PJM IPRTF

Hybrid "Transition" Proposal for Stakeholder Discussion

11/23/2021

CYPRESS CREEK RENEWABLES

OPEN ROAD RENEWABLES

Hybrid Proposal: 12 month serial + cluster

- Those who support PJM Option 4 desire IC-choice for late-stage AE1-AG1 projects
- Those who support PJM Option 2/3 are concerned that the serial backlog processing timeline of Option 4 could extend 2.5 yrs+ and desire certainty for the market to transition to the new paradigm via a workable solution
- Hybrid solution → ~12 months of serial backlog processing followed by a one-time transition to cluster processing
  - Gating criteria + Transitional Serial Readiness Requirement (TSRR) effectively thins-out serial backlog
  - Hard cap of 12 months of serial backlog processing.
  - Any serial backlog projects that remain after 12-month mark without completed Facilities Study will have their ISAs (Interconnection Service Agreements) tendered and have 30 days to securitize, withdraw, or opt for transitional cluster processing
  - Following the completion of the serial backlog processing, one-time transition to cluster processing

Details around 12 months of serial processing

- First, establish gating criteria of economic viability to limit transitional serial eligibility (SIS in hand, $150k/MWac all-in Interconnection Upgrade (NUs + Direct))
- Second, establish robust financial requirement (TSRR) to further thin out the projects that elect serial backlog processing. (e.g., % NU)
- These first two elements will reduce the serial backlog to a manageable volume to enable the re-tools and stability study modeling to be completed in ~12 months.
- During the 12 months, PJM/TOs are performing Stability Study and SIS Retools. The workload is supported by developer fees (portion of TSRR is allocated to ensure 100% of workload funded by 3rd party contractors.)
- At the 12-month mark, ICs with uncompleted Facilities Study in serial backlog will have their ISAs tendered
- IC has 30 days to execute ISA and ISCA (IX services construction agreement) and securitize NUs (nonrefundable) and direct connect upgrades as per existing tariff requirements. Any projects that fail to do so are moved into the subsequent cluster.
- The ISA issuance with incomplete Facility Design & Cost estimate is a risk that IC will take as the final Facility Upgrade cost will be based upon actual expenses (as actual costs are incurred and invoiced by the TO).

Hybrid Proposal: 12 month serial + cluster

- The proposed solution has the following contours with the items open for refinement highlighted in yellow:

A) Max 12 months of Transitional Serial backlog processing
  i) SIS in hand for AE1-AG1
  ii) Gating criteria of $150k/MWac all in IX upgrade cost (NU+DC) to stay in serial processing
  iii) TSRR sizing that effectively culls the queue and fully covers resourcing PJM and TOs with 3rd party support to complete Stability studies and re-tools in 12 months
  iv) Max 12-month transitional serial processing.
  v) At conclusion of 13th month following transition serial start, first transitional cluster begins

B) Transitional Cluster
  i) Harmonize on number of transitional clusters, comparing timeline to option 3

