

Document title:

**TSSOP - Transmission System Storm Operational Plan: Planning Section – Event System Priorities, Assessment, Restoration Approach**

Document number:

GDLP-EMG-TRM-00028

Revision No.:

Rev. 003

Keywords:

Transmission System Storm Center Operational Plan (TSSOP), Transmission Storm Plan, emergency preparedness, planning, incident action plan, IAP

Applies to:

Transmission - DEF

This document is the Planning Section of the Transmission System Storm Operational Plan referenced in the Table of Contents in TSSOP – [GLDP-EMG-TRM-00025](#)-Introduction and Overview.

**Table of Contents**

1.0 Planning Section.....	3
2.0 Mission and Purpose .....	3
3.0 Organization Chart – Planning Section .....	3
3.1 Planning Section Chief – Role & Responsibilities .....	4
4.0 Planning Process for Storm Activation & Restoration .....	6
4.1 IMT Reporting & IAP Development.....	6
4.2 Planning Process.....	7
5.0 System Impact Assessment and Planning .....	8
5.1 Peninsular Florida Impact outside of the DEF service area.....	8
5.2 Storm Impact directly to the DEF service area .....	9
5.3 Storm Impact to Pinellas County/St. Petersburg .....	9
5.4 Storm Impact to Northern Region .....	9
5.5 Storm Impact to Central Region .....	10
5.6 Storm Impact to Coastal Region .....	10
6.0 Damage Assessment and Resource Planning.....	11
7.0 Restoration / System Priorities .....	11
8.0 Operational Restoration Performance / Goals / Expectations .....	12
8.1 Operational Performance Guiding Principles .....	12
8.2 Operational Performance Goals & Timeline .....	12
8.3 Operational Performance Assessment.....	12
9.0 System Assessments and ETRs.....	12
10.0 Engineering Records & Data Integrity.....	13
11.0 Energy Control Center .....	13
11.1 Energy Control Center / Grid Restoration-System Operations General Manager – Role & Responsibility .....	14
11.2 Clearance Holder – Coordinator / Switching & Tagging Authority – Role & Responsibility .....	15
12.0 Planning Section Resources – Storm Roles and Responsibilities.....	15
12.1 Reporting & Performance Mgmt Branch Lead - Role & Responsibilities.....	15
12.1.1 Reporting Analysts – Role & Responsibilities .....	17
12.1.2 Finance Cost Analyst – Role & Responsibilities.....	17
12.2 Situation Awareness (Initial TOMS Data Entry) Leader – Role & Responsibilities.....	17
12.2.1 Data Support and Oversight – Role & Responsibilities.....	18

12.2.2 System Planner & Evaluation (TOA & TOMS) - Role & Responsibilities.....	19
12.3 Wholesale Customer Emergency Center - Roles & Responsibilities .....	20
12.4 Logistics & Resource Assessment Planning – Roles and Responsibilities .....	21
12.5 Operations & Damage Assessment Planning - Role & Responsibilities .....	22
13.0 Training and Activation of Planning Resources .....	23
13.1 Training Expectations / Objectives .....	23
13.1.1 Data Gathering & Reporting .....	23
13.1.2 TOMS System Data Entry.....	23
13.1.3 ETR Policy / Reporting.....	24
13.2 Training matrix / schedule .....	24

**Effective Date: January 31, 2021**

## **1.0 Planning Section**

The Planning Section of the Florida TSSOP is a vital entity to the strategic and planned response to an emergency / Major Storm Event. The Planning Section is comprised of system operations, system planning, energy control, and resource and work planning experts. During 'blue-skies', the Planning Section is monitoring the system and creating strategy and plans for normal operations. During a Major Storm Event this Section is primarily responsible for the prioritization of and planning for system restoration, while creating and reporting the daily / next day resource plan to complete restoration successfully.

The Planning Section is the creator of the daily plan for the event; the Incident Management Team Report (IMT) which feeds the Florida/DEF Incident Action Plan (IAP). The Planning section will follow the Incident Command System / structure and process of awaiting direction from DEF-T Region Incident Command (RIC) / System Storm Center for activation, strategic planning, and deployment. The Planning Section will interact with Meteorology, RIC, Operations Section (Damage Assessment & Restoration), Logistics Section (Resource Management), Finance Section, and Communications Section leadership to create the Daily Plan and Reporting in support of the IAP creation and process. The IAP is created by a joint team representing DEF; Customer Delivery and Transmission subject matter experts create and document the Daily and Next Day plan for restoring the system; and then the plan is executed by the Operations, Logistics, Communications, and Finance Sections. This kind of planning, communication, and cooperation throughout Major Event Response is crucial to safe, efficient, and effective system restoration.

## **2.0 Mission and Purpose**

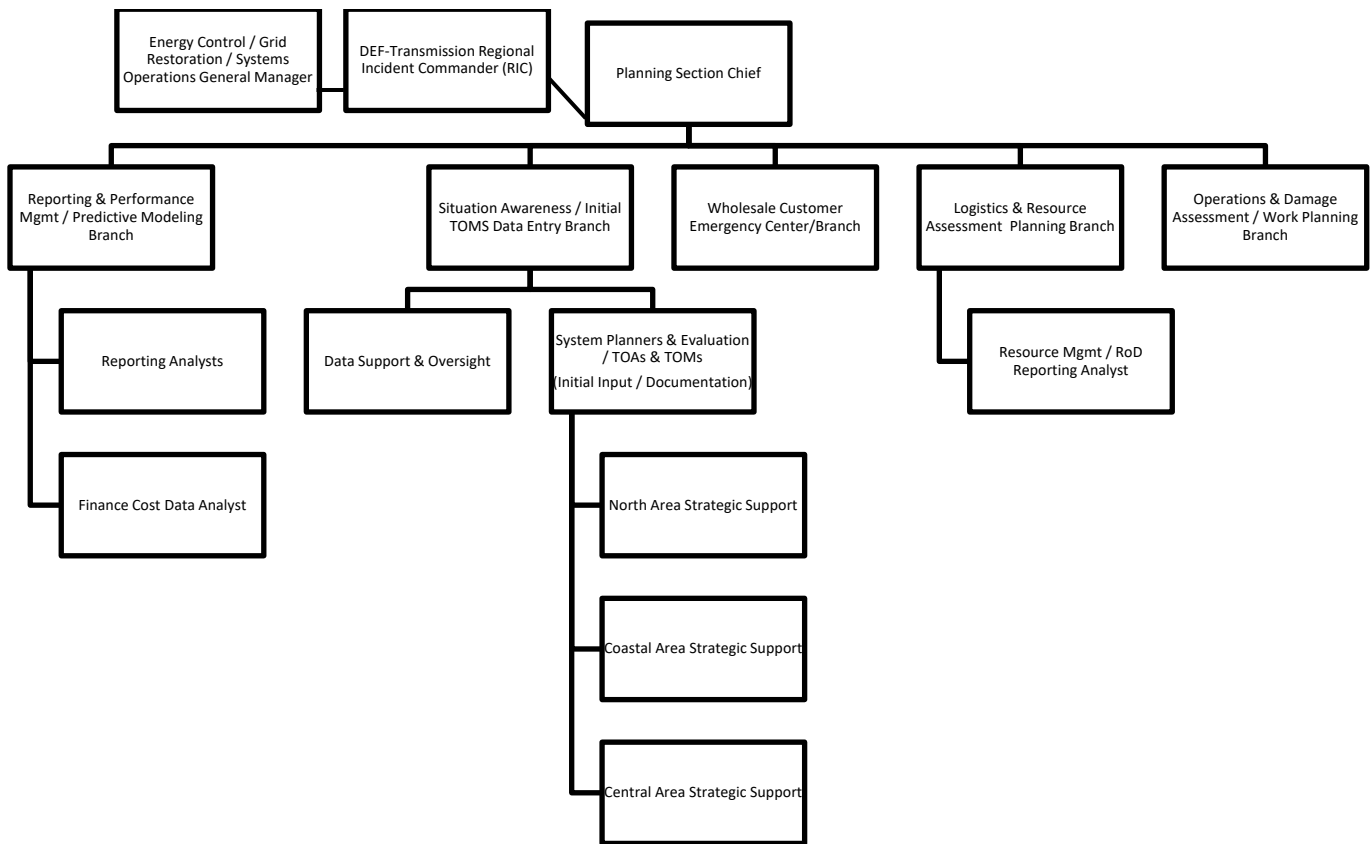
It is the mission of the Planning Section to ensure that the storm incident action plan is created with RIC / System Storm Center, Operations, & Logistics to provide the initial strategy / approach to restoring the transmission system safely, efficiently, with operational excellence. Planning personnel (Section Chief, ECC, System Planning, etc.) will identify and assure training, tools, and TSSOP Planning Section is current for the specific purpose of efficiently executing storm plans according to expectations pertaining to safety, cost, restoration times and other key performance indicators.

During an event, the Planning Section's primary purpose is to provide the prioritization of restoration of the system to ensure transmission system integrity, and then the daily plan for how restoration will be accomplished as swiftly as possible. ECC provides integral information and data into the initial plan and prioritization; Operations AIC / Crew Management & Area Assessment then provide the means to the plan with local and very specific damage assessments and data updates.

Additionally, DEF responds to an event as One Florida Response Team; the Regional Incident Commander (RIC) for CD and for Transmission regularly meet to assure this synchronicity; the Planning Section assures the syncing occurs in the development of the IAP daily. The Initial ETRs and then daily substation ETRs are determined with Transmission and CD at the Planning table. Transmission Planning provides to CD Planning, each morning of the event, an updated IMT report from the previous day so that leadership in Florida can adjust / update the days planning cycle and expectations.

