California Energy Commission

Guidebook

STAFF FINAL

WATER ENERGY TECHNOLOGY REBATE PROGRAM GUIDEBOOK

First Edition

CALIFORNIA
ENERGY COMMISSION

Edmund G. Brown Jr., Governor

JULY 2015

CEC-500-2015-043-ED1-SF

CALIFORNIA ENERGY COMMISSION

Brad Williams
Primary Author

Pam Doughman and Kirk Switzer
Project Managers

Virginia Lew
Office Manager
ENERGY EFFICIENCY RESEARCH OFFICE

Laurie ten Hope
Deputy Director
ENERGY RESEARCH AND DEVELOPMENT DIVISION

Robert P. Oglesby
Executive Director

DRAFT

Governor Brown's Executive Order B-29-15 directed the Energy Commission to create the Water Technology Program. The Energy Commission plans to adopt this Guidebook at its business meeting on July 8, 2015.

ACKNOWLEDGEMENTS

The California Energy Commission is grateful for the funding and technical support received from the California Climate Investments program, which made the funding for the Water Energy Technology program possible.

The author would like to thank all those that have assisted in developing the WET program and in particular:

California Energy Commission:
Heather Bird, Kevin Mori, Chris Scruton, David Weightman, Allan Ward

Department of Water Resources:
Diana Brooks, Kent Frame, Jennifer Morales

California Water Resources Control Board:
Fran Spivey-Weber, Vice Chair, Matthew Gomberg

California Air Resources Board:
Shelby Livingston, Elizabeth Yura, Matthew Botill, Cari Anderson

California Department of Food and Agriculture:
Amrith Gunasekara

California Natural Resources Agency:
Kristopher Tjernell

California Public Utilities Commission:
Commissioner Catherine Sandoval, Jamie Ormond

California Employment Training Panel:
Peter Cooper

DRAFT

DRAFT

ABSTRACT

This Water Energy Technology Rebate Program Guidebook explains how the California Energy Commission's Water Energy Technology rebate program will be administered and outlines terms and definitions.

DRAFT

Keywords: Awardee, funding award, water energy technology, greenhouse gas reduction, agriculture, commercial, recipient, residential, industrial, on-farm water savings, on-farm energy savings

.

Please use the following citation for this report:

Williams, Brad, 2015. *Water Energy Technology Rebate Program Guidebook*. California Energy Commission. Publication Number: CEC-500-2015-043-ED1-SF.

DRAFT

TABLE OF CONTENTS

Page

Acknowledgements **1**

Abstract **3**

I. Introduction **7**

A. Purpose of this Document 7

B. Key Words/Terms 8

C. Background 10

D. Period of Performance 10

II: Program Funding **11**

Phase 1: Agriculture 11

A. Amount Available 11

B. Maximum Funding Amounts 11

C. Restrictions on Combining Rebate Funding with Other Funds 12

D. Funding Availability and Restrictions 12

III: Eligibility Requirements **14**

Phase 1: Agriculture 14

A. Applicant Requirements 14

B. Project Requirements 15

C. Additional Rebate Technologies 18

D. Eligible and Ineligible Project Costs 18

E. Disadvantaged Communities 19

IV: Application Process **21**

A. Application 21

B. Application Organization and Content 22

C. Application Process 23

D. Key Dates and Deadlines 23

V: Application Review and Rebate Award Process **25**

DRAFT

A. Application Review 25
B. Rebate Application Screening 25
C. Rebate Award 26
D. Grounds to Reject an Application or Cancel an Award 26
E. Miscellaneous 27
VI: Participant Requirements and Payments 29
A. Program Participant Requirements 29
B. Payments 29
VII: Administration and Other Requirements 31

ATTACHMENTS

Attachment Number	Title
1	Application for Technology Additions to Rebate List
2	Guidance for Determining Energy and Water Savings and Greenhouse Gas Emissions Reductions for Rebate Projects • Low Pressure Irrigation System

LIST OF TABLES

Table 1: Rebate #1: Conversion of Existing High Pressure Drip Irrigation to Low Pressure System 16

DRAFT

I. Introduction

A. Purpose of this Document

Responding to California's drought, Governor Brown's Executive Order B-29-15[1] outlines bold steps to save water, increase enforcement of water use standards, streamline the state's drought response, and invest in new technologies to make California more drought-resilient. In an effort to accelerate innovative water and energy technologies, the California Energy Commission, jointly with the Department of Water Resources and the State Water Resources Control Board, will implement the Water Energy Technology Program under Executive Order B-29-15 and provide funding for emerging technologies.

The Water Energy Technology (WET) Program accelerates advanced technologies that result in long lasting water and energy savings and greenhouse gas emission reductions. The WET Program provides rebates for various industries in California to partially fund advanced water efficient technologies that reduce on-site water and energy use and greenhouse gas (GHG) emissions.

The Energy Commission will implement the WET Program in three phases:

- Phase 1 will focus on agriculture.
- Phase 2 will focus on industry, businesses, and residents.
- Phase 3 will focus on renewable energy powered desalination.

This Water Energy Technology Rebate Program Guidebook (WET Rebate Guidebook) provides information in these areas:

- How the rebate phase of the program will be implemented
- Project and program eligibility
- The application process
- Screening and review criteria
- The award process
- Reporting and documentation requirements
- Payments to Recipients
- Provisions for technology additions to the rebate list

This WET Rebate Guidebook will be periodically revised to include updated program information and requirements of the California Climate Investments Program. .

[1] Executive Order B-29-15 is available on line at http://gov.ca.gov/docs/4.1.15_Executive_Order.pdf

DRAFT

For information on the separate process for WET Program grants and additional information on the WET Program, please visit the Energy Commission's website or contact the Energy Commission at:

- Water Energy Technology Program website: www.energy.ca.gov/wet/
- Share your ideas: www.energy.ca.gov/wet/idea_exchange
- E-mail: wet@energy.ca.gov
- To receive updates on the Water Energy Technology Program sign up for the listserv at: www.energy.ca.gov/wet/

B. Key Words/Terms

This section identifies the key words or terms used in the WET Rebate Guidebook.

