# Outages

Version 2

#### **eNAMS** Reference Guide



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## 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.

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eNAMS PLDs V Basic Da	ata Outages Reports 🗸	HVSCC Tags 🗸 Late N	iews 🗸 🛛 Bulk Uploads 🗸	Bulk Upload CSV PI	LD Outage Gantt More 🔻	-
		Search Out	age			
Day Ahead Week Ahead	2 Week Ahead					Reset
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Date Ti	me	Date	Time	Select		\$
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Outage Number / 10 Outage Ker	/erence	Only Show Outages Starting OK End Other Asset Owr	ner ine Date Kange			<b>İ</b>
Owner		📠 Enter Value	Q	Select	Change Type	•
Set	•	Tage		Select	~	•
		Edit eNAMS /	App Navigation Items		* - 8	? 🌲
S eNAMS PLDs	~				Santt More	• 🕶
	Perso	nalize your nav bar for this app. Reor	der items, and rename or remove i earn More 🕕	tems you've added.	774100	
	NAVIGATION TIEMS (15)			Add	I More Items	
	= 🛄 PLDs				Â	
	😑 🛜 Basic Data					
Day Ahead We	ek A 🔳 🗲 Outages					Res
Dat	e Ra 🗮 🛅 Reports				Ву	
Date						\$
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#### Outage Search page (Reference)

Day Ahead Week Ahead 2 Week Ahead								Reset
Date Range From			Date Range To				Order By	
Date Time		Date	Time		Se	elect		*
		<b>a</b>	0				Outages Which Have Changed Since D	ate
Outage Number / TO Outage Reference	]	Only Show Outages	Starting OR Ending In The Date Ra Other Asset Owner	ange			Chapter Time	Ê
Owner		🚯 Enter Value		Q	5	alact	Change type	•
Select			Tags				PLD Reference Number	•
Substation Codes		Search Tags		Q				
Search Substation Q		L	Affected Users				Bulk Uploads	
Must Include All Substations	Part 1	Search Affected Users		Q	s	Search Bulk Uploads	Part 2	Q
TO Impact			Service					
Select		Select		\$		Avaliable	Operational Note Status	Selected
ERTS From	7		ERTS From Unit			Available		
		Select		÷	V	With SO		_
ERTS TO	7		ERTS To Unit		T	O Feedback Required		
		Select		÷	E	NCC Feedback Requir	red	¥
Only Show OnCom Outages					F C C	eedback With SO Operational Note Need Complete	ds Regrou	
Status			Outage Type				Only Display	
Avaliable Selected	Av	aliable	Selected		Avaliable		Selected	
Initial	Non-NGESO (C	of Interest to SO)	ed	•	Seasonal Risk	•		•
With SO	Non-NGESO (N	lot of Interest to SO) Unpla	nned		Cross-boundary Outage	res.		
▲		•		-		•		•
Planned		Fault	Part 3		Generation Risk			
Unplanned					Demand at Risk			
Fault					Affects Sensitive Sites			
ТВА								
Completed								
Pa	rt 4 Search Outages	Search Operational Notes	Bulk Approve/Reject Ope	erational Notes Report Availabili	ty Report			



#### Part 1 of 4 – Outage Search page fields



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#### 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.





#### Part 3 of 4 – Outage Search page fields



#### 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)

Date Range To

Time

Date

Day Ahead	Week Ahead	2 Week /	Ahead		
			[	ate Range From	
	Date			Time	
	19-Jun-2021	曲	00:00	O	
		OL	itage Nun	nber / TO Outage Reference	
				Owner	
	Select				:
			S	ubstation Codes	
	Search Substation	1			Q
			Must In	clude All Substations	
				TO Impact	
	Select				:
				ERTS From	
				ERTS To	
			Joly Show	OnCom Outages	

25-Jun-2021 23:59 0 曲 Only Show Outages Starting OR Ending In The Date Range Other Asset Owner 💼 Enter Value Q Tags Search Tags... Q DLSCOT X Affected Users Q Search Affected Users. Service Select ERTS From Unit Select ERTS To Unit ; Select

	Order By		
Select			
Outages Whic	Have Changed Sir	nce Date	
	hange Type		
Select			
PLD I	eference Number		
	ulk Uploads		
Search Bulk Uploads			
Oper	tional Note Statu	5	
Available		Selected	
	•		



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



#### **Typical Outage Search page selections**

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

Day Ahead	Week Ahead	2 Week A	head													
			Date Range F	From				Date Ra	nge To					Order	By	
	Date		Time				Date	Tim	e				Select			;
	12-Jun-2021	曲	00:00	Q			18-Jun-2021 🛗	23:59	0				Outages Whit	ch Have C	hanged Since Date	
		Ou	age Number / TO Ou	tage Reference			Only Show Our	tages Starting OR B	nding In The Date	Range			07-Jun-2021			ä
								Other Asse	t Owner					Change	Туре	
			Owner				Enter Value			Q			Select			:
	Select				:			Tag	5				PLD	Referenc	e Number	
			Substation Co	des			Search Tags			Q						
	Search Substation				Q			🔟 PLS	тн 🗙					Bulk Upl	oads	
			Must Include All Sul	bstations				Affected	Users				Search Bulk Uploads			Q
			TO Impact				Search Affected Users			Q						
	Select				•			Servi	ce				Ope	rational I	Solocted	
			ERTS From				Select			;			Available	1.	Selected	•
								ERTS Fro	m Unit				With SO	-		-
			ERTS To				Select			:			TO Feedback Required			_
								ERTS To	Unit				ENCC Feedback Required			
		c	nly Show OnCom Out	ages			Select			:			See dhard With 50			
													Feedback with SO			
													Operational Note Needs Regrouping			
													Complete			
			St	atus				Outa	ge Type					Only D	isplay	
	Available			Select	ed		Available			Selected			Available		Selected	
Initial						<ul> <li>Non-NGESO (O</li> </ul>	Of Interest to SO)	•	Planned			Seasonal Risk		►		
1101-00						New NEEDO (N	1-1 - 5 (-1-1		Undersed			Construction O				
with SO			•			WON-INGESO (N	or or intelest to SUJ		Unplanned		*	Cross-boundary Ou	(ages	•		
Planned									Fault			Generation Risk				

