



Applicable Procedure

FRCC Reliability Coordinator Monitored Element and Contingency Criteria (FRCC-MS-OPRC-001)

Procedure Purpose

This procedure identifies the appropriate elements that must be monitored in the FRCC Reliability Coordinator (RC) Agent’s Energy Management System (EMS) and Real-time Contingency Analysis (RTCA) application which are utilized to perform the FRCC RC’s Operational Planning Analyses, Real-time monitoring, and Real-time Assessment (RTA). The document also identifies the appropriate contingencies to be utilized in the RC Agent’s RTCA application. The FRCC RC Agent’s EMS and RTCA application are essential to maintaining the reliability of the FRCC Bulk Electric System (BES). These applications provide the capability to adequately monitor and analyze the BES elements within the FRCC Reliability Coordinator Area (FRCC RC Area) and a portion of the adjacent Southeastern RC’s BES.

Review Area(s)

- Real-Time RC Functions
Monitor and perform real-time contingency analyses and assess the real-time reliability issues of the FRCC BES.
- Operation and maintenance of the real-time Contingency Analysis Program
The Agent shall operate and maintain a real-time Contingency Analysis Program to assess the security of the FRCC BES.

Applicable Group(s)

- RC Agent Management
- RC Agent Modeling / Application Group
- RC System Operators (RCSO)

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-OPRC-001)	Applicable Group
001-01	Describe the process used by the FRCC RC Agent to ensure contingency list and monitored element list is updated and that the RC Agent responsibilities are met.	Section 5.1	RC Agent Modeling / Application Group



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

001-02	Explain the criteria (threshold) of what is warranted as significant system topology changes.	Sections 5.1.2 and 5.1.3	RC Agent Modeling / Application Group
001-03	What controls are in place to ensure the processes used to complete responsibilities are done consistently?	All	RC Agent Modeling / Application Group
001-04	Are periodic reviews completed to confirm accuracy of contingencies and monitored elements? If so, who is responsible and how are these reviews complete?	All	RC Agent Modeling / Application Group
001-05	Describe the RCSO process for reporting / identifying inconsistencies with contingencies or monitored elements (modeling) in the RC monitoring tools. How often does this occur?	N/A	RCSO
001-06	How are inconsistencies with contingencies or monitored elements (modeling) in the RC monitoring tools typically identified? Is there a mechanism for the RC to identify inconsistencies? Dependent on the FRCC entities? For example: discrepancy identified by a TOP.	N/A	RCSO
001-07	How familiar are all RC Agent Modeling / Application Group staff with the FRCC Reliability Coordinator Monitored Element and Contingency Criteria (FRCC-MS-OPRC-001) procedure?	All	RC Agent Modeling / Application Group
001-08	Is there a verification process to ensure changes are captured into the RC monitoring tools as described in the FRCC Reliability Coordinator Monitored Element and Contingency Criteria (FRCC-MS-OPRC-001) procedure?	All	RC Agent Modeling / Application Group
001-09	Describe the process used for the RCSO to approve or disapprove planned outages and maintenance of its telecommunication, monitoring, and analysis capabilities (section 5.4.2). What controls are in place to get and document approval or disapproval.	Section 5.4.2	<ul style="list-style-type: none"> • RC Agent Modeling / Application Group • RCSO



2021 Review of RC Agent’s Performance

Questions for RC Agent SMEs

001-10	How does the RCSO ensure a Real-Time Assessment (RTA) is performed at least once every 30 minutes? When all monitoring tools are available and when some tools are unavailable.	Section 5.4.1	RCSO
001-11	Describe the process to ensure the Southeastern RC’s BES transmission lines 200kV and above and transformers with low side voltage of 200kV and above with circuit breakers up to the fourth electrical bus from the FRCC’s BES are properly maintained and updated.	Section 6.2.8	RC Agent Modeling / Application Group
001-12	Who is responsible for ensuring the activities in Section 6.2 (Developing the RTCA Application Contingency List) and 6.3 (Developing the RTCA Application Monitored Element List) are done consistently and accurately? What controls are in place around these activities?	Sections 6.2 and 6.3	RC Agent Management
001-13	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management



Applicable Procedure

FRCC Member Services Data Specification and Collection Procedure (FRCC-MS-OPRC-004)

Procedure Purpose

This document outlines the requirements for data specification and collection to build and maintain models in support of Operations Planning Analyses, Real-time monitoring, and Real-time Assessments within the FRCC Region to prevent instability, uncontrolled separation, and cascading outages.

