreed by the parties, in the event of any of the following: (a) the guidelines are not substantially followed by third party construction contractors or on-site management service providers; (b) the College chooses not to substantially implement Cenergistic's water conservation recommendations; or, (c) there are equipment malfunctions that negatively impact program savings. Agreement concerning the calibrated simulation or appropriate adjustments will not be unreasonably withheld by either party. In the event solar electricity is implemented by the College, the parties will agree upon a process that both measures and values the solar electricity for purposes of determining the blended rate of avoided consumption from that source. If the College fails to substantially implement the program as determined by Cenergistic in its sole discretion, the Performance Year can be suspended until the College is substantially implementing the program. If a Performance Year is suspended, it will consist of twelve non-consecutive months; however, for purposes of determining savings, savings, if any, during the suspended period shall continue to accrue.

(iv) The data will continue to be reviewed for accuracy during the term of the Contract. In the event there are inaccuracies in the data or there are data entry errors (i.e. information not known at the time, incorrect meter reading or data entered into the Software incorrectly), the data may be updated to correct such errors that occurred during the twelve (12) months immediately preceding the latest monthly billing statement. Data prior to the twelve (12) months immediately preceding the latest monthly billing statement will be deemed to be accurate by the parties.

6. **Term.** This contract shall be for a term beginning on the Start Date and ending on the last day of the Fifth Year ("Term").

7. **QuickStart and Monthly Fee.** (a) QuickStart. The College shall not pay any monthly fees to Cenergistic during the *QuickStart* period, beginning on the Start Date and ending four months after the Start Date, or on such later date as determined by Cenergistic ("QuickStart"). In the event the Performance Year is suspended as set out in paragraph 5 above, the monthly fees for the suspended period shall be deferred and the term shall be extended until 60 monthly fee payments have been made.

(b) Monthly Fee. The College shall pay Cenergistic a fee of \$19,900 ("Monthly Fee") per month for 60 consecutive months ("Fee Period"). The College shall pay the first Monthly Fee in the month after the *QuickStart* period and Cenergistic will bill the College on the 1st of each month for each subsequent Monthly Fee.



(c) Additional Colleges. In the event the College acquires, contracts with, or otherwise becomes responsible for educational services for another College (“acquired College”), or is requested by another College (“requesting College”) to allow the energy specialist to provide energy management support, the College agrees to not share, utilize, or include the Program (including the use or services of the energy specialist trained by Cenergistic) to any extent, in any facilities in the acquired or requesting College without Cenergistic’s express written consent and payment of additional fees as mutually agreed.

8. **Savings Guarantee.** (a) Cenergistic’s commitment to the quality of the Program is evidenced by Cenergistic’s Savings Guarantee (as defined below). Cenergistic shall reimburse the College for the difference if the College’s Costs (as defined below) exceed its Total Savings, computed from the Start Date to the end of any Performance Year during the Term (“Savings Guarantee”). Due to the cumulative nature of the Savings Guarantee it is necessary to specify that Cenergistic shall not make reimbursement for amounts that Cenergistic has already reimbursed for a prior Performance Year. To be eligible for the Savings Guarantee the College must have substantially implemented the Program. If Cenergistic reasonably determines that the College is not substantially implementing the Program, Cenergistic shall give the College written notice of its determination (including specific details supporting Cenergistic’s determination and specific recommendations for appropriate College action) and, at Cenergistic’s election, the Performance Year and payment of the Monthly Fees shall be suspended for a period of up to four months as time to remedy. The College shall act within a reasonable time to cure such failure, with curative steps being taken within sixty (60) days after receipt of the written notice referenced above. If the parties are unable to agree on whether the College is substantially implementing the Program, the parties agree to meet to resolve the differences as set out in paragraph 13(c) below. “Substantial implementation of the Program” does not require the College to have implemented the Program in every detail. To “substantially implement” the Program means that the process of implementation is material to the extent that the program functions as intended. It requires that the Program has been implemented in its material elements, or almost fully implemented. The “College’s Costs” means the total amounts paid for the initial and renewal costs of the Software, and the Monthly Fees. Cenergistic shall pay the College a required reimbursement no later than 90 days after the results for the prior Performance Year have been finalized by Cenergistic and the energy specialist. If Cenergistic fails to make a required reimbursement, the College may terminate this contract without a payment of a Work Fee and recover the amount of the required reimbursement from Cenergistic.