Search Operational Notes

Bulk Approve/Reject

Operational Notes Report

Availability Report

To view information on the appropriate Tag to select

 $\mathbf{T}$ 

to guery a region, click here in Slide Show view:

Unplanned

Fault

TBA

Build Control Report

 Anno 2014
 Control Report

 Anno 2014
 Control Report

 Contro

 Control Report

 Control Report



Demand at Risk

Affects Sensitive Sites

# 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

				Create Cross-Boundary Basic Outage Create New
		Search Ba	ic Outages	
Bas	slc Outage Code		Status	
			Select	:
	Owner		Other Asset Owner	
Select		;	Enter Value	Q
De	ala Kange Hom	=	Data Kange TU	<b>#</b>
Cin	cult Description			
			Only show Outages starting OR ending within the date range	
Su	ibstation Codes		Asset Codes	
Search Substation		۹	Search Asset	۹
עסאו 🔯	AN QUEENS 400KV X		Must Include All Assets	
Must Incl	ude All Substations		Affected Users	
Basic Outage Type	0		Search Affected Users	Q
Available	Selected		Tags	
Non-NGESO (Of Interest to SO)	Basic Outage	^	Search Tags	Q
Non-NGESO (Not of Interest to SO)	Cross-boundary Basic Outage		Group	
	•			
			Risk Outages Only	



#### **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)

				All 🔻 Q. Search	n					** 🖬 ? 🐥
eNAMS PLDs ∨ Ba	sic Data Outages Reports 🗸	✓ Tags ✓ HVSCC Late New	ws 🗸 Bulk Uploads 🗸 Bulk U	pload CSV PLD Outage Gantt	OCLRs 🗸 ROB / NOB 🗸	Affected Users 🗸	Fall to Flys 🗸 Contac	ts ∨ Multi-BADRs ∨	Outages 🗸	
Outage									L Faller	Scherk Berle Octore Descurt
ON-0000384									+ Pollov	Submit Basic Outage Request Cone Basic Outage Printable V
e Type Description Status	Basic Outage Code									
Outage Appr	oved INDQX31									
ana Na Sara <i>II dala</i> mana ana Anto					an 1949 - An					
	~	$\rangle$	×		Approved			Withdrawn		Archived
								1		
tails Related								Chatter	Activity	
								Ť4 =		Q. Search this feed
🗟 Substations (1)						Add Exis	sting Substations			
Name	<ul> <li>Substation Code</li> </ul>	✓ Status	<ul> <li>Commissioning</li> </ul>	Date 🗸 Decomm	issioning Date 🗸 🗸	Transmission Owner	~			
INDIAN QUEENS 400KV	INDQ4	Approved	2017-03-31		r	NGET	¥			
			View All							
										$\searrow$
\Xi Assets (1)						bA	id Existing Assets			
Asset Name	✓ Asset Description	✓ Status	<ul> <li>Commissioning</li> </ul>	Date V Decomm	nissioning Date	Transmission Owner	×		/\_	
IND04.SGT.IND0.SGT3	Indian Oueen SGT3	Existing	2021-03-10			NGET			n A	
			View All						-	
_					Propose New	Propose New	Propose New			
🗄 Outages (6+)					Planned Outage	Unplanned Outage	Fault Outage			Collaborate here!
									Here's where yo	u start talking with your colleagues about this record.
Outage Number	✓ Status	Outage Type Description	✓ Change Type	Planned Start Date/Time     oc (op /popp	Planned End Date/Time	✓ Transmission	Owner 🗸			
ON-0000774	Planned	Planned	Add 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				



### 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).

vnership Detail							
Owner			Other Asset Owner				
utage Request Description							
Circuit Description 0 INDIAN QUEENS 400/132KV	SGT3		Additional Description				
Status 🚯			Basic Outage				
Initial		•	ON-0000384				
• Outage Type Planned		•	Change Type 🕚 Add				
utage Dates							
* Planned Start Date/Time 🕚		5	* Planned End Date/Time	)			5
Date 17/06/2021	Time		Date	-	12-00		
17/00/2021	12.00	0	24/00/2021		12.00	0	
Actual Start Date/Time	Time		Actual End Date/Time		Ime		
<b>#</b>		0		曲		0	
Planned Equipment Release Date	Time		Permit For Work Date/Time	0	Time		
苗		0		苗		0	
Authorised Person Attendance Da	te/Time 🚺						
<b>=</b>		O					
* Change Code		5	* Change Description				5
			[				DED/

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### 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

sNAMS PLDs ∨ Basic Deta Outages Reports ∨ Tags ∨ HVSCC Late News ∨ Bulk Uplo	All V Q. Search	★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
Outgrage         ON-0011736           Typo Devotorion         Status         Fluenced Stat Date Time         Fluenced Stat Date Time         Duration (Dapid)           Outgrage         Initial         17/05/2001 12:00         24/05/2021 12:00         8	Basic Outage Code INDOX1	+ Follon Change Balk Outage Clone Outage •
Initial With SO Adjected TEA	Planned Started Complete	Not Taken Cancelled Withdrawn Archived
ails Related		Chatter Activity
wnership Detail # T	Other Asset Gamer	te •     Q. Search bits feed     C       National Sims 50 updated this record. Autt row     •
Intage Request Description It Description It Description Itan QUEENS 400/132KV SGT3	Additional Description ()	Outage Number A blank value to ON-0011736
s () al pany Cose ()	Balc Outage ONCOUSE4 Balc Outage Code INDQXG1	the Decomment
ge type ()	Change Type <b>0</b> Add	Witte a comment
utage Uates ed Sart Date (The ) 6/2021 12:00 / / / / / / / / / / / / / / / / / /	Panned Ind Date If The 0 24/06/2021 12:00 Amus Exc Resulting	Submit Outage
		sv
		Record submitted for approval

\*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



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### **Cloning an Outage**

eNAMS plds v b

Outage ON-0011736

Details Related

- 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)

