



California ISO  
Shaping a Renewed Future

# Reliability Services Initiative

Replacement and substitution

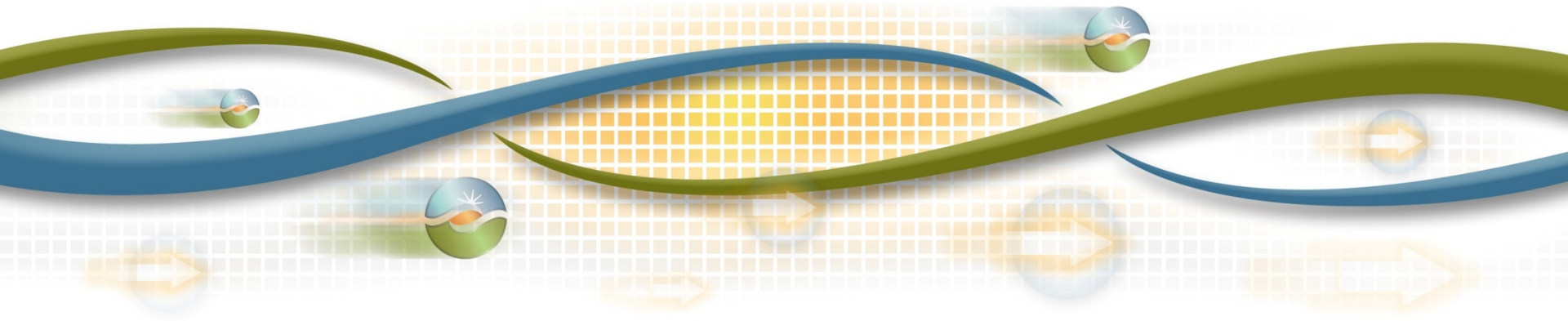
Working group meeting

September 16<sup>th</sup>, 2014

Carrie Bentley

[cbentley@caiso.com](mailto:cbentley@caiso.com)

916-608-7246



# Stakeholder Meeting Agenda- August 18<sup>th</sup>, 2014

Time	Topic	Presenter
10:00 – 10:05	Introduction and meeting agenda	Tom Cuccia
10:05 – 10:15	Scope and schedule	Carrie Bentley
10:15 – 12:00	Current replacement rule and associated issues	Perry Servedio and Gautham Katta
12:00 – 1:00	Lunch	
1:00 – 1:10	Replacement and substitution roadmap	Carrie Bentley
1:10 – 2:00	Replacement and substitution proposal targeted for 2016 RA year	
2:00 – 2:30	RA monthly process and outage policy proposal for 2017 RA year	
2:30 – 2:45	Break	
2:30 – 3:55	Proposes changes to RA monthly process and outage policy for 2017 RA year (cont.)	
3:55 – 4:00	Next steps	Tom Cuccia

# Reliability services initiative scope

- Minimum eligibility and must-offer rules
- FRAC MOO update
- Availability incentive mechanism
- **Replacement and substitution**

# Schedule

Item	Date
Paper: Revised Straw Proposal	Monday, August 11, 2014
Meeting: Revised Straw Proposal meeting	Monday, August 18, 2014
Meeting: R&S Working Group meeting	Tuesday, September 16th, 2014
Comments due: R&S Working Group	Informal only- email or call me
Paper: 2nd Revised Straw Proposal	Tuesday, October 07, 2014
Meeting: 2nd Revised Straw Proposal	Tuesday October 14, 2014
Comments due: 2nd Revised Straw Proposal	Tuesday, October 28, 2014
Final Draft Proposal	December
Target Board of Governors Meeting	February, 2014

# Replacement and substitution agenda

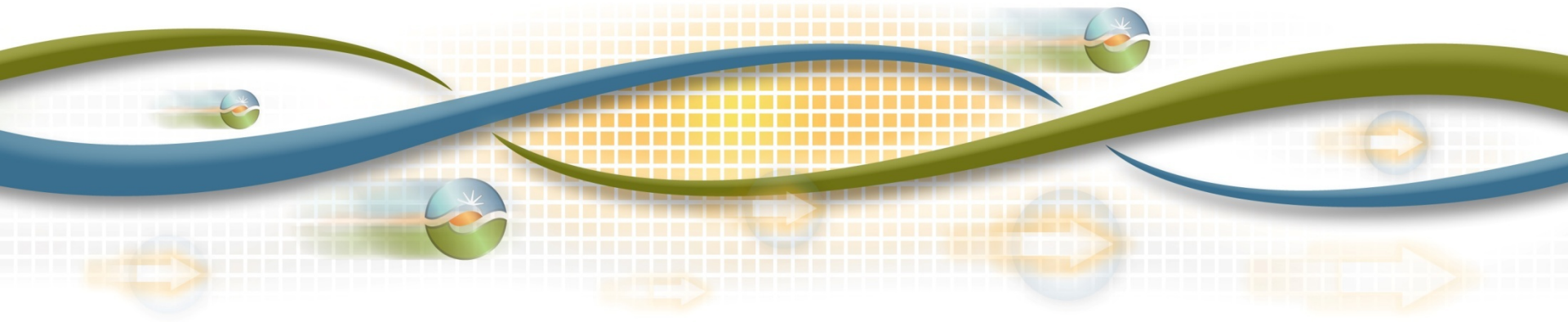
1. Current replacement and substitution rules
2. Replacement and substitution issues
3. Replacement rules targeted implementation prior to 2016 RA year
4. Substitution rules targeted implementation prior to 2016 RA year
5. Outage rules targeted implementation prior to 2017 RA year

# Replacements & Substitutions

An overview of a complex process

*Perry Servedio*

*Gautham Katta*



# Agenda

## Replacements & Substitutions

### Sections:

1. Background
2. Overview of existing process
3. Issues

# Background

## Monthly Procurement & Demonstration of RA



# Monthly Procurement & Demonstration of RA

1. Local Regulatory Authority (LRA) mandates procurement of **115%** of next **month's** Peak Load Forecast.

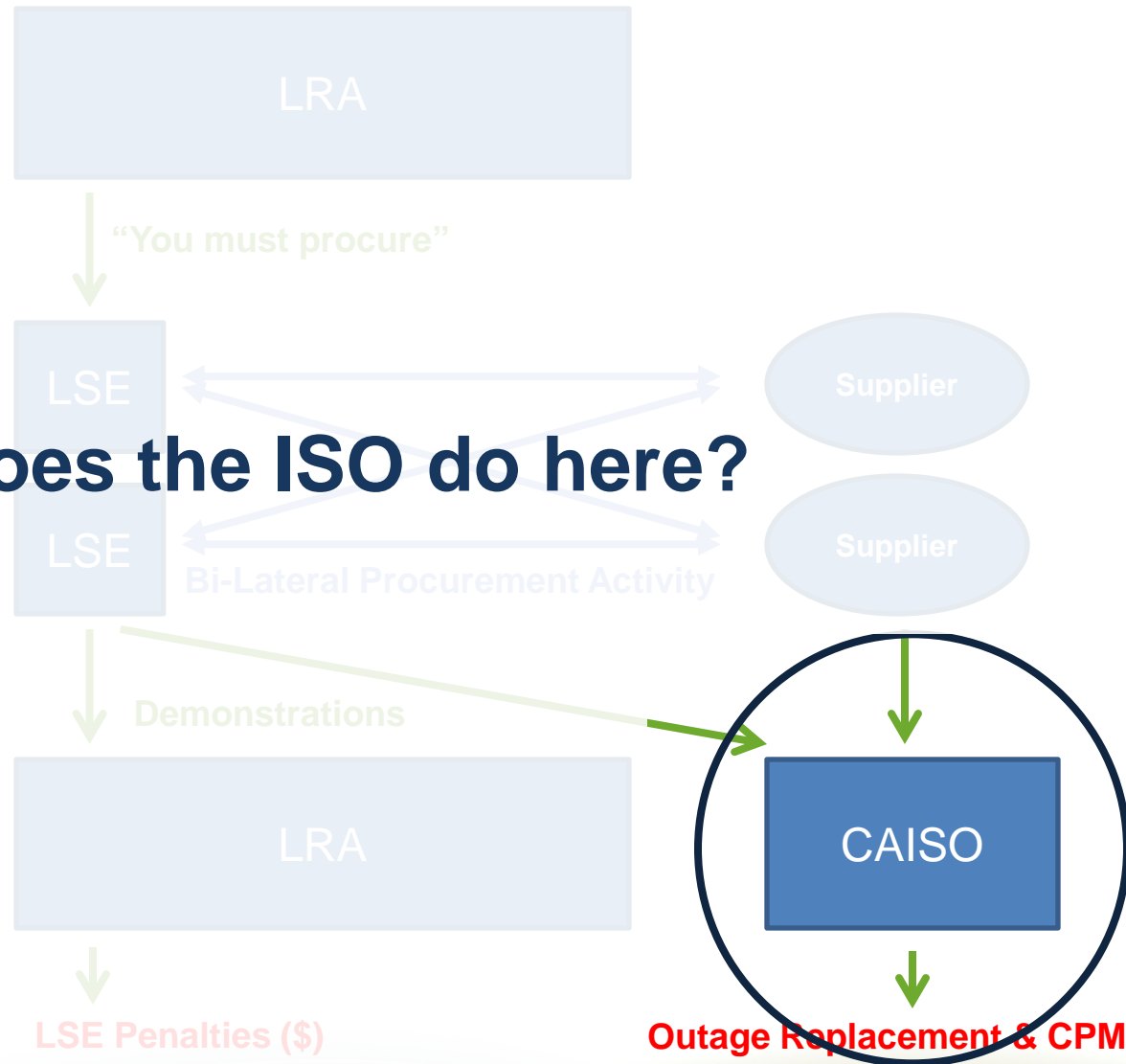
2. Load Serving Entities (LSEs) engage in bi-lateral procurement of capacity to meet this requirement.

3. LSEs demonstrate procurement to LRA and ISO

4. Suppliers demonstrate RA sales to ISO.

5. LRA ensures LSE compliance.

6. ISO ensures Suppliers corroborate LSE showings and met needs.



# Monthly Procurement & Demonstration of RA

## LSEs must meet three individual requirements



### ISO Tariff Section 40.7(a)

1. Procure 115% of Peak Load Forecast
2. Procure 100% of Local Need



**Traditional RA  
Requirements**

### ISO Tariff Section 40.7(b)

3. Replacement Requirement for  
Scheduled Generation Outages



**Replacement  
Requirement**

# Overview of existing process

## 2. Overview of existing process

### This Section

#### 1) Load Serving Entity perspective

- a) Traditional RA Requirements
- b) Replacement Requirement
  - i. Base RA Fleet
  - ii. Outage Data
  - iii. LSE-Specific curtailment values
  - iv. Evaluate Specified Replacements
  - v. Replacement Requirement Determination
    - i. Determine total system operationally available capacity
    - ii. Determine LSE operationally available capacity
    - iii. Replacement Decision Logic
- c) LSE Timeline

#### 2) Supplier perspective

- a) Firm vs. Non-Firm
- b) Supplier Responsibilities
- c) Providing Replacement Capacity
- d) Supplier Timeline

#### 3) Overlap of Responsibilities and Timelines

#### 4) Committed Capacity

# Load Serving Entity Perspective

# Load Serving Entity Perspective

**Each LSE submits an RA Plan which includes:**

- 1. Designated RA Capacity (“D” capacity)**
  - i. Used to meet Traditional RA Requirements
  - ii. Used to meet Replacement Requirements
  
- 2. Specified RA Replacement Capacity (“S” capacity)**
  - i. Used to mitigate impact of planned outages
  - ii. Used to meet Replacement Requirements
  
- 3. Non-Specified RA Replacement Capacity (“N” capacity)**
  - i. Used to mitigate impact of planned outages
  - ii. Used to meet Replacement Requirements

# Traditional RA Requirements

## 1. LOCAL

**Tariff Section 40.7.a.i Compliance Evaluation:** Each LSE must satisfy its allocated MW responsibility for each designated TAC area in which it serves load by identifying all resources the LSE has procured to serve this load. This is an annual value that must be procured for each month of the year.

***OUTAGES ARE NOT EVALUATED HERE***

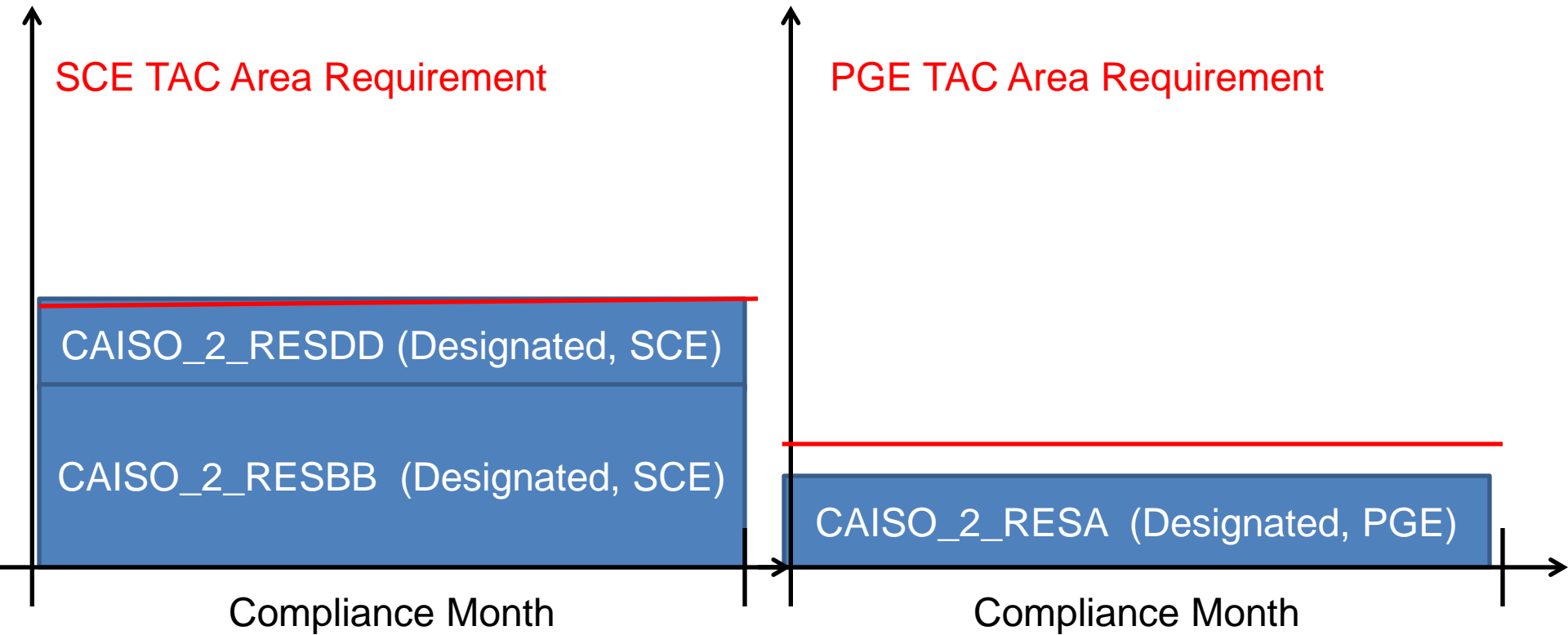
## 2. SYSTEM

**Tariff Section 40.7.a.ii Compliance Evaluation:** Each LSE must satisfy its peak Demand and Reserve Margin requirements by identifying all resources the LSE has procured to serve load.

