**ATTACHMENT 3 - PROJECT MANAGEMENT PLAN TEMPLATE**

**REMINDER: APPLICANTS SHOULD SINGLE SPACE THE PROJECT MANAGEMENT PLAN IN ACCORDANCE WITH THE FORMAT AND CONTENT REQUIREMENTS IN NOFO PART I AND PART II. REMOVE THIS BLOCK PRIOR TO SUBMISSION.**

Title Page:

**PROJECT MANAGEMENT PLAN**

**{***Title of Project***}**

**WORK PERFORMED UNDER AGREEMENT**

{*Agreement Number/TBD*}

{*Recipient Organization Name*}

{*Address*}

{*City, State, Zip Code*}

**Period of Performance:** {*start date*} **to** {*end date*}

**Current Budget Period: {start date} to {end date}**

**Submitted:** {*date*}

**Revision:** {*#*}

**PRINCIPAL INVESTIGATOR**

{*Name*}

{*Phone Number*}

{*E-Mail*}

**BUSINESS CONTACT**

{*Name*}

{*Phone Number*}

{*E-Mail*}

**SUBMITTED TO**

U. S. Department of Energy

National Energy Technology Laboratory

DOE Project Officer: {*Name/TBD*}

**This report should not contain any proprietary, business sensitive, or other information not subject to public release.**

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# ACRONYM LIST

**DMP:** Data Management Plan

**DOE:**  Department of Energy

**NOFO:** Notice of Funding Opportunity

**FY:** Fiscal Year (federal)

**PMP:** Project Management Plan

**Q#:**  Quarter #

**SOPO:** Statement of Project Objectives

*Add project specific acronyms as needed.*

*RECIPIENT SHOULD REMOVE ALL ITALICIZED INSTRUCTIONS AND EXAMPLES FROM EACH.*

# EXECUTIVE SUMMARY AND TECHNICAL APPROACH

*Provide a synopsis of the overall project that briefly describes the technical approach, objective(s), goals, and expected results.* *Identify and discuss technology or techniques resulting from the project. Discuss technology transfer activities and information dissemination/sharing that will occur during this project.*

# KEY PERSONNEL

*List the project team’s key personnel, their role, and contact information. Key personnel are identified in the Financial Assistance Agreement and, at a minimum, include the Principal Investigator and Business Point of Contact**. Note that changes to key personnel require prior DOE approval.*

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY PERSONNEL** | | | |
| **Role** | **Name** | **Phone** | **Email** |
| Principal Investigator |  |  |  |
| Business Point of Contact |  |  |  |
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# TEAM MEMBERS

|  |  |
| --- | --- |
| **SUMMARY OF TEAM MEMBER PLANNED ACTIVITIES** | |
| **Team Member** | **Planned Activities by SOPO Task/Subtask Number(s)** |
| *Prime Recipient* | *1.0 - Manage and execute the project. Develop required plans.*  *X.Y - Design evaluations.* |
| *Utility ABC* | *X.Y - Providing data.*  *X.Y - Software demonstration host; will install at backup/secondary control center.* |
| *Professor Tom Smith, (University Name)* | *X.Y - Engineering code development.* |
|  |  |
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*Complete the following table to provide a summary of Prime Recipient and Team Member planned activities by SOPO task and/or subtask number(s).*

*Complete the following table to provide information about the roles, location, and funding for members of the project team. If a team member has multiple roles and/or multiple locations, include a separate entry for each role and location. Include any team member:*

* *receiving or providing project funds (government or cost share) equal to or greater than $25,000;*
* *providing intellectual property (include value if applicable); and/or*
* *serving as demonstration host/location regardless of value.*

*For each team member listed in the table, select the role description from the following:*

* *Subrecipient,*
* *Demonstration Host/Location,*
* *Vendor (e.g., services, equipment, supplies, etc.)*
* *Intellectual Property Provider (e.g., source code, data, algorithms, etc.),*
* *Cost Share Provider, and*
* *Other*

