



Outages

Version 2

eNAMS Reference Guide

This guide has been produced to provide detailed guidance on how to use and interact with Outages in eNAMS. The guide has been written with NGESO users as the target audience in mind, however most of the information contained within is expected to be just as relevant for other users of eNAMS.

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Key for Chapters 1) & 4):

Brand new to eNAMS

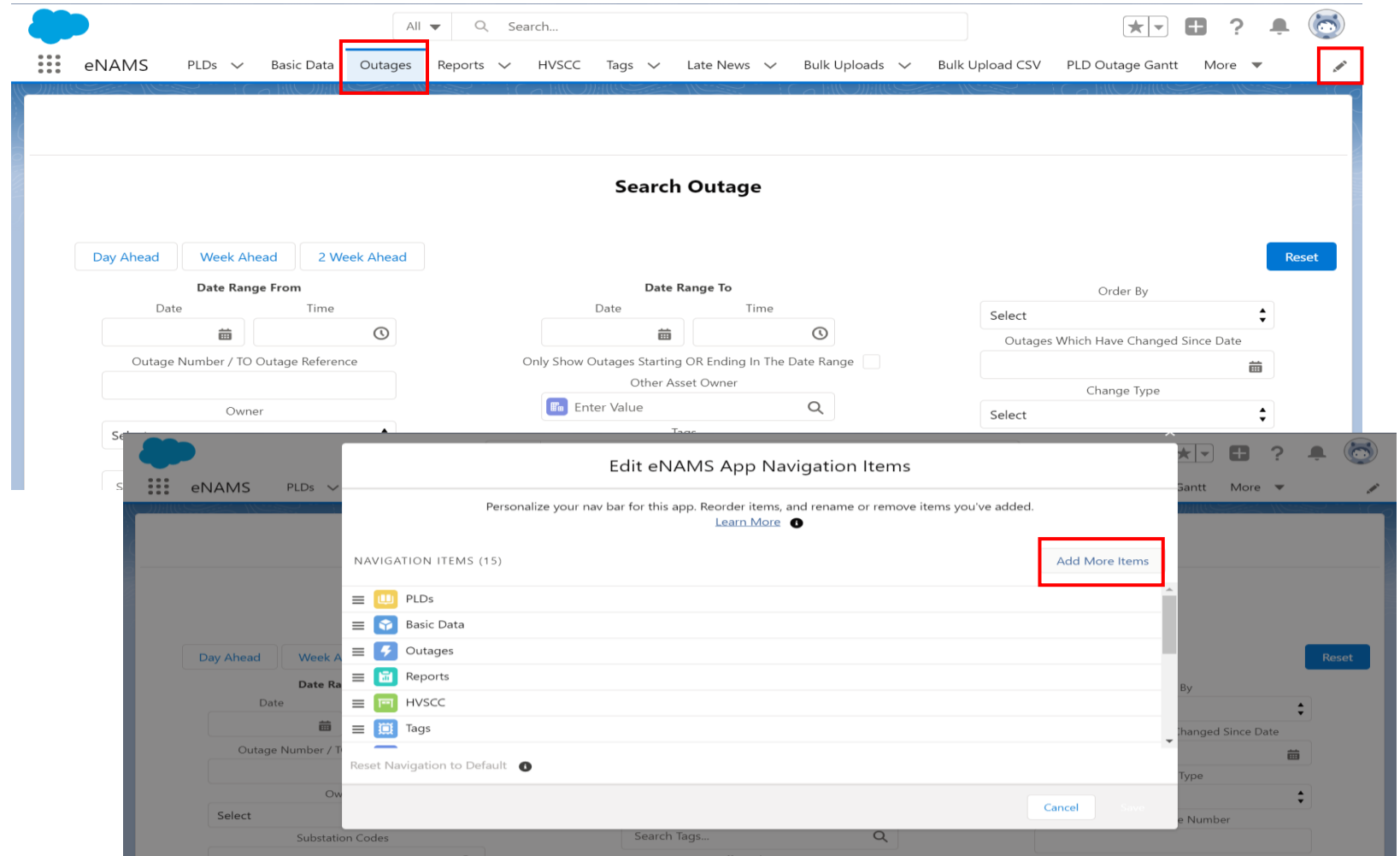
Similar to field in TOGA

Same as field in TOGA

Using the Outage Search page

Navigate to Outages

- Click on **Outages** in your toolbar in eNAMS
- If Outages is not visible in the toolbar, click on the **pencil icon** on the right-hand side then click **Add More Items** then find **Outages**.



Outage Search page (Reference)

Day Ahead

Week Ahead

2 Week Ahead

Date Range From

Date

Time

Outage Number / TO Outage Reference

Owner

Select

Substation Codes

Search Substation...

Must Include All Substations

TO Impact

ERTS From

ERTS To

Only Show OnCom Outages

Date Range To

Date

Time

Only Show Outages Starting OR Ending In The Date Range

Other Asset Owner

Enter Value

Tags

Search Tags...

Affected Users

Search Affected Users...

Service

Select

ERTS From Unit

Select

ERTS To Unit

Select

Order By

Select

Outages Which Have Changed Since Date

Change Type

Select

PLD Reference Number

Bulk Uploads

Search Bulk Uploads...

Operational Note Status

Available

Selected

With SO

TO Feedback Required

ENCC Feedback Required

Feedback With SO

Operational Note Needs Regrou...

Complete

Reset

Part 1

Available

Initial

With SO

Planned

Unplanned

Fault

TBA

Completed

Status

Selected

Available

Non-NGESO (Of Interest to SO)

Non-NGESO (Not of Interest to SO)

Outage Type

Selected

Planned

Unplanned

Fault

Part 3

Available

Seasonal Risk

Cross-boundary Outages

Generation Risk

Demand at Risk

Affects Sensitive Sites

Only Display

Selected

Part 4

Search Outages

Search Operational Notes

Bulk Approve/Reject

Operational Notes Report

Availability Report

Part 1 of 4 – Outage Search page fields

Search selected plan week (Sat – Fri).

Day Ahead Week Ahead 2 Week Ahead

Date Range From Date Range To

Date Time Date Time

Outage Number / TO Outage Reference

Owner

Select

Substation Codes

Search Substation...

Must Include All Substations ☐

TO Impact

Select

ERTS From

ERTS To

Only Show OnCom Outages ☐

Search by Date range (Time auto-populated as 00:00 and 23:59 respectively unless specified)

Only Show Outages Starting OR Ending In The Date Range ☐

Other Asset Owner

Enter Value

Tags

Search Tags...

Affected Users

Search Affected Users...

Service

Select

ERTS From Unit

Select

ERTS To Unit

Select

Search by eNAMS Outage Number or TOGA number (TO Outage Reference)

Search by Owner of (Basic) Outage if listed, otherwise use Other Asset Owner field

Click on tick box to return Outages which include all listed substations

Search by TO Priority (P1 = Highest Priority)

Search by ERTS Range. Enter same ERTS From and ERTS To to search a single ERTS value. eNAMS includes ERTS conversion logic i.e. 2 DAYS = 48 HOURS.

Other Asset Owner comprises non-onshore TO's & other parties. Example being OFTO's.

Search all Tags. Use Tags PLSTH/PLNTH/PLSCOT to search by planning region.

Search by External Parties. Example being RWE.

Select In Service or Out Of Service

Part 2 of 4 – Outage Search page fields

Order the search results in Chronological order based on Last Updated date or order in numerical order based on Outage Number. Order By Planned Start Date is an option however is applied by default.

Change Requests are assigned with a Change Type depending on the type of change. This can be either Add (for brand new outage), Update (for changing an existing outage), TBA (when an Outage is TBA'd) or Cancel (when an Outage is cancelled).

Each Bulk Upload is assigned a reference number that starts with BU. Search here by this reference number.

The screenshot shows the Outage Search interface with the following fields and annotations:

- Order By:** A dropdown menu with 'Select' as the current selection. An annotation points to it: 'Order the search results in Chronological order based on Last Updated date or order in numerical order based on Outage Number. Order By Planned Start Date is an option however is applied by default.'
- Outages Which Have Changed Since Date:** A date input field with a calendar icon. An annotation points to it: 'Search by Outage Last Updated Date'.
- Change Type:** A dropdown menu with 'Select' as the current selection. An annotation points to it: 'Change Requests are assigned with a Change Type depending on the type of change. This can be either Add (for brand new outage), Update (for changing an existing outage), TBA (when an Outage is TBA'd) or Cancel (when an Outage is cancelled).'
- PLD Reference Number:** A text input field. An annotation points to it: 'Search by PLD Project Number'.
- Bulk Uploads:** A section containing a search input field labeled 'Search Bulk Uploads...' with a magnifying glass icon. An annotation points to it: 'Each Bulk Upload is assigned a reference number that starts with BU. Search here by this reference number.'
- Operational Note Status:** A multi-selectable field with two columns: 'Available' and 'Selected'. The 'Available' column contains: 'With SO', 'TO Feedback Required', 'ENCC Feedback Requ...', 'Feedback With SO', 'Operational Note Ne...', and 'Complete'. The 'Selected' column is empty. An annotation points to it: 'Multi-selectable field to view by Op Note status for when viewing Op Notes.'
- Reset:** A blue button located at the top right of the form.

Reset

Reset all Outage Search page fields

Search by Outage Last Updated Date

Search by PLD Project Number

Multi-selectable field to view by Op Note status for when viewing Op Notes.

Part 3 of 4 – Outage Search page fields

Search by Outage status. For outage planning, the user will typically select:

- With SO
- Planned
- Unplanned
 - Fault
 - Started

Status

Available		Selected
Initial	▶	
With SO	◀	
Planned		
Unplanned		
Fault		
TBA		
Completed		

Outage Type

Available		Selected
Non-NGESO (Of Interest to SO)	▶	Planned
Non-NGESO (Not of Interest to SO)	◀	Unplanned
		Fault

Search by:

- Seasonal Risk – if ticked in Outage
- Cross-boundary Outages – if Basic Outage is of cross-boundary type
- Generation Risk – if ticked in Outage
- Demand at Risk – if ticked in Outage
- Affects Sensitive Site – if ticked in Outage

Only Display

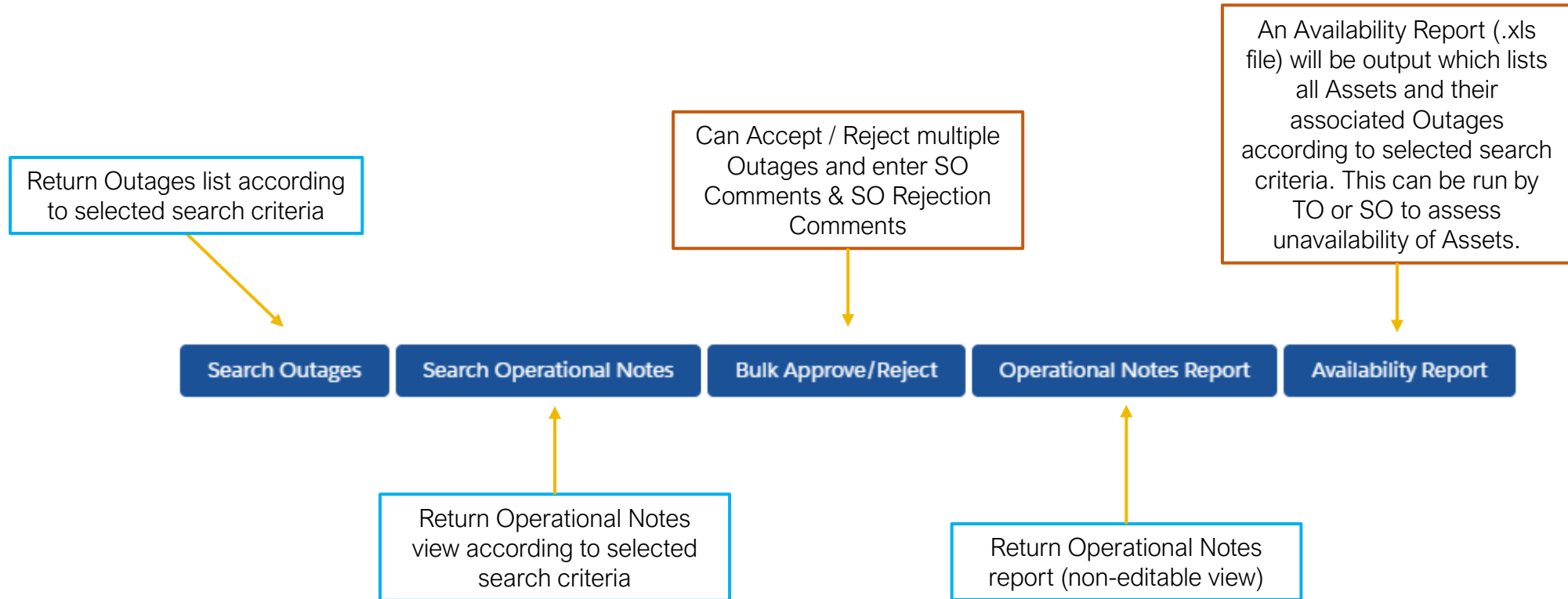
Available		Selected
Seasonal Risk	▶	
Cross-boundary Outages	◀	
Generation Risk		
Demand at Risk		
Affects Sensitive Sites		

Search by Outage Type field.

To view DNO created outages for assessment, select Non-NGESO (Of Interest to SO). Currently, only SPD are expecting to use this Outage Type.

Please note, if user is searching for Fault in Status field, then Fault must be selected in Outage Type; same also for Unplanned Outages. All other Status are covered under Planned Outage Type.

Part 4 of 4 – Outage Search page fields



Typical Outage Search page selections

View Two Week Ahead Notes for Scotland
(see *Operational Notes Guide – eNAMS* for further information)

The screenshot displays the 'Typical Outage Search' interface. At the top, there are three tabs: 'Day Ahead', 'Week Ahead', and '2 Week Ahead', with the latter highlighted by a red box. Below the tabs, the 'Date Range From' is set to '19-Jun-2021 00:00' and 'Date Range To' is '25-Jun-2021 23:59'. A red box highlights the 'Tags' search field, which contains 'PLSCOT'. Other filters include 'Owner', 'Substation Codes', 'Must Include All Substations TO Impact', 'ERTS From', 'ERTS To', and 'Only Show OnCom Outages'. On the right, there are dropdowns for 'Order By', 'Change Type', 'PLD Reference Number', and 'Bulk Uploads'. Below these, the 'Operational Note Status' section shows a list of statuses: 'With SO', 'TO Feedback Required', 'ENCC Feedback Required', 'Feedback With SO', 'Operational Note Needs Regrouping', and 'Complete'. At the bottom, there are two main sections: 'Status' and 'Outage Type'. The 'Status' section has a red box around the 'Selected' list, which includes 'With SO', 'Planned', 'Unplanned', 'Fault', and 'Started'. The 'Outage Type' section also has a red box around the 'Selected' list, which includes 'Planned', 'Unplanned', 'Fault', and 'Non-NGESO (Of Interest to SO)'. At the bottom right, there is a 'Only Display' section with a list of categories: 'Seasonal Risk', 'Cross-boundary Outages', 'Generation Risk', 'Demand at Risk', and 'Affects Sensitive Sites'. A 'Reset' button is located at the top right. At the bottom, there are five buttons: 'Search Outages', 'Search Operational Notes' (highlighted with a red box), 'Bulk Approve/Reject', 'Operational Notes Report', and 'Availability Report'.

To view information on the appropriate Tag to select to query a region, click here in Slide Show/PDF view:



Typical Outage Search page selections

View Week Ahead South Outages which have changed since a specific date

The screenshot displays the 'Typical Outage Search' interface with several key elements highlighted in red:

- Navigation Tabs:** 'Day Ahead', 'Week Ahead' (selected), and '2 Week Ahead'.
- Date Range From:** Date: 12-Jun-2021, Time: 00:00.
- Date Range To:** Date: 18-Jun-2021, Time: 23:59.
- Search Tags:** A search bar with 'PLSTH' entered and a dropdown menu.
- Order By:** A dropdown menu with 'Outages Which Have Changed Since Date' selected.
- Operational Note Status:** A section with 'Available' and 'Selected' lists.
- Outage Type:** A section with 'Planned', 'Unplanned', and 'Fault' options.
- Search Outages:** A button at the bottom left.

