

# Resource aggregations are required to be within a single sub-Load Aggregation Point (LAP).

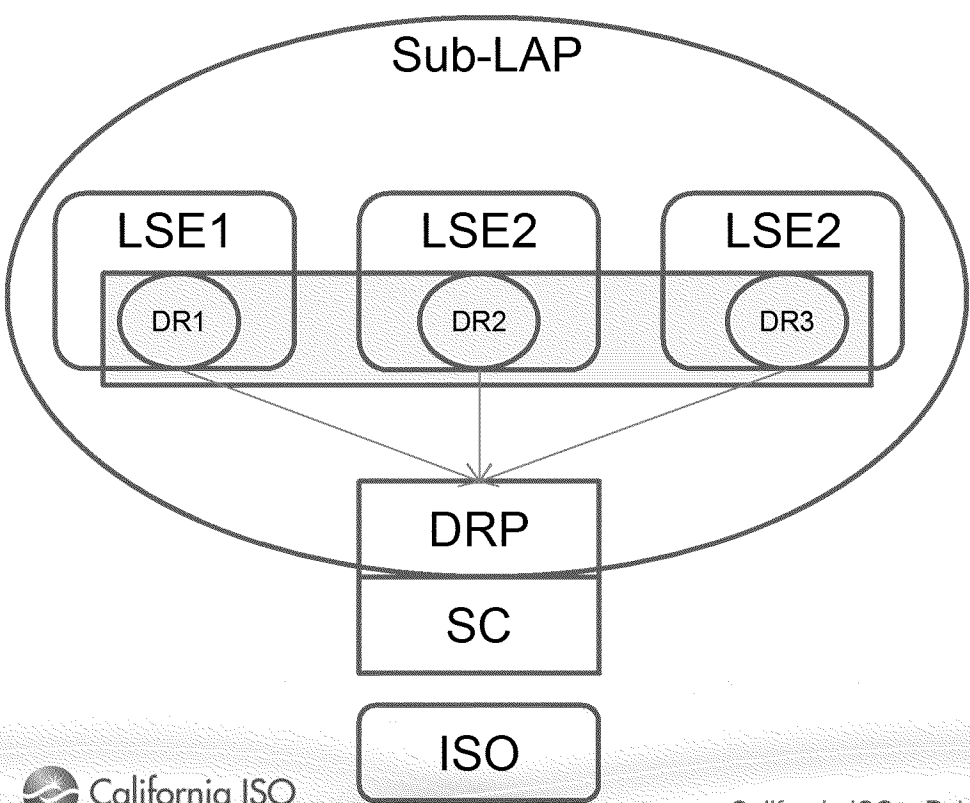
- *Ensures demand response resource dispatch does not create additional congestion*



- ✓ A sub-LAP is an ISO-defined subset of pricing nodes (Pnodes) within a default LAP.
- ✓ 24 sub-LAPs were created to reflect major transmission constraints within each utility service territory (default LAP)
- ✓ Developed initially for congestion revenue rights (CRRs)

# Resource aggregations are required for a single load serving entity (LSE)

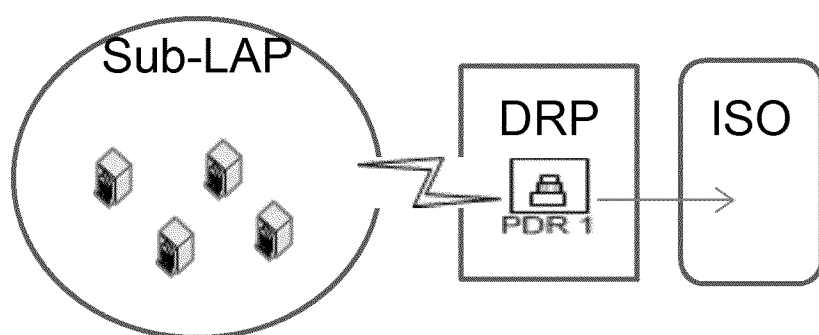
- *Ensures ability to provide visibility of DR awards to LSEs and ability to identify individual default load adjustment (DLA) contribution of LSE specific location performance.*



- ✓ Options for LSE to gain visibility needed
- ✓ DLA policy change needed

Resource aggregations of 10 MW and above and those providing ancillary services require telemetry.

