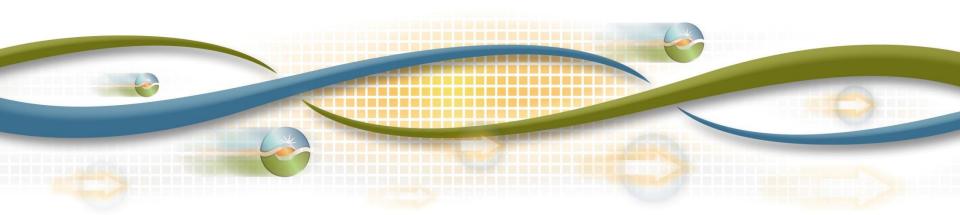


# Reliability Requirements Customer Partnership Group

June 2017

Sandhya Balasubramanian Business Solutions Manager

AKM Ferdous Sr. System & QA Analyst



## Customer Partnership Group Scope and Objective

- Created in response to customer's request to have more involvement in the planning, design and usability validation phases of ISO application development
- Provide an open interactive partnership forum to identify potential opportunities to improve the overall customer experience
- Share ideas, opinions and provide feedback
- Discuss issues and concerns, and answer customer questions
- All ideas are welcome and will be considered based upon feasibility, prioritization and timeline constraints. Not all ideas may be feasible to implement
- Meetings vary in frequency to review progress, provide feedback on design and usability and discuss implementation approaches
- Active participation is critical to the CPG success and to improve our customer's experience interacting with ISO applications



## Agenda

- RSI 1B Design Discussion for Changes to:
  - RA & Supply Plan
  - Cross Validation
  - RA Report
  - Reports Module
  - Report Changes
- Product Backlog

RSI 1B design discussion:

RA & Supply plan changes



#### RA Plan Changes



#### RA Plan Template

- Local MW only from local GEN resources
- System MW from local and system GEN resources, ITIEs & TGs
- Existing validations will continue to apply for the fields in the template. E.g.
  Flex Validation, Resource to SC association, etc.
- For resubmissions, user can upload RA Plan with RA MW lesser than prior submission with a warning.

#### Supply Plan Changes



#### Supply Plan Template

- Local MW only from local GEN resources
- System MW from local and system GEN resources, ITIEs & TGs
- ∑ Local RA + system RA across LSEs <= NQC of the resource</li>
- ∑ Local RA + system RA across LSEs <= PMax of the resource</li>
- Existing validations will continue to apply for the fields in the template. E.g.
  Flex Validation, Resource to SC association, etc.

#### Supply & RA Plan User Interface (UI) Changes

#### 1. Templates

- Will have RSI-2017 templates with split of Local vs System Capacity
- For the transition period contact OES for existing templates, if needed

#### 2. Upload Supply/RA Plans

'Comments' is a new optional field

#### 3. Download Supply/RA Plans

- Comments' will be in the landing page with existing fields
- Downloaded file will not show the comment

#### 4. Template Validation:

Validation will be driven by the trade month for which plan is uploaded.

### Late & Missing RA Plans

| Download RA Plan                       |                |                 |                  |           |                   |           |
|--|----------------|-----------------|------------------|-----------|-------------------|-----------|
| Submittal Type<br>Target Period<br>LSE |                |                 | Month<br>Version |           | Year              |           |
| Display Plans                          |                | 0               | Submitted        | •         | Missing/Late Plan | 1         |
| LSE SCID                               | Submittal Type | Submission Date | Plan Month       | Plan Year | Missing           | Late Days |
| SC1                                    | M              |                 | 05               | 2017      | Υ                 |           |
| SC2                                    | М              | 3/17/2017 16:11 | 05               | 2017      | N                 | 2         |

- Late RA Plan report for initial submission after showing due date.
- If LSE's total peak obligation (across TACs) is less than 1 MW (configurable) then the plan will not be considered in the missing plans report.

### Late Supply Plans



 Late Supply Plan report – newly added for initial submission after the showing due date

#### Cross Validation (CV) for Generic RA

|         |          | LSE's S  | howing    | Supplier | 's Showing | CV Results                       |           |                             |                            |
|---------|----------|----------|-----------|----------|------------|----------------------------------|-----------|-----------------------------|----------------------------|
| Example | Resource | Local RA | System RA | Local RA | System RA  | Status                           | Qualified | Qualified                   | Comments                   |
| #       |          |          |           |          |            |                                  | Local RA  | System RA                   |                            |
| 1       | Α        | 100      | 50        | 100      | 50         | Pass                             | 100       | 50                          |                            |
| 2       | В        | 100      | 50        | 110      | 60         | Pass                             | 110       | 60                          |                            |
| 3       | С        | 100      | 50        | 100      | 40         | Warning 100 40 LSE's showing was |           | LSE's showing was capped at |                            |
|         |          |          |           |          |            |                                  |           |                             | the Supplier's             |
| 4       | D        | 100      | 50        | 90       | 60         | Warning                          | 90        | 60                          | LSE's showing was modified |
|         |          |          |           |          |            |                                  |           |                             | to match the Supplier's    |
| 5       | E        | 100      | 50        |          |            | Error                            |           |                             | No Supplier found          |

CV between RA and Supply Plans validates the breakup of local and system RA MWs showings between LSE and Supplier and caps at supplier's showing when there is a mismatch.

