Excergy Corporation

WORK ORDER INITIATION FORM for the CITY OF CLEARWATER

Date: December 5, 2014

Project Number: _____

City Project Number: 14-0050-UT

Plan Set Number: _____

1. PROJECT TITLE:

Advanced Metering Infrastructure – Phase I (Feasibility/Business Case/Strategic Assessment)

2. SCOPE OF SERVICES:

Project Summary:

Excergy will provide Advanced Metering Infrastructure (AMI) support and services through a series of phases. This work order initiation is for Phase I only. The phases are:

PHASE I

Stage 1 - Evaluate and summarize the feasibility of alternative AMI solutions.
Stage 2 - Business Case Development.
Stage 3 - Strategic assessment; Summarize all related technology and associated financial packages to refine direction of City's AMI initiative.

PHASE II (**Not included in this work order**)
Stage 4 - Develop a Request for Proposal (RFP) for AMI system acquisition and installation; Assist the City during the evaluation and scoring of Proposals submitted as result of the RFP.
Stage 5 - Assist the City in contract negotiations with selected AMI vendor.

PHASE III (**Not included in this work order**)
Stage 6 - Strategy Formulation; Implementation Plans.
Stage 7 - Assist the City during installation and activation of the AMI system.
Stage 8 - Assist the City with IT interfaces.

Phases I – III and Stages 1 – 8 above in general, outline the Excergy services to be provided to the City such that the City can progress from initial feasibility analysis to final AMI technology implementation. This work order addresses Phase I only. It is understood that City evaluation of results achieved from each Excergy completed Stage will be the basis for direction to proceed to the subsequent phase; only, if in the opinion of the City, it is determined to be in the City's continued best interests to pursue AMI implementation, will Excergy be directed to proceed to the next phase. The design plans shall be compiled using the applicable City of Clearwater Deliverables Standards.

Detailed Tasks and Deliverables (Phase I, Stages 1-3):

Task 1: Project Management

Following the notice to proceed, Excergy will hold an organizational Kickoff Session with City of Clearwater's project team to review project scope, requirements, deliverables, timetable, reporting relationships, and project management tools; establish a detailed Project Plan and Schedule; and develop the Communications Plan. We will discuss sensitivities, issues, and concerns unique to City of Clearwater that will need to be addressed during the project. We will establish a set of project management and reporting protocols.

Prior to this session, Excergy will provide a request for background information, to be used as input for the process analyses and business case development, including:

- Current meter reading technologies and customer interaction processes and policies
- Workload and performance statistics
- Meter populations and meter management
- Relevant characteristics of City of Clearwater's billing system, rate structures for each district, the asset management/work order systems, and City of Clearwater's IT environment
- Conservation, nonrevenue water programs, and water resource management
- Other relevant background information

During the Kickoff Session, Excergy will review the data request with City of Clearwater's team to understand what information is readily available and what information needs to be compiled, identify who will compile it, and establish a timetable, being mindful of the limitations on City of Clearwater staff time. And, working with City of Clearwater's team, we will identify City of Clearwater staff to be interviewed (see Task 3) to help understand City of Clearwater's data and issues, and establish an interview schedule. Excergy will provide a preliminary discussion of typical costs associated with a water AMI project to help validate Clearwater planning assumptions. The thorough costs and benefits analysis will be performed in Task 10.

Following the Kickoff Session, the Excergy Project Manager will provide a Kickoff Session Summary for City of Clearwater and Excergy, as well as the Project Plan and Schedule and Communications Plan.

Throughout the project, the Excergy Project Manager will manage the weekly project status cycle for City of Clearwater. This will include measurement of project progress, performance status, risk management, items of concern, and open action items. These items will be managed regularly, consistently tracked, and communicated to the City's project manager.

Once the baseline is identified, established and documented at the Project Kickoff Meeting, any changes to the project baseline will be managed through a change control process that uses a Change Control Board (CCB) to manage any unavoidable change. The CCB will oversee changes that are beyond the scope of the contractual requirements for software, documentation, environment, and interfaces, as well as changes to the Statement of Work (SOW) and contract milestones. The City of Clearwater or Excergy Project Manager will bring issues requiring attention and direction to the CCB, including scope issues arising from change requests or issues that affect contract milestones and requirements.

Task 1 Meetings

- As required

Task 1 Deliverables

- Detailed Project Plan and Schedule
- Background Information Request
- Kickoff Session Summary
- Weekly Status Reports

Task 2: Communications Plan

AMI business case studies tend to be high profile since system cost is not trivial and AMI can significantly impact many operations. City of Clearwater employees may be exposed to a significant amount of information (from vendors, for example), some of which can be confusing. Information voids are often filled by misinformation. Therefore, managing project communications well is essential. It is important that all persons who are potentially affected by the project be informed and have an opportunity for input. With City of Clearwater's project team, we will establish guidelines, points of contact, and the methods to be used for communications. The Communications Plan should cover data gathering, procedures for documenting meetings and workshops, draft documents, and review tracking, and balance formality with cost effectiveness and timeliness.

Task 2 Meetings

- N/A

Task 2 Deliverables

► Communications Plan

Task 3: Information Analysis and Staff Interviews

Upon receiving the requested background information, Excergy will review the data. Approximately one week after reviewing background information provided by City of Clearwater, Excergy staff will conduct up to 12 individual hour-long interviews with managers or representatives of the functional areas likely to be impacted by an AMI system as determined by the Clearwater Project Manager. Two Excergy staff will conduct one-on-one onsite interviews with City of Clearwater staff at the rate of two interviews per hour conducted over the course of one day.

