



State of Utah

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Lieutenant Governor

Department of Administrative Services

KIMBERLY K. HOOD  
Executive Director

Division of Facilities Construction and Management

BRUCE WHITTINGTON  
Interim Director

## Addendum No. 1

Date: June 30, 2015  
To: Design/Build Teams  
From: Bianca Shama – Project Manager  
Reference: Ground-Mounted Solar Photovoltaic System – Ogden Weber ATC  
Utah College of Applied Technology – Ogden, Utah  
DFCM Project No. 15124240  
Subject: **Addendum No. 1**

|       |  |          |
|-------|--|----------|
| Pages | Addendum Cover Sheet                           | 2 pages  |
|       | Revised Project Schedule                       | 1 page   |
|       | <u>Mandatory Meeting Presentation Document</u> | 15 pages |
|       | Total  | 18 pages |

**Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.**

**1.1 SCHEDULE CHANGES:** See attached Revised Project Schedule. Changes are highlighted.

**1.2 GENERAL ITEMS: Questions/Answers**

1.2.1 Question: Can the presentation from the June 16, 2015 Mandatory Meeting be posted?  
Answer: Attached.

1.2.2 Question: With respect to the location of the array, can we show different options (to show the price difference), including some of the land currently used for crop farming?  
Answer: Yes, the farmland can be included as part of the array location, but the parking areas need to remain intact. We welcome several options at different price levels.

- 1.2.3 Question: Were we able to determine the Interconnection service voltage and location?  
Answer: There is medium voltage (12,700 V) service at the campus. The main transformer and switch gear was shown during the 'walk-through'. There is also a transformer closer to the solar array location on the southwest side of the campus (see drawings submitted as part of the RFP).
- 1.2.4 Question: Is there any geotechnical information?  
Answer: No.
- 1.2.5 Question: If the canal is filled in (with a pipe to allow water flow-through), to open up the land on the opposite side of the canal for the solar array, who will pay for that?  
Answer: OWATC has opened a dialog for the piping of the existing canal. The soonest that it could be accomplished would be after the current irrigation season (Oct. 15th). For the purpose of the response, please assume OWATC would pay for this work.
- 1.2.6 Question: What is the set back from the canal (if it remains in place as-is)?  
Answer: The only set back associated with the canal is a 10' Right of Way / Maintenance Easement from the top of bank to the south.
- 1.2.7 Question: Is a fence required around the array?  
Answer: Vendor should comply with NEC Code. There are no additional requirements set by OWATC.
- 1.2.8 Question: What is the setback from RMP distribution power lines?  
Answer: It is vendor's responsibility to make sure various codes and ordinances are complied with.
- 1.2.9 Question: What are the licensing requirements of the project developer for the awarded RFP? Is the project developer required to have Utah licensure (if so what would that be) or if the project developer's construction contractor has Utah licensure, does that meet DFCM's requirements? (On page 21 of the RFP, the cost proposal form indicates a field for contractor's license).  
Answer: The prime company who is bidding on the project must hold a Utah contractor's license at the time of the bid. Subcontractor license would not be sufficient for the bid.
- 1.2.10 Question: Is there any type of estimated construction cost or range for construction?  
Answer: The cost of the project will be dependent on the proposer's price per watt for the system.
- 1.2.11 Question: What is the specification for weed control and ground cover under the array?  
Answer: Since the maintenance of the array and maximizing its productions is vendor's responsibility, the specification for the ground cover is at vendor's discretion (albeit subject to approval as is the case for the entire design proposal). A weed barrier is recommended.



STATE OF DFCMH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

## PROJECT SCHEDULE – REVISED PER ADDENDUM NO. 1 DATED JUNE 30, 2015

**PROJECT NAME:** GROUND-MOUNTED SOLAR PHOTOVOLTAIC FACILITY  
OGDEN – WEBER ATC  
UTAH COLLEGE OF APPLIED TECHNOLOGY – OGDEN, UTAH  
**DFCM PROJECT NO.** 15124240

|   | Day              | Date                 | Time       | Place   |
|---|------------------|----------------------|------------|---|
| Request for Proposals Available             | Thursday         | June 4, 2015         | 3:00 PM    | DFCM web site *   |
| <b>Mandatory</b> Pre-Proposal Site Meetings | Tuesday          | June 16, 2015        | 11:00 AM   | Main Lobby<br>Multi Purpose Facility Bldg 5<br>Ogden-Weber ATC<br>200 N. Washington Blvd<br>Ogden, UT |
| Last Day to Submit Questions                | Thursday         | June 25, 2015        | 4:00 PM    | Bianca Shama- DFCM<br>E- mail: <a href="mailto:bshama@utah.gov">bshama@utah.gov</a>                   |
| Addendum Issued                             | Tuesday          | June 30, 2015        | 3:00 PM    | DFCM web site *   |
| Response Document                           | Tuesday          | July 7, 2015         | 12:00 NOON | DFCM<br>Room 4110 State Office Bldg<br>Capitol Hill Complex<br>SLC, UT                                |
| Short listing (if necessary)                | Thursday         | July 9, 2015         | 4:00 PM    | DFCM web site *   |
| <b>Interviews</b>                           | <b>Wednesday</b> | <b>July 15, 2015</b> | <b>TBA</b> | <b>To Be Announced</b>  |
| Announcement                                | Friday           | July 17, 2015        | 4:00 PM    | DFCM web site *   |
| Substantial Completion Date                 | Sunday           | July 31, 2016        |            |   |

\* DFCM's web site address is <http://dfcm.utah.gov>.



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

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**Division of Facilities Construction and Management**

**Request for Proposals  
for  
Design/Build/Operate/Maintain/Finance Services  
SINGLE-STAGE COMPETITION  
Value Based Selection Method**

June 16, 2015

**GROUND-MOUNTED SOLAR PHOTOVOLTAIC FACILITY OGDEN-WEBER ATC**

**UTAH COLLEGE OF APPLIED TECHNOLOGY OGDEN, UTAH**

DFCM Project No. 15124240





# Contents

- » Admin Announcements
- » Goals and Deliverables
- » Cost Proposal
- » Site Details



# Schedule

DFCM Project No. 15124240



| Event  | Day      | Date          | Time     | Place   |
|--|----------|---------------|----------|---|
| <b>Mandatory</b><br>Pre-Proposal<br>Site Meeting | Tuesday  | June 16, 2015 | 11:00 AM | Multi Purpose Bld,<br>Ogden Weber ATC, nr<br>200 N Washington<br>Blvd, Ogden UT                     |
| Last Day to<br>Submit<br>Questions               | Thursday | June 25, 2015 | 4:00 PM  | Bianca Shama- DFCM<br><a href="mailto:bshama@utah.gov">bshama@utah.gov</a>                          |
| Addendum<br>Issued                               | Tuesday  | June 30, 2015 | 3:00 PM  | <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a><br>(DFCM QUICK LINKS<br>“current projects”) |



# Schedule

|                              |          |               |            |   |
|------------------------------|----------|---------------|------------|---|
| Response Document            | Tuesday  | July 7, 2015  | 12:00 noon | DFCM<br>4110 State Office Bldg<br>SLC, UT   |
| Short listing (if necessary) | Thursday | July 9, 2015  | 4:00 PM    | <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a><br>(DFCM QUICK LINKS<br>“current projects”) |
| Interviews                   | Thursday | July 16, 2015 | TBA        | TBA   |
| Announcement                 | Friday   | July 17, 2015 | 4:00 PM    | <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a><br>(DFCM QUICK LINKS<br>“current projects”) |
| Substantial Completion Date  |          | July 31, 2016 |            |   |





# Goals

- 1,200 kW<sub>DC</sub> ground mounted solar PV system
- PPA, lowest \$/kWh, escalator & Co-payment combo
- Investment Grade; to Code
- Educational Elements
- Completion Date July 31, 2016 (USIP)





# Funding

- » USIP \$700,000 (5 x Annual Payments \$156,771.21)  
Assigned to Vendor
- » OWATC Board of Directors (to be Approved)





# Deliverables

- Geotechnical
  - Engineering / Design Plans
  - DFCM Approval
  - Permitting
  - Interconnect / Net Metering
  - Purchasing
  - Construction
  - Inspection
  - Monitoring System
  - Manuals including warranty docs
  - Training
  - Education
- Code Compliant: **Note 2014 NEC**
  - UL Certified Materials
  - As Specified in RFP



# Cost Proposal Form

| <b>Scenario #</b> | <b>kW<sub>DC</sub> PPA</b> | <b>Annual kWh Output (in Year 1)</b> | <b>Rate/kWh PPA (in Year 1)</b> | <b>PPA Escalation Rate</b> | <b>Expected OWATC Contribution (in addition to RMP incentive)</b> |
|-------------------|----------------------------|--------------------------------------|---------------------------------|----------------------------|---|
| <b>1</b>          | 1,200 kW                   | 1,794,771 kWh/yr                     | \$0.06                          | 2.0%                       | \$90,000  |
| <b>2</b>          | 1,200 kW                   | 1,794,771 kWh/yr                     |                                 |                            | \$0   |
| <b>3</b>          | etc                        |                                      |                                 |                            |   |

|  |                                   |  |
|--|-----------------------------------|--|
| Estimated RMP Payment Saved<br>(Assume 6% Annual Increase) | Net Cash Flow<br>(not discounted) | Net Cash Flow<br>(2.5% discount)<br>(optional) |
|--|-----------------------------------|--|



# Value Based Selection:

- » Price Proposal Form not Visible to Interview Committee until after Interview
- » Points for Price Proposal Proportionally Distributed between Highest and Lowest Bidder (and In-Between)
- » Net Present Value (Discounted and Non-Discounted)



## Please Note:

- » Debarment Form
- » Standard Contract Conditions (PPA/ SLA)
- » DFCM Administrative Fee \$0.09 per Watt installed
- » Funding: OWATC and USIP (no Prevailing Wage)



# USIP:

- » Assigned to Vendor
- » Completion 18 months from March 4, 2015
- » Please Start Interconnect Application Early
- » Please Note Very Specific Production Metering Spec
- » Effective Grounding!!!!!!!!!!!!!!



## Grounding Bank System Design Requirements

Grounding bank specifications are provided as service to our customers. Any system meeting IEEE and Rocky Mountain Power requirements to achieve effective grounding is acceptable and will be received and reviewed.

In addition to IEEE requirements to achieve effective grounding, the X/R ratio shall be greater to or equal to 4 (four). The specifications supplied, call for copper windings in the grounding transformer which typically achieve this. If the selected transformer does not achieve this value, a reactance shall be inserted in each phase or in the neutral between the neutral of the transformer and the neutral of the system.

It is acceptable, if you choose, to use three single phase transformers wired into a zig-zag configuration.

A neutral current path meeting the IEEE definition for effective grounding must exist, through all customer owned equipment including transformers, from the distribution transformer to the effective grounding equipment. Special care shall be accessed in evaluating the system if a delta configured transformer is used in any part of the circuit.

Phase and ground pickup level are specified.

When either the phase pickup or ground pickup (neutral current through the grounding transformer) current levels are reached, both the generation and the grounding bank must open.

Breakers can be sized according to NEC requirements.

The generation cannot be closed or remain closed if the grounding transformer is open or opens.

The grounding bank cannot be closed unless all three phases are present.



# Evaluation

- Design and Components (25 points)
- Schedule (10 points)
- Past Performance (10 points)
- Strength of the Team (10 points)
- Project Management (10 points)
- Cost (25 points)
- Viability (10 points)

**TOTAL 100 POINTS**



# Project Details

|   |                 |
|---|-----------------|
| Ogden Weber Technical College<br>200 N Washington Blvd, Ogden, UT 84404 |                 |
| RMP Account #   | 44761956-001 7  |
| Meter #   | 28819752        |
| Schedule #  | 8               |
| Average Annual Consumption  | 6,408,609 kWh/y |
| Average Annual Expense  | \$579,000       |
| Fully Blended Rate  | \$0.09/ kWh     |
| Summer Peak Energy Rate   | \$0.049 / kWh   |
| DC Equivalent Capacity of RMP USIP Award                                | 1,200 kW        |
| AC Equivalent Capacity of RMP USIP Award                                | 1,047 kW        |

# GROUND MOUNT (Capacity Estimation)

Medium Voltage  
12,700 V

Main Electrical Panel

T = Transformer

Approximate Distance to Main Electrical Panel  
~700 ft.

1 block =  
20 strings x 18 =  
360 modules = 100 kW

444 ft



Property Line