TEXAS RE

TPL-001-5.1 Implementation Plan

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Overview of TPL-001-5.1

Transmission System Planning Performance

- **Purpose:** To ensure that the Bulk Electric System (BES) operates reliably across various System conditions & after a range of probable Contingencies
- Requirements for the Planning Coordinator (PC) & Transmission Planner (TP) for the Near-Term Planning Horizon & the Long-Term Planning Horizon

TPL-001-5.1 Requirements Enforceable on July 1, 2023

Enforceable: R1, R2*, R3, R4, R5, R6, R7, & R8 & Table 1

*Requirement 2, Part R2.7 is governed by the NERC Implementation Plan (IP) for the Category P5 planning event in Table 1 for the non-redundant components of a Protection System (as noted in Footnote 13 a, b, c, & d of the Standard)

2.7. For planning events shown in Table 1, when the analysis indicates an inability of the System to meet the performance requirements in Table 1, the Planning Assessment shall include Corrective Action Plan(s) addressing how the performance requirements will be met. Revisions to the Corrective Action Plan(s) are allowed in subsequent Planning Assessments, but the planned System shall continue to meet the performance requirements in Table 1. Corrective Action Plan(s) do not need to be developed solely to meet the performance requirements for a single sensitivity case analyzed in accordance with Requirements R2, Parts 2.1.3 and 2.4.3. The Corrective Action Plan(s) shall:

R2.7—Table 1, P5 Category

Category	Initial Condition	Event [1]	Fault Type [2]	BES Level [3]	Interruption of Firm Transmission Service Allowed [4]	Non-Consequential Load Loss Allowed
P5 Multiple Contingency *(Fault plus non-redundant component of a Protection System failure to operate)*	Normal System	Delayed Fault Clearing due to the failure of a non-redundant component of a Protection System[13] protecting the Faulted element to operate as designed, for one of the following: 1. Generator 2. Transmission Circuit 3. Transformer[5] 4. Shunt Device[6] 5. Bus Section	SLG	EHV	No[9]	No
				HV	Yes	Yes

R2.7 & Implementation Plan Compliance Dates

IP permits additional time to develop CAPs for the TPL-001-5 Category P5 planning events involving single points of failure in Protection Systems

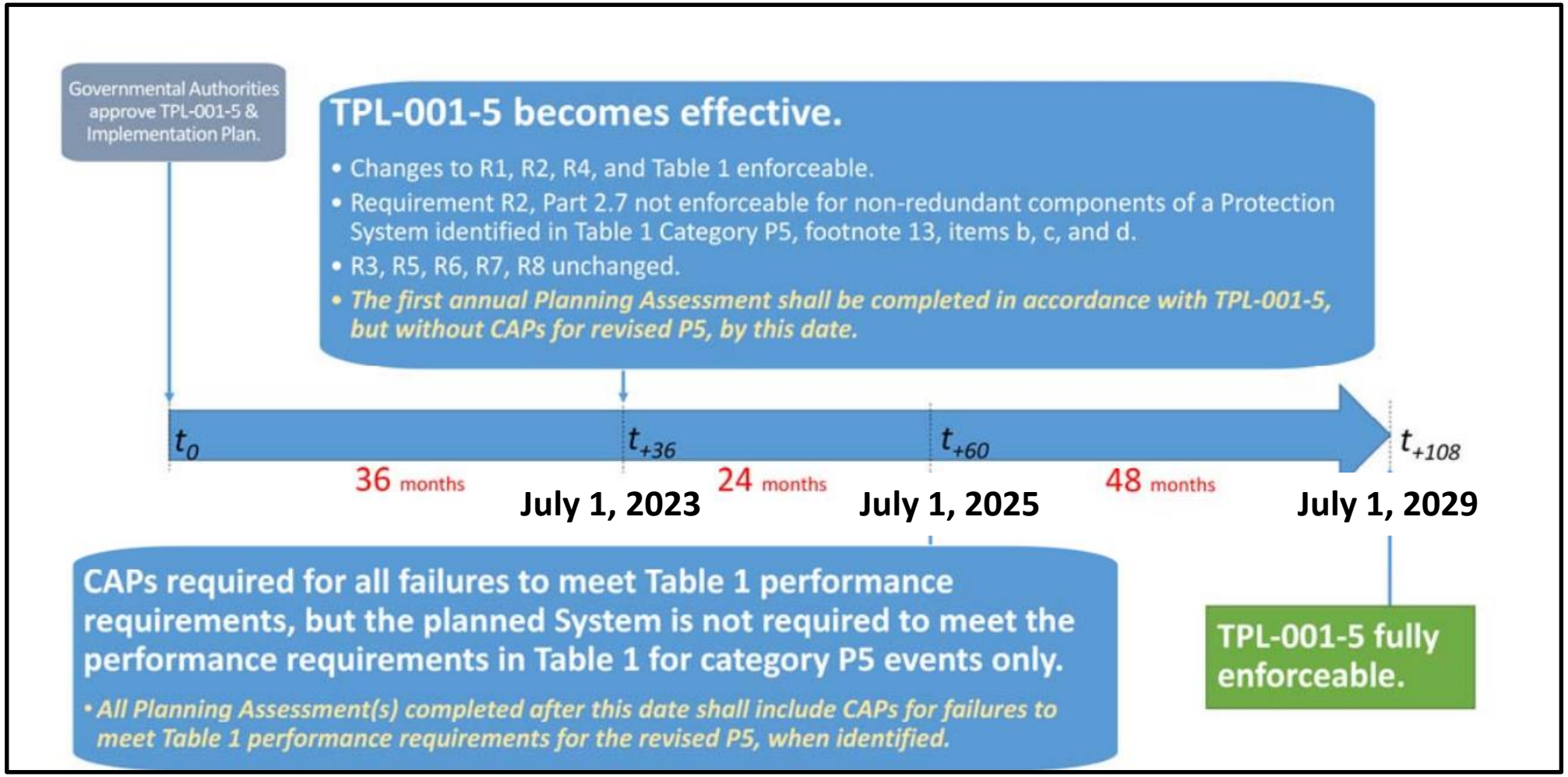
24 months after Effective Date (July 1, 2025)

- Applicable entities must have created Corrective Action Plan(s) (CAPs) for *all* failures identified, including any for the P5 Contingency, to meet Table 1 performance requirements

Additional 48 months (July 1, 2029—72 months after Effective Date)

- Applicable entities must have implemented the CAPs developed to address P5 planning event failures and must comply with meeting the performance requirements for Table 1

Implementation Plan Timeline



Best Practices & Internal Controls

Controls to track CAP development and implementation

Defined process for developing CAP alternatives

Process for identifying non-redundant relays for developing P5 Contingencies

- **Documented Transmission Planning process, including change management process**
- **Collaboration among Transmission Planning, Operations, Project Management, and regulatory groups**

Additional Resources

NERC TPL-001-5 Implementation Plan

NERC CMEP Practice Guide Considerations for TPL-001-4 & TPL-001-5.1 Table 1 Contingencies

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Ensuring electric reliability for Texans