			All 🔻 Q. Search						* 🖬 ? 🐥 🕅
:Data Outages Reports 🗸 Tags	✓ HVSCC Late News ✓	Bulk Uploads 🗸 🛛 Bulk Upload	I CSV PLD Outage Gantt OCLRs	V ROB / NOB V	Affected Users 🗸 🛛 Fall to Flys 🗸 🛛	Contacts 🗸 Multi-BADRs 🗸	Outages 🗸		
				) ):////:(\_ \'					
							+ Follow	v Submit Outage Change	Basic Outage Clone Outage 🔻
Planned Start Date/Time d 17/06/2021 12:00	Planned End Date/Time 24/06/2021 12:00	Duration (Days) Basic Outa 8 INDQ4M	ze Code						
~ >	~ >	~ <b>&gt;</b>	Planned	Started	Complete	Not Taken	Cancelled	Withdrawn	Archived
						Chatter	Activity		
		Actual Start Date	/lime			Actual End Date/	Ime		
			曲		0		苗		0
		Planned Equlpm	ent Release Date/Time			Permit For Work I	Date/Time		
			苗		0		苗		0
		AuthorIsed Perso	n Attendance Date/Tin	ne					
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		* Change Code				* Change Description	on		
		None			\$				
		Complete this field	1.			Complete this field			
		Work Involve	t						
		"Work Involved							
		For proximity t	o DNO equipment and	to undertake ph	asing checks				
									1



# 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

Started

Complete

- 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

III ONAMS PLDs V Basic Data Cutages Reports V Tags V HVSCC Late News V Burk Uploads V	All V Q, Search
C CH-201736	
Outage Type Description         Status         Fianned Statt Date/Time         Pianned End Date/Time         Duration (Days)           Planned Outage         With SO         17/06/2021 12:00         24/06/2021 12:00         8	Basht Oxtage Criste INDQXB1
With NO Rejected TEA	Planned Started Complete
Details         Related           ✓ Overarship Detail	Other Asset Owner       All • Q. Search         And Move Search Se
	Outage Request Description     Circuit     Circuit Description     Circui

Not Taken

Cancelled

\*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 <u>before</u> proceeding with approval.

Planned

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Archlved

Withdrawn

### Reject a single Outage / Change Request

Started

Complete

- 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

eNAMS PLDs V Basic Data Outages Reports V Tags V HVSCC Late News V Builk Uploads		
	and the second	
Outget type Description         Status         Planned Suit Date: Time         Planned Gut Date: Time         Duration (Days)           Planned Outget         With 5O         17/06/2021 12:00         24/06/2021 12:00         8	Bark Outage Code INDQXS1	
V WEIn SCO Rejected TBA	Panned Started	
Details Related		
Vones and Decan		
Outage Request Description Circuit Description		
INDIAN QUEENS 400/132KV SGT3	✓ ESO Outage Comments	
Rejected V	ON-DOD0384 ESO Comments - Internal 0	Operational Remarks
Company Code  SO Trill pilot is colocitated upon save	Baak Courage C INDQX31 This for this Cot	
°Outage Type ● Planned ▼	Charge Type 1	
✓ Outage Dates	ESO Rejection Comments	
* Planned Start Date/Time ()	*Planned End	
17/06/2021 📾 12:00 O	24/06/202	NGET Comments
Actual Start Date/Time Date Time	Actual End Dat	
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Date Time	ESO Comments (SPT)	SP Comments
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	ESO Comments (SHETL)	SHETL Comments
$\checkmark$		

Not Taken

Cancelled

Withdrawn

Archived

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

Planned

TBA

Change Request page before proceeding with rejection.

#### 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.

Search Outages	Search Operational Notes	Bulk Approve/Reject	Operational Notes Report	Availability Report				
	Outage Number V Cir	rcuit Description $\lor$ Change	Type V Outage Type Descript	tion 🗸 Planned Start Date/Time 🗸	Planned End Date/Time $~~ \lor~$	Status 🗸	SO Comments 🗸 🗸	SO Rejection Comments $~~ \lor~$
	ON-0955864	Update	Planned Outage (Chang	ge Requ 31/08/2020 07:30:00	20/08/2021 15:30:00	With SO		
	ON-0960946	Update	Planned Outage (Chang	ge 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)".

Sta	tus	Outage Number 🛛 🗸 TO Outage Refere 🗸	Status 🗸	Outage Type Desc 🗸	Circuit Description $\lor$ Addit	itional Descri 🗸 Change Type 🗸 🗸	Planned Start Dat 🗸	Planned End Date $\lor$	Owner 🗸
Þ	Selected With SO	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
	Diannerd Search Outages	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		\Xi 🛛 Outage Ch	🔁 Outage Change Requests (2)									
ON-0000787		Outage Name	~	Status	$\sim$	Change Type	$\sim$	Change Description $ \lor $	CreatedDate ↓	$\sim$	Created By	$\sim$
Outage Type Description Status Planned Outage Planned		ON-0000787		With SO		Update		tt	08/06/2021		Nathanael Sims NGE OP	T
	r	ON-0000787		Approved		Add		Test	04/09/2020		Jonathan Barcroft	
Details <b>Related</b>	-						Vie	w All				

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## **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

