




California ISO

EIM Track 2 Overview – DMM

Document Owner: **Morris, Janet**

 California ISO	Operations	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

REVISION HISTORY

VERSION NO. <small>(Must match header)</small>	DATE	REVISED BY	DESCRIPTION
1.0	3/20/2018	Nancy Strouse	Document uploaded to SharePoint
1.1	3/20/2018	Joanne Alai	Updated timeline
1.2	7/12/2018	Nancy Strouse	Updated DMM process flow
1.3	5/1/2019	Cari Chenkin	Updated Formatting, Grammar & Punctuation
1.4	5/16/2019	Ayman Fattah	Content updates, date refreshes



 California ISO	Operations	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

TABLE OF CONTENTS

1	Purpose	4
2	Track 2 DMM Overview	4
2.1	DMM Process Flow	5
3	Setting up Major Maintenance Adders (MMA)	6
3.1	Steps in setting up MMAs for new EIM Entities.....	6
4	Negotiating Default Energy Bids (NDEB).....	7
4.1	Steps in setting up NDEBs for new EIM Entities	7
5	Other Negotiated Values	7
6	EIM DMM Timeline	9
7	Track 2 DMM Key Deliverables	10

 California ISO	Operations	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

1 Purpose

This document is to provide entities who are joining the Energy Imbalance Market (EIM) with a summary of the key deliverables and timing when setting up Major Maintenance Adders (MMA), negotiating Default Energy Bids (DEB) and negotiating operational and maintenance values with the Department of Market Monitoring (DMM).


2 Track 2 DMM Overview

Early in the process of a new participant joining EIM, they will be introduced to DMM. A kickoff meeting is held that includes key members of the DMM team and marketing representatives from the new EIM entity team. Key topics covered are:

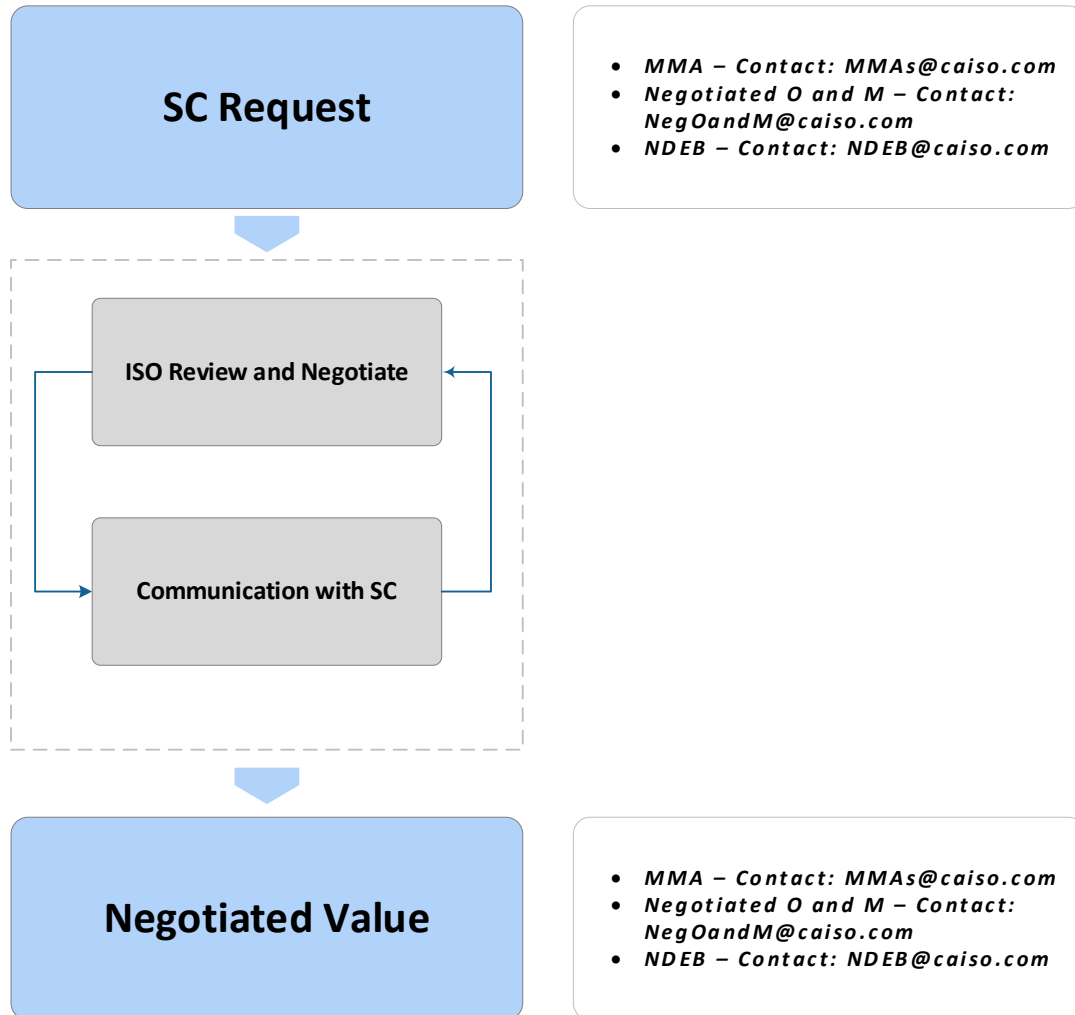
- Introduction to DMM
- Review of the new EIM entity's resources
- Review the new EIM entity's potential need for major maintenance adders (MMA), negotiated default energy bids (NDEB), and other negotiated values
- Review the process for negotiating and implementing MMAs, DEB, and other negotiated operations and maintenance (O&M) values
- Develop initial timeline for deliverables
- Plans for future and on-going communications


If a new participant determines that they would like to request any of these from DMM, a proposal can be submitted which triggers the start of negotiations between the new market participant and DMM. For any request, DMM may ask for additional documentation, request details about how a calculation was derived, and may set formal or informal meetings to discuss the process or methodologies.

Once a negotiation is finalized, DMM will verify that a particular request has been approved, in writing, with the market participant and will discuss when accompanying changes are deployed into the market.

 California ISO	Operations	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

2.1 DMM Engagement Process Flow



 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

3 Setting up Major Maintenance Adders (MMA)

Major Maintenance Adders (MMA) can be put in place for testing in Market Simulation, Parallel Operations, or not until Production, depending on the EIM Entity’s testing plans. In order to meet these testing phases, the negotiations need to be final at least one week before the start of the testing phase. MMAs can also be included after go-live in the production environment.

Major maintenance adders (MMAs) are included as one of the cost components in the CAISO’s proxy cost calculation for start-up and minimum load costs. There are two types of MMAs.


- Startup MMAs – Identifies maintenance costs specifically related to startup costs. Startup MMAs are used to calculate a cap at which the entity can bid.
- Run hour MMAs – Identifies maintenance costs incurred due to maintenance needs where the timing is determined based on the unit running a particular number of hours.

Scheduling coordinators are not required to apply for MMAs, but if they do not have an MMA, there would be no default value, effectively making the default zero. MMAs are intended to capture maintenance costs that are directly attributable to either starts or operating hours. Maintenance costs that are incurred as a function of calendar time or MWh output, for example, are not eligible.

General information about MMAs can be found in the [Business Practice Manual for Market Instruments, Attachment L](#).

3.1 Steps in setting up MMAs for new EIM Entities

1. **Submit Initial Major Maintenance Adder form:** An initial MMA form is completed by the EIM Entity and sent to the DMM team.
 - a. MMA applications are submitted using the MMA template. The template can be found here:
<http://www.caiso.com/Documents/MajorMaintenanceTemplate.xlsx>.
 - b. Instructions on how to fill out the template can be found here:
<http://www.caiso.com/Documents/Instructions-MajorMaintenanceTemplate.pdf>.
 - c. Applications should be sent to MMAs@caiso.com. The template alone is enough to begin the application process. After reviewing the application, the CAISO may request additional supporting documentation.
2. **DMM Initial MMA review and feedback:** The review cycle on the initial submission acts as training on how to complete the form to convey the appropriate information.
3. **Submit remaining Major Maintenance Adder forms:** Once the initial form is approved, the EIM entity can complete and submit the remaining forms.

 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

4 Negotiating Default Energy Bids (NDEB)

Negotiated Default Energy Bids (NDEBs) can be put in place for testing in Market Simulation, Parallel Operations, or not until Production, depending on the EIM Entity’s testing plans. In order to meet these testing phases, the negotiations need to be final at least two weeks prior to the start of the testing phase. An NDEB is calculated for each unit following one of three methodologies including:

- Variable Cost Option – Is calculated using a variety of master file inputs and is calculated differently for gas and non-gas units. This option is the default option for Default Energy Bid calculation.
- LMP Option – Uses the lowest 25th percentile LMPs when the resource was dispatched as the default energy bid. This option is only calculated for resources that have been in the market for at least 90 days.
- Negotiated Rate Option – This option is negotiated with DMM and may be formulaic.


Scheduling coordinators are not required to apply for a Negotiated Default Energy Bid. Negotiated Default Energy Bids may be used to represent variable costs when these variable costs are not represented by either the Variable Cost Option or the LMP Option. General information about NDEBs can be found in the [Business Practice Manual for Market Instruments, Attachment D.6](#).

4.1 Steps in setting up NDEBs for new EIM Entities


1. **Submit a proposal for a Negotiated Default Energy Bid to the DMM team.**
 - Written proposals should be sent via email to ndeb@caiso.com.
 - After reviewing the written proposal, DMM may request additional supporting documentation. For example, documentation may be needed to support additional costs identified in an NDEB calculation.
2. **Refine and Negotiate the NDEB.**
 - DMM and the New EIM Entity may require additional meetings to discuss and refine Negotiated Default Energy Bid methodologies.

5 Other Negotiated Values

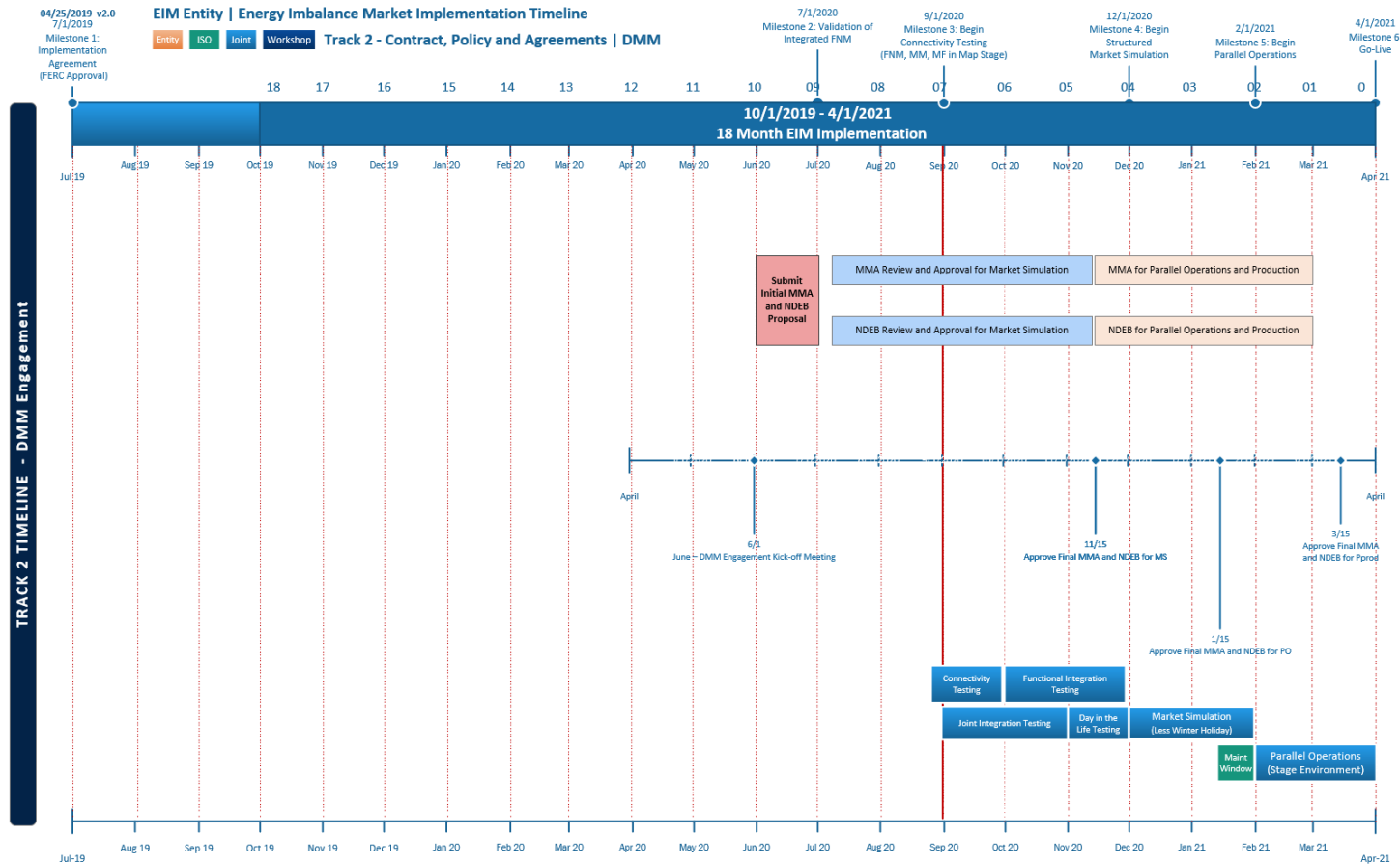
In addition to the Major Maintenance Adders (MMA) and Negotiated Default Energy Bids (NDEB), DMM can also negotiate other components of reference prices used in the CAISO’s Energy Imbalance Market. These values include negotiated operational and maintenance

