



Resource-to-Busbar Mapping of 2019 IRP Portfolios for 2020-21 TPP



Methodology - Staff Proposal
October 8, 2019

Outline

- IRP and TPP – busbar mapping context
- Methodology for busbar mapping
- Timeline to meet TPP deadline
- Process for stakeholder vetting of Methodology

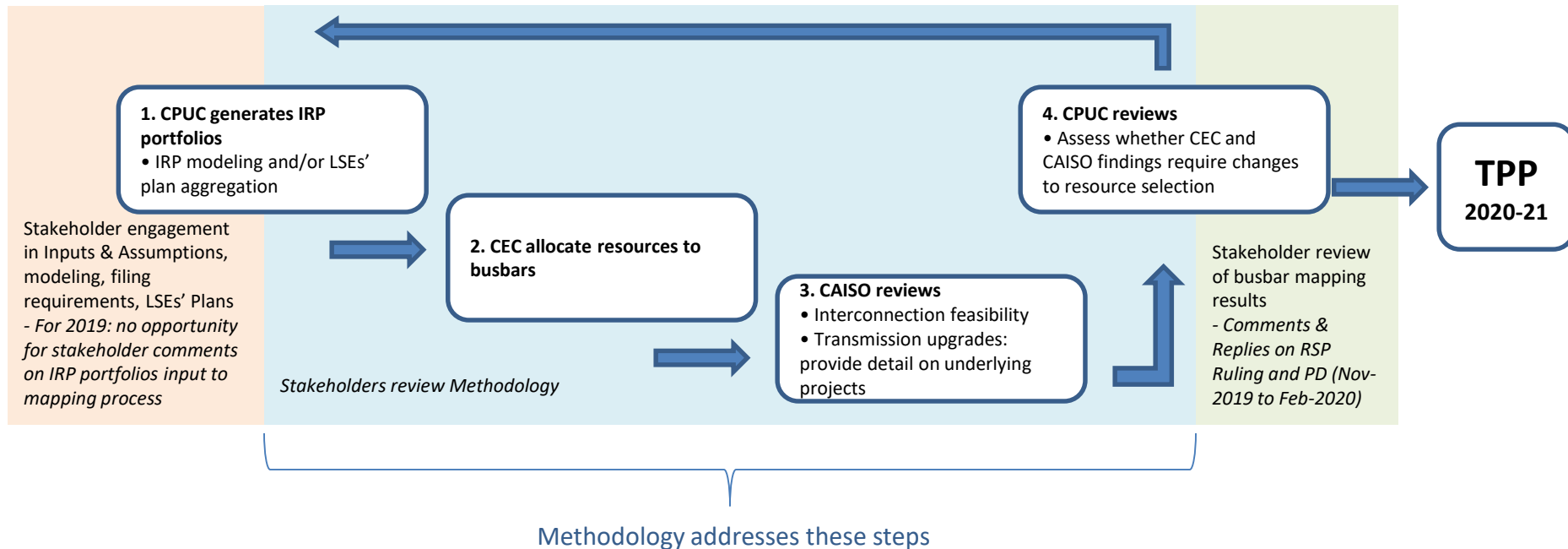
IRP and TPP – busbar mapping context

- Resource-to-busbar mapping (“busbar mapping”): process for translating geographically-coarse portfolios to plausible network locations for Transmission Planning Process (TPP) modeling
- IRP develops a Reliability Base Case, Policy-Driven Base Case and Policy-Driven Sensitivity(ies) every year
 - Upon formal CPUC adoption, these IRP portfolios are transmitted to the CAISO to be used as inputs to the TPP
- Busbar mapping scope: utility-scale generation resources that are not already in the baseline

Busbar mapping in 2017-18 IRP

- Process has been performed twice; for each of 2017 and 2018 IRP portfolios
- Learnings and questions for 2019 include:
 - Engaging the CAISO, as well as the CEC, in the busbar mapping process can address issues iteratively during the IRP portfolio formation process, rather than later, during TPP
 - How to validate that the theoretical resource potential estimates in RESOLVE are sufficiently representative of commercial interest?
 - How to ensure that gen-ties are feasible, economically and from a land-use perspective?
 - What other success criteria should be used to determine whether allocations are appropriate?

Methodology for 2019-20 busbar mapping



- Improvements for 2019-20 busbar mapping
 - Publishing Methodology for stakeholder vetting upfront
 - Identifying specific steps performed by each agency's staff, enabling iterative refinement of IRP portfolios
 - Introducing validation of resource potential with commercial interest
 - Articulation of guiding principles and criteria for effective mapping

Timeline to meet TPP deadline

- 2019-20 busbar mapping focused on meeting TPP deadline of February 2020, for TPP 2020-21
 - Deep decarbonization (to meet SB 100 goals by 2045 and 80% emissions reductions below 1990 levels by 2050) likely to require update to methodology for 2020-21 or later busbar mapping, to address need to co-optimize economic, land use, transmission and interconnection issues

Activity	Timing
Document Methodology and receive informal comments	August – October 2019
Set up process with draft portfolio	September – October 2019
Map proposed RSP	October 2019
Ruling: Proposed RSP (incl. mapping) and TPP Sensitivity options - release & receive comments	November 2019
Map TPP Sensitivity and re-map proposed RSP if needed	December 2019 – January 2020
PD: Proposed RSP and TPP Sensitivity (incl. mapping if time allows, otherwise delegated to staff to release) – release & receive comments	January – February 2020
Informally transmit IRP portfolios to TPP	Mid-February 2020
Formally transmit IRP portfolios to TPP, following CPUC Decision	End-February 2020

Process for stakeholder vetting of Methodology

- Draft Methodology to be sent to Service List post Workshop
- Staff seek parties to focus on:
 - Questions raised in draft Methodology
 - Effective mapping of 2019 IRP portfolios, noting future opportunities to further improve Methodology in future
- Informal comments requested within 1 week

Questions or Comments?

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