## **3.0 Organization Chart – Planning Section**

The Planning Section organization is made up of five Branches that support the planning efforts through data gathering, reporting, and assuring information flows in directions needed for timely and expeditious decision making. The organizational chart below depicts the Reporting & Performance Mgmt / Predictive Modeling Branch; the Situation Awareness / TOMS data entry Branch (which includes system planning and ECC expertise); Wholesale Customer Emergency Center and Support Branch (is the direct line to all Wholesale Customers); Logistics & Resource Assessment Planning Branch (identifies the resources needed to respond to the event within estimated timeframe); Operations & Damage Assessment/Work Planning (is the direct link to Construction, Maintenance, & Vegetation Management [CMV] and Damage Assessment [DA] data).



Details and current assignments to the storm roles illustrated above can be found in the [T-FL System Storm Organization Chart](#) – folder (Link is to folder on DEF-Transmission System Storm Share Point site housing PDF files of org chart.)

The Planning Section is responsible for planning the approach / actions for the storm event; for coordinating with System Operations / ECC on the critical nature of system priorities and securing / maintaining System Integrity (Grid/ BES). The Planning Section is the documenter of the event and responsible for putting together the IAP and IMT reports throughout the event and to assure the planning documents are accurate and true to the event and restoration story – these are the documents of record for every event that impacts the Florida system. The following role description, Planning Section Chief, is provided here for clarity of this leadership role and the integration with RIC throughout an event. The Branch Roles & Responsibilities are provided within associated sections of this document.

### 3.1 Planning Section Chief – Role & Responsibilities

#### Job Function:

This is a lead position; it is the storm organizations planning leader for the event. The Planning Section Chief is responsible for developing, maintaining and issuing the Incident Management Team Report (IMT) for submission into the DEF Incident Action Plan (IAP). It is expected that The Planning Section Chief will gather with DEF CD Planning Section Chief and Planning Sections Branch Leads / IAP Development team to develop and strategize the best approach to respond to the event. This includes but is not limited to Reporting & Performance Management, Wholesale Customer Emergency Center, Logistics & Resource Assessment Planning, Operations & Damage Assessment Planning. The Transmission IMT Report includes the daily plan pertaining to all sections of the storm organization (TSSC, Operations, Planning, Logistics, & Communications); the template provides a summary section that is submitted to DEF IAP Development Team. The Planning Section Chief is ultimately responsible for assuring that Transmission's Daily Plan and event status is submitted to the DEF IAP daily.

**Job Description:**

The Planning Section Chief is responsible for ensuring:

- That the Planning Section's organizational structure and foundational processes are current. Specifically, that the Planning Section Process is current, and the Planning Section organizational structure is sound, roles are filled with SME, and each is trained in process, tools, and communications protocols.
- Annual readiness activities for the Planning Section are completed by section branch leads.
- All Planning Section personnel are trained annually; that role descriptions are up to date and checklists for each role are accurate and available for use.
- All Planning Section personnel are prepared to respond to direction to activate during a major event.
- Planning Section Chief will report to storm duty as a member of the IMT; will assure shift coverage for the planning necessary to facilitate the Plane development / implementation and IAP / IMT reporting
- Creates and distributes the Incident Action Plan (or the Transmission portion for submittal) for the event.
  - Once the plan is created for initial application, the IAP is modified daily and updated as the event occurs.
  - The IAP is distributed and executed daily; adjustments occurring as per system leadership, event changes, grid stability/restoration dictate.
  - The IAP form and function (template) can be found in the System Storm Center current storm documentation.

**Key Interface Points:**

- DEF-T Regional Incident Commander
- Area Incident Commanders (AIC)
  - Crew Mgmt Director (Restoration/DA Mobilization)
  - Area Logistics Lead Area Assessment / Field Engineering / Work Planning Branch Director
    - Area/Field Engineers / TOMS Outage Mgmt Team
- ECC / Grid Restoration / System Operations General Manager
- Reporting & Performance Mgmt Branch
- Wholesale Customer Emergency Center/Branch
- Logistics & Resource Assessment Planning Branch
- Operations & Damage Assessment / Work Planning Branch
- DEF-T System Storm Liaison to DEF-CD RIC
- Logistics Section Chief
- Communications – External / Public Information Liaison
- Transmission Emergency Prep Rep / TSSOP Program Mgr.

**Checklist of Actions:**

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [Planning Section Chief](#) tab (Under development)

## **4.0 Planning Process for Storm Activation & Restoration**

The Major Event Planning Process within Incident Command System and this Plan provides time and means for leadership to review the situation (Situation Analysis), apply resource assessment data, grid stability / restoration priorities, and create an Incident Action Plan (IAP) that is clear, direct. Creating a plan, during a fast-paced, emergency event can prove challenging; this team must be able to work, communicate, and plan and document that plan under pressure while remaining clear and able to communicate critical decisions and recommendations to the RIC.

### **4.1 IMT Reporting & IAP Development**

The IAP includes information pertaining to all sections of the storm organization (RIC/TSSC, Operations, Planning, Logistics, Finance, & Communications). When a Regional Event is declared, the IAP is created by the Regional Incident Command. For example, within Florida Region (DEF) during a major weather (hurricane) event, the Customer Delivery RIC-Planning Section Chief takes the IAP developer role for the event, while Transmission focuses on providing reporting into the daily plan via the Incident Management Team (IMT) 2X daily report. If the event was a Transmission Only Event – Transmission Storm Organization would be responsible for producing the IAP.

Since most of the time, DEF-T stands up in support of the larger event impacting DEF CD and Transmission, DEF-Transmission Planning Section completes the IMT Report. The IMT Report has a summary / IAP section which provides the information required in the Transmission section of the IAP. The IMT Report cadence for completion and distribution is determined by the DEF-T RIC – typically the IMT Report is to follow the DEF-T Operations System Storm Calls (See Briefing Cadence in GDLP-EMG-TRM-00025); templates for the report are to be completed based on IST / Emergency Mgmt and Regional Incident Command direction.

Before the IMT Report is submitted to the IAP development team OR to DE Transmission leadership, the DEF-T RIC, Deputy RIC, and/or the Planning Section Chief on duty are to review and approve the IMT Report. The IMT Report is also to be utilized in providing Communications Section / PIO and Wholesale Customer Center ETR / Transmission restoration status information. The IMT Report must be reviewed with these lines of communication in mind.

Additionally, the IMT Report provides needed documentation of the system outages and loads, daily planning of ETRs, restoration completed, total number of resources utilized, that support the documentation needed and often requested by the public utilities commission and regulators. It is vital that the IMT Report be clear, accurate, and tell the DEF Transmission story, because it becomes a document of record. The Planning Section's responsibility to plan the event includes publishing the IMT Report in support of DEF's ability to safely, effectively, and efficiently restore the system.

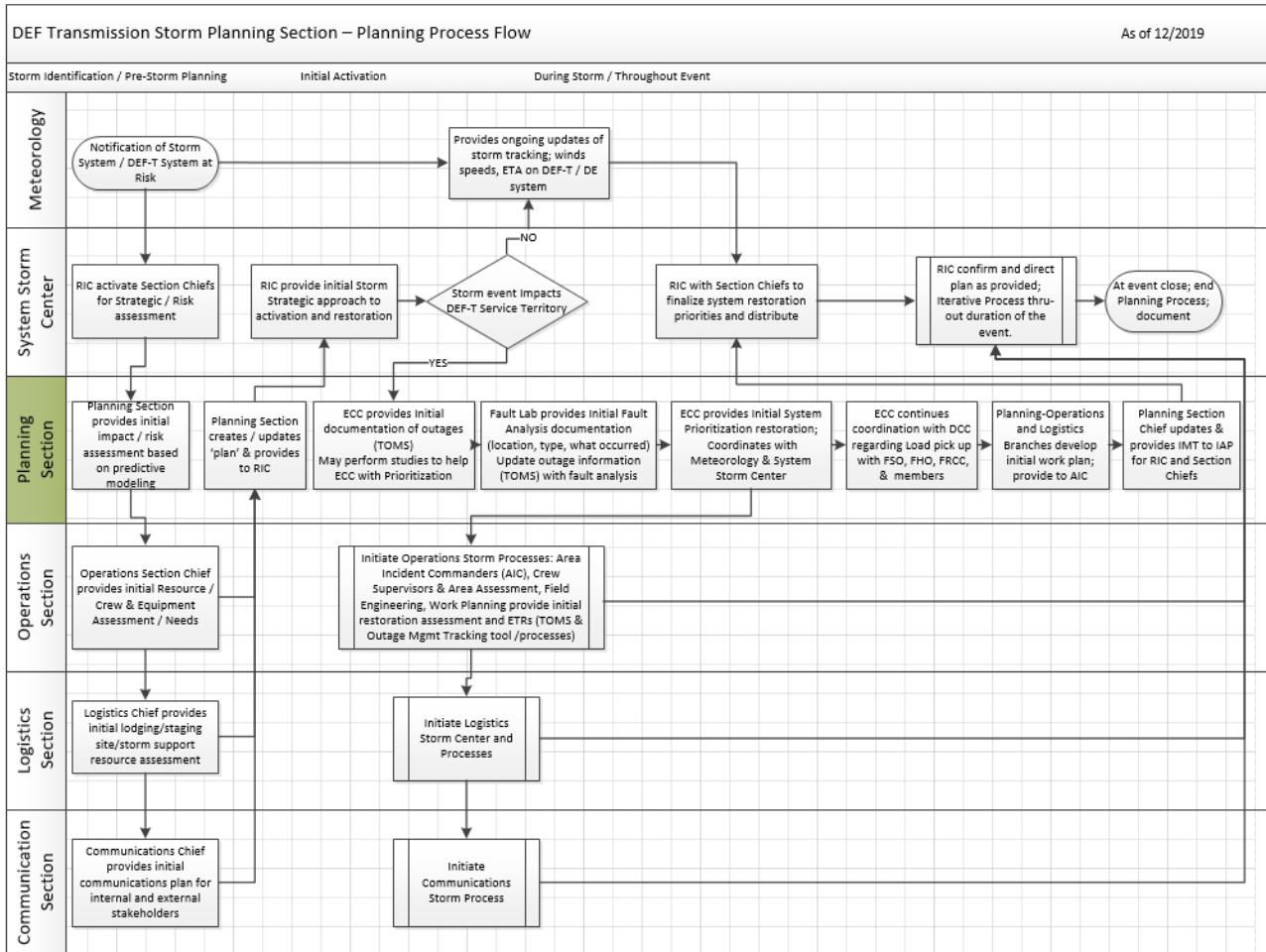
- The IMT Report form and function (template) can be found in the Reporting folders on the DEF-Transmission System Storm Share Point Site: [REPORTING](#)
- The IAP form and function (template) can be found in the System Storm Center current storm documentation [Storm – IAP site/folders](#).