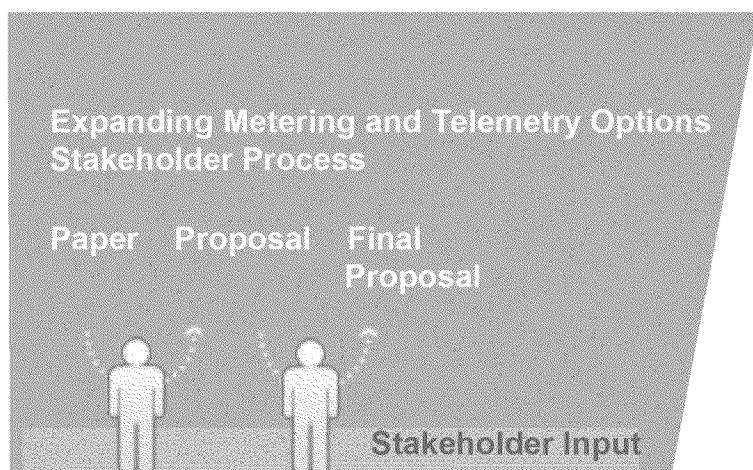
- *Ensures visibility for real-time operation of the grid and compliance to mandatory and enforceable NERC and WECC approved reliability standards.*



- ✓ RDRR does not require telemetry
- ✓ Telemetry is provided for the aggregate resource
- ✓ A single remote intelligent gateway (RIG) can represent multiple DR resources

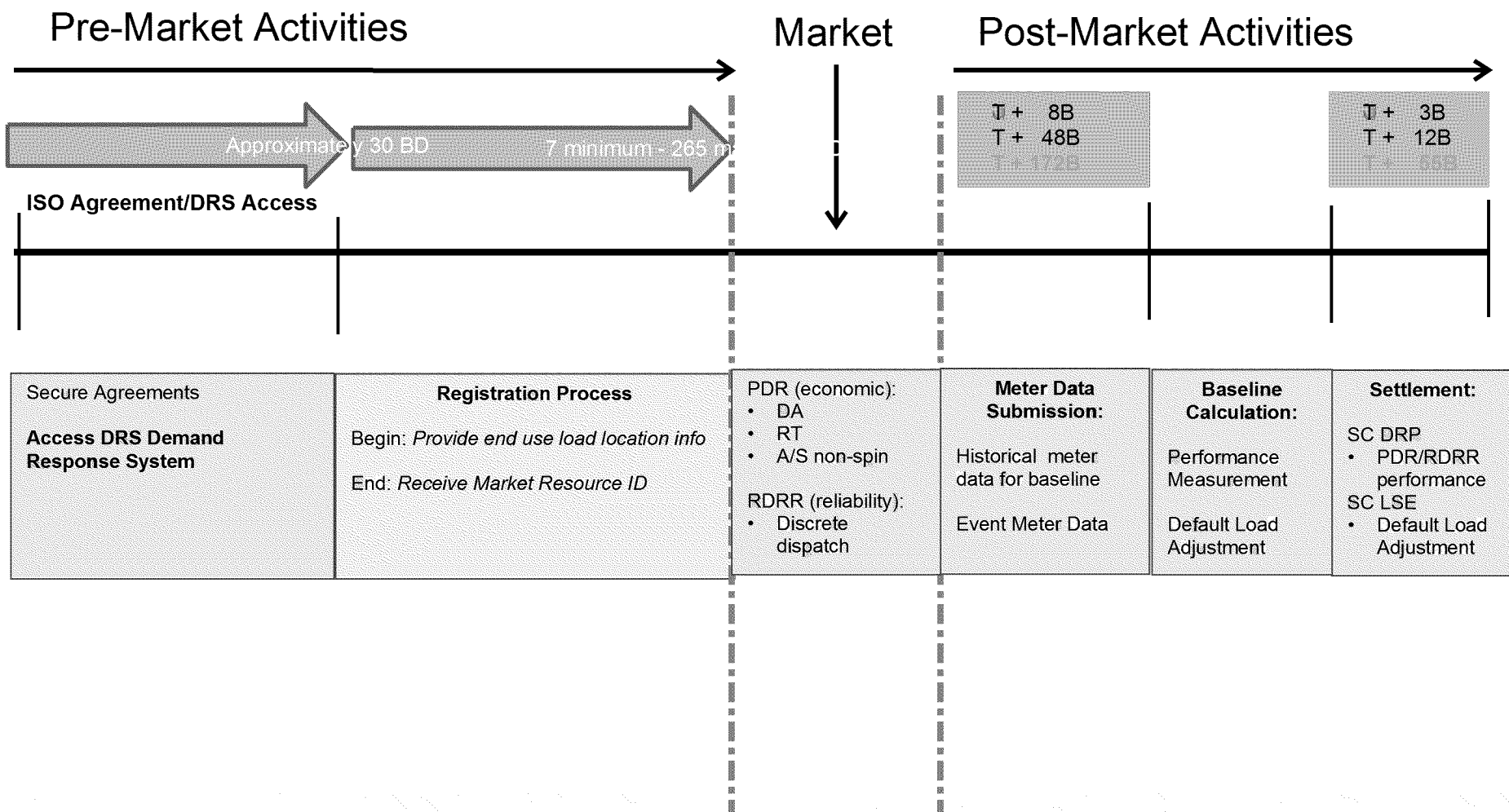
Phase 1 Metering and Telemetry Options Initiative provided options for current transport, protocol, submittal and aggregator requirements.

