



Item 10.2: Passport Program Update

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Urgent Board of Directors Meeting

ERCOT Public

June 7-8, 2021

Passport Update

- Pre-Passport Update
- Previous Plan for Passport Delivery
- Bifurcation of EMS Upgrade and RTC
- Re-Assessing Delivery Sequence
- Passport Next Steps

In-Flight Pre-Passport Projects

ESR: Energy Storage Resource
BES: Battery Energy Storage
DGR: Distributed Generation Resource

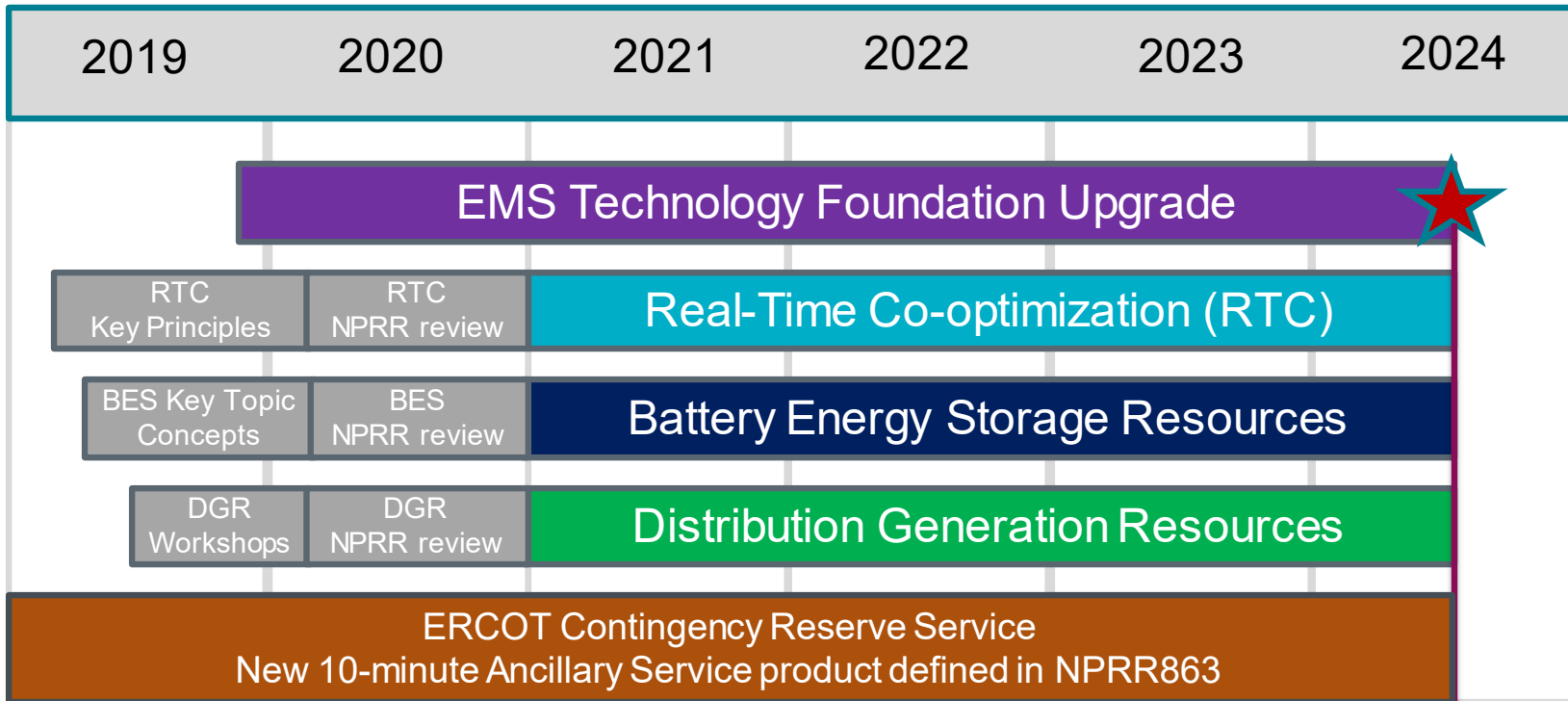
- **PR325-01 Fast-Frequency Response (FFR) Advancement** (Gate to Execution phase June 2021)
 - Target go-live December 2021
 - NPRR863, NPRR1015, NOGRR187

- **PR354-01 DGR/DESR Implementation** (Gate to Execution phase June 2021)
 - Target go-live 2021-R6 (December 2021) or 2022-R1 (February 2022)
 - NPRR917 – Nodal Pricing for SODGs and SOTGs
 - NPRR1016 – Clarify Requirements for DGRs and Distribution Energy Storage *Resources*
 - NPRR1052 – Load Zone Pricing for Settlement Only Storage Prior to NPRR995
 - NPRR1065 – Implementation Adjustment for NPRR917
 - PGRR082 – Revise Section 5 and Establish Small Generation Interconnection Process
 - Related RRs – NOGRR212, RRGRR026

