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December 15, 2023

**BY E-PORTAL**

Mr. Adam Teitzman  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

**Re: Docket No. 20230121-EG – Petition of Associated Gas Distributors of Florida (AGDF)  
for Approval of Conservation Demonstration and Development Program**

Dear Mr. Teitzman:

Attached for filing, please find the Associated Gas Distributors of Florida's Responses to Staff's First Data Requests.

Thank you for your assistance with this filing. As always, please don't hesitate to let me know if you have any questions whatsoever.

Sincerely,



Beth Keating  
Gunster, Yoakley & Stewart, P.A.  
215 South Monroe St., Suite 601  
Tallahassee, FL 32301  
(850) 521-1706

MEK

**Re: Docket No. 20230121-EG – Petition of Associated Gas Distributors of Florida (AGDF) for Approval of Conservation Demonstration and Development Program**

Responses of the AGDF to Staff's First Data Requests

1. Please refer to the petition, Paragraph 3, wherein the member utilities represented by AGDF are identified. Please answer the following:

A. If the petition is approved, is there any impediment for the Commission to issue an order for each participating utility, rather than a single order? If so, please discuss.

**AGDF Response:**

**AGDF is not aware of any impediment that would prevent or impair the Commission's ability to issue separate orders for each participating AGDF member should it choose to do so. However, AGDF notes that in recent years, the Commission has tended to issue one order addressing each AGDF petition. See, for instance, Dockets Nos. 20090122-EG, 20100186-EG, and 20130167-EG. AGDF respectfully suggests that issuing one order may be more procedurally efficient, particularly given the coordinated efforts contemplated by the CDD program.**

B. Please describe the role Peoples Gas, a member of AGDF but not a joint petitioner, or its employees, would have in any CDD project decisions that impact the joint petitioners.

**AGDF Response:**

**Since People's Gas has already implemented a CDD program, they will have the same opportunities as the other AGDF members involved in the current docket. They can participate in joint research projects with the AGDF members or pursue independent research projects. This autonomy, with the option to co-fund to increase the scale of the project, provides additional resources where needed and allows each utility to pursue projects that best suit its territory.**

2. Please refer to the petition, Paragraph 4, which includes a footnoted citation to Order No. PSC-10-0113-PAA-EG, issued February 25, 2010, in Docket No. 090122-EG (2010 Order). Please reference the 2010 Order and the petition to answer the following questions:
  - A. In the 2010 Order, separate programs were approved for each utility, including a program description, criteria, and eligible measures. Are company-specific programs no longer being proposed in the current petition? If so, please discuss.

**AGDF Response:**

The approach taken by AGDF with this Petition is essentially the same as that set forth in the 2009 Petition. The primary differences with this most recent request are that AGDF now seeks approval for each participating member of a CDD program on a more permanent program, and the program structure contemplates a more cohesive, joint approach to studying new conservation technologies and programs. As in the 2009 filing, the AGDF has described the program, criteria and measures within the Petition, as well as projected spend and a cap for each member, but contemplates that, if approved, each participating member will include a project description page addressing its participation within the regular C-5 schedules filed in the annual conservation cost recovery docket.

It is AGDF's understanding that, in Docket No. 20090122-GU, program descriptions were filed subsequent to the filing of the original petition after discussions between AGDF representatives and staff. If staff would prefer that AGDF similarly file new program descriptions for each participating member in this docket, AGDF is willing to do so.

- B. In the 2010 Order, the approved programs allowed participation by the LDCs with entities other than AGDF. Is participation with these outside entities no longer being proposed in the current petition? If so, please discuss.

**AGDF Response:**

While it is expected that participation in research projects will primarily be limited to AGDF, there may be opportunities to collaborate with other southeastern regional entities, associations, or utility companies to jointly pursue funded research if it is believed to benefit the Florida natural gas end-user.