These interviews will help to clarify the background information provided by City of Clearwater and identify individual issues and needs, organizational requirements and sensitivities, and future visions for leveraging AMI capabilities. The background information and interviews will help in assessing where AMI could generate economic and non-economic benefits and costs.

On the day immediately following the interviews, in a one-day workshop with the project team, Excergy will present the consolidated observations from the interviews to make sure we have captured and understand all important issues and needs. We will review City of Clearwater's corporate strategies; customer interactions, operations, and water resource management vision and goals; regulatory environment; existing issues and constraints (such as workforce and capital budget requirements); and other factors that might affect an AMI project.

Task 3 Meetings

► Up to 12 individual hour-long interviews with managers or representatives of the functional areas likely to be impacted by an AMI system

► One-day workshop to present consolidated observations from interviews

Task 3 Deliverables

► Summary of findings, including consolidated issues and needs

Task 4: Situation Analysis and AMI - MDMS Technology Review

As part of a one-day workshop onsite with the City of Clearwater, Excergy will review current and emerging AMI technologies and best practices, and their relative advantages and disadvantages for City of Clearwater. We are familiar with every available technology and will suggest those that appear to be most aligned with City of Clearwater's objectives and operating environment. Additional workshop topics to be considered include the following:

► The current AMI marketplace and trends, and related issues such as standards and obsolescence

- Communications and data backhaul systems
- Interoperability of the City of Clearwater's meters and major AMI vendor offerings
- Customer interaction and operational applications enabled by AMI, and their information requirements, as well as characteristics of AMI data (frequency, resolution, latency, success rate, etc.)
- Meter data management and integration issues between an AMI system and City of Clearwater's SAP billing, new customer interfaces, and how AMI – Meter Data Management System (MDMS) fits into the utility's IT architecture and planning
- Advances in water metering technologies, including electromagnetic and ultrasonic meters, and their implications for business cases and for procurement strategies
- Available acoustic leak detection (ALD) technologies and their interoperability with AMI systems
- Other emerging technologies, such as AMI- or meter-based sensors (e.g., for water pressure) and actuators (e.g., remote control shut-off valves), and their implications for business cases
- Possibilities for collaboration with other utilities (e.g., gas and electric utilities), including economies of scale and institutional considerations
- Various implementation and deployment strategies

Following this workshop, Excergy will provide a draft white paper discussing AMI technology and related considerations for City of Clearwater. Based on comments from City of Clearwater, we will revise this for incorporation into the business case assessment report.

Task 4 Meetings

- Current and emerging AMI & MDMS technologies workshop

Task 4 Deliverables

- AMI/MDMS Technology white paper (draft)

Task 5: AMI Customer Interaction Process Analysis

As a foundation for the AMI requirements definition and economic and financial analyses, Excergy will lead City of Clearwater staff in two half-day workshops to model key metering and customer interaction processes and policies, quantify potential benefits, and identify other benefits. Areas to examine may include on-cycle meter reading, high bill investigations, move-ins and move-outs, and collections. The modeling will focus on data requirements and key paths of information and work flow.

Based on AMI capabilities and the project team's vision of future customer interaction, we will lead City of Clearwater staff in modeling redesigned business processes and estimating the

extent to which AMI can streamline operations and enhance service. The workshops will also explore enhanced services facilitated by AMI, such as "watchdog" services. These understandings are essential to building a comprehensive business case.

We will provide a brief analysis of the data required to support specific customer interaction, operations, conservation, and Non-revenue water (NRW) management functions in terms of the frequency of meter sampling, data transmission, latency, synchronization, resolution and reliability recommended for the application function.

Task 5 Meetings

- Two half-day Customer interaction process modeling and redesign workshops

Task 5 Deliverables

- Customer interaction Workshop Summary Memorandum

Task 6: Distribution Operations Analysis

Excergy staff will conduct a half-day workshop with City of Clearwater distribution system managers to review the potential costs, savings and other benefits of implementing AMI-based distribution system monitoring. Excergy will document the workshop, providing a brief assessment of the potential contribution to the business case via a memorandum.

Task 6 Meetings

- Half-day AMI-based distribution system monitoring workshop

Task 6 Deliverables

- AMI-based distribution system monitoring workshop summary memorandum

Task 7: Conservation and Demand Management Analysis

Excergy staff will conduct a half-day workshop with appropriate City of Clearwater conservation and demand management staff to review the potential costs, savings and other benefits of implementing AMI-based conservation and demand management processes. Excergy will document the workshop, providing a brief assessment of the potential contribution to the business case via a memorandum.

Task 7 Meetings

- Conservation and Demand Management Analysis half day workshop

Task 7 Deliverables

- Conservation and Demand Management Summary Memorandum

Task 8: Current Software Applications, Integration, and Information Technology Assessment

Excergy will review City of Clearwater's existing information systems and associated business processes, to identify areas of existing software that must be modified for effective integration to achieve the benefits of AMI. With City of Clearwater staff, we will create a provisional application development roadmap and an AMI integration scheme. This effort is not meant to specify City of Clearwater's IT architecture; rather to suggest directions, future needs, and level of effort.

During a one-day work session with City of Clearwater staff, we will discuss system integration challenges and opportunities, and the decisions that have to be made. We will also discuss AMI deployment interface planning, emphasizing project control best practices and tools. We will help City of Clearwater objectively assess the readiness of its systems and processes to support AMI deployment and cost-effectively manage AMI operation and maintenance.

Excergy will draft technical memoranda covering data requirements, suggested integration requirements, and a provisional application development roadmap for review by City of Clearwater staff and incorporation into the business case assessment.

Task 8 Meetings

- Data and IT integration workshop for analysis of "As is", "To be" and "In the future"

Task 8 Deliverables

- Technical memoranda on functional data requirements and AMI information integration
- Provisional application development roadmap

Task 9: AMI/MDMS Strategic Alternatives

Based on City of Clearwater's organizational and strategic needs, the process analysis and redesign exercises, and the software and IT needs defined in previous tasks, Excergy will develop a set of provisional AMI and MDMS strategic alternatives. Strategic considerations of AMI/MDMS implementation will include the following:

- Choice of technology
- Customer Types: To what extent should strategies adopted in one of City of Clearwater's customer types (commercial/residential) be different from others?
- Speed of AMI deployment and Timing of MDMS implementation
- Project management: Should City of Clearwater seek a vendor turnkey solution, engage a project management firm, or assume the role of general contractor?
- Collaborative opportunities: Are there opportunities to collaborate with neighboring municipal utilities or energy utilities?

► Organizational resources: What other IT projects, strategic initiatives, organizational and staffing changes, etc., might impact the timing and extent of an AMI and MDMS implementation?

Working with City of Clearwater's team, Excergy will develop assessments of these and other areas. We will discuss these in a one-day Requirements/Strategies workshop, at which we will present preliminary recommendations.

Based on the workshop, we will revise the requirements and preliminary strategy recommendations. These will form the basis for developing the benefit/cost models.

Task 9 Meetings

► One-day Requirements/Strategies Workshop

Task 9 Deliverables

► AMI/MDMS requirements and strategy recommendations report

Task 10: Economic and Financial Analysis

Based on the analysis and review of City of Clearwater's data, as well as recent AMI and MDMS system cost data, we will develop a high level benefit/cost model of the major scenarios identified in Task 9. The model will incorporate the following:

► Capital costs to include new meters or registers, salvage on old meters, Meter Interface Units (MIUs), collectors and repeaters, control hardware and software, the meter data management system, integration with existing systems, installation and project management, core application development, and incidental costs.

► Operations and maintenance (O&M) costs to include Data Concentrator Unit (DCU) power, backhaul communications, software licensing, application management, system operator costs, field service to repair failed components, periodic field inspections, and staffing for tamper and theft follow-up. A typical list of business case elements is shown below. We may incorporate additional contributors to economic benefits and costs identified with City of Clearwater staff.

► Excergy will review City of Clearwater's meter population, meter testing, and replacement schedules in constructing the business case to factor in economies of scale and other applicable cost efficient strategies for AMI deployment.

► Direct savings from AMI, such as other savings and costs related to more cost effective conservation programs, distribution system leak management, revision of capital construction programs, or a host of other areas.

Typical Elements of AMI Economic/Financial Analysis

Meters to be changed or retrofitted	Vehicle and other savings
Meter and MIU costs	Reductions in billing adjustments
Installation costs, including lid replacement	Under-registration recovery from meters
Salvage on old meters	Distribution leak detection net savings
Meter maintenance avoided during installation	Financing savings from CIP deferrals
Meter reading collection equipment	Environmental savings (Greenhouse Gases (GHG), etc.)
Meter data management system	Water conservation savings
Integration costs	Multi-year parameters
Project management	Cost and savings impact (%) over time
Annual O&M costs, license fees	Cash flow
Personnel	Depreciation/residual values
Net present value/IRR	Legal and consulting costs
Training costs	Financing costs
Communications and publicity costs	Discounted cash flow with financing

The model will calculate cash flow in each year of the planning period, net present value, and other financial measures used to compare alternatives.

Excergy will review the business case analyses with City of Clearwater in a one-day workshop and revise the model analyses where appropriate based on the team's comments. The analyses and accompanying narrative will form the core of the Business Case Report. Excergy will endeavor to complete the analysis as soon as practical to give the City insight to projected financials before the end of Phase I.

Task 10 Meetings

- One-day Business Case Analyses Review Workshop

Task 10 Deliverables

- High level multi-period economic and financial model
- Business case narrative

Task 11: Meter Technologies Management

Excergy will incorporate an analysis of City of Clearwater's existing meter population and its performance into the benefit/cost analysis of Task 10, and develop a set of recommendations for meter procurement, AMI meter configuration (reading resolution, frequency of transmission and sampling), meter retrofit, and replacement.

Task 11 Meetings

- Collection of information and discussion with the City of Clearwater's meter shop

Task 11 Deliverables

- AMI-based meter technologies management recommendations report

Task 12: Noneconomic Benefits/Costs

While economic/financial models deal well with only hard, direct costs and benefits; a business case must also consider soft and indirect costs and benefits, such as enhanced customer satisfaction and confidence, and reduced environmental impact. As part of the business case, we will include a high level review of the non-economic factors, including Triple Bottom Line objectives, and identify major indicators for each component (social, environmental, customer service, employee development, etc.).