○ *Required no tariff and minimal BPM changes for quick hits*



- ✓ Phase 1 proposal development completed, implementation in progress
  - May 14, stakeholder call
  
- ✓ Phase 2 launching in Q4 provides DERs aggregation benefits currently available to DR resources

# Sequential activities prepare for PDR/RDRR market participation



Registration provides visibility and auditability of aggregated participation to multiple entities.

## Create location

- duplication check across DRP's
- UDC account # primary key
- validations
  - duplication check across DRP's
  - completeness validation

## Create registration

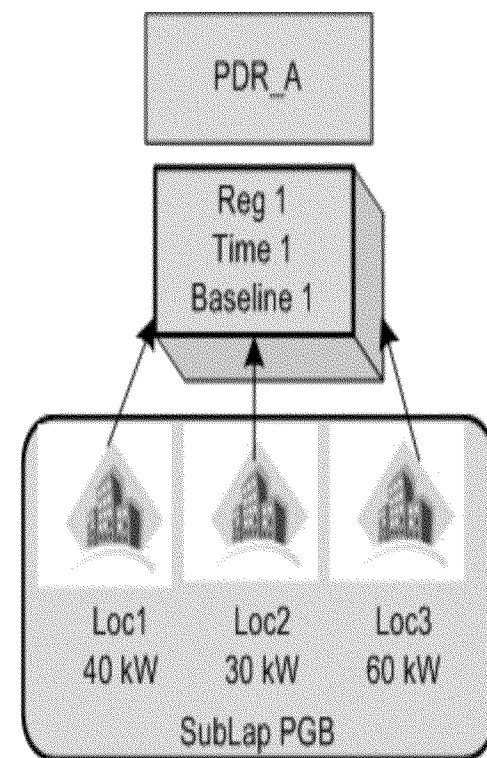
- locations aggregated to create registration
- validations
  - duplicate location across registrations
  - Sub-Lap/LSE/total load reduction