- C. In the 2010 Order, the individual utilities were required to seek administrative approval from Commission staff prior to proceeding with a project. Is this administrative approval no longer being proposed in the current petition? If so, discuss the reason for the change in new project authorization.

**AGDF Response:**

**AGDF respectfully notes that Order No. PSC-2010-0113-PAA-EG states that administrative approval was required if any AGDF member intended to exceed its 5-year cap, or the cap on any individual project. It does not indicate that approval was required to proceed with a project. AGDF contemplates that similar administrative approval to exceed spending caps would be required as part of the approval of the proposed new CDD program.**

- D. Page 3 in the 2010 Order states that the (2010) CDD Program “could result in the . . . elimination of duplicate projects.” By utility, please list each instance that a duplicate project was eliminated since 2010.

**AGDF Response:**

**The two cases in which duplicate projects were eliminated were the Oil Conserving Fryer (OCF) research project and the Gas Heat Pump (GHP) research project, as they were jointly funded, which rendered duplicate individual utility research efforts unnecessary.**

- E. Page 3 in the 2010 Order states that the (2010) CDD Program “could result in the . . . application of a screening method that would ensure priority ranking of potential projects.” Please provide any documents or other evidence that this was accomplished during the original 5-year timeframe referenced in the 2010 Order, or thereafter.

**AGDF Response:**

**A comprehensive explanation of the AGDF CDD project selection process, including all associated criteria and qualifiers, can be found in Attachment 2E. Attachment 2E also includes a power point presentation which reflects, the six projects that were prioritized and proposed for funding after the program extension are presented.**



- F. Page 3 in the 2010 Order states that the (2010) CDD Program “could result in . . . a guarantee a variety of [CDD] projects that could benefit AGDF member LDCs.” Please provide any documents or other evidence that this was accomplished during the original 5-year timeframe referenced in the 2010 Order or thereafter.

**AGDF Response:**  
**Please see Attachment 2E.**

- G. Page 3 in the 2010 Order states that the (2010) CDD Program “could result in . . . a reduction of administrative costs if joint projects are pursued.” Please provide any documents or other evidence that this was accomplished during the original 5-year timeframe referenced in the 2010 Order, or thereafter.

**AGDF Response:**

**Please see Attachment 2G for the AGDF expense report detailing CDD-related expenditures in 2014. The total amount incurred for the year was \$115,306.72, encompassing research, administrative, legal, contractor, and equipment costs associated with conducting CDD research projects during that period. This serves as a concrete demonstration of how collectively funding these expenses through AGDF utilities leads to reduced administrative costs. By dividing these expenses among AGDF members, the individual financial burden on any single utility is thereby lessened.**

- H. Page 4 in the 2010 Order also referenced that a 5 year cap with single-year limits was established in the prior docket. Please explain why a similar structure was not requested in the instant docket.

**AGDF Response:**

**The primary reason for structuring the programs based on a project cap versus a single-year cap was the result of our learning from prior CDD initiatives. We learned that projects can run long or be condensed, and it makes sense to structure the approval based on projects and their caps rather than an individual single-year spending cap.**

3. Please refer to the petition, Paragraph 5, which states, in part, that [t]his petition is being filed by AGDF on behalf of its members . . .”

A. Assuming approval of the petition, please discuss AGDF’s role in approving/denying the CDD Funding Request Forms (as featured in Appendix B to the petition). Address in your response how forms are evaluated, including the request process for conducting the criteria reviews and timetables for project request approvals.

**AGDF Response: AGDF will contribute to helping member local distribution companies prioritize research areas, seek proposals from research institutions, and compile results for AGDF members to evaluate and choose independently. AGDF members convene in the winter, summer, and fall and will utilize these gatherings for in-person deliberations for prioritization, issuance of requests for proposals, and selection of projects.**

B. Assuming approval of the petition, please discuss AGDF’s role for collecting and/or disbursing funds on behalf of its members for CDD programs. If applicable, address in your response how the role differs for shared programs.