*Use the address that is closest to where the team member’s work will be performed.*

|  |  |  |  |
| --- | --- | --- | --- |
| **SUMMARY OF TEAM MEMBER ROLES AND FUNDING** | | | |
| **Team Member** | **Role** | **Location** | **Value** |
| *Utility XYZ* | *Demo Host/Location* | *123 Main Street Morgantown, WV 26505* | *$0* |
| *Utility XYZ* | *Demo Host/Location* | *14 Main Street Pittsburgh, PA 15219* | *$0* |
| *Vendor ABC* | *Vendor* | *456 Main Street Pittsburgh, PA 15219* | *$100,000* |
| *Another Utility* | *Cost Share Provider* | *1 Another Utility Drive Morgantown, PA 19543* | *$250,000* |
|  |  |  |  |
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# PROJECT BUDGET AND SPEND PLAN

*Complete the following tables and ensure that each budget category is consistent with the SF-424A form included with the Financial Assistance Agreement.*

|  |  |  |  |
| --- | --- | --- | --- |
| **PLANNED BUDGET - PHASE 1** | | | |
| **Budget Category** | **Federal Share** | **Non-Federal Share** | **Total** |
| Personnel |  |  |  |
| Fringe Benefits |  |  |  |
| Travel |  |  |  |
| Equipment |  |  |  |
| Supplies |  |  |  |
| Contractual  (List each contract valued at $25,000 or more. Add rows as necessary) |  |  |  |
| Remaining Contractual (Sum of all contracts that are individually valued at under $25,000) |  |  |  |
| Construction |  |  |  |
| Other |  |  |  |
| **Sub-Total Direct Charges** |  |  |  |
| Indirect Charges |  |  |  |
| **Total** |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **PLANNED BUDGET - PHASE 2** | | | |
| **Budget Category** | **Federal Share** | **Non-Federal Share** | **Total** |
| Personnel |  |  |  |
| Fringe Benefits |  |  |  |
| Travel |  |  |  |
| Equipment |  |  |  |
| Supplies |  |  |  |
| Contractual  (List each contract valued at $25,000 or more. Add rows as necessary) |  |  |  |
| Remaining Contractual (Sum of all contracts that are individually valued at under $25,000) |  |  |  |
| Construction |  |  |  |
| Other |  |  |  |
| **Sub-Total Direct Charges** |  |  |  |
| Indirect Charges |  |  |  |
| **Total** |  |  |  |

*Complete the following table to outline the planned spending for each quarter during the project. The list should correspond to the Federal Fiscal Year (FY). For example, “FY21, Q1” would refer to the quarter that began October 1, 2020.*

|  |  |  |  |
| --- | --- | --- | --- |
| **QUARTERLY SPEND PLAN** | | | |
| **Quarter** | **Federal Share** | **Non-Federal Share** | **Total** |
| FY##, Q1 |  |  |  |
| FY##, Q2 |  |  |  |
| FY##, Q3 |  |  |  |
| FY##, Q4 |  |  |  |
| FY##, Q1 |  |  |  |
| *Add/Remove rows*  *as needed.* |  |  |  |
| **TOTAL** |  |  |  |

# MILESTONE LOG

*Complete the following table to identify milestones that demonstrate significant progress toward meeting the overall project goals. If the project contains any go/no-go decision points, include them and their associated decision criteria in the table. A milestone is a time-based marker that indicates that a significant activity, process, or phase of work has been initiated or completed.  For each milestone, list the associated SOPO task/subtask and how the achievement of the milestone will be verified. Additional milestone guidance is provided immediately following this PMP template.*

|  |  |  |  |
| --- | --- | --- | --- |
| **MILESTONE LOG** | | | |
| **Milestone  (or Decision Point)** | **SOPO Task/**  **Subtask Number** | **Planned  Completion Date** | **Verification Method  (or Decision Criteria)** |
| *NDAs with industry partners are signed* | *X.Y* | *MM/DD/YY* | *Confirmation email to Federal Project Officer.* |
| *Design specification complete.* | *X.Y* | *MM/DD/YY* | *Confirmed in quarterly report.* |
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# PROJECT SCHEDULE AND DELIVERABLES

