

Member Impacting Project Overview:

Reliability Communication Tool

Version 2.4

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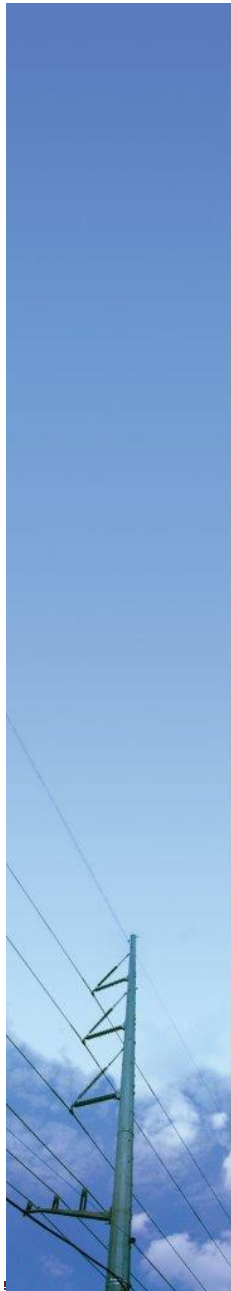


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Version Control

Version	Date	Author	Change Description
1.0	6/29/2018	Scott Maple	Initial document for publication
1.1	10/24/2018	Scott Maple	Member testing updates; minor clarifications
2.0	1/16/2019	Scott Maple	Modified implementation completion date; added member training dates, Microsoft browsers supported, a security recommendation, and FAQs
2.1	2/1/2019	Scott Maple	Technical Impact information added; Member Requirements information added; training times added; FAQs added; minor updates
2.2	3/4/2019	Scott Maple	FAQs added
2.3	3/18/2019	Scott Maple	Parallel operations dates added; clarification made to 4/5 date in Executive Summary and timeline; FAQs added
2.4	4/3/2019	Scott Maple	Dates added for load shed tests for R-Comm

Executive Summary

The Reliability Communication Tool (RCT) is intended to address gaps in how we communicate key reliability information between and among SPP, our members and their associated entities. The tool will facilitate real-time notifications for flowgate activation/de-activation, load shed, general messaging, and other reliability coordination directives. It will also enable receipt acknowledgement and satisfy compliance requirements, all with reduced staff activity and oversight of individual touchpoints.

The RCT will be an SPP developed and hosted solution for multidirectional communication. All appropriate transmission operators (TOPs) and transmission owners (TOs) will have access. Using a web-based user interface, users will be able to view and send messages through the tool. SPP production systems will be ready on 4/5/2019. Parallel operations will be conducted from 4/8/2019-6/28/2019, and 7/8/2019 will mark the official production use for messaging and load shed events.

Business Impact

This tool should result in a reduction in time spent on the phone issuing load shed instructions and providing flowgate activation/deactivation information. The tool will also decrease the compliance risk involved with issuing verbal operating instructions and allow SPP operators more time during critical timeframes to focus on other reliability tasks.

SPP TOPs and TOs currently receive Load Shed instructions via email, which is not always readily available at each real-time operations desk. The RCT will alert the impacted SPP TOPs and TOs more effectively and efficiently than email can. Initial training will be provided by the SPP Customer Training department prior to the implementation date. After implementation, all impacted SPP TOPs and TOs will participate in regular testing of the new system.

For authentication and authorization, the RCT will require external users to have a certificate installed on the PC from which they access the tool and the SPP Marketplace Portal. Existing certificates may be leveraged for access to the RCT. Additionally, the Local Security Administrator (LSA) from each member company must grant users of the RCT the appropriate company-scoped roles within the security panel of the SPP Marketplace Portal. The details on role names were emailed to the LSAs.

Users Impacted

Many, if not most, SPP stakeholders will benefit from the functionalities of the tool and underlying process. Transmission operators (TOPs) and transmission owners (TOs) will be the primary users for the initial R-Comm implementation.

Technical Impact

The Reliability Communication Tool will streamline the communication process of sending and receiving critical information currently shared via email and other mechanisms. This project will create a new member-facing web application; there are no plans for an Application Programming Interface (API). Because this is a new application, there are no technical impacts expected to existing member systems. SPP envisions TOPs and TOs will use this web application to view and acknowledge messages in near-real time.