Word/Term	Definition
Applicant	The respondent to this Application. An Applicant is defined by a federal tax identification number.
Application	An Applicant's formal written response to this solicitation.
ARB	Air Resources Board
California Climate Investments Program	The program is funded by the State proceeds from Cap-and-Trade auctions. These funds provide an opportunity for the State to invest in projects that help the State achieve its climate goals and provide benefits to Disadvantaged Communities.
CAM	Commission Agreement Manager, the person designated by the Energy Commission to oversee the rebate-funded project and is the main point of contact for the Recipient.
CV	Coefficient of Variation for pressure compensating emitters.
Commercial Technology	Technologies that have reached commercial maturity or been deployed at scales sufficiently large in conditions reflective of actual operating environments that enable appraisal of operational and performance characteristics and financial risks.
Deemed Savings	Energy and water savings that have been pre-calculated for a particular technology.
Disadvantaged Communities	These are communities defined as areas representing census tracts scoring in the top 25 percent in CalEnviroScreen 2.0 (http://oehha.ca.gov/ej/ces2.html).
Energy Commission	State Energy Resources Conservation and Development Commission; also known as the California Energy Commission.
Emerging Technologies	Technologies that have significant greenhouse gas reductions and water savings potential but have not yet achieved enough market share to reach economies of scale.
Emission Factors	Conversion factors used to convert energy savings into equivalent

DRAFT

Word/Term	Definition
	greenhouse gas emission reductions, typically identified as metric tons of carbon dioxide equivalent.
Energy Efficient Technologies	Technologies that either use less energy to provide the same service at an industrial, agriculture or water facility; or provide more services with the same amount of energy input.
Energy Savings	A project that produces on-site energy savings to the Recipient, as electricity, natural gas or fossil fuels.
Grant	Funds for projects that are not on the rebate list. These projects are customized, encompassing one or more emerging technologies and the savings and benefits must be justified by the Applicant.
Greenhouse Gas (GHG)	Gases that trap heat in the atmosphere, contributing to climate change. Greenhouse gas results from the combustion of fossil fuels.
Greenhouse Gas Reduction Fund	Supports the funding awards made under the Water Energy Technology Program.
ITRC	Irrigation Training Research Center at Cal Poly, San Luis Obispo
Independent Verifiable Test Data	Data that is required to justify the energy and water savings, and greenhouse gas emission reductions, of the technologies submitted for grant funding. The data must be from an independent source and shows the direct savings and greenhouse gas emission reductions from the technology.
Rebate	Funds for a prescriptive project on the list. These types of projects have Deemed Savings (see definition) and can be replicated at multiple locations.
Recipient	The awardee of a WET Program Rebate or Grant.
Reservation	Proposed awardees will receive a letter confirming that the project has been approved for funding and informing them of the amount of the reservation.
State	State of California
Water Savings	On-site water savings for the Recipient or using recycled water that reduces ground water use and results in direct, on-site energy savings (e.g., reduction of ground water pumping).

DRAFT

C. Background

1. Water Energy Technology Program

The WET Program will achieve water and energy savings and greenhouse gas reductions by accelerating cutting-edge technologies such as renewable energy-powered desalination, integrated onsite reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.[2]

2. California Climate Investments Program

The WET Program is funded by the Greenhouse Gas Reduction Fund (GGRF). All GGRF funded programs must advance AB 32 (2006) as the primary program goal and each project must provide real and quantifiable emission reductions. The WET Program will accelerate cutting-edge water energy technologies and support achieving the State's long-term GHG emissions reduction goals, while maximizing other co-benefits like water savings. The Energy Commission, in-alignment with GGRF principles, will prioritize investing the GGRF funds in WET projects types that achieve the highest GHG reductions, maximize co-benefits, and are necessary to meet the State's climate goals.

3. Assembly Bill (AB) 32) The Global Warming Solutions Act of 2006

AB 32 created a comprehensive program mandating a reduction in California GHG emissions to 1990 levels by 2020. GHG emission reduction strategies also include a cap-and-trade program requiring the California Air Resources Board (ARB) to develop a Scoping Plan that describes how to reduce GHG emissions in California. ARB must update the plan every five years.

Additional information: http://www.arb.ca.gov/cc/ab32/ab32.htm
Applicable Law: California Health and Safety Code §§ 38500 et seq.

D. Period of Performance

All projects must be completed and Rebate funds fully disbursed by April 1, 2017, or by such later date as may be permitted by the Energy Commission, in consultation with the Department of Water Resources and the Water Resources Control Board.

An Applicant may not begin work on that portion of a project receiving a Rebate under this WET Rebate Guidebook before the Energy Commission's approval of the Applicant's Rebate. Project expenses incurred before the Rebate approval will not be reimbursed.

[2] http://www.energy.ca.gov/drought/

II: Program Funding

Phase 1: Agriculture

A. Amount Available

There is up to **$7 million** of WET Program rebates for agricultural operations and will be allocated to two categories:

- **Group A: Rebates up to $6.10 million** are available for all projects that meet the requirements in Section III.

- **Group B: Rebates up to $900,000** are available for projects that meet the requirements in Section III and benefit Disadvantaged Communities in at least one of these areas: 1) project provides water and energy use efficiency incentives or other services that reduce energy use to water users with a physical address in a disadvantaged community; or 2) project improves, repairs or replaces water system infrastructure for water and energy savings within a disadvantaged community.

The Energy Commission reserves the right to adjust the level of funding between Groups A and B, based on public demand and need, or other factors.

B. Maximum Funding Amounts

An Applicant is defined by a federal tax identification number. Applicants must apply for either Group A or Group B Rebates. The requirements for each group as it pertains to the projects listed in Table 1, Section III are:

- Group A Rebates
  - An Applicant can apply for a single Rebate up to 50 percent of the eligible project cost with a maximum Rebate of $250,000 and can include multiple property locations. For example, an Applicant can request up to $250,000 in a Rebate for a project that costs $500,000 or more.
  - An Applicant applying on behalf of several agriculture operations can apply for a single Rebate up to 50 percent of the eligible project cost, with a maximum Rebate of $250,000. The rebate can include multiple property locations.
  - The Energy Commission reserves the right to assess the reasonableness of any project cost estimates and may request additional information.

- Group B Rebates
  - For projects benefiting Disadvantaged Communities, the maximum funding is 75 percent of the eligible project cost, with a maximum Rebate of $300,000. For example, an Applicant can request up to $300,000 in a Rebate for a project that costs $400,000 or more.

DRAFT

- An Applicant applying on behalf of several agricultural operations benefiting Disadvantaged Communities can apply for a Rebate totaling up to 75 percent of the eligible project cost, with a maximum Rebate of $300,000.
- One Rebate Application can include multiple property locations.
- The Energy Commission reserves the right to assess the practicality of any project cost estimates and may request additional information.