***OUTAGES ARE NOT EVALUATED HERE***

# Traditional RA Requirements

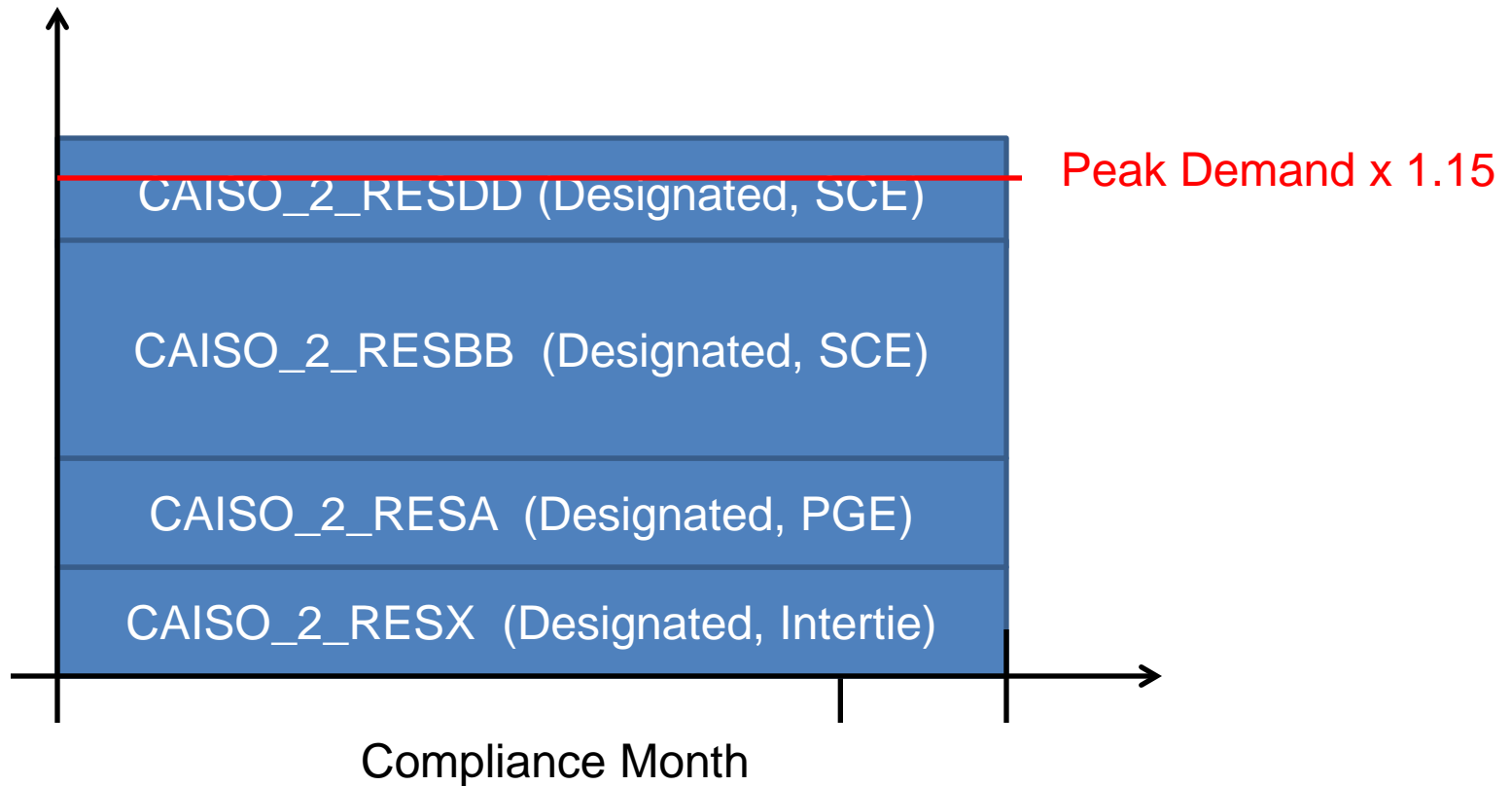
## *Local Requirements*





# Traditional RA Requirements

## *Peak Demand & Reserve Margin Requirement*



# Replacement Requirement

## 3. SYSTEM - REPLACEMENT REQUIREMENT

**Tariff Section 40.7.b Compliance Evaluation:** Each LSE must demonstrate operationally available RA Capacity, excluding capacity scheduled to take an Approved Maintenance Outage during the RA month, that is equal to or greater than the LSEs applicable forecasted monthly Demand and Reserve Margin.

***REPLACEMENT REQUIREMENT EVALUATES  
PLANNED OUTAGES ONLY***

# Replacement Requirement

## *Base RA Fleet*

- Which resources are RA resources?
- How much RA Capacity do we have?



# Replacement Requirement

## *Outage Data*

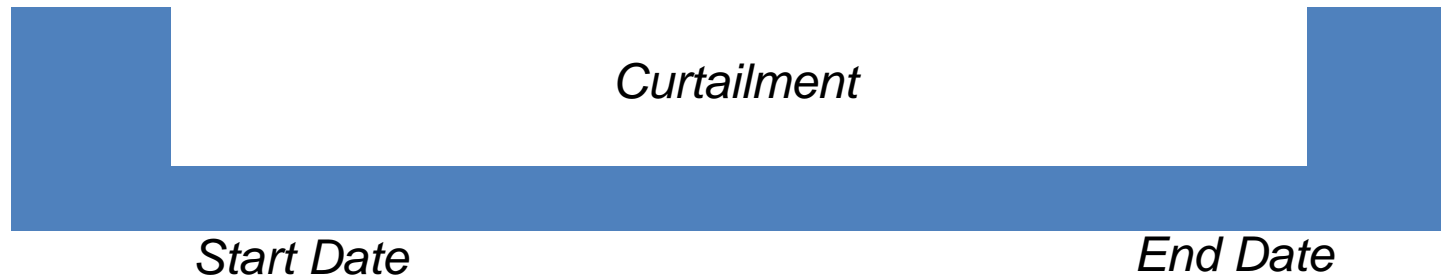
**What do we need to think about when it comes to outage data as it relates to LSE Replacement Requirement?**

- Which resources to evaluate
- Data at an outage-level granularity
- Determining how much an individual outage curtails a resource (accounting for overlapping outages)
- Curtailment values per day
- Outage priority for Replacement Requirement purposes
- LSEs responsible for pieces of curtailments

# Replacement Requirement

## *Outage Data*

**What people may think an outage looks like:**



**What an outage actually looks like:**



- *Multiple availabilities during multiple overlapping outages, each given to the ISO at different times.*
- *These availabilities represent the total resource availability across all outages on resource.*

# Replacement Requirement

## *Outage Data – Outage-level granularity*

- Replacement Requirement not just about the resource on outage, but the outage itself; we assign replacement requirements due to impact of outages.
- Suppliers have multiple overlapping outages on resources.
- Each outage has a different priority; priority is important, because we're stacking in Last-In First-Out (LIFO) order.

# Replacement Requirement

## *Outage Data – Outage-level granularity*

**What do we mean by getting outage data per resource, per outage?**

- Notice in the data below that there are overlapping outages on RESA.
- We generate this data based strictly on availability points and the way they change over time.

OutageID	RESOURCE_ID	Day	Type	Record Date	Curtailment (MW)
0001	RESA	5	PLANNED	T-100	100
0002	RESA	5	PLANNED	T-90	50
0003	RESA	5	FORCED	T-80	100
0004	RESA	5	PLANNED	T-50	25
0005	RESB	5	PLANNED	T-50	100
0006	RESC	5	FORCED	T-60	150

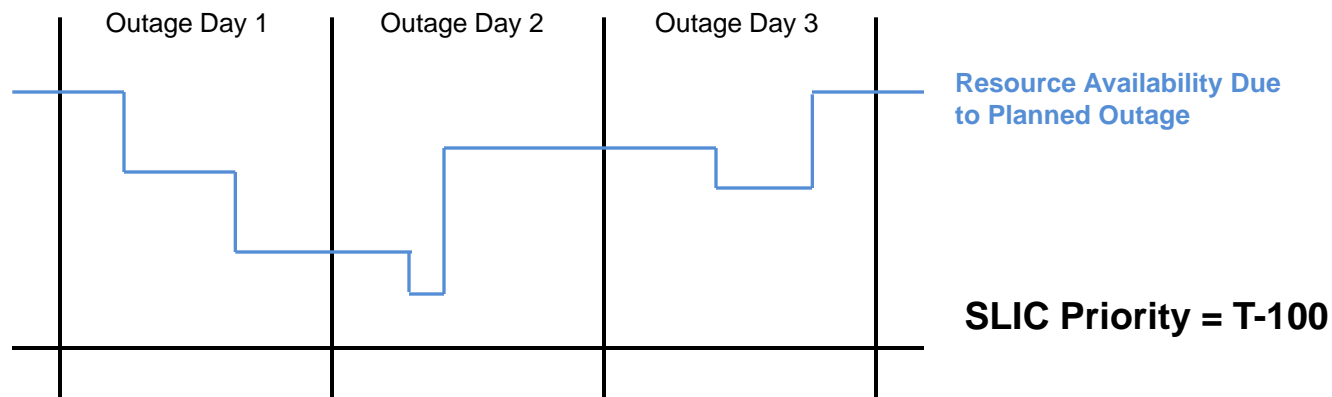
# Replacement Requirement

*Outage Data – Outage-level granularity*

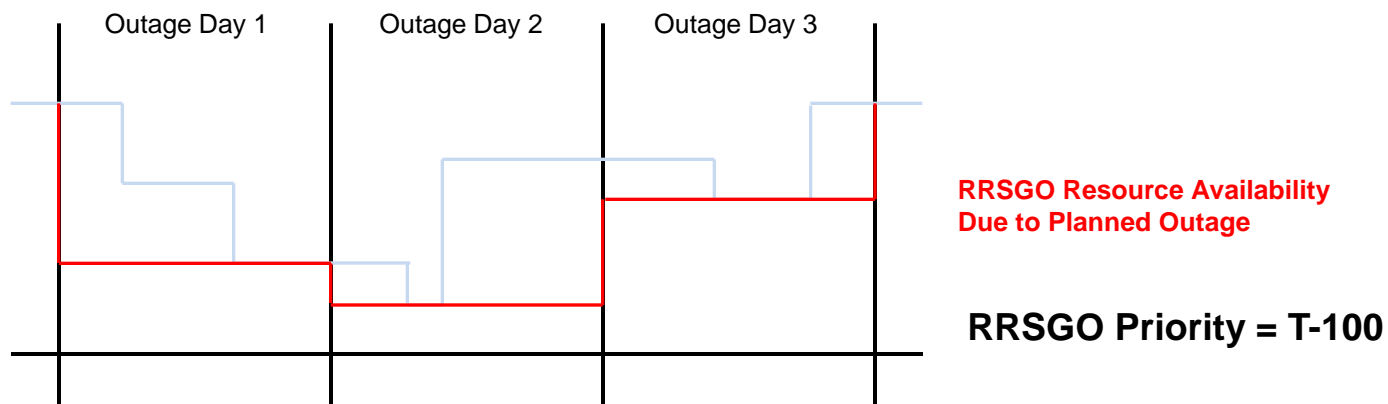
## **Replacement Rule Outage Priority Date Determination**



## Planned Outage Data in SLIC

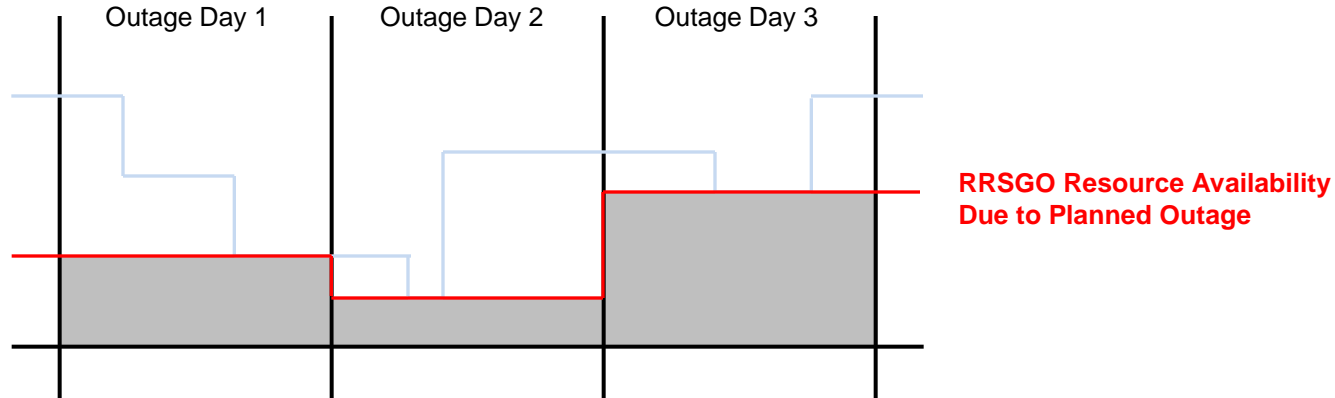


## Planned Outage Data for RRSO

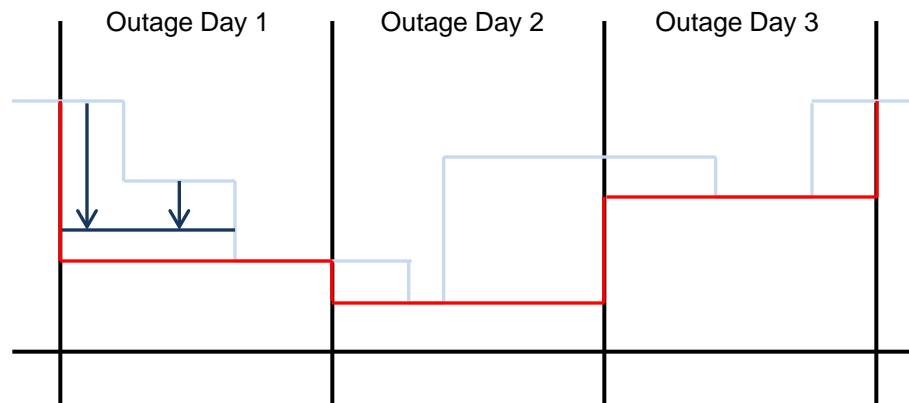


# When does the RRS GO Priority Date change?

Any change to the outage that lands an availability point below the red line (**within the gray region**) will result in a new RRS GO Priority Date for the **entire outage**.