octain Rolated		
Ownership Detail		PTDM ANN DUDM
NGET		der mei metales geminier
✓ Outage Request Description		
Circuit Description 🚯		Additional Description
TRUDAN QUEENS ADDRY MESH CORNER 47 53147 MSCA AND DANDOLPH 1 CIRCUIT		Basic Outage
Company Code		ON-0000331 Basi: Outage Code
SO Outage type 0		IND04M4
Planned	Pal	
✓ Outage Dates	I GI	
Fianned Start Date/Time  17/06/2021.12:00	/	Planted End bate/Time   24/06/2021 12:00
Actual Start Date/Time	/	Actual End Date/Time
Planned Equipment Release Dete/Time		Permit For Work Date/Time 0
Authorised Person Attendance Date/Time		
Change Code		Change Description
OH - SO CUSTOMERS REQUESTED (DNO, DCC)		OUTAGE REQUESTED BY OUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS /
V Work Involved		
Work Involved  For proximity to DNO equipment and to undertake phasing checks		
✓ Outage Characteristics		
Emergency Return To Service: Day		Emergency Resum to Service: Day Units
Emergency Return to Service: Ngnt		Emergency Return To Service: Night Units
8 Wonding Time	/	Hours /
Continuous	/	
P4	1	
Commissioning/Decommissioning Outage?	1	Review ERTS Profiles
V Work Tune		
Work Type Description	Da	rt O
EPR - External Party Request, PRS - Post Fault Repairs - Switchgear	<b>1</b> 2	
✓ TO Work Description		
TO Dutage Reference	/	TO Project
TO Reference	1	TO Comments
TO Stada		PLD ()
V ESO Outage Comments		
ESO Comments - Internal 0	/	operational memans
ESO Rejection Comments	1	
ESO Comments (NGET)	/	NGET Commenta 0
ESO Comments (SPT)	/	SP Comments 0
ESO Comments (SHETL)		SHETL Comments
✓ Sanction		
Sanctioning Review Needed		Sanction Review Initiation Date
Sanction Review Initiated By		Sanction Review Projection Date
	Dai	rt 2
✓ Risk Characteristics	r ai	lJ
Demand at Fisk Needed		Demand Risk Complete
Generator Risk Needed		Generation Hisk Complete
Seasonai Risk Needed 0		Seasonal Kisk Complete
Manual Austria Sauroni Str.		
manage erection preserved RISK 😈	1	
✓ Demand at Risk Details		
Restoration		Mitigation
Restoration Demand Hisk Approve: Status	/	Mitigetion / Demand at file. Ortalis
Restoration Demand Rik Approval Status Arteris Sensitive Ste		Antigution /
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Recordin General RNA Approx Street Annus Sentes das Careeration RNA Details - Internal Careeration RNA Details - Internal	Par	weights Benere at Mis betels t 4 Generation at Illia beats
Recordin Genes device States Construction States Construction State Deales - Internal Conservation Risk Alphable - Internal Conservation Risk Alphable - Internal	Pai	Miguin Brive at the beens t 4 servedin at the boars
Beneration Generation Adaptions bothin America Sambha dala Generation Risk Details - Internal Generation Risk Details - Internal Generation Risk Details - Internal Second Risk Details - Internal Second Risk Details - Roternal Comparation (P)	Pái	Angelon Serves at Ris Details T 4 Consider a life books Reservicingense 0
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	Par	winguin
accordin  acress data data  construitada  c	Pai	wington Benner at His Detein
Assessed to  Served Ad agrees Status  Concentration RAS Details - Internal  Concentration RAS Details - Int	Pái	vergenin ennes at Mix Oteknis
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execution  Berner State Agrows Blook  Constraints Balance Blook  Constraints Balance Blook  Constraints Balance Balance  Constraints Balance Balance  Constraints Balance Balance  Constraints	Par	empire empire t 4 overthis at this teters t 5 eventhis at this cents eventhis at this cents to conceptifier Managements and the second the second se

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#### 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