Other visible elements include a 'Reset' button, 'Outage Number / TO Outage Reference', 'Owner', 'Substation Codes', 'Must Include All Substations TO Impact', 'ERTS From', 'ERTS To', 'Only Show OnCom Outages', 'Affected Users', 'Service', 'ERTS From Unit', 'ERTS To Unit', 'Bulk Uploads', and 'Only Display'.

To view information on the appropriate Tag to select to query a region, click here in Slide Show/PDF view:



Creating an Outage

Both the SO and TO have permissions to create an Outage.
The TO can only create an Outage up to With SO status

Find Basic Outage

- Navigate to **Basic Data** tab, then select **Basic Outages**. Enter your search criteria (i.e. enter Substation Code), then click **Search Basic Outages**
- Click and open the relevant **Basic Outage**

The screenshot displays the eNAMs application interface for searching basic outages. The top navigation bar includes the eNAMs logo and various menu items, with 'Basic Data' highlighted. Below this, the 'BASIC OUTAGES' sub-tab is selected. The main content area is titled 'Search Basic Outages' and contains several search criteria fields. The 'Substation Codes' field is highlighted with a red box and contains the text 'INDIAN QUEENS 400KV X'. The 'Search Basic Outages' button at the bottom right is also highlighted with a red box. Other search criteria fields include 'Basic Outage Code', 'Owner', 'Data Range From', 'Circuit Description', 'Status', 'Other Asset Owner', 'Data Range To', 'Asset Codes', 'Affected Users', 'Tags', and 'Group'. A 'Basic Outage Type' section shows 'Non-NGESO (Of Interest to SO)' and 'Non-NGESO (Not of Interest to SO)' under 'Available', and 'Basic Outage' and 'Cross-boundary Basic Outage' under 'Selected'.

Propose Outage

- Once you've selected the **Basic Outage**, click on the **Related** tab
- Scroll down to the **Outages** section
- Click to propose either a **Planned Outage** / **Unplanned Outage** or **Fault Outage**.
- (Note: TO accounts have a slightly different page layout than the SO)

The screenshot displays the eNAMS Outage management interface. The top navigation bar includes tabs for PLDs, Basic Data, Outages, Reports, Tags, HVSCC, Late News, Bulk Uploads, Bulk Upload CSV, PLD Outage Gantt, OCLRs, ROB / NOB, Affected Users, Fall to Flys, Contacts, Multi-BADRs, and Outages. The main header shows the Outage ID ON-0000384, its status (Approved), and the Basic Outage Code (INDQX31). A progress bar indicates the status: Approved (green), Withdrawn (grey), and Archived (grey). The 'Related' tab is selected, showing details for Substations (1) and Assets (1). The 'Outages' section (6+) is visible, with buttons for 'Propose New Planned Outage', 'Propose New Unplanned Outage', and 'Propose New Fault Outage' highlighted. The 'Outages' table lists various outage records with columns for Outage Number, Status, Outage Type Description, Change Type, Planned Start Date/Time, Planned End Date/Time, and Transmission Owner.

Outage Number	Status	Outage Type Description	Change Type	Planned Start Date/Time	Planned End Date/Time	Transmission Owner
ON-0000774	Planned	Planned	Add	26/08/2020	28/08/2020	NGET
ON-0000790	Planned	Planned	Add	09/09/2020	11/09/2020	NGET
ON-0000902	Initial	Planned	Add	13/11/2020	25/11/2020	NGET
ON-0007237	Planned	Planned	Update	29/01/2021	31/01/2021	NGET
ON-0007257	Planned	Planned	Add	03/02/2021	03/02/2021	NGET
ON-0007260	Planned	Planned	Add	09/02/2021	16/02/2021	NGET

Populate Outage fields

- Populate fields as required.
- Fields with a red asterisk (*) indicate mandatory fields
- When complete, press **Save** to create Outage (prior to Save, ensure **Status** is in **Initial** status).

New Outage: Propose Planned Outage

Ownership Detail

Owner: Other Asset Owner

Outage Request Description

Circuit Description ⓘ
INDIAN QUEENS 400/132KV SGT3

Additional Description ⓘ

Status ⓘ
Initial

Basic Outage
ON-0000384

* Outage Type ⓘ
Planned

Change Type ⓘ
Add

Outage Dates

* Planned Start Date/Time ⓘ
Date: 17/06/2021 Time: 12:00

* Planned End Date/Time ⓘ
Date: 24/06/2021 Time: 12:00

Actual Start Date/Time
Date: Time:

Actual End Date/Time
Date: Time:

Planned Equipment Release Date/Time ⓘ
Date: Time:

Permit For Work Date/Time ⓘ
Date: Time:

Authorised Person Attendance Date/Time ⓘ
Date: Time:

* Change Code ⓘ
OH - SO CUSTOMERS REQUESTED (DNO,DCC)

* Change Description ⓘ
OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REP/

Work Involved

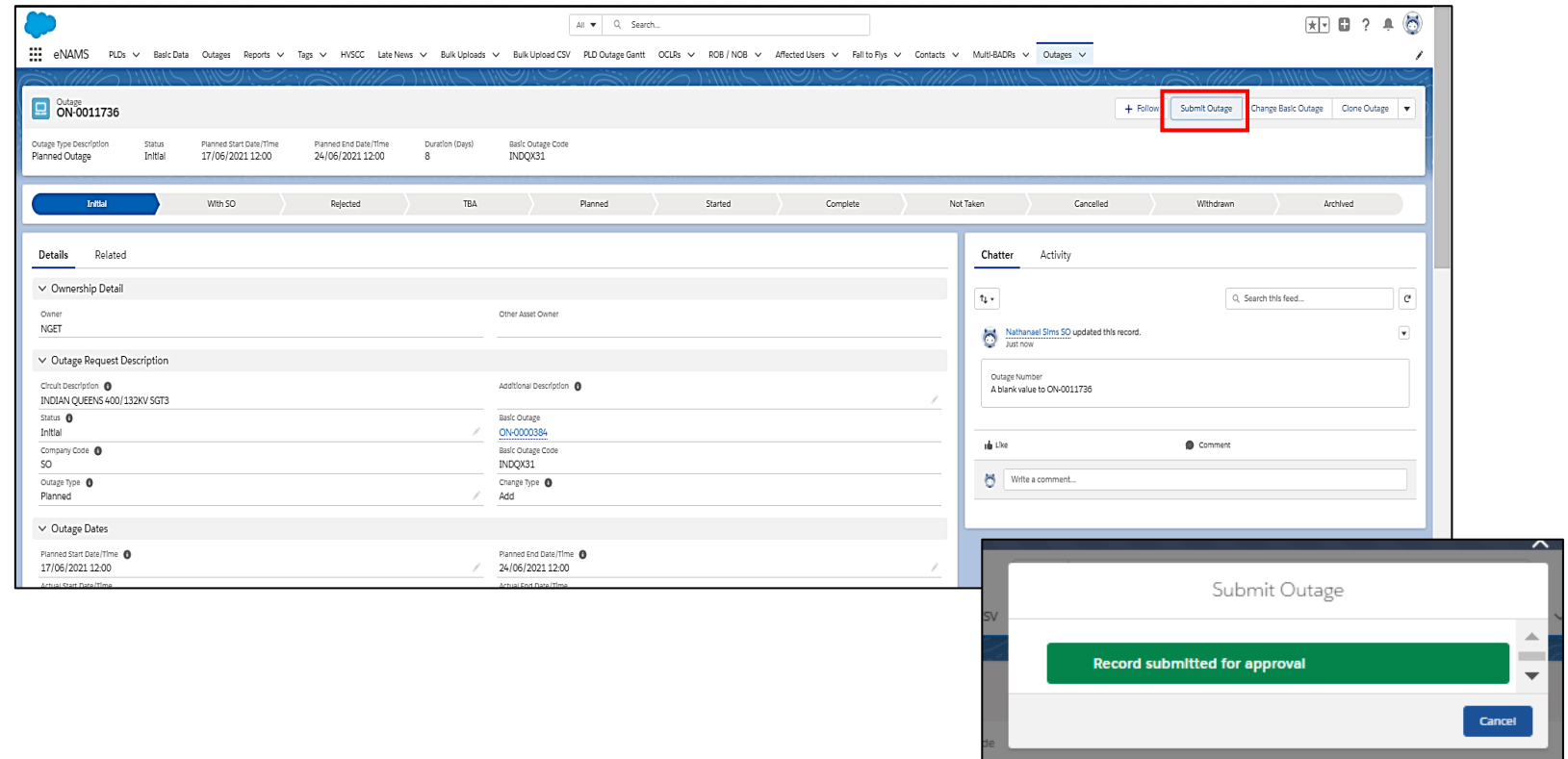
* Work Involved ⓘ
For proximity to DNO equipment and to undertake phasing checks

Outage Characteristics

Cancel Save & New **Save**

Submit Outage to With SO

- Check the Outage details and make any modifications /additions if necessary
- When ready, click **Submit Outage** at the top*
- You should see a green popup appear
- The Outage will automatically change to **With SO** status



*Please note the Submit Outage button is used only for changing from Initial to With SO; eNAMS will not allow the user to simply change the status from Initial to With SO directly in the Status field. If attempted, when the user presses “Save”, it will throw an error.

Changing an Outage's Basic Outage

- If an Outage description is incorrect and therefore was formed from the wrong Basic Outage, you can change this by clicking **Change Basic Outage** at the top of the Outage page.
- For TO users, a Change Request (Initial) has to be raised before the button will appear to enable changing the Basic Outage.
- Select an alternative Basic Outage (note: the new Basic Outage has to be part of the same Basic Group)
- Click **Save**
- A green popup should appear

The screenshot displays the eNAMS Outage management interface. At the top, the 'Change Basic Outage' button is highlighted with a red box. Below the button, the 'Details' tab is active, showing the 'Ownership Detail' and 'Outage Request Description' sections. The 'Outage Request Description' section shows the current 'Basic Outage' as 'INDQ4M3'. A dropdown menu is open, showing a list of alternative Basic Outages: 'INDQ4M3', 'INDQ4M4', 'INDQ4M1', 'INDQ42', and 'INDQ4M1'. The 'Save' button is also highlighted with a red box. A green success message popup is visible at the bottom right, stating 'Success! Basic Outage Updated.'

Cloning an Outage

- To Clone an existing Outage, click on **Clone Outage** at the top of the Outage page
- Populate fields as necessary
- Ensure **Change Code** and **Change Description** mandatory fields are populated
- Click **Clone**
- A green popup should appear
- (Note: this functionality is available to TO and SO users – TO users are forced to submit the change via a With SO Change Request)

The screenshot displays the eNAMS Outage page for Outage ON-0011736. The 'Clone Outage' button is highlighted with a red box. A modal form is open, allowing users to clone the outage. The form includes fields for 'Actual Start Date/Time', 'Planned Equipment Release Date/Time', 'Authorised Person Attendance Date/Time', 'Actual End Date/Time', 'Permit For Work Date/Time', 'Change Code' (set to '--None--'), and 'Change Description'. A 'Work Involved' section contains the text 'For proximity to DNO equipment and to undertake phasing checks'. A green success message at the bottom states 'Success! Outage Record Created Successfully!'.

Outage Type Description	Status	Planned Start Date/Time	Planned End Date/Time	Duration (Days)	Basic Outage Code
Planned Outage	Planned	17/06/2021 12:00	24/06/2021 12:00	8	INDQMM4

Progress: Planned (Active) → Started → Complete → Not Taken → Cancelled → Withdrawn → Archived

Details | Related

Clone Outage

Actual Start Date/Time: [Calendar Icon] [Clock Icon]

Planned Equipment Release Date/Time: [Calendar Icon] [Clock Icon]

Authorised Person Attendance Date/Time: [Calendar Icon] [Clock Icon]

Actual End Date/Time: [Calendar Icon] [Clock Icon]

Permit For Work Date/Time: [Calendar Icon] [Clock Icon]

* Change Code: --None-- (Complete this field.)

* Change Description: (Complete this field.)

Work Involved

* Work Involved: For proximity to DNO equipment and to undertake phasing checks

Success! Outage Record Created Successfully!

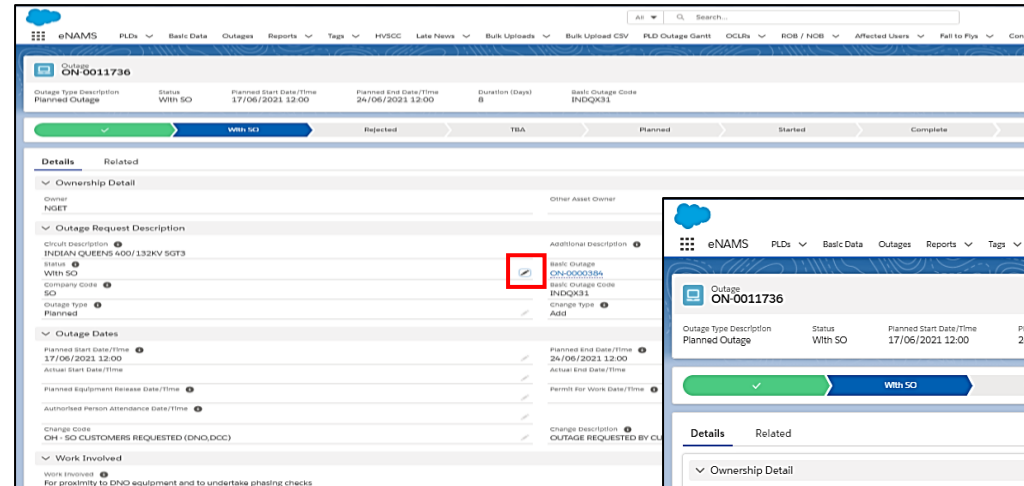
Approving / Rejecting Outages

Only one Change Request at Initial or With SO status can exist for an Outage at any one point in time.

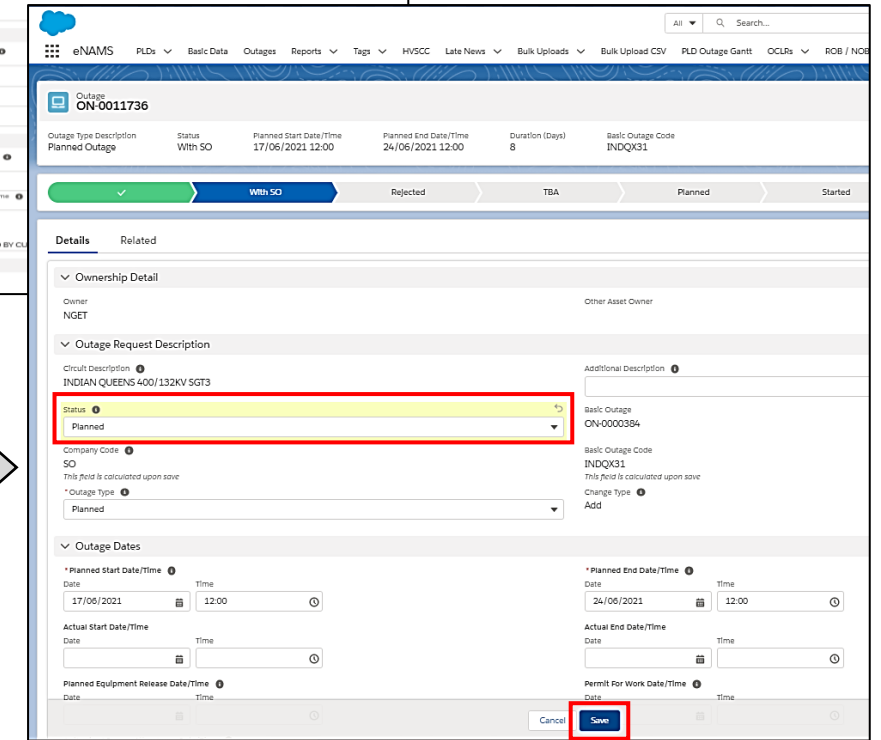
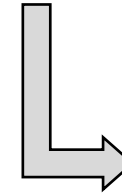
Approving / Rejecting an Outage or Change Request are known as “end states”; this means the TO is then able to make a change to an Outage / submit a new Change Request.