Excergy will then provide City of Clearwater a white paper memorandum on noneconomic benefits and costs.

Task 12 Meetings

- N/A

Task 12 Deliverables

- White paper memorandum on noneconomic benefits and costs

Task 13: Deployment Recommendations

Based on the economic and financial analyses of the key strategies developed in Task 9, we will develop draft recommendations regarding:

- New technologies, if any, that are appropriate for the various districts or operating units
- The rate(s) of deployment, and in particular, acceleration over normal meter replacement
- Project management and implementation support
- Prerequisites in such areas as information technology, City of Clearwater's organization, customer-interaction practices, etc.

We will present these draft recommendations in a memorandum. Based on feedback and discussions with City of Clearwater staff, we will revise the recommendations memorandum.

Task 13 Meetings

► Review and discussion with City of Clearwater Project Manager prior to release of Memorandum on AMI deployment recommendations

Task 13 Deliverables

► Memorandum on AMI deployment recommendations

Task 14: Implementation Considerations

Based on the recommended strategies and business case, Excergy will help City of Clearwater's team prepare a draft implementation plan. We will also help prepare a project schedule in the form of a Gantt chart that shows the key tasks and milestones for project procurement and deployment. This will help identify the points at which monetary and staffing commitments are required.

As part of implementation planning, Excergy will prepare a suggested project schedule, from start of procurement through deployment. At each stage, we will recommend the functions required for project management (for example, vendor selection, field inspections, programming, acceptance testing, etc.) and which functions could be outsourced or provided by the vendor, or should be handled by City of Clearwater staff. These recommendations will be incorporated and consistent with the economic analysis of Task 10.

Excergy will prepare a draft Implementation Planning Report, which will include a project procurement process and deployment schedule and suggested staffing. We will review the draft with City of Clearwater staff in a one-day workshop, and revise it as necessary. (Note: a final implementation plan is generally created at the time of technology and vendor selection.)

Task 14 Meetings

► Implementation considerations workshop

Task 14 Deliverables

► Draft implementation planning white paper

Task 15: Risk Assessment

Since an AMI project requires significant capital investment, delivers mission-critical information, and has a long service life; risk assessment and management should be part of a comprehensive AMI business case analysis, addressing technological risks and business risks.

As part of the implementation considerations, we will develop a risk analysis of recommended technologies and deployment strategies, identifying potential risks at each stage in the project, their likelihood, impact, and suggested management strategies (mitigation, prevention, or acceptance).

Task 15 Meetings

► N/A

Task 15 Deliverables

► Risk assessment memorandum

Task 16: Consolidated Report

Excergy will compile the components developed in the previous tasks into a Draft AMI Feasibility Study report. Most of the elements of this report will have already been reviewed by City of Clearwater's core team in prior tasks. The report will consolidate this work to comprise a companywide and district-by-district analysis of all costs and benefits of installing AMI. After a final review with City of Clearwater's core team, we will finalize the report.

Task 16 Meetings

► Review and discussion with City of Clearwater Project Manager on the Draft AMI Feasibility Study Report to obtain & incorporate feedback prior to release of Final AMI Feasibility Report

Task 16 Deliverables

► Draft AMI Feasibility Study Report

► Final AMI Feasibility Report

3. PROJECT GOALS:

Task 1: Project Management support**.** Detailed Project Plan and Schedule, Background Information Request, Kickoff Session Summary, Weekly Status Reports

Task 2: Communications Plan

Task 3: Summary of findings, including consolidated issues and needs

Task 4: AMI Technology white paper (draft), MDMS Technology white paper (draft)

Task 5: Customer interaction Workshop Summary Memorandum

Task 6: AMI-based distribution system monitoring workshop summary memorandum

Task 7: Conservation and Demand Management Summary Memorandum

Task 8: Technical memoranda on functional data requirements and AMI information integration, Provisional application development roadmap

Task 9: AMI/MDMS requirements and strategy recommendations report

Task 10: High level multi-period economic and financial model, Business case narrative

Task 11: AMI based meter management recommendations report

Task 12: White paper memorandum on noneconomic benefits and costs

Task 13: Memorandum on AMI deployment recommendations

Task 14: Draft implementation planning white paper

Task 15: Risk assessment memorandum

Task 16: Draft AMI feasibility study report, Final AMI feasibility report

4. BUDGET:

This price includes all labor and travel expenses anticipated to be incurred by Excergy Corporation for the completion of these tasks in accordance with Professional Services Method "A" – Cost Times Multiplier Basis, **for a fee not to exceed** one hundred seventy thousand seven hundred fifteen dollars (**$170,715.00**). Labor is estimated to be $152,715 and travel expenses at $18,000. Excergy will minimize travel costs through local resources, government rates, and remote work sessions wherever possible and agreed to by the City of Clearwater.

Milestone	Description	Due	Amount
Task 1	Project Management	Monthly Based on Actual Time and Expenses	$21,075.00
Task 2	Kickoff Session, Data Request, Information Gathering, Communications Plan	Monthly Based on Actual Time and Expenses	$18,000.00
Task 3	Information Analysis and Staff Interviews	Monthly Based on Actual Time and Expenses	$21,720.00
Task 4	Situation Analysis and AMI – MDMS Technology Review	Monthly Based on Actual Time and Expenses	$11,595.00
Task 5	AMI Customer Interaction Process Analysis	Monthly Based on Actual Time and Expenses	$10,770.00
Task 6	Distribution Operation Analysis	Monthly Based on Actual Time and Expenses	$7,500.00

Task 7	Conservation and Demand Management Analysis	Monthly Based on Actual Time and Expenses	$3,600.00
Task 8	Current Software Applications, Integration and Information Technology Assessment	Monthly Based on Actual Time and Expenses	$18,610.00
Task 9	AMI- MDMS Strategic Alternatives	Monthly Based on Actual Time and Expenses	$6,825.00
Task 10	Economic and Financial Analysis	Monthly Based on Actual Time and Expenses	$13,700.00
Task 11	Meter Technologies Management	Monthly Based on Actual Time and Expenses	$5,850.00
Task 12	Noneconomic Benefits/Costs	Monthly Based on Actual Time and Expenses	$3,050.00
Task 13	Deployment Recommendations	Monthly Based on Actual Time and Expenses	$3,600.00
Task 14	Implementation Considerations	Monthly Based on Actual Time and Expenses	$3,640.00
Task 15	Risk Assessment	Monthly Based on Actual Time and Expenses	$4,300.00
Task 16	Consolidated Report	Monthly Based on Actual Time and Expenses	$16,880.00

Professional	Hourly Rate
Administrative	$ 50.00
Tom Gallegos	$ 225.00
Mark Johnson	$ 225.00
John Sullivan	$ 225.00
Gareth Thompson	$ 225.00
Priscila Zardo	$ 225.00
Lynn Adams	$ 235.00
James Ketchledge	$ 260.00
Don Schlenger	$ 300.00

Billing and Payment Terms

Excergy will invoice the City monthly for labor and travel expenses. Payment terms are net thirty (30) days. Excergy reserves the right to charge one and one-half (1.5%) percent per month or the maximum rate permitted by law, whichever is greater, on any balance remaining unpaid after thirty (30) days.

5. SCHEDULE:

The project is anticipated to start on December 8, 2014, and be completed by May 1, 2015. A detailed project schedule is shown in Appendix A.

6. STAFF ASSIGNMENT (Consultant):

Excergy staff assignments:

James Ketchledge, CEO: Principal in Charge/Quality Assurance
Priscila Zardo: Project Manager (Phases 1 & 2), Technical Lead for Phase 3
Lynn Adams, Executive Consultant: Business Process/ Organization
Mark Johnson, Principal Consultant: Economic Analysis
Gareth Thompson, Solution Architect: IT/ System Integration
Dr. Don Schlenger, Ph.D., Sr. Vice President – Water: AMI SME
Tom Gallegos, Principle Consultant: Meter Technologies Management

John Sullivan, PMP: Project Manager (Phase 3)

City assignments:

Glenn Daniel: Project Manager

CORRESPONDENCE/REPORTING PROCEDURES:

Engineer's/Architect's project correspondence shall be directed to:

Priscila Zardo, pzardo@excergy.com, 720-316-7006 x713

All City project correspondence shall be directed to: Glenn Daniel, glenn.daniel@myclearwater.com, 727-562-4960x7249, with copies to others as may be appropriate.

7. INVOICING/FUNDING PROCEDURES:

Invoices for work performed shall be submitted monthly to the City of Clearwater, Public Utilities Department, Attn: Glenn Daniel, Water Manager, 1650 N Arcturas Ave., Bldg C, Clearwater, Florida 33765-1945. Contingency services will be billed as incurred only after written authorization is provided by the City to proceed with those services.

City Invoicing Code: **0315-96774-561300-533-000-0000**

8. INVOICING PROCEDURES

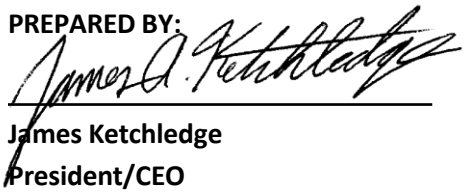
At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

A. Purchase Order Number and Contract Amount.
B. The time period (begin and end date) covered by the invoice.
C. A short narrative summary of activities completed in the time period.
D. Contract billing method – Lump Sum or Cost Times Multiplier.
E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of $50 or greater or cumulative monthly expenses greater than $100).
G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

9. SPECIAL CONSIDERATIONS:

The consultant named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

PREPARED BY:



James Ketchledge
President/CEO
Excergy Corporation

October 30, 2014
Date

APPROVED BY:

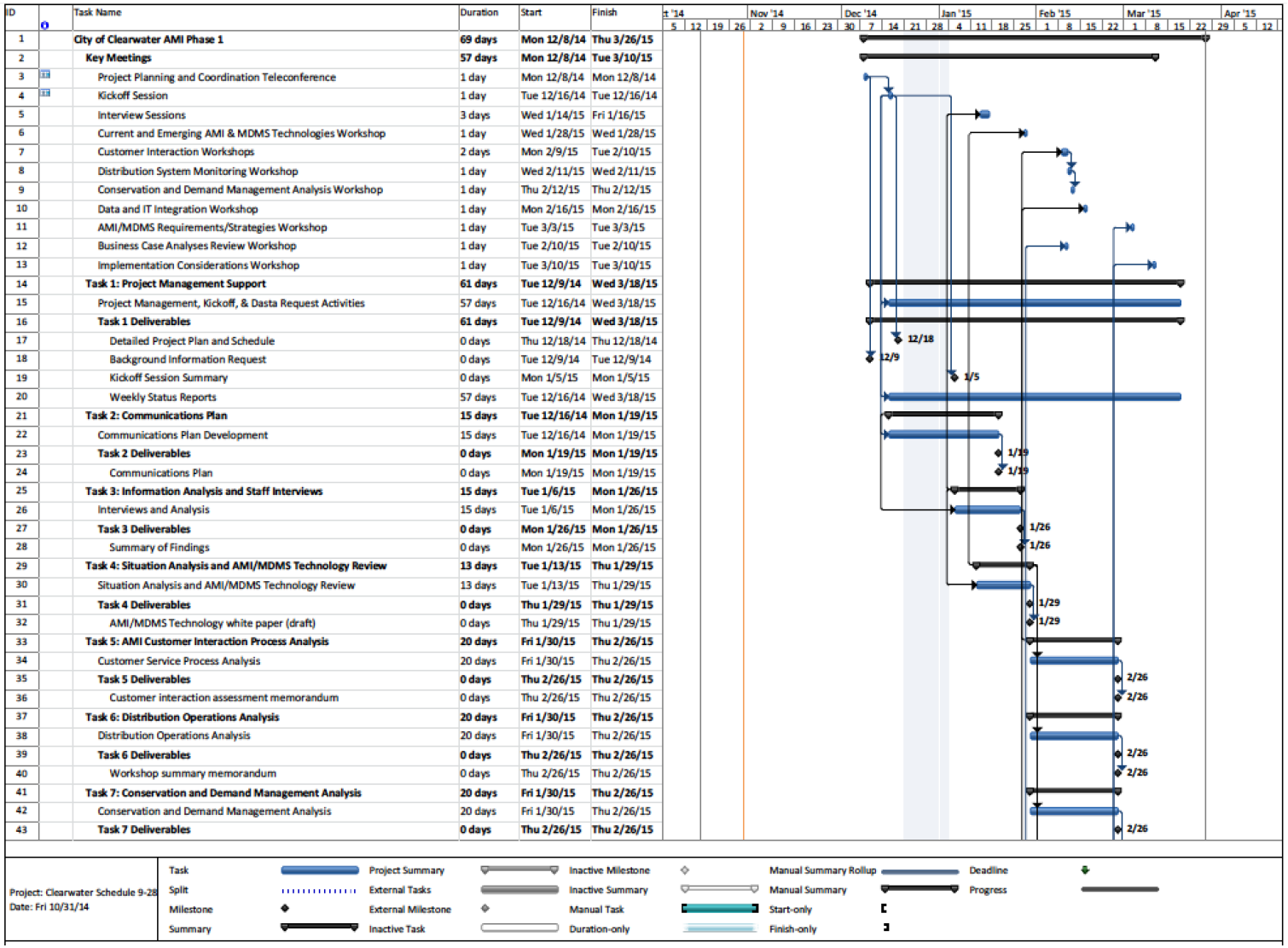
Tracy Mercer
Public Utilities Director
City of Clearwater