## Cross Validation (CV) Changes for Planned Outage Substitution Obligation Output

- Landing Page for CV Results
  - New column 'Outage Type' added
  - Initial POSO run for the trade month will be color coded
- View Results -> Supply / RA Plans
  - Local, System & Total MW will be displayed for trade dates effective after RSI2 implementation.
- View Results -> LRA Obligation
  - Adding filter for LRA

#### RA Report Changes

#### RA Report

Resource

Res A

Start date

5/1/2017

End date

5/1/2017

| Resource ID | Start Date    | End Date       | <b>PMAX</b> | PMIN | NQC   | EFC  | TAC | Local Area | Generic RA | CPM | Flex RA | Flex CPM | Flex Cat. | Must Offer Obligation |
|-------------|---------------|----------------|-------------|------|-------|------|-----|------------|------------|-----|---------|----------|-----------|-----------------------|
| Res A       | 5/1/2017 0:00 | 5/1/2017 23:59 | 174.6       | 25.0 | 174.6 | 12.0 | ABC | Bay area   | 1          | 0   | 65      | 0        | 1         | Υ                     |

- Download RA for Search Period
- Download RA for Month
- RA will be at a daily granularity (not hourly)
- Header level data
  - Displayed on the UI & will be in the download
- Details level data
  - Only in the download
- Replacement fields removed

## RA Report – Fields Displayed on the Screen

| Field Name            | Description  |
|-----------------------|--|
| Resource ID           | Resource ID for each resource adequacy resource  |
| Start Date            | Start date selected by the user. RA is displayed at a daily granularity in PST                                 |
| End Date              | End date selected by the user. RA is displayed at a daily granularity in PST                                   |
| PMAX                  | Maximum power limit  |
| PMIN                  | PMin of the resource from MF   |
| NQC                   | Net Qualifying Capacity of the resource  |
| EFC                   | Effective Flexible Capacity of the resource  |
| TAC                   | Transmission Access Charge area of the resource  |
| Local Area            | Local area, mapped to a TAC, for the resource  |
| Generic RA            | Total Generic RA for the resource for the day. Use max RA for a day if this varies during a day.               |
| СРМ                   | Total Generic Capacity procurement mechanism MW for the resource for the period selected                       |
| Flex RA               | Total Flex RA for the resource for the period selected. Use max Flex RA for a day if this varies during a day. |
| Flex CPM              | Total Flex CPM for the resource for the period selected  |
| Flex Cat.             | Flex category of the resource  |
| Must Offer Obligation | Must Offer Obligation (MOO) for the resource for the period selected. Possible values are: Y, N                |



## RA Report – Additional Details in the Download – Page 1

| Field Name            | Description   |
|-----------------------|---|
| SCID                  | Supplier  |
| Dispatchable          | Dispatchable flag for the resource  |
| Fuel Type             | Fuel type resource attribute from MF  |
| Res Type              | Resource type attribute from MF. E.g. GEN, ITIE, TG, etc.   |
| Use Limit             | Use limit flag resource attribute from the MF   |
| Local MW              | Total Local MW (from Supply plan & Forced Substitutions)  |
| System MW             | Total System MW (from Supply plan & Forced Substitutions)   |
| Local Substitute MW   | Total Generic Local Substitution MW provided by this resource to other resource(s) on forced outage.  |
| System Substitute MW  | Total Generic System Substitution MW provided by this resource to other resource(s) on forced outage. |
| Planned Substitute MW | Total Generic Substitution MW provided by this resource for planned outages                           |



## RA Report – Additional Details in the Download – Page 2

| Field Name                             | Description  |
|--|--|
| Transferred MW - Local Substitution    | Generic Local MW transferred from this resource to other resources that have provided forced substitution                        |
| Transferred MW - System Substitution   | Generic System MW transferred from this resource to other resources that have provided forced substitution                       |
| Transferred MW - Planned Substitution  | Generic System & Local MW transferred from this resource to other resources as system RA that have provided planned substitution |
| CPM Substitute MW                      | The amount of Generic CPM substitution megawatts provided by this resource to other resource(s) for forced & planned             |
| Transferred MW - CPM Substitution      | Total Generic CPM MW transferred from this resource to other resource(s) that have provided substitution for planned outages     |
| Flex MW                                | Flex MW from the Supply plan after validation  |
| Flex Substitute MW                     | The amount of Flex CPM substitution megawatts provided by this resource to other resource(s)                                     |
| Transferred MW - Flex Substitution     | Total Flex CPM MW transferred from this resource to other resource(s) that have provided substitution for planned outages        |
| Flex CPM Substitute MW                 | Total Flex CPM Substitution MW provided by this resource to other resource(s) on outage  |
| Transferred MW - Flex CPM Substitution | Total Flex CPM MW transferred from this resource to other resource(s) that have provided substitution for outages                |



#### Reports

- 'Validation & Reports' will be renamed as 'RA Validation'
- New tab for 'Reports'
- Reports module will contain
  - RA Report
  - Generic Obligation Report (previously 'Obligation')
  - Flex Obligation Report (previously 'View Flex Analysis Results')
  - SC Transfer Report (previously 'View SC Transfer Details')

Note: Existing security rules apply to these reports. Navigation to these reports will be easier.

### Report Changes

- Generic Obligation Report
  - Month replaced with Start and End month filters
- Flex Obligation Report
  - Month replaced with Start and End month filters
- SC Transfer Report
  - Removing 'Repl Capacity' and 'RA MW' columns



## **Questions?**



#### Product Backlog and Roadmap