Demand Risk Asset (0)				Add Assets
Outage Change Requests	(1)			
Outage Name	✓ Status ✓ Char	ige Type V Change Description	✓ CreatedDate ↓	✓ Created By ✓
		OUTAGE REQUESTED	BY CUSTOMER	
ON-0011736	Approved Add	FOR PROXIMITY AND REPAIR WORKS	FOR FAULT 06/06/2021	Nathanael Sims SO
		View All		
ERTS Profile (0)				
		Part 6		
Affected User (0)		T alt O		
Tags (4)				Add Tags
Tag Name	<ul> <li>Description</li> </ul>	✓ TagType	✓ Inactive	
AM	Asset Management E/W	External Party		V
STHW	South West	External Party		×
SWE	South West	External Party		•
TSW	Subs-South West	External Party		•
		View All		
<b>0</b>				
LIFT Details (2)				New
LIFT Details (2) Detail Name	Record Type	Date Added	Date R	New
LIFT Details (2) Detail Name 00001395	Record Type ROB	Date Added 2021-05-06 1111-192	Date R 2021-0	New emoved 66 06 12 28 072
LIFT Details (2) Defail Name 00001395 00001396	Record Type ROB ROB	Date Acted 2022-06-00 11:11:02 Pair-00 11:102 Pair-00 11:102	Data & 2021-0 2021-0	New 46.05128.072 66.05128.072 57.05128.072
LIFT Details (2) Detail Name 00001395 HVSCCs (0)	Record Type BCB BCB	Date Added 2020-06-06 31:11:107 Patrick 44	Date 8 2021-0 2021-0	Intern emoved 66 06 11 28 07 2
LIFT Details (2) Detail Name 00001336 HVSCCs (0) Late News (0)	Record Type RCB RCB	Date Added 2022-06-00 11111187 Particular Added 11:8997	Date 8 2021-0 2021-0	hew 86 09 11 28 07 0 66 09 11 28 07 0 00 01 28 07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
LIFT Details (2) Detail Name 00001395 HVSCCs (0) Late News (0) Fail to Flys (0)	Record Type BOB BOB	Dife Added 2022-06-00 111-102 Particular 100 2022 Option 11 2000 2022 Option 11 2000 2022 Option 11 2000 2020 Option 11 2000 2020 Option 12 2000 202000 2020 Option 12 2000 2020 Option 12 2000 2000 2000 2000	Dale 8 2014-0 2021-0	Interved 86.05.11.28.072 (* 86.05.11.28.072 (* 96.09.11.28.072 (* 97.000)
LIFT Details (2) Detail Name 00001395 00001395 HVSCCs (0) Late News (0) GCLBs (0)	Record Type 808 808	Elle Added 2021-06-06 1111-112 2022-000 11 2007 2022-000 11 2007 202-000 11 2007 202-000 11 2007 202-000 11 2007 202-000 11 2007 202-000 11 2007 2007 2007 2007 2007 2007 2007 2007	Date B 2021-0 2022-0	Inconst 86:05 1128:072 • 86:05 1128:072 • 86:
LIFT Details (2) Detail Name 00001395 00001395 HVSCCs (0) Late News (0) Fail to Flys (0) OCLRs (0) Files (0)	Record Type 808 808	Elst Aded 2022-06-05 1111/12 Part 100 2020 (00 11 ) 2020 (00 110) 2020 (00 110) 2020 (00 110) 2020 (00 110) 2020 (00 110) 2020 (00 100) 2020 (00 10) 2020 (00 100) 2020 (00 10) 2020 (00 100) 2020 (00 10) 2020 (00 10) 2020 (00 10) 2020 (00 10) 2020 (00 10) 2020 (00 10	Date R 2021-0 2021-0	Intern Internet
LIFT Details (2) Detail Name 00002395 00002392 HVSCCs (0) Late News (0) Fail to Fkys (0) OCLRs (0) Files (0) Files (0)	Record Type 808		Date R 2021-0 2022-0	Internet State Sta
LIFT Details (2) Detail Name 00003295 00003296 HVSCCs (0) Late News (0) GCLRs (0) Files (0)	Record Type RCB RCB		Date 8	Interved Int
LIFT Details (2) Detail Name 00001295 00001295 HVSCCs (0) Late News (0) Fail to Flys (0) OCLRs (0) Files (0) Files (0)	Record Type 808 800	Elte Added 2021-06-06 11:11:102 Particular 2020-000 11:887 2020-000 11:887 2020-000 11:887 2020-000 11:887 2020-000 11:887 2020-000 11:02 2020-000 br>2020-000 11:02 2020-000 2000-000 2020-000 2000-000 2000-0000 2000-000 20	Date 8 2021-0 2022-0	Inconst Be 00 11 28 077 0 00 11 28 077 0 00 11 28 077
LIFT Details (2) Detail Name 00001395 00001395 UFVSCCs (0) Late News (0) CLRs (0) GCLRs (0) GCLRs (0) GCLRs (0) GCLRs (0)	Record Type 008 009	Like Aded 2022-06-00 1111:187 Parts of 01 11:097 Vision of 11:097 Parts of 01:097 Vision of 11:097 Vision of	Date 8	Interved Int
LIFT Details (2) Detail Name 00001295 00001295 HVSCCs (0) Late News (0) CLRs (0) Fail to Flys (0) Files (0) Outage History (6-)	Record Type 008 000 000 000 000 000 000 000 000 00	Die Aded 222.06 00 111:1/2 Patrix 1 1997 Patrix 1 1997 Vielloud Firs Or drop firs User Paart 8	Dale B 2001-0 2022-0	Interviewe
LIFT Details (2) Detail Name 00001395 00001395 HVSCCs (0) Late News (0) CoLRs (0) Filles (0) CoLrage History (G+) (0) (0)	Record Type 2008 2008 2009	Elle Added 2022-06-00 111:102 Paint 1 202 Coding files Coding files User User Paint 8 Coding files	Date R 2001-0 2022-0 202-0 20-0 202-0 202-0 200-0 20-0 200-0 200-0 200-0	
LIFT Details (2) Detail Name 20001298 20001298 HVSCCs (0) Late News (0) Fail to Flys (0) CLBs (0) Files (0) CLBs (0)	Record Type 902 908 908 909 909 909 900 900 900 900 900	Elle Aded 2020 00 01 111 197 Part all 197 Part all 197 Usine Firs Or drop firs Usine Firs Or drop firs Usine Firs Or drop firs Usine Firs Or drop firs	Date B 2022 0 2022 0 2023 0 2023 0 2024 0 2025 0 200 0 2025 0 200 0 200 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
LIFT Details (2) Detail Name 00003295 00003395 HVSCCs (0) Late News (0) CLIRs (0) CLIR	Ricot Type RCB RCB RCB RCB RCB RCB RCB RCB	Late Aded 2022-06-00 1911-192 Parts of 1920-000 1999 Parts of 1999 Parts of 1999 Parts of 1999 Parts of 1999 Values Strass of Nathanal Strass of	Date 8 2021.0 20	Interview Constant of Constant
LIFT Details (2) Detail Name 20001295 20001295 HVSCCs (0) Late News (0) CLBs (0) CLBs (0) CLBs (0) CLtage History (6-) Elize (2) CLTage History (6-) Elize (2) Elize (	Record Type 2008 2009	Lite Aded 2023 66 05 1311 1317 Paint 1 1317 Paint 1 1317 Paint 1 1317 Utility 1	Date 8 2022.0 202.0	Interview Concerns 4 / 500 Interview Concerns 4 / 500 In
LIFT Details (2) Detail Name 00001295 00001295 HVSCCs (0) Late News (0) CLBs (0) CLBs (0) GULBs (0) Filles (0) SU20212211 SU201220 SU20212211 SU2021223 SU2022 SU2022 SU202 SU2022 SU202 SU2	Record Type 2008 2009 2009 2009 2009 2009 2009 2009	Like Adad 2022-06-00 11:11/2 Paint 1:107 Paint 1:107 P	Dale 8 2014 2014 2014 2014 2014 2014 2014 2014	

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#### Part 1a of 8 – Outage page fields



#### 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					
ТВА	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

ERTS – separate fields for digits a unit of time Select if Com / Decom is associated with this outage (purpose is to aid visibility of upcoming CSP's). Can selected by TO or SO. TO can enter reference number (i legacy TOGA number). This numb 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

	1	✓ Outage Characteristics			
nd		Emergency Return To Service: Day 0 6 // Emergency Return To Service: Night 0 8 //	Emergency Return To Service: Dey Units  Hours  Emergency Return To Service: Night Units  Hours		Tick if Outage has no ERTS (i.e. return On Completion)
ed d be .e.		Working Time Continuous TO Impact O P4 Commissioning/Decommissioning Outage? O Work Type	OnCom		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
er e		Work Type Description EPR - External Party Request;PRS - Post Fault Repairs - Switchgear V TO Work Description			not visible to TO. Therefore cannot be used as intended.
	i Ì	TO Outage Reference	TO Project	←-[	TO Project reference (i.e. Pl no.)
		TO Reference //	TO Comments 0	•	TO comments, visible to SO
		V ESO Outure Commente			PLD name, if linked
- d		ESO Contage Continents  ESO Rejection Comments	Operational Remarks	-	Any operational comments, such as switching restrictions, OESB etc.
ea		ESO Comments (NGET)	NGET Comments	ן ר	Only available for cross-boundary
		ESO Comments (SPT)	SP Comments		outages. Visible to the specific TO
	K,	ESO Comments (SHETL)	SHETL Comments		and the ESO

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

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#### Part 3 of 8 – Outage page fields



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#### 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

