LUMA

TELEMETRY

TELEMETRY PROCEDURE

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Procedure Title: **Telemetry Procedure**

Procedure # __8____ Revision # 1.2

Security Classification _RESTRICTED___ Date Issued 12/15/2021

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PROCEDURE DEVELOPMENT HISTORY:

Revision Approved Date __/__/___ Approved by _____Title _____

Authored by _____ Title _____

Reason for Revision

_____

Revision Approved Date __/__/___ Approved by _____ Title _____

Authored by _____ Title _____

Reason for Revision

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Contents

1.0 Executive Summary 3

2.0 Objective/Scope/Roles 3

2.1 Objective 3

2.2 Scope 3

2.3 Roles and Responsibilities 4

3.0 Procedure 5

3.1 Addition of Telemetry Points 5

3.2 New Interconnected Facilities 5

3.3 New Transmission Elements 6

Appendix A: Glossary 8

Appendix B: Procedure Cross-Reference Matrix 9

1.0 Executive Summary

This Telemetry procedure lays out the steps that must be followed for requesting, approving and securely interfacing additional telemetry points for the SCADA system.

2.0 Objective/Scope/Roles

2.1 Objective

This procedure sets the requirements for the approval and interface of telemetry equipment that ensures resources are deployed in alignment with the priorities of LUMA management, that fieldwork is being scheduled and coordinated with LUMA with an emphasis on safety and reliability. Also, this procedure ensures that cybersecurity threats are minimized for each new addition to the SCADA/ Energy Management System. Finally, clarifies the responsibilities when implementing telemetry equipment that the System Operations team is approving the interfacing data points and maintaining safety in the field for all personnel and the Bulk Power System.

2.2 Scope

The users of this procedure will comply with the requirements of System Operations, LUMA Cybersecurity requirements, SCADA programmers, and concerning all technical requirements of communication interfaces.

This Telemetry procedure refers to specific connections and communications that provide data to System Operations infrastructure. This data may include analog or digital inputs measured or controlled within Interconnected Facilities connected to an interface with System Operations equipment.

2.3 Roles and Responsibilities

2.3.1 Manager, Control Center Support

Manages the request and approval processes for Remote Terminal Units (RTUs). Manages and oversees the deployment and commissioning, approval and closeout request processes.

2.3.2 System Operations OT Coordinator

Manages the approval process of each new point of telemetry for compliance with LUMA's overall Data Security Plan.

2.3.3 Generator Facility Operator Designee (GFOD)

Responsible for notifying LUMA personnel of all changes or additions to inputs for existing or newly added RTUs.

2.3.4 LUMA Transmission Asset Requestor (LTAR)

Responsible for notifying Luma personnel of all changes or additions to inputs or newly added RTU's.

3.0 Procedure

3.1 Addition of Telemetry Points

GFOD or LTAR **shall** send an email to the System Operations OT Coordinator with all information required to comply with the Interconnection Agreement and Accepted Operating Procedures. Modification to all telemetry points **shall** be requested of System Operations Control Center Support. System Operations **shall** verify within LUMA that all technical, telemetry and cybersecurity requirements comply with applicable procedures and any legal agreements (i.e., Interconnection Agreement and Accepted Operating Procedures).

3.1.1 Notification

GFOD or LTAR **shall** notify the System Operations OT Coordinator of the data to be connected, the interface equipment and the proposed interconnection schedule.

3.1.2 Approval

System Operations OT Coordinator shall verify and refer each notification to the appropriate internal parties to review any additional requirements and provide approval or denial within 30 days.

3.1.3 Confirmation and Installation

Upon receipt of approval, the GFOD or LTAR shall commence the installation as approved and provide two weeks' notice to System Operations OT Coordinator to witness and inspect the installation.

3.2 New Interconnected Facilities

The steps to follow whenever a new interconnected facility is initiating connecting to BPS or a change to a telemetry data connection is needed are defined below.

3.2.1 Notification

GFOD or LTAR **shall** send an email to the System Operations OT Coordinator with all information required to comply with the Interconnection Agreement and Accepted Operating Procedures for each new Interconnected Facility notification.

