

WCM Upgrade

Assessment and Preparations



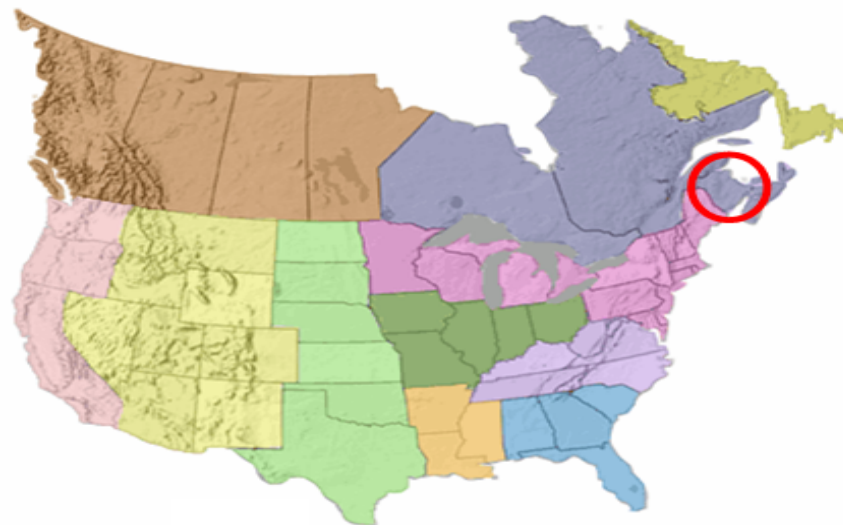
Énergie NB Power

Nucléaire Nuclear

Introduction

NB Power Nuclear

- One of the NB Power Group of Companies
- Owned by the Province of New Brunswick
- One unit - Point Lepreau GS – Operated 25 years
- Shutdown in March 2008 for \$1.4B refurbishment
- Restart – Original Schedule - September 2009
- – Current Schedule - February 2011



Background

- WCM was implemented in 2004 on 4.6C
- Previous work permit/tagout process was a manual, paper based system.
- Standard Model was implemented.
- Numerous modifications were made to accommodate existing process

Modifications

- WCA long text available in PREP status
- WCD Header and Item long text available in PREP status
- Partner function change available in PREP and CHNG status
- Change logs