Review Area(s)

- Real-Time RC Functions
Monitor and perform real-time contingency analyses and assess the real-time reliability issues of the FRCC BES.
- Maintenance of database and assessment tools
The RC Agent shall maintain a database and assessment tools, provide next-day offline security analysis to FRCC staff for review, complete any task milestones as agreed upon by FRCC and the Agent and complete database loads in a timely manner agreed upon by FRCC and the Agent.
- Operation and maintenance of the real-time Contingency Analysis Program
The Agent shall operate and maintain a real-time Contingency Analysis Program to assess the security of the FRCC BES.

Applicable Group(s)

- RC Agent Management
- RC Agent Modeling / Application Group

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-OPRC-004)	Applicable Group
004-01	Describe the process for collecting data used for to support Operational Planning Analyses, Real-time monitoring, and Real-time Assessments including any non-BES data and external network data deemed necessary by the FRCC RC.	Section 6.1	RC Agent Modeling / Application Group



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

004-02	How familiar are back office staff with the FRCC Data Specification and Collection Procedure (FRCC-MS-OPRC-004)?	All	RC Agent Management
004-03	How does FPL "provide" data to the RC Agent Modeling and Application groups as per the FRCC Data Specification and Collection Procedure (FRCC-MS-OPRC-004)?	Section 6.1	RC Agent Modeling / Application Group
004-04	Which RC Agent group is responsible for analyzing and implementing the data collected from the FRCC Data Specification and Collection Procedure (FRCC-MS-OPRC-004)?	All	RC Agent Management
004-05	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management

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Applicable Procedure

FRCC Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities Procedure (FRCC-MS-RC-020)

Procedure Purpose

This document outlines how the FRCC Reliability Coordinator (RC) addresses the quality of the Real-time data necessary to perform its Real-time monitoring and Real-time Assessments. It also outlines how the FRCC RC addresses the quality of analysis in its Real-time Assessments.

Review Area(s)

- Real-Time RC Functions
Monitor and perform real-time contingency analyses and assess the real-time reliability issues of the FRCC BES.
- Maintenance of database and assessment tools
The RC Agent shall maintain a database and assessment tools, provide next-day offline security analysis to FRCC staff for review, complete any task milestones as agreed upon by FRCC and the Agent and complete database loads in a timely manner agreed upon by FRCC and the Agent.
- Operation and maintenance of the real-time Contingency Analysis Program
The Agent shall operate and maintain a real-time Contingency Analysis Program to assess the security of the FRCC BES.

Applicable Group(s)

- RC Agent Management
- RC Agent Modeling / Application Group
- RC System Operators (RCSO)

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-RC-020)	Applicable Group
020-01	Is there a documented process used by the RC Agent to benchmark and identify data quality issues by GCS staff? Ex: tools listed in section 6.2 (tie-line discrepancy report, PV application)	Section 6.2	<ul style="list-style-type: none"> • RC Agent Management • RC Agent Modeling / Application Group



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

020-02	What is the process used for manually overwriting data points? Is there a process for going back to the automated (non-manually overwritten) data collection?	Section 6.1.2	RC Agent Modeling / Application Group
020-03	Is there a turnover check sheet for the RCSOs to confirm and verify data that has been manually overwritten?	Section 6.1.2	RCSO
020-04	Is there a documented process for identifying and resolving issues with the PV application? Who is responsible for implementing the process? Are there backup roles?	Section 6.2.1	RC Agent Modeling / Application Group
020-05	How familiar are the RCSOs with the visual and audio quality alarms available on the EMS? Is the training around these alarms and how they are used sufficient?	All	RCSO
020-06	What does it mean if the RTCA display turns pink?	Section 6.2.2.2	RCSO
020-07	What does it mean if the RTCA Base-case Interface solution notification is blinking?	Section 6.2.5.2	RCSO
020-08	What is the process used to follow up and resolve and issue if an individual RTU is marked as being inoperable?	Section 6.1.1.2.1	RC Agent Modeling / Application Group
020-09	Do the RCSOs know how to access the RTU data via the substations communications webpage?	Section 6.1.1.2.2	RCSO
020-10	RCSOs to provide input on their feelings around the monitoring tools available, alarms, processes, communication with database group, training provided, etc.	All	RCSO
020-11	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management