<ul> <li>Demand at Risk Details</li> </ul>			
Restoration	Mitigation		
Demand Risk Approval Status	Demand at Risk Details	,	
Affects Sensitive Site			
			Concration Rick fields
✓ Generation Risk Details - Internal			Serieration Risk lielus.
Generation Risk Review Status	Generation at Risk Details	}	See Generation Risk chapter for details of
✓ Seasonal Risk Details - Internal			process
Dependency 0	Reserve/Response		
		/	
Restriction ()	Risk ()		
		/	
Seasonai Risk Review Status 0			
Reviewed	/		



#### Part 5 of 8 – Outage page fields





#### 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
Ŧ Outage Change Req	uests (1)						
Outage Name	✓ Status	<ul> <li>Change Type</li> </ul>	~	Change Description 🗸	CreatedDate ↓	✓ Created By	~
ON-0011736	Approved	Add		OUTAGE REQUESTED BY CUSTOMER FOR PROXIMITY AND FOR FAULT REPAIR WORKS	06/06/2021	Nathanael Sims SO	
			v	lew All			
<b>ERTS Profile (0)</b>							
Affected User (0)							
🗋 Tags (4)							Add Tags
Tag Name	✓ Descri	ption	~	Tag Type	✓ Inactive		
AM	Asset I	Management E/W	I	External Party			
STHW	South	West		External Party			
SWE	South	West	1	External Party			

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 <u>defects</u> 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)      LIFT Details (2)      LIFT Detail Name      LIFT-00001395      LIFT-00001396	Record Type ROB ROB	Date Added           2021-06-06 11:11:192           2021-06-06 11:13:002           View All	Unk Child Outage Unk Parent Outage Date Removed 2021-06-06 11-28:072 2021-06-06 11-28:072	New v	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.
<ul> <li>HVSCCs (0)</li> <li>Late News (0)</li> <li>Fail to Flys (0)</li> </ul>				New	A Late News record is automatically generated if there is a new Outage / Outage Change that affects the following day. See <i>Late</i> <i>News Guide – eNAMS.pptx</i> for further details.



#### Part 8 of 8 – Outage page fields



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).
# 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 Ap	oparatus) <b>GT2</b>					
ESO Comments  ASAP Required  ASAP Required  ASAP Required  ASAP Code  ASAP Co	✓ ESO Details						
NASAP Code • All SAP Code • All SAP Description S828 NASAP Zone SSOUTH WEST • Demand at Risk Details • Demand at Risk • • • • • • • • • • • • • • • • • • •	ESO Comments			NASAP Required		1	
NASAP Zone SOUTH WEST > Demand at Risk Details Demand at Risk Details Sensitive Site Demand at Risk Details Demand at Risk Details Omand at Risk Details Sensitive Site Sensitive Site Sensi	NASAP Code 3 S828			NASAP Description		1	
Demand at Risk Details   Demand at Risk Details     Sensitive Site     Demand at Risk Details     Operation Risk Details - Internal     Cancel     Save	NASAP Zone 8-SOUTH WEST						
Demand at Risk     Sensitive Site <ul> <li>Demand at Risk Details</li> </ul> <td>✓ Demand at Risk □</td> <td>Details</td> <td></td> <td></td> <td></td> <td></td> <td></td>	✓ Demand at Risk □	Details					
Sensitive Site <ul> <li>Demand at Risk Details</li> </ul> <ul> <li>Demand at Risk ①</li> <li>Demand at Risk ①</li> <li>Demand at Risk Details</li> </ul> <ul> <li>Demand at Risk ①</li> <li>Demand at Risk Details</li> </ul> <ul> <li>Demand at Risk Details</li> <li>Cancel</li> </ul> <ul> <li>Demand at Risk Details - Internal</li> </ul> <ul> <li>Cancel</li> <li>Save</li> </ul>	Demand at Risk		/	Demand at Risk Details		/	
Demand at Risk       Image: Concept and the concept an	Sensitive Site		✓ Demand at Risk Details				
Sensitive Site  Generation Risk Details - Internal Cancel Save			Demand at Risk 🕕		5	Demand at Risk Details	5
Sensitive Site			×			***DEMAND AT SINGLE CCT RISK*** Axn MANN SC fault, AXMI MC1/SGT1, MANI	ninster demand at risk to: AXMI-CHIC- N4 Busbar faults.
✓ Generation Risk Details - Internal     Cancel   Save		$\mathbf{i}$	Sensitive Site				
Generation Risk 🚯			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
$\overline{\nabla}$	
🔁 Demand Risk Assets (1)	Add Assets
Asset Name $\checkmark$ Asset Description $\checkmark$ Substation Node 1 $\checkmark$ Substation Node 2 $\checkmark$ Fault Type $\checkmark$ MVA	Remove
A-00002909 AXMINSTER SGT1 AXMINSTER 400KV AXMINSTER 132KV	Add Risk Details
View All	
Asset (Plant and Apparatus) AXMI4.SGT.SGT2	
🔁 Demand Risk Assets (1)	Add Assets
Asset Name v Asset Description v Substation Node 1 v Substation Node 2 v Fault Type v MVA	$\sim$
A-00002909 AXMINSTER SGT1 AXMINSTER 400KV AXMINSTER 132KV Single CCT 50	
View All	



## 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)
  - o Demand at Risk Details



# 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.

Demand Risk Asset (1) Asset Name  Asset Desc A-00002909 AXMINSTE	Substation Node 1        R SGT1     AXMI4       Asset (Plant and Apparatus)       A 00002909       MVA       50       Requires Further Information	Substation Node 2 ~ Fault Typ AXMI1 Edit AO-0006955 Outage ON-0011767 Demand Risk Ass With a colou Generation Risk	oe V MVA	Add Assets
Demand Risk Asset (1)  Asset Name Acodo 2909 AXMINSTE	Substation Node 1        R SGT1     AXMI4       Asset (Plant and Apparatus)       A 00002909       MVA       50       Requires Further Information	Substation Node 2 > Fault Typ AXMI1 Edit AO-0006955	et VMVA	Add Assets
Asset Name v Asset Desc A-00002909 AXMINSTE	cription     Substation Node 1        R SGT1     AXMI4         Asset (Plant and Apparatus)       A 00002909       MA       50       Requires Further Information	Substation Node 2 ~ Fault Typ AXMI1 Edit AC-0006955 ON-0011767 Demand Risk Ass ? This field is calculated and the control of t	ee V MVA	
	R SGT1 AXMI4 Asset (Plant and Apparatus) A 00002909 MVA S0 Requires Further Information	AXMI1 Edit AO-0006955 Outage 0N-0011767 Demand Risk As W This field is calcul Generation Risk	લ	
	Asset (Plant and Apparatus) A-00002909 MVA 50 Requires Further Information	Edit AO-0006955 Outage ON-0011767 Demand Risk Ass With field is colcul Generation Risk A	ot	
	Asset (Plant and Apparatus) A-00002909 M/A 50 Requires Further Information	Outage ON-0011767 Demand Risk Ass This field is calcul Generation Risk /	et	
	Created By	Grand Four & the sector	ated upon sove Isset C rfsk. 10MVA pick up within 1 hour confirmed Sims 50, 07/06/2021 10:10	ty SSE. No pick up available
P Demand Risk Asset (1)				

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# 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.

