2021 Interconnection Process Enhancements – Gridwell Consulting Proposed Issues

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PHASE 1

NEAR-TERM ENHANCEMENTS FOR MAY 2022 BOARD MEETING

Proposed issues to include in Phase 1

- Issue: The interconnection queue far outstrips *any* estimate of future need, the queue is bloated
- Interconnection and procurement is at a major inflection point; we cannot squander scarce time and human resources studying unviable interconnection requests
- Developers do not have sufficient data to evaluate potential project interconnection sites, and resort to hedging their risk with superfluous interconnection requests that are destined to fail

Proposed issues to include in Phase 1

- CAISO interconnection data transparency and reporting has not kept pace with the amount change since the GIDAP implementation in 2012.
  - This is the fourth iteration of IPE
  - The GIDAP BPM has been revised 27 times and the Generator Management BPM has been revised 30 times
- Without suitable data stakeholders cannot independently evaluate interconnection queue trends or develop data driven opinions on major reforms to be proposed in Phase 2 of this effort

Proposed issues to include in Phase 1

- Availability vs accessibility
  - Accessibility - the quality of being easy to obtain, use, examine, or appreciate
- Increasing CAISO data *accessibility* will drive better policy outcomes and increase the likelihood that stakeholders come to consensus on a proposal
  - Everyone is aligned around the same data set
  - Proposals and insights and be independently validated
  - Everyone experiences improved efficiency and has more time for the fun policy development work

Proposed issues to include in Phase 1

- Standard methods for increasing accessibility
  - Provide data in an accessible format (usually excel)
  - Include a summary dashboard with key metrics
  - Include primary keys to facilitate analysis (queue position and Resource_ID)
  - Provide a data dictionary to define what values mean and increase data literacy

Proposed issues to include in Phase 1

- CAISO Interconnection Queue improvement opportunities:
  - Resource ID
  - Transmission Planning Study Area and Sub Area
  - Partial Capacity Deliverability Status percent or MW amount
  - Phase level nameplate MW, interconnection capacity MW, Fuel Type, Technology, In-Service Date, COD
  - Restructure the fuel type by column (wind, solar, BESS) rather than Fuel-1, Fuel-2, Fuel-3
- Information is publicly available in other CAISO sources (TPP documents, NQC spreadsheet, etc)

Proposed issues to include in Phase 1

- Transmission Planning data improvement opportunities:
  - Share study report data available across multiple reports in an excel document (posted on NDA site)
  - Create a transmission project tracking report with information from TPP appendices and RIMS Transmission module
  - Ideally transmission data would include, element upgrade name, description, region, expected in service date, From_Sub, To_Sub, model identifier, voltage, project status, line miles, and facility rating mva.

PHASE 2

LONG-TERM ENHANCEMENTS FOR NOVEMBER 2022 BOARD MEETING

Proposed issues to include in Phase 2

- Review of the modern queue (clusters TC through 12) shows that only 1 in 10 interconnection requests and 4% of proposed MW reach COD
- Superclusters extend the study process to 3.5 years and compounding existing alignment challenges with procurement timelines

	Queue Position		MW at POI	
Application Status	Count	% of Total	Sum	% of Total
Active	196	16%	44,014 MW	20%
Completed	100	8%	9,328 MW	4%
Withdrawn	922	76%	170,333 MW	76%
Grand Total	**1218**		**223,675 MW**	

Proposed issues to include in Phase 2

- Drivers for superclusters:
  - Expected procurement levels
  - Low threshold for entry; interconnection requests are not structured to control for proportionality – it costs the same amount to request 30 MW as it does 1000 MW
  - $250,000 site exclusivity deposit (in lieu of land rights) is never at risk;
  - Projects have limited financial motivation to drop out before the completion of Phase I
  - Information on regional curtailments, known transmission constraints, and known deliverability availability without a study is difficult to find
  - Only 2% of IRs with executed GIAs end up withdrawing, financial drivers appear to be most effective