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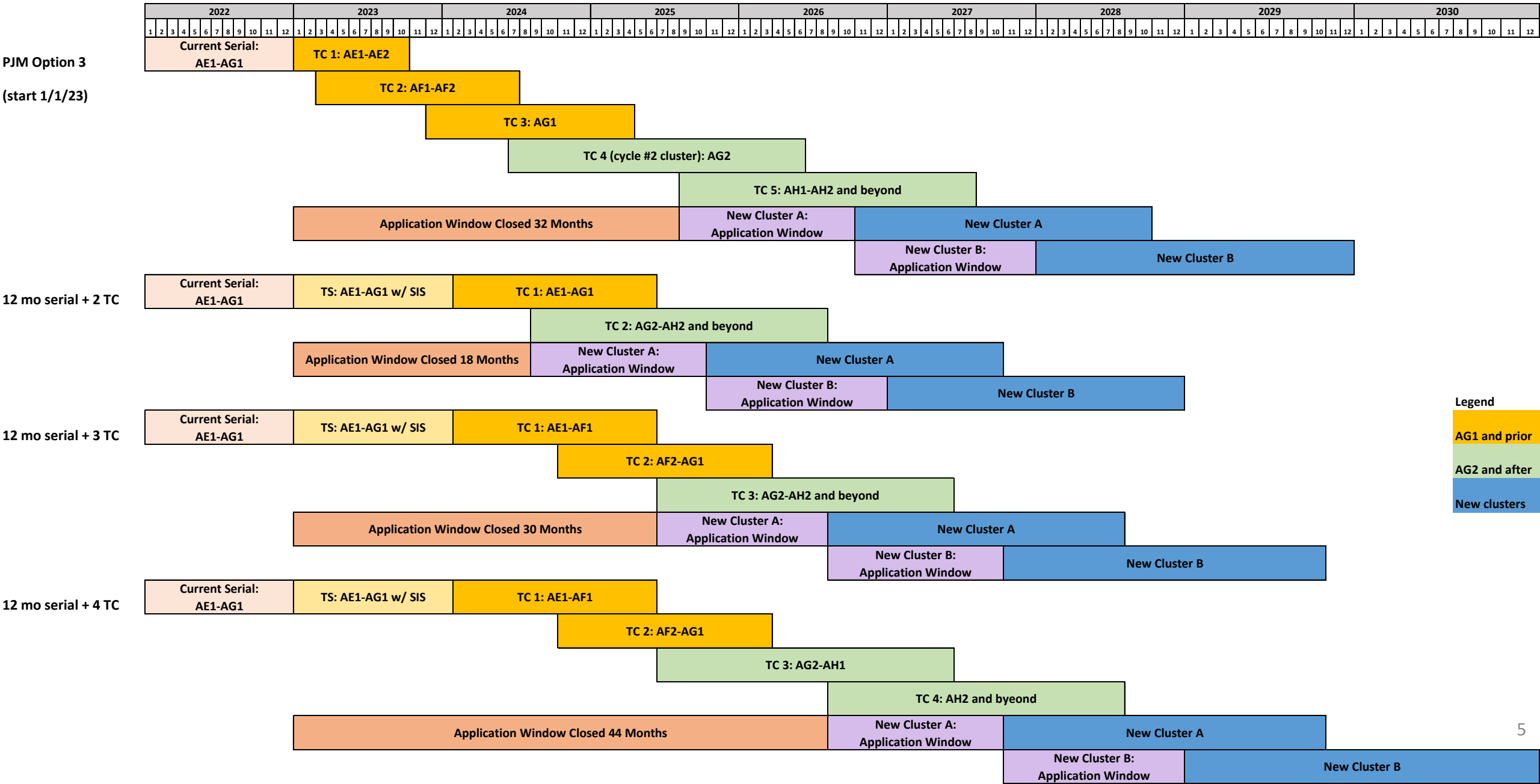
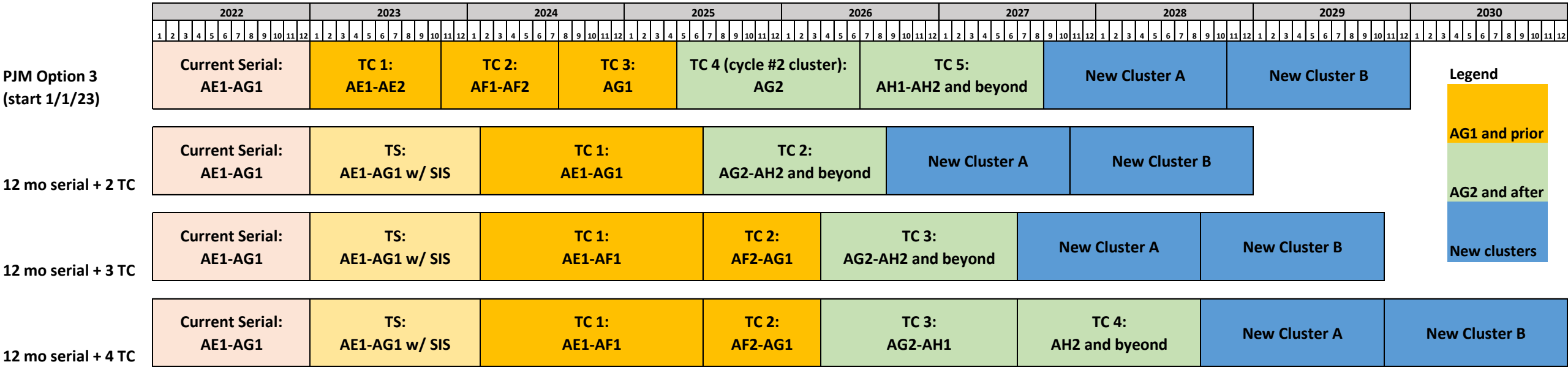


Hybrid Proposal cont…
(Compressed from prior slide for ease of schedule comparison)



- Options provide opportunity to move through the transition faster than PJM Option 3 while giving IC choice to late-stage projects
- Hybrid Proposal variants complete transition process **as much as 12 months sooner** than PJM Option 3 (“12 mo serial + 2 TC” variant) and **at most 12 months longer** than PJM Option 3 (“12 mo serial + 4 TC” variant)

Hybrid Proposal: 12 month serial + cluster

- Details to work out on this ‘hybrid’ proposal:
  - Gating criteria of $150k/MWac all-in IX Upgrade (NU+DC) cost to select serial processing
  - TSRR sizing ($/MW, % of NUs, etc)
  - Transitional Cluster…should there be 2, 3, or 4 transitional clusters?
  - Anything else?

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