**AGDF Response:**

**On behalf of its members, AGDF typically contracts with research entities to conduct research. Invoices from such entities are paid by AGDF, and AGDF then seeks reimbursement from its participating members. To be clear, AGDF does not apply any administrative charge to CDD invoices to its members. Other than the contracting and invoicing function described, AGDF does not serve as an administrator of funds as it pertains to the CDD program. AGDF also organizes and proposes potential CDD-eligible projects to AGDF members that could be individually or jointly pursued and funded.**

C. Assuming approval of the petition, please discuss AGDF’s role in selecting the vendors to conduct CDD projects on behalf of its members.

**AGDF Response:**

**AGDF will contribute to helping member local distribution companies prioritize research areas, seek proposals from research institutions, and compile results for AGDF members to evaluate and choose independently. AGDF members convene in the winter, summer, and fall and will utilize these gatherings for in-person deliberations for prioritization, issuance of requests for proposals, and selection of projects.**

- D. Assuming approval of the petition, please discuss whether any CDD projects will be performed by AGDF on behalf of its members (i.e. by vendors identified by AGDF), the members themselves, or either of these as determined by AGDF by project.

**AGDF Response:**

**AGDF will not undertake any of the research connected with the CDD projects; this research will be carried out by third-party research organizations to be identified by AGDF consistent with prior practice. This would not preclude AGDF members, or individual utilities from undertaking a limited CDD Project scope of work should the opportunity arise, but this would be evaluated on a case-by-case basis and would likely be the exception rather than the rule.**

4. Please refer to the petition, Paragraph 9, which states, in part, that the petition seeks “approval for the AGDF members to include a new Conservation Demonstration & Development Program (“CDD”) similar to the temporary CDD program approved by the Commission in Docket No. 20090122-EG.” In addition please refer to Appendix A of the petition.

- A. Please explain what is to be included in the new CDD program, by category as listed in Appendix A. Identify the specific project(s) the member utilities are considering, and provide all related details.

**AGDF Response:**

**The purpose of including Appendix A is to showcase the various research projects that could be undertaken by AGDF member LDCs. These projects encompass theoretical reports, state-specific analyses, field tests, and laboratory evaluations. The intention behind featuring these examples is to demonstrate the range of potential projects that AGDF will be taking into consideration and to facilitate the categorization of requests for proposals, should the program be given the green light.**

**At present, the member utilities have no specific projects under consideration, pending CDD program approval. Once approval is secured, the utilities will commence the process of prioritizing projects, inviting proposals, and, ultimately, selecting research initiatives.**



- B. Paragraph 9 also discusses the collaborative work on statewide initiatives that the LDCs have engaged in, and that it is found to be beneficial to both AGDF member utilities and their respective customers. However, the paragraph 22 table as well as Appendix B both appear to be for projects by the individual utilities rather than collaborative projects. Please explain how this DSM CDD program addresses cost allocation for collaborative work, given the aforementioned table and request form.

**AGDF Response:** As with the prior, temporary CDD program, the proposed program will enable the AGDF member companies to combine resources in order to research the effectiveness of technologies that could serve as the basis for DSM programs. Research of this nature and scope is typically quite expensive. Individually, the costs to conduct the research anticipated by the proposed CDD program would impose a significant financial strain on any individual LDC, and would be cost prohibitive for some members. Combining resources will enable each LDC to participate and gain the benefits of the research, which, if a technology is shown to be effective, can then be translated into an active DSM program should an individual AGDF member desire to do so. To the extent the new DSM programs designed around technology shown to be effective through the CDD program produce savings for customers, the benefit is passed on to those customers. To be clear, the chart in paragraph 22 does not reflect any individual research be a utility, but rather anticipated contribution caps in the event AGDF decides to pursue 1, 2, or 3 research projects through the CDD program. This is intended to reflect that AGDF has taken into consideration the smaller customer base of certain LDCs in setting the anticipated contribution caps. Individual members can also opt out of participating in any particular research project.