Approve a single Outage / Change Request

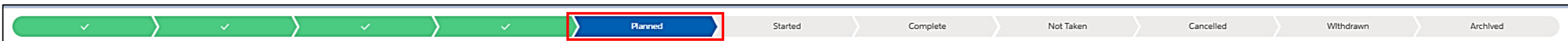
- To accept an Outage / Change Request*, firstly click on any pencil icon in the Outage / Change Request, or click **Edit** in the top right-hand corner of the page.
- This will make some fields editable
- To approve, click on the dropdown against the **Status** field
- Select **Planned** for a new outage or select **Approved** for a Change Request
- Then click **Save** to accept
- The chevrons will update to indicate **Planned** status if a new Outage / **Approved** if a Change Request



The screenshot shows the 'eNAMS' interface for an Outage/Change Request. The top navigation bar includes 'eNAMS', 'PLDs', 'Basic Data', 'Outages', 'Reports', 'Tags', 'HVSCC', 'Late News', 'Bulk Uploads', 'Bulk Upload CSV', 'PLD Outage Gantt', 'OCLRs', 'ROB / NOB', 'Affected Users', 'Fall to Fly', and 'Contacts'. The main header shows 'Outage ON-0011736' with a status of 'With SO'. Below this is a progress bar with stages: 'Planned Outage', 'Rejected', 'TBA', 'Planned', 'Started', and 'Complete'. The 'Details' section includes 'Ownership Detail' (Owner: NGET), 'Outage Request Description' (Circuit Description: INDIAN QUEENS 400/132KV SGT3, Status: With SO, Company Code: SO, Outage Type: Planned), and 'Outage Dates' (Planned Start Date/Time: 17/06/2021 12:00, Planned End Date/Time: 24/06/2021 12:00, Duration: 8 days, Basic Outage Code: INDQX31). A pencil icon is highlighted in the 'Additional Description' field.



The screenshot shows the 'eNAMS' interface for the same Outage/Change Request, but the status has been changed to 'Planned'. The progress bar now shows 'Planned' as the active stage. The 'Status' dropdown in the 'Outage Request Description' section is highlighted, showing 'Planned' selected. The 'Save' button at the bottom right is highlighted.



The horizontal bar shows the status progression: 'Planned' (highlighted), 'Started', 'Complete', 'Not Taken', 'Cancelled', 'Withdrawn', and 'Archived'.

*To view the details of a Change Request (i.e. what is changing), click on the **Difference With Original Outage** button on the Change Request page before proceeding with approval.

[Difference With Original Outage](#)

Reject a single Outage / Change Request

- To reject an Outage / Change Request*, firstly click on any pencil icon in the Outage / Change Request, or click **Edit** in the top right-hand corner of the page
- This will make some fields editable
- To reject, click on the dropdown against the **Status** field
- Select **Rejected**
- You must populate ESO Rejection Comments field
- Then click **Save** to reject the Outage / Change Request.
- The chevrons will update to indicate **Rejected** status

The screenshot displays the eNAMS interface for managing outages. The top navigation bar includes links for eNAMS, PLDs, Basic Data, Outages, Reports, Tags, HV/SOC, Late News, Bulk Uploads, Bulk Upload CSV, PLD Outage Gantt, OCLs, and ROE / NOB. The main content area shows details for Outage ON-0011739, including its status (Rejected), planned start/end times, duration, and basic outage code. The 'Status' dropdown is highlighted with a red box, and the 'ESO Rejection Comments' field is also highlighted with a red box, containing the text 'Rejected due to >300MW at SC risk'. A large grey arrow points from the main form to a detailed view of the 'ESO Outage Comments' section, which shows various comment fields like 'ESO Comments - Internal', 'ESO Rejection Comments', 'ESO Comments (NGET)', 'ESO Comments (SPT)', and 'ESO Comments (SHETL)'.

*To view the details of a Change Request (i.e. what is changing), click on the **Difference With Original Outage** button on the Change Request page before proceeding with rejection.

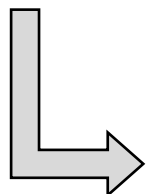
[Difference With Original Outage](#)

Please note:

- 1) eNAMS validation does not currently prevent the user selecting Not Taken, TBA or Cancelled for a new Outage (Change Type: Add and Status: Initial / With SO); therefore the user should be careful not to inadvertently select these status' due to lack of prevention logic.
- 2) SO user must remember to delete old SO Rejection Comments that may already exist from a previous rejection that may have occurred prior to the outage first being Planned and write new ones in applicable to the first change request being rejected.

Bulk Approve / Reject Outages

- The Bulk Approve/Reject page in eNAMS allows you to do the following in bulk:
 - **Approve** multiple Outages
 - Populate multiple **ESO Comments – Internal**
 - Populate multiple **Rejection Comments**
 - **Reject** multiple Outages
- Currently the bulk functionality does not work for Change Requests, only for new Outages (i.e. with Change Type = Add). This is a known defect.
- To navigate to the Bulk Approve/Reject page, first go to the **Search Outage** page
- Define your search criteria then click on **Bulk Approve/Reject** button
- You will see the list of Outage appear with any existing **SO Comments** or **SO Rejections Comments** listed in the last two columns (highlighted below)
- When Outages are Approved / Rejected or Comments fields populated in the bulk view, the relevant fields will be updated in the outage list.



<input type="checkbox"/> Outage Number	<input type="checkbox"/> Circuit Description	<input type="checkbox"/> Change Type	<input type="checkbox"/> Outage Type Description	<input type="checkbox"/> Planned Start Date/Time	<input type="checkbox"/> Planned End Date/Time	<input type="checkbox"/> Status	<input type="checkbox"/> SO Comments	<input type="checkbox"/> SO Rejection Comments
<input type="checkbox"/> ON-0955864	Full 132/115	Update	Planned Outage (Change Requ...	31/08/2020 07:30:00	20/08/2021 15:30:00	With SO		
<input type="checkbox"/> ON-0960946	Full 132/115	Update	Planned Outage (Change Requ...	25/01/2021 08:00:00	10/09/2021 17:00:00	With SO		

Locating Change Request of an Outage

- There are multiple methods of finding out if an Outage has an open (i.e. With SO) Change Request
- One such method is to search for the Outage / Outages on the Outage Search page in the normal way (ensure With SO is selected in the Status field on the Outage Search page).
- The Change Request is identified in the Outage Type Description column with “(Change Request)”.

Status

Selected

With SO

Planned

Search Outages

Outage Number	TO Outage Refere...	Status	Outage Type Desc...	Circuit Description	Additional Descri...	Change Type	Planned Start Dat...	Planned End Date...	Owner
ON-0000787		Planned	Planned Outage	INDIAN QUEENS 400KV MESH CORNER 4 / SGT4 / MSC4 AND LAN-DULPH 1 CIRCUIT		Add	17/09/2026 07:45:00	19/09/2030 16:00:00	NGET
ON-0000787		With SO	Planned Outage (Change Request)	INDIAN QUEENS 400KV MESH CORNER 4 / SGT4 / MSC4 AND LAN-DULPH 1 CIRCUIT		Update	18/09/2026 07:45:00	19/09/2030 16:00:00	NGET

- Another method is by navigating to a specific Outage, followed by the Related tab, then view the Outage Change Requests field

Outage ON-0000787

Outage Type Description Planned Outage

Status Planned

Details

Related

Outage Change Requests (2)

Outage Name	Status	Change Type	Change Description	CreatedDate	Created By
ON-0000787	With SO	Update	tt	08/06/2021	Nathanael Sims NGET OP
ON-0000787	Approved	Add	Test	04/09/2020	Jonathan Barcroft

View All

Understanding Outage Fields

Outage – Details tab (Reference Page)

- **Part 1**
 - Ownership Detail
 - Outage Request Description
 - Outage Dates
 - Work Involved
- **Part 2**
 - Outage Characteristics
 - Work Type
 - TO Work Description
 - ESO Outage Comments
- **Part 3**
 - Sanction
 - Risk Characteristics
- **Part 4**
 - Demand at Risk Details
 - Generation Risk Details – Internal
 - Seasonal Risk Details – Internal
- **Part 5**
 - Operational Notes
 - System Information

Details	Related
Ownership Detail	
Owner NGST	Other Asset Owner
Outage Request Description	
Circuit description INDIAN QUEENS ADOBY MESH CORNER 4 / SOTA / MICA AND LANDOLPH 1 CIRCUIT	Additional description
Status Planned	Batch Outage CH-0000333
Company Code SO	Batch Outage Code INDQAM
Outage Type Planned	Outage Type
Outage Dates	
Planned Start Date/Time 17/06/2023 12:00	Planned End Date/Time 24/06/2023 12:00
Actual Start Date/Time	Actual End Date/Time
Planned Equipment Release Date/Time	Permits For Work Date/Time
Authorized Person attendance Date/Time	
Change Code CH - SO CUSTOMERS REQUESTED (INDQAMC)	Change Description OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS
Work Involved	
Work Involved For proximity to CHD equipment and to undertake phasing checks	
Outage Characteristics	
Emergency Return to service Day 6	Emergency Return to service Day Units Hours
Emergency Return to service Night 8	Emergency Return to service Night Units Hours
Working Time Continuous	On/Off
TO Impact PL	In Service
Contingency/Decommissioning Outage	Review ESO Profiles
Work Type	
Work Risk Description EPB - External Party Request/PS - Post Fault Repairs - Switchgear	
TO Work Description	
TO Outage Reference	TO Project
TO Reference	TO Comments
TO Scale	PLD
ESO Outage Comments	
ESO Comments - Internal	Operational Remarks
ESO Rejection Comments	
ESO Comments (NGAT)	NGST Comments
ESO Comments (SP)	SP Comments
ESO Comments (SHATL)	SHATL Comments
Sanction	
Sanctioning Review Needed	Sanction Review Initiation Date
Sanction Review Initiated By	Sanction Review Completion Date
Risk Characteristics	
Demand at Risk Needed	Demand Risk Complete
Generation Risk Needed	Generation Risk Complete
Seasonal Risk Needed	Seasonal Risk Complete
Manual Override Seasonal Risk	
Demand at Risk Details	
Recreation	Mitigation
Demand Risk Approval Status	Demand at Risk Details
Affects Sensitive Site	
Generation Risk Details - Internal	
Generation Risk Review Status	Generation at Risk Details
Seasonal Risk Details - Internal	
Dependency	Seasonal Response
Restriction	Risk
Seasonal Risk Review Status	
Operational Notes	
Start Date Operational Note CP-00004001	End Date Operational Note CP-00004002
System Information	
Created By Nathaniel Sims SO, 06/06/2023 11:11	Changed By Nathaniel Sims@nationalgrid.co.uk
Outage Number CH-0011736	Last Modified Date 06/06/2023 12:11

Outage – Related tab (Reference Page)

- **Part 6**
 - Demand Risk Asset
 - Outage Change Requests
 - ERTS Profile
 - Affected User
 - Tags
- **Part 7**
 - Linked Outages
 - LIFT Details
 - HVSCCs
 - Late News
 - Fail to Flys
- **Part 8**
 - OCLRs
 - Files
 - Outages History

Details

Related

Demand Risk Asset (0)

Add Assets

Outage Change Requests (1)

Outage Name	Status	Change Type	Change Description	CreatedDate	Created By
CH-0011736	Approved	Add	OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS	06/06/2021	Nathanael Sims SO

View All

ERTS Profile (0)

Affected User (0)

Tags (4)

Add Tags

Tag Name	Description	Tag Type	Inactive
ADM	Asset Management E/W	External Party	
STHW	South West	External Party	
SWIE	South West	External Party	
TSW	Subs South West	External Party	

View All

Linked Outages (0)

Link Child Outage

Link Parent Outage

LIFT Details (2)

New

LIFT Detail Name	Record Type	Date Added	Date Removed
LIFT-00001395	ROB	2021-06-06 11:11:19Z	2021-06-06 11:28:07Z
LIFT-00001396	ROB	2021-06-06 11:11:19Z	2021-06-06 11:28:07Z

View All

HVSCCs (0)

Late News (0)

Fail to Flys (0)

New

OCLRs (0)

Files (0)

Add Files

Upload Files

Or drop files

Outage History (6+)

Date	Field	User	Original Value	New Value
06/06/2021 12:11	Circuit Description	Nathanael Sims SO	INDQMC3	INDIAN QUEENS 400KV MESH CORNER 4 / 5G74...
06/06/2021 12:09	Circuit Description	Nathanael Sims SO	INDIAN QUEENS 400/132KV SGT3	INDQMC3
06/06/2021 11:28	Status	Nathanael Sims SO	With SO	Planned
06/06/2021 11:13	Status	Nathanael Sims SO	Initial	With SO
06/06/2021 11:11	Status	Nathanael Sims SO	With SO	Initial
06/06/2021 11:11	Status	Nathanael Sims SO	Initial	With SO

View All

Part 1a of 8 – Outage page fields

- Automatically populated from Basic Outage
- Current Outage status. See **Outage Status** slide for Descriptions.
- A two-letter prefix for specific company derived from Basic Outage owner.
- Planned / Unplanned / Fault
- Outage Start / End Dates & Times
- Actual Start / End Dates & Times (automatically marks Outage as Started when populated)

Details		Related
▼ Ownership Detail		
Owner	Other Asset Owner	
NGET		
▼ Outage Request Description		
Circuit Description ⓘ	Additional Description ⓘ	
INDIAN QUEENS 400KV MESH CORNER 4 / SGT4 / MSC4 AND LANDULPH 1 CIRCUIT		
Status ⓘ	Basic Outage	
Planned	ON-0000331	
Company Code ⓘ	Basic Outage Code	
SO	INDQ4M4	
Outage Type ⓘ	Change Type ⓘ	
Planned	Add	
▼ Outage Dates		
Planned Start Date/Time ⓘ	Planned End Date/Time ⓘ	
17/06/2021 12:00	24/06/2021 12:00	
Actual Start Date/Time	Actual End Date/Time	
Planned Equipment Release Date/Time ⓘ	Permit For Work Date/Time ⓘ	
Authorised Person Attendance Date/Time ⓘ		
Change Code	Change Description ⓘ	
OH - SO CUSTOMERS REQUESTED (DNO,DCC)	OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS	
▼ Work Involved		
Work Involved ⓘ		
For proximity to DNO equipment and to undertake phasing checks		

- Link to Basic Outage
- Inherited from most recent closed Change Request

Part 1b of 8 – Outage Status

- **Initial** – pre-submission status.
- **With SO** – when an Outage (New or Change Request) has been submitted to the ESO.
- **Rejected** – when an Outage has been rejected by the ESO.
- **TBA** – when an Outage has been accepted into TBA (TBA = To be arranged). Booking can be reused.
- **Planned** – when a Planned outage has been accepted into the plan by the ESO.
- **Unplanned** – when an Unplanned outage has been accepted by the ESO. Unplanned outages are those switched out through manual intervention but have not followed the planning process.
- **Fault** – when a Fault outage has been accepted by the ESO. Fault outages are those switched out through automatic protective action.
- **Started** – when an Outage has begun (Actual Start Date & Time is populated).
- **Complete** – when an Outage has finished (Actual End Date & Time is populated).
- **Not Taken** – when an Outage didn't go ahead (can currently only be marked by the ESO). Booking can be reused. Please note there is a future change planned to allow TOs to mark an Outage as Not Taken.
- **Cancelled** – when the work associated with an Outage is no longer required (booking cannot be reused).
- **Withdrawn** – when an Outage booking isn't required (booking cannot be reused). Can be marked by ESO only.
- **Archived** – after a certain length of time, an Outage in Completed status is Archived (to save space on Salesforce server).

Part 1c of 8 – Outage Status

Statuses		
Planned Outage	Unplanned Outage	Fault Outage
Initial	Initial	Initial
With SO	With SO	With SO
Rejected	Rejected	Rejected
Planned	Unplanned	Fault
TBA	TBA	TBA
Started	Started	Complete
Complete	Complete	Cancelled
Not Taken	Not Taken	Archived
Cancelled	Cancelled	
Withdrawn	Archived	
Archived		

Part 2 of 8 – Outage page fields

Outage Characteristics	
Emergency Return To Service: Day 0 6	Emergency Return To Service: Day Units 0 Hours
Emergency Return To Service: Night 0 8	Emergency Return To Service: Night Units 0 Hours
Working Time Continuous	OnCom <input type="checkbox"/>
TO Impact 0 P4	In Service 0 <input type="checkbox"/>
Commissioning/Decommissioning Outage? 0 <input type="checkbox"/>	Review ERTS Profiles <input type="checkbox"/>
Work Type	
Work Type Description EPR - External Party Request; PRS - Post Fault Repairs - Switchgear	
TO Work Description	
TO Outage Reference 0	TO Project
TO Reference	TO Comments 0
TO Scada	PLD 0
ESO Outage Comments	
ESO Comments - Internal 0	Operational Remarks
ESO Rejection Comments 0	
ESO Comments (NGET) 0	NGET Comments 0
ESO Comments (SPT) 0	SP Comments 0
ESO Comments (SHETL) 0	SHETL Comments 0

ERTS – separate fields for digits and unit of time

Select if Com / Decom is associated with this outage (purpose is to aid visibility of upcoming CSP's). Can be selected by TO or SO.

TO can enter reference number (i.e. legacy TOGA number). This number can be searched on the Outage Search page*

Additional TO reference (not searchable except via Reports)

SCADA reference if available

SO only comments

To be populated if Outage Rejected

SO comments visible to NGET

SO comments visible to SPT

SO comments visible to SSEN-T

Tick if Outage has no ERTS (i.e. return On Completion)

Should be ticked by the TO to indicate if ERTS Profile has been submitted (ERTS Profile is visible in Related tab of Outage – see slide Part 6 of 8). However, there is an outstanding defect in that this field is not visible to TO. Therefore cannot be used as intended.

TO Project reference (i.e. PI no.)

TO comments, visible to SO

PLD name, if linked

Any operational comments, such as switching restrictions, OESB etc.

Only available for cross-boundary outages. Visible to the specific TO and the ESO

*note: the legacy TOGA number is migrated to this field for all migrated outages.

Part 3 of 8 – Outage page fields

Tick if commercial sanction is required (i.e. if TO Justification paper required)

NAP Paper initiated by (mark as SO or TO)

Tick if Demand At Risk (Demand Risk Asset field will then become visible on Related tab). See **Demand At Risk** chapter.

Tick if Generation is at increased risk (no longer necessary for RoCoF / VS following SQSS mod GSR027). See **Generation Risk** chapter.

Tick if Winter ERTS review required. See **Seasonal Risk** chapter.

▼ Sanction	
Sanctioning Review Needed <input type="checkbox"/>	Sanction Review Initiation Date
Sanction Review Initiated By	Sanction Review Completion Date
▼ Risk Characteristics	
Demand at Risk Needed <input checked="" type="checkbox"/>	Demand Risk Complete <input type="checkbox"/>
Generator Risk Needed <input type="checkbox"/>	Generation Risk Complete <input type="checkbox"/>
Seasonal Risk Needed 0 <input type="checkbox"/>	Seasonal Risk Complete <input type="checkbox"/>
Manual Override Seasonal Risk 0	

Date sanction requirement initiated and date outage sanctioned

These fields are automatically populated when the respective assessments have been completed (i.e. Approval / Review Status' are set to Approved / Reviewed).

Part 4 of 8 – Outage page fields

Demand at Risk fields.
See **Demand At Risk**
chapter for details of
process

Seasonal Risk (i.e. Winter
ERTS Risk) fields.
See **Seasonal Risk** chapter
for details of process

▼ Demand at Risk Details	
Restoration	Mitigation
Demand Risk Approval Status	Demand at Risk Details
Affects Sensitive Site <input type="checkbox"/>	
▼ Generation Risk Details - Internal	
Generation Risk Review Status ⓘ	Generation at Risk Details
▼ Seasonal Risk Details - Internal	
Dependency ⓘ <input checked="" type="checkbox"/>	Reserve/Response ⓘ <input checked="" type="checkbox"/>
Restriction ⓘ <input checked="" type="checkbox"/>	Risk ⓘ <input checked="" type="checkbox"/>
Seasonal Risk Review Status ⓘ Reviewed	

Generation Risk fields.
See **Generation Risk**
chapter for details of
process

Part 5 of 8 – Outage page fields

Click link to view Starting
Operational Note

▼ Operational Notes

Start Date Operational Note

[OP-00004001](#)

End Date Operational Note

[OP-00004002](#)

Click link to view Ending
Operational Note

This section is
automatically populated

▼ System Information

Created By

 [Nathanael Sims SQ](#), 06/06/2021 11:11

Changed By

[nathanael.sims@nationalgrideso.so](#)

Outage Number

ON-0011736

Last Modified Date


06/06/2021 16:43


Part 6 of 8 – Outage page fields

This field is made visible when Demand at Risk Needed field is ticked in Details tab. See **Demand At Risk** chapter for process details.

All closed and open Change Requests (CR) are listed here. Click Outage Name against each CR to view the details. See Interpreting Outage History section for details on viewing in conjunction with Outage History field.


Lists all Tags inherited from the Basic Outage, in addition to any Tags assigned for the individual Outage. Tags fall into categories of External Party / Scheme / Free Codes / ESO Party.


 Demand Risk Asset (0) Add Assets


 Outage Change Requests (1)

Outage Name	Status	Change Type	Change Description	CreatedDate	Created By
ON-0011735	Approved	Add	OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS	06/06/2021	Nathanael Silms SO

View All

 ERTS Profile (0)

 Affected User (0)

 Tags (4) Add Tags

Tag Name	Description	Tag Type	Inactive
AM	Asset Management E/W	External Party	<input type="checkbox"/>
STHW	South West	External Party	<input type="checkbox"/>
SWE	South West	External Party	<input type="checkbox"/>
TSW	Subs-South West	External Party	<input type="checkbox"/>

View All

Click to view if a granular view of ERTS of an Outage has been created by the TO. ERTS Profile entries can be generated by TO when the Outage is in Initial status. There is currently little validation for this field, there are defects on the backlog to enhance this feature.

Inherited from Basic Outage. This field lists all the organisations (Accounts) who can see the Outage in their reports.

Part 7 of 8 – Outage page fields

May link a Parent or Child Outage to current Outage. A Parent Outage will see the current outage as a Child Outage, and vice versa. This functionality is similar to TOGA and is useful to see easily when there are multiple shorter outages planned in coordination with a longer umbrella outage.

When an Outage is linked to an HVSCC Record, the HVSCC Record details will appear here.

A F2F record can be generated here (or by navigating to Fail To Flys in the eNAMS toolbar). Visible to ESO only.

Linked Outages (0)

Link Child OutageLink Parent Outage

LIFT Details (2)

New

LIFT Detail Name	Record Type	Date Added	Date Removed
LIFT-00001395	ROB	2021-06-06 11:11:19Z	2021-06-06 11:28:07Z
LIFT-00001396	ROB	2021-06-06 11:13:00Z	2021-06-06 11:28:07Z

View All

HVSCCs (0)

Late News (0)

Fail to Flys (0)

New

An item is automatically created on the ROB (Regional Outage Board). The user may manually create an item on the NOB (National Outage Board) if National assessment required.

A Late News record is automatically generated if there is a new Outage / Outage Change that affects the following day. See *Late News Guide – eNAMS.pptx* for further details.

Part 8 of 8 – Outage page fields

When an Outage is linked to an OCLR in eNAMS, the OCLR details will appear here.

OCLRs (0)

Files (0)

Add Files

Upload Files

Or drop files

Outage History (6+)

Date	Field	User	Original Value	New Value
06/06/2021 12:11	Circuit Description	Nathanael Silms SO	INDQMC3	INDIAN QUEENS 400KV MESH CORNER 4 / SGT4...
06/06/2021 12:09	Circuit Description	Nathanael Silms SO	INDIAN QUEENS 400/132KV SGT3	INDQMC3
06/06/2021 11:28	Status	Nathanael Silms SO	With SO	Planned
06/06/2021 11:13	Status	Nathanael Silms SO	Initial	With SO
06/06/2021 11:11	Status	Nathanael Silms SO	With SO	Initial
06/06/2021 11:11	Status	Nathanael Silms SO	Initial	With SO

View All

The user may upload any type of file. The file is visible to all Affected Users who have visibility of the Outage (TO, SO, DNO's, DCC's).

Each change to a pre-defined 20 tracked Outage fields will be shown here in a new row

Demand At Risk

Asset Level (1/2) – Defining Demand at Risk

- Demand at Risk can be defined at the Asset level i.e. if an outage on an Asset is always going to cause demand to be at risk to a fault, this can be marked within the Asset.
- There are three fields available to populate:
 - **Demand at Risk** (tick to say yes)
 - **Demand at Risk Details**
 - **Sensitive Site** (i.e. if impacted site is listed within Work Instruction NAP-020)

Asset (Plant and Apparatus)
AXMI4.SGT.SGT2

▼ ESO Details

ESO Comments ⓘ

NASAP Required ⓘ

NASAP Code ⓘ

S828

NASAP Description ⓘ

NASAP Zone ⓘ

8-SOUTH WEST

▼ Demand at Risk Details

Demand at Risk ⓘ

☐

Demand at Risk Details ⓘ

Sensitive Site ⓘ

☐

▼ Demand at Risk Details

Demand at Risk ⓘ

☒

Sensitive Site ⓘ

☐

▼ Demand at Risk Details

DEMAND AT SINGLE CCT RISK Axminster demand at risk to: AXMI-CHIC-MANN SC fault, AXMI MC1/SGT1, MANN4 Busbar faults.

▼ Generation Risk Details - Internal

Generation Risk ⓘ

Cancel Save

Asset Level (2/2) – Defining Demand at Risk

- If **Demand at Risk** is flagged, the **Demand Risk Assets** field will become visible on the **Related** tab of the Asset.
- Multiple **Demand Risk Assets** can be linked to a single Asset by clicking on **Add Assets**
- Once linked, click on the dropdown arrow on the right hand side, then click on **Add Risk Details**
- Here, the user can populate Risk Details including **MVA** at risk, **Fault Type** and any additional comments. Then click **Save**.
- Refresh the page to see the entered details appear.

Asset (Plant and Apparatus)
AXMI4.SGT.SGT2

Demand Risk Assets (0)

Add Assets

Demand Risk Assets (1)

Add Assets

Remove

Add Risk Details

Asset Name	Asset Description	Substation Node 1	Substation Node 2	Fault Type	MVA
A-00002909	AXMINSTER SGT1	AXMINSTER 400KV	AXMINSTER 132KV		

View All

Asset (Plant and Apparatus)
AXMI4.SGT.SGT2

Demand Risk Assets (1)

Add Assets

Asset Name	Asset Description	Substation Node 1	Substation Node 2	Fault Type	MVA
A-00002909	AXMINSTER SGT1	AXMINSTER 400KV	AXMINSTER 132KV	Single CCT	50

View All

nationalgridESO

Basic Outage Level – Defining Demand at Risk

- Demand at Risk is also defined at the Basic Outage level i.e. if an Outage is always going to cause demand to be at risk to a fault, this can be marked within the Basic Outage.
- When an Asset that has **Demand at Risk** tagged is linked to a **Basic Outage**, the **Basic Outage** automatically inherits the **Demand at Risk** flag and **Demand at Risk Details**.
- **Demand At Risk** can also be manually flagged within the Basic Outage (same process as for an Asset).
- There are two fields available to populate:
 - Demand at Risk (tick to say yes)
 - Demand at Risk Details

The screenshot illustrates the process of adding an asset and defining demand at risk in a system interface. It is divided into three main sections connected by downward arrows.

Section 1: Assets (0)
This section shows an empty state with a header "Assets (0)" and a button "Add Existing Assets" highlighted with a red box.

Section 2: Assets (1)
This section shows the state after adding an asset. The header is "Assets (1)". A table lists the asset details, with the first row highlighted by a red box:

Asset Name	Asset Description	Status	Commissioning ...	Decommissionin...	Transmission Ow...
AXMI4.SGT.SGT2	AXMINSTER SGT2	Existing	1988-01-01		NGET

Below the table is a "View All" link. A green success message box is displayed: "Success! Asset Record has been added".

Section 3: Other
This section shows the "Demand at Risk" configuration. It has a header "Other" and two fields highlighted with a red box:

- Demand at Risk**: A checkbox that is checked.
- Demand at Risk Details**: A text field containing the text: "***DEMAND AT SINGLE CCT RISK*** Axminster demand at risk to: AXMI-CHIC-

Outage Level (1/2) – Defining Demand at Risk

- If Demand at Risk is defined at Basic Outage level, then the **Demand at Risk** flag and **Demand at Risk Details** will be automatically inherited by Outages. The **Affects Sensitive Site** flag will be automatically inherited from Assets.
- If **Demand at Risk** is flagged, the **Demand Risk Asset** field will become visible on the **Related** tab of the Outage.
- The **Demand Risk Asset** details will be automatically inherited from **Assets** linked to the Basic Outage. It can also be configured manually in the Outage.
- The user can click **Add Assets** and link Asset(s) to which demand would be lost if faulted.
- Once linked, click on the dropdown arrow and click **Risk Details**
- Here, the user can stipulate the **MVA** at risk, **Fault Type** and any additional **comments**
- Click **Save** and refresh the page to view the updated details.

The screenshot illustrates the 'Demand Risk Asset' configuration process. It shows the 'Related' tab of the 'Demand Risk Asset (0)' section, which includes an 'Add Assets' button. A dropdown arrow is highlighted, leading to a modal window for editing the asset details. The modal contains fields for 'Asset (Plant and Apparatus)', 'MVA', 'Fault Type', and 'Comments'. The 'MVA' field is set to 50, and the 'Fault Type' is set to 'Single CCT'. The 'Comments' field contains the text: '50MVA is at SC risk. 10MVA pick up within 1 hour confirmed by SSE. No pick up available from WPD.' The 'Save' button is highlighted. Below the modal, the 'Demand Risk Asset (1)' section shows the updated details in a table.

Asset Name	Asset Description	Substation Node 1	Substation Node 2	Fault Type	MVA
A-00002909	AXMINSTER SGT1	AXMI4	AXMI1	Single CCT	50

Outage Level (2/2) – Defining Demand at Risk

- The user may populate the **Restoration** and **Mitigation** fields (Note: SO and TO have permissions).
- Once complete, mark **Demand Risk Approval Status** as **With TO** to request the TO's approval.
- Demand Risk Approval Status** is a monitored field, therefore any change (i.e. when TO changes **Approval Status** field to **Approved**), will be recorded in Outage History – see example screenshot below.
- When Approval Status is **Approved**, the **Demand Risk Complete** box in the Outage is automatically ticked.

Note:

If Sensitive Site: SO must approve Demand at Risk; TO moves from With TO to With SO, the TO user does not have permissions to move to Approved
If not Sensitive Site: TO can and shall move directly to Approved.

▼ Demand at Risk Details

Restoration

Mitigation

Demand Risk Approval Status

Initial

DEMAND AT SINGLE CCT RISK Axminster demand at risk to: AXMI-CHIC-MANN SC fault, AXMI MC1/SGT1, MANN4 Busbar faults.

▼ Demand at Risk Details

Restoration

10MVA pick up by SSE within 1 hour post-fault. Confirmed with SSE - John Johnny - 06/06/2021. The remainder can only be restored in ERTS time (no pick up available from WPD network).

Mitigation

AXMINSTER DEMAND (50MVA) IS AT RISK TO THE FOLLOWING FAULTS:

- AXMINSTER SGT1
- AXMINSTER MC1

Demand at Risk Details

DEMAND AT SINGLE CCT RISK Axminster demand at risk to: AXMI-CHIC-MANN SC fault, AXMI MC1/SGT1, MANN4 Busbar faults.

This field is calculated upon save

▼ Generation Risk Details - Internal

Cancel Save

Date	Field	User	Original Value	New Value
1 07/06/2021 10:58	Demand Risk Approval Status	Nathanael Sims NGET OP	With TO	Approved

Field Descriptions - Demand at Risk

eNAMS Field	Object Level	Proposed Use
Demand at Risk Needed	Asset / Basic Outage / Outage	Check the box if an outage on this equipment will cause demand to be lost to a subsequent fault. Selection inherited from Asset -> Basic Outage -> Outage, can be added or taken away at each level. After checking the box, you may need to refresh the page for additional fields to appear.
Risk Details	Asset / Basic Outage / Outage	High level summary of why demand is at risk during an outage on this equipment e.g., on PEMB4 SGT1 it may say "Local demand at risk to faults losing SGT2" Outage is locked to the Basic Outage's Risk Details (which can be set independent of the Asset if necessary).
Restoration	Outage	Description of recovery actions that will be taken post fault. Detailed description of any outage specific risks, e.g., "Demand will be transferred to X group in Y minutes"
Mitigation	Outage	Description of health checks or other mitigations carried out to ensure likelihood of fault is as low as possible
Affects Sensitive Site	Asset / Outage	Check the box if the demand that would be lost is at a sensitive site (site list provided in Work Instruction NAP-020). These sites require additional approval from ESO.
Demand Risk Approval Status	Outage	Initial – while drafting risk details. With TO – when ready for TO actions (i.e. Mitigation) With SO - only applicable at sensitive sites, which require NGESO final approval of demand at risk. Approved – can be set directly by the TO if non-sensitive site impacted.
Demand at Risk Asset	Asset / Basic Outage / Outage	Can be found in Related tab. List of assets to which demand is at risk to a fault on. Selection and values inherit from Asset -> Outage (via Basic Outage), additional assets can be added or taken away at Outage level.
Change History	Asset / Basic Outage / Outage	The date, time and user of each change will be recorded in the Field History Tracker which can be found in Related tab.

Generation at Risk

Generation Risk was added to eNAMS to highlight occasions where a RoCoF / Vector Shift constraint might be triggered, where additional sanction could be needed or where an outage causes a largest loss.

Following FRCR Phase 1 go-live on 25/05/2021, BMU+VS losses are no longer required to be secured. However the intention is to continue to populate this field in the event of adverse weather, in line with provisions in the SQSS operational chapters which allow the Control Room to take additional actions over and above the agreed criteria if there is a period of significantly higher risk.

The benefit of recording in the Generation Risk field on the outage level is that a report can be run for commercial and the ENCC Energy and Strategy desks to review forecast risk as and when is necessary.

Asset Level (1/2) - Defining Generation at Risk

- Generation Risk is only visible to SO.
- Like Demand at Risk, Generation Risk can be defined at the Asset level i.e. if an outage on an Asset is always going to cause generation to be at risk to a fault, this can be marked within the Asset.
- There are two fields available to populate:
 - **Generation Risk** (tick to say yes)
 - **Generation Risk Details**

Generation Risk Details - Internal

Generation Risk ☐

Generation Risk Details

Generation Risk Details - Internal

Generation Risk ☒

Generation Risk Details

MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSLING 400KV CIRCUIT.

System Information

Cancel Save

Asset Level (2/2) - Defining Generation at Risk

- If **Generation Risk** is flagged, the **Generation Risk Assets** field will become visible on the **Related** tab of the Asset
- Multiple **Generation Risk Assets** can be linked to a single Asset by clicking on **Add Assets**
- Once linked, click on the dropdown arrow on the right hand side, then click on **Add Risk Details**
- Here, the user can populate Risk Details including **MVA** at risk, **Fault Type**, **Generators** and any additional **comments**. Then click **Save**.
- Refresh the page to see the entered details appear.

Details **Related**

Generation Risk Assets (0) Add Assets

Generation Risk Assets (1) Add Assets

Asset Name	Asset Descrip...	Substation N...	Substation N...	Fault Type	MVA	Generators
A-00001745	MARCHWOOD - NURSING 400KV CIRCUIT	MARCHWOOD 4...	NURSING 400KV			

↓

Edit AH-0000052

Parent Asset: A-00001485

Child Asset: A-00001745

Fault Type: Single CCT

MVA: 299

Generators: MARCHWOOD POWER STATION

Comments:

Cancel Save & New Save

Generation Risk Assets (1) Add Assets

Asset Name	Asset Descrip...	Substation N...	Substation N...	Fault Type	MVA	Generators
A-00001745	MARCHWOOD - NURSING 400KV CIRCUIT	MARCHWOOD 4...	NURSING 400KV	Single CCT	299	MARCHWOOD P...

Note: there is a current defect in eNAMS that will limit maximum MVA at risk to 300MW at Asset level, this has been escalated for fix

Basic Outage Level – Defining Generation at Risk

- Generation Risk is also defined at the Basic Outage level i.e. if an Outage is always going to cause generation to be at risk to a fault, this can be marked within the Basic Outage.
- When an Asset that has **Generation Risk** tagged is linked to a Basic Outage, the Basic Outage automatically inherits the **Generation at Risk** flag and **Generation at Risk** Details.
- **Generation at Risk** can also be manually flagged within the Basic Outage (same process as for an Asset).
- There are two fields available to populate:
 - **Generation at Risk** (tick to say yes)
 - **Generation at Risk** Details

The diagram illustrates the process of defining Generation at Risk in three steps:

- Assets (0)**: A button labeled "Add Existing Assets" is highlighted with a red box.
- Assets (1)**: A table of assets is shown. The first asset is highlighted with a red box:

Asset Name	Asset Description	Status	Commissioning ...	Decommissionin...	Transmission Ow...
MAWO4.OHL.FAWL4	MARCHWOOD - FAW-LEY 400KV CIRCUIT	Existing	1988-01-01		NGET

A green success message "Success! Asset Record has been added" is displayed below the table.
- Generation at Risk**: A form is shown with a red box around the "Generation at Risk" field, which is checked. The "Generation at Risk Details" field contains the text: "MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSILING 400KV CIRCUIT."

Outage Level (1/2) – Defining Generation at Risk

- If Generation at Risk is defined at Basic Outage level, then the **Demand at Risk** flag and **Demand at Risk Details** will be automatically inherited by Outages.
- If **Generation at Risk** is flagged, the **Generation Risk Asset** field will become visible on the **Related** tab of the Outage.
- The **Generation Risk Asset** details will be automatically inherited from **Assets** linked to the Basic Outage. It can also be configured manually in the Outage.
- The user can click **Add Assets** and link Asset(s) to which generation would be lost if faulted
- Once linked, click on the dropdown arrow and click **Risk Details**
- Here, the user can stipulate the **MVA** at risk, **Fault Type**, **Generators** and any additional comments
- Click **Save** and refresh the page to view the updated details.

Details **Related**

Generator Risk Asset (0) Add Assets

↓

Generator Risk Asset (1) Add Assets

Asset Name	Asset Descrip...	Substation N...	Substation N...	Fault Type	MVA	Generators
A-00001745	MARCHWOOD - NURSILING 400KV CIRCUIT	MAWO4	NURS4A			▼

↓

Edit AO-0006984

Asset (Plant and Apparatus)
A-00001745
MVA
910
Comments
MARCHWOOD POWER STATION (910MW) AT SC RISK

Outage
ON-0011907
Demand Risk Asset
☐ This field is calculated upon save
Generation Risk Asset
☒ This field is calculated upon save

Generators
MARCHWOOD POWER STATION
Fault Type
Single CCT

Created By
Nathanael Sims SO, 07/06/2021 14:17
Asset Outage Name
AO-0006984

Last Modified By
Nathanael Sims SO, 07/06/2021 14:19

Cancel Save & New **Save**

↓

Generator Risk Asset (1) Add Assets

Asset Name	Asset Descrip...	Substation N...	Substation N...	Fault Type	MVA	Generators
A-00001745	MARCHWOOD - NURSILING 400KV CIRCUIT	MAWO4	NURS4A	Single CCT	910	MARCHWOOD P... ▼

Outage Level (2/2) – Defining Generation at Risk

- If Generation at Risk is acceptable, the appropriate user can mark **Generation Risk Review Status** as **Reviewed**
- Following this, the **Generation Risk Complete** box is automatically ticked
- Note: **Generation Risk Review Status** or **Generation Risk Complete** fields are not a monitored field, therefore any change would not be recorded in Outage History.

The screenshot displays the 'Generation Risk Details - Internal' form. A red box highlights the 'Generation Risk Review Status' dropdown menu, which is currently set to 'Not Reviewed'. The dropdown options are: 'Not Reviewed', '--None--', '✓ Not Reviewed', and 'Reviewed'. To the right of the dropdown, the text reads: 'Generation at Risk Details', 'MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSING 400KV CIRCUIT.', and 'This field is calculated upon save'. Below this, there is a 'Reserve/Response' checkbox. A large grey arrow points down from the dropdown menu to the 'Generation Risk Complete' checkbox, which is also highlighted with a red box and is currently checked. The 'Generator Risk Needed' checkbox is also checked.

Generation Risk Details - Internal

Generation Risk Review Status ⓘ

Not Reviewed

--None--

✓ Not Reviewed

Reviewed

Generation at Risk Details

MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSING 400KV CIRCUIT.

This field is calculated upon save

Reserve/Response ⓘ

Generator Risk Needed

Generation Risk Complete

Field Descriptions – Generation at Risk

eNAMS Field	Object Level	Proposed Use
Generation at Risk Needed	Asset / Basic Outage / Outage	Check the box if an outage on this equipment will cause a generator to be lost to a subsequent fault. Selection inherited from Asset -> Basic Outage -> Outage, can be added or taken away at each level. After checking the box, you may need to refresh the page for additional fields to appear.
Risk Details	Asset / Basic Outage / Outage	High level summary of why generation is at risk during an outage on this equipment e.g. "Following fault on X Circuit I/T will trip off generator" Outage is locked to the Basic Outage's Risk Details (which can be set independent of the Asset if necessary).
Generation Risk Approval Status	Outage	Not Reviewed – risk is identified but not yet approved. Reviewed – risk has been agreed to.
Generation Risk Asset	Asset / Basic Outage / Outage	Can be found in Related tab. List of assets to which demand is at risk to a fault on. Selection and values inherit from Asset -> Outage (via Basic Outage), additional assets can be added or taken away at Outage level. There is a current defect in eNAMS that will limit maximum MW at risk to 300MW at the Asset level, this has been escalated for fix.
Change History	Asset / Basic Outage / Outage	The date, time and user of each change will be recorded in the Field History Tracker which can be found in Related tab.

Seasonal Risk

Seasonal Risk replaces 'Risk 18', 'ERTS risk' or 'Winter Risk'. Currently this applies to outages with an ERTS > 18H ($\geq 18H$ in E&W) in the Winter period - between Week 45 and Week 9.

The requirement for assessing Seasonal Risk is stated in STCP 11-1 (extract taken in 2021):

“The types of faults on the National Electricity Transmission System in winter tend to have a greater potential for longer repair times and there is a greater potential for circuits to be recalled to secure the Transmission System against severe weather conditions. All Outages placed in the Winter Period that have an Emergency Return to Service Time greater than 24 hours must be pre-approved by both NGESO and the relevant TO”

Defining Seasonal Risk (1/2)

- Seasonal Risk is defined on the Outage level only
- For Outages where ERTS > 18H and is planned between Week 45 – 9, the **Seasonal Risk Needed** flag should be set
- This flag is set automatically for Outages that meet that aforementioned criteria*
- For those not automatically set, this can be done by clicking on **Manual Override Seasonal Risk** field and selecting **Seasonal Risk**
- The **Seasonal Risk Needed** flag will then be automatically ticked.

The screenshot displays a web interface for configuring seasonal risk. On the left, under the heading "Seasonal Risk Needed" (with an information icon), there is a checkbox and the text "This field is calculated upon save". Below this is a "Manual Override Seasonal Risk" section (also with an information icon) which contains a dropdown menu. The dropdown is currently open, showing three options: "--None--", "Seasonal Risk" (which is selected and marked with a checkmark), and "Not Seasonal Risk". A red box highlights the "Manual Override Seasonal Risk" section. On the right, under the heading "Seasonal Risk Complete", there is a checkbox and the text "This field is calculated upon save". Below this is a "Mitigation" section. A large grey arrow points from the "Manual Override Seasonal Risk" section down to the "Seasonal Risk Needed" checkbox, which is now checked. The "Seasonal Risk Complete" checkbox remains unchecked.

*note: there is an outstanding defect which doesn't automatically tag ONCOM outages as Seasonal Risk Needed if it meets the aforementioned criteria. This has been escalated for resolution.

Defining Seasonal Risk (2/2)

- Following requisite checks, the user may tick against **Dependency**, **Restriction**, **Reserve/Response**, **Risk** fields to indicate acceptance against each category
- **Seasonal Risk Review Status** can be changed to **Reviewed** to indicate agreement to Seasonal Risk.
- **Seasonal Risk Complete** flag will then be automatically ticked
- Note: **Seasonal Risk Review Status** or **Seasonal Risk Complete** are not a monitored field, therefore any change would not be recorded in Outage History
- Only the SO has access to view the Seasonal Risk Details section. TO only has permissions to view Seasonal Risk Needed / Complete section.

The screenshot displays a web form titled "Seasonal Risk Details - Internal". The form is divided into two main sections. The top section, highlighted with a red border, contains four fields: "Dependency" (checked), "Restriction" (checked), "Reserve/Response" (checked), and "Risk" (checked). Below these is a dropdown menu for "Seasonal Risk Review Status" currently set to "Reviewed". A large grey arrow points down from this section to a second section. The second section, also highlighted with a red border, contains two fields: "Seasonal Risk Needed" (checked) and "Seasonal Risk Complete" (checked). The "Seasonal Risk Complete" field is highlighted with a red border.

Field Descriptions – Seasonal Risk

eNAMS Field	Object Level	Proposed Use
Seasonal Risk Needed	Outage	Calculated field, eNAMS will check the box if the criteria is met <i>There is an outstanding defect as it doesn't pick up on ONCOM ERTS outages. This has been escalated to fix.</i>
Manual Override Seasonal Risk	Outage	Can be used to add Seasonal Risk to an outage that has not been automatically marked.
Dependency	Outage	Check the box to confirm there is no / approved dependency on generation during this outage.
Reserve/Response	Outage	Check the box to confirm there is no / approved constraint of reserve/response during this outage.
Restriction	Outage	Check the box to confirm there is no / approved constraint of generation during this outage.
Risk	Outage	Check the box to confirm there is no / approved additional risk to generation during this outage.
Seasonal Risk Review Status	Outage	Not Reviewed – Requirement is identified and pending assessment outcome. Reviewed – All four boxes are ticked and there are no issues, or any issues have been approved through sanctioning.
Change History	Outage	The date, time and user of each change will be recorded in the Field History Tracker which can be found in Related tab.

ERTS Profiling

ERTS Profile in eNAMS enables a more granular view of an Outage ERTS to be made available to the SO by the TO

Defining ERTS Profile

- An ERTS Profile can be raised from the **Initial** page of a new Outage / Outage Change Request
- From the Outage page in Initial status, scroll down to **ERTS Profile** (in TO view)
- Click on **New** button found within the ERTS Profile field
- Populate the **New ERTS Profile: ERTS Profile** popup as much as possible, and provide details of the reason for the ERTS entry in the **Comments** field
- Click **Save**
- Create multiple ERTS Profile entries to cover the entire period of the Outage
- (Please note there is no logic to prevent ERTS Profile entries overlap – this is a known defect to be rectified)

The flowchart illustrates the process of defining an ERTS Profile. It begins with a status bar showing the progression from 'Initial' to 'With SO', 'Approved', 'Rejected', and 'Cancelled'. An arrow points down to a form where the 'ERTS Profile (0)' field is visible, and a 'New' button is highlighted. Another arrow points down to the 'New ERTS Profile: ERTS Profile' popup form.

New ERTS Profile: ERTS Profile

Information

ERTS Profile Number

*Outage 1

ON-0012911

*Period Start 1

03/08/2021

*Period End 1

18/08/2021

Emergency Return To Service: Day 1

12

Emergency Return to Service: Day Units 1

Hours

Emergency Return To Service: Night 1

18

Emergency Return to Service: Night Units 1

Hours

OnCom 1

☐

*Comments 1

Period 1 - Jumpers broken

Cancel Save

Interpreting Outage History

Outage Lifecycle Example

- We shall use an example of an Outage that has had the following lifecycle:
- 1) New Outage Rejected
 - 2) Outage Resubmitted and Accepted
 - 3) Change of Start Date (One day earlier) Accepted
 - 4) Change of ERTS (to ONCOM) Accepted
 - 5) Change of End Date (Delay end by one day) Rejected
 - 6) Outage TBA request submitted and Accepted
 - 7) Outage requested from TBA to Planned and Accepted
 - 8) Outage Cancelled

Records of Outage

Outage Change Requests (7)

Outage Name	Status	Change Type	Change Description	CreatedDate	Created By																																																																																																																																																						
ON-0011912	Approved	Cancel	Outage works were bundled and completed in another booking therefore this booking is no longer required.	08/06/2021	Nathanael Sims NGET OP																																																																																																																																																						
ON-0011912	Approved	TBA	Ops confirmed they are now able to resource - please reinstate into plan for old Planned	08/06/2021	Nathanael Sims SO																																																																																																																																																						
ON-0011912	Approved	<div><div>Outage History</div><div>29 Items • Sorted by Date • Updated 14 minutes ago</div><table><tr><th>Date</th><th>Field</th><th>User</th><th>Original Value</th><th>New Value</th></tr><tr><td>1 07/06/2021 16:09</td><td>Change Code</td><td>Nathanael Sims SO</td><td>9 - TO Resource</td><td>13 - Bundling / Opportunity Outage</td></tr><tr><td>2 07/06/2021 16:09</td><td>Change Description</td><td>Nathanael Sims SO</td><td>Ops confirmed they are now able to resource - please reinstate into plan for old P...</td><td>Outage works were bundled and completed in another booking therefore this bo...</td></tr><tr><td>3 07/06/2021 16:09</td><td>Status</td><td>Nathanael Sims SO</td><td>Planned</td><td>Cancelled</td></tr><tr><td>4 07/06/2021 16:08</td><td>Status</td><td>Nathanael Sims SO</td><td>With SO</td><td>Planned</td></tr><tr><td>5 07/06/2021 16:06</td><td>Status</td><td>Nathanael Sims NGET OP</td><td>Initial</td><td>With SO</td></tr><tr><td>6 07/06/2021 16:06</td><td>Change Code</td><td>Nathanael Sims NGET OP</td><td>11 - Replan TBA</td><td>9 - TO Resource</td></tr><tr><td>7 07/06/2021 16:06</td><td>Change Description</td><td>Nathanael Sims NGET OP</td><td>To TBA - Ops no longer able to resource</td><td>Ops confirmed they are now able to resource - please reinstate into plan for old P...</td></tr><tr><td>8 07/06/2021 16:06</td><td>Status</td><td>Nathanael Sims NGET OP</td><td>TBA</td><td>Initial</td></tr><tr><td>9 07/06/2021 16:05</td><td>Change Code</td><td>Nathanael Sims SO</td><td>13 - Bundling / Opportunity Outage</td><td>11 - Replan TBA</td></tr><tr><td>10 07/06/2021 16:05</td><td>Change Description</td><td>Nathanael Sims SO</td><td>CAN WE CHANGE ERTS TO ONCOM</td><td>To TBA - Ops no longer able to resource</td></tr><tr><td>11 07/06/2021 16:05</td><td>Status</td><td>Nathanael Sims SO</td><td>Planned</td><td>TBA</td></tr><tr><td>12 07/06/2021 16:00</td><td>Change Code</td><td>Nathanael Sims SO</td><td>9 - TO Resource</td><td>13 - Bundling / Opportunity Outage</td></tr><tr><td>13 07/06/2021 16:00</td><td>Change Description</td><td>Nathanael Sims SO</td><td>START ONE DAY EARLIER - NOW 15/06/2021</td><td>CAN WE CHANGE ERTS TO ONCOM</td></tr><tr><td>14 07/06/2021 16:00</td><td>Emergency Return To Service: Day</td><td>Nathanael Sims SO</td><td>4</td><td></td></tr><tr><td>15 07/06/2021 16:00</td><td>Emergency Return To Service: Night</td><td>Nathanael Sims SO</td><td>6</td><td></td></tr><tr><td>16 07/06/2021 16:00</td><td>Emergency Return To Service: Day Units</td><td>Nathanael Sims SO</td><td>Hours</td><td></td></tr><tr><td>17 07/06/2021 16:00</td><td>Emergency Return To Service: Night Un...</td><td>Nathanael Sims SO</td><td>Hours</td><td></td></tr><tr><td>18 07/06/2021 15:58</td><td>Change Code</td><td>Nathanael Sims SO</td><td>1 - New work identified in current year</td><td>9 - TO Resource</td></tr><tr><td>19 07/06/2021 15:58</td><td>Change Description</td><td>Nathanael Sims SO</td><td>NEW</td><td>START ONE DAY EARLIER - NOW 15/06/2021</td></tr><tr><td>20 07/06/2021 15:58</td><td>Planned Start Date/Time</td><td>Nathanael Sims SO</td><td>15/06/2021 02:00</td><td>14/06/2021 02:00</td></tr><tr><td>21 07/06/2021 15:57</td><td>Status</td><td>Nathanael Sims SO</td><td>With SO</td><td>Planned</td></tr><tr><td>22 07/06/2021 15:56</td><td>Status</td><td>Nathanael Sims NGET OP</td><td>Initial</td><td>With SO</td></tr><tr><td>23 07/06/2021 15:56</td><td>Status</td><td>Nathanael Sims NGET OP</td><td>Rejected</td><td>Initial</td></tr><tr><td>24 07/06/2021 15:56</td><td>Work Involved</td><td>Nathanael Sims NGET OP</td><td></td><td></td></tr><tr><td>25 07/06/2021 15:56</td><td>Status</td><td>Nathanael Sims SO</td><td>With SO</td><td>Rejected</td></tr><tr><td>26 07/06/2021 15:54</td><td>Status</td><td>Nathanael Sims NGET OP</td><td>Initial</td><td>With SO</td></tr><tr><td>27 07/06/2021 15:54</td><td>Created.</td><td>Nathanael Sims NGET OP</td><td></td><td></td></tr><tr><td>28 07/06/2021 15:54</td><td>Demand Risk Approval Status</td><td>Nathanael Sims NGET OP</td><td></td><td>Initial</td></tr><tr><td>29 07/06/2021 15:54</td><td>Owner</td><td>Nathanael Sims NGET OP</td><td></td><td>NGET</td></tr></table></div>				Date	Field	User	Original Value	New Value	1 07/06/2021 16:09	Change Code	Nathanael Sims SO	9 - TO Resource	13 - Bundling / Opportunity Outage	2 07/06/2021 16:09	Change Description	Nathanael Sims SO	Ops confirmed they are now able to resource - please reinstate into plan for old P...	Outage works were bundled and completed in another booking therefore this bo...	3 07/06/2021 16:09	Status	Nathanael Sims SO	Planned	Cancelled	4 07/06/2021 16:08	Status	Nathanael Sims SO	With SO	Planned	5 07/06/2021 16:06	Status	Nathanael Sims NGET OP	Initial	With SO	6 07/06/2021 16:06	Change Code	Nathanael Sims NGET OP	11 - Replan TBA	9 - TO Resource	7 07/06/2021 16:06	Change Description	Nathanael Sims NGET OP	To TBA - Ops no longer able to resource	Ops confirmed they are now able to resource - please reinstate into plan for old P...	8 07/06/2021 16:06	Status	Nathanael Sims NGET OP	TBA	Initial	9 07/06/2021 16:05	Change Code	Nathanael Sims SO	13 - Bundling / Opportunity Outage	11 - Replan TBA	10 07/06/2021 16:05	Change Description	Nathanael Sims SO	CAN WE CHANGE ERTS TO ONCOM	To TBA - Ops no longer able to resource	11 07/06/2021 16:05	Status	Nathanael Sims SO	Planned	TBA	12 07/06/2021 16:00	Change Code	Nathanael Sims SO	9 - TO Resource	13 - Bundling / Opportunity Outage	13 07/06/2021 16:00	Change Description	Nathanael Sims SO	START ONE DAY EARLIER - NOW 15/06/2021	CAN WE CHANGE ERTS TO ONCOM	14 07/06/2021 16:00	Emergency Return To Service: Day	Nathanael Sims SO	4		15 07/06/2021 16:00	Emergency Return To Service: Night	Nathanael Sims SO	6		16 07/06/2021 16:00	Emergency Return To Service: Day Units	Nathanael Sims SO	Hours		17 07/06/2021 16:00	Emergency Return To Service: Night Un...	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25 07/06/2021 15:56	Status	Nathanael Sims SO	With SO	Rejected																																																																																																																																																							
26 07/06/2021 15:54	Status	Nathanael Sims NGET OP	Initial	With SO																																																																																																																																																							
27 07/06/2021 15:54	Created.	Nathanael Sims NGET OP																																																																																																																																																									
28 07/06/2021 15:54	Demand Risk Approval Status	Nathanael Sims NGET OP		Initial																																																																																																																																																							
29 07/06/2021 15:54	Owner	Nathanael Sims NGET OP		NGET																																																																																																																																																							

Change Requests and Outage History Use

- It is important to highlight that **Change Requests** must be viewed in conjunction with **Outage History** to appreciate all the details of a historical change / open Change Request of an Outage.
- **Change Requests** are required to view:
 - Who submitted a Change Request and when
 - Any details of an open Change Request (i.e. what is changing)
 - Details of any fields not tracked by Outage History (not included in list of 20 tracked fields).
- **Outage History** field simply tracks any changes to an Outage (i.e. acknowledges changes made under a Change Request only once Approved). This includes an Outage that has never been in Planned status, therefore any changes are made directly in the Outage (not through a Change Request).
- An example to illustrate its limitations is the below where the **Outage History** skips out **Rejected** Change Request (No. 5 from previous slide)

No. 6) of Outage Lifecycle Example: Outage to TBA - Accepted

6	07/06/2021 16:06	Change Code	Nathanael Sims NGET OP	11 - Replan TBA	9 - TO Resource
7	07/06/2021 16:06	Change Description	Nathanael Sims NGET OP	To TBA - Ops no longer able to resource	Ops confirmed they are now able to resource - please reinstate into plan for old P...
8	07/06/2021 16:06	Status	Nathanael Sims NGET OP	TBA	Initial
9	07/06/2021 16:05	Change Code	Nathanael Sims SO	13 - Bundling / Opportunity Outage	11 - Replan TBA
10	07/06/2021 16:05	Change Description	Nathanael Sims SO	CAN WE CHANGE ERTS TO ONCOM	To TBA - Ops no longer able to resource

No. 4) of Outage Lifecycle Example: Change ERTS - Accepted

Difference With Original Outage

- The **Difference With Original Outage** button in a Change Request will open a **Difference With Original Outage** tab.
- It can be used effectively for open Change Requests (i.e. Change Requests at Initial or With SO Status) as the columns represent:
 - Original Value = current Planned Outage
 - New Value = open Change Request
- Conversely, it is not effective for closed Change Requests (i.e. Change Requests at Accepted / Rejected / Cancelled Status), as it will only show you what has changed since the Change Request as opposed to what changed under the Change Request. Furthermore, as would be expected, the latest closed Change Request will be blank in both the **Original Value** and **New Value** column.
- As a result, it is important to interrogate **Outage History** field to understand what changed under a particular **Change Request**, by matching the dates / time of a Change Request being **Accepted** (i.e. Last Modified Date) to the **Outage History Date** column to find the relevant changes.

View Change Request when No.6 of Outage Lifecycle Example was pending (Open Change Request)

Difference With Original Outage			
Field Name	Original Value	New Value	
Change Code	13 - Bundling / Opportunity Outage	2 - OESB/ EMI / RHMZ	
Planned End Date Time	2021-06-29 11:00:00	2021-06-30 11:00:00	
Duration(Days)	16	17	
Change Description	CAN WE CHANGE ERTS TO ONCOM	CHANGE END DATE - DELAY BY ONE DAY	
			Cancel

View same Change Request as above but now after No.8 of Outage Lifecycle Example

Difference With Original Outage			
Field Name	Original Value	New Value	
Change Code	13 - Bundling / Opportunity Outage	2 - OESB/ EMI / RHMZ	
Change Type	To Cancel	To Update	
Planned End Date Time	2021-06-29 11:00:00	2021-06-30 11:00:00	
Duration(Days)	16	17	
Change Description	Outage works were bundled and completed in another booki...	CHANGE END DATE - DELAY BY ONE DAY	
			Cancel

Interpreting Migrated Outages History

- Outages have been migrated from TOGA to eNAMS in line with criteria given to preserve Outage history required for reporting purposes and for day to day tasks, while acknowledging technical limitations which prevent a full scale replica of what is available in TOGA in regards to history.
- Some of the limitations of mapping between TOGA -> eNAMS that users should be aware of when interrogating the history of migrated Outage data:
 - There is no mapping for Outage changes in TOGA that were made without a change request. A change request in TOGA constitutes [Status] -> Awaiting Agreement (primarily used for E&W Outages) or a Request Outage (primarily used for Scotland and GB YA Outages).
 - TOGA Change Date & Time is mapped to eNAMS Created Date & Time, therefore:
 - For open CR's (i.e. With SO status), the Created Date & Time is accurate.
 - For closed CR's (i.e. in Approved / Rejected status), Date & Time the request was signed in in TOGA = Created Date & Time in eNAMS, therefore is not accurate.
 - eNAMS Last Modified Date & Time is populated as Data migration date & time, therefore is not accurate for migrated Outages.
 - "Outage History" field is blank for migrated Outages due to limitations.
 - "Changed By" field in eNAMS CR is correctly mapped to display the name of the person who signed in the change in TOGA.
 - "Created By" field states a generic Data Migration Salesforce ID due to limitations.

Cross-boundary Outages

Cross-boundary Outages

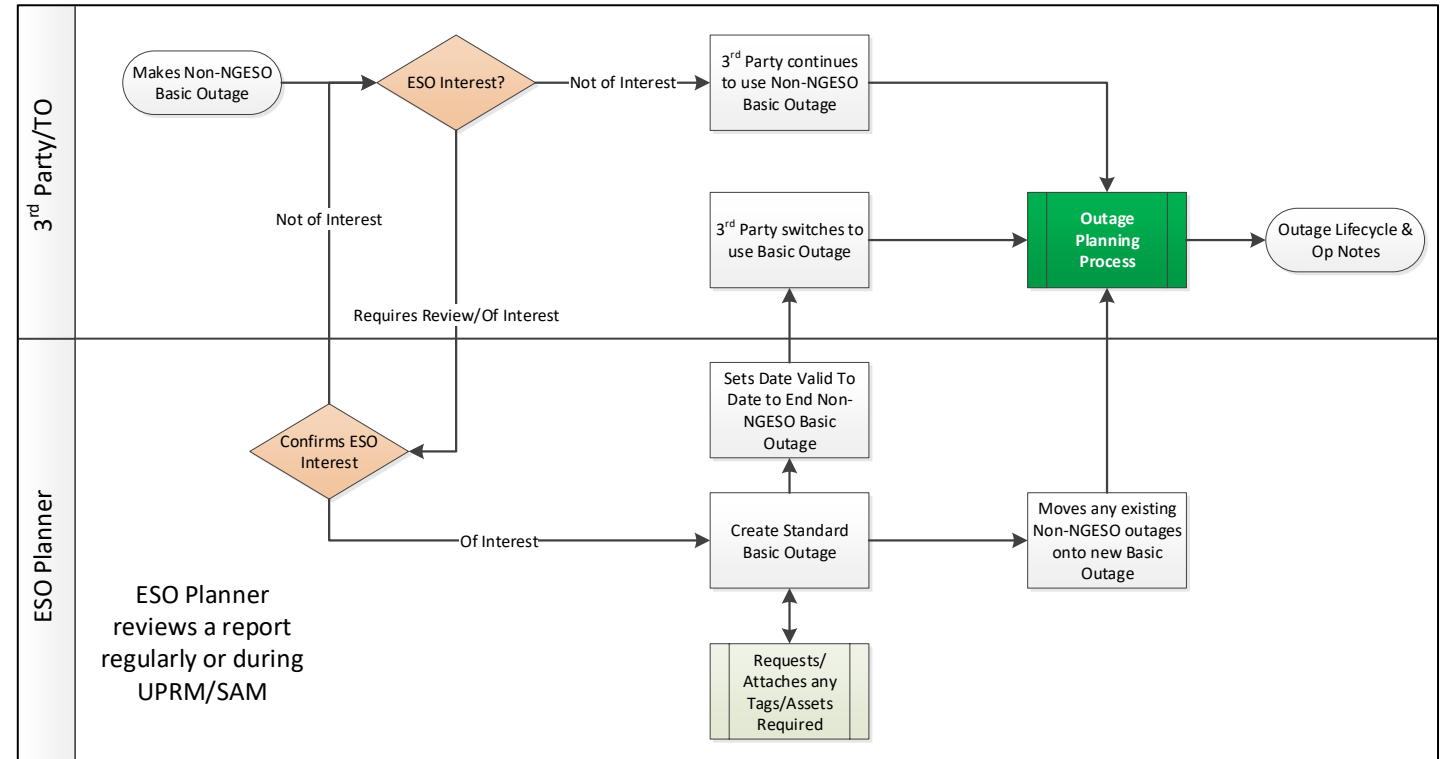
- Cross-boundary Outages can be created in eNAMS (a feature that wasn't available in TOGA).
- The premise of this functionality is to provide a single booking for Outages that span two TO's.
- Using Cross-boundary Basic Outages when raising Outages than span more than one TO eliminates the need to raise a "mirror booking" as was necessary in TOGA.
- There is two Cross-boundary Basic Outages for each circuit where the circuit spans two TO's, one Cross-boundary Basic Outage for each Owner of the circuit
- There are two fields within a Cross-boundary Basic Outage that enable visibility of a Cross-boundary Outages by both affected TO's.
 - **Owner** – this is the TO who has requested the outage (i.e. the one conducting work on the circuit)
 - **Boundary Transmission Owner** – this is the TO affected by the cross-boundary outage

The screenshot displays a web form for creating a Cross-boundary Basic Outage. It is divided into two main sections: 'Ownership Detail' and 'Basic Outage Description'. In the 'Ownership Detail' section, the 'Owner' dropdown menu is set to 'NGET'. In the 'Basic Outage Description' section, the 'Boundary Transmission Owner' dropdown menu is set to 'SPT'. Both dropdown menus are highlighted with red rectangular boxes. The 'Boundary Transmission Owner' field also includes a red asterisk and an information icon (i) to the left of the dropdown, and a refresh icon (circular arrow) to the right.

Non-NGESO Outages

Non-NGESO Outages

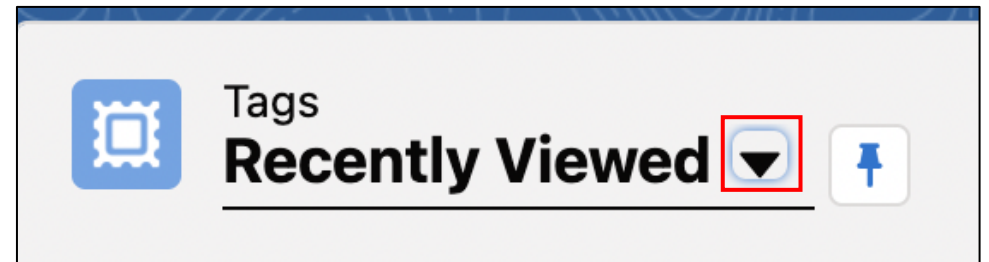
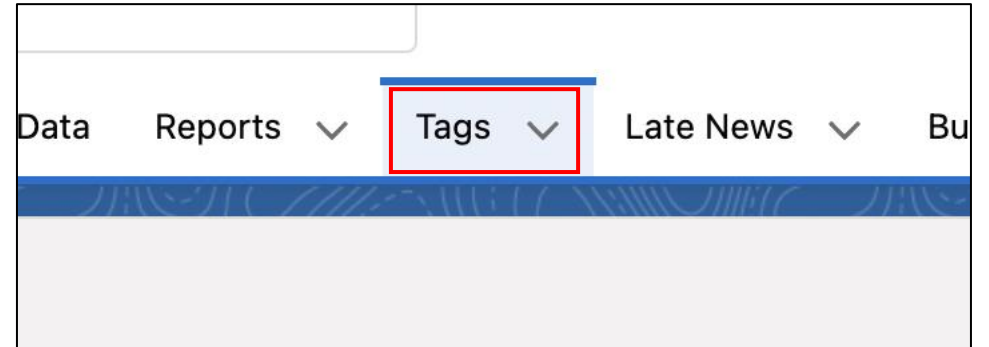
- Non-NGESO Outages are intended to be used by Third Parties (currently DNO's only) to submit their outages directly in eNAMS to be reviewed by ESO
- The Non-NGESO Outage differs from the normal Outage in one significant way in that it does not have an approval or change request process built into eNAMS (on the backlog for addressing post go-live).
- The DNO is able to create a Non-NGESO Basic Outage and advise of whether it is of ESO interest (i.e. affects ESO outage planning) or not
- If it is not of interest, the DNO may submit Non-NGESO outages directly into eNAMS
- If it is of interest, the ESO shall withdraw the Non-NGESO Basic Outage and create a standard Basic Outage for it which the DNO can use to submit outages to ESO for approval.



Tags and Affected Users

Purpose and Types of Tags

- Tags are essentially keywords that can be associated with records.
- These keywords are used to categorize and search the data easily.
- Tags can be accessed from the toolbar in eNAMS under **Tags** and filtered using the **dropdown arrow** shown on the right.
- There are four types of Tags present in eNAMS:
 - **ESO Party**
 - These are the same as SO Party Tags in TOGA, these include PLNTH and CTRSCOTN Tags
 - **External Party**
 - These Tags are used to identify affected parties and are associated with Accounts
 - **Free Codes**
 - These cover a wide variety and can be created and linked freely to Outages
 - **Scheme**
 - Each Tags is associated with a Scheme therefore can be used effectively to bundle Outages relating to a project



Outages Visibility using Tags / Accounts

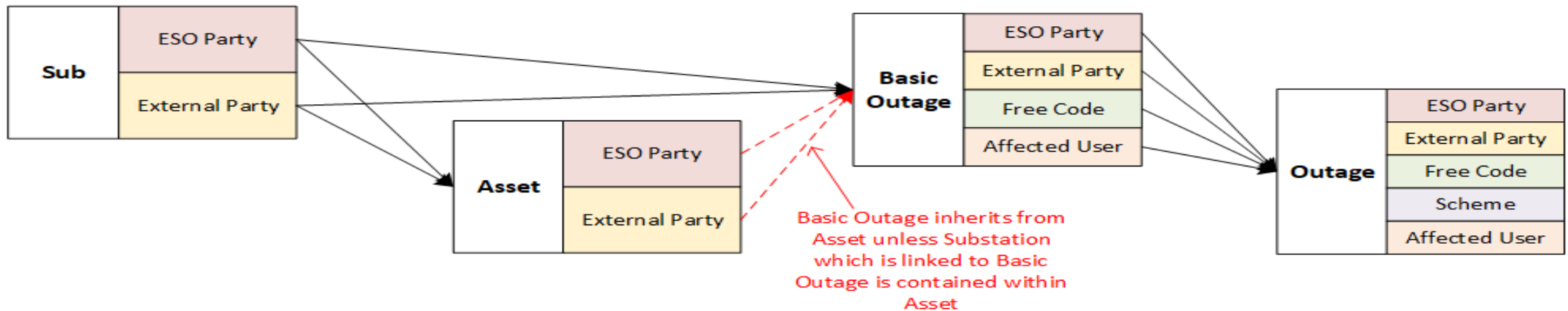
- Permissions for visibility is granted to external parties (i.e. not ESO) by adding their Account as an **Affected User** to Outages (inherited from Basic Outage).
- By also adding their **External Party** tag as a **Tag** to Outages (inherited from Substation, Asset, Basic Outage) this allows the company Account and OC2 reports to filter data to the appropriate contacts.
- For example, UKPN has an Electricity Account in eNAMS which is set as an Affected User on all Outages which affect UKPN. It also has External Party Tags which represent each of the subsidiaries (London, Eastern and South-Eastern). These are added individually as Tags on the Outages that affect the subsidiary.
- The example on the right is a Brimsdown 132kV outage which affects both UKPN-E and UKPN-L
- Each Affected User has an **Access Level** which defines the permissions available to the party, these are **Read** or **Read & Write**.
- If a company is the Owner of a Basic Outage (and therefore Outage), they do not need to be an Affected User to have Read & Write permissions of the Outage

Affected User (2)			
Account Name	Affected User Type	Access Level	Effective Date
UK POWER NETWORKS (OPERATIONS) LIMIT...	Affected User	Read	
UNIPER UK LIMITED	Affected User	Read	
View All			

Tags (6)				Add Tags	
Tag Name	Description	Tag Type	Inactive		
CTRSOUTH	Control South	ESO Party			
PLSTH	Planning South	ESO Party			
PI33563	Bay Refurb	Scheme			
UKPNE	EASTERN POWER NETWORKS PLC	External Party			
UKPNL	LONDON POWER NETWORKS PLC	External Party			
EECL	Enfield Energy Centre	External Party			
View All					

Tags Inheritance

- Tags and Affected Users are inherited in line with the following:
 - Substation to Asset: Inherit **ESO Party** & **External Party** Tags
 - Substation to Basic Outage: Inherit **ESO Party** & **External Party** Tags
 - Asset to Basic Outage: Inherit **ESO Party** & **External Party** Tags
 - Basic Outage to Outage: Inherit **ESO Party** & **External Party** & **Free Code** Tags and **Affected User**



- When Tags are added to objects, an **Effective Date** field is used to apply the Tag to all Outages with a Planned End Date of equal to or after the Effective Date

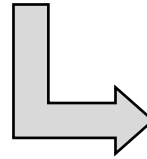
Effective Date
<input type="text"/>

Deactivating / Deleting Tags (1/2)

- eNAMS currently only has an Effective Date field for removing ESO Party & Free Codes Tags and Affected Users
- For the other types of Tags, there is a manual process for deleting Tags from objects in eNAMS
- If a Tag is no longer relevant / needed:
 - Open the Tag
 - Click on **Inactive** field and check the box
 - A tick will appear in the Inactive column of all objects (Assets / Basic Outages / Outages etc.) that have the Tag linked

Tags (6) Add Tags

Tag Name	Description	Tag Type	Inactive
ESOPARTY9	ESOPARTY9	ESO Party	
EXTPARTY9	EXTPARTY9	External Party	
ESOPARTY00	ESOPARTY00	ESO Party	



Delete Tag Assignments

Enter Removal Effective Date

Cancel Remove

Details Related

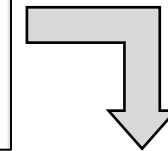
* Tags Name:

* Description:

Owner:

Other Asset Owner:

Inactive ☒



Tags (2) Add Tags

Tag Name	Description	Tag Type	Inactive
PI32019	New SGT3 at Eaton Socon	Scheme	✓

Deactivating / Deleting Tags (2/2)

- If a Tag needs to be removed from select objects, then the process that needs to be followed depends on the type of Tag
- As mentioned in the previous slide, the Effective Date filter is available for Affected Users, ESO Party & Free Code Tags
- For other types of Tags, a manual process is necessary
- If, for example, a Scheme Tag needs to be deleted from a Substation and the user wishes to remove the same Tag from Outages in the future, they must do the following:
 - Go to the **Substation** and go to the **Tags** field then delete the Tag by clicking the **dropdown arrow** and click **Remove**
 - On **Search Basic Outages** page, search **Basic Outages** by that Tag
 - Go into each **Basic Outage** individually to remove the **Tag** in question
 - Follow the same process for **Outages** using the **Search Outage** page as for Basic Outages

Tags for Querying Regions

- Each object (Substation, Asset, Basic Outages, Outages etc.) in TOGA was assigned a “Licensed Area” which was NGET, SHETL or SPT
- This however came with drawbacks in that all objects were visible to at least one TO
- eNAMS does not have a “Licensed Area” field and instead categorises each object by its Owner.
- This allows OFTO outages, for instance, to be visible to the OFTO but not the onshore TO where they are not affected
- Due to the fact that there could be several Owners (i.e. OFTO’s, DNO’s, TO’s) in a single Licensed Area, it is not appropriate to query using the Owner field if searching for everything that falls within a region.
- The search query needs to be conducted using the **Tags** field in eNAMS
- The below table shows what **Tags** are suggested when querying for all objects affecting a region in eNAMS

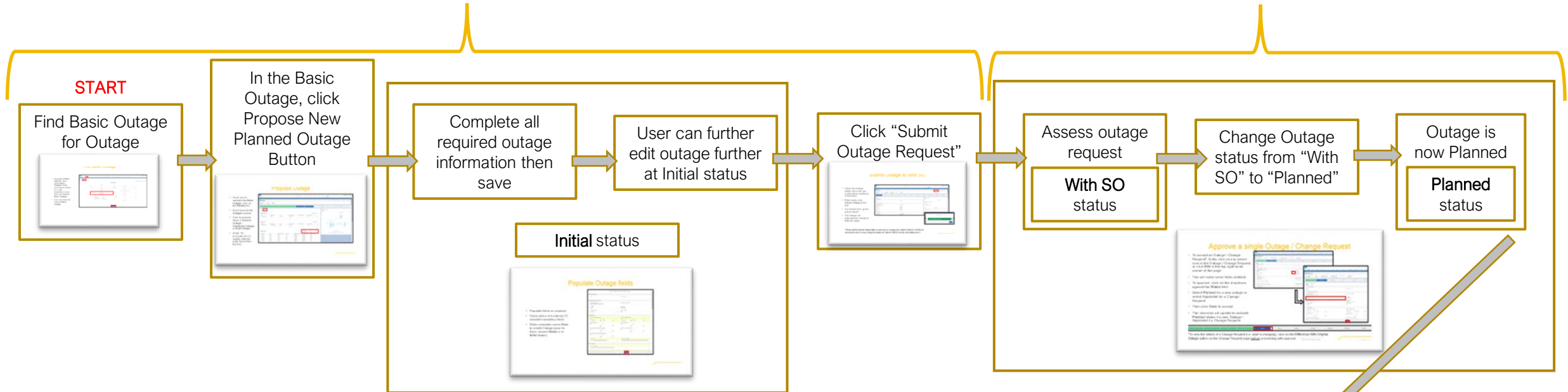
Role	Region	Identifier used in TOGA	Identifier to be used in eNAMS
National	E&W	E&W (Licensed Area)	PLSTH + PLNTH (Tag)
	Scotland	SHETL + SPT (Licensed Area)	PLSCOT or CTRSCOTN + CTRSCOTS (Tag)
Outage Planning	E&W South	PLSTH (SO Party)	PLSTH (Tag)
	E&W North	PLNTH (SO Party)	PLNTH (Tag)
	Scotland North	SHETL (Licensed Area)	CTRSCOTN (Tag)
	Scotland South	SPT (Licensed Area)	CTRSCOTS (Tag)

Appendix – Outage Change Scenarios

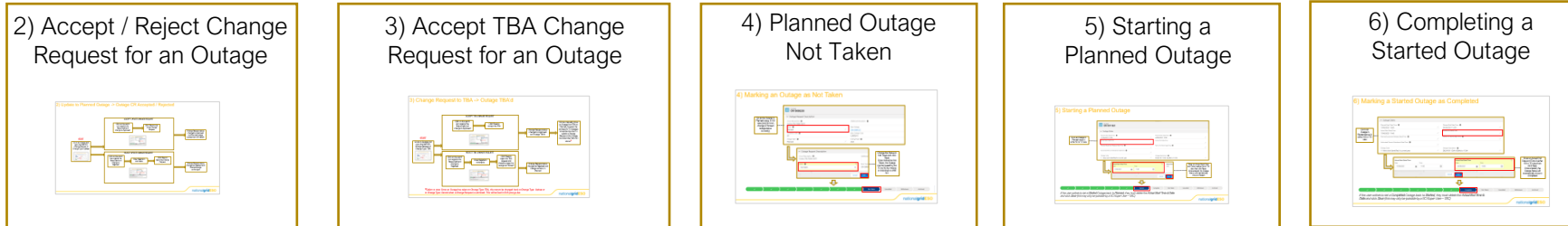
1) New Outage -> Accepted into plan

SO or TO users can do these steps (usually a TO though)

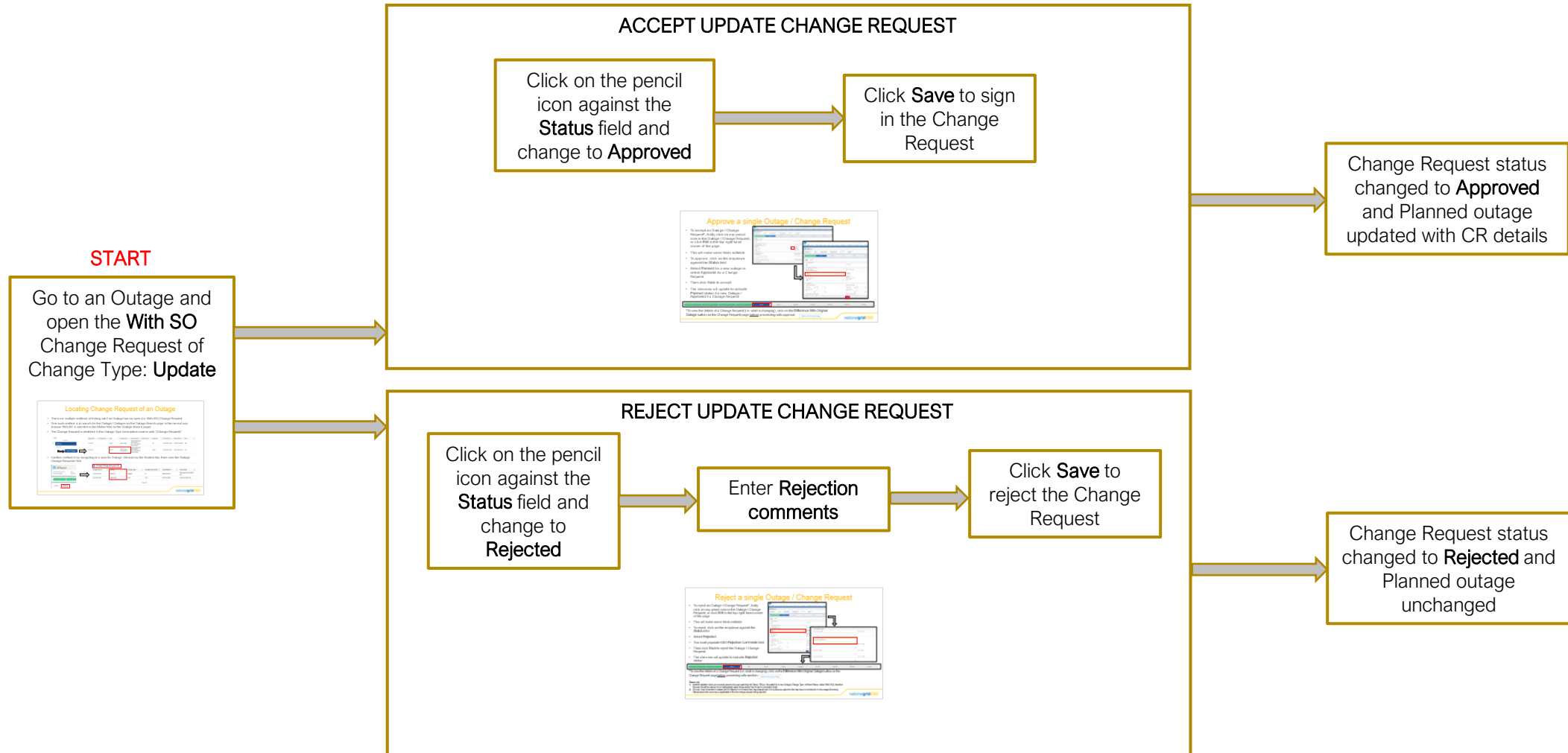
Only SO users can do these steps



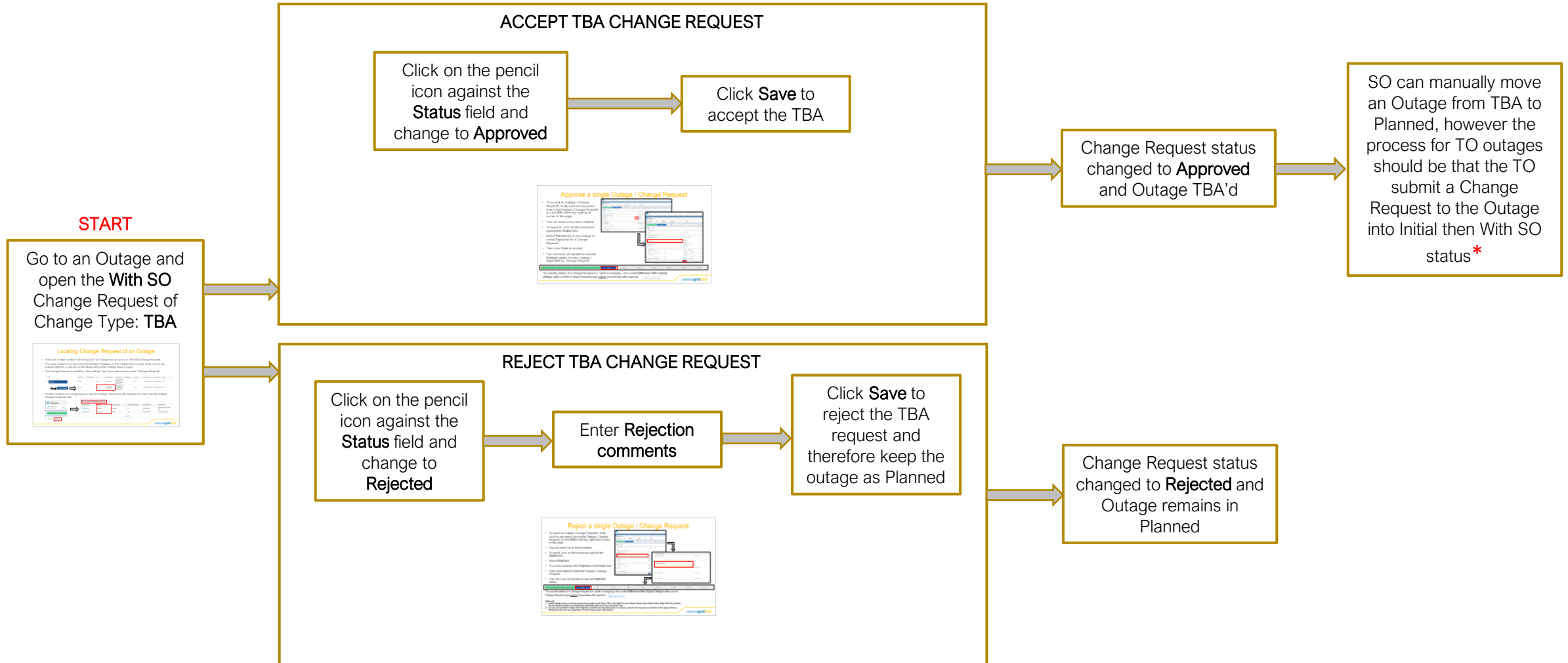
Links to further outage change scenarios that follow directly on from this one:



2) Update to Planned Outage -> Outage CR Accepted / Rejected

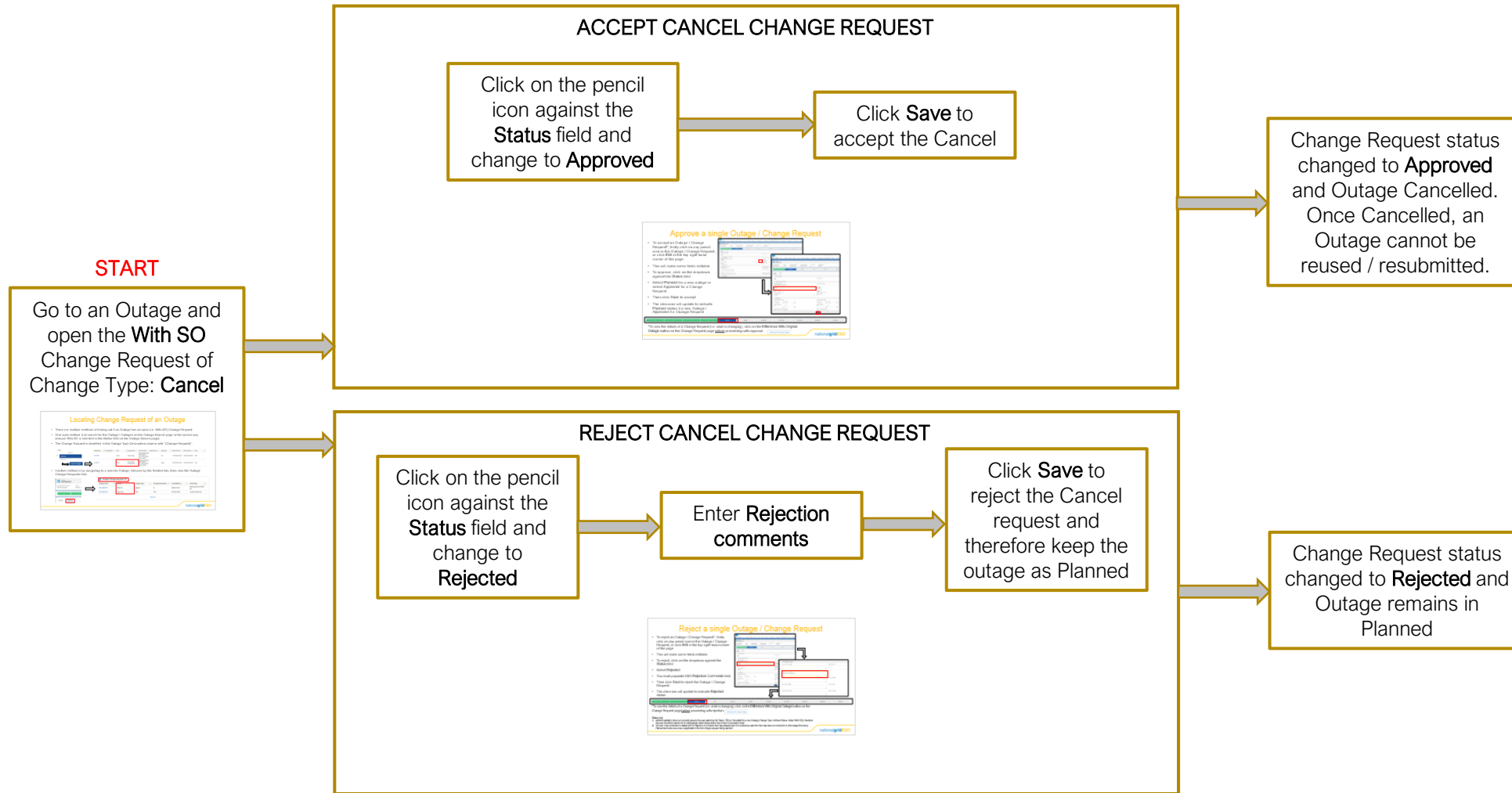


3) Change Request to TBA -> Outage TBA'd




*Defect to note: Once an Outage has taken on Change Type: TBA, this cannot be changed back to Change Type: Update or to Change Type: Cancel when a Change Request is submitted. This will be fixed in ELS post go-live

3) Change Request to Cancel -> Outage Cancelled



4) Marking an Outage as Not Taken

Go to the Outage in **Planned** status in SO view (only SO can change a Planned outage status currently)

 **Outage**
ON-0008258

▼ Outage Request Description

Circuit Description ⓘ
Currie 275/132kV SGT1

Status ⓘ
Planned

Company Code ⓘ
SP

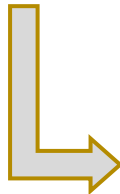
Outage Type ⓘ
Planned

Additional Description ⓘ

Basic Outage
[ON-0004352](#)

Basic Outage Code
CURR2H1

Change Type ⓘ
Add



▼ Outage Request Description

Circuit Description ⓘ
Currie 275/132kV SGT1

Status ⓘ
Not Taken

Company Code ⓘ
SP

This field is calculated upon save

Additional Description ⓘ

Basic Outage
ON-0004352

Basic Outage Code
CURR2H1

Change Type ⓘ
Add

Cancel

Save

Change the Status to **Not Taken** and click **Save**.
Once marked as Not Taken, the Outage can be reused by the TO or SO by moving to Initial then to With SO.



5) Starting a Planned Outage

Go to an Outage in
Planned status in
either SO or TO view

Outage
ON-0011921

▼ Outage Dates

Planned Start Date/Time ⓘ 17/06/2021 12:00	Planned End Date/Time ⓘ 24/06/2021 12:00
Actual Start Date/Time	Actual End Date/Time
Planned Equipment Release Date/Time ⓘ	Permit For Work Date/Time ⓘ
Authorised Person Attendance Date/Time ⓘ	
Change Code 1 - New work identified in current year	Change Description ⓘ DELAY BY 1 DAY AGAIN to 17/04

Actual Start Date/Time

Date 17/06/2021	Time 11:45
--------------------	---------------

Planned Equipment Release Date/Time ⓘ

Date Time

Cancel Save

Enter an Actual Start Date and Time in either SO or TO view then click **Save**. Once entered, the Outage Status will automatically move to **Started**



If the user wishes to set a **Started** Outage back to **Planned**, they must delete the **Actual Start Time & Date** and click **Save** (this may only be possible by a SO Super User – TBC)

6) Marking a Started Outage as Completed

Go to an Outage in **Started** status in either SO or TO view

▼ Outage Dates

Planned Start Date/Time ⓘ 17/06/2021 12:00	Planned End Date/Time ⓘ 24/06/2021 12:00
Actual Start Date/Time 17/06/2021 11:45	Actual End Date/Time
Planned Equipment Release Date/Time ⓘ	Permit For Work Date/Time ⓘ
Authorised Person Attendance Date/Time ⓘ	
Change Code 1 - New work identified in current year	Change Description ⓘ DELAY BY 1 DAY AGAIN to 17/04



Actual Start Date/Time

Date: 17/06/2021 Time: 11:45

Actual End Date/Time

Date: 24/06/2021 Time: 15:00

Planned Equipment Release Date/Time ⓘ

Permit For Work Date/Time ⓘ

Cancel Save

Enter an Actual End Date and Time in either SO or TO view then click **Save**. Once entered, the Outage Status will automatically move to **Completed**



If the user wishes to set a **Completed** Outage back to **Started**, they must delete the **Actual End Time & Date** and click **Save** (this may only be possible by a SO Super User – TBC)