

PROGRESS REPORT for EPC-19-060

December 2022

Recipient Project Manager: Sarah Kurtz

Commission Agreement Manager: Jeffrey Sunquist

What we planned to accomplish this period

1. We will finalize our approach for the final phase of the work
2. We will continue to meet with stakeholders and community representatives to gather inputs and request feedback
3. We will prepare a draft of a paper describing our results on the critical time steps approach.
4. We will complete the revision of “Storage technology summary” in December

What we actually accomplished this period

1. We will finalize our approach for the final phase of the work.

We have been working with our manager on finalizing this – we anticipate that the official guidance will be sent in early January and we will have a CPR meeting in February.

2. Stakeholder and collaborator meetings: During the month of December, we met with:

- Roderick Go of E3
- Priya Sreedharan of Gridlab
- Alex Panchula and Soufien Taamallah of Electric Hydrogen
- Simon Pang of Lawrence Livermore National Lab
- Julia Prochnik of JAS Energies

3. We will prepare a draft of a paper describing our results on the critical time steps approach. Finalizing this approach is critical before starting the Phase 2 calculations

We completed a draft of the paper and will be submitting it in January.

Working in our CEC manager and using the results of the study, we are assembling all of the files for running the baseline. Initial checks identified some errors in assembling the files, but these will be fixed in January.

4. We will complete the revision of “Storage Technology summary”

This is attached.

How we are doing compared to our plan

We are working with the CEC to define our final scenario. This is behind, but we expect it will be completed in January, then work can proceed more quickly.

Significant problems or changes

The invoicing is still behind, but we have now completed the invoicing through June 2022 and have submitted a first draft of the invoice through September. The no-cost extension is approved and we are in the midst of revising the subcontracts to reflect the new end date.

What we expect to accomplish during the next period

1. We will finalize our approach for the final phase of the work
2. We will continue to meet with stakeholders and community representatives to gather inputs and request feedback
3. We will submit the paper describing our results on the critical time steps approach.
4. We will complete the revision of “Storage Scenarios summary” in January
5. We will prepare for CPR meeting in February
6. We will update the Preliminary analysis summary based on the CEC guidance.

Status of Milestones and Products. (highlighted dates need to be modified still)

Task #	Task	Deliverable	Due date	Status
1.2	Kick-off meeting	Updated budget	9/18/2020	Complete
1.3	CPR Meeting #1	CPR Meeting #1	TBD	
	CPR Meeting #2	CPR Meeting #2	1/21/22	Complete
1.4	Final meeting	Final Meeting	11/11/23	
		Schedule for closeout	11/17/23	
		Draft and Final Written Products	11/17/23	
1.5	Progress Reports & Invoices	Progress Reports	Monthly	Ongoing
		Invoices	Monthly	Ongoing
1.6	Final Report	Draft Outline	6/30/23	
		Final Outline	TBD	
		Draft Report	8/30/23	
		Final Report	10/31/23	
		Written Responses to Comments on Draft Report	9/15/23	
1.7	Match funds	Status letter	9/9/20	Revision submitted

1.9	Subcontracts	Final subcontracts	TBD	Completed
1.10	TAC	List of potential members	9/9/20	Completed
		List of TAC members	TBD	Completed
		Documentation of TAC member commitment	TBD	Completed
1.11	TAC Meetings	Draft TAC meeting schedule	10/1/20	Completed
		TAC meeting 1	11/4/20	Completed
		TAC meeting 2	8/5/21	Completed
		TAC meeting 3	8/19/22	Completed
		TAC meeting 4	3/17/23	
		Note, each meeting need multiple actions		
		Final TAC meeting schedule	TBD	Completed
		Draft TAC meeting agenda	TBD	First one completed
		Backup materials	TBD	First one completed
		Final TAC Meeting agenda	TBD	First one completed
		TAC meeting summaries	TBD	First one completed
2.1	Data assembly	Draft baseline description	2/4/21	Completed
		Final baseline description	2/25/21	Completed
2.2	Confirmation of baseline data and approach	Draft modeling approach description	2/4/21	Completed
		Final modeling approach description	2/25/21	Completed
2.3	Implementation of baseline data into models to create initial baseline scenario	Summary of baseline model results	3/23/21	Completed
		CPR Report #1	15 days prior	Completed
3.1	Evaluate and document future energy storage technology alternatives	Draft storage Technology summary	7/2/21	Completed
		Final storage technology summary	12/12/22	Completed
3.2	Define representative future energy storage technology alternatives	Draft proposed storage scenarios summary	6/1/22	Completed
		Final	1/2/23	

3.3	Evaluate and document future energy electricity generation technology alternatives	Draft electricity generation technology summary	8/2/21	Completed
		Final	10/12/22	Completed
3.4	Define representative future electricity generation technology alternatives	Draft proposed electricity generation scenarios summary	4/1/22	Completed
		Final	11/12/22	Completed
4.1	Multi-day model optimization	Summary of multi-day baseline model results	9/2/21	Completed
		CPR #2	Summer	Completed
4.2	Grid scenario selection	Draft grid scenario summary	2/8/22	Completed
		Final	3/7/22	Completed?
5.1	Preliminary Scenario Analysis	Draft preliminary analysis summary	7/1/22	Completed
		Final	8/26/22	In progress
5.2	Final scenario analysis	Draft final analysis summary	6/10/23	
		Final	8/13/23	
6.1	Initial public meetings	Opening workshop presentation materials	11/17/20	Completed
		Northern CA workshop	12/3/20	Completed
		Southern CA workshop	12/3/20	Completed
		Opening workshop summary	1/8/21	Completed
6.2	Public workshop for grid scenario selection	Agenda	11/2/21	Completed
		Presentation materials	11/2/21	Completed
	Public workshop with CEC and TAC to present proposed scenarios		11/16/21	Completed
		Workshop summary	11/23/21 Summarize public comments: 12/17/21	Completed
6.3	Public workshop for preliminary scenario analysis	Agenda	6/3/22	Completed
		Presentation materials	7/1/22	Completed

	Public Workshop with CEC and TAC to present preliminary analysis		7/12/22	Completed
		Workshop summary	8/9/22	In progress
6.4	Public Workshop for Final Scenario Analysis	Agenda	6/15/23	
		Presentation materials	6/15/23	
	Public workshop with CEC and TAC to present final analysis		6/30/23	
		Workshop summary	7/15/23	
7	Evaluation of Project Benefits	Kick-off meeting benefits questionnaire	9/18/20	Completed
		Final meeting benefits questionnaire	8/1/23	
8	Knowledge transfer activities	Draft initial fact sheet	7/23/20	Completed
		Final initial fact sheet	7/30/20	Completed
		Draft final project fact sheet	7/25/23	
		Final project fact sheet	8/1/23	
		Draft knowledge transfer plan	12/31/20	Completed
		Final knowledge transfer plan	2/26/21	Completed
		Draft knowledge transfer report	8/1/23	
		Final knowledge transfer report	10/1/23	