For optimal security, SPP recommends that TOPs and TOs route their traffic over SPPNET. This will require network configuration changes on both the SPP and TOP/TO side. Please have your IT networking representative submit an RMS ticket to initiate this activity. (See More Information below for RMS instructions.) Changes must be completed by 3/15/2019.

SPP Systems/Processes Impacted

Reliability Communication Tool (RCT) – new
Integrated Marketplace Portal – link from portal to the new RCT; no actual integration

Anticipated Member Systems/Processes Impacted

SPP TOs and TOPs will use this tool as the primary means to facilitate the load shed process.

The supported web browsers that can be used are Firefox (latest), Chrome (latest) Microsoft Edge (latest) and Microsoft Internet Explorer 11.

Member Requirements

Members must have access to the Marketplace Portal to engage with the Reliability Communication Tool. Members need an OATI digital certificate. The LSA must register the user in the Portal and grant the appropriate R-Comm roles.

Testing

SPP will work directly with affected TOs and TOPs to identify liaisons and testers for this project. SPP will work with these representatives in jointly conducting tests and verifying test results. SPP will issue test scenario documentation, test cases, and scorecards that will be returned to SPP.

Member connectivity testing will be open to affected TOs and TOPs from 11/6/2018-11/8/2018 using the Member Testing Environment (MTE).

Member testing for Usability (Member Functional) Testing will be open to affected TOs and TOPs 11/6/2018-12/7/2018 in the Member Testing Environment (MTE).

Structured member testing sessions are being offered via WebEx as follows, with the requirement that all affected TOs and TOPs attend one session. Meeting notices will be sent to all designated testers.

- 11/15/2018: 1-3 p.m. CST
- 11/17/2018: 1-3 p.m. CST
- 11/27/2018: 1-3 p.m. CST
- 11/29/2018: 1-3 p.m. CST

Training

Training Assumptions:

- Applicable entities will identify personnel to receive project-related training and/or documentation.
- Applicable entities will use the LMS to register for any project-related training sessions, if applicable.

- SPP Training will provide learning opportunities that aid understanding, but each entity will be expected to certify performance readiness as applicable.

Stakeholder training will be offered on three tentative dates; details and meeting notices to current liaisons and testers will be forthcoming:

- 3/7/2019: 1-3 p.m. CST
- 3/14/2019: 1-3 p.m. CST
- 3/28/2019: 1-3 p.m. CST

Summary of Timeline

Date	Responsible Party	Action
March 2018- November 2018	SPP	Requirements, Design, Build
As needed	SPP	Publish Stakeholder Requirements via MIPO revision
As needed	SPP	Publish Stakeholder specifications if necessary via MIPO revision
As needed	SPP	Publish Stakeholder Testing details via MIPO revision
11/6/2018- 12/7/2018	Member	Member Testing phase
3/7/2019 3/14/2019 3/28/2019	SPP / Member	Stakeholder Training preceding go-live
4/5/2019	SPP / Member	SPP production systems ready and member connectivity complete
4/8/2019- 6/28/2019	SPP / Member	Parallel operations
4/24/2019 5/1/2019 5/8/2019 5/15/2019 5/22-2019 5/29/2019 6/5/2019	SPP / Member	Joint SPP/stakeholder load shed testing for R-Comm
7/8/2019	SPP / Member	Full deployment in Production

Project Assumptions

Member resource availability for member testing.

Risks

None identified at this time.

Communication Plan

Liaisons

Project Liaisons will be asked to perform the following functions during the project timeline:

- Assess milestones for feasibility
- Serve as the main point of contact between SPP and member organization
- Coordinate member implementation and testing efforts

MIPO and Project Documentation

This MIPO will be updated upon change or with any new information, and according to the Member Project Touch Points and Deliverables. With any update, a redline version will be posted to the [Reliability Communication Tool documentation folder](#) on SPP.org, and the CWG will be notified.