C. Restrictions on Combining Rebate Funding with Other Funds

- An Applicant **cannot** receive multiple WET Rebates or a WET Rebate and a WET Grant for the same project.[3] If this occurs, it will result in disqualification.
- Separate Applicants **cannot** apply for WET Rebates for the same project or even different aspects of the same project. For example, if an Applicant requests a WET Rebate for 50 percent of a Group A project, another Applicant cannot request a WET Rebate for any other part of the project.
- An Applicant **cannot** combine funding from the WET Program with funding from the California Department of Food and Agriculture's State Water Efficiency and Enhancement Program (SWEEP), the California Department of Water Resources' Water Energy Efficiency Program, or any other program that has received funding from the Greenhouse Gas Reduction fund (GGRF).[4] Additionally, an Applicant **cannot** combine WET program funding with other Energy Commission funding associated with research and development (e.g., Electric Program Investment Charge or Natural Gas research and development) or the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP).
- An Applicant **can** combine WET Program Rebates with rebates, incentives and/or grants offered by utilities and others, if: 1) the funding source from these entities does not come from GGRF or the other Energy Commission programs referenced in the previous bullet; and 2) the total of all rebates, incentives and/or grants, including the WET Program Rebate, does not exceed 100 percent of the total project cost.

D. Funding Availability and Restrictions

- Rebates are available on a first-come, first-served basis, until available WET Rebate Program funds are exhausted.
- Funding is subject to any waiting list criteria established by the Energy Commission for Applicants who submit complete and accurate Applications. If the total amount of Reservations issued reaches the program limit, applicants will be put on a waiting list for future consideration.

---

[3] Refer to the Water Energy Technology Program –Solicitation for more information about WET Program Grants.

[4] www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm.

- Complete Applications will be reviewed in the order they are received by the Energy Commission. Refer to Section IV for Application organization and content requirements.
- Projects which result in land fallowing are not eligible.
- Projects replacing permanent crops with non-permanent and/or row crops are not eligible.
- Projects replacing an existing permanent crop with another permanent crop are eligible for Rebates, provided all applicable criteria are met.

DRAFT

III: Eligibility Requirements

Phase 1: Agriculture

A. Applicant Requirements

1. Eligibility

Individual California agricultural operations or a collaborative Applicant representing multiple agricultural operations are eligible to apply for Rebates.

An agricultural operation is one that is involved in operating row, vineyard, field and tree crops, commercial nurseries, nursery stock production, greenhouse operations, or livestock production. The agricultural operation site must be located in California and must benefit California agriculture as direct energy and water savings and greenhouse gas emission reductions. Aquaculture operations are **not** eligible.

A collaborative Applicant, submitting an Application on behalf of several individual agricultural operations is subject to the restrictions stated in Section II. The lead collaborator, with written authorization from the other collaborating Applicants, may apply for and receive a Rebate on behalf of all collaborating Applicants. The lead collaborator may be an eligible Applicant, an equipment manufacturer, contractor, non-profit, or other entity. Lead collaborators that are not agricultural operations may only use Rebate funds on behalf of collaborating agricultural operations.

Only one Application per eligible Applicant is allowed, and only one Application for each project is allowed. An eligible Applicant must choose to apply either as an individual Applicant or as a partner under a collaborative Application. If multiple Applications are received that contain funding requests from a single agricultural operation (as an individual applicant, a collaborative applicant or both), those Applications will be returned unprocessed to the Applicant(s).

Note also the restrictions on Table 1 for Rebate #1.

2. Terms and Conditions

Each Applicant must agree to the terms and conditions within this WET Rebate Guidebook. By signing the Application, each Applicant agrees to the terms and conditions without negotiation. Failure to agree to the terms and conditions by taking actions such as failing to sign the Application Form or indicating that acceptance is based on modifying the terms will result in **rejection** of the Application. Applicants **must read** the terms and conditions carefully.

DRAFT

3. California Secretary of State Registration

California business entities and non-California business entities that conduct intrastate business in California and are required to register with the California Secretary of State, must do so and be in good standing to enter into an agreement with the Energy Commission. If required but not currently registered with the California Secretary of State, Applicants should contact the Secretary of State's Office as soon as possible to do so. For more information, visit the Secretary of State's website at: [www.sos.ca.gov].

B. Project Requirements

All projects must meet the following requirements:

- The project must result in greenhouse gas emission reductions.
- Only the irrigation system described in Table 1 is eligible for a Rebate.
- All components listed in Table 1 must be installed and meet the minimum requirements listed. Individual components, such as purchasing only variable frequency drive motor controls, are not eligible. Existing equipment that meets the stated minimum requirements could be retained if documentation is provided that indicates that it meets the minimum requirements listed.
- The system must be installed in a California agricultural operation.
- Eligibility is limited to agricultural operations currently using high pressure drip irrigation systems.
- Rebate Applicants must meet site, Applicant, technology, and any other requirements indicated in this WET Rebate Guidebook.
- If a collaborative Applicant is submitting on behalf of several individual agricultural operations, the information in Table 1 must be identified separately for each agricultural operation. This information is part of the Supplemental Information discussed in Section IV and must be submitted with the Application.

DRAFT

Table 1: Rebate #1: Conversion of Existing High Pressure Drip Irrigation to Low Pressure System

<u>All</u> components/elements in this table must be included in the system design and meet the minimum requirements listed to be eligible for a Rebate.	
Components/Elements	Minimum Requirements
Crop and Land Requirements	• Acreage must be at least 40 acres. • Land slope must be less than 5 percent.
System Requirements	• Must be designed by Certified Irrigation Designer (certificate from the Irrigation Association) • Must have a pump test completed within the last 2 years for all effected pumps. • Must convert from a high pressure system that is greater than 45 psi. • Must operate more than 1,000 hours/year
Distribution Uniformity (DU)	• Design must result in a DU greater than 0.92 , calculated using the Cal Poly ITRC design computational procedure • The following design assumptions must be provided: o Flow rate differences of individual emitters – include pressure/ discharge graphs, indicating the range in pressures and flows expected across the complete field. o Non-uniformity due to manufacturing variability- includes number of emitters per plant and the manufacturer rated coefficient of variation. o Unequal drainage
Water flow meter	• Design must include totalizer and flow rate displays. • Design must be installed with manufacturer recommended minimum lengths upstream and downstream.
Valves	Design must include adequate air vents/pressure relief/valving at key locations as determined by the irrigation designer.
Sand Media Filters	• Filtration sizing must conform to industry standards of velocity as related to degree of filtration required.
Maintenance Plan	• Proof of adequate filtration and chemical injection must be provided. • Flushing manifolds must be designed to guarantee a minimum tape/hose end flushing velocity of 1.5 ft. /sec.
High Efficiency Pumps and Motors	• Maximum pressure at outlet of pump (upstream of the filter) = 30 psi, plus any uphill elevation. • Designed to deliver low pressure with required maximum system flow rate, having an impeller/bowl efficiency ≥ 80% • Must have an inverter duty motor, meeting NEMA MG-1 Part 31 Standard. • Motors ≥ 100 HP must include: o An insulated bearing carrier on the upper bearing (above the thrust bearings). o A shaft grounding ring above the bottom guide bearing.

Variable Frequency Drive (VFD) motor controls	• VFD enclosure must be shaded from the sun, with air circulation between the shading and the enclosure. Cooling guaranteed to protect the VFD in the hottest conditions expected. • Minimum NEMA 3R or equivalent enclosure (in terms of environmental protection). • Electronics exposed to no external air. • True power factor ≥ 0.90; displacement power factor between 1.0 - .95 lagging at all speeds and loads. • Microprocessor-based inverter logic isolated from power circuits. • Buffered Pulse Width Modulated (BPWM) output waveform using 4th generation Insulated Gate Bipolar Transistors (IGBT) technology. • Must provide continuous output amperage ≥ 15% of the maximum amperage required by the project at a specified input voltage. • Resolution of output control frequency (0-70 Hz) of +/- 0.003 Hz. • DC link choke for the DC bus reactor. • Passive filter (line reactor and EMI/RFI filter) on the input side of the controller. • Ability to accept a variation of input voltage of +10% to - 15% (full rated motor voltage and torque must be deliverable with voltage dips down to 10% below the nominal AC line voltage). • Ability to support a motor cable length ≥ 100 feet for this application without voltage reflection or other problems. • Temperature rating for 100% performance at 50 deg. Celsius ambient. • VFD must have a 3% input line reactor on the input. If not built into the unit, one must be installed between the VFD and the motor. • Must be a 6 pulse VFD. • Manufacturer testing of assembled VFD package prior to delivery to the Applicant. • Drive efficiency (including all associated filters) ≥ 96.5% at full speed and full load. • Ability to automatically restart after an overcurrent, overvoltage, under voltage, or loss of input signal protective trip. The number of restart attempts, trial time, and time between reset attempts shall be programmable. • 3-position Hand-Off-Auto (HOA) switch and speed potentiometer. When in "Hand", the VFD will be manually started, and the speed will be controlled from the speed potentiometer. When in "OFF", the VFD will be stopped. When in "Auto", the VFD will start via a signal from an internal PLC, and its speed will be controlled via PLC communications. For units with bypass capability, a 3-position Drive-Off-Bypass switch is required. • VFD must have input line fuses standard in the drive enclosure. • VFD must be optimized for a 2 kHz carrier (switching) frequency. The carrier frequency must be adjustable to a maximum of 8 kHz. The carrier frequency must be adjusted to the maximum frequency that eliminates audible "hums" in the motor and drive. • All EMI and RFI must be contained and controlled to meet IEC 61800-3

	• VFD must meet standard IEC 61800-5-1:2007 (2.3 times the line voltage for 1.3 msec) for transient protection. • VFD must provide volts per Hertz and "Sensorless Vector" operation. The operating mode shall be "Sensorless Vector."

"≥" means greater than or equal to

C. Additional Rebate Technologies

To be included on the list of eligible technologies for Rebates, emerging technologies must be reviewed and approved by the Energy Commission. Periodically, the Energy Commission will consider new technologies/ approaches to include on the Rebate list. The process to submit new technologies/approaches for consideration is explained in Attachment 1 of this WET Rebate Guidebook along with the schedule for submission. All new additions must be approved at an Energy Commission business meeting.

D. Eligible and Ineligible Project Costs

The Rebate can reimburse up to 50 percent of eligible project costs, except for those benefiting Disadvantaged Communities, which can be reimbursed up to 75 percent of eligible project costs.

1. **Eligible Project Costs**
   - Equipment/Materials: Includes the items listed in Table 1 and others meeting the stated minimum requirements.
   - Installation Labor: Contractor fees for labor to install the equipment/materials.
   - Engineering Design: Irrigation design costs incurred after rebate approval by the Energy Commission.
   - Cost associated with performing post-retrofit, monitoring and verification to provide data on technology performance to the Energy Commission.

2. **Ineligible Project Costs**

   - Post-project service charges and maintenance costs associated with the funded system.
   - Non-labor costs and fees associated with project management and oversight and legal.
   - Supplies and equipment costs not directly related to the WET Rebate program project, such as adding lighting retrofits to an irrigation project.
   - Costs incurred before receiving the Rebate Reservation from the Energy Commission.
   - Cost associated with preparing the Application, securing financing, securing permits and providing insurance for the project.
   - Fines, penalties and legal settlements.

- Personal computers, phones or other personal devices.
- Purchase of real property.
- Food, beverage, advertising, public relations and entertainment costs.

E. Disadvantaged Communities

To qualify for Group B funding, projects must meet one of the following requirements**:**

1. **Project is located in a Disadvantaged Community census tract[5] and provides direct, meaningful and assured benefits** to one or more Disadvantaged Communities, consistent with the Air Resources Board's criteria.[6] Examples of projects that currently meet this criteria are:
   - Project provides water and energy use efficiency incentives or other services that reduce energy use by water users (e.g., residential, commercial, agricultural) with a physical address in a Disadvantaged Community.
   - Project improves, repairs or replaces water system infrastructure resulting in water and energy savings in a Disadvantaged Community.

2. **Projects not located in a Disadvantaged Community census tract but will provide direct benefits to one or more Disadvantaged Communities**, consistent with Air Resources Board's criteria.[7] Examples of projects that meet this criteria are:

   - Project reduces both energy and water use through improvements to the water conveyance or distribution systems, or treatments that directly serve a disadvantaged community.

DRAFT

[5] For maps of disadvantaged community census tracts, refer to: www.calepa.ca.gov/EnvJustice/GHGInvest/

[6] Air Resources Board, Draft Cap-and-Trade Auction Proceeds, Funding Guidelines for Agencies that Administer California Climate Investments, Volume 2: Investments to Benefit Disadvantaged Communities, Appendix 2.A, June 16, 2015.. http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auction-proceeds-funding-guidelines-06-16-2015-public-draft.pdf

[7] Ibid.

- Project includes recruitment, agreements, policies or other approaches that are consistent with federal and state law and result in at least 25 percent of the project work hours performed by residents of a disadvantaged community.
- Project includes recruitment, agreements, policies or other approaches that are consistent with federal and state law and result in at least 10 percent of project work hours performed by residents of a disadvantaged community participating in job training programs which lead to industry-recognized credentials or certifications.

3. The Energy Commission reserves the right to add or change the above criteria pursuant to ARB criteria and guideline modifications for the California Climates Investments Program

DRAFT

IV: Application Process

A. Application

The Energy Commission will issue an Application Form. Eligible Applicants who want to receive a Rebate according to this WET Rebate Guidebook must apply to the Energy Commission as specified in the Application package. The Application will identify:

- The name of the entity applying for the Rebate.
- Information about the agricultural operations where the technology will be installed.
- Maximum amount of funds available, including minimum amounts, if applicable.
- Schedule of project.
- Administrative requirements for submission, including forms and instructions.
- Criteria used to screen and review applications.

Unless otherwise indicated, the Application will include:

- Name, address, and business contact information of Applicant.
- Name, address, and business contact information for the agricultural operation, or site where the project will take place.
- Description of the property/project location, including information about current crops, irrigation system, equipment and practices.
- Names of collaborative companies and farms participating in the Application.
- Past project activity as it relates to CDFA's SWEEP, DWR's Water Energy Efficiency Program, Energy Commission programs, and any other California state agency or water/energy utility programs.
- Supplemental information, including:
    - 12 months of pre-retrofit energy and water bills, or alternate methodology for calculating baseline usage.
    - Irrigation design drawing(s) by a Certified Irrigation Designer.

DRAFT

- Copy of pump test results for all affected pumps. Pump test must be completed within the last two years and include the following information:
  - flow rate
  - discharge pressure
  - pumping water level
  - age of the pump
  - Efficiency of the pump.
- Copy of Distribution Uniformity test results, if available
- Equipment specifications performance metrics for all equipment to be installed.
- For a collaborating Applicants applying on behalf of one or more agricultural operations, a letter from each participating agricultural operation acknowledging the role of the lead collaborator.
- For those applying under Group B, Disadvantaged Communities, documentation of benefits to Disadvantaged Communities, including how the project meets the criteria described in Section II.A and the census tract number of the Disadvantaged Communities.[8]

- Applications may require additional information as required by law or the Energy Commission, and as specified in the Application.

B. Application Organization and Content

Submit Application attachments in the order specified below. For more details on the specific attachments, please refer to the Application.

- Attachment 1 - Application Form

The Application Form requests basic information about the Applicant and the project.

- Attachment 2 - Supplemental Information

This attachment contains the required Rebate supplemental information that must include energy and water billings, irrigation design drawing(s) and other information as indicated.

- Attachment 3 - Project budget

This attachment contains the project budget and identification of all eligible projects costs.

[8] http://www.calepa.ca.gov/EnvJustice/GHGInvest/ for interactive maps to determine disadvantaged community census tract numbers.

C. Application Process

1. Submit a completed, signed Application (Attachment 1), supplemental information (Attachment 2) and project budget (Attachment 3). By signing the Application, the Applicant agrees to the terms and conditions, and requirements stated in this WET Rebate Guidebook.
2. The Energy Commission and/or its consultant will screen and review each Application to ensure it meets the minimum Rebate requirements as indicated in this WET Rebate Guidebook.
    a. Complete Applications will be reviewed in the order they are received by the Energy Commission.
    b. The Energy Commission or its consultant may request to conduct a pre-installation inspection as part of the review process.
    c. No funding will be reserved if an Application is incomplete or illegible, has conflicting information, or does not otherwise comply with the program requirements in this WET Rebate Guidebook. Incomplete Applications will not be approved and will require reapplication prior to further consideration. If an Applicant reapplies, the complete Reservation Application and all supporting documentation must be submitted as one package and will be subject to the program requirements and funding availability in effect at the time of reapplication.
    d. Information provided in the Application, supporting information and project budget must be consistent throughout, or provide an explanation if they are different. Failure to do so may result in Application rejection.
3. An Application will be approved for a Reservation based on the date it is deemed complete, not the date it was first submitted, and availability of funds. Applicants are strongly encouraged to keep copies of all Applications and supporting documentation submitted to the Energy Commission.
4. If necessary, the Energy Commission may suspend the program and/or establish a waiting list. Applications on a waiting list may be funded if additional program funding becomes available.
    a. The Energy Commission may establish additional conditions for Applications on the waiting list, including, but not limited to, the total Rebate amount of Applications on the waiting list and the time Applications may remain on the waiting list.

D. Key Dates and Deadlines

The following table provides estimates of key dates associated with the WET Rebate Program.

DRAFT

Activity	Tentative Due Date
Application Release*	TBD
Pre-Application Workshop	Two weeks after Application Release*
Begin Receipt of Applications	Two weeks after Pre-Application Workshops*
Anticipated First Reservations	Three weeks after receipt of application
Anticipated Rebate Project Completion Date	18 months from Reservation approval by the Energy Commission

* These dates could change based on the WET Program funding approval by the State Legislature.

DRAFT

V: Application Review and Rebate Award Process

A. Application Review

The Energy Commission staff and/or its consultant will screen Applications for completeness and then review them for eligibility and compliance with Screening Criteria. The Screening Criteria involve completeness, eligibility, funding amount requested, and compliance with the technical requirements of the WET Rebate Program. **Applications that fail any of the Screening Criteria will be rejected.** The Energy Commission, through its own staff or its designees, will review Applications and may conduct interviews and/or on-site verifications.

B. Rebate Application Screening

SCREENING CRITERIA *The Application must pass ALL criteria to progress to Stage Two.*	**Pass/Fail**
1. The Application Form is signed where indicated.	☐ Pass ☐ Fail
2. The Applicant meets the eligibility requirements specified in the WET Rebate Guidebook.	☐ Pass ☐ Fail
3. The Applicant has not exceeded the maximum Rebate amount as indicated in the WET Rebate Guidebook.	☐ Pass ☐ Fail
4. The Applicant's site meets all the Rebate requirements specified in Table 1 of the WET Rebate Guidebook and has potential for achieving energy and water savings and GHG emission reductions.	☐ Pass ☐ Fail

DRAFT

SCREENING CRITERIA *The Application must pass ALL criteria to progress to Stage Two.*	**Pass/Fail**
5. Site verification or conference call confirms project eligibility.	☐ Pass ☐ Fail
6. Application is complete, and includes all supplemental information and project budget as described in the WET Rebate Guidebook.	☐ Pass ☐ Fail
7. All supplemental information is technically accurate, assumptions are reasonable, and meets technical requirements specified in the WET Rebate Guidebook.	☐ Pass ☐ Fail
8. The application and all attachments do not contain any confidential information unless subject to the conditions in Section V, E3	☐ Pass ☐ Fail
9. The Applicant has not included a statement or otherwise indicated that it will not accept the Energy Commission terms and conditions, or that acceptance is based on modifications to the terms and conditions	☐ Pass ☐ Fail

C. Rebate Award

1. Screening Results, Approval and Debriefing

a. Applications that pass the Rebate Application Screening will be awarded a Rebate Reservation.
b. The Energy Commission will send a letter confirming the Rebate Reservation amount.
c. The Energy Commission will post a list of Applicants receiving a Rebate Reservation at the WET Program website.
d. **Debriefings:** Unsuccessful Applicants may request a debriefing within 30 calendars days of receiving notification from the Energy Commission that their Application was not successful.

D. Grounds to Reject an Application or Cancel an Award

Only Applicants who submit complete and accurate applications and provide all supporting documentation will receive Rebate Reservation approval. In Applications with only minor omissions or discrepancies that do not affect eligibility or the requested amount to be

reserved, the Energy Commission *may* request clarification of information. If the additional information is not supplied within the stated timeframe, the Application may be canceled and the Applicant told to reapply.

The Energy Commission reserves the right to reject an Application and/or to cancel a Rebate for reasons including, but not limited to, discovering at any time:

- The Application contains false or intentionally misleading statements or references that do not support an attribute or condition contended by the Applicant.
- The Application is intended to erroneously and fallaciously mislead the State in its review and the attribute, condition, or capability is a requirement of this Wet Program.
- The Application does not literally comply or contains caveats that conflict with this WET Rebate Guidebook's requirements, and the variation or deviation is material.
- The Application does not contain sufficient information to allow a useful review to be conducted.
- The Applicant has received unsatisfactory evaluations from the Energy Commission or another California state agency.
- The Applicant is required to be registered with the California Secretary of State and is either not registered or is registered and not in good standing or is listed by the Secretary of State as "inactive" or "suspended."

E. Miscellaneous

1. Rebate Cancellation or Amendment

It is the Energy Commission's policy not to solicit Applications unless there is a bona fide intention to issue Rebates. However, the Energy Commission reserves the right to do any of the following:

- Cancel this WET Rebate Program or individual Rebates.
- Revise the amount of funds available for the WET Rebate Program, Groups A or B, or individual Rebates.
- Amend the WET Rebate Program or individual Rebates; and/or
- Reject any or all Applications received in response to this WET Rebate Guidebook.

If this WET Rebate Guidebook is amended, the Energy Commission will send the amendment or amended version to all parties who requested it, and will also post the addendum on the Energy Commission's website at: [http://www.energy.ca.gov/wet/]. The Energy Commission will not reimburse Applicants for Application development expenses under any circumstances, including cancellation or termination of WET Rebate Program.

2. Modification or Withdrawal of Application

Applicants may withdraw or modify a submitted Application at any time by sending a letter to the Energy Commission at the address in the Application Form. An Application cannot be "timed" to expire on a specific date. For example, a statement such as the following is non-responsive: "This Application and the cost estimate are valid for 60 days."

3. Confidentiality

Though the review process is confidential, **all submitted Applicant documents will become public records** after the Energy Commission notifies Recipients of the results of their Application submittal or the WET Rebate Program is cancelled or terminated. In general, the Energy Commission will not accept or retain Applications that identify any portion as confidential. However, the Energy Commission will not disclose the following: a) any information that the Energy Commission is required by law to keep confidential; or b) any information in which the Applicant has followed the procedures for a request for designation of confidential information specified in Title 20 California Code of Regulations Section 2505 and the Energy Commission has approved the application for confidentiality.

DRAFT

VI: Participant Requirements and Payments

A. Program Participant Requirements

All WET Rebate Program Recipients must agree to:

- Upon request Recipient must provide access to Energy Commission staff and/or its consultant(s) for pre-installation and post-installation inspections and energy and water use reporting up to three years after project installation.
- Recipient must provide Energy Commission staff and/or its consultant(s) access to the pre-retrofit and post-retrofit energy (e.g., electric) and water utility billings associated with the funded project for up to three years pre-retrofit and three years post-retrofit.
- Accepting a Rebate under the WET Rebate Program may require Applicants to pay prevailing wages and adhere to the other requirements of a "public work" (see Labor Code §1720 et seq.). Whether an Applicant's activities constitute a "public work" and trigger its legal requirements will depend upon the specific facts of each situation. Because state funds pay these Rebates, they might be considered "public funds" and meet the definition of a "public work." In addition, the activities Applicants perform entitling them to these /rebates are likely to involve construction, alteration, demolition, installation, repair, or maintenance – the activities that create a "public work." **The Energy Commission strongly urges Applicants to seek professional advice about how participating in this WET Rebate Program may require them to comply with "public work" laws, including paying prevailing wages.** The Director of the Department of Industrial Relations determines prevailing wage rates for different geographical areas. For more information about "public works" including the applicable prevailing wage rates for your area, please visit the Department of Industrial Relations website at: [http://www.dir.ca.gov/default.html].
- The Energy Commission staff and/or its consultant may monitor and verify actual water, energy and/or fuel use and savings achieved by the project for up to three years from project completion.
- All projects must comply with all applicable federal, state and local laws, ordinances, and regulations. The Applicant is responsible for any and all such obligations.

B. Payments

Unless otherwise indicated, Rebate payments will be subject to these conditions:

- For Applicants requesting two payments during Rebate term (optional):
    - The first payment, which is optional for Applicants to request, will be no more than 50 percent of the total Rebate amount and will occur after an

Applicant has received a Reservation and the Energy Commission has reviewed and approved, one or more purchase orders submitted by the Applicant to the dealer/company for equipment and installation of the entire project.

- The Energy Commission will make the second payment after project completion on a reimbursement basis based on actual incurred expenses and under these circumstances:
  - Verification that actual incurred expenses do not exceed 50 percent of eligible project costs by submission of paid invoices and receipts detailing actual expenses and identification of the specific equipment purchased and paid contractor services. These invoices and receipts must substantiate both the first and second payment requests.
  - The Energy Commission or its technical consultant may conduct a final site inspection before payment.

- For Applicants submitting one invoice after project completion:
  - Submission of paid invoices and receipts detailing actual expenses paid and identifying the specific equipment purchased and paid contractor services. These invoices and receipts must substantiate the payment request and not exceed:
    - 50 percent of eligible project costs for Group A Rebates or $250,000, whichever is less; or
    - 75 percent of eligible project costs for Group B Rebates or $300,000, whichever is less.
  - The Energy Commission or its technical consultant may conduct a final site inspection before payment.