<ul> <li>Demand at Risk Details</li> </ul>			
Restoration		Mitigation	
Demand Risk Approval Status Initial	1	Demand at Risk Details ***DEMAND AT SINGLE CCT RISK*** Axminster demand at risk to: AXMI-0 MANN SC fault, AXMI MC1/SGT1, MANN4 Busbar faults.	CHIC
Demand at Risk Details			
Restoration	5	Mitigation	5
10MVA pick up by SSE within 1 hour post-fault. Confirmed with SSE - John		AXMINSTER DEMAND (50MVA) IS AT RISK TO THE FOLLOWING FAULTS:	
Johnny - 06/06/2021. The remainder can only be restored in ERTS time		- AXMINSTER SGT1	
(no pick up available from wPD network).	11	- AXMINSTER MC1	
Demand Risk Approval Status	5	Demand at Risk Details	
With TO	•	***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

Save

Cancel

#### 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.

Affects Sensitive Site

	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)
  - o Generation Risk Details

<ul> <li>Generation Risk Details - Internal</li> <li>Generation Risk</li> <li>Generation Risk</li> <li>MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSLING 400KV CIRCUIT.</li> </ul>	Generation Risk 0	/	Generation Risk Details	/
MARCHWOOD POWER STATION (910MW) WILL BE AT RISK TO A FAULT WHICH TRIPS THE MARCHWOOD-NURSLING 400KV CIRCUIT.	✓ Generation Risk Details - Internal	Ł	<u> </u>	
V System Information	Generation Risk 🚯	5	Generation Risk Details	5



# 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.



# 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)
  - o Generation at Risk Details





# 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.



## 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 <u>not</u> a monitored field, therefore any change would not be recorded in Outage History.



#### 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 (>= 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.

Seasonal Risk Needed	Seasonal Risk Complete
This field is calculated upon save	This field is calculated upon save
Manual Override Seasonal Risk 🚯	5
Seasonal Risk	▼
None	
✓ Seasonal Risk	
	Mitigation
Not Seasonal Risk	
Seasonal Risk Needed	Seasonal Risk Complete
Seasonal Risk	Seasonal Risk Complete
Seasonal Risk Needed 1 Manual Override Seasonal Risk 1	Seasonal Risk Complete

\*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 <u>not</u> 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.



#### 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 There is an outstanding defect as it doesn't pick up on ONCOM ERTS outages. This has been escalated to fix.
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)

Initial	With SO	Approved	Rejected	Cancelled
		$\bigtriangledown$		
ERTS Profile (0)				New
N	lew ERTS Pr	ofile: ERTS Profile		
Information		*Outage	•	
		ON-0012911	×	
*Period Start ()		*Period End 🚯		
03/08/2021	t	18/08/2021	iii an	
Emergency Return To Service: Day		Emergency Return to Service: Day Units 🚯		
12		Hours	•	
Emergency Return To Service: Night 1		Emergency Return to Service: Night Units		
18		Hours	•	
OnCom 🚯		*Comments		
-		Period 1 - Jumpers broken		
			Cancel	

# Interpreting Outage History



# Outage Lifecycle Example

Outage Name

ON-0011912

ON-0011912

ON-0011912

ON-0011912

ON-0011912

ON-0011912

ON-0011912

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

Records of Outage 🚰 🛛 Outage Change Requests (7)

$\sim$	Status	,	✓ Char	nge T	ype 🗸	Cha	nge Description	$\sim$	CreatedDate 🦆	$\sim$	Created By		$\sim$	
	Approved		Canc	el		Outa and bool is no	age works were bun completed in anoth king therefore this b o longer required.	dled er ooking	08/06/2021		Nathanael Sir	ns NGET OP		
	Approved	Outa	TBA ge History			Ops able state	confirmed they are to resource - please into plan for old Pl	now rein- anned	08/06/2021		Nathanael Sir	ns SO		
	Approved	29 items	s • Sorted by Date	e • Upda	ted 14 minutes ago	~	User 🗸	Original V	/alue		~	New Value		19. C Y
	Dejected	1	07/06/2021 1	16:09	Change Code		Nathanael Sims SO	9 - TO Res	ource			13 - Bundling / O	pportuni	ity Outage
	Rejected	2	07/06/20211	16:09	Status		Nathanael Sims SO	Planned	rmed they are now able to resource - p	olease reinstat	e into plan for old P	Cancelled	re bundi	ed and completed in another booking therefore this bo
	Approved	4	07/06/2021 1	16:08	Status		Nathanael Sims SO	With SO				Planned		
	Approved	6	07/06/20211	16:06	Change Code		Nathanael Sims NGET OP	11 - Repla	n TBA			9 - TO Resource		
	Approved	7 8	07/06/20211	16:06 16:06	Change Description Status		Nathanael Sims NGET OP Nathanael Sims NGET OP	To TBA - C TBA	ops no longer able to resource			Ops confirmed th Initial	ney are no	w able to resource - please reinstate into plan for old P
		9	07/06/20211	16:05	Change Code		Nathanael Sims SO	13 - Bund	ling / Opportunity Outage			11 - Replan TBA		
		10	07/06/20211	16:05	Change Description		Nathanael Sims SO	CAN WE C	CHANGE ERTS TO ONCOM			To TBA - Ops no le	onger abi	le to resource
		11	07/06/20211	16:05	Status		Nathanael Sims SO	Planned				TBA		
		12	07/06/20211	16:00	Change Code		Nathanael Sims SO	9 - TO Res	ource			13 - Bundling / O	pportuni	ity Outage
		13	07/06/20211	16:00	Change Description		Nathanael Sims SO	START ON	IE DAY EARLIER - NOW 15/06/2021			CAN WE CHANGE	E ERTS TO	ONCOM
		14	07/06/2021 1	16:00	Emergency Return To Service: Day		Nathanael Sims SO	4						
		15	07/06/2021 1	16:00	Emergency Return To Service: Night	t IIt-	Nathanael Sims SO	6						
		10	07/06/2021 1	16:00	Emergency Return To Service: Day C	tillo	Nathanael Sims SO	Hours						
		19	07/06/2021 1	15-58	Change Code	. 011	Nathanael Sims SO	1 - New w	ork identified in current year			9 - TO Resource		
		10	07/06/2021 1	15:58	Change Description		Nathanael Sims SO	NEW	one racinalited in content year			START ONE DAY F	ADI TED -	NOW 15/06/2021
		20	07/06/2021 1	15:58	Planned Start Date/Time		Nathanael Sims SO	15/06/20	21 02:00			14/06/2021 02:0	00	
		21	07/06/2021 1	15:57	Status		Nathanael Sims SO	With SO				Planned		
		22	07/06/2021 1	15:56	Status		Nathanael Sims NGET OP	Initial				With SO		
		23	07/06/2021 1	15:56	Status		Nathanael Sims NGET OP	Rejected				Initial		
		24	07/06/20211	15:56	Work Involved		Nathanael Sims NGET OP							
		25	07/06/2021 1	15:56	Status		Nathanael Sims SO	With SO				Rejected		
		26	07/06/2021 1	15:54	Status		Nathanael Sims NGET OP	Initial				With SO		
		27	07/06/2021 1	15:54	Created.		Nathanael Sims NGET OP							
		28	07/06/2021 1	15:54	Demand Risk Approval Status		Nathanael Sims NGET OP					Initial		
		29	07/06/2021 1	15:54	Owner		Nathanael Sims NGET OP		Windows PowerSt	hell		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)