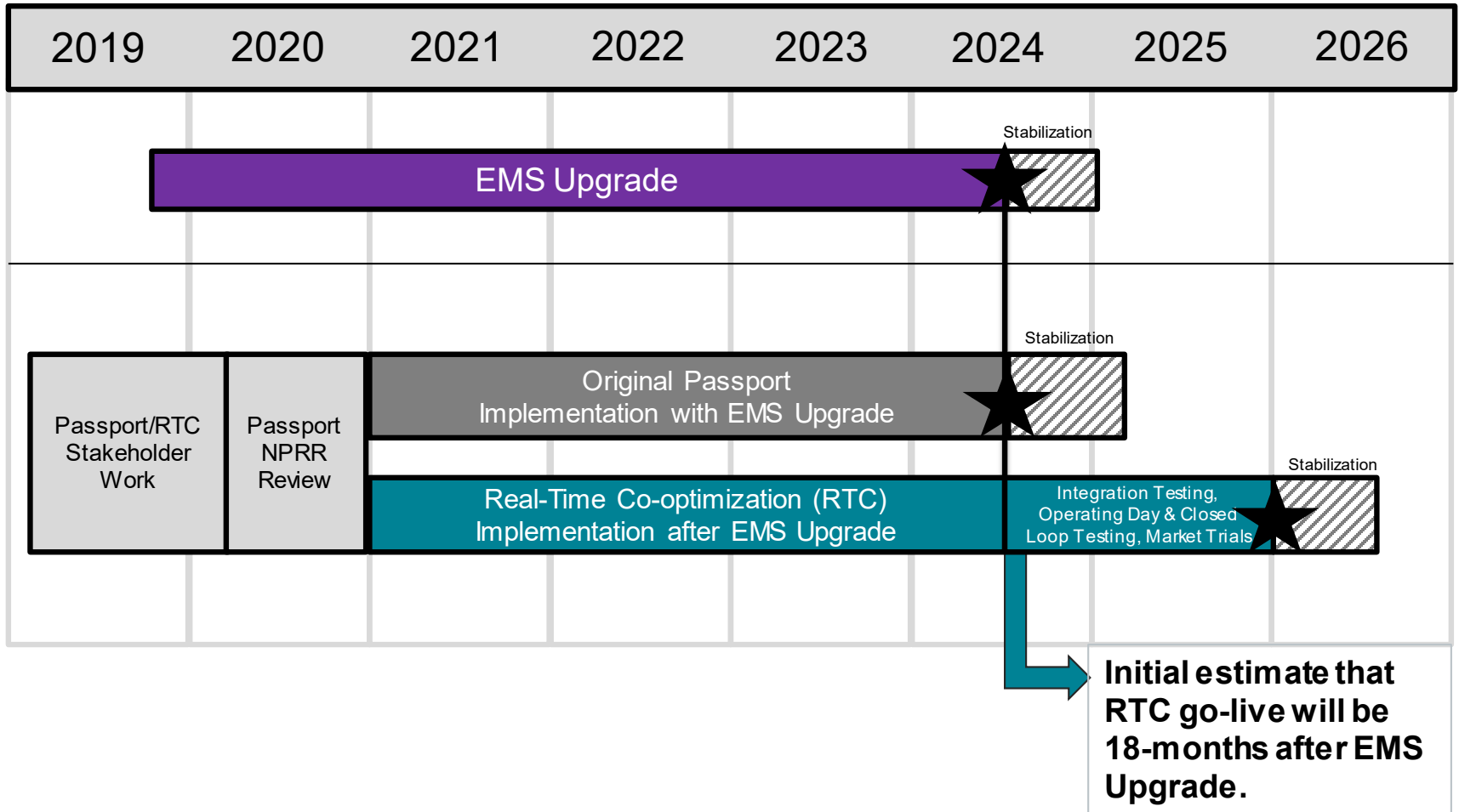
- **PR353-01 BES Combo Model Implementation** – potential for multiple go-lives
 - Target go-live TBD (the team is still working to set release targets)
 - NPRR963 – Base Point Deviation Settlement & Deployment Performance Metrics for ESRs (Combo Model)
 - NPRR987 – BESTF-3 ESR Contribution to Physical Responsive Capability and RT On-Line Reserve Capacity Calcs
 - NPRR989 – BESTF-1 ESR Technical Requirements
 - NPRR1002 – BESTF-5 ESR Single Model Registration and Charging Restrictions in Emergency Conditions
 - NPRR1026 – BESTF-7 Self-Limiting Facilities and Self-Limiting Resources
 - NPRR1038 – BESTF-8 Limited Exemption from Reactive Power Requirements for Certain ESRs
 - NPRR1069 – Align Ancillary Service Responsibility for ESRs with NPRR987
 - Related RRs – NOGRR204, NOGRR208, OBDRR017, PGRR081, RRGRR023