## Example 1

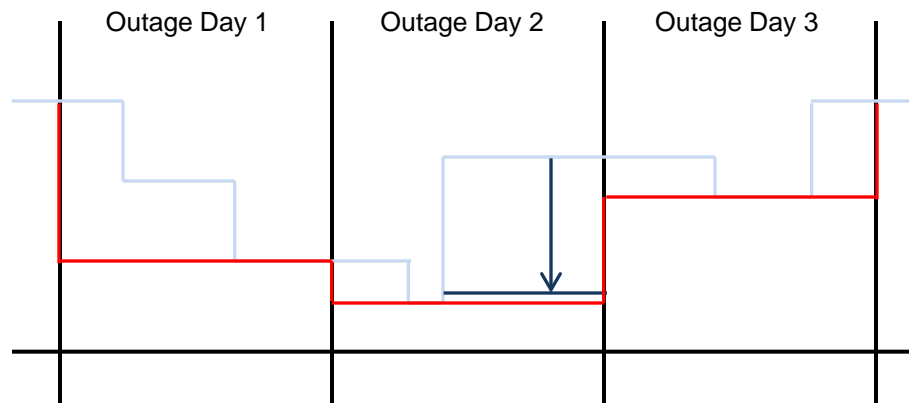


At T-90, Availability on Day 1 drops, but not below the minimum availability that day. **RRSGO Priority for entire outage remains at T-100.**

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-100**

## Example 2

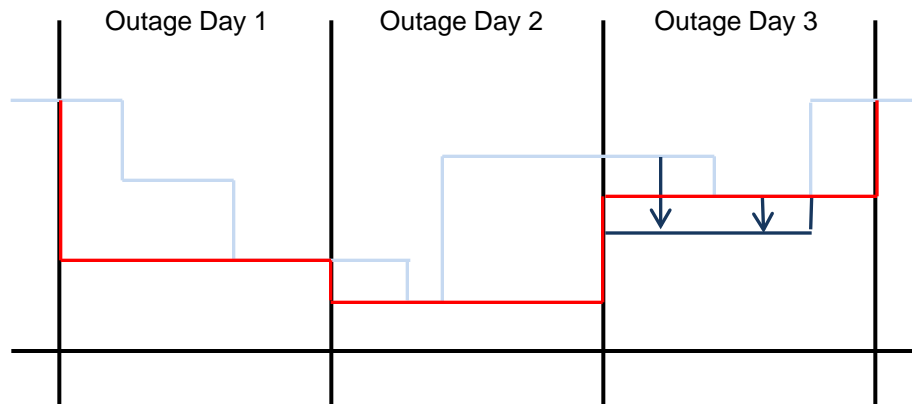


At T-90, Availability on Day 2 drops below minimum availability on day 1, but not below the minimum availability that day (Day 2). **RRSGO Priority for entire outage remains at T-100.**

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-100**

## Example 3

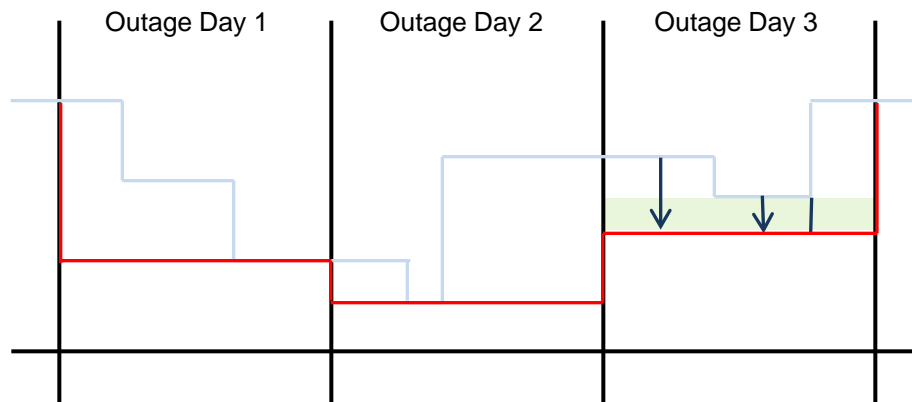


At T-90, Availability on Day 3 drops below minimum availability on day 3, but not below the minimum availability on all other days of the outage.

**RRSGO Priority for entire outage changes to T-90.**

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-90**



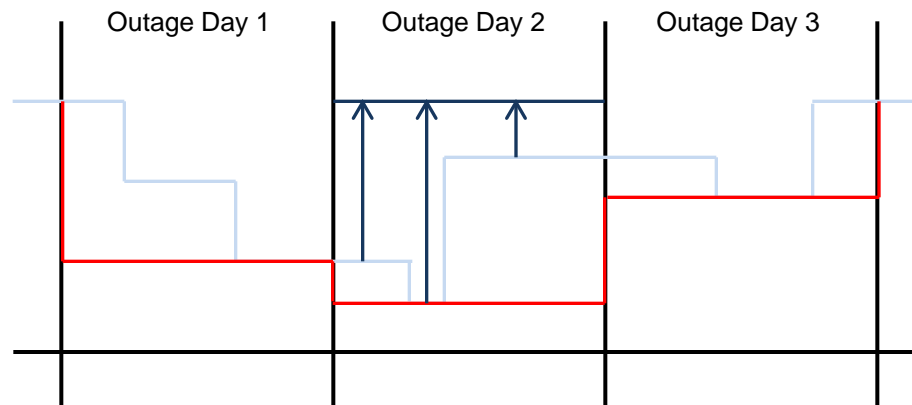
Example 3 RRSO Resource Availability now looks like this.

This will be the baseline used when assigning a new Priority Date for any additional outage alterations from this point forward.

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-90**

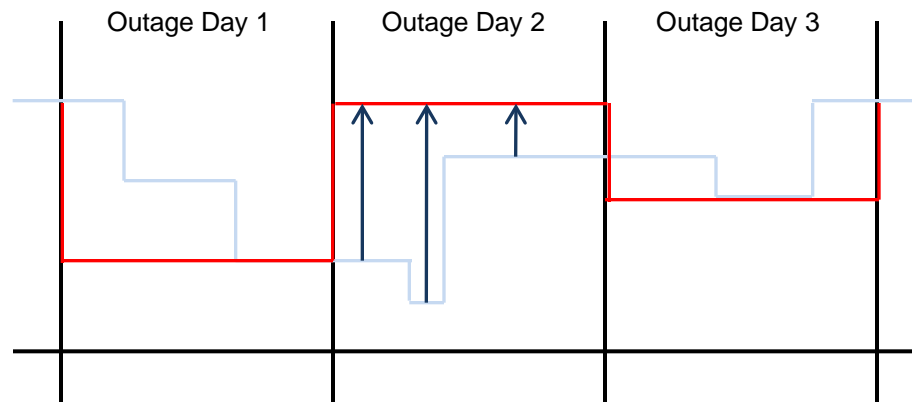
## Example 4



At T-90, Availability on Day 2 rises to full availability. **RRSGO Priority for entire outage remains at T-100.**

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-100**



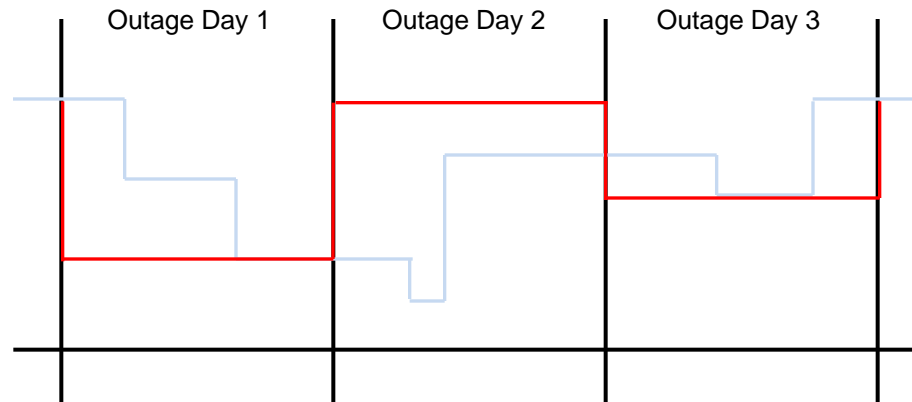
Example 4 RRSO Resource Availability now looks like this.

This will be the baseline used when assigning a new RRSO Priority Date for any additional outage alterations from this point forward.

**Initial RRSO Priority = T-100**

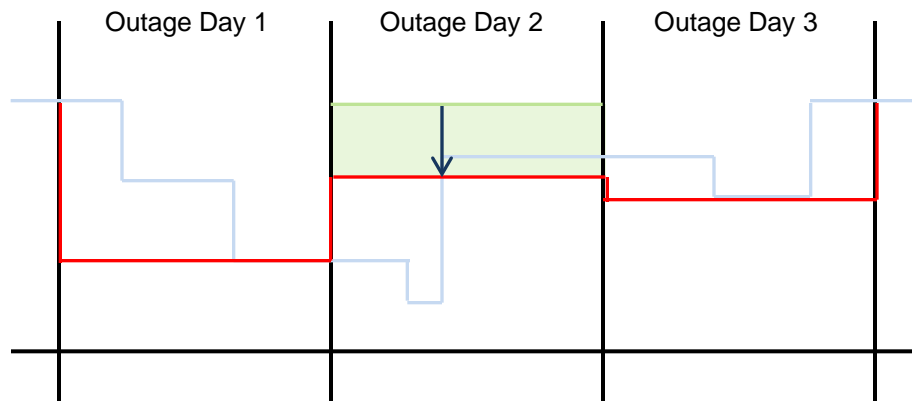
**New RRSO Priority = T-100**

## Example 5 (continuation of Example 4)



In Example 4, at T-90, the RRSO Resource Availability was changed to the figure shown on left and the priority date remained at T-100.

**RRSGO Priority = T-100**



If at T-60, the RRSO Resource Availability is then changed to lower the availability on Day 2 to a value lower than was set in the T-60 change (above), **RRSGO Priority for entire outage changes to T-60.**

**Initial RRSO Priority = T-100**

**New RRSO Priority = T-60**

# Replacement Requirement

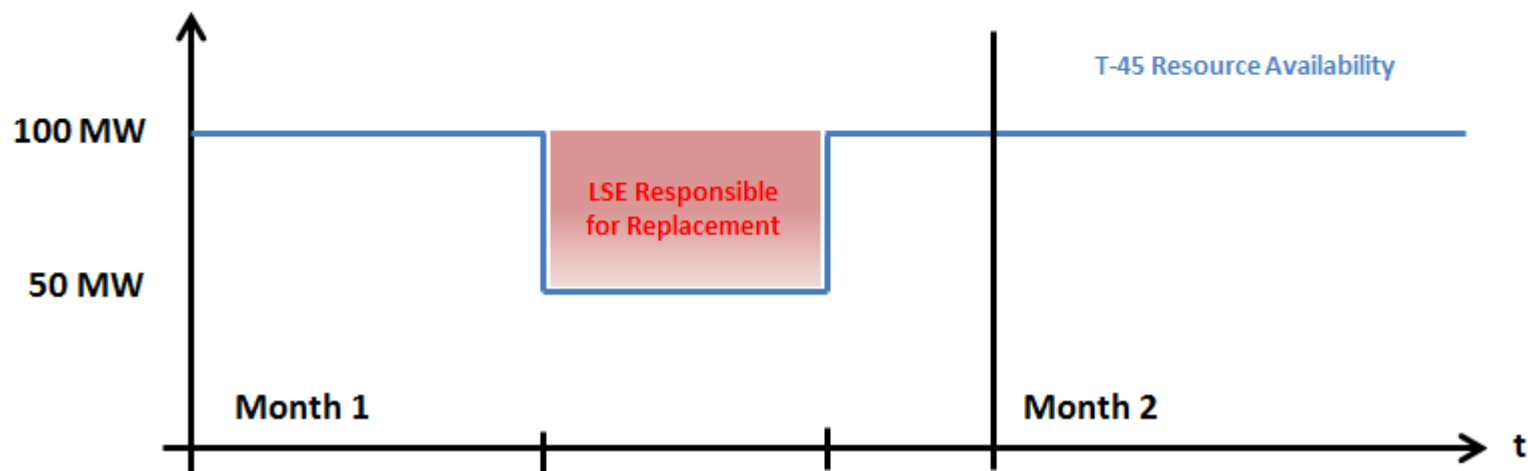
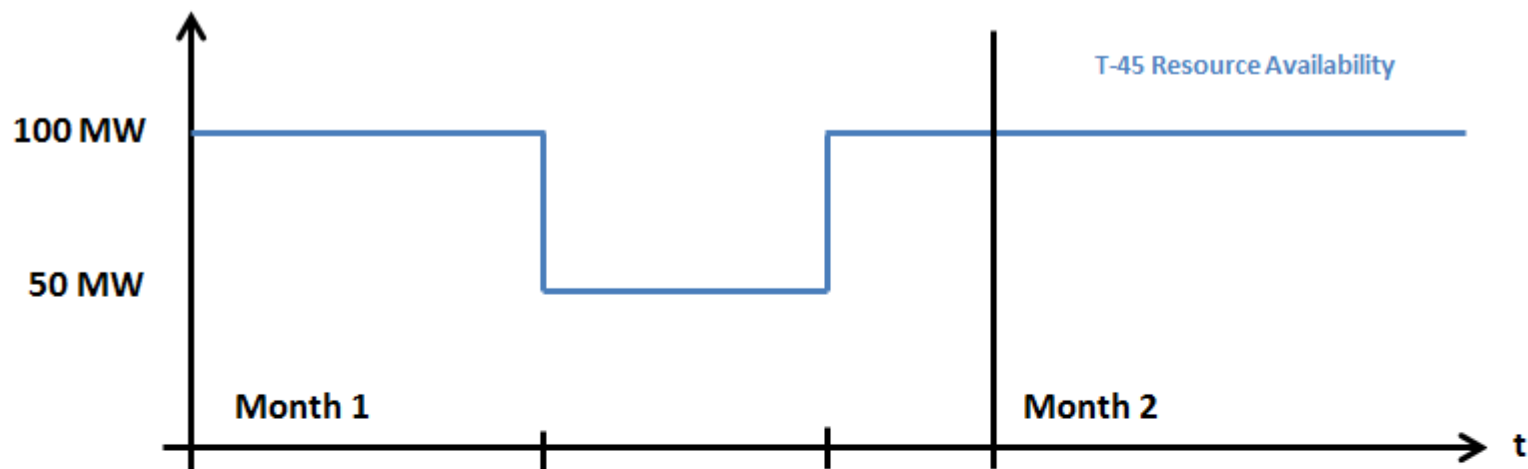
*Outage Data – Outage-level granularity*