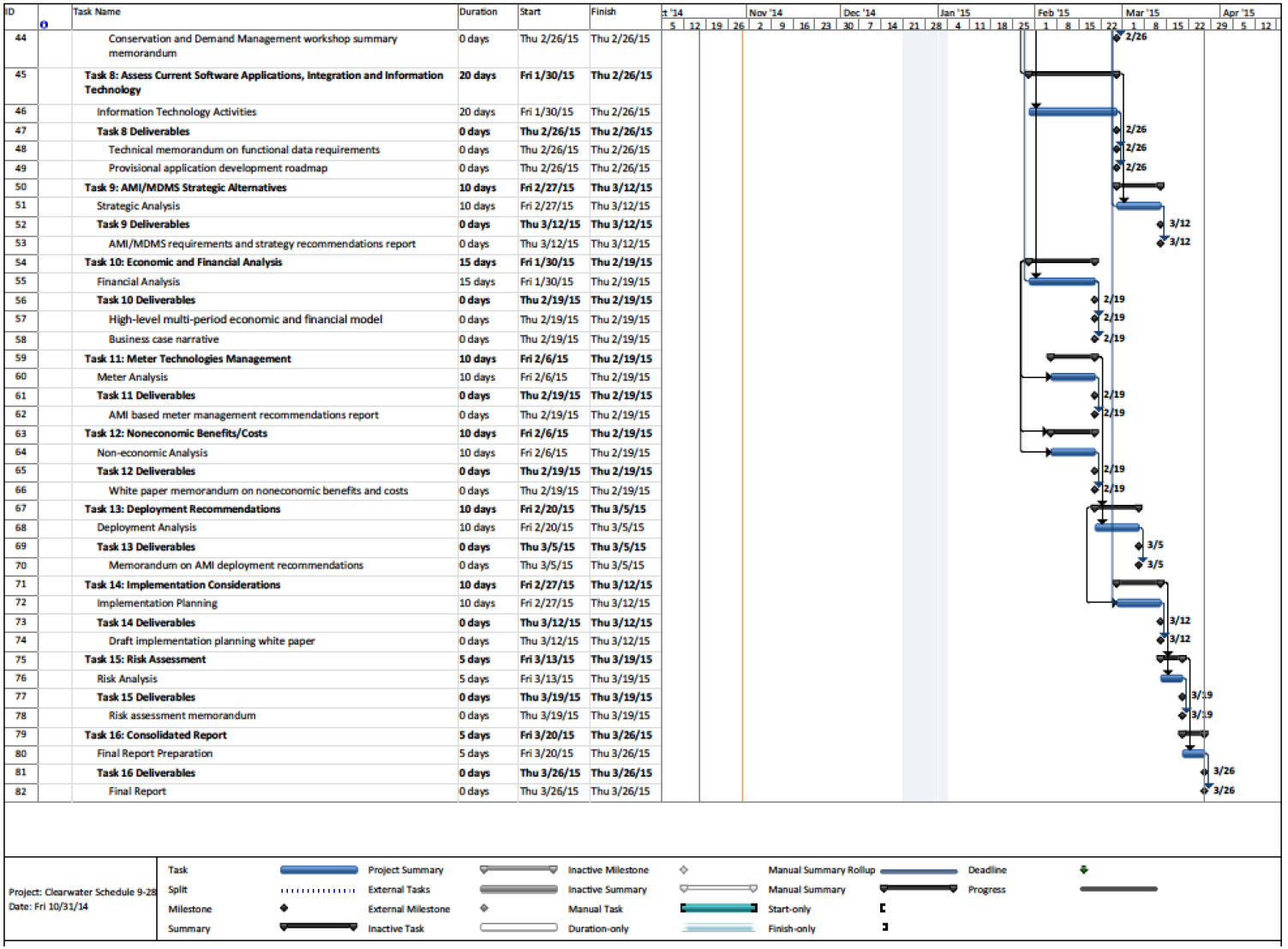
Date

WORK ORDER INITIATION FORM

Appendix A: Project Schedule

ID	Task Name	Duration	Start	Finish
1	**City of Clearwater AMI Phase 1**	**69 days**	**Mon 12/8/14**	**Thu 3/26/15**
2	**Key Meetings**	**57 days**	**Mon 12/8/14**	**Tue 3/10/15**
3	Project Planning and Coordination Teleconference	1 day	Mon 12/8/14	Mon 12/8/14
4	Kickoff Session	1 day	Tue 12/16/14	Tue 12/16/14
5	Interview Sessions	3 days	Wed 1/14/15	Fri 1/16/15
6	Current and Emerging AMI & MDMS Technologies Workshop	1 day	Wed 1/28/15	Wed 1/28/15
7	Customer Interaction Workshops	2 days	Mon 2/9/15	Tue 2/10/15
8	Distribution System Monitoring Workshop	1 day	Wed 2/11/15	Wed 2/11/15
9	Conservation and Demand Management Analysis Workshop	1 day	Thu 2/12/15	Thu 2/12/15
10	Data and IT Integration Workshop	1 day	Mon 2/16/15	Mon 2/16/15
11	AMI/MDMS Requirements/Strategies Workshop	1 day	Tue 3/3/15	Tue 3/3/15
12	Business Case Analyses Review Workshop	1 day	Tue 2/10/15	Tue 2/10/15
13	Implementation Considerations Workshop	1 day	Tue 3/10/15	Tue 3/10/15
14	**Task 1: Project Management Support**	**61 days**	**Tue 12/9/14**	**Wed 3/18/15**
15	Project Management, Kickoff, & Dasta Request Activities	57 days	Tue 12/16/14	Wed 3/18/15
16	**Task 1 Deliverables**	**61 days**	**Tue 12/9/14**	**Wed 3/18/15**
17	Detailed Project Plan and Schedule	0 days	Thu 12/18/14	Thu 12/18/14
18	Background Information Request	0 days	Tue 12/9/14	Tue 12/9/14
19	Kickoff Session Summary	0 days	Mon 1/5/15	Mon 1/5/15
20	Weekly Status Reports	57 days	Tue 12/16/14	Wed 3/18/15
21	**Task 2: Communications Plan**	**15 days**	**Tue 12/16/14**	**Mon 1/19/15**
22	Communications Plan Development	15 days	Tue 12/16/14	Mon 1/19/15
23	**Task 2 Deliverables**	**0 days**	**Mon 1/19/15**	**Mon 1/19/15**
24	Communications Plan	0 days	Mon 1/19/15	Mon 1/19/15
25	**Task 3: Information Analysis and Staff Interviews**	**15 days**	**Tue 1/6/15**	**Mon 1/26/15**
26	Interviews and Analysis	15 days	Tue 1/6/15	Mon 1/26/15
27	**Task 3 Deliverables**	**0 days**	**Mon 1/26/15**	**Mon 1/26/15**
28	Summary of Findings	0 days	Mon 1/26/15	Mon 1/26/15
29	**Task 4: Situation Analysis and AMI/MDMS Technology Review**	**13 days**	**Tue 1/13/15**	**Thu 1/29/15**
30	Situation Analysis and AMI/MDMS Technology Review	13 days	Tue 1/13/15	Thu 1/29/15
31	**Task 4 Deliverables**	**0 days**	**Thu 1/29/15**	**Thu 1/29/15**
32	AMI/MDMS Technology white paper (draft)	0 days	Thu 1/29/15	Thu 1/29/15
33	**Task 5: AMI Customer Interaction Process Analysis**	**20 days**	**Fri 1/30/15**	**Thu 2/26/15**
34	Customer Service Process Analysis	20 days	Fri 1/30/15	Thu 2/26/15
35	**Task 5 Deliverables**	**0 days**	**Thu 2/26/15**	**Thu 2/26/15**
36	Customer interaction assessment memorandum	0 days	Thu 2/26/15	Thu 2/26/15
37	**Task 6: Distribution Operations Analysis**	**20 days**	**Fri 1/30/15**	**Thu 2/26/15**
38	Distribution Operations Analysis	20 days	Fri 1/30/15	Thu 2/26/15
39	**Task 6 Deliverables**	**0 days**	**Thu 2/26/15**	**Thu 2/26/15**
40	Workshop summary memorandum	0 days	Thu 2/26/15	Thu 2/26/15
41	**Task 7: Conservation and Demand Management Analysis**	**20 days**	**Fri 1/30/15**	**Thu 2/26/15**
42	Conservation and Demand Management Analysis	20 days	Fri 1/30/15	Thu 2/26/15
43	**Task 7 Deliverables**	**0 days**	**Thu 2/26/15**	**Thu 2/26/15**