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Applicable Procedure

FRCC Reliability Coordinator Operations Planning (Next-Day) Procedure (FRCC-MS-OPRC-030)

Procedure Purpose

This document provides procedures for the FRCC Reliability Coordinator (RC) Next-Day Planner (RCNDP) and the Reliability Coordinator System Operators (RCSO) to perform the Operational Planning Analysis (OPA) to assess whether the planned operations for the next-day will exceed System Operating Limits (SOLs) and Interconnection Operating Reliability Limits (IROLs) within the FRCC Reliability Coordinator Area (FRCC RC Area).

Review Area(s)

- Maintenance of database and assessment tools
The RC Agent shall maintain a database and assessment tools, provide next-day offline security analysis to FRCC staff for review, complete any task milestones as agreed upon by FRCC and the Agent and complete database loads in a timely manner agreed upon by FRCC and the Agent.

Applicable Group(s)

- RC System Operators (RCSO)
- RC Next-Day Planner (RCNDP)

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-OPRC-030)	Applicable Group
030-01	What is an IROL? How many are there within the FRCC? What procedures are available for the RCSO to identify and mitigation potential and actual IROL exceedances? Is there a check sheet?	Section 2.6	<ul style="list-style-type: none"> • RCSO • RCNDP
030-02	Are there any concerns around the process for developing and using the Next-Day Plan?	All	<ul style="list-style-type: none"> • RCSO • RCNDP
030-03	What triggers the need to run a valley case? (NDP) Do you coordinate mitigation for the valley case? How?	Section 6.1.5	<ul style="list-style-type: none"> • RCSO • RCNDP



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

030-04	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management
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Applicable Procedure

FRCC RC Agent EMS Model Update Procedure (FRCC-MS-OPRC-040)

Procedure Purpose

This document outlines the process for updating the FRCC Reliability Coordinator (RC) Agent’s Energy Management System (EMS) power system model in support of RC function Operations Planning Analyses (OPAs), Real-Time Monitoring, and Real-time Assessments (RTA) within the FRCC Reliability Coordinator Area.

Review Area(s)

- Maintenance of database and assessment tools
The RC Agent shall maintain a database and assessment tools, provide next-day offline security analysis to FRCC staff for review, complete any task milestones as agreed upon by FRCC and the Agent and complete database loads in a timely manner agreed upon by FRCC and the Agent.

Applicable Group(s)

- RC Agent Modeling / Application Group
- RC System Operators (RCSO)
- RC Next-Day Planner (RCNDP)

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-OPRC-040)	Applicable Group
040-01	What RC Agent documentation exists around the workflow process for updating the EMS Model?	All	RC Agent Modeling / Application Group
040-02	Is there redundancy in the personnel and processes associated with the EMS Model Update? Is there a need for more resources around this process?	All	RC Agent Modeling / Application Group
040-03	Describe the process the RC Agent follows to review the information from the FRCC OEs and to acknowledge receipt within 5 days of the OEs submitting the project details.	Section 6.1.8	RC Agent Modeling / Application Group