Next Steps

Action	Assignee	Status & Due Date
Send project communication and identify liaison at member companies	SPP Customer Relations	Sent 6/13/2018
Provide member response	Member Company Liaisons	Due 6/29/2018
MIPO review meeting, if desired	Project Team/ Liaison	

FAQs

Frequently asked questions will be added to the document as identified or necessary.

Question	Origination	Answer
What is the reason for the change in implementation date from 2/28/2019 to 4/5/2019?	SPP Staff	SPP identified the need for a new architecture for the solution to ensure optimal security and compliance capability. This change in architecture necessitated additional development work, which extended the original timeline.
Will members need to perform additional testing as a result of the change in architecture?	SPP Staff	No. Tool functionality has not been affected by the change in architecture. The member testing completed in 2018 meets all needs. However, users are welcome to continue exploring the tool in MTE.

Reliability Communication Tool

Is SPP treating R-Comm as part of its CIP program?	Member	Yes.
What is the recommended communication path for accessibility to the tool from RC work stations?	Member	For back-office functions, traffic over the internet is an option. However, for communications with real-time operations, SPP recommends routing traffic over SPPNET. Network configuration changes should be submitted via RMS and completed by 3/15/2019.
Do directives sent through the tool potentially have a 15-minute impact on the Bulk Electric System?	Member	Each stakeholder must make this determination individually. While the "engine" within R-Comm that calculates and records load shed instructions/events resides within SPP's electronic security perimeter, the communications channel and cyber asset that allow stakeholders to view messages are NOT within the ESP. There is no 15-minute impact to SPP.
Will the RCT be the only means of communicating these directives, or will it just be the primary means?	Member	The tool will be the primary means, but other means may also be used if necessary.
If a directive or other real-time communication goes unacknowledged, what will the SPP operator do?	Member	The SPP Operator will make a phone call if the message is not acknowledged in a timely manner.
What happens when a bad actor acknowledges the load shed and the stakeholder/member doesn't know about it? Will SPP always follow up with a phone call when there is a load shed directive, even if the event is acknowledged in the RCT?		The R-Comm tool was built with security features including dual-factor authentication (digital cert and User/Pass) for each account. Also, each account will have roles (read, read/write) managed by the local security administrator at each entity. Each entity will need to define who can acknowledge instructions. SPP will not follow up with a phone call unless the message is not acknowledged in a timely manner. The exception is local load shed issues; these will continue to be handled with a phone call.
What is the SPPNet IP address for stakeholders to use in setting up network paths?	Member	For optimal security, stakeholders are asked to navigate to the application via the Marketplace Portal (https://marketplace.spp.org/).
Will the load shed audible alarm in the R-Comm tool continue to chime until acknowledged?	Member	No. The alarm will sound only for a designated time lasting a few seconds. SPP has logged a future enhancement to enable the alarm to continue until the user takes some action.

How will the three-part communication loop be closed when a load shed instruction is communicated via R-Comm?	Member	The three-part communication requirement applies only to verbal operating instructions; it is not applicable to written instructions delivered via the R-Comm tool.
Will the R-Comm tool indicate when it is not functioning or connectivity has been lost?	Member	Yes. The Connection Status indicator will turn from green to red, and the time will freeze. This indicator can be found in the bottom left of the tool in the R-Comm footer.
Is the flowgate page a dynamic or static page?	Member	Dynamic; the flowgate page auto-updates within a couple of minutes.
When sticky messages expire, do they go to your deleted items?	Member	No; however, you can retrieve these through the reporting function.
Do sticky messages show up above critical messages already received?	Member	Yes. Sticky messages remain at the top of the queue until the sticky message expiration date has passed.
Do users have to use static/canned subject lines for messages between entities or can they be free-form?	Member	Static subject lines must be used at present. Free-form headers are not available at this time.
How do you delete a message?	Member	Click the trash bin icon at the top of the preview pane.
Is there a way to keep a log from dropping off after expiration?	Member	No. You can, however, still access a log via the reporting function.

More Information

At any time, members can ask questions or get more information by completing an RMS ticket using "Project Inquiries" Quick Pick and this project's subject option.

RMS link: <https://spprms.issuetrak.com/login.asp>.

If a new user ID is needed for RMS, click on that link and follow the directions for "Register Now".

Quick Pick:

* Request Type:

* Subtype 1: