



IRP Modeling Advisory Group Charter

Purpose of the Group

The primary purpose of the Integrated Resource Planning (IRP) Modeling Advisory Group (MAG) is to ensure that any modeling work that may be undertaken by Energy Division and by individual LSEs as part of the 2017 IRP process is performed in a manner that is as transparent and objective as possible.

In order to achieve its purpose, the Modeling Advisory Group will serve as a forum for Energy Division staff to:

1. Provide timely information to parties about completed and planned IRP modeling-related activities; and
2. Solicit and receive informal feedback from parties about completed and planned IRP modeling-related activities.

MAG will be used to inform Energy Division staff's efforts to develop draft guidance for the IRP process. As described in the *CPUC Staff Concept on Integrated Resource Planning*, the proposed guidance Energy Division staff develops will also be informed by other, parallel staff activities, such as assumptions development and scenario development.¹ Staff anticipates that the draft IRP guidance it prepares based, in part, on informal feedback from MAG will be entered into the record of the LTPP-IRP proceeding (R.16-02-007), at which time parties to the proceeding will have an opportunity to offer formal comments.

Scope of Work

Throughout the fourth quarter of 2016, MAG will primarily focus on developing draft guidance for modeling and analytical work to be performed in the 2017 IRP process.² In 2017, the group will shift focus to developing guidance for modeling for the 2018 and subsequent IRP cycles. The draft guidance related to modeling and analytical work is anticipated to include the following primary categories: study plan, filing requirements, and standards of review.

¹ See p. 8/46, available at: <http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=12399>

² The draft guidance issued by Energy Division in December may also include other topics not directly related to modeling and analytical issues, such as procedural outcomes and procurement, but those issues will be addressed outside of MAG.

Key 2017 IRP Modeling-Related Issues (representative, but not necessarily comprehensive)

1. Study plan for developing a Reference System Plan
 - a. RESOLVE inputs, outputs, mechanics, and data formats
 - b. Input sources, uncertainties, futures, sensitivities, and scenarios³
 - c. Content and format of System Plan
2. Filing requirements for LSEs: analytical information needed to enable CPUC review
 - a. Modeling guidelines
 - b. Data requirements
 - c. Metrics for tracking compliance with statutory goals
3. Standards of review for individual IRPs filed by LSEs: how the information filed by LSEs will be evaluated from technical perspective
 - a. Define criteria for evaluating individual and aggregate LSE plans including allowable ranges of deviation from the Reference System Plan
 - b. Define processes and analytical work to evaluate whether criteria are met and whether deviations from the Reference System Plan are reasonable

Additional Future IRP Modeling Issues (to be addressed in 2017 for 2018-19 IRP)

- Role, nature, and timing of reliability assessments
- Alternative modeling platforms and approaches for developing the System Plan

The issues in scope under this charter may be adjusted and refined by Energy Division staff from time to time in response to clearly identified and articulated needs arising during the course of IRP development activities.

Ground Rules for Participation

To participate in MAG, members must acknowledge and agree to the following ground rules.

1. The topics to be addressed in MAG are likely to become highly technical. Energy Division will do its best to provide materials and resources to facilitate understanding of these topics. Members must make a good faith effort to review and understand any materials provided in advance of MAG meetings. This may require time outside of the designated MAG meeting times.
2. Members agree to restrict discussion to issues defined in this charter, including amendments to the charter that might be adopted from time to time, as being within the scope of work of this group.
3. Members must be willing to work constructively and collaboratively to find reasonable approaches for developing the work products identified in this charter recognizing that:
 - a. time and resources are limited;
 - b. IRP planning and procurement are iterative, with each cycle building on the information lessons learned from the previous cycle.

³ Including inputs from other agencies such as CARB, CEC, and CAISO

4. Members must be committed to helping Energy Division meet the deadlines listed in this charter (which may be modified by Energy Division from time to time).
5. Verbal comments during meetings and calls must address the specific topics being discussed on the agenda of each meeting.

Frequency and Format of Meetings

MAG meetings will consist of public conference calls and/or webinars hosted by Energy Division every other week. Each meeting will generally follow a standard format (see table below), consisting of a report-out on recently completed activities, a look-ahead at planned near-term activities, and key questions for discussion. Time will also be reserved at the end of each meeting for general questions and answers to enable members to both improve their own understanding as well as shape the work performed by staff.

To the extent possible, Energy Division will take notes during each meeting and circulate the notes to the service list of the LTPP-IRP proceeding (R.16-02-007)

As needed, Energy Division may also solicit informal, written comments from group members on specific questions, which will typically be due one week from the meeting date (and one week before the next meeting date).

Specific meeting agenda items will be circulated by Energy Division prior to each scheduled meeting.

Standard MAG Meeting Agenda (90 min)

Agenda Item	Time (min)
1. Energy Division reports out on recently completed activities and action items from last meeting	20
2. Energy Division discusses planned near-term activities	20
3. Energy Division poses key questions	10
4. Members ask clarifying questions, provide initial responses	20
5. Member Topics and General Q&A	20

Energy Division Work Products and Deadlines

- 12/?? Slides for December Workshop
- 12/?: December Workshop (tentative)
- 12/23: Draft Staff Proposal on IRP Guidance Due

Preliminary Draft IRP Modeling Advisory Group Meeting Schedule and Topics
(Work Products Shown in Italics)

#	Date	Report Out Topic	Look Ahead Topic
1	10/20/16	Post-workshop comments on analytical framework, MAG charter	Introduction to RESOLVE for IRP
2	11/3/16	RESOLVE follow-up	RESOLVE II
3	11/17/16	RESOLVE II follow-up	RESOLVE III
4	12/1/16	TBD	TBD
	12/??/16	<i>Staff Workshop (draft agenda – subject to change)</i> <ul style="list-style-type: none"><i>Proposed Assumptions, including GHG</i><i>Scenario Development</i><i>Filing Requirements</i><i>Procedural Outcomes</i>	
	12/23/16	<i>Draft Staff Proposal on IRP Guidance Due</i>	