Managing Transmission Line Ratings

Technical Rating Communication implementation workshop

Various

Agenda

3:00 – 3:10 pm   **High-Level Project Milestones**
Mark Phelps

3:10 pm - 3:30 pm   **LEP API Sample Code**
Mark Phelps / Raj Sivakumar

3:30pm – 3:35pm   **LEP Sandbox Access Reminder**
Mark Phelps / Heather Latka

3:35pm – 3:40pm   **Other Updates / Ongoing Efforts**
Mark Phelps

3:40pm – 4:00pm   **Clarifications**
Joshua Bauer / Raj Sivakumar

HIGH-LEVEL PROJECT MILESTONES

MTLR Limit Exchange Portal (LEP) External Milestones

	Key Dates	Functionality
LEP Operation(UI/API)	Oct. 18, 2024	Sandbox available with APIs, AARs, Seasonal Ratings, Temporary Ratings exceptions
LEP Operation	January 31st, 2025	Sandbox update to include Local Transmission feature and UI bug fixes, if needed;
LEP Operation	TBD	Additional bug fixes and functionality; Will depend on vendor delivery quality.
NX	7/11/2025	Fully functional Sandbox
LEP Operation	7/31/2025	Fully functional Sandbox available
LEP Historian(Cloud)	TBD	
FERC 881 deadline	TBD	

Q: What is cadence of working group meetings going forward in light of extension?

LEP API SAMPLE CODE

Power System Limits Exchange Portal (LEP) Sample Client Programs

Power System Limits Exchange Portal (LEP) Sample Client Programs in Java for API calls are available on the ISO website under the Upload and Download File Format Protocols section. The files include these API samples:

GET calls
- Monitoring set by ID
- Transmission Facilities
- Transmission Facility ID
- Voltage Levels

PATCH (partial update)
- Forecast Rating Proposal

Monitoring Sets (CRUD ops)
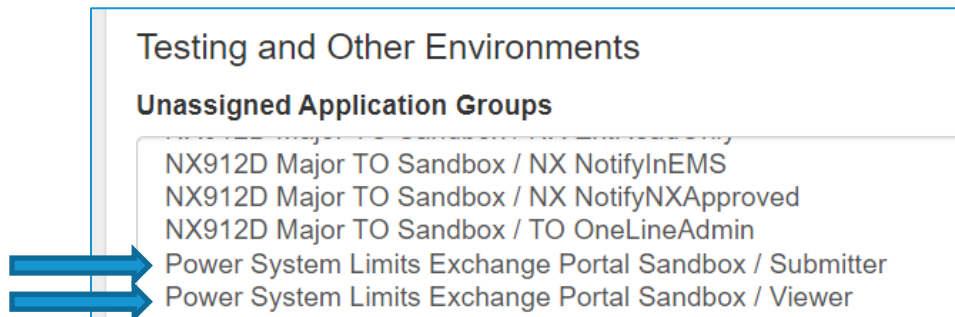- PUT (update)
- POST (create)
- DELETE
- GET

LEP SANDBOX ACCESS REMINDER

Assign Power System Limits Exchange Portal (LEP) Sandbox Roles to Users

SAs assign the LEP sandbox roles from the Unassigned Application Groups section of the page:

Testing and Other Environments

Unassigned Application Groups

NX912D Major TO Sandbox / NX NotifyInEMS
NX912D Major TO Sandbox / NX NotifyNXApproved
NX912D Major TO Sandbox / TO OneLineAdmin
Power System Limits Exchange Portal Sandbox / Submitter
Power System Limits Exchange Portal Sandbox / Viewer

- Power System Limits Exchange Portal Sandbox / Submitter – submits ambient adjusted ratings (AARs) compliant with FERC Order No. 881 requirements.
- Power System Limits Exchange Portal Sandbox / Viewer – views submitted ambient adjusted ratings (AARs).

Assign Power System Limits Exchange Portal (LEP) Sandbox Roles to Users (cont.)