## LSE responsibility per outage

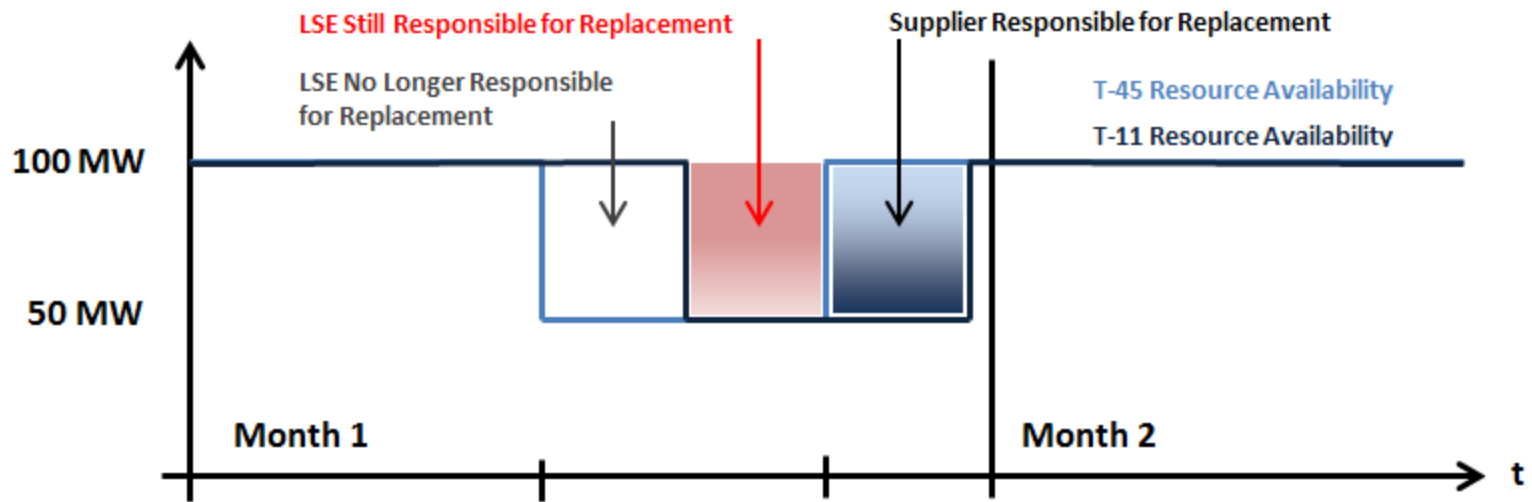
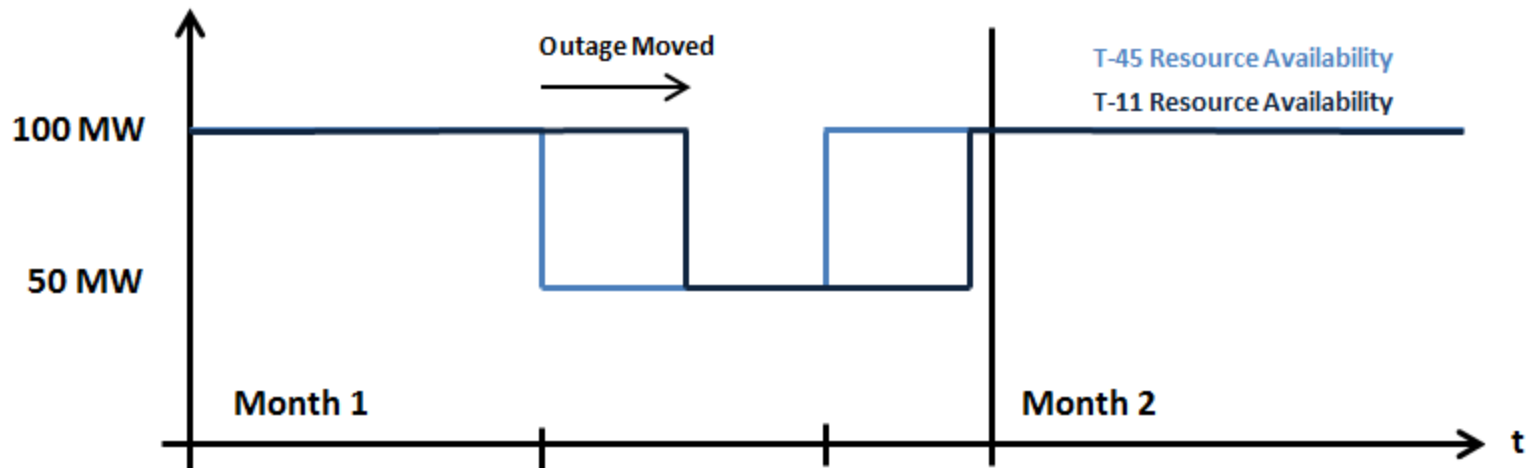
- Graph Resource Availability due to **Planned Outages**.
- Evaluate outages in the Compliance Month based on a “snapshot” taken at T-45.
- In these examples, the “snapshot” changes sometime between T-45 and T-11 when the outage is moved/canceled or the MW is increase/decreased.



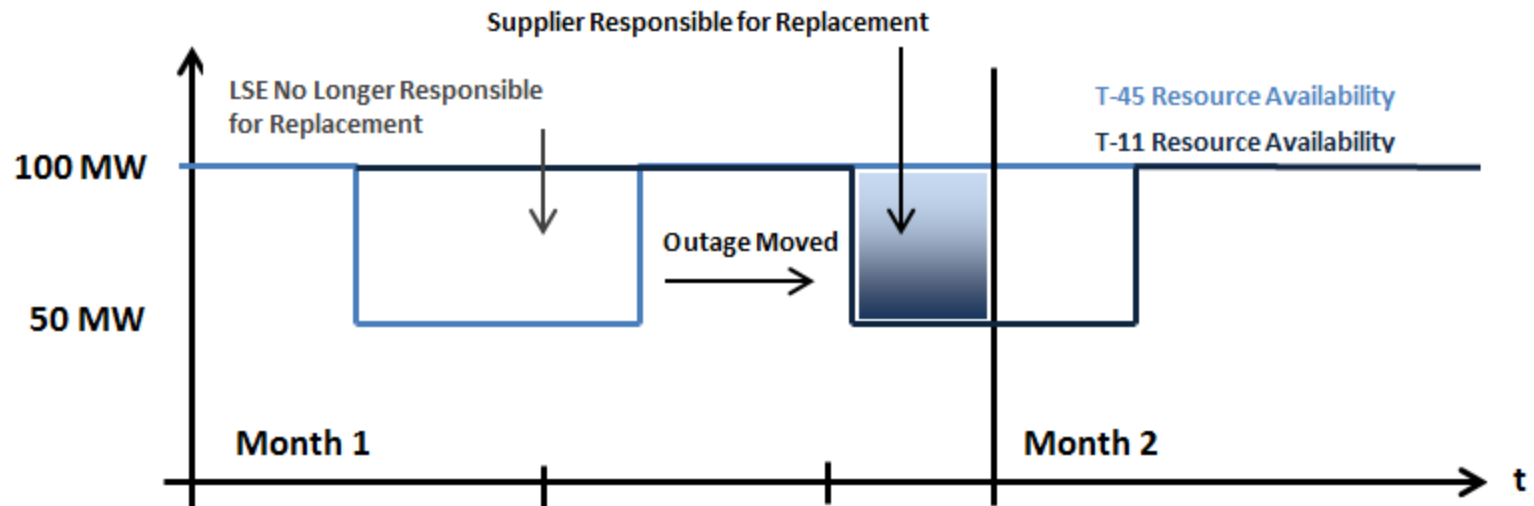
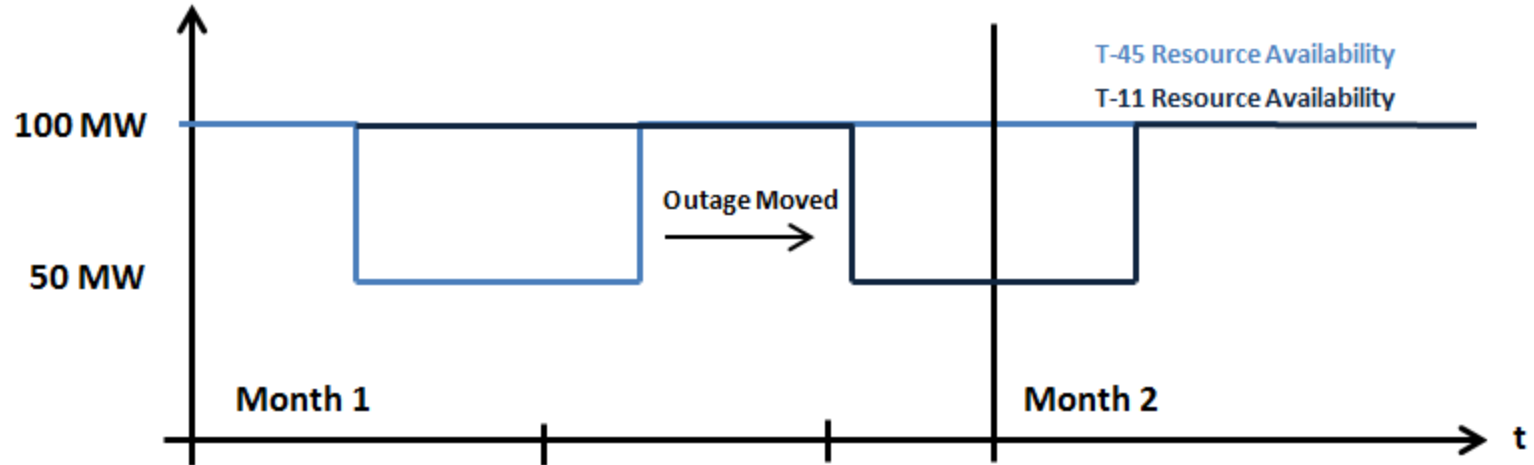
# Example



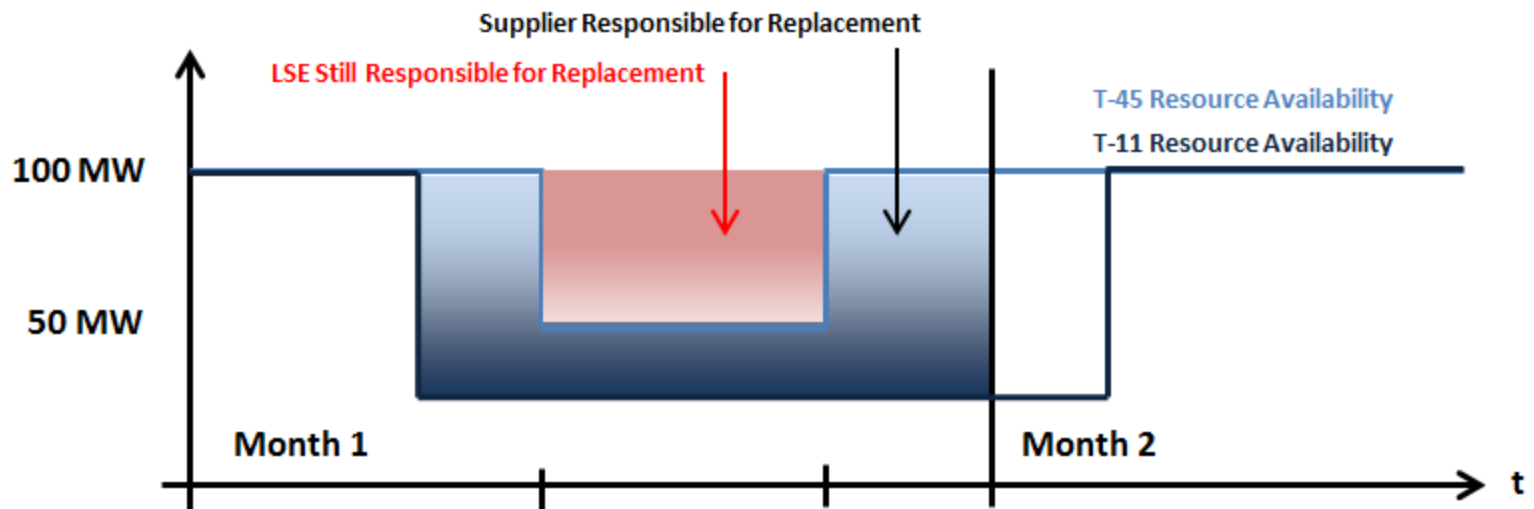
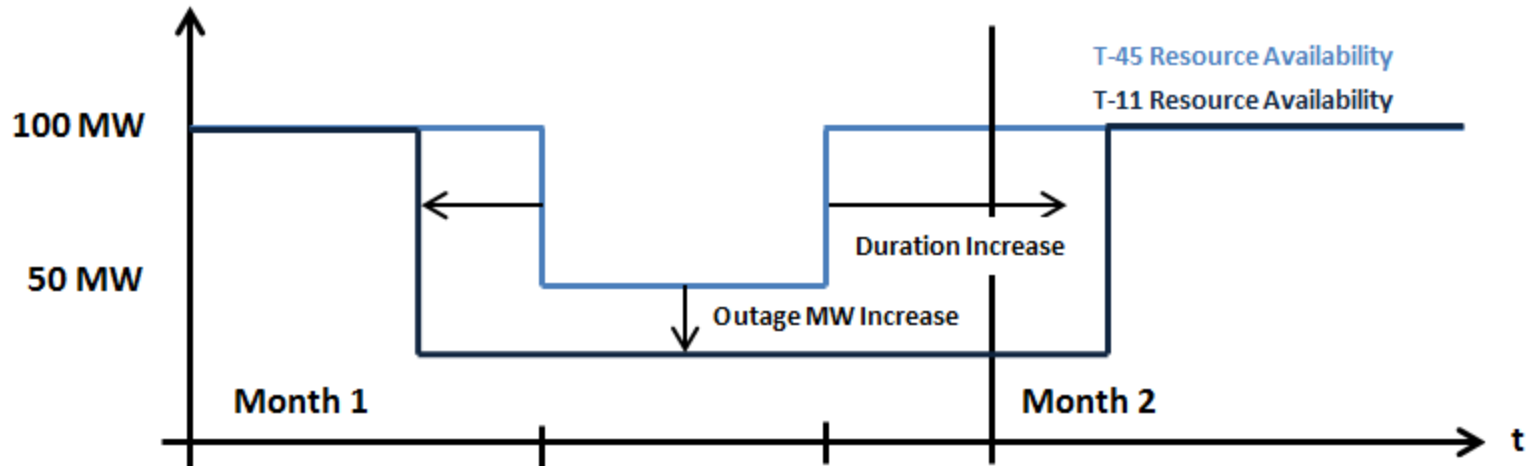
# Example



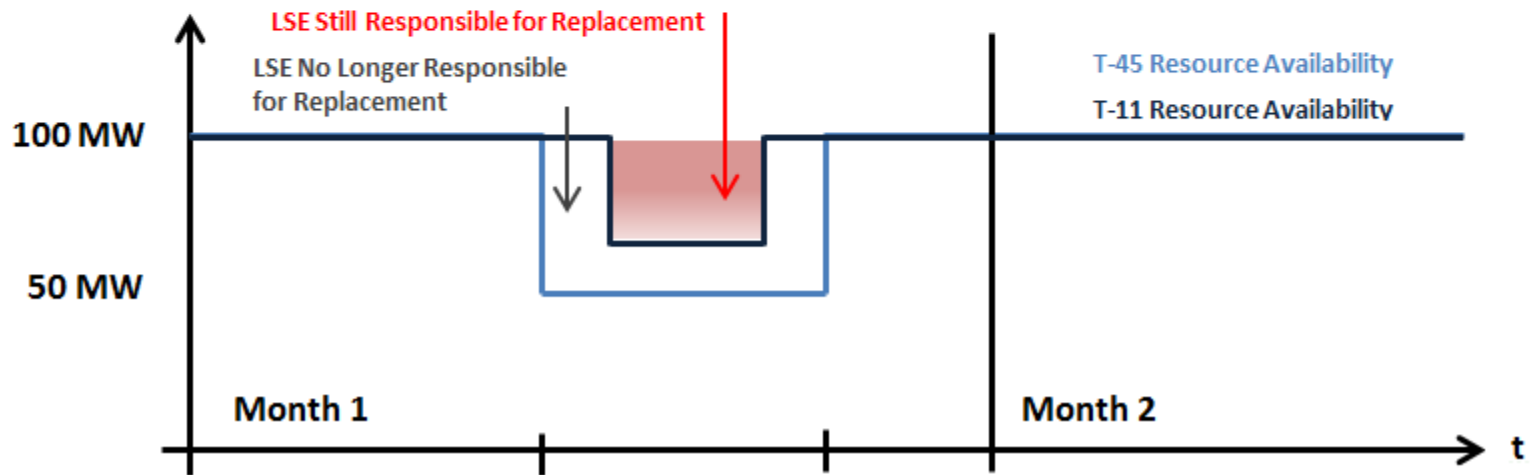
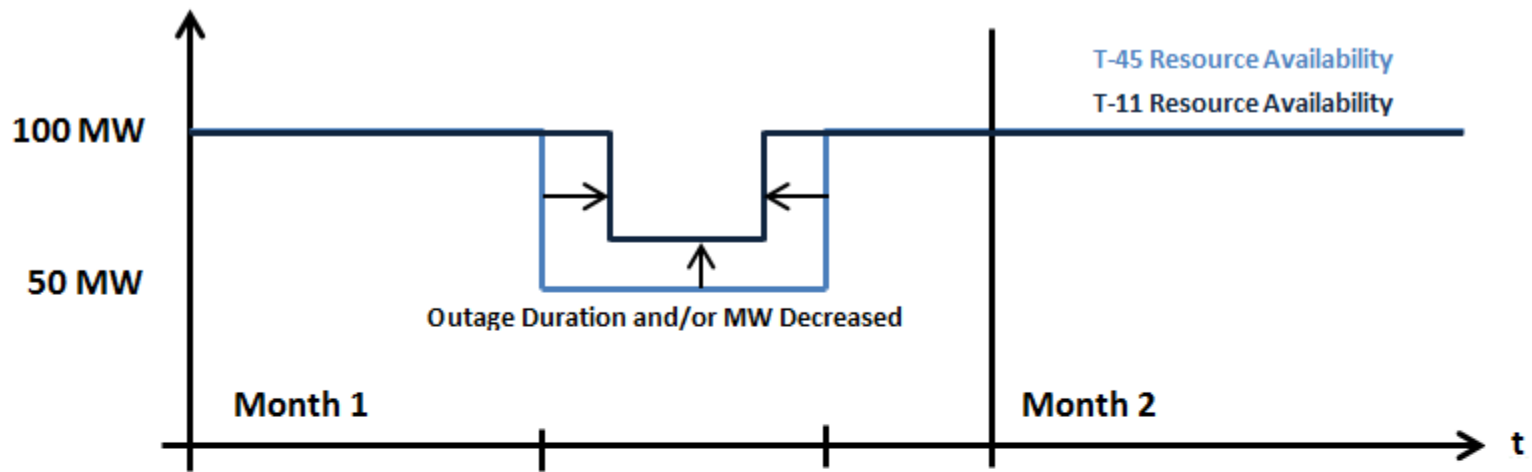
# Example



# Example



# Example



# Replacement Requirement

## *Outage Data – Outage-level granularity*

### **In summary, we now have:**

- Planned Outage Curtailment per resource, per outage, per day.
- Planned Outage Priority date per outage.
- The portion of outages that LSEs may be responsible for.

# Replacement Requirement

## *LSE-Specific Curtailment Values*

**Outages are on resources, and resources are shared by LSEs, so how do we determine each LSE's specific portion of the outage?**

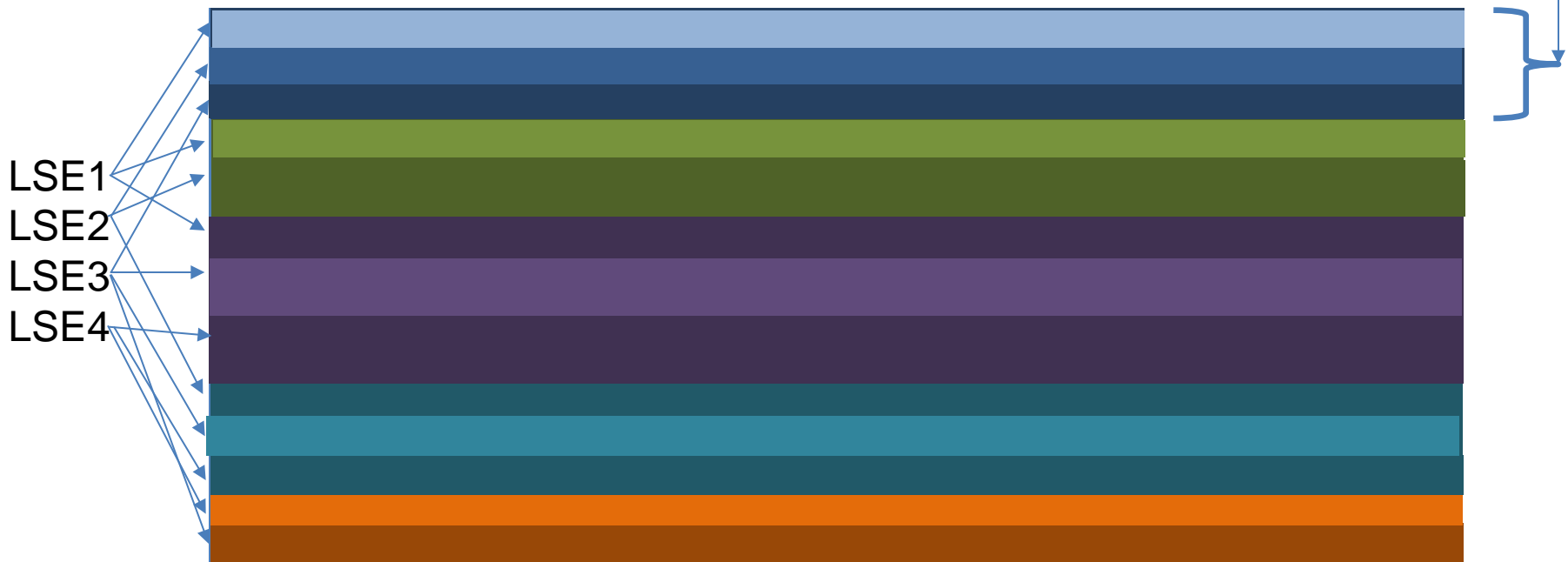
# Replacement Requirement

## *LSE-Specific Curtailment Values*

Where do these MW values come from?

LSE1, 2, & 3 have equal parts of the outage on RESE.

If resource goes out, what should each LSE owe?



*Just think about it: What happens if an LSE adds a resource to their plan sometime after T-25?*



# Replacement Requirement

## *LSE-Specific Curtailment Values*

- ISO determines ratios per day for each day of the trade month.
- Applies those ratios on those days to the outage curtailment per Outage ID to find the MW amount an individual LSE may be responsible for.

# Replacement Requirement

## *Evaluate Specified Replacements*

### **Now we can process Specified Replacements:**

LSEs give Specified Replacements at T-45, we can only use it if the MW amount matches that LSE's portion of the outage curtailment on that day.

### **Example:**

- LSE1 gives us an “S” Replacement from 1/1 to 1/5 for 10 MW.
- ISO sees the outage from 1/4 to 1/6 for a curtailment of 9 MW attributable to this LSE.

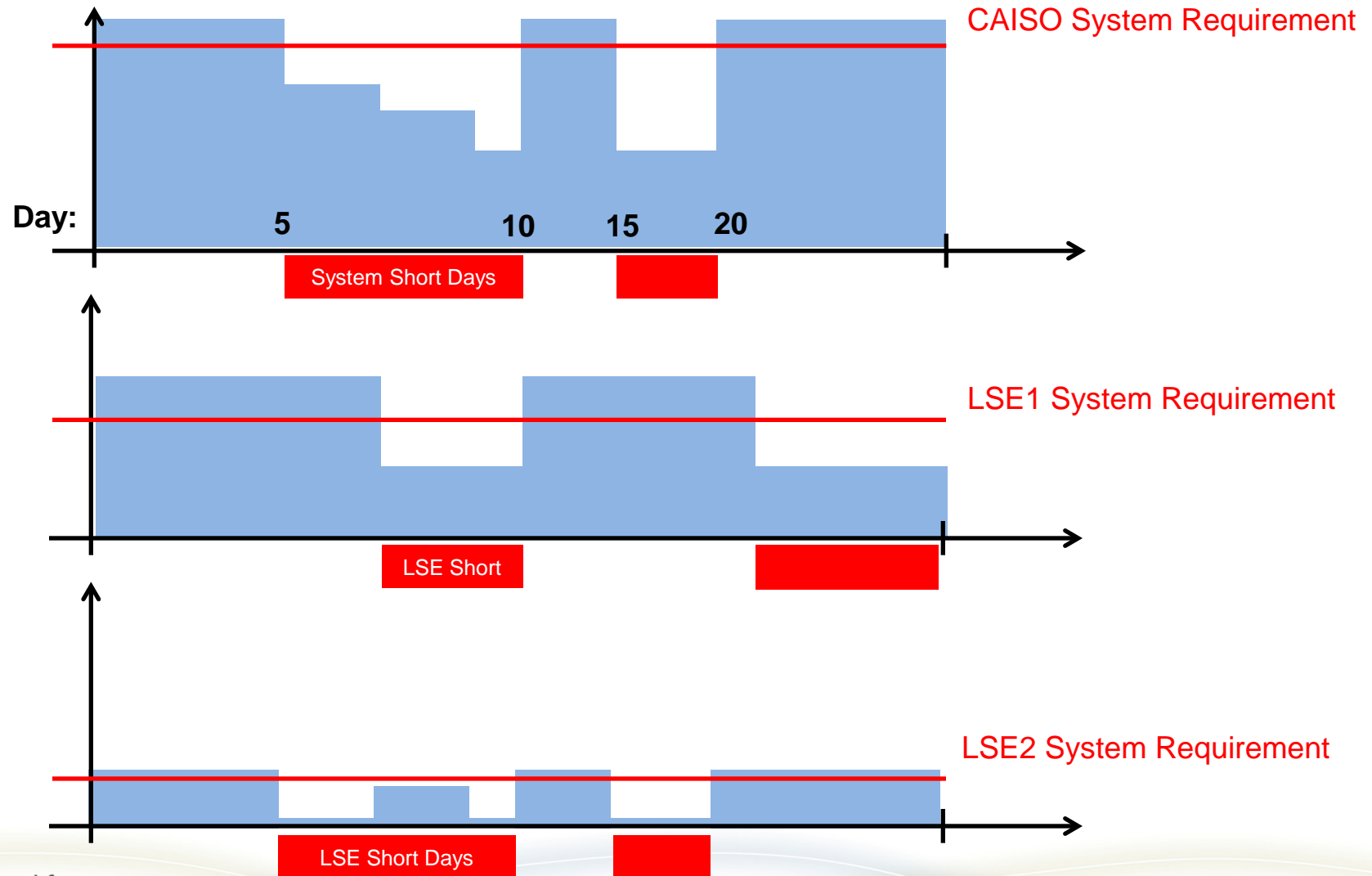
# Replacement Requirement

## *Replacement Requirement Determination*

- This is where the ISO finally applies the impact of Planned Outages known at T-45 to the LSE RA Plans.
- On each day, if the CAISO total system is short due to Planned Outages and the LSE is short due to planned outages, a Replacement Requirement is determined.
- ISO assigns LSE's a Replacement Requirement.
- Replacements due with supplier approval by T-11.

# Replacement Requirement

## *Replacement Requirement Determination*



# Replacement Requirement

## *Replacement Requirement Determination*

### Summary from previous charts

- System is short from Day 5 to Day 10
- System is short from Day 15 to day 20
- LSE1 is short From Day 7 to Day 10
- LSE1 is short from Day 21 to Day 30
- LSE2 is short from Day 5 to Day 10
- LSE2 is short from Day 15 to Day 20

**Which LSE's may be assigned a Replacement Requirement and on which days?**

# Replacement Requirement

## *Replacement Requirement Determination*

### System Short, LSEs Short

- So far, this determination is still “potential.”
- We can only assign Replacement Requirement due to specific outages on a last-in first-out (LIFO) order.
- We now need to evaluate outages.

# Replacement Requirement

## *Replacement Requirement Determination*

### **The Logic**

- ISO goes down through this list of impact MW and assigns Replacement Requirements until it meets its total System Requirement.
- ISO does not assign the Replacement Requirement if the LSE already meets its individual LSE requirement.
- If LSE provided Non-Specified Replacement capacity, ISO uses it here instead of assigning a Replacement Requirement.

# Replacement Requirement

## *Replacement Requirement Determination*

Day	Priority	OTG ID	RES ID	LSE	Impact MW
5	01/01/2013	OTG02	RES_A	LSE1	10
5	12/15/2012	OTG04	RES_B	LSE2	25
5	12/01/2012	OTG03	RES_C	LSE1	100
5	06/01/2012	OTG01	RES_D	LSE3	50
5	06/01/2012	OTG01	RES_D	LSE1	50

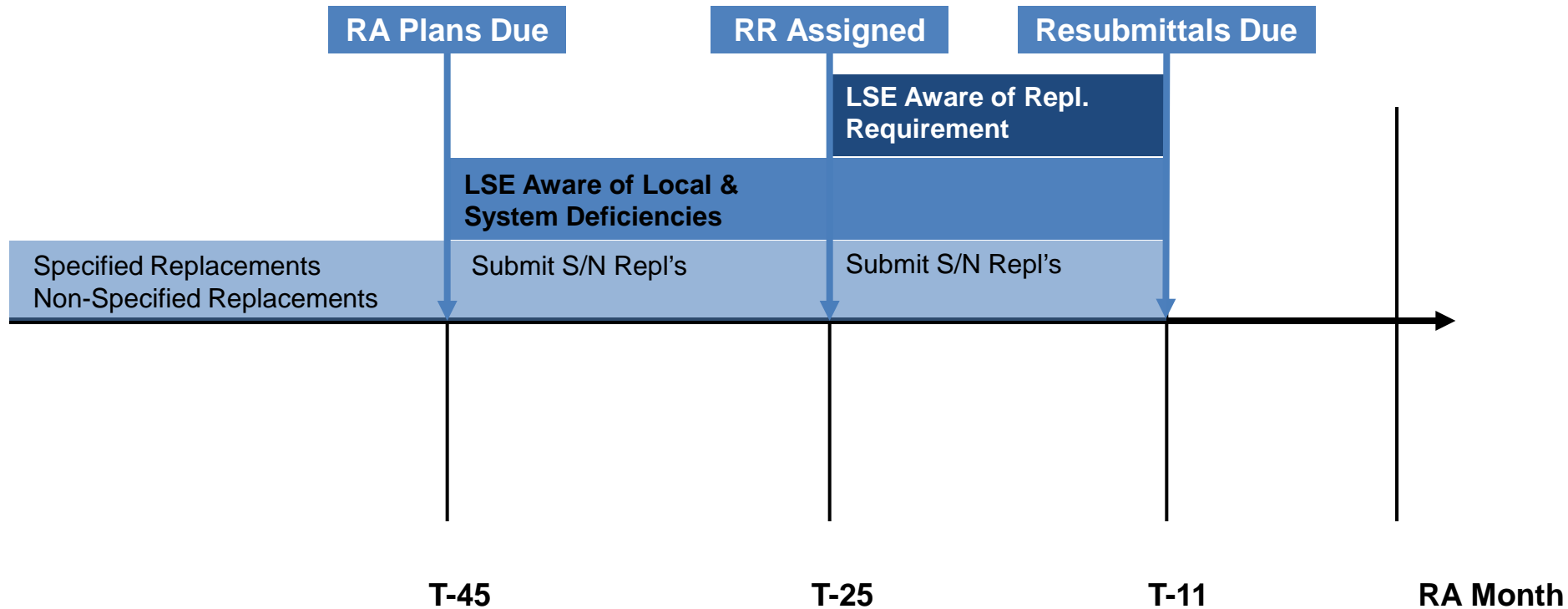


# Replacement Requirement

## *Replacement Requirement Determination*

**Now, the LSE has until T-11 to provide RA Replacement Capacity.**

# LSE Responsibilities & Timeline



# Supplier Perspective

# Supplier Perspective

## *Firm vs. Non-Firm*

- How do you structure your contracts?
- Does “Firm” mean your buyer is not responsible for planned outage replacement as well as forced outage substitution?
- If firm, are you regularly providing RA Replacement Capacity to an LSE to provide to the ISO?

# Supplier Perspective

## *Supplier Responsibilities*

### 1. Schedule Outages

Along with coordinating outage logistics, get the outage scheduled and approved with the ISO.

### 2. Submit Supply Plan

Each Supplier must submit a Supply Plan to the ISO demonstrating resources sold as RA.

### 3. Approve/Reject Replacements

Suppliers must Approve/Reject Replacement Capacity provided by LSEs.

### 4. Replacement Requirement

A supplier may have to provide replacement capacity for any planned outage not approved prior to T-45. This depends on the total operationally available RA capacity known at the time of review.

# Supplier Perspective

## *Providing Replacement Capacity*

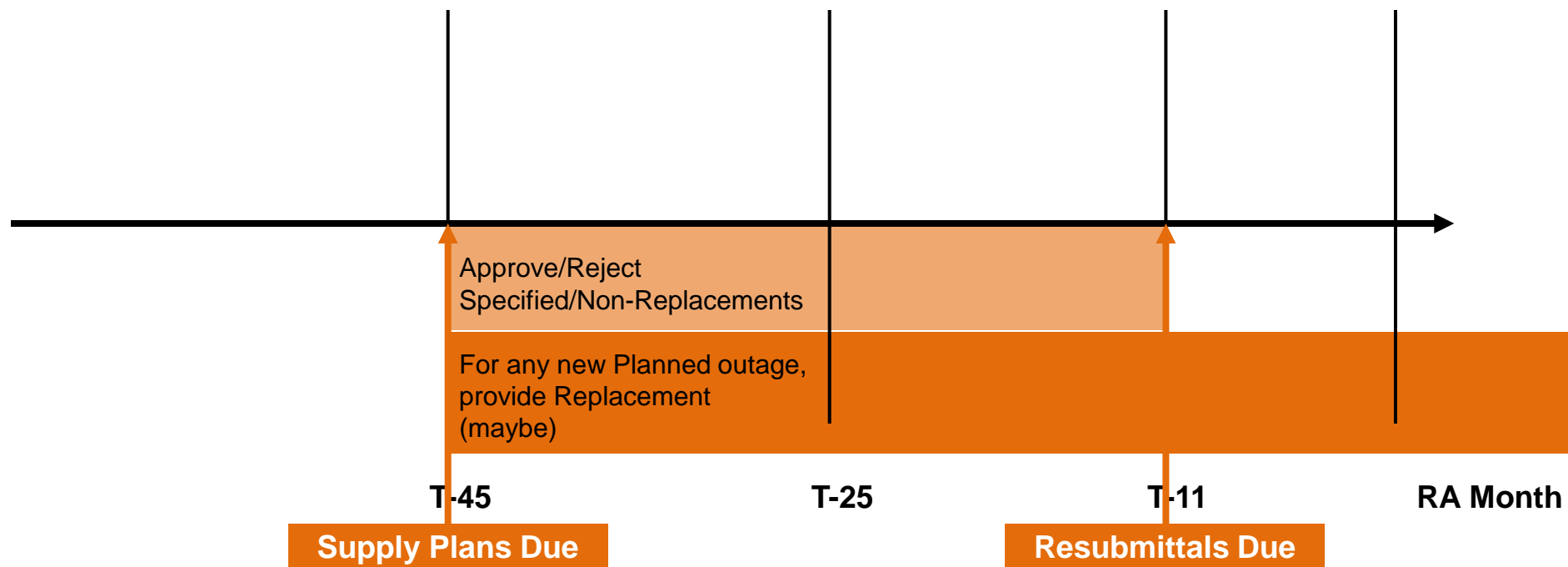
Is the ISO system short of operationally available capacity on any days during the outage?

- It depends on all MW shown in aggregate
- It depends when you ask us
  - Are we still waiting for replacement capacity from other market participants that may never come?
  - Are we still waiting for LSEs to cure traditional RA deficiencies?

**Replacement uncertainty will always exist.**

# Supplier Perspective

## *Providing Replacement Capacity*

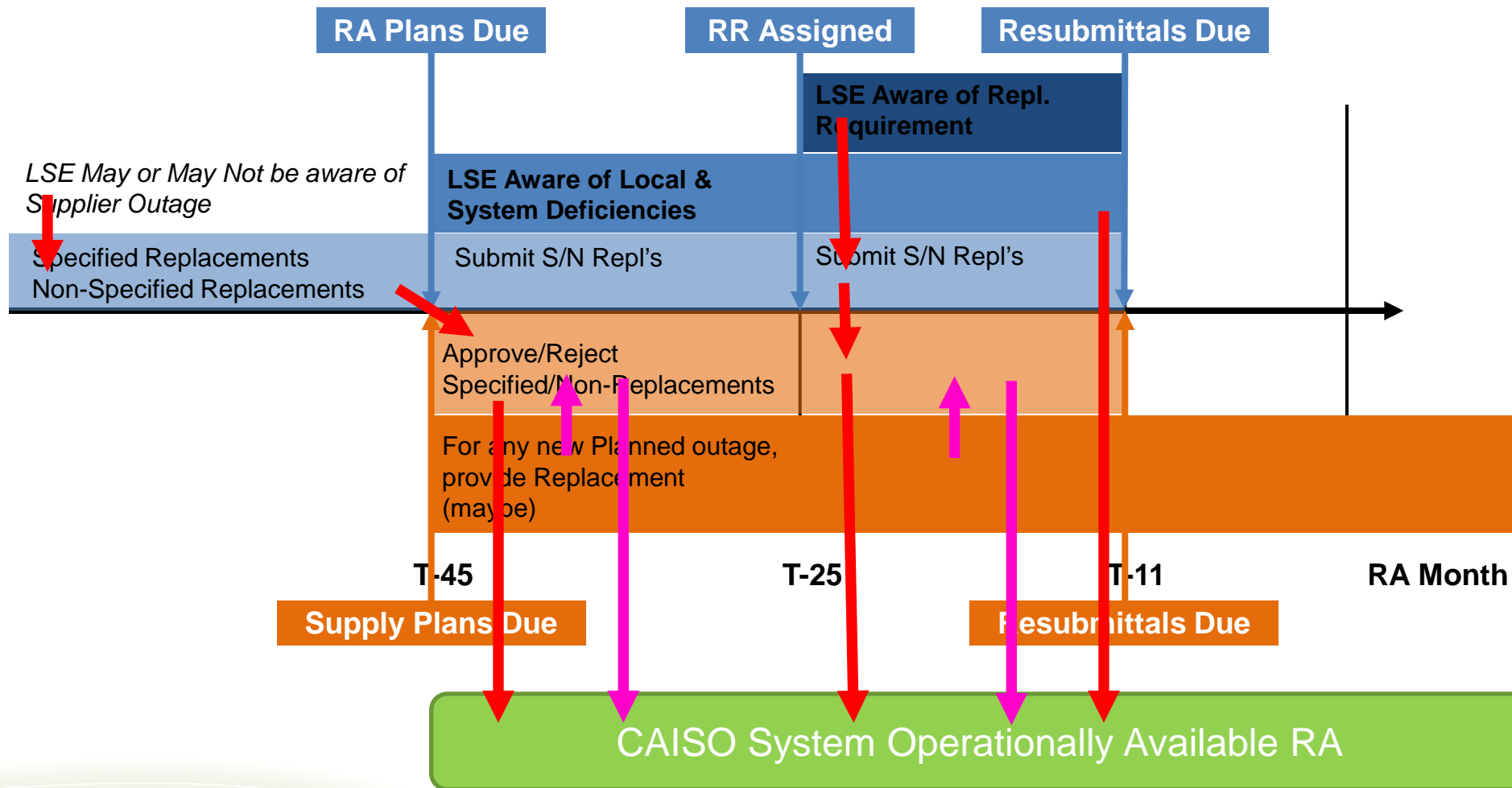


# Overlap of Responsibilities & Timelines



# Overlap of Responsibilities & Timelines

*How do these responsibilities & timelines overlap?*



# Committed Capacity

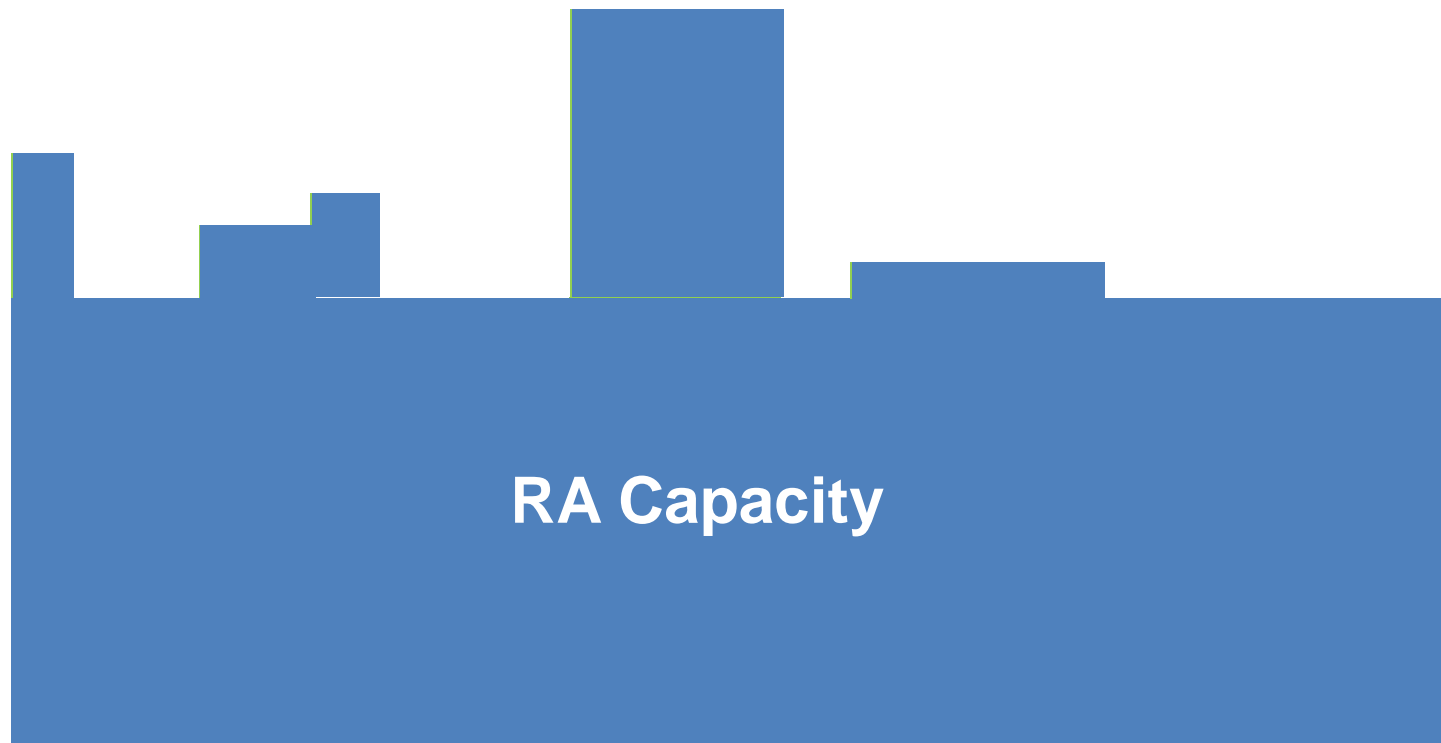
# Committed Capacity

## *What do we mean by “committed capacity”?*

- Once “Designated” RA capacity is received and matches a Supply Plan, it becomes RA Capacity and takes on RA obligations.
- Once “Replacement RA Capacity” is received and approved by a supplier, it becomes RA Capacity and takes on RA obligations.
- Replacement RA Capacity loses its association with a particular outage because it was just extra capacity procured to meet replacement obligations.
  - If an LSE gives the ISO Non-Specified Replacements, then they are not associated with a particular outage in the first place; it is associated with an aggregate replacement capacity required.
  - LSEs can provide additional Designated capacity to meet replacement obligations in aggregate; this is not associated to particular outages, and if the MW amount given does not exactly equal the MW amount required, which outage would it be attributed to?