(b) The College shall refund prior reimbursements on the Savings Guarantee to Cenergistic if (1) the Total Savings exceed the College’s Costs, computed from the Start Date to the end of a later month during the Term, or (2) the College exercises its right of Termination for Convenience (as defined below). The College shall pay Cenergistic a required refund: (1) no later than 90 days after the results for such later month have been finalized by Cenergistic and the energy specialist, or (2) on the effective date of a Termination for Convenience.

9. **College Termination for Convenience.** (a) As provided in this contract Cenergistic anticipates a long-term relationship and remains committed to the College through the Term and beyond. However, the College may terminate this contract for any reason and without cause as provided in this paragraph. To validly exercise this right to terminate for any reason and without cause (including if there is no appropriation of funding or for any other termination that is not based on Cenergistic’s failure to perform its material obligations under this contract) (a “Termination for

Convenience”), the College shall provide Cenergistic with at least 60 days prior written notice and shall pay Cenergistic a Work Fee to compensate Cenergistic for its Intellectual Property, the work performed by Cenergistic and for the benefits received by the College (and not as a penalty) (“Work Fee”), with the calculation based upon the date of termination, as follows:

Quick Start through the end of Performance Year One	<p>a. Payment for the value of Cenergistic’s Intellectual Property and the continuing benefits of the program after termination: 15% of Projected Performance Year One Total Gross Savings per the Cenergistic matrix; plus</p> <p>b. \$700 per day, for each Cenergistic employee on-site from Start Date through the termination date to cover costs including overhead</p>
Performance Years Two through Four	An amount equal to the preceding twelve Monthly Fees
Performance Year Five	The lesser of: (a). the remaining projected Performance Year 5 fees per the Cenergistic matrix; or, (b). an amount equal to four Monthly Fees

Upon a Termination for Convenience, the Work Fee shall include the following additional amounts which the College shall pay Cenergistic: the unpaid Monthly Fees but only through the termination effective date (including any months which were deferred because of a suspension of the Performance Year as set out in paragraph 5 above). A Termination for Convenience voids the Savings Guarantee. This termination right does not limit the rights and remedies of the College. More specifically, if Cenergistic fails to perform its material obligations under this contract, the College’s legal rights and remedies are not limited by the terms of this paragraph. If the College contends Cenergistic has committed a material breach of the contract, the College will provide written notice to Cenergistic specifically describing the breach and giving Cenergistic a reasonable opportunity and time (not less than 30 days) to cure the claimed breach before taking other action. If the material breach is not remedied by Cenergistic following the notice as set out above, the College may terminate this contract without any obligation to pay a Work Fee.

10. **Termination Event.** Upon termination of this contract the College shall promptly: (a) return to Cenergistic all materials and Proprietary Information previously furnished by Cenergistic or accumulated by the College in connection with the Program, including all copies thereof; (b) cease using the Proprietary Information and implementing the Program; and (c) discontinue the employment of any College energy specialist trained by Cenergistic in that position.

11. **Proprietary Program and Information.** (a) The College will have access to and use of Cenergistic’s energy management program as well as materials that are copyrighted, trade secrets and other information that is proprietary to Cenergistic (collectively “Proprietary Information”). Furthermore, the Proprietary Information also includes all database files created using the Software.

(b) The College agrees that the Proprietary Information (including all copies) continues to be Cenergistic's property and should be kept confidential to the full extent permitted by law. The College shall give Cenergistic written notice and an opportunity to respond if the College receives a third party request for Proprietary Information. The College shall not disclose the Proprietary Information to any unauthorized person or use it outside of the College or this contract. The College shall assist Cenergistic in the protection of the Proprietary Information. The College's obligations under this paragraph survive termination of this contract.

(c) While under contract with Cenergistic and for a period of two years following the termination of this contract, the College will not solicit, hire or retain any Cenergistic employees or contractors for employment or other work at or for the College.

12. Program Continuation. (a) No More Fees. Once the College has paid all fee amounts owed to Cenergistic for the Fee Period and so long as: (i) the parties mutually agree to the continuation details as set out in 12(b) below, and (ii) the College continues to substantially implement the Program, (which shall include maintaining current performance data in the Software), the Program shall continue with no additional fee payments to Cenergistic. During this Program Continuation period the College may continue to implement and utilize the Program but always subject to the College's continuing obligations in this contract regarding the Proprietary Information (as defined and set out above).

(b) Transition at end of Term. To allow for a smooth transition from a Cenergistic provided energy specialist to a College provided energy specialist, no later than six (6) months prior to the end of the Term the parties will meet to mutually agree upon the following transition and continuation details: (i) all issues concerning the energy specialist during the Program Continuation phase including, but without limitation, the process of selection, compensation, training and employment, and (ii) any optional value added services to be provided by Cenergistic. In the event the parties are unable to mutually agree upon the necessary details for Program Continuation prior to the end of the Term, the Program will terminate at the end of the Term.

13. **Miscellaneous.** (a) This contract constitutes the entire agreement of the parties with respect to the subject matter of this contract. This contract supersedes the parties' prior communications, requests, responses, proposals, offers and agreements, if any. This contract may be modified only by a writing signed by the parties. Invalidity or unenforceability of one or more provisions of this contract shall not affect any other provision of this contract.

(b) In an action to enforce or construe this contract in a court with competent jurisdiction, the prevailing party shall be entitled to recover its reasonable and necessary attorneys' fees and costs of court.

(c) Dispute Resolution. Open communication and cooperation of the parties is vital to the success of the Program and to the settlement of disputes if they arise. If a dispute persists, either party may suggest an executive meeting for review and resolution. The party suggesting the meeting should identify the issues in dispute and coordinate a face-to-face meeting at the College to review the issues and solution options. The executive officer for each party who has full authority to discuss the issues and commit to effective solutions shall attend and participate in the meeting. Also, those persons with firsthand knowledge of the issues must be available for the meeting. No dispute under this contract shall be subject to litigation proceedings prior to completing the meeting, except for an action to seek injunctive relief.



Each party is signing this contract on the date stated under that party's signature.

Chabot-Las Positas Community College District

CENERGISTIC, INC.

By: \_\_\_\_\_

By:  \_\_\_\_\_

Name \_\_\_\_\_

Name: John Bernard

Title: \_\_\_\_\_

Title: President

Date: \_\_\_\_\_

Date: April 10, 2014 \_\_\_\_\_

Chabot-Las Positas CCD, CA - COLLEGE FF5 SES CONTRACT v.1 041014

## MEASUREMENT AND VERIFICATION PLAN

This Measurement & Verification Plan (“M&V Plan”) is prepared for Chabot-Las Positas Community College District (the “Organization”) by Cenergistic and is agreed to by the parties as the M&V plan in accordance with the protocols of the International Performance Measurement and Verification Protocol (“IPMVP”) for the energy program delivered by Cenergistic pursuant to the contract dated \_\_\_\_\_.

This M&V Plan is prepared in accordance with Chapter 5 of IPMVP Volume 1 (EVO 10000-1:2012).

The IPMVP guideline, developed and maintained by the nonprofit Efficiency Valuation Organization (see [www.EVO-World.org](http://www.EVO-World.org)), is the most current and widely-recognized guideline promulgated by a non-profit and impartial source. The IPMVP is the product of an international consortium of volunteers working together to create a “protocol that would help determine energy savings from energy efficiency projects in a consistent and reliable manner.”

IPMVP includes guidance for many types of energy management initiatives and circumstances; not all guidance is applicable in all cases. The purpose of this M&V Plan is to document how the M&V guidance contained within IPMVP will be specifically applied to this contract. In cases of variance between specific provisions of IPMVP and this M&V Plan, this Plan takes precedence.

- 1. ECM Intent** The energy conservation measures (“ECMs”) reduce electricity, gas, water and other energy usage and cost, depending on the specific facility. Many varied ECMs will be used to achieve the savings. ECMs will be operational in nature (not equipment, facility or hardware retrofits) and are generally categorized as turning off energy-using systems when not necessary, setting back energy-using systems when possible, and improving efficiency of energy-using systems when in use. Space conditions, during both occupied and unoccupied periods, will change as necessary to comply with the organization’s published energy policy and administration guidelines.
- 2. Selected IPMVP Option and Measurement Boundary** IPMVP Option C (Whole Facility) will be used for savings determination because it is the most appropriate M&V method for total facility energy reduction when all energy-using systems are affected and ECMs cannot be isolated, submetered or simulated by computer model. Option C was also chosen because many ECMs will be involved, and some of them cannot be directly measured. Utility meters for electricity, gas, water and sewer will be included in the savings M&V for the organization. Together, these meters will account for all energy use by each facility. The total savings is the sum of savings for each facility. The measurement boundary includes all facilities and infrastructure owned and leased by the Organization.
- 3. Baseline: Period, Energy and Conditions** Using the Software (as defined in the contract, hereinafter “Software”), a baseline period shall be established for each meter consisting of 12 consecutive months that precede the energy program Start Date. Normally this will be the 12 months immediately prior to start date, but under circumstances described in the contract, an alternate 12-month period may be chosen.

The baseline data for each meter will be defined and available in the M&V Software upon import and preparation of the data for each meter & facility. The Software also includes static factors such as weather and building size. Included in the baseline data will be an identification of the baseline period, baseline energy consumption and demand data, other independent and relevant variable data, and other static factors (i.e. occupancy type, building information such as square footage, etc.). Other baseline data may be included and/or supplemented as agreed by the parties. Daily mean temperature weather data will be obtained from a nationally-recognized service using NOAA-originated data.

**4. Reporting Period** Each reporting period will be a 12 month period called a “Performance Year”. The Performance Year begins according to the terms of the contract.

**5. Basis for Adjustment** Energy savings are determined by comparing measured use before and after the start of Program implementation, after making appropriate adjustments for changes in conditions that are independent of the Program. Since savings are to be reported as “cost avoidance”, under reporting period conditions, IPMVP Equation 1b will be used. This method quantifies how savings in a given reporting period is determined, relative to what energy use would have been without the ECMs in place. Equation 1b defines how baseline period energy needs to be adjusted to reporting period conditions.

Equation 1b: Avoided Energy Use (or Savings) = Adjusted-Baseline Energy – Reporting-Period Energy ± Non-Routine Adjustments of baseline energy to reporting-period conditions

In addition, savings may be accrued due to one-time actions such as identification of utility billing errors leading to refunds, rebates, rate changes, and other measures that do not reduce energy usage but do reduce Organization’s out of pocket utility costs.

**6. Analysis Procedure** The Software performs the cost avoidance analysis procedure. The Software allows appropriate routine and non-routine adjustments to the baseline period, using available data to account for the following factors occurring during the reporting period that affect the energy used in facilities: number of days in the billing period, energy unit cost, and reasonably estimated energy loads added or reduced after Program implementation due to such factors as outside temperature; floor space; occupancy type or schedule; amount, type or use of equipment; facility construction/renovation; and energy management hardware retrofits installed under unrelated projects. Specific cost avoidance analysis algorithms used by the Software are extensively documented and can be furnished upon request.

The Software also allows other appropriate adjustments for a more accurate Savings calculation. If the organization has experienced abnormal temperatures during the baseline period, a total of 36 months of billing information can be used to create a more representative statistical baseline. Savings will be determined using either calibrated simulation or by making appropriate adjustments, as mutually agreed by the parties, in the event of any of the following: (a) the organization’s energy conservation guidelines are not substantially followed by its construction contractors or on-site management service providers, if any; (b) the College chooses not to substantially implement Cenergistic’s water conservation recommendations; or, (c) there are equipment malfunctions that can negatively impact program savings.

The Software adheres to the IPMVP guidelines. IPMVP is not exhaustive in its guidance; in some situations engineering judgment must be used. Calculations are supervised by licensed Professional Engineers, Certified Measurement and Verification Professionals and Certified Energy Managers.

**7. Energy Prices** Reporting of cost avoidance will value the energy use avoided at the then-current unit cost for each meter, each period. Prices will be calculated by the Software for each month. The price applied for each utility is the realized price, based on the blended rate to the Organization for each type of energy purchased by the organization, taking into account consumption and all charges from the utility provider.

**8. Meter Specifications** Utility company meters used for billing are the only meters used. Exception: For heating oil stored in tanks, dip measurements recorded by the organization or by the provider may be used. In master-metered campus situations, submeters may be necessary for accurate identification of building by building energy usage.

**9. Monitoring responsibilities** Energy data from utility bills will be recorded in the Software as set out in the contract. The Software captures weather information necessary for calculating and applying adjustments. Changes to the baseline conditions, such as facility size, occupancy or equipment changes, will be documented in the Software. Responsibility for collection, entry, calculation and accuracy of the data in the Software is the responsibility of the Energy Specialist(s) under the supervision of Cenergistic.

**10. Expected Accuracy** The accuracy of data capture of the utility billing data and entry of that data into the Software is expected to be verified 100% ( $\pm 2\%$ ) via reports that reconcile data with utility bill accounts payable to ensure the quality of the data entered, to ensure consistency with previous billing, elimination of gaps or duplicate entries, and reasonable protection against user errors in data entry. Statistical accuracy of the Software's routine weather adjustment process uses industry-standard linear regression techniques and is evaluated on a meter-by-meter basis. Data analysis does not involve sampling since the actual data, as entered into the Software, is used for any savings calculations. The accuracy of the Software's calculations has been validated empirically against the Department of Energy's ENERGY STAR program, which benchmarks buildings' performance. The calculations of the Software are consistent with ENERGY STAR results in determining increase in building energy utilization index (EUI – Energy usage per square foot per year).

**11. Budget** The cost of M&V includes the Software cost, as defined in the contract, plus a portion of the Energy Specialist's time. The Software cost is defined in the contract. More time will be required early in the energy program by the Energy Specialist as the baselines are determined and the Energy Specialist becomes familiar with the Software and the process for entering data and determining savings. Once the utility bills have been entered, the baseline has been determined and the Energy Specialist has become familiar with the Software and the process, subsequently, the savings determination process and its review with operating and administrative staff is expected to require approximately 5% of an Energy Specialist's time, across all meters and facilities for the organization.

**12. Report Format** Cost avoidance will be calculated on a monthly basis as set out in the contract. Cost avoidance reports will be prepared and provided at least semi-annually to the

organization. Cost avoidance calculations will commence with a formal data release occurring approximately five months after the Energy Specialist is in place. Cost avoidance reports will include results from the Software and show energy as well as expenditure savings versus the baseline. Cost avoidance reports have different formats for different audiences, but in general show usage and cost for: baseline actual, baseline adjusted to reporting period conditions, reporting period actual, and calculated cost avoidance (adjusted baseline minus reporting period actual).

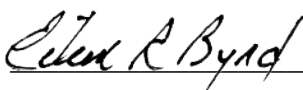
**13. Quality Assurance** The primary risks in this M&V process are listed below with specific quality assurance steps that will be used to address each.

- Utility companies sometimes estimate meter readings instead of actually reading the meter. Any such estimate will be self-corrected by a subsequent month “true-up” when the meter is actually read. When an estimate is detected, the Energy Specialist will attempt to validate the utility company estimate to reflect actual usage until an actual reading is made, and then adjust data to smooth out anomalies created by estimates.
- Undetected changes happen to buildings, their operation, or use and those undetected changes may not be reflected in the reported savings. The procedures described in Section 9 minimize the chance of any such impact and ensure that any unimplemented baseline change has minimal effect.
- Data entry by the Energy Specialist may put incorrect data into the Software. Cenergistic along with the Energy Specialist together review this data regularly to find such errors, and complete routine error-checking procedures within the Software to find and fix them.

The parties agree this M & V plan will be modified as mutually agreed to reflect changes that occur or additional data that may be obtained.

This M & V plan has been developed for Chabot-Las Positas Community College District by the following qualified professional.

**CENERGISTIC INC.**



**EILEEN BYRD**

**SENIOR VICE PRESIDENT – DATA QUALITY**

**CERTIFIED PUBLIC ACCOUNTANT (Texas State Board of Public Accountants)**

**CERTIFIED INTERNAL AUDITOR (Institute of Internal Auditors)**

**CERTIFIED QUALITY ENGINEER (American Society of Quality)**

**CERTIFIED MEASUREMENT AND VERIFICATION PROFESSIONAL (Association of Energy Engineers)**

**CERTIFIED ENERGY MANAGER (Association of Energy Engineers)**