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

040-04	How does the RC Agent ensure accuracy of the model as per section 6.1.9? Are there any internal controls around this process to ensure consistency (check sheets, tracking tools, etc)?	Section 6.1.9	RC Agent Modeling / Application Group
040-05	Describe the process for ensuring changes to the off-line tools (off-line Open Access Gateway (OAG) and EMS databases) are transferred to the live environment.		RC Agent Modeling / Application Group
040-06	How does FPL submit modeling database changes (as per the FRCC-MS-OPRC-040 procedure) to the modeling team?		RC Agent Modeling / Application Group
040-07	Is there a documented process around the development and distribution of the database load letter? Who is responsible for completing the activity in section 6.1.14?	Section 6.1.14	RC Agent Modeling / Application Group
040-08	Who is a part of the RC Agent Model and Application Management Team? Please provide an organizational chart.	Sections 6.1.15 and 6.1.16	RC Agent Modeling / Application Group
040-09	Does the NDP receive notifications from the OEs prior to energizing, disconnecting, or reconfiguring equipment as per section 6.1.16? If so, what is the process for responding?	Section 6.1.16	RCNDP
040-10	What is the NDP process for notifying the RCSO and MRCOO as per section 6.1.18.	Section 6.1.18	RCNDP
040-11	How does the RCSO review the EMS to ensure it is ready for pending changes?	Section 6.1.19	RCSO
040-12	What controls are in place for the RC Agent to ensure the EMS real-time and study model represent the actual field configuration?	Section 6.1.20	RC Agent Modeling / Application Group



2021 Review of RC Agent's Performance

Questions for RC Agent SMEs

040-13	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management
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Applicable Procedure

FRCC Reliability Coordinator Training Program (FRCC-MS-RC-007)

Procedure Purpose

This procedure is utilized as the systematic approach to develop and implement a training program for its Reliability Coordinator (RC) System Operators (RCSOs) performing real-time, Bulk Electric System (BES) RC SO reliability-related tasks (RRTs) in the FRCC RC area.2 This procedure is also utilized to develop and implement training for its identified Operations Support Personnel on how their job function impacts those BES RC SO RRTs.

Review Area(s)

- Training for Reliability Coordinators
The Agent will provide training to the FRCC RC Operator. The training program for the FRCC RC Operators shall be developed and updated by FRCC and FPL.

Applicable Group(s)

- RC Agent Management
- RC Agent Training Staff

Request No.	Question / Requested Information	Applicable Section (in FRCC-MS-RC-007)	Applicable Group
007-01	Explain the process for documenting RC SO training hours and efforts to ensure certifications are up-to-date and renewed within the appropriate time. Who is responsible for ensuring the RCs on the desk have the necessary credentials?	Section 6.1.1	<ul style="list-style-type: none"> • RC Agent Management • RC Agent Training Staff
007-02	Explain the internal controls used to ensure every operator who sits on the desk has an active NERC certification.	Section 6.1.2	RC Agent Training Staff
007-03	Explain how the RC time entry sheet (monthly summary) is developed and managed.	Section 6.1.2	RC Agent Management
007-04	Does the RC Agent look at other RCs / TOPs process for developing RRTs and determining their effectiveness?	Section 6.2	RC Agent Management



2021 Review of RC Agent’s Performance

Questions for RC Agent SMEs

007-05	What is the internal process the RC Agent uses to ensure RRTs are up-to-date and effective?	Section 6.3	RC Agent Management
007-06	Is a review performed to document the number of hours spent by FRCC RC staff vs the RC Agent staff to execute the training program?	All	RC Agent Management
007-07	What the internal process used by the RC Agent to perform their training needs analysis and to provide recommendations to the FRCC RC? Who is responsible for executing the needs analysis?	Section 6.3.1	<ul style="list-style-type: none"> • RC Agent Management • RC Agent Training Staff
007-08	How does the RC Agent determine the need for additional training? (Internal reviews, previous training sessions, etc)	Section 6.3.2.1	<ul style="list-style-type: none"> • RC Agent Management • RC Agent Training Staff
007-09	How does the RC Agent capture the SOS training in their training records (copies of the ILAs, etc)?	Section 6.3.2.1	RC Agent Training Staff
007-10	Explain the process for providing initial training for new RCSOs and new RCNDPs.	Section 6.4	RC Agent Training Staff
007-11	Describe the internal process for used to perform an evaluation of the Initial Training Program at least once each calendar year.	Section 6.4.5	RC Agent Training Staff
007-12	Describe the testing process and provide written tests used to ensure new RCSOs comprehension of RC duties.	Section 6.2	RC Agent Training Staff
007-13	Describe the communication process for disseminating information to the appropriate groups once a formal notification is made when updates to procedures with RC Agent responsibilities are made, how is that information disseminated to relevant RC Agent staff? (example: flow charts, org charts, etc.)	All	RC Agent Management