Attachment D

DELIVERABLE
INSTRUCTIONS AND TEMPLATE

DELIVERABLE INSTRUCTIONS

Upon conclusion of each milestone, the awardee must provide MTC with the deliverables discussed below. The deliverables are a requirement for payment. One hard copy and one electronic version of each deliverable should be submitted to the MTC Project Manager/Coordinator and Project Administrator. **Only a complete deliverable package will be accepted for payment processing.** Do not submit the deliverable template, attachments, and invoice separately; submit all materials at the same time. Please be aware that this information will be used for the MTC website, MTC evaluation reports and in related outreach and education materials.

1. **At completion of the first milestone; you only need to provide the attachments listed below.**
2. **At completion of the second milestone (system installed), you need to submit a complete draft of the deliverable template and the attachments listed below.**
3. **At completion of the third milestone (system commissioned); you need to submit the final version of the deliverable template that addresses any comments made by the MTC in the earlier draft, and the attachments listed below. The third milestone deliverable should be a complete document that includes all attachments required for the three milestones.**

CONSTRUCTION DELIVERABLE REQUIREMENTS	Done
Milestone #1 –Initial Permitting and Site Preparation	
1. Plans & specifications for the systems to be installed (include an electrical one-line diagram)	☐
2. Digital photos of site showing conditions before project begins and upon completion of site preparation	☐
3. Copies of relevant licenses, certifications or permitting approvals and any associated analysis including such items as: environmental studies, interconnection-related studies, building permits, etc.	☐
4. Invoice and back-up documentation as well as change orders, if applicable	☐
Milestone #2 – Delivery and Installation of Equipment	
1. Completed draft deliverable template	☐
2. Digital photos of new equipment/systems (MTC may use these pictures for publicity)	☐
3. Copy of warranty or service contract	☐
4. Invoice and back-up documentation as well as change orders, if applicable	☐
Milestone #3 – Commissioning and Final Permitting	
1. Final deliverable template which addresses MTC comments on draft	☐
2. Commissioning report documenting that all funded systems are operating as the design intended. See MTC technical requirements.	☐
3. Authorization to interconnect from the utility, if applicable	☐
4. Final permits or permit amendments	☐
5. Invoice and back-up documentation, as well as change orders, if applicable	☐

CONSTRUCTION DELIVERABLE TEMPLATE

1. **Project Narrative:** Provide a brief description of the hydropower project. This information will be posted on the MTC website.

Renewable Energy Construction Project Profile Form	
Awardee Name	
Project Title	
Project Type	
Type and Amount of Award	
Technology	
New Nameplate Capacity, if any	
Estimated Annual Electricity Production (kWh)	
Estimated Payback and Internal Rate of Return (including grants and incentives)	
Project Description	**Project Photo or Rendering**

Cost Breakdown	
Total Cost	
MTC Funding (amount and type)	

2. **Construction Schedule:** Please update the following schedule with the projected and actual construction dates:

Construction Schedule		
	Original Plan	**Actual Dates**
1. Place order for major system components		
2. Site preparation completed		
3. Major system components delivered to the project site		
4. New systems installed		
5. All systems commissioned		
Please add comments on the reasons behind schedule changes, if any:		

3. Lessons Learned: Please describe lessons learned in each of the categories below. Think about what went well, what went wrong, what you would do differently next time, and how you would advise someone else going through this process.

Wholesale Hydropower Project Development Lessons Learned
1. Initial Decision Making Process and Feasibility Study Stage:
2. Permitting (and Community Interaction):
3. Design and Procurement:
4. Site Preparation and Installation:
5. Interconnection:
6. Commissioning:

4. **Operations and Maintenance:** Who will be responsible for preventive maintenance? Routine maintenance and repairs? What is your operations and maintenance plan with regard to your facility? What are your anticipated operations and maintenance costs?

5. **Renewable Energy Certificates:** Does your project generate Renewable Energy Certificates eligible for the Renewable Portfolio Standards in Connecticut, Rhode Island or New Hampshire? If so, please identify the state and class for which they qualify, and how you plan to sell them. If applicable, please note terms and purchase price for your REC contract (other than with MTC), the expiration date for the REC contract and what happens at expiration ("Reverts to Owner", "No Action," "No Contract", "Other").

6. **System Components and Installed Costs:** Please provide information on system components and cost elements. This is an imbedded Excel spreadsheet, click twice to open Excel, click word document to close Excel. White cells are entry cells, and yellow cells are calculation cells.

Equipment Description	Model	Manufacturer	Location of Manufacturer (City/ State/ Zip/ Country)	Quantity	Unit Cost	Total Cost
[list major equipment (e.g., turbines, generator, etc.), insert rows as required]						$ -
[list major equipment (e.g., turbines, generator, etc.), insert rows as required]						$ -
					Main Equipment Costs	$ -
Data Acquisition System (If Applicable)						$ -
Meter						$ -
Other						$ -
					Peripherial Equipment Costs	$ -
					Design Costs (engineering, permitting, architectural, etc.)	$ -
					Installation costs (Labor costs, electrical, etc.)	$ -
					Interconnection Fees (If Applicable)	$ -
					Total Installed Cost	$ -

7. **Production Tracking System Information:** If your project will be reporting generation to MTC's Production Tracking System, please provide the following information:

Contractors	
Company:	Service rendered: *[Project Manager, Installer, Designer, Electrician, EPC]*
Company:	Service rendered:
Company:	Service rendered:
System Start-up Information	
Date in service:	

Technical Worksheet	
Hydro system capacity (AC kW):	Flow rate (cu.ft./second) and head (ft) required for rated output:
Hydro project type and hydro technology: *(repower existing system, new project at existing dam, etc.)*	Project location: (latitude & longitude)
Average hydraulic head available (ft.):	Summarize methodology and source for estimated production:
Minimum average month flow rate (cu.ft./second) at site:	Average annual flow rate (cu.ft./second) at site:
MA DCR Dam Safety Number (or other State ID):	Estimated Annual Production (kWh):