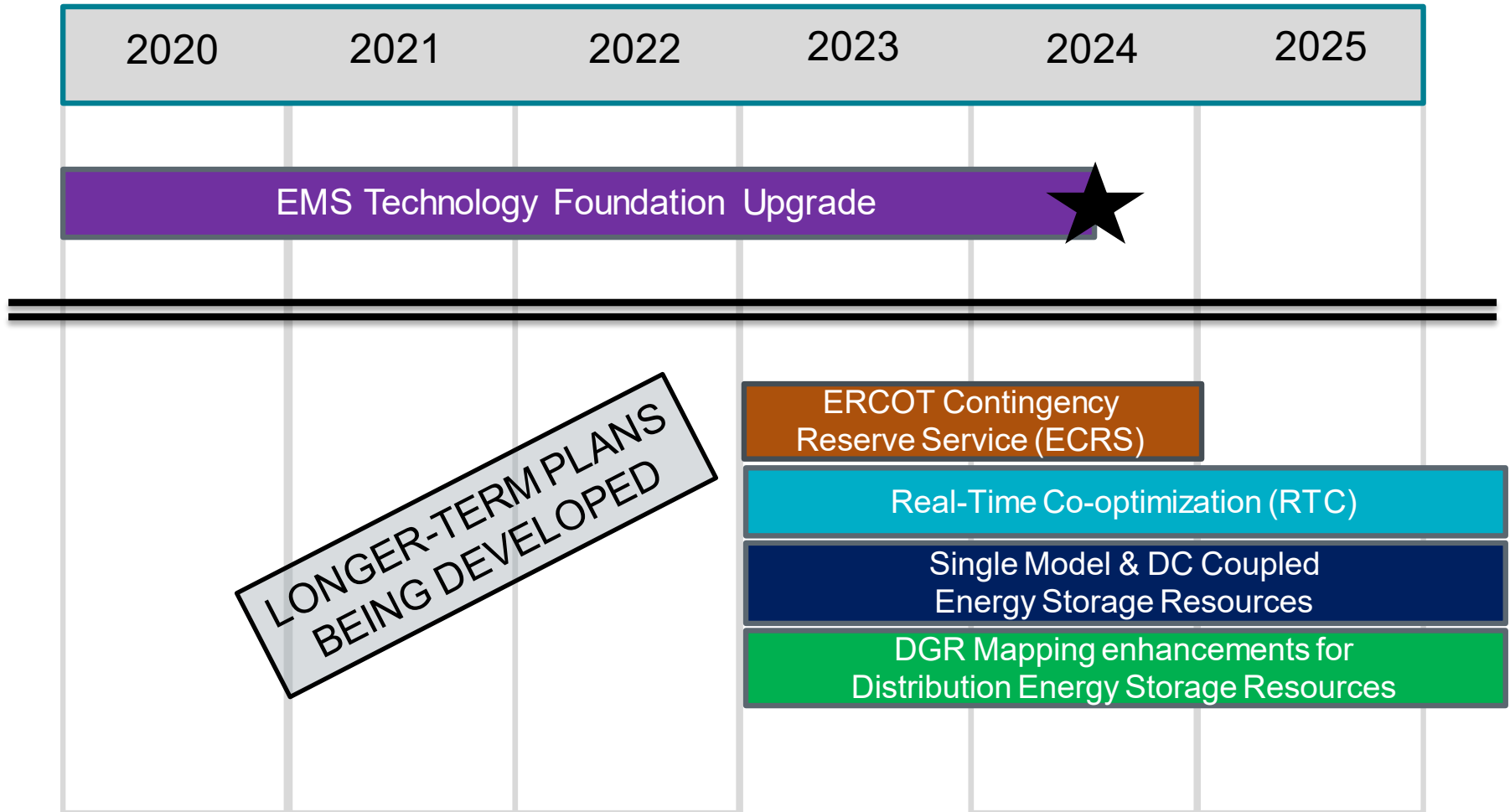
Previous Plan for Passport Delivery



Bifurcation of EMS Upgrade and RTC



Re-Assessing Delivery Sequence (not delivery dates)



Next Steps on Longer-Term Plans

- ERCOT will re-align EMS Upgrade project to exclude dependencies on Passport market design scope, development, and testing.
 - The next assessment of the EMS Upgrade go-live date will be complete in June 2022 when the project transitions from Planning to Execution.
- ERCOT will work to complete the development of a new sequence for the Passport market design based on the assumption of the EMS Upgrade go-live in 2Q2024. This new sequence will be presented at the August 2021 Board meeting as a potential option for re-alignment and delivery of these market design changes.
- In parallel, ERCOT will support Revision Requests from the February 2021 Extreme Winter Weather Event and other reliability policy decisions with Impact Analysis support and maintain awareness of potential changes in strategic needs and delivery.

Wrap-up

- Currently there is no change in overall budget estimates (see below). Note that re-planning may result in changes to budget estimates and will result in some project spending moving into future years.
- ERCOT continues to work on re-planning the Passport market design efforts and will provide an update at the August 2021 Board meeting.

(Dollars in Millions)

2024 Passport Program	Budget
Real-Time Co-Optimization (RTC)	\$ 51.6
Energy Management System (EMS) Upgrade 2024	27.1
Battery Energy Storage (BES)	5.1
NPRR 863 ERCOT Contingency Reserve Service (ECRS)	1.2
Distributed Generation Resources (DGR)	0.5
Passport Program Projects	<u>\$ 85.5</u>

- Questions?