All reporting forms, templates, links will be provided by current Planning Section protocols and methods; these administrative means will be updated based on and as per current approved technology and cybersecurity direct. For example: MS SharePoint and MS Teams files and folders may be used as directed and interchangeably.

## 4.2 Planning Process

The planning process diagram provides a road map for inputs and outputs expected from this team. The IAP and the IMT reports are documents produced by this section; however, that is not all the Transmission Planning Section is responsible to coordinate. See the process flow diagram below.

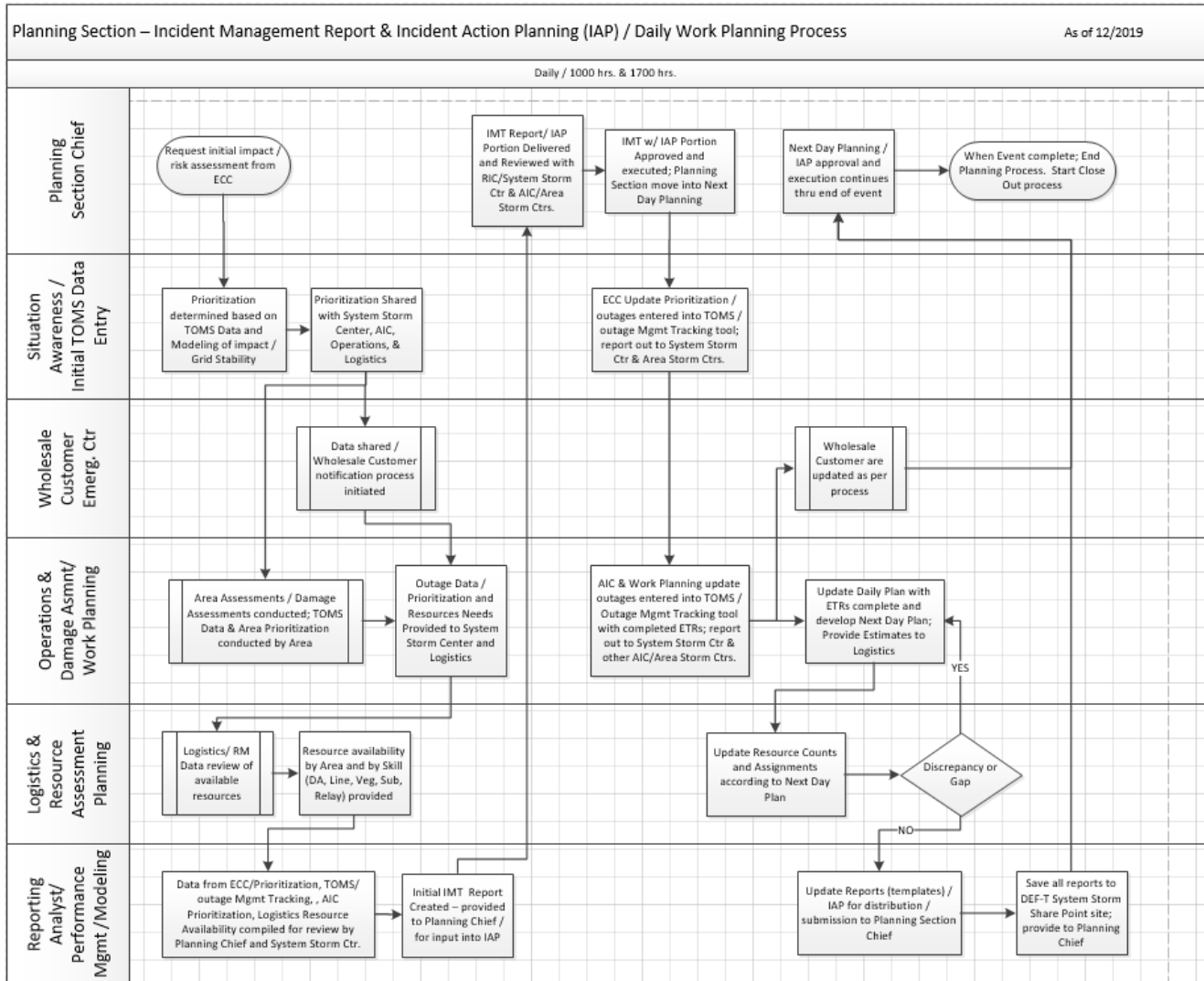
### T-FL Storm Planning Section Process



(Diagram – Planning Section Process – High Level / Cross Functional)

The primary responsibility of the Planning Section (as illustrated above) is to provide an initial priority of restoration of the DEF-Transmission electrical system to the System Storm Center; this priority is to uphold the integrity of the overall system and provide effective means to completely restore all customers safely. Once a resource assessment is done by the RIC / System Storm Center, Operations Section AIC & Crew Management, and Resource Management/ Logistics leads, the Planning Section Chief is responsible for developing, maintaining and issuing the Incident Management Team (IMT) Report which feeds to the DEF Incident Action Plan (IAP). Through Planning IAP Development Team the IAP is then distributed to DE Transmission AND Customer Delivery RIC.

The Planning Section Team drives the development of an initial plan, that is updated and refreshed daily based on status of restoration, stability of system, resource availability & safety, schedule adherence, risk assessment, etc. The following diagram illustrates the daily planning process and the criteria for cross functional communications and reporting.



(Diagram – Planning Section – IAP/Work Planning Process – Cross Functional)

## 5.0 System Impact Assessment and Planning

When a major storm / event threatens the integrity of the transmission grid, the Planning Section activates and begins situational awareness and storm monitoring with Meteorology and RIC, ECC & DCC and System Storm Center leadership. Key factors in storm assessment are the predicted storm path and path uncertainty, forward speed and uncertainty, wind speed predictions, rainfall and coastal storm surge expectations. If necessary, system posture and configuration changes will be made prior to storm impact. Depending on the severity of the storm, these preparations may include curtailing maintenance and construction activities or shutting down generation that is expected to be in the path of the storm.

There are three discrete impact scenarios that are driven by the predicted geographical storm path:

### 5.1 Peninsular Florida Impact outside of the DEF service area

In this scenario the primary impact of the storm is expected to be on neighboring utility systems. This may impact the ability of those utilities to serve load and may affect generation and tie-lines. In this scenario DEF's role will be to coordinate and support restoration activities with neighboring utilities and the FRCC Reliability Coordinator (RC).

### 5.2 Storm Impact directly to the DEF service area

In this scenario the storm is expected to directly impact the DEF system and customer load. This may impact the DEF's ability to serve load and may also affect generation and tie-lines. In this scenario DEF's role will be to coordinate and support restoration activities within the DEF system as well as with affected neighboring utilities and the FRCC Reliability Coordinator (RC).

### 5.3 Storm Impact to Pinellas County/St. Petersburg

In this scenario the storm is expected to directly impact St. Petersburg and potentially affect the continuity of operations at the primary DEF ECC location. This may require the activation of the Backup Control Center (BCC) at Wildwood and the transfer of control of the system from the primary control center to the BCC for the duration of the storm.

In addition, there are 3 predictive regional models under evaluation for potential surge inundation or rainfall flooding. The DEF substations and/or control enclosures (finished floor) elevations are compared utilizing the FEMA 100-Year Floodplain elevations, and where there is a delta the substation is included in the list below. The substations listed below will be analyzed for the probability of exceedance once a storm impact to Florida is projected 3-5 days out. This detail will assist in determining the substations that may require additional flood mitigating measures such as sandbags.