# Committed Capacity

*What do we mean by “committed capacity”?*

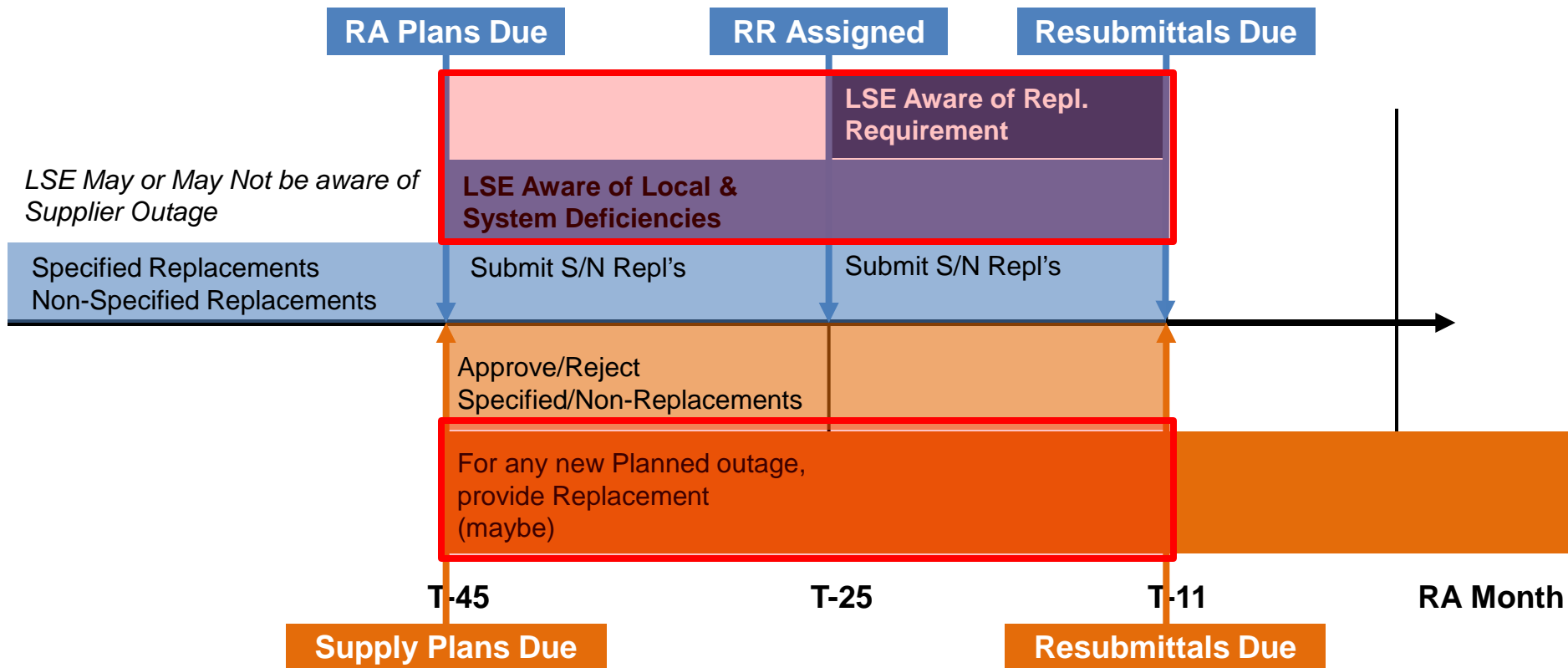


# Issues

# Issues

## Process Complexity

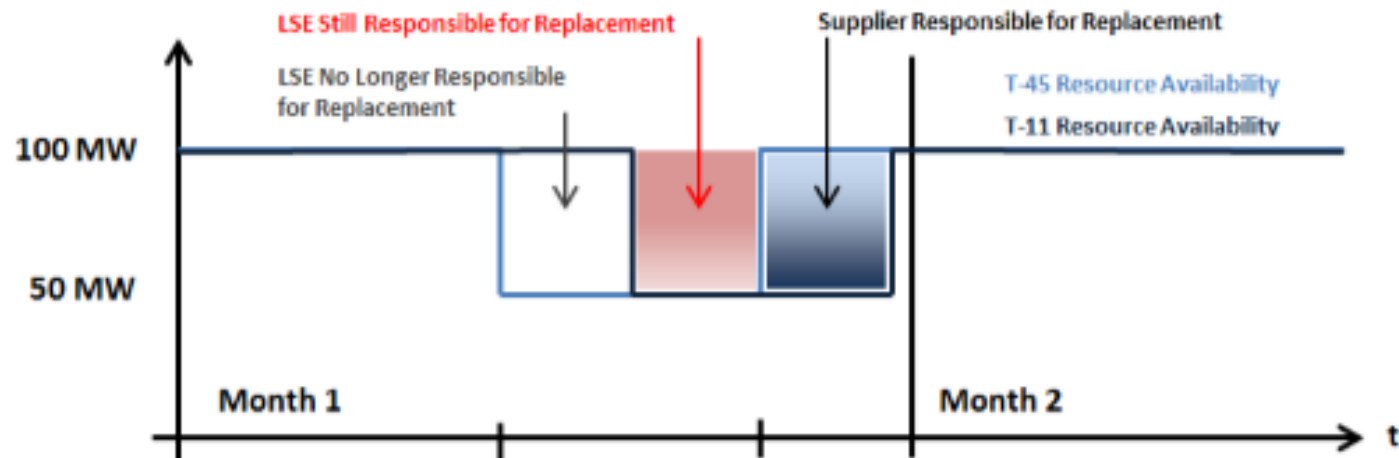
1. Overlapping cure periods for **traditional LSE RA requirements and LSE replacement requirements (T-45 to T-11)**
  - Local Requirements
  - System Requirements
  - Replacement Requirements
2. Overlapping cure periods for **LSE requirements and supplier replacement requirements**



# Issues

## Process Complexity

### 3. Tracking of outage replacement responsibility across multiple functional entities

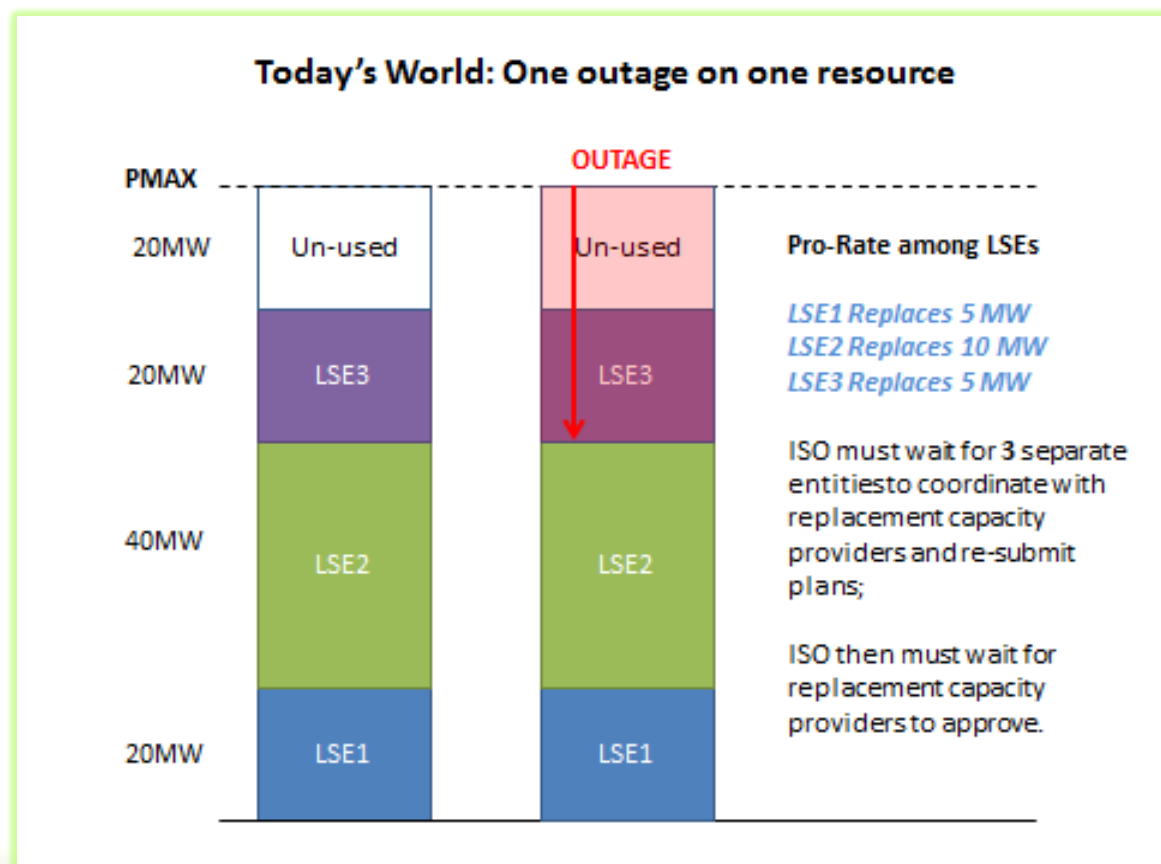




# Issues

## Process Complexity

### 4. Tracking multiple LSE replacement responsibility for a single outage



# Issues

## Process Complexity

# of LSEs Sharing Resources	Avg # of Resources Split among this many LSEs	Minimum # of LSEs Sharing	Maximum # of LSEs Sharing
>=10 LSEs Sharing	Average of <b>4.5 Resources</b> Split among <b>greater than 10 LSEs</b> per month	11 LSEs Sharing	20 LSEs Sharing
>=5 LSEs Sharing	Average of <b>7 Resources</b> Split among <b>between 5-10 LSEs</b> per month		
4 LSEs Sharing	Average of <b>3 Resources</b> Split among <b>4 LSEs</b> per month		
3 LSEs Sharing	Average of <b>13.25 Resources</b> Split among <b>3 LSEs</b> per month		
2 LSEs Sharing	Average of <b>18 Resources</b> Split among <b>2 LSEs</b> per month		

***Based on RA Plan data from the past 5 months***

# Issues

## Inefficient RA Commitment and Procurement

1. Use of the same load forecasts in both planning and operating horizons
  - The use of the CEC 1 in 10 forecast in both the planning and operating horizons potentially forces more commitment than is needed for reliability on individual days
2. Overlapping cure periods
  - Same cure periods for different requirements
    - Local
    - System
    - Replacement Requirement
3. Timing of Outage Assessment
  - All LSE outage analysis performed on T-45 outage snapshot
  - Outages frequently move or are scheduled after this point in time.

# Issues

## Outage Moves or Cancellation

1. Outages move or cancelled after LSE or Supplier provides **replacement capacity**
  - ISO may request for outage cancellation that has replacement capacity due to reliability reasons
  - Supplier may move or cancel an outage
  - Approved replacement capacity is RA capacity irrespective of outage move or cancellation
    - Increases exposure to Standard Capacity Product
    - ISO has more RA capacity than required because replacement capacity is committed on days where outage moved or cancelled

# REPLACEMENT & SUBSTITUTION ROADMAP

# Replacement and substitution overview

- Need to integrate flexible RA requirements in replacement and substitution outage rules
- ISO considering provisions to simplify and increase transparency of current outage rules
  - ISO is planning on updating flexible RA requirements in Spring 2016
  - Flexible planned outage rules on non-updated flexible rules would be implemented in Fall 2016
  - The ISO would then need to change planned outage rules immediately after implementing first set of rules
- Therefore, ISO proposes to delay flexible RA outage rules

# Replacement and substitution roadmap

Expected implementation date		Fall 2015	Fall 2016	Fall 2017
<b>Proposed in RSI Phase 1</b>	<i>Planned outages</i>	-	Redesign of replacement rule for system RA and monthly RA process	-
	<i>Forced outages</i>	Enhancements to current rules and new flexible RA forced outage rules	-	-
<b>Proposed in RSI Phase 2</b>	<i>Planned outages</i>	-	Any additional changes in advance of implementing updated flexible RA requirements and associated outage rules	Rules related to flexible RA planned outages
	<i>Forced outages</i>	-		Updated rules related to flexible RA forced outages, if necessary

# **PLANNED OUTAGE RULES TARGETED IMPLEMENTATION PRIOR TO 2016 RA YEAR**



# Replacement rule issues

- ISO filed flexible RA requirement in August
  - Does not propose to implement replacement rule for flexible RA until 2018
  - There will therefore be a gap in flexible planning process
- ISO has observed that system resources are not always replaced with similar characteristic resource
  - For example:
    - MCC buckets: use limitations may increase beyond acceptable level
    - Dispatchability: Flexible *attributes* may not be replaced

# Replacement rule prior proposal

1. Dispatchable resources cannot be replaced by non-dispatchable resources
  - a) Will need to update dispatchable definition in tariff
2. Non-use-limited resources cannot be replaced by use-limited resources
  - a) Considering updating use-limited definition in tariff

# Replacement rule new proposal

- Delay any changes to replacement rule until RSI phase II
- Trade off:
  - Some additional risk of increased exceptional dispatches to ensure flexibility in market
  - ISO believes this is unlikely to occur prior to 2017 when flexibility is expected to become increasingly scarce

# **FORCED OUTAGE RULES TARGETED IMPLEMENTATION PRIOR TO 2016 RA YEAR**

# Substitution proposal

Automated many-to-many substitution has not yet been implemented

- System on track for Fall 2015 implementation
- Propose to implement this for flexible substitution in 2016

Substitution is locked in even if outage moves or is cancelled

- Propose to provide flexibility to move substitute RA capacity in the event the outage is moved or cancelled

Deadline for providing day-ahead substitution is very early in the morning

- Propose to move deadline from 6am to 8am

# Substitution proposal (cont.)

The ISO does not allow real-time substitution for system resources

- Propose to allow real-time substitution for system resources (pending internal reliability assessment)

Local RT substitution rules require the substitute capacity to be located at the same bus