5. From the petition, Paragraph 13 references the CDD Activity Report dated June 28, 2018 (2018 Report). Please answer the following questions:
- A. The 2018 Report identified findings from Gas Heat Pump Field Tests. Please identify how those findings have been incorporated into the conservation programs each joint petitioner currently offers. Please provide a detailed response for each joint petitioner.

**AGDF Response:** The findings have not directly impacted the cost-effectiveness assessment of any current conservation programs offered by the Petitioners.

**FCG:** FCG does not currently have a conservation program designed around GHPs, but based on the information gathered through the prior CDD testing, FCG is engaged in assessing the feasibility and appropriate design of a GHP DSM program for which it expects to seek approval, either independently or jointly with our AGDF partners, later in 2024.



**FPUC:** FPUC does not currently have a conservation program designed around GHPs, but based on the information gathered through the prior CDD testing, FPUC is engaged in assessing the feasibility and appropriate design of a GHP DSM program for which it expects to seek approval, either independently or jointly with our AGDF partners, later in 2024.

**St. Joe Natural Gas:** St. Joe Natural Gas does not currently have a conservation program designed around GHPs, but based on the information gathered through the prior CDD testing, St. Joe Natural Gas is engaged in assessing the feasibility and appropriate design of a GHP DSM program for which it expects to seek approval, either independently or jointly with our AGDF partners, later in 2024.

**Sebring Gas:** Sebring Gas does not currently have a conservation program designed around GHPs, but based on the information gathered through the prior CDD testing, Sebring Gas is engaged in assessing the feasibility and appropriate design of a GHP DSM program for which it expects to seek approval, either independently or jointly with our AGDF partners, later in 2024.

- B. Please address how the findings of the 2018 Report related to the Gas Heat Pump Field Tests impacted the cost-effectiveness assessment of conservation programs each joint petitioner currently offers. Please provide a detailed response for each joint petitioner.

**AGDF Response:** The findings have not directly impacted the cost-effectiveness assessment of any current conservation programs offered by the Petitioners.

**FCG:** Similar to the statement above for 5(a), the GHP field tests provided information that provided both operational information, as well as cost information, which is expected to help FCG design a program around GHP technology that will meet the required cost-effectiveness tests.

**FPUC:** Similar to the statement above for 5(a), the GHP field tests provided information that provided both operational information, as well as cost information, which is expected to help FPUC design a program around GHP technology that will meet the required cost-effectiveness tests.

**St. Joe Natural Gas:** Similar to the statement above for 5(a), the GHP field tests provided information that provided both operational information, as well as cost information, which is expected to help St. Joe Natural Gas design a program around GHP technology that will meet the required cost-effectiveness tests.

**Sebring Gas System:** Similar to the statement above for 5(a), the GHP field tests provided information that provided both operational information, as well as cost information, which is expected to help Sebring design a program around GHP technology that will meet the required cost-effectiveness tests.

- C. The 2018 Report identified findings from Oil Conserving Fryer Tests. Please identify how those findings have been incorporated into the conservation programs each joint petitioner currently offers. Please provide a detailed response for each joint petitioner.

**AGDF Response:** The findings have not directly impacted the cost-effectiveness assessment of any current conservation programs offered by the Petitioners.

FCG has leveraged the outcomes of the oil conserving fryer project, particularly the comprehensive PowerPoint presentation that outlined the research project's results. This presentation, through industry partners, was used to educate and inform food service clients about the benefits of transitioning from electric fryers to gas fryers.

FPUC has leveraged the outcomes of the oil conserving fryer project, particularly the comprehensive PowerPoint presentation that outlined the research project's results. This presentation, through industry partners, was used to educate and inform food service clients about the benefits of transitioning from electric fryers to gas fryers.

**St. Joe Natural Gas** has leveraged the outcomes of the oil conserving fryer project, particularly the comprehensive PowerPoint presentation that outlined the research project's results. This presentation, through industry partners, was used to educate and inform food service clients about the benefits of transitioning from electric fryers to gas fryers.