### 5.4 Storm Impact to Northern Region

The following substations meet the elevation and FEMA 100-Year Floodplain criteria:

Substation Name	County	Latitude	Longitude	Substation Elevation	CEE Finished Floor Elevation	FEMA Flood Elevation
APALACHICOLA	Franklin	29.7191	-84.9991			
BEACON HILL	Gulf	29.9321	-85.388			
CARRABELLE BEACH	Franklin	29.859	-84.6908			
CRYSTAL RIVER NORTH	Citrus	28.9135	-82.5836	8.5' NAVD88		8' NAVD88
CRYSTAL RIVER PLANT	Citrus	28.9606	-82.7013	8.0' NAVD88		16' NAVD88
EASTPOINT	Franklin	29.745	-84.8681			
GUMBAY	Liberty	30.0483	-84.6081			
HOMOSASSA	Citrus	28.807	-82.5801	7.0' NAVD88		
INDIAN PASS	Franklin	29.6917	-85.2545			
INDIAN PASS TAP	Franklin	29.6923	-85.2542			
Inglis	Levy	29.0317	-82.678	8.3' NAVD 88	12' NAVD88	13' NAVD88
OCCIDENTAL #2	Hamilton	30.4397	-82.7822			
OCCIDENTAL #3	Hamilton	30.4414	-82.7878			
ST GEORGE ISLAND	Franklin	29.6656	-84.8586			
St Marks East	Wakulla	30.1894	-84.2077	14.5' NAVD 88	15.33' NAVD88	16' NAVD88
St Marks West	Wakulla	30.1892	-84.2107	14.0' NAVD 88	14.83' NAVD88	16' NAVD88
TROPIC TERRACE	Citrus	28.8642	-82.5764	12.14' NAVD 88		
WILCOX	Gilchrist	29.6128	-82.9522	23.33' NAVD 88		

### 5.5 Storm Impact to Central Region

The following substations meet the elevation and FEMA 100-Year Floodplain criteria:

Substation Name	County	Latitude	Longitude	Substation Elevation	CEE Finished Floor Elevation	FEMA Flood Elevation
HAINES CITY EAST	Polk	28.1195	-81.5515	77.6' NAVD88	78.43' NAVD88	
Lake Aloma	Orange	28.603	-81.3188	84.5' MSL		
Lockhart	Orange	28.6237	-81.455	71' NAVD 88	74' NAVD88	75.1' NAVD88
Midway	Osceola	28.1085	-81.475	61.5' NAVD 88	61.83' NAVD88	65' NAVD88

### 5.6 Storm Impact to Coastal Region

The following substations meet the elevation and FEMA 100-Year Floodplain criteria:

Substation Name	County	Latitude	Longitude	Substation Elevation	CEE Finished Floor Elevation	FEMA Flood Elevation
ANCLOTE PLANT	Pinellas	28.1845	-82.7848	11.00' NAVD88	11.33' NAVD88	
BAYBORO	Pinellas	27.7582	-82.6376	3.2' NAVD88		
BAYWAY	Pinellas	27.7093	-82.715	5.9' NAVD 88		12' NAVD 88
CROSS BAYOU	Pinellas	27.8641	-82.7401	7.57' NAVD 88	8.9' NAVD88	10' NAVD88
DISSTON	Pinellas	27.8299	-82.7034	18.13' NAVD88		18' NAVD88
ELFERS	Pasco	28.2068	-82.7228	15.66' NAVD88		
GATEWAY	Pinellas	27.8821	-82.6795	9.14' NAVD88	10.91' NAVD88	9' NAVD88
HIGGINS PLANT	Pinellas	28.0036	-82.6617	8.5' NAVD88		9' NAVD88
Lake Tarpon	Pinellas	28.0585	-82.655	11.5' NAVD 88		
NORTHEAST	Pinellas	27.8565	-82.6592	8.75' NAVD88	9.72' & 9.8' NAVD88	9' NAVD88
PILSBURY	Pinellas	27.8205	-82.6334	6.0' NAVD88	6.8' NAVD88	9' NAVD88
PORT RICHEY WEST	Pasco	28.2744	-82.7158	9.65' NAVD88	10.41' NAVD88	11' NAVD88
SAFETY HARBOR	Pinellas	28.0005	-82.697	17.65' NAVD88		
STARKEY ROAD	Pinellas	27.8411	-82.7586	11.13' NAVD88		
Tarpon Springs	Pasco	28.1486	-82.7394	9.5' NAVD 88		
THIRTY SECOND STREET	Pinellas	27.8328	-82.6769	15.2' NAVD 88		
TRI CITY	Pinellas	27.9217	-82.7236	17.14' NAVD 88		
ULMERTON	Pinellas	27.8914	-82.7068	13.3' NAVD 88		
ULMERTON WEST	Pinellas	27.8933	-82.7796	8.13' NAVD 88	8.63' NAVD88	10' NAVD88
ZEPHYRHILLS	Pasco	28.2294	-82.1903	85.0' NAVD88	85.36' NAVD88	

Transmission System Storm Hardening is an on-going preventative maintenance program that addresses aged assets and systematically upgrades to increase the overall strength of the transmission grid. When a major weather system threatens the DEF-T system, the state of the storm hardening program, storm protection plan, system maintenance, and new construction are considered along with the storm track and strength.

## 6.0 Damage Assessment and Resource Planning

During annual readiness and prior to Tropical Storm Season is when hypothetical and predictive modeling occurs as part of the system planning and asset reliability work; it's an expected, on-going and good business practice. However, planning for an event to impact the transmission system, anticipating damage and the resources required to restore the system is as much science, as it is art. Knowing the strength and vulnerabilities of the system AND the strength and capabilities of the resources, helps to initially identify the resource volume (level of effort) and estimated restoration time that will be required to restore the system. This is the fundamental objective of two Planning branches: Damage Assessment & Operations Work Planning AND Logistics & Resource Assessment Planning.

As part of the Planning Section these SMEs provide initial estimates based on the 'science' and then adjust based on experience and the 'art'. The estimated restoration time and resource assessment are initially based upon *predicted* impact pre-landfall. It is a high level, 'level-of-effort' discussion for identifying volume and initial assessment needs to estimate volume & skill of resources needed so that the RIC and System Storm leadership can define restoration approach / strategy. One part of this assessment is to determine if DEF-T can meet restoration expectations with on-system / native resources or if non-native / off-system resources from other DE jurisdictions and Mutual Assistance will be needed. Transmission does everything possible to utilize resources familiar with transmission work practices and safety expectations; however, the size and impact of the event may require getting non-native / foreign resources to support restoration efforts.

Resource Management Lead from the Logistics Section and/or the Logistics Chief are the assigned resource management planning subject matter experts to participate in this planning action. Additionally, Asset Management, Field Engineering and Work Planning experts are part of the team. At the onset of the Major Storm Event, representatives from ECC/Grid Restoration, Wholesale Storm Center, Resource Management, Work Management, and Damage Assessment will jointly participate in the ongoing assessment process. The assessment is updated and refined after landfall based on the number of outages and physical assessment of impacted facilities. A daily (twice daily) review and update occurs via the IMT Report as input to the DEF IAP and establishing, validating, adjusting estimated restoration times. Role/Job descriptions and details of each of these SME's can be reviewed in Sections 11.0 and 12.0 of this document.

## 7.0 Restoration / System Priorities

It is a primary function for the Planning Section to provide restoration priorities to guide the Transmission System Storm Center in directing the Operations and Logistics Sections in activation and deployment decisions.

The following guidelines should be utilized by the Storm Process Owners (Regional Incident Commander, T-System Storm Center, Operations, Planning, Logistics, Finance, and Communications Section leaders) in coordination with Transmission Wholesale Account Manager, Distribution Large Account Managers, and External Relations to determine restoration priorities. With input from the ECC, the Transmission System Storm Center (TSSC) determines the overall priority restoration. In addition, the TSSC authorizes the assignment of transmission resources, equipment, and materials for system restoration activities among multiple maintenance areas.

- **Priority 1** – Restore off-site power to nuclear sites, restore power to ECC (fed from Kenneth City Substation), restore power to the Backup ECC (fed from Wildwood Substation), restore power to electric powered natural gas pipeline compressor stations, restore start-up power to all available generation units, restore Eastern Interconnection tie lines. Identify and restore power wherever public may be endangered; prioritization of restoration considers "public endangerment" as well as grid stability.

- **Priority 2** – Restore critical customer load in coordination with the DCC, T-Lines critical to BES reliability, equipment needed to maintain system voltage within FRCC voltage limits.
- **Priority 3** – All other T-lines, switches connecting to all other feeders, D-lines, service drops and equipment, providing black-start services to neighboring utilities, energizing tie-lines with neighboring utilities.

Paralleling these priorities are requirements for restoring communications links that facilitate the restoration of electric service. The Energy Delivery Group will assist IT & Telecom by giving reasonable priority to electric facilities serving two-way radio sites, PBX sites, fiber optics and microwave sites, etc. In addition, the Delivery Operations Group will make resources available on a priority basis to support restoring fiber optic cables which carry communications traffic for the Company. The Transmission System Storm Center is responsible for communicating these restoration priorities to Logistics and Operations (AIC / Area Storm Centers).

## **8.0 Operational Restoration Performance / Goals / Expectations**

As noted previously, 'restoration performance and goals' are based on securing and maintaining the integrity of the grid and BES reliability in a prioritized manner in accordance with DE and utility safe/secure work practices.

### **8.1 Operational Performance Guiding Principles**

The general approach to restoration scope assessment will be based on the initial assessment of the overall geographical scope and severity of the damage to the system. Initial restoration scope and time frame assessments will be based on collaboration between the ECC and DCC System Storm Center, Customer Delivery-Zone & Transmission-Area storm centers. These considerations define the overall event estimated restoration time, (i.e., a 2-day, 3-day event or a 5-day event) and then all strategy and plans work toward that goal. This is called the Initial Event ETR. See [DEE-RSTR-Set Est ETR Policy\\_Proc00009](#)

### **8.2 Operational Performance Goals & Timeline**

Restoration times for transmission system outages will be based on damage assessments and materials, staging and labor estimates for each outaged facility in combination with an overall plan for the priority and staging of the restoration plan for all outaged facilities. As goals and objectives are defined and related to estimated restoration, they are included within the IAP and taken from operational calls / event briefings / general reporting to System Storm Center/RIC within the IMT Report.

### **8.3 Operational Performance Assessment**

The operational performance assessment will be performed and updated daily as restoration efforts progress throughout the duration of the overall restoration process, followed by an overall post-restoration operational performance assessment. As each AIC / Area Storm Center reports status of ETRs and damage assessments, the overall performance of restoration efforts will be documented through daily reporting / briefings. ETRs will be tracked and verified within the Outage Management Tracking Tool and reported within the IMT Report updates.

## **9.0 System Assessments and ETRs**

The transmission system is required to maintain stability as feasible during any emergency event. The grid relies on each utility maintaining the stability of their transmission assets. The system is assessed continuously. When a tracked weather system becomes a threat, the system is assessed for those vulnerable areas due to construction projects or on-going maintenance, like storm hardening of structures. If the system is impacted by the event, the initial restoration priorities are set based on damage / direct impact. The outage management system is uploaded with initial impacts / outages. Outages are identified; however, estimates to restore (ETRs) are not available until the local area completes assessments.

The transmission service and maintenance areas are assessed; each of the three areas (North-NO, Central-CE, Costal-CO) in DEF are individually and systematically assessed by local crews. The local maintenance resources are most familiar with the area system; the area confirms the priorities and sequence in which the area can be restored. From this area assessment estimated restoration times (ETRs) are assigned to each outage/work assignment. This data gets updated in the Outage Tracking tool and TOMS, then Planning / ECC and System Storm Center reviews and reassesses next set of System priorities. This process repeats until the system is methodically and effectively restored. (The process for Area Assessment and Outage Tracking is defined with roles & responsibilities in TSSOP – GDLP-EMG-TRM-00027-Operations Section.)

As a provider to other utilities, DEF Transmission Wholesale Customers are included in this assessment and prioritization process. DEF-T provides general assessment information to these utilities, see the Wholesale Customer Notification Process within TSSOP – [GDLP-EMG-TRM-00026 - Storm Annual Planning, Restoration Strategy & Direction](#)

## **10.0 Engineering Records & Data Integrity**

Maintaining the engineering records and data integrity of our transmission information systems is important for day to day operational process excellence. Construction changes that occur during restoration efforts that are not properly documented can negatively impact these information systems and the future system operational excellence. Every effort is to be made during restoration planning to set expectations and guiding principles for the restoration efforts. A guiding principle Transmission follows is to restore our electric grid system back to original status (prior to the event).

Functioning within operational excellence and safe restoration protocols, these changes/repairs are more economically and efficiently documented at the time the construction change occurred. In isolated cases, decisions may be made to manually document in order to support restoration efforts. In these cases, the need for a re-verification or final sweep of an area after the restoration effort has been completed will be performed and led by the Damage Assessment team within the Operations Section (See GDLP-EMG-TRM-00027-Operations Section). A confirmation of correction and update of all data sources (GIS, Cascade/Maximo, Aspen, 3-lines, 1-lines, P&P, general layouts, any and all official engineering records) back through the Planning Section is required. At the point during a major event, where the determination is made by the Person in Charge (POC) at the Area Storm Center (AIC) or at System level as to whether the operations will revert to paper during restoration must be documented within IMT Report / IAP and storm restoration records.

Post-event ‘as-built’ data collection and accurate depiction of engineering records of field / restoration effort/changes is necessary to assure the post-event system meets minimum standards. Each engineering and construction unit should utilize ‘as-built’ procedures to assure integrity and standards are met. (Underdevelopment – identify and incorporate links to applicable As-Built Standards/Procedures.)

## **11.0 Energy Control Center**

The Energy Control Center (ECC) is fundamentally responsible for maintaining reliability on the Bulk Electric System (BES), monitoring the status of the transmission system, managing and reporting outages, and issuing switching orders for system level transmission lines, equipment and facility clearances during both blue-sky and storm situations.

The ECC conducts storm status calls with FSO (Fuels and System Optimization) & FHO (Fossil Hydro Operations) to assess forecast, plant shutdown requirements, generation status and short-term and immediate fuel availability. The ECC coordinates on a regional level with all the Florida Reliability Coordinating Council (FRCC) entities to share and coordinate storm preparedness.

The ECC will enter all Transmission operations / outages into the Transmission Outage Management System (TOMS & iTOA), update the Master Outage Tracking tool, provide to RIC and contact AICs / the appropriate storm center(s), and notify the FRCC RC (Florida Reliability Coordinating Council – Reliability Coordinator). ECC will continue to update the FRCC RC on outages and system conditions periodically.

Prior to receiving field damage assessments, ECC will determine restoration priorities based upon reliability and restoration needs and provide them to the Planning Section Chief. The RIC, ECC, and Planning Section Chief will establish *with* Customer Delivery RIC & Planning Section an 'Initial EVENT ETR' (Estimated Time to Restore). That ETR will provide the number of days, in general, that Duke Energy believes it will take to restore customers' power. It is vital that this estimate is developed with Transmission and Customer Delivery 'at the table' so that accuracy and efficiencies can be applied to the restoration work plans; communicating the best available information to the public/customers and regulators. See [DEE-RSTR-Set Est ETR Policy Proc00009](#)

When Damage Assessments begin coming in, and ETRs are obtained from the field, the Planning Section Chief will coordinate with ECC to reevaluate and update the IAP. Changes to the IAP will be shared with the TSSC and with Operations. As work orders get assigned to the restoration efforts of each outage, the Area Storm Centers / Operations will continue to update TOMS with ETRs.

To summarize, the primary function of the ECC during a major storm event is to stabilize the system, continue to service customer load to the extent possible, and restore facilities and customer load that were affected and interrupted by the passage of the storm. The ECC is also responsible for coordination with the FRCC Reliability Coordinator (RC) and neighboring interconnected Transmission Operators (TOPs) to support safe and effective system restoration. ECC restoration priorities ensure that the reliability of the Bulk Electric System (BES) is maintained during restoration and priority is placed on restoring connection to the Eastern Interconnection.

## **11.1 Energy Control Center / Grid Restoration-System Operations General Manager – Role & Responsibility**

### **Job Function:**

The ECC-System Operations General Manager is responsible for leading and coordinating all ECC organization activities during a major storm event, including ultimate decision-making authority for actions taken, ECC staffing and resource deployment, and activation of the Backup Control Center in Wildwood.

The ECC General Manager will initiate and host storm conference calls with the Fossil Hydro Organization (FHO), Fuels & System Optimization (FSO) and key Florida stakeholders (State Regulatory Affairs, Corporate Communication, etc.), and will participate in storm calls hosted by TSSC (Transmission System Storm Center), the FRCC Reliability Coordinator and the DEF Storm Organization. TSSC calls will focus on the operational status of the bulk power system, logistics and staging of repair crews, assessment and prioritization of storm damage, and coordination of restoration activities. ECC calls with FHO and FSO will focus on storm related generation issues, fuel inventory levels, generation profiles and plant shutdowns and startups.

### **Job Description:**

The ECC/Grid Restoration – System Operations General Manager is responsible for ensuring:

- That the organizational structure and processes are current. Specifically, assuring and directing those processes that pertain to identifying, prioritizing, and activating storm roles to manage the ECC critical role and functionality.
- Annual readiness activities for the ECC/Grid Restoration Branch are completed by branch/team.
- ECC/Grid Restoration Branch personnel are trained annually; that role descriptions are up to date and checklists for each role are accurate and available for use.
- All ECC/Grid Restoration personnel are prepared to respond to direction to activate during a major event.

- Provides input to the Incident Management Team Report and the DEF Incident Action Plan for the event, specifically the data and information required to provide initial prioritization to the TSSC. Additionally, provide ongoing updates to the IAP/Restoration Priorities that assure grid stability.
- Assures data management / documentation of outages and event impact to the transmission system occurs as expected / required by DEF, and all other appropriate regulators.
- Initiates all necessary Storm Event calls with external interface points
- Participates on all TSSC Calls and DEF-T Planning Calls as required/scheduled.

**Key Interface Points:**

- DEF-T Regional Incident Commander
- Area Incident Commanders (AIC) – Clearance Holder
- Planning Section Chief
  - Situation Awareness / TOMS Data Entry
  - Wholesale Customer Center
- DEF-T System Storm Liaison to DEF-CD RIC
- DEF-CD Regional Incident Commander
- Distribution Control Center

**Checklist of Actions:**

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [ECC/Grid Restoration-System Operations General Manager](#) tab

**11.2 Clearance Holder – Coordinator / Switching & Tagging Authority – Role & Responsibility****Job Function:**

The Area Incident Commander is the Clearance Holder for all clearances / switching & tagging in that maintenance area for the event. The ECC will communicate directly to the AIC and provide summary to the TSSC / RIC based on system priorities and restoration needs.

SEE GDLP-EMG-TRM-00027-Operations – sections 4.0 – AIC Role & Responsibilities & 5.0 - Crew Mgmt – Area Clearance Holder/Switching & Tagging process referenced.

**12.0 Planning Section Resources – Storm Roles and Responsibilities**

As defined in previous portions of this document, the Planning Section team is responsible for planning the approach / actions for the storm event; for putting together the IAP and IMT reports throughout the event and to assure the planning documents are accurate and true to the event and restoration story – these are the documents of record for every event that impacts the Florida system. The following role descriptions provide clarity around each role, responsibilities, and expectations during pre-event, the event, post event functions and activities for the Planning Section.

**12.1 Reporting & Performance Mgmt Branch Lead - Role & Responsibilities****Job Function:**

This Lead role is the RIC / TSSC Point of Contact (PoC); the role is to pull data together across the DEF-Transmission System Storm Organization (Operations, Logistics, Planning, Finance & Communications) to provide a consistent means of reporting to:

1. Regional Incident Command / Transmission Executives / Incident Support Team
2. Incident Management Team & DEF-Transmission System Storm Organization (Regional / Internal)
3. Public Utilities / Corporate Communications / External Stakeholders

The Reporting Analyst / PoC portion of this role / team is a critical position, especially in the pre-storm planning; event / incident planning, and storm deployment/re-deployment of restoration teams. It is the DEF Transmission storm organizations' Point of Contact for anyone calling into Transmission System Storm Command. This role reports to the NP Storm Center for Transmission Storm Direction.

It is responsible for:

- Utilizing and updating reporting templates;
- Guarding the accuracy & consistency of the data to be shared;
- Modeling potential storm /event impacts;
- Assessing and confirming with ECC/Planning initial priorities for restoration of system and maintaining grid stability

This role is the creator of the Incident Management Team (IMT) Report: they gather and compile data necessary for clear and effective reporting of the condition and estimated time to restore (ETR); the IMT Report summary information is submitted to IC/Planning-IAP development team to assure inclusion of critical Transmission system reports used in the creation of the DEF IAP (Incident Action Plan). This role reviews the Outage Mgmt Tracking data and TOMS data for inclusion in reports and decision making for TSSC; reports outages on lines, substations, provides validation of ETRs. The PoC role is an interfacing role within Transmission System Storm Center Leadership (Operations, Planning, Logistics, Finance & Communications) to gain alignment and plan for the event restoration priorities.

#### **Job Description:**

The Planning Section Reporting & Performance Branch / PoC is responsible for:

- Reporting Analyst / Data Mgmt / Event Modeling team member
- Gathering and compiling potential and actual event impact to T-FL system, using modeling and actual data
- Compiles and documents IMT Report for inclusion in the DEF - IAP assuring a synced restoration daily & next day plan
- Supports the 'reviews' of all documentation in meeting reports, IMT reports, IAP reports,
- Participates on Transmission Operations System Storm calls.
- Provides/Confirms Transmission system impact and restoration activity data to Storm Leadership by reporting:
  - Lines out / down
  - Substation impacts
  - Status / Production / ETR of all Transmission restoration activities
- Must be familiar with and skilled in utilizing, reading, reporting from the:
  - T-FL System Map board
  - WebFG
  - System 1-line
  - Modeling tools (current DEF-T / System)
  - TOMs data management tool so that reports are regularly run and provided to Storm Leadership
  - Outage Management Tracking Tool (aka Outage Tracking spreadsheet)
  - Finance Reports
  - Logistics Reports
    - Resource on Demand or other Resource Mgmt data
    - Lodging reports
    - Site Mgmt reports
    - Fueling, Materials, other critical crew logistics reports
- Answers the telephone within the DEF-T System Storm Center (TSSC); direct/prioritizes call request, need
- Based on modeling data and impact data, provides reports, insight, pro-active view of possible emergent / emergency issues and situations

**Key Interface Points:**

- DEF-T Regional Incident Commander (RIC)
- DEF-T System Storm Liaison to DEF-CD RIC
- Area Incident Commanders (AIC)
- Area Assessment, Field Engineering & Work Planning Director
- Planning Section Chief
  - Wholesale Customer Emergency Center
  - Logistics & Resource Assessment Planning
  - Operations & Damage Assessment/Work Planning
- Finance Section Chief
  - Reporting Branch Lead
- Logistics Chief
  - Logistics Reporting Analyst
- Communications – External / Public Information Liaison
- Transmission Emergency Prep Rep / TSSOP Program Mgr.

**Checklist of Actions:**

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [Planning-Reporting Analyst/POC](#) tab (under development)

**12.1.1 Reporting Analysts – Role & Responsibilities**

This Job / Role Description is under development – Also see Finance Section – GDLP-EMG-TRM-00031 Reporting Branch – these analysts may cross over sections to support continuity/consistency in reporting.

**12.1.2 Finance Cost Analyst – Role & Responsibilities**

This Job / Role Description is under development – See Finance Section – GDLP-EMG-TRM-00031

**12.2 Situation Awareness (Initial TOMS Data Entry) Leader – Role & Responsibilities**

**Job Function:**

This Situation Awareness Leader is to assure the impact to the transmission system gets captured accurately and documented within TOMS system for use by the Area Incident Command centers and the Operations Damage Assessment, Area Assessment / Field Engineering / Work Planning Branches. The initial capturing of Outages and reporting the Situation is crucial, if not pivotal to safe, efficient, and effective restoration. The following roles report to the Situation Awareness leader during an event: Data Support & Oversight and System Planning & Evaluation; therefore, it is crucial that this role have blue-sky experience as well as Major Storm Event (Red-sky) experience and skill with viewing and assessing the transmission system, dispatching of the system, system configuration in order to best direct the planning team. See Training Requirements.

**Job Description:**

Under development

**Key Interfaces:**

- Planning Section Chief
- ECC / Grid Restoration / Systems Operations General Manager
- Meteorology
- Operations – Area Assessment / Field Eng. / Work Planning Branch Director
- Data Support & Oversight
- System Planner & Evaluation Team
- Reporting & Performance Branch Lead / TSSC POC

**Training Requirements:**

- System Planning Job (Blue-Sky) Requirements
- ECC Dispatch (Blue-sky) Processes / Requirements
- TOMS Training / Refresher
  - COT102-Plantview Course
- iTOA Training / Refreshers
- Storm-Outage Management Tracker Training on tool and process

**Checklist of Actions:**

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [Situation Awareness Leader](#) tab (Under development)

**12.2.1 Data Support and Oversight – Role & Responsibilities**

**Job Function:**

This is a lead and oversight / directive storm role; it provides additional analytical and reporting skills to the Situation Awareness Team through Asset Management SME. The Data Support & Oversight role will further support the ECC control room in identifying storm related outages, assessing system conditions and entering outage data from iTOA and Transmission Outage Management System (TOMS). This information is crucial to developing the ECC restoration priorities that are later used in development and execution of swift effective restoration and the development/implementation of the IMT / IAP.

**Job Description:**

The Data Support & Oversight role is responsible for supporting and training all System Planners / Evaluators and ensuring:

- All outage data is efficiently and accurately entered into TOMS
- Prior to storm season, that all annual readiness activities for the System Planners role are completed
- Creates and delivers Outage Management Tracker process and tool training
- Assures current training modules on current tools available to the team
- Stays current / completes TOMS training and refresher information are available in the TOMS computer-based training Plantview course COT102
- Participates in all storm calls / Briefings as invited
- Back up to Operations: Area Assessment team lead if needed
- Participates in all Storm Drill activities that allows testing of TOMS system and promotes familiarity with the tool
- Assures knowledge and ability to respond to storm role each year during resource assessment.
- Provides input to the Incident Action Plan for the event, specifically the data and information required to provide initial prioritization to the TSSC

**Key Interface Points:**

- Situation Awareness Leader
  - System Planners & Evaluators
- Wholesale Customer Emergency Center
- Area Incident Command (AIC)
- Area Assessment / Field Engineering / Work Planning Director
  - TOA/Work Planners

**Training Requirements:**

- System Planning Job (Blue-Sky) Requirements
- Awareness / Asset Management processes and procedures
- TOMS Training / Refresher
  - COT102-Plantview Course
- iTOA Training / Refreshers
- Storm-Outage Management Tracker Training on tool and process

**12.2.2 System Planner & Evaluation (TOA & TOMS) - Role & Responsibilities**

**Job Function:**

Engineering support staff in Operations Engineering and Transmission System Planning will support the ECC control room in identifying storm related outages, assessing system conditions and entering outage data into the Transmission Outage Management System (TOMS). This information is crucial to developing the ECC restoration priorities that are later used in development and execution of the DEF IAP.

**Job Description:**

The System Planners & Evaluation role is responsible for ensuring:

- All outage data is efficiently and accurately entered into TOMS
- Prior to storm season, that all annual readiness activities for the System Planners role are completed
- Participates and completes Outage Management Tracker process and tool training
- Participates and completes TOMS training and refresher information are available in the TOMS computer-based training Plantview course COT102
- Participates in all Storm Drill activities that allows testing of TOMS system and promotes familiarity with the tool
- Assures knowledge and ability to respond to storm role each year during resource assessment.
- Provides input to the Incident Action Plan for the event, specifically the data and information required to provide initial prioritization to the TSSC

**Key Interface Points:**

- Situation Awareness Leader
- Wholesale Customer Emergency Center
- Area Incident Command (AIC)
- Area Assessment / Field Engineering / Work Planning Director
  - TOA/Work Planners

**Training Requirements:**

- System Planning Job (Blue-Sky) Requirements
- TOMS Training / Refresher
  - COT102-Plantview Course
- iTOA Training / Refreshers
- Storm-Outage Management Tracker Training on tool and process

**Checklist of Actions:**

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [System Planner & Evaluation](#) tab (Under development)

## 12.3 Wholesale Customer Emergency Center - Roles & Responsibilities

### Job Function:

The Wholesale Customer Emergency Center (WCEC) is a liaison between Duke Energy and Florida's Wholesale Customers during a storm/emergency event. This role reports to the RIC / Transmission System Storm Center (TSSC) for direction. The role is responsible for maintaining clear and direct communication to and from DEF's Wholesale Customers regarding DEF's strategy and approach to restoration, as it impacts wholesale / transmission interconnections. Additionally, this role discusses and maintains awareness of the wholesale customers restoration efforts and provided support as necessary.

### Job Description:

The T-FL Wholesale Customer Emergency Center is responsible for:

- Hosting and following the DEF Wholesale Customer Notification and Communication Process
- Manning and responding to the Transmission System Storm Center-Wholesale Customer Emergency Center's dedicated telephone line and email in-box.
- Maintaining communication with the wholesale customers as storm / event dictates.
- Notifies the wholesale customers when the Duke Energy Transmission; System Storm Center and Area Storm Centers are activated.
- Participating in DEF-T System Operations Storm calls; and reporting appropriate impacts and findings from Wholesale Customers
- Documents necessary actions and/or provides input to the IMT Report, as deemed appropriate.
- Participates on Transmission Operations System Storm calls.
- Updates and maintains the Wholesale Utility Partner contact list; assures accuracy and provides hard copies to post within T-FL System Storm Center.
- It is anticipated that this role typically does not need Logistical support (rooms/lodging, fuel, transportation, etc.), therefore, if TSSC location changes or other redirection occurs, Wholesale Customer Emergency Center should confirm inclusion on TSSC roster count for relocation, logistical support.

### Key Interface Points:

- DEF-T Regional Incident Commander (RIC)
- ECC / Grid Restoration – System Operations General Manager
- DEF-T System Storm Liaison to DEF-CD RIC
- Area Incident Commanders (AIC)
- Area Assessment, Field Engineering & Work Planning Director
- Planning Section Chief
  - Logistics & Resource Assessment Planning
  - Operations & Damage Assessment/Work Planning
- Logistics Chief
  - Logistics Reporting Analyst
- Communications – External / Public Information Liaison
- Transmission Emergency Prep Rep / TSSOP Program Mgr.

### Checklist of Actions:

This checklist timeline is designed for a major hurricane entering DEF-T service area. A faster occurring emergency event could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [T-FL Wholesale Customer Emergency Ctr](#) tab (Under development)

## 12.4 Logistics & Resource Assessment Planning – Roles and Responsibilities

### Job Function:

The expectation of this role is to provide logistics intelligence and data around the available resource pool at the time of an event. This SME / leader should have knowledge and accessibility to data regarding volume of restoration resources on the system and off-system (Native & Non-Native resources); availability of logistical support (housing/lodging, meals, base camp locations, fuel, materials, equipment, etc.). This role must understand the processes for acquiring resources within FL, through Mutual Assistance protocols, and across DE Jurisdictions. This role is to confirm initial 'stick counts' from Operations, and to provide insight around capabilities to support timing of arrival of those resources.

### Job Description:

The Logistics & Resource Assessment Planning role is responsible for:

- Meeting with Planning Section Chief and other Branch Directors to develop the initial resource plan and mobilization plan for the event
- Providing the logistical intelligence and data to confirm capabilities of providing resources logistical support
- Provide a questioning attitude when discussing timing and volume of assets requested for event
- Provide both encouragement / problems solving and 'Push-back'; communicate clearly regarding unavailable logistical support; provide planning leadership with accurate situation assessment (i.e. cannot have alt. housing availability / set up pre-landfall – contractually vendors not able to safely set up and secure prior to landfall)
- Provide initial cost data for RIC / IMT / Planning for better decision making (i.e. base camp for 250 w/o beds = \$750,000 per day or base camp for 250 w/beds = \$2.5M per day)
- Review / approve all logistical documentation prior to IMT / IAP submittal
- Participate in on-going planning discussions as needed
- Provide close out / release planning and documentation at end of event

### Key Interface Points:

- Planning Section Chief
  - Situation Awareness Branch Director
  - Reporting & Performance Mgmt Branch Director
  - Operations & Damage Assessment/Work Planning
  - Wholesale Customer Emergency Center/Branch Director
- Logistics Chief
- Regional Incident Commander
- Area Incident Command (AIC)
- Operations-Area System Assessment /Engineering / Work Assignment Branch Director
- Communications – External / Public Information Liaison
- Transmission Emergency Prep Rep / TSSOP Program Mgr.

### Checklist of Actions:

This timeline is designed for a major hurricane entering our area. A near miss could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [Logistics & Resource Planning](#) tab (Under development)

**Reference:** TSSOP Logistics Section – GDLP-EMG-TRM-00029 – Lodging, Site Management, Resource Management – resource support.

## **12.5 Operations & Damage Assessment Planning - Role & Responsibilities**

### **Job Function:**

This position is responsible for providing overall planning picture of expected damage based on predictive models of pending event; including an assessment of volume of crew resources anticipated & equipment needed based on modeling and projections agreed upon with Planning Section. This role must understand and be able to predict number of resources needed to safe, efficiently & effectively restore the system. This role also identifies perceived gaps in resource availability / mobilization so that the Planning Section can project length of restoration. The expectation of this role is to provide CMV / Native & Non-Native / Mutual Assistance intelligence and data around *Potential Volume* of Resource pool *needed* due to the predictive data surrounding the event. In other words, the objective of this role in the Planning role is to answer these initial questions:

- How many resources does CMV expect will be needed for this event IF it is CAT 3 vs CAT 4 impact?
- How many resources will be needed to assure 3 days vs 5 days ETR?
- What is the approximate ETA / needed for off-system resources to arrive in Florida / on-DEF-system to accomplish needed 'start' work?
- What specialty equipment is anticipated and ETA?

Providing these initial estimated numbers, sets the stage for Resource Mgmt, Logistics, Site Mgmt, to begin 'planning and acquisition' and to therefore identify and then validate the availability and cost of resources at the time of an event. This SME / leader should have knowledge and accessibility to data regarding volume of restoration resources on the system and off-system (Native & Non-Native resources); expected needs for specialty equipment, hard to access skill sets, general volume of resources available vs. not available. This role must understand the processes for acquiring resources within FL, through Mutual Assistance protocols, and across DE Jurisdictions. This role is to provide initial 'stick counts' to Planning & Logistics, and to provide insight around capabilities to support timing of arrival of those resources.

### **Job Description:**

The Operations & Damage Assessment Planning role is responsible for:

- Meeting with Planning Section Chief and other Branch Directors to develop the initial resource plan and mobilization plan for the event
- Providing the operations intelligence and data to confirm volume and timing of resources needed for event
- Encourage open discussion regarding availability and welcome 'Push-back'; have a questioning attitude regarding acquisition and timing of resources.
- Communicate clearly regarding needed logistical support; provide planning leadership with accurate situation assessment (i.e. need helicopters in Region prior to event for swift damage assessment; must have specialty equipment in Region prior to event or will not receive due to congested / slow travel time)
- Provide initial cost data for RIC / IMT / Planning for better decision making (i.e. on-system Crews storm contracts vs. mutual assistance storm contracts)
- Review / approve all operations/CMV documentation prior to IMT / IAP submittal
- Participate in on-going planning discussions as needed
- Provide close out / release planning and documentation at end of event

**Key Interface Points:**

- Planning Section Chief
  - Situation Awareness Branch Director
  - Reporting & Performance Mgmt Branch Director
  - Logistics & Resource Assessment Branch Director
  - Wholesale Customer Emergency Center/Branch Director
- Logistics Chief
- Regional Incident Commander
- Area Incident Command (AIC)
- Operations-Area System Assessment /Engineering / Work Assignment Branch Director
- Communications – External / Public Information Liaison
- Transmission System Storm Coordinator/Consultant

**Checklist of Actions:**

This timeline is designed for a major hurricane entering our area. A near miss could require timing adjustments on some activities and cancellation of others. The following link provides the Checklist of Actions for annual readiness prior to storm season and during storm events (before landfall, during restoration, and after the storm event).

**See Checklist:** [Operations & Damage Assessment Planning](#) tab (Under development)

**Reference:** TSSOP-Operations Section - GDLP-EMG-TRM-00027 – 5.0 Crew Management – Restoration/DA Mobilization - Crew Mgmt & Restoration/DA Mobilization Director Role

## 13.0 Training and Activation of Planning Resources

The Planning Section is responsible for the Daily Plan that establishes ETRs and assures the transmission system is returned to service safely, effectively, and efficiently. Training for this Section is around gathering the data and clearly and accurately reporting the data in a way that the DEF-Transmission organization and community at large are confident in the status of restoration provided.

### 13.1 Training Expectations / Objectives

There are three clear areas of training expected:

#### 13.1.1 Data Gathering & Reporting

The IMT Report and the IAP team members are to be trained in the tools and cadence at least annually.

#### 13.1.2 TOMS System Data Entry

Each year the System Operations and Transmission Planning staff supporting outage data entry into the Transmission Outage Management System (TOMS) will train in the process of entering outages, generally in support of the annual storm drill. Due to learnings, the Planning Section and Operations Sections have developed the Outage Management Tracking process and tools to support TOMS / TOA data reporting and to better provide ETRs, status on work plans/work completed and general understanding of the area system restoration. Training on this process and tool are part of the Planning Section and Operations Section Training Plan.

As part of the development of the drill scenario, a list of facility outages will be developed. TOMS outage support staff will be selected prior to the drill and assigned a portion of the facility outage list for entry during the drill. At the appropriate point during the storm drill timeline, the TOMS data entry support staff will enter outage data into the TOMS development system (not production). The objective of the TOMS data entry training is to ensure that all TOMS data entry support staff are able to access the TOMS system, are familiar with the data entry process, and are able to successfully and accurately enter their assigned outage data. TOMS training and refresher information are available in the TOMS computer-based training Plantview course COT102.

### **13.1.3 ETR Policy / Reporting**

Additionally, Training on the ETR policy for use during storms is expected for the Planning & Operations Sections. See [DEE-RSTR-Set Est ETR Policy Proc00009](#)

### **13.2 Training matrix / schedule**

Training schedule will be created and published annually as Planning Section prepares for according to emergency management best practices. Typically, computer-based trainings are available year-round and the expectation is that each employee assigned to Planning Section storm role will be responsible to keep annual training current. In addition, any emergency management / storm-event exercises and drills will be planned and scheduled as directed from DEF Transmission RIC and CD RIC.

# Document Approval Form

effective: 1/31/21

issued: 1/20/21

**Section A: Document identification and type of action** ([Instructions](#) for completing form on page 2)

Document no.:	GDLP-EMG-TRM-00028	Revision no.:	003
Document title: TSSOP - Planning Section – Event System Priorities, Assessment, Restoration Approach			
Applies to: (Select all that apply)			
<input type="checkbox"/> Duke Energy		<input checked="" type="checkbox"/> Department <u>Transmission</u>	
<input type="checkbox"/> Duke Energy Carolinas, LLC			
<input type="checkbox"/> Duke Energy Progress, LLC		<input type="checkbox"/> Other _____	
<input checked="" type="checkbox"/> Duke Energy Florida, LLC			
<input type="checkbox"/> Duke Energy Indiana, LLC			
<input type="checkbox"/> Duke Energy Kentucky, Inc.			
<input type="checkbox"/> Duke Energy Ohio, Inc.			
<input type="checkbox"/> Group _____			
Type of action:	Periodic Review cycle: (Default is 2-year)	Compliance Applicability: (required field)	<input type="checkbox"/> Communication plan established <input type="checkbox"/> Impact Reviews completed  For Doc. Mgmt staff use only: <input type="checkbox"/> Editorial Change <input type="checkbox"/> Control element revision  (does not require approval signature)
<input type="checkbox"/> New <input checked="" type="checkbox"/> Revision <input type="checkbox"/> Periodic review completed <input type="checkbox"/> Ownership Change <input type="checkbox"/> Cancellation <input type="checkbox"/> Suspension <input type="checkbox"/> Renumber	<input checked="" type="checkbox"/> 1-Year <input type="checkbox"/> 2-Year <input type="checkbox"/> 3-Year <input type="checkbox"/> 4-Year <input type="checkbox"/> 5-Year	<input type="checkbox"/> None <input type="checkbox"/> NERC <input type="checkbox"/> State Codes/Standards <input type="checkbox"/> FERC Standards of Conduct <input type="checkbox"/> Patriot Act <input type="checkbox"/> Sarbanes-Oxley <input type="checkbox"/> HIPAA <input type="checkbox"/> OSHA _____ <input checked="" type="checkbox"/> Other <u>Emergency Preparedness</u>	
Security Restrictions Required: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, explain _____			
Document Collection name(s): (Not Required - A unique grouping of like documents.)			

**Complete if submitting a form for publication:**☐ Yes (Procedure No: \_\_\_\_\_)Does the document being submitted for publication have a parent, governing or instructional procedure? ☒ No \_\_\_\_\_How is the form being submitted for publication to be completed or used? ☐ Hard Copy (completed by hand) ☒ Fillable PDF

Description of document action or summary of changes:

Annual Review; Updates based on previous season's continuous improvements and/or state regulators requests.

Specifically: updated document to align / include Irma Cost Settlement Agreement - Major Storm Process Improvements (MSPI project) and all documents supporting TSSOP. Planning Section was updated with Flood Plan in addition to role description updates.

**Section B: Approval** **Who should sign?** see instructions on page 2 ([Electronic Signature Instructions](#))**Author(s)/Writer(s)/Preparer(s)** (signature not required):

Deb Banister-Hazma

Approval recommended (print name): Kenny Adams	(signature)	Date:
Approval recommended (print name): Brantley Tillis	(signature)	Date:
Approval recommended (print name): Glenn Dooley or Curtis Lloyd (proxy)	(signature)	Date: 12/1/20
<b>Final Approval</b> (print name): Troy Buis	(signature) Digitally signed by Troy Buis Date: 2021.01.06 13:17:17 -05'00'	Date: 1/6/21

Return signed form as a PDF to [TransDocumentMgmt@duke-energy.com](mailto:TransDocumentMgmt@duke-energy.com).**Keywords:** procedures and forms; procedures program; DAF; ADMP-PRO-TRM-00016; document management program  
**Applies to:** Duke Energy - Transmission; Enterprise Operational Excellence; Transmission and Fuels Strategy and PolicyADMF-PRO-TRM-00004  
Rev. 005 11/2020  
Page 1 of 2**AUTHORIZED COPY**  
**Duke Energy Proprietary Business Information – Not for external distribution****20220050-DEF-000145**

# Document Approval Form

completed 1/21/22

**Section A: Document identification and type of action** ([Instructions](#) for completing form on page 2)

Document no.: GDLP-EMG-TRM-00028	Revision no.: 003
----------------------------------	-------------------

Document title: TSSOP - Transmission System Storm Operational Plan: Planning Section – Event System Priorities, Assessment, Restoration Approa

Applies to: (Select all that apply)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Duke Energy                         | <input type="checkbox"/> Duke Energy Indiana, LLC   | <input checked="" type="checkbox"/> Department <u>Transmission</u> |
| <input type="checkbox"/> Duke Energy Carolinas, LLC          | <input type="checkbox"/> Duke Energy Kentucky, Inc. |  |
| <input type="checkbox"/> Duke Energy Progress, LLC           | <input type="checkbox"/> Duke Energy Ohio, Inc.     | <input type="checkbox"/> Other _____                               |
| <input checked="" type="checkbox"/> Duke Energy Florida, LLC | <input type="checkbox"/> Group _____                |  |

<b>Type of action:</b> <input type="checkbox"/> New <input type="checkbox"/> Revision <input checked="" type="checkbox"/> Periodic review completed <input type="checkbox"/> Ownership Change <input type="checkbox"/> Cancellation <input type="checkbox"/> Suspension <input type="checkbox"/> Renumber	<b>Periodic Review cycle:</b> (Default is 2-year) <input checked="" type="checkbox"/> 1-Year <input type="checkbox"/> 2-Year <input type="checkbox"/> 3-Year <input type="checkbox"/> 4-Year <input type="checkbox"/> 5-Year	<b>Compliance Applicability:</b> (required field) <input type="checkbox"/> None <input type="checkbox"/> NERC <input type="checkbox"/> State Codes/Standards <input type="checkbox"/> FERC Standards of Conduct <input type="checkbox"/> Patriot Act <input type="checkbox"/> Sarbanes-Oxley <input type="checkbox"/> HIPAA <input type="checkbox"/> OSHA _____ <input checked="" type="checkbox"/> Other <u>Emergency Preparedness</u>	<input type="checkbox"/> Communication plan established <input type="checkbox"/> Impact Reviews completed  <b>For Doc. Mgmt staff use only:</b> <input type="checkbox"/> Editorial Change <input type="checkbox"/> Control element revision  (does not require approval signature)
--	--	--	---

**Security Restrictions Required:** ☐ Yes ☐ No If yes, explain \_\_\_\_\_

Document Collection name(s): (Not Required - A unique grouping of like documents.)

**Complete if submitting a form for publication:**☐ Yes (Procedure No: \_\_\_\_\_)Does the document being submitted for publication have a parent, governing or instructional procedure? ☒ No \_\_\_\_\_How is the form being submitted for publication to be completed or used? ☐ Hard Copy (completed by hand) ☐ Fillable PDF

Description of document action or summary of changes:

Review performed. No 2021 changes.

**Section B: Approval** **Who should sign?** see instructions on page 2 ([Electronic Signature Instructions](#))**Author(s)/Writer(s)/Preparer(s)** (signature not required):

Dina Bradt

Approval recommended (print name): Brantley Tillis	(signature)	Date:
Approval recommended (print name): Glenn S Dooley	(signature)	Date:
Approval recommended (print name): Curtis Keith Lloyd	(signature)	Date:
<b>Final Approval</b> (print name): Kenny Adams (email proxy) <i>DB</i>	(signature)	Date: 1/21/22

Return signed form as a PDF to [TransDocumentMgmt@duke-energy.com](mailto:TransDocumentMgmt@duke-energy.com).

**Keywords:** procedures and forms; procedures program; DAF; ADMP-PRO-TRM-00016; document management program  
**Applies to:** Duke Energy - Transmission; Enterprise Operational Excellence; Transmission and Fuels Strategy and Policy

ADMF-PRO-TRM-00004  
Rev. 005 11/2020  
Page 1 of 2

**AUTHORIZED COPY** 20220050-DEF-000146  
Duke Energy Proprietary Business Information – Not for external distribution