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 $\ensuremath{P}\xspace.$
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

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

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)

Field Name	~	Original Value	$\sim$	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	

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

Difference With Original Outage							
	Field Name	$\sim$	Original Value	~	New Value	$\sim$	
	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	i	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).
  - Rejected Outages are not migrated into eNAMS from Request Outages in TOGA, due to technical limitations.
     Rejected Outages have however been migrated from the Planned Outages area in TOGA (therefore no limitations for E&W Planners).
  - 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 <u>not</u> accurate.
  - eNAMS Last Modified Date & Time is populated as Data migration date & time, therefore is <u>not</u> 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

Ownership Detail	
Owner	ی
NGET	ا
Basic Outage Description	
* Boundary Transmission Owner ()	ۍ
SPT	◄

# 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 golive).
- 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

Data	Reports 🗸	Tags 🗸	Late News	$\sim$	Bu			
́Л	ASTA M.	- <u>\</u>		川	16-			
			MACTICE		27			
Tags Recently Viewed								



## **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

C Affected User (2)				
Account Name	<ul> <li>Affected User Type</li> </ul>	✓ Access Level	✓ Effective Date	~
UK POWER NETWORKS (OPERATIONS) LIMI	T Affected User	Read		
UNIPER UK LIMITED	Affected User	Read		
		View All		
📋 Tags (6)				Add Tags
Tag Name 🗸 🗸	Description 🗸	<sup>7</sup> Тад Туре	✓ 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	
	苗

# 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	$\sim$	Description	$\sim$	Tag Ty	/pe	$\sim$	Inactive				
ESOPARTY9		ESOPARTY9		ESO Pa	arty						
EXTPARTY9		EXTPARTY9		Extern	al Party			Remove			
		ECODA PTV00			arty			_			
					Enter Removal Effective Date	ê		 Delete Tag Ass	ignments	Cancel	Remove

Details Related	d							
* Tags Name PI32019			* Description New SGT3 at Eaton Socon					
Owner NGET			Inactive           Imactive           Other Asset Owner           Search Accounts			ۍ م		
	📋 Tags (2)						•	Add Tags
	Tag Name	~	Description	$\sim$	Тад Туре	~	Inactive	
	PI32019		New SGT3 at Eaton Socon		Scheme		$\checkmark$	

### 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)
National	Scotland	SHETL + SPT (Licensed Area)	PLSCOT or CTRSCOTN + CTRSCOTS (Tag)
	E&W South	PLSTH (SO Party)	PLSTH (Tag)
Outago Blanning	E&W North	PLNTH (SO Party)	PLNTH (Tag)
Ouldge Plaining	Scotland North	SHETL (Licensed Area)	CTRSCOTN (Tag)
	Scotland South	SPT (Licensed Area)	CTRSCOTS (Tag)
# Appendix – Outage Change Scenarios



#### 1) New Outage -> Accepted into plan

To use these outage change scenario process diagrams most effectively, start the slide show in Power Point. You can then click on the thumbnail pictures to see more detail on each process stage if you need to and click again to come back to this diagram.



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

To use these outage change scenario process diagrams most effectively, start the slide show in Power Point. You can then click on the thumbnail pictures to see more detail on each process stage if you need to and click again to come back to this diagram.



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

To use these outage change scenario process diagrams most effectively, start the slide show in Power Point. You can then click on the thumbnail pictures to see more detail on each process stage if you need to and click again to come back to this diagram.



\*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

To use these outage change scenario process diagrams most effectively, start the slide show in Power Point. You can then click on the thumbnail pictures to see more detail on each process stage if you need to and click again to come back to this diagram.



### 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	e Request Description					
Circuit Desci			Additional Description	0		
Status	152KV 5GTT		Basic Outage			
Planned		1	ON-0004352			
Company Co	de 🚺		Basic Outage Code			
SP Outage Ture	•		CURK2H1			
Planned	Planned		Add			
			Additio	nal	Change the Status to <b>Not Taken</b> and click	
	Circuit Description Circuit Description Currie 275/132kV SGT1 Status Not Taken Company Code SP This field is calculated upon save		Additio Basic O ON-OC Cancel Save	nal I utag )04:	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



nationalgridESO

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



**Date** and click **Save** (this may only be possible by a SO Super User – TBC)