- Explore whether same bus is always necessary
- Explore after-the-fact review

No flexible RA substitution rules in place

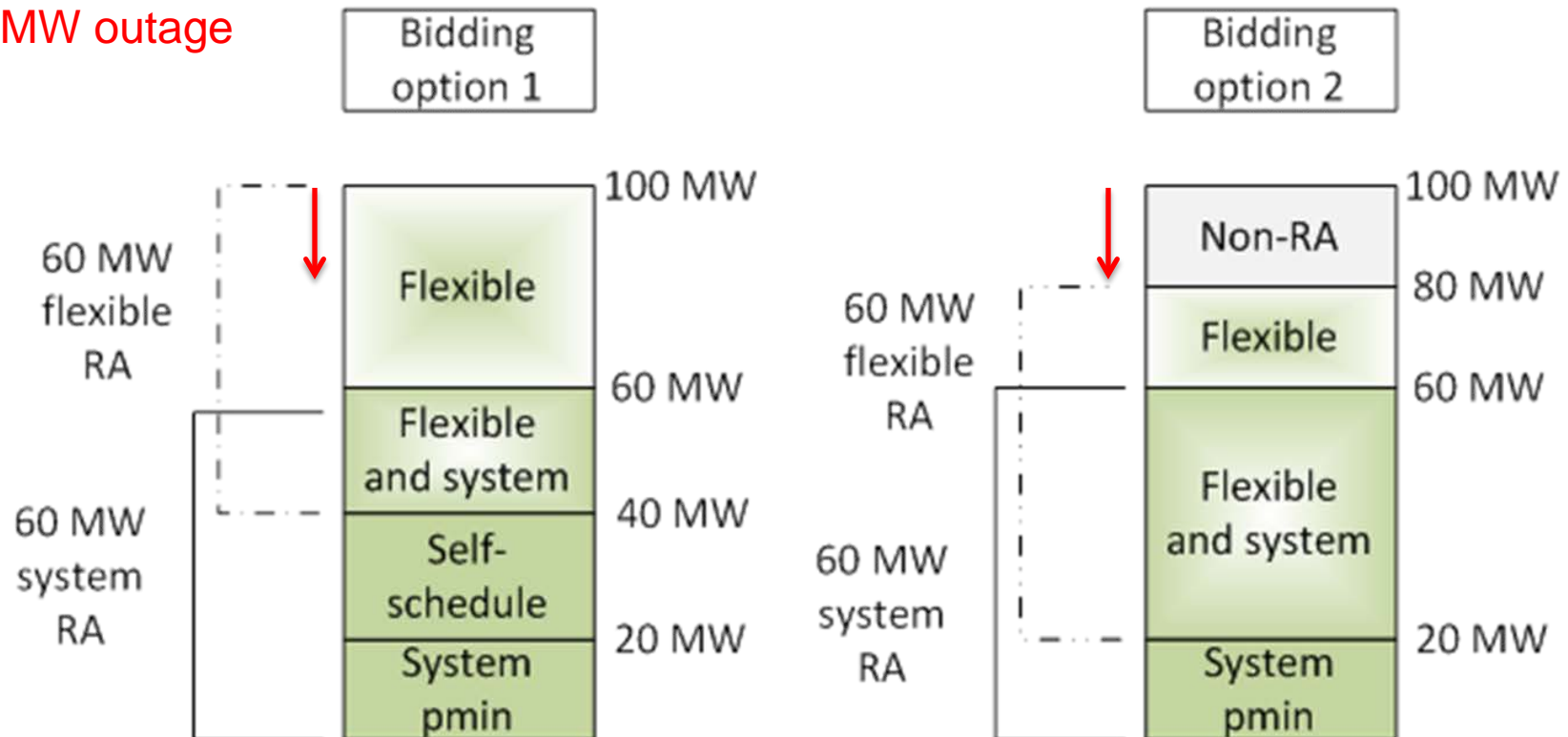
- Propose category or better substitution rules for flexible RA
- Propose substitution quantity flexibility

# Substitution for flexible RA resources

- ISO will make no presumptions on how resource with flexible RA on it will operate
- In the event of an outage, the ISO will allow SC to provide ISO with substitute capacity up to the outage amount
- This is necessary because ISO cannot determine in advance how a resource will meet a flexible requirement

# Options to meet 60 MW flexible RA requirement

20 MW outage

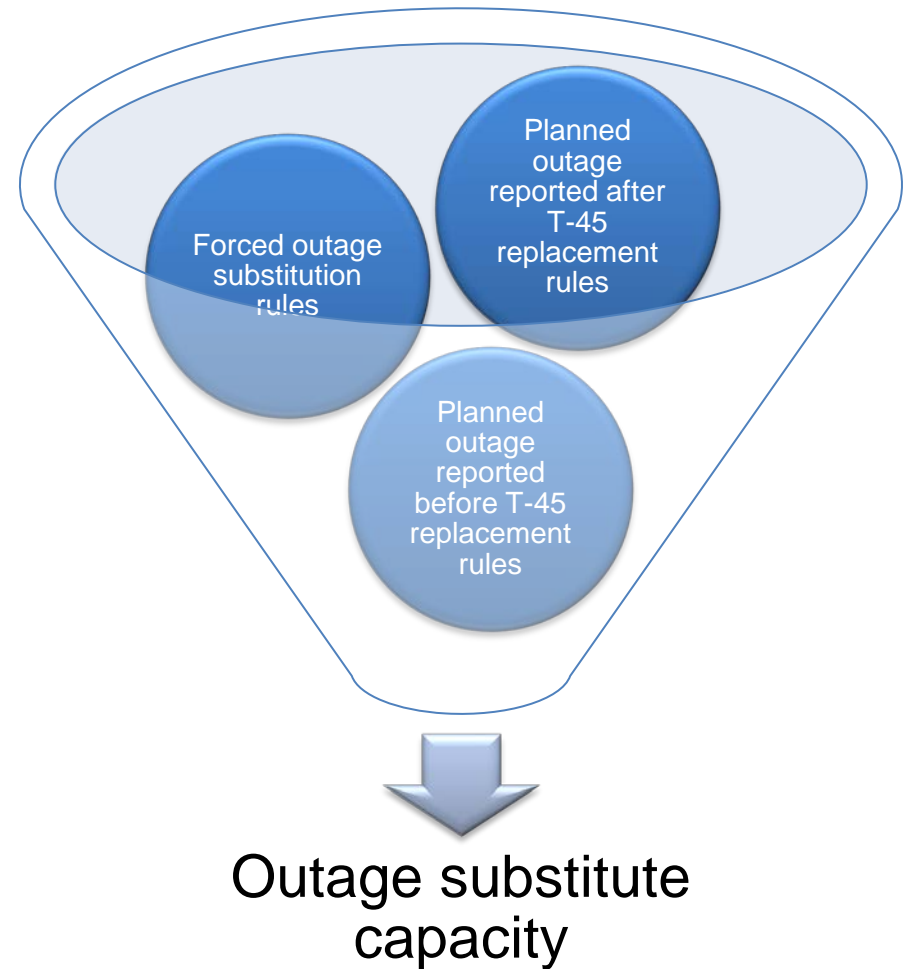




# **OUTAGE RULES TARGETED IMPLEMENTATION PRIOR TO 2017 RA YEAR**

# Monthly RA and outage process proposal: Summary

- ISO proposes both timeline and rule changes to monthly RA planning and outage process
- Goal is to remove complexity in rules and processing

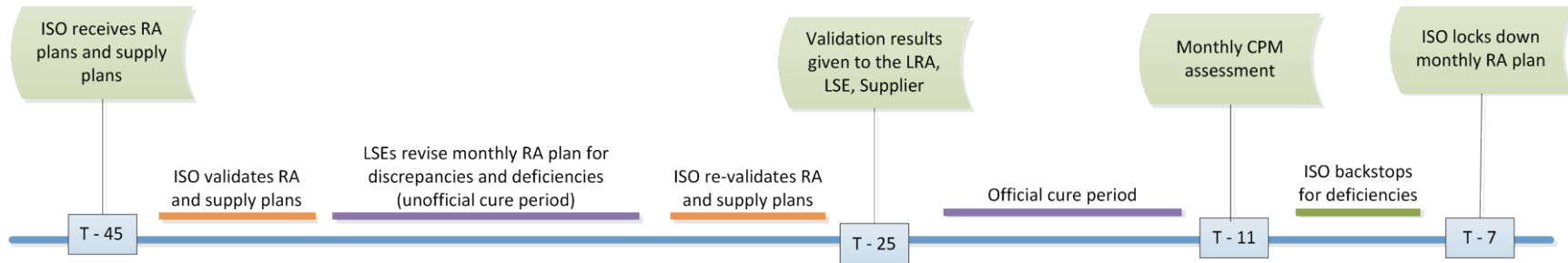


# Monthly RA and outage process proposal: Summary

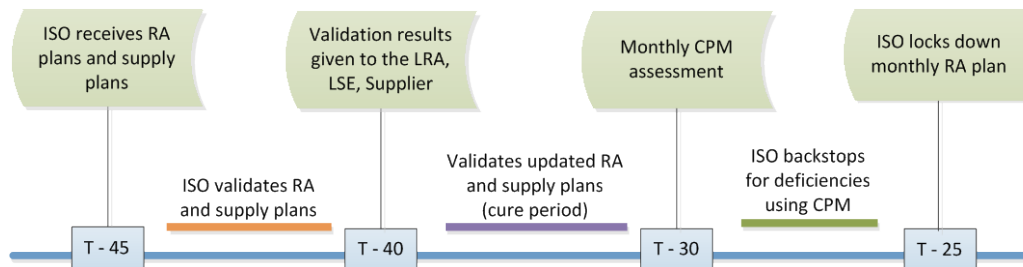
- ISO proposes both timeline and rule changes to monthly RA planning and outage process
  - Goal is to remove complexity when it does not serve a reliability purpose
- Vision:
  - Outages with nature of work categories
  - Depending on the outage category, the ISO will require or allow:
    - Planned outage substitute capacity
    - Forced outage substitute capacity
    - No substitute capacity
  - All outages run through same processing system

# Monthly RA and outage process proposal: Monthly RA timeline changes

## Current Process

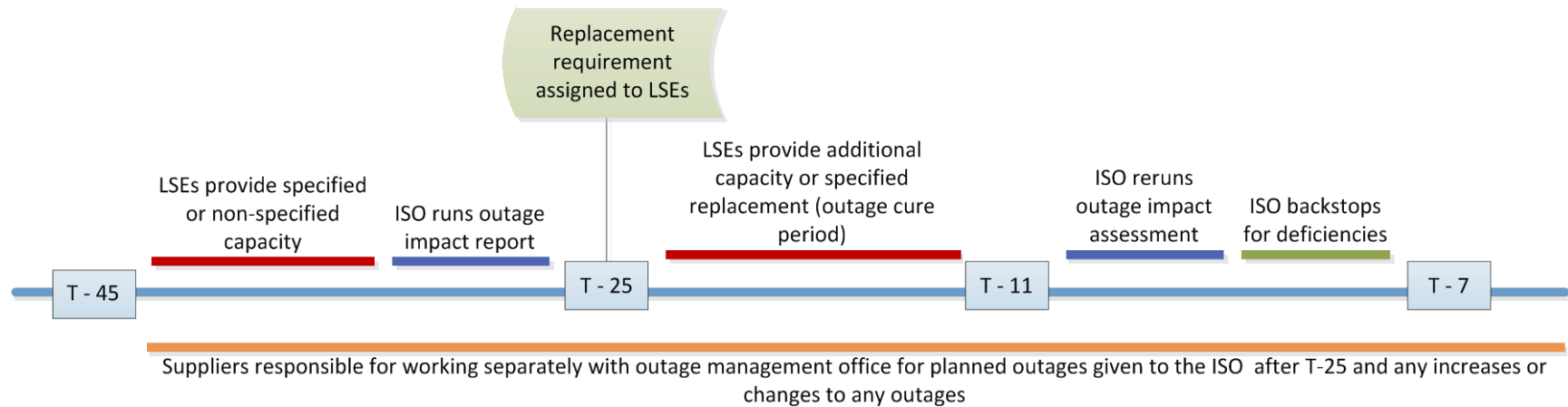


## Proposed Process

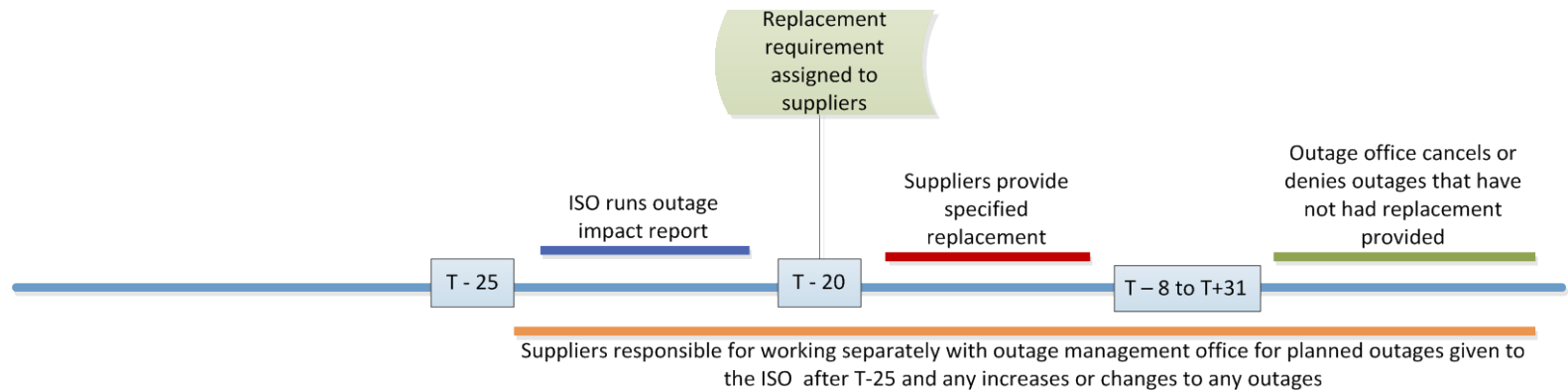


# Monthly RA and outage process proposal: Outage assessment timeline changes

## Current Process



## Proposed Process



## Monthly RA and outage process proposal: Separation of LSE and supplier responsibility

- Supplier will be responsible for all outage replacement
- Currently, ISO sees majority of outages come in after T-45 and so the obligation is on the supplier
- ISO understands that ultimately it is the contract between the supplier and LSE that dictates which party will provide replacement capacity to ISO
- The ISO is willing to explore potential for LSEs to show a daily RA value in the event a contract between LSE and supplier does not put the obligation to replace during planned on the supplier

## Monthly RA and outage process proposal: Consistent forecast used to assign needed capacity

- ISO proposes to investigate whether a more up-to-date forecast could be done at T – 25
- Currently, after T-45, the ISO will use discretion on replacement
- The ISO proposes to create clear, transparent rules on when replacement will be needed and to use a single set of rules regardless of when the planned outage is reported

## Monthly RA and outage process proposal: Penalties for planned and forced outages aligned

- The ISO proposes to remove the potential of designating capacity under a monthly CPM in the event a resource does not supply replacement capacity
- Instead the ISO may cancel or deny the outage
- In the event the outage takes place anyway, regardless of whether it is still reported as a planned outage or was removed and reported as a forced outage, the capacity will be subject to the availability incentive mechanism



## Monthly RA and outage process proposal: Release of substitute capacity as RA capacity in the event an outage moves

- Currently once capacity is accepted by the ISO as replacement capacity it is considered RA
  - Cannot be released
  - Is subject to SCP mechanism
- ISO proposes in the event an outage moves or is cancelled, the scheduling coordinator will be able to move any planned or forced substitute capacity up to the amount moved or cancelled

## Monthly RA and outage process proposal: Separation of system and local showings

- The ISO proposes to enhance the monthly RA showing process and require LSEs to indicate which MWs are being shown as local capacity to meet the LSEs requirement
- Only local capacity shown as local capacity will be used in the local collective deficiency check
- The ISO in real-time will then require local substitution only if the capacity was shown on the LSEs plan as local

## Next steps

- Informal comments only
  - Please call or email Carrie Bentley with comments or questions
- Second Revised Draft posted October 7<sup>th</sup>, 2014
- RSI meeting will be on October 14<sup>th</sup>, 2014