ID	Task Name	Duration	Start	Finish
44	Conservation and Demand Management workshop summary memorandum	0 days	Thu 2/26/15	Thu 2/26/15
45	**Task 8: Assess Current Software Applications, Integration and Information Technology**	**20 days**	**Fri 1/30/15**	**Thu 2/26/15**
46	Information Technology Activities	20 days	Fri 1/30/15	Thu 2/26/15
47	**Task 8 Deliverables**	**0 days**	**Thu 2/26/15**	**Thu 2/26/15**
48	Technical memorandum on functional data requirements	0 days	Thu 2/26/15	Thu 2/26/15
49	Provisional application development roadmap	0 days	Thu 2/26/15	Thu 2/26/15
50	**Task 9: AMI/MDMS Strategic Alternatives**	**10 days**	**Fri 2/27/15**	**Thu 3/12/15**
51	Strategic Analysis	10 days	Fri 2/27/15	Thu 3/12/15
52	**Task 9 Deliverables**	**0 days**	**Thu 3/12/15**	**Thu 3/12/15**
53	AMI/MDMS requirements and strategy recommendations report	0 days	Thu 3/12/15	Thu 3/12/15
54	**Task 10: Economic and Financial Analysis**	**15 days**	**Fri 1/30/15**	**Thu 2/19/15**
55	Financial Analysis	15 days	Fri 1/30/15	Thu 2/19/15
56	**Task 10 Deliverables**	**0 days**	**Thu 2/19/15**	**Thu 2/19/15**
57	High-level multi-period economic and financial model	0 days	Thu 2/19/15	Thu 2/19/15
58	Business case narrative	0 days	Thu 2/19/15	Thu 2/19/15
59	**Task 11: Meter Technologies Management**	**10 days**	**Fri 2/6/15**	**Thu 2/19/15**
60	Meter Analysis	10 days	Fri 2/6/15	Thu 2/19/15
61	**Task 11 Deliverables**	**0 days**	**Thu 2/19/15**	**Thu 2/19/15**
62	AMI based meter management recommendations report	0 days	Thu 2/19/15	Thu 2/19/15
63	**Task 12: Noneconomic Benefits/Costs**	**10 days**	**Fri 2/6/15**	**Thu 2/19/15**
64	Non-economic Analysis	10 days	Fri 2/6/15	Thu 2/19/15
65	**Task 12 Deliverables**	**0 days**	**Thu 2/19/15**	**Thu 2/19/15**
66	White paper memorandum on noneconomic benefits and costs	0 days	Thu 2/19/15	Thu 2/19/15
67	**Task 13: Deployment Recommendations**	**10 days**	**Fri 2/20/15**	**Thu 3/5/15**
68	Deployment Analysis	10 days	Fri 2/20/15	Thu 3/5/15
69	**Task 13 Deliverables**	**0 days**	**Thu 3/5/15**	**Thu 3/5/15**
70	Memorandum on AMI deployment recommendations	0 days	Thu 3/5/15	Thu 3/5/15
71	**Task 14: Implementation Considerations**	**10 days**	**Fri 2/27/15**	**Thu 3/12/15**
72	Implementation Planning	10 days	Fri 2/27/15	Thu 3/12/15
73	**Task 14 Deliverables**	**0 days**	**Thu 3/12/15**	**Thu 3/12/15**
74	Draft implementation planning white paper	0 days	Thu 3/12/15	Thu 3/12/15
75	**Task 15: Risk Assessment**	**5 days**	**Fri 3/13/15**	**Thu 3/19/15**
76	Risk Analysis	5 days	Fri 3/13/15	Thu 3/19/15
77	**Task 15 Deliverables**	**0 days**	**Thu 3/19/15**	**Thu 3/19/15**
78	Risk assessment memorandum	0 days	Thu 3/19/15	Thu 3/19/15
79	**Task 16: Consolidated Report**	**5 days**	**Fri 3/20/15**	**Thu 3/26/15**
80	Final Report Preparation	5 days	Fri 3/20/15	Thu 3/26/15
81	**Task 16 Deliverables**	**0 days**	**Thu 3/26/15**	**Thu 3/26/15**
82	Final Report	0 days	Thu 3/26/15	Thu 3/26/15