- SAs notify the users they grant access to the LEP sandbox and which role they have been assigned.

- Access will bridge to the user's digital certificate **BY THE BUSINESS DAY FOLLOWING** the role assignment.

- Users can access the Introduction to Transmission Ratings and Operating Limits Information Exchange (TROLIE) technical introduction to view information presented by GE Grid Solutions, the Linux Foundation, and the Midcontinent Independent System Operator (MISO) to learn more about the LEP application.

- View project information on the FERC Order No. 881: Managing Transmission Line Ratings project page.

OTHER UPDATES / ONGOING EFFORTS

Other Updates / Ongoing Efforts

- The "Ratings" tab had been enabled for both LepReadWriteUser (submitter) and LepReadOnlyUser (viewer) roles in Sandbox

- We are actively working on creating a "User Guide" / FAQ

CLARIFICATIONS

Provide some clarifying information about what to use when constructing some RESTAPI submissions

What should you use

- "resource-id" – In the RESTAPI on the Headers tab under "X-LEP-Name-Type" it is set to "NETMOMCompositeId"

  - This is the ISO-NE NETMOM Composite ID
  - Found using the Get Network Segments or Get Network Segments ID queries

What should you use

- "provider" – this would be the customer ID from CAMS associated with the "Participant" on the NX9 form. Examples:
  - Eversource Energy Service Co: **112**
  - New England Power Company: **81**
  - NSTAR Electric Company: **3**
  - Central Maine Power Company: **6**
  - The Narragansett Electric Comp: **156**
  - Vermont Transco LLC: **50853**
  - Connecticut Light and Power Co: **50092**
  - United Illuminating Company_ T: **181**

What should you use

- "authority" – This is the name of the modeling authority set. For Sandbox LEP, it is "ISONE".
  - Can be identified using Get Model Authority Sets
    - NOTE: emp60 should not be used, it is the one that came with LEP

- "origin-id" – Have not found any specific requirements for this field in the TROLIE specs.
  - For Forecast Proposals I use: https://pslep-sbx.iso-ne.com/lep-operations/rating-proposals/forecast
  - For Seasonal Proposals I use: https://pslep-sbx.iso-ne.com/lep-operations/rating-proposals/seasonal

NX Application to LEP correlations

```
"names": [
    {
        "type": "ParticipantID",
        "name": "513-507"
    },
    {
        "type": "NXID",
        "name": "513-507/D156-BE"
    },
    {
        "type": "NX_ERN",
        "name": "4597"
    },
```

Equipment Search ⊠

Equipment Reference Number	Participant ID	Participant	Reference Number	Participant Equipment ID	ISO Equipment ID	ISO EMS ID
4597	3	NSTAR Electric Company	4597	513-507	513-507/D156-BE	513-507/D156
4602	3	NSTAR Electric Company	4602	478-502-4	478-502-2-BE	478-502-2
4724	81	New England Power Company	4724	U2	U2-2	U2-2
4725	81	New England Power Company	4725	U2	U2-1	U2-1
4731	81	New England Power Company	4731	X-24W	X-24W-1B	X-24W-1
4625	3	NSTAR Electric Company	4625	478-503	478-503-3-OH	478-503-3

Available Alternate Identifiers

- Use Get Network Segments to identify the different "names" that can be used as "alternate-identifies". Worthwhile ones:
  - "type": "ParticipantID"
  - "type": "NXID"
  - "type": "NX_ERN"
  - "type": "CIMMRID"

- There are others, but they are not useful.

Time components in Forecast Proposal

- If creating a Forecast Proposal at clock time 1710 on 03/26/25, here is how to go about determining the time
  - "begins" – This should be the hour beginning time for the first period being provided
    - "begins": "2025-03-26T18:00:00-04:00",
  - First period start and ends:
    - "period-start": "2025-03-26T18:00:00-04:00",
    - "period-end": "2025-03-26T19:00:00-04:00",

- Required to submit all 72 periods for a Network Segment at the same time for them to be accepted

Questions