**Sebring Gas System** has leveraged the outcomes of the oil conserving fryer project, particularly the comprehensive PowerPoint presentation that outlined the research project's results. This presentation, through industry partners, was used to educate and inform food service clients about the benefits of transitioning from electric fryers to gas fryers.

- D. Please address how the findings of the 2018 Report related to the Oil Conserving Fryer tests impacted the cost-effectiveness assessment of conservation programs each joint petitioner currently offers. Please provide a detailed response for each joint petitioner.

**AGDF Response:**

The findings have not directly impacted the cost-effectiveness assessment of any current conservation programs offered by the Petitioners.

**FCG** is planning to revamp its energy conservation programs in 2024 through a separate AGDF petition. During this process, FCG will utilize data from prior CDD efforts to conduct a cost-benefit analysis. Specifically, FCG will draw from previous CDD findings, including operational and installation costs, avoided electric energy usage, and additional maintenance considerations for higher efficiency models.

**FPUC** is planning to revamp its energy conservation programs in 2024 through a separate AGDF petition. During this process, FPUC will utilize data from prior CDD efforts to conduct a cost-benefit analysis. Specifically, FPUC will draw from previous CDD findings, including operational and installation costs, avoided electric energy usage, and additional maintenance considerations for higher efficiency models.

**St. Joe Natural Gas** is planning to revamp its energy conservation programs in 2024 through a separate AGDF petition. During this process, St. Joe Natural Gas will utilize data from prior CDD efforts to conduct a cost-benefit analysis. Specifically, St. Joe Natural Gas will draw from previous CDD findings, including operational and installation costs, avoided electric energy usage, and additional maintenance considerations for higher efficiency models.

**Sebring Gas System** is planning to revamp its energy conservation programs in 2024 through a separate AGDF petition. During this process, Sebring Gas System will utilize data from prior CDD efforts to conduct a cost-benefit analysis. Specifically, Sebring Gas System will draw from previous CDD findings, including operational and installation costs, avoided electric energy usage, and additional maintenance considerations for higher efficiency models.

- E. Provide a review of all CDD projects implemented from 2010 to date, excluding the Gas Heat Pump Field Test and Oil Conserving Fryer Tests, by the utilities. Include the name of the utility, name of the project, time periods, explanation of the project, scope of the research and any findings. If any such CDD project resulted in impacts to utility conservation programs, please identify such impacts to the program and ratepayers.

**AGDF Response:** Apart from the various stages of the Gas Heat Pump, and Oil Conserving Fryer research project, no other CDD research projects were undertaken or documented between 2010 and 2018.

6. Please refer to the petition, Paragraph 15, which states that the proposed CDD program would allow funding to complete the cost effectiveness data inputs that are required for gas conservation program approval. Please provide example(s) of past CDD projects that yielded changes in data inputs subsequently used for gas conservation program approval, and summarize the details.

**AGDF Response:** While AGDF has not yet incorporated any of the CDD findings into cost-effectiveness analysis, it intends to do so in 2024 through an AGDF energy conservation program filing to improve and expand current AGDF member conservation portfolios. In the upcoming AGDF petition, we will utilize the data points for the two required cost effectiveness tests for natural gas utility demand side management programs: the Participant Test and the Gas Rate Impact Measure test.



7. Please refer to the petition, Paragraph 22, which states, in part, that participating utilities “will report any CDD-related expenses and participation on this program through the company’s annual conservation cost recovery clause expense review.” Assuming approval of the petition, how do the participating utilities plan to report the status of CDD programs and projects with the Commission and/or with customers, what details do they plan to report, and under what timeframes?

**AGDF Response:** AGDF members expect that annual expenditures for Conservation Demonstration and Development (CDD) projects will be subject to the annual conservation clause review audit. They also plan to submit a final summary report within 90 days of completing a CDD research project.

8. Please refer to the petition, Paragraph 22, to answer the following questions regarding the CDD project cost summary table. Paragraph 22 states, in part, “A summary table is provided below to illustrate the annual, estimated CDD expenses in total, as well as the proposed limits for each LDC.” Do the values displayed in the table represent both the estimated expenses and the proposed expense limit? If not, please list what the proposed expense limit is for each LDC.

**AGDF Response:** The figures in the table denote estimated expenses and the proposed expense limits for each LDC. The goal of offering multiple project options was to provide the commission with greater flexibility in determining the most suitable magnitude for the utilities to establish permanent CDD programs.

ATTACHMENT 2E

## AGDF CDD Project Selection Process

With the Conservation Demonstration & Development (CDD) Program being a new energy conservation program, AGDF first worked to establish a criteria for how potential CDD programs would be considered for funding.

Over the duration of the CDD Program AGDF developed and refined a process to qualify potential demonstration and development projects based on the value that project would deliver in terms of end user value. The first step in this process was to define the pre-qualification criteria for all projects considered.

Each potential demonstration and development was intended to be compatible with at least one of the following qualifiers:

- Has the potential to result in a NG Demand Side Management rebate program
- Advantageously positions natural gas as a mechanism for Energy Code Compliance
- Has the potential to contribute to the attainment of Green Building Standards
- Can be compatible with an existing NG Demand Side Management rebate program
- Can be integrated with renewable systems or will achieve substantial Electric Demand savings
- Serves as an energy educational mechanism to promote NG energy efficiency
- Has a high degree of replicability for a wide range of commercial customers
- Serves as a verification tool to affirm assumptions used in energy modeling software

The second step in the AGDF Project Selection Process was to select an accredited Research Institution for the project. The primary tool AGDF uses for selecting a research institution was the Request for Information (RFI) & Request for Proposals (RFP) approach. The RFI was constructed as a tool to qualify interested research institutions that would be interested in receiving and responding to a future RFP. The RFI contained a brief overview of the project and requested that each research institution state the qualifications and expertise of their staff and their capabilities to perform the research that AGDF was seeking. AGDF used both State (Florida Energy Systems Consortium) and Federal resources (Department of Energy) to assist with identifying qualified research institutions as candidates to receive the RFI. Once AGDF received RFI responses from interested and capable research institutions, a RFP for each project was then issued. The RFP contained the background of the COD Program, the proposed budget for the project, the proposed scope of the research project (which was subject to refinement based on research institution feedback and expertise), the purpose and objectives of the research project, and the expected deliverables. Once all RFPs had been received, a research proposal evaluation matrix was then compiled to assist AGDF with determining which research institution will be selected. Once the technology to be researched and the research institution had been determined, the third step in the AGDF Project Selection Process is initiated, which is Location Selection. Selecting the location for a research project takes a considerable amount of time and effort, to streamline this portion of the AGDF Project Selection Process AGDF developed a procedure for Location Selection.

The Location Selection procedure is the tool AGDF uses to communicate the roles, tasks and responsibilities for 5 different groups that are involved with any research project AGDF. These 5 groups consist of; AGDF, the Equipment Manufacture or Distributor, the Equipment Installer, the Research Institution, and the Host facility.

The role of AGDF during the Location Selection Procedure was to define the type of end user/ vertical market that would be most appropriate for the technology being researched, identify potential candidates to host the research project, and to also serve as the project manager. The role of the Equipment Manufacture or Distributor is to agree to the hold harmless agreement for the project, address all technical questions and equipment concerns, and serve as a resource for the equipment installer. The Equipment Installer is tasked with making multiple site visits to determine installation logistics & costs, coordinating with the host facility staff to determine and optimal installation schedule, creating engineering drawings, pulling permits and installing the system.

The Research Institution's primary responsibilities include approving the potential location selected as a good research candidate, specifying and procuring the research data acquisition system & monitoring equipment, coordinating with the host facility the installation of the data collection equipment, and verifying that data collected is remotely transmitted back to the research institution. The duties and responsibilities of the Host Facility is to coordinate installation schedules with the Equipment Installer and the Research Institution, agree to a hold harmless agreement, provide verbal non-technical feedback regarding the performance of the technology being installed, and to designate a point person to contact for any potential issues that may arise during the research project.

Once the location has been selected and the duties and responsibilities for each group have been communicated, the next step in the AGDF Project Selection Process, which is Equipment Installation, was initiated. The most critical aspect of this phase was to coordinate installation schedules with the Equipment Installers, the Research Institution, and the Host Facility. During this step in the AGDF Project Selection Process a critical needs assessment is conducted to determine if the host facility will need to be without power or natural gas, and if so, determine how long the facility will be off-line, and if necessary coordinate after-hours installation of monitoring equipment throughout the building. Once the critical needs assessment has been completed, the equipment being researched and the data acquisition systems are then installed and tested.

The fifth and final step in the AGDF Project Selection Process is the Monitoring and Reporting phase. It has been AGDF's intent to collect as wide of a data set as possible for each of the technologies to be researched. As such, the desired period of data collection has been set at a 1 year minimum, to determine how each technology evaluated performs over a month period.



# CDD Options for 2017

Considering 6 FSEC CDD Project  
Proposals

Joe Eysie

# CDD Regulatory Background

## **CDD Expiration Date:**

Granted an extension through 12/31/17

## **CDD Criteria:**

A close tie between CDD expenditures and conservation

## **CDD Project Options:**

Collaborative Efforts or Individual Projects

# Summary of the 6 Proposals

1. OCF Collateral Materials
2. Supplementing the GHP Field Data
3. New Tankless & Recirculation Systems
4. Lab Testing NG-HPWH
5. NG-PV Hybrid HW
6. Utility Report Card



# OCF Collateral Materials

Turning the results from the OCF Field Tests into useful content for EC Educational Outreach:

- Final PR OCF gas fryers promotional flyer (1 page)
- Short course syllabus for OCF gas fryer study
- Short course presentation material
- Presentation of short course at 6 locations

Cost & Time: \$12,886 (12 Months)



# OCF Collateral Materials

## Why?

Good story to tell

Includes Draft & Final Version PDF

Educational courses for Food Srv . Assn.

2 types of packaged content (flyer/class)

Recording of Classes for online Training

Doesn't need to be a CDD Expense

## Supplementing the GHP Field Data

Review Field Performance and Model Part Load Impact for Natural Gas Heat Pumps

- Conduct supplemental GHP research to provide additional data (literature review on GHP, modeling & simulations)
- This research is designed to expand and compile the technical inputs that would be used for conducting cost effectiveness for GHP

Cost & Time: \$32,698 (6 Months)



# Supplementing the GHP Field Data

## Why?

The next logical step for a GHP Program

Market Dynamics have changed

CHP Pairing Options

GHP & PV Design Pairings

FL's last best hope for NG Space Cooling

## New Tankless & Recirculation Systems

### Evaluation of Natural Gas Tankless Water Heater with Recirculation Control

- Install & test a high efficiency tankless water heater with the latest innovative recirculation features at FSEC's (Cocoa, FL) hot water systems laboratory.

Cost & Time: \$62,170 (16 months)



# New Tankless & Recirculation Systems

## Why?

Better understand Recirculation value

Compare savings and benefits of new systems

Laboratory field testing is open to view

Wi-fi feature by Rinnai

19 channels of instrumentation data

## Lab Testing NG-HPWH

### Testing and Evaluation of Natural Gas Heat Pump Water Heater

- Install and test the performance of a natural gas adsorption cycle heat pump water heater.
- Compare the performance of the NG-HPWH to electric HPWH