*Complete the following table to provide the schedule and estimated cost for executing each of the tasks and subtasks described in the SOPO.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SCHEDULE & COST SUMMARY** | | | | |
| **SOPO Task/ Subtask Number** | **SOPO Task/**  **Subtask Title** | **Planned Start Date** | **Planned Completion Date** | **Planned  Total Cost** |
| *1.0* | *Project Management and Planning* | *MM/DD/YY* | *MM/DD/YY* |  |
|  |  |  |  |  |
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| --- | --- | --- |
| **DELIVERABLES LOG** | | |
| **SOPO**  **Task/ Subtask**  **Number** | **Deliverable** | **Planned  Completion**  **Date** |
| *1.1* | *Project Management Plan* | *MM/DD/YY* |
| *1.3* | *Data Management Plan* | *As Needed* |
| *1.4* | *Commercialization Plan* | *MM/DD/YY* |
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*Complete the following table to include only the deliverables defined in the SOPO.*

# METRICS

*Complete the following table to include all the metrics stipulated in the NOFO, and any metrics defined by the Recipient.*

|  |  |  |  |
| --- | --- | --- | --- |
| **PROJECT METRICS** | | | |
| **SOPO Task/ Subtask  Number** | **Tracking  Metric** | **Units (%, $, #, etc.)** | **Goal** |
| *X.X* | *Estimated capital cost* | *$/unit* | *$1,000* |
| *X.X* | *Number of utilities participating in energy emergency exercises* | *#* | *15* |
| *X.X* | *System energy efficiencies* | *%* | *Improvement by >20%* |
| *X.X* | *Outage time of critical loads* | *Hours/ Interruption* | *Reduced by >98%* |
|  |  |  |  |
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# 

# RISK MANAGEMENT

*Complete the following table to identify both internal and external risks (i.e., technical, resource, management, etc.), that may impact the likelihood of project success. For each identified risk, indicate any relevant task/subtask, likelihood of occurrence and the extent and potential impact on successful project completion. Provide a narrative below the table that describes the project’s risk management process, including at a minimum: monitoring frequency, new risk identification, risk retirement, and team member involvement.*

|  |  |  |  |
| --- | --- | --- | --- |
| **RISK MANAGEMENT LOG** | | | |
| **Risk** | **Likelihood**  (High, Medium, Low)  **Impact**  (High, Medium, Low) | **Potential Impact** (Identify SOPO Task/Subtask, if applicable) | **Mitigation  Strategy** |
| *Inability to secure required cost share.* | *Low High* | *Scope of project will be reduced or project may be terminated.* | *{Insert appropriate mitigation strategy here}* |
| *Loss of utility partner.* | *Low Medium* | *Significant delay in starting demonstration phase in Task 5.0.* | *{Insert appropriate mitigation strategy here}* |
|  |  |  |  |
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***Guidance for Creating Project Management Plan Milestones***

*A milestone is used to gauge overall progress toward achieving the project goals.**In order to exhibit project progress/achievement as accurately as possible, a milestone must be specific, measurable, attainable, relevant, and timely. While DOE expects all projects to have at least one high-level milestone per year, a sufficient number of milestones should be included that demonstrate work completed or progress made towards achieving project goals. Fundamentally, a milestone:*

* *Marks the end or the beginning of an event;*
* *Occurs by a specific date;*
* *Has no duration of time, expends no resources, and has no associated costs; and*
* *Can be verified.*

*A milestone is not a process, task, activity, or deliverable. However, as shown in the following examples, the completion of a process, task, activity; or submission of a deliverable can be a milestone.*

* ***A process****: “Oversight of the NEPA program” may be a significant element of the project, however it does not help measure actual progress. On the other hand, “Obtain a NEPA Categorical Exclusion” (as part of the NEPA process) can be a milestone.*
* ***A SOPO task/subtask or activity****: While the task “Development of the Preliminary Design” may be substantial, it is not a milestone. However, “Complete the Preliminary Design” could be a milestone since it would be a measure of progress made towards achieving the project goals.*
* ***A deliverable****: “Submit the Communications Plan” may be considered a milestone since it marks completion of a significant task, activity, phase, etc. As such, the deliverable can provide a measure of project progress. However, unless the deliverable marks the completion of an important work package or phase, it may not possess sufficient significance to warrant being a milestone.*

*It is understood that Recipients will use a variety of internal indicators, benchmarks, etc. to track/gauge the progress made by the team toward completing the planned project. However, many of these may not have the significance to be included as a PMP milestone.*