 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

values (O&M), negotiated frequently mitigated unit adders, and negotiated greenhouse gas bid caps. For further information on any of these, please contact ndeb@caiso.com.

 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018


6 EIM DMM Timeline



Owner: Morris, Janet

Program Management Office


Copyright 2019 California ISO

 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

7 Track 2 DMM Key Deliverables

The following are key deliverables required by the EIM Entity and the CAISO.

Deliverable	Responsible	Timing	Description of deliverable	Format
MMA's				
Kickoff Meeting	DMM	6 months before start of market simulation (June)	An introductory meeting with the EIM entity marketing team and DMM to provide an overview of DMM, review the EIM entity resources, review potential MMA and NDEB needs, and develop an initial timeline.	Meeting
Initial Major Maintenance form	EIM entity	6 months prior to start of market simulation (June)	Submit one example MMA form for review by the DMM team. The timing of this submission depends on the number.	Excel
NDEB proposal	EIM Entity	6 months prior to start of market simulation (June)	Email requesting a Negotiated Default Energy Bid.	Email
Approval for Final NDEB for Market Simulation	DMM	11 business days prior to start of Market Sim (Nov)	Final NDEB approved by DMM if NDEB is required before Market Sim.	Email
Approval for Final MMAs for Market Simulation	DMM	1 week prior to start of Market Sim (Nov)	Final MMA approved by DMM if MMAs are required before Market Sim.	Email
Approval for Final NDEB for Parallel Operations	DMM	11 business days prior to the start of Parallel Ops (Jan)	Final NDEB approved by DMM if NDEB is required before Parallel Operations.	Email

 California ISO	Technology	Template Version:	1.4
		Document Version:	0
EIM Track 2 Overview - DMM		Date Created:	7/12/2018

Deliverable	Responsible	Timing	Description of deliverable	Format
MMA's				
Approval for Final MMA's for Parallel Operations	DMM	1 week prior to start of Parallel Ops (Jan)	Final MMA approved by DMM if MMA's are required before Parallel Ops.	Email
Approval for Final NDEB for Production	DMM	11 business days prior to Go-Live (March)	Final NDEB approved by DMM if NDEB is required before Go-Live.	Email
Approval for Final MMA's for Production	DMM	1 week prior to production go-live (March)	Final MMA approved by DMM if MMA's are required before prod.	Email