Cost & Time: \$94,496 12 Months



## Lab Testing NG-HPWH

### Why?

Florida Performance data

High Cost-because these aren't market ready

Assists with GHP, and the notion of NG as a cooling energy source

## NG-PV Hybrid HW

Development of a Hybrid Natural Gas - Photovoltaic Water Heater

- Design, construct, test and evaluate a photovoltaic (more of a Development Project)
- (PV) assisted natural gas residential type water heater.
- Building NG & Renewable Synergies

Cost & Time: \$59,938 16 Months



## NG-PV Hybrid HW

### Why?

Were Pairing NG with renewable systems

We would involved in funding the concet  
of a new technology produced by a  
Florida research institute

## Utility Report Card

Encouraging Energy Conservation in Schools through a Utility Report Card

- Utility/School District partnership to automate how the SD's energy consumption is organized and illustrated into a simplified report card & make formal presentation to school board.
- Great outreach project for SD relationship building and outreach

Cost & Time: \$11,965 (15 Months)



# Utility Report Card

## Why?

Packageable outreach offering for SD

Not a CDD Expense but a Educational Exp.

Can be replicated with multiple school districts within the state

The Utility Report Card was designed to allow for automatic monthly distribution via emails of results, with the idea that interested citizens, teachers and school board members could see the results.

Although the tool itself does not save energy, the tracking of data is informative to find schools that have started increasing energy or documenting savings form energy improvements.

# Options Moving Forward

- **Option 1:** Not to proceed with any projects proposed
- **Option 2:** Proceed without the project management services of Tactical Energy
- **Option 3:** Proceed with Tactical Energy to PM, coordination, billing, reporting, and CDD cost justification (\$5k per project)



**Table 3**  
**Recommended Annual Expenditure Caps**

<b>LDC</b>	<b>Annual Cap</b>
Florida City Gas	\$100,000
Chesapeake Utilities	\$60,000
Florida Public Utilities	\$60,000
FPU - Indiantown Div.	\$10,000
Peoples Gas	\$150,000
Sebring Gas System	\$10,000
St. Joe Natural Gas	\$10,000
<b>Total</b>	<b>\$400,000</b>

# Next Steps

- Feedback
- FSEC Follow up questions?
- MOA (Background, Purpose, Reporting, Funding, Duration, Contact Information)
- Timeline

ATTACHMENT 2G

AGDF  
**Transactions by Account**  
 As of December 31, 2014

Type	Date	Num	Name	Memo	Original Amount	Paid Amount	
CDD							
Bill	01/03/2014	Inv#1079	Tactical Energy Solutions, LLC	CDD	2,500.00	2,500.00	2% Admin.
Bill	02/01/2014	Inv#METERS-112	Relms, Inc.	CDD	2,140.00	2,140.00	2% Equipt.
Bill	02/01/2014	Inv#GM-00108479	University of South Florida	CDD	45,374.75	45,374.75	39% Research
Bill	04/01/2014	Inv#GM-00112865	University of South Florida	Inv#GM-00112865 Project#2131-1021-00	45,374.75	45,374.75	39% Research
Bill	04/14/2014	Inv#1084	Tactical Energy Solutions, LLC	CDD	5,079.60	5,079.60	4% Admin.
Bill	08/21/2014	Inv#1090	Tactical Energy Solutions, LLC	CDD	5,396.42	5,396.42	5% Admin.
Bill	10/01/2014	Inv#480735	Gunster	CDD	1,067.35	1,067.35	1% Legal
Bill	10/17/2014	Inv#2210	J & J Davis Plumbing	CDD	2,225.00	2,225.00	2% Contractor
Bill	11/01/2014	Inv#482501	Gunster	CDD	2,494.55	2,494.55	2% Legal
Bill	12/09/2014	Inv#484333	Gunster	CDD	544.30	544.30	0% Legal
Bill	12/15/2014	Inv#1998	Tactical Energy Solutions, LLC	CDD	3,110.00	3,110.00	3% Admin.
Total CDD						115,306.72	1
<b>TOTAL</b>							