## LSE/UDC/ISO registration review

- UDC/LSE review registration including locations

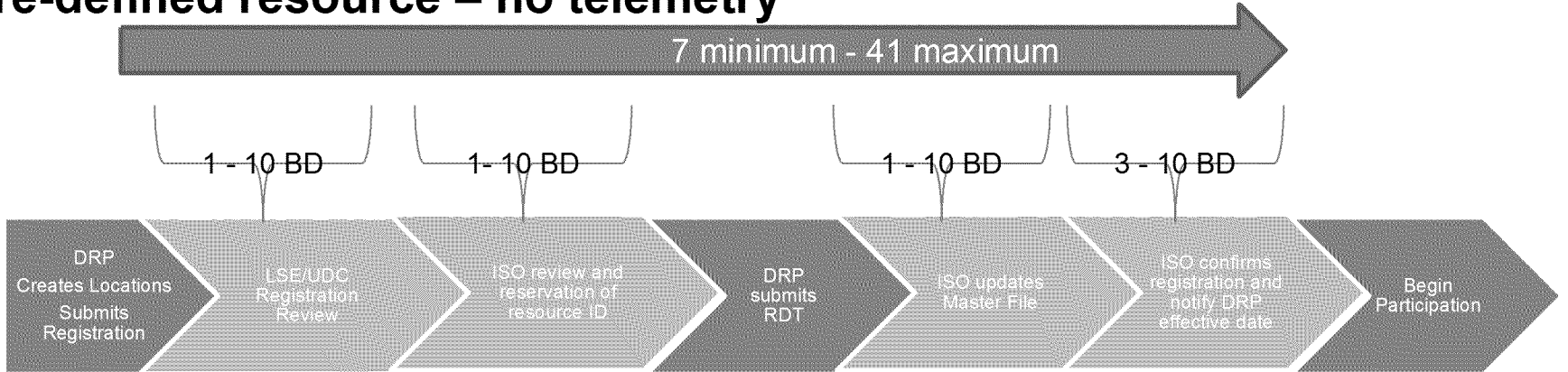
## Create resource and confirm

- resource ID provided, Resource data template submitted
- masterfile updated

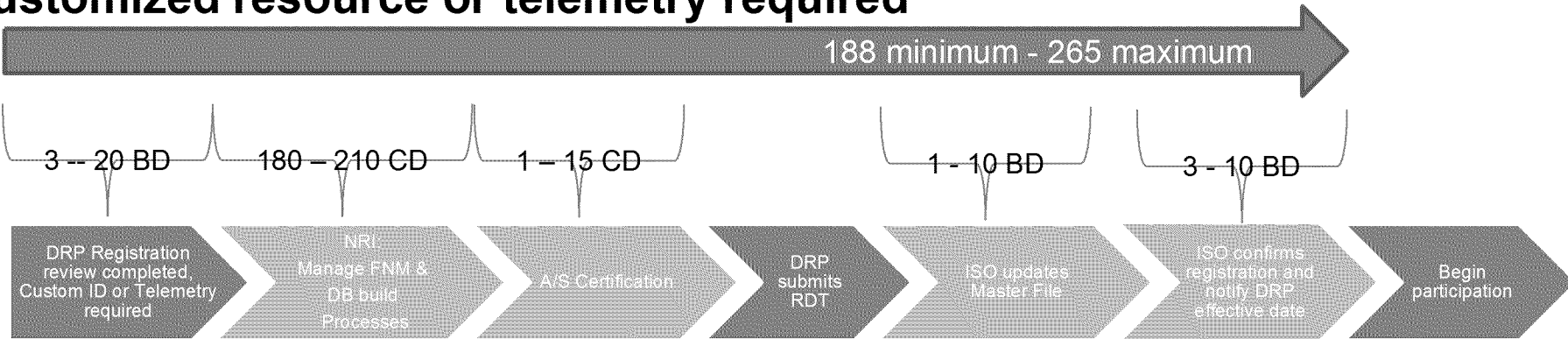


# Timelines are affected by level and type of participation

## Pre-defined resource – no telemetry



## Customized resource or telemetry required





Deadlines for DR resources remain consistent with timelines for all resource types including load.

○ *Aligns ISO direct settlement with the DRP and LSE SC's*

✓ **Meter data submitted by SC as SQMD**

- historical meter data for baseline
- event meter data

T + 8 B initial  
T + 48B recalculation

✓ **Calculation in DR system**

- baseline
- performance measurement
- only

✓ **Settlement**

- Direct settlement of PDR/RDRR performance with DRP's SC
- Default load adjustment calculated and applied to LSE load meter data

T + 3B initial  
T + 12B recalculation  
T + 55B recalculation



# Participants have options for their baseline methodology.

- o *Baselines supports DR participation with separation between DRP and LSE*

- ✓ **10 in 10 non-event day baseline methodology will be calculated by ISO**
- ✓ **Alternative baseline can be used with ISO approval**
  - Calculations performed by party other than ISO
  - Submitted as generation meter data

Date	Type	Event	HE14
4/15/2009	WD	N	15.00
4/16/2009	WD	N	15.75
4/17/2009	WE	N	10.50
4/18/2009	WE	N	9.50
4/19/2009	WD	N	13.75
4/20/2009	WD	N	14.00
4/21/2009	WD	N	14.75
4/22/2009	WD	N	14.00
4/23/2009	WD	N	13.75
4/24/2009	WE	N	6.00
4/25/2009	WE	N	15.75
4/26/2009	WD	Y	14.80
4/27/2009	WD	Y	15.50
4/28/2009	WD	N	14.00
4/29/2009	WD	N	14.00
4/30/2009	WD	N	13.80

Date	MWH	Selection
4/15/2009	15.00	10
4/16/2009	15.75	9
4/19/2009	13.75	8
4/20/2009	14.00	7
4/21/2009	14.75	6
4/22/2009	14.00	5
4/23/2009	13.75	4
4/28/2009	14.00	3
4/29/2009	14.00	2
4/30/2009	13.80	1
<b>10 Day Avg (Raw Baseline)</b>	<b>14.28</b>	

Selection Criteria Type=WD  
Event=N  
Where WD = Week Day  
WE = Week End  
Event = Y if DA schedule, RT/AS dispatch or Outage



California ISO – Public