LTAR **shall** provide the instructions on alarm settings and response requirements to the System Operations OT Coordinator on new equipment.

3.2.2 Approval

System Operations OT Coordinator **shall** verify and refer each notification to the appropriate internal parties to review any additional requirements and provide approval or denial within 30 days.

3.2.3 Confirmation and installation

Upon receipt of approval, the Generator Facility Operator Designee **shall** commence the installation as approved and provide a minimum of two weeks' notice to System Operations OT Coordinator to witness and inspect the installation.

3.3 New Transmission Elements

New transmission elements include substations equipment, transmission lines, capacitor banks, etc. The steps to follow whenever a new transmission element is initiating connecting to BPS or a change to a telemetry data connection is needed are defined below.

3.3.1 Notification

LTAR **shall** notify the System Operations OT Coordinator of the data to be connected, the interface equipment to be used and the schedule for which data is to be interconnected.

3.3.2 Approval

System Operations IT Coordinator **shall** verify and refer each notification to the appropriate internal parties to review any additional requirements and provide approval or denial. The review and approval process will be communicated within 30 days.

3.3.3 Confirmation and installation

Upon receipt of new Transmission Element installation approval, the Operations IT Coordinator **shall** be provided notification in advance to witness and inspect the installation. Then, the Transmission Element installation can commence as scheduled.

This Procedure shall be used in conjunction with the Cybersecurity Procedure.

Appendix A: Glossary

Term	Definition
Telemetry	The automatic recording and transmission of data from remote or inaccessible sources to an IT system in a different location for monitoring and analysis.

Appendix B: Procedure Cross-Reference Matrix

Procedure Reference Matrix, Part 1 of 2	Short Term Load Forecasting	New Facility Interconnection	Resource Adequacy Planning	Interconnected Facility Retirements	Legacy T&G Demarcation	Interconnected Facilities Capabilities	Black Start	Telemetry	Cybersecurity	Root Cause Analysis and Corrective Actions	Public Reporting	Performance Reporting	Stakeholder Management	Policy on Reserves
Short Term Load Forecasting														
New Facility Interconnection														
Resource Adequacy Planning														
Interconnected Facility Retirements														
Legacy T&G Demarcation														
Interconnected Facilities Capabilities														
Black Start														
Telemetry									X					
Cybersecurity														
Root Cause Analysis and Corrective Actions														
Public Reporting														
Performance Reporting														
Stakeholder Management														
Policy On Reserves														
Reducing Risk Exposure to Contingencies														
Critical Loads														
Load Shedding														
Contingency and System Operating Limits Response														
Energy Dispatch, Scheduling and Merit Order														
Transmission Operations														
Plant Level Communications														
Balancing Frequency and Voltage														
Demand-Side Resources (Non-Wire Alternatives)														
System Operator Training														
Scheduling Planned T&G Outages														
Forced Outage														
Outage Execution and Closeout														
Emergency Response Execution														
Emergency Response Drills														

Procedure Reference Matrix, Part 2 of 2	Reducing Risk Exposure to Contingencies	Critical Loads	Load Shedding	Contingency & System Operating Limits Response	Energy Dispatch, Shedding & Merit Order	Transmission Operations	Plant Level Communications	Balancing Frequency & Voltage	Demand Side Resources (NWA)	System Operator Training	Scheduling Planned T&G Outages	Forced Outage	Outage Execution & Closeout	Emergency Response Execution	Emergency Response Drills
Short Term Load Forecasting															
New Facility Interconnection															
Resource Adequacy Planning															
Interconnected Facility Retirements															
Legacy T&G Demarcation															
Interconnected Facilities Capabilities															
Short Term Load Forecasting															
Telemetry															
Cybersecurity															
Root Cause Analysis and Corrective Actions															
Public Reporting															
Performance Reporting															
Stakeholder Management															
Policy On Reserves															
Reducing Risk Exposure to Contingencies															
Critical Loads															
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