- All invoices must include a) payment request form (to be provided by the Commission Agreement Manager) which identifies the project expenditures as it relates to the approved budget for the project; b) back-up invoices and other documentation to substantiate the amount requested; c) progress report summarizing the status of the project, budget and preliminary/final project results showing post retrofit GHG emission reductions.

- Before final payment, the Energy Commission reserves the right to verify that the amount of the Rebate, when combined with all other sources of funding for the project, including utility rebates or incentives, does not exceed 100 percent of the total project cost.

- Energy Commission staff must approve all invoices. This approval is subject to the recipient's submittal and appropriateness of the invoiced expenses under the WET Rebate Program.

DRAFT

VII: Administration and Other Requirements

1. Audits, Record Retention, and Access to Facilities

Upon written request from the Energy Commission, Applicants and Recipients must provide all project documents, including detailed documentation of all planned and paid expenses, allow the Energy Commission or its designee access to project facilities and records, and allow the Energy Commission or its designee to collect project-related data including the data required to measure and verify water, electricity, and GHG emission reductions (this may include but is not limited to utility bills, metering data, facility equipment surveys, information on operational practices and site occupancy levels). Further, if requested, the Applicant or Recipient must provide the Energy Commission or its designee associated data from a period before the start of the project as necessary to establish baseline data, such as water and/or energy use and GHG emissions.

Applicants and Recipients must retain all project records (including financial records, progress reports, payment requests, and electricity and fuel use reduction documentation) for a minimum of three years from the date of the final Rebate payment. Unsuccessful Applicants must retain records for three years after receiving a rejection or denial from the Energy Commission.

Applicants and Recipients must include the above audit, record retention, and access rights in any subcontract or subgrant.

2. Use and Disclosure of Information and Records

With very few exceptions, all project documents submitted to the Energy Commission or its technical consultant(s), including as part of any audit, are considered public records subject to disclosure under the Public Records Act, except as noted in Section V.E.3. The Energy Commission or other state agencies may also use any of these documents or information for any purpose, including to determine eligibility and compliance with the WET Rebate Program, applicable law, or a particular Rebate document, or to evaluate related or relevant programs or program elements, or to prepare reports. These documents and information include, but are not limited to: Applications for funding, invoices and any documentation submitted in support of Applications, Rebates, invoices or obtained through an audit.

If the Energy Commission requires Recipient to provide copies of records that the Recipient believes contain proprietary information entitled to protection under the California Public Records Act or other law, the Recipient may request that such records be designated

confidential according to the Energy Commission's regulations for confidential designation, Title 20, California Code of Regulations, Section 2505.

Applicants considering requesting confidentiality should note that GGRF funds are subject to information disclosure requirements to ensure transparency. Information concerning the identity of Recipients and the amount or payment of Rebates is public information, and will be disclosed according to the California Public Records Act. This information, as well as other public information, may also be disclosed through the Energy Commission's website, another State of California agency website, or through other means.

Please note that the Energy Commission can disclose confidential information and records to other governmental entities and policing authorities for civil and criminal investigation and enforcement purposes.

3. <u>Enforcement</u>

The Energy Commission can take any and all actions necessary to enforce the WET Rebate Program and/or Energy Commission rights.

4. <u>WET Rebate Guidebook Authority</u>

This WET Rebate Guidebook is adopted according to Executive Order, B-29-15 which states the following: "*chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.*"

5. <u>WET Rebate Guidebook Interpretation</u>

Nothing in this WET Rebate Guidebook is construed to abridge the powers or authority of the Energy Commission.

6. <u>Effective Date of WET Rebate Guidebook</u>

This WET Rebate Guidebook is not effective until adopted by the Energy Commission at a publicly-noticed meeting according to Executive Order B-29-15.

The Energy Commission will post the adopted Guidebook on its website:
http://www.energy.ca.gov/wet/

Applicants may also obtain the WET Rebate Guidebook by contacting:

California Energy Commission
WET Program
1516 Ninth Street, MS-51
Sacramento, CA 95814
E-mail: wet@energy.ca.gov

7. Changes to the WET Rebate Guidebook

The Energy Commission can make changes to this WET Rebate Guidebook from time to time in according to Executive Order B-29-15 and other requirements. Changes will take effect after adoption by the Energy Commission at a publicly noticed business meeting.

8. Standard of Performance

In performing activities to receive a Rebate, the Recipient, its subcontractors, and their employees are responsible for exercising the degree of skill and care required by customarily accepted good professional practices and procedures for the type of work performed.

9. Due Diligence

The Recipient must take timely actions that, taken collectively, move this project to completion.

10. Refund to the Energy Commission

If the Energy Commission determines that any invoiced and paid amounts exceed the actual allowable incurred costs, the Recipient will repay the amounts to the Energy Commission within thirty (30) days of request or as otherwise agreed by the Energy Commission and the Recipient. If the Energy Commission does not receive such repayments, it will be entitled to take any actions, including withholding further payments to the Recipient and seeking repayment from the Recipient.

11. Permits and Clearances

The Recipient is responsible for ensuring that all necessary permits and environmental documents are prepared and that clearances are obtained from the appropriate agencies.

12. Indemnification

DRAFT

To the extent allowed under California law and to the extent the Recipient legally can, the Recipient will indemnify, defend, and hold harmless the State (including the Energy Commission) and state officers, agents, and employees from any and all claims and losses in connection with its performance within the WET Program.

13. Governing Law

The WET Program and Rebates issued under it are governed by the laws of the State of California, including as to interpretation and performance. Should a federal entity, such as a Department of Energy national laboratory apply, both California and Federal laws apply, with federal law prevailing in case of conflicts.

14. Independent Capacity

In the performance of this Agreement, the Recipient and its agents, subcontractors, and employees will act in an independent capacity and not as officers, employees, or agents of the State of California.

15. Assignment

Rebates are not assignable or transferable by the Recipient either in whole or in part without the consent of the Energy Commission.

16. Severability

If any provision of this WET Rebate Guidebook is unenforceable or held to be unenforceable, all other provisions will still remain in full force and effect.

17. Waiver

No waiver of any breach of this WET Rebate Guidebook constitutes waiver of any other breach. All remedies will be taken and construed as cumulative, meaning in addition to every other remedy available under the WET Program or other law.

18. Assurances

The Energy Commission reserves the right to seek further written assurances from the Recipient and its team that the work under this Agreement will be performed according to the terms of the Agreement.

19. Change in Business

The Recipient will promptly notify the Energy Commission of the occurrence of any of the following:

- A change of address.
- The existence of any litigation or other legal proceeding affecting the project.
- The occurrence of any casualty or other loss to project personnel, equipment, or third parties.

20. Prior Dealings, Custom, or Trade Usage

The provisions and requirements in this WET Rebate Guidebook are not modified or supplemented by prior dealings, custom, or trade use.

21. Federal, State, and Local Laws

Applicants and Recipients will comply with all applicable federal, state and local laws, rules and regulations.

22. Nondiscrimination Statement of Compliance

While participating in the WET Rebate Program, the Recipient and its subcontractors will not unlawfully discriminate, harass, or allow harassment against any employee or Applicant for employment because of sex, sexual orientation, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition, age, marital status, or denial of family care leave. The Recipient and its subcontractors will ensure that the evaluation and treatment of their employees and Applicants for employment are free from such discrimination and harassment.

23. Americans With Disabilities Act

By participating in the WET Program, the Recipient assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. Section 12101, et seq.), which prohibits discrimination on the basis of disability, as well as applicable regulations and guidelines issued according to the ADA.

24. Suspension of Program and Individual Reservations and Rebates

If events occur that threaten or compromise the Program's participants, objectives, or funds, the Executive Director will, upon written notice (e.g., via a posting on the Energy Commission's website or email), suspend the WET Program, including the submission of applications, and/or the reimbursable work by any or all Recipients. Reimbursable work means work by Recipients for which they can seek payment under this Program. While the Energy Commission intends to conduct an efficient and seamless Program, this direction to the Executive Director is required to act quickly, if necessary, to protect the Program's

DRAFT

participants, the objectives, and funds. The actions under this clause do not limit any other rights, remedies, or actions the Commission can take.

25. <u>Survival of Terms</u>

In addition to other provisions in this WET Rebate Guidebook indicating they extend beyond the Rebate and project, provisions 10, 12, 13, 15-17, and 20-21 of this Section VII, survive the completion of projects under this Program.

26. <u>Rejection of Applications and Termination of Reservations without Cause</u>

Without limiting or affecting any of its other rights, remedies, and actions, the Energy Commission reserves the right to (1) reject any application and (2) terminate any Reservations without cause upon giving 10 days written notice to the affected applicant(s).

DRAFT

Attachment 1: Application for Technology Additions to WET Agriculture Rebate Lists

The Energy Commission can consider new technologies/approaches for consideration and inclusion on the Rebate list. Proposed technologies will be reviewed by Energy Commission staff and possibly its technical consultant. The responses to the questions in Attachment 1 will be evaluated by Energy Commission staff to determine technical and economic feasibility, technical potential for significant greenhouse gas emission reductions and water savings along with market impact to California.

Tentative Schedule for Receipt of Applications for Technology Additions

Activity	**Tentative Dates**
Application Release	TBD
Begin Receipt of Applications	Two weeks after Application Release
Energy Commission Staff Evaluation and Recommendation	45 days after receipt of Application
Anticipated Business Meeting Consideration for Recommended Technologies	90 days after staff recommendation

DRAFT

Application for Technology Additions for WET Rebates

1. Name of Technology

   a. Describe the technology, including web site (if applicable).

   b. Discuss whether commercially available and why it is an emerging technology.

2. Energy Savings

   a. Describe the energy savings from the technology. [Note: Energy savings must be from a reduction of on-site pumping energy or other on-site energy reductions. Energy software programs must be directly linked to a mechanical action that will result in water and energy savings, and not based solely on behavioral modifications.]

   b. Estimate direct, on-site annual energy (e.g., kWh/yr, therms/yr) savings to be achieved by the technology. Include all calculations and assumptions used in determining annual energy savings.

   c. Provide at least six months of independent monitoring and verification data documenting actual, on-site energy savings in an agricultural operations. Identify the site and location where the verification occurred and the current status and the measured results. Attach independent monitoring and verification data and test results.

3. Water Savings

   a. Describe the water savings from the technology. [Note: Water savings must be from a reduction of on-site water use. Water software programs must be directly linked to a mechanical action that will result in water and energy savings, and not based solely on behavioral modifications.]

   b. Estimate direct, on-site annual water (e.g., million gallons per day) savings to be achieved by the technology. Include all calculations and assumptions used in the determination of annual water savings.

   c. Provide at least six months of independent monitoring and verification data documenting actual, on-site water savings in an agricultural operation. Identify the site and location where the verification occurred and the current status. Attach independent monitoring and verification data and test results.

4. Greenhouse Gas Emission Reductions

   a. Describe the GHG emission reductions from this technology and the source of these reductions.

DRAFT

b. Estimate direct, on-site annual GHG emission reduction potential from this technology. Include all calculations and assumptions used in the determination of annual GHG emission reductions in metric tons per year. GHG reductions must be quantified using a methodology approved by ARB.[9]

c. Provide at least six months of independent monitoring and verification data documenting actual, on-site GHG emission reductions in an agricultural operations. Attach independent monitoring and verification data and test results.

5. Potential for Statewide Application

   a. Describe the target market (e.g., agricultural segment, size and location).

   b. Discuss how the technology will meet needs not met by similar technology currently in the market place.

   c. Describe trends that might impact market demand for the technology.

   d. Describe marketing efforts to reach the target market and results.

   e. Identify locations where the technology has been installed and the status.

6. Implementation

   a. Discuss readiness of the technology for large-scale deployment in California.

   b. Discuss whether any permits are required before the technology can be installed.

   c. Discuss whether the technology is available and can be installed and operational within 12 months of placing the item on the Rebate list.

7. Technology Support

   a. Discuss your technical support to customers in California.

   b. Discuss operation and maintenance requirements.

   c. Discuss equipment life and warranty.

8. Price

   a. Estimate the retail purchase price of the technology and installation costs.

   b. Discuss other costs, such as annual operation and maintenance.

   c. Estimate cost benefit and return on investment-including all assumptions.

---

[9] ARB is required to develop quantification methods for agencies receiving Greenhouse Gas Reduction Fund (GGRF) appropriations per SB 862. Quantification methods are posted on ARB's auction proceeds website at http://www.arb.ca.gov/auctionproceeds.

DRAFT

d. Identify the rebate amount needed as a percentage of the equipment cost.

e. Discuss the potential strategies for aggregating projects to minimize administrative costs?

9. Co-Benefits

a. Discuss any co-benefits of the technology, including all assumptions and justifications.

DRAFT

Attachment 2
Determining Greenhouse Gas Reductions and Water and Energy Savings for Rebate #1: Conversion from High Pressure Drip to Low Pressure System

ARB is required to develop quantification methods for agencies receiving Greenhouse Gas Reduction Fund (GGRF) appropriations per SB 862. Quantification methods are posted on ARB's auction proceeds website at http://www.arb.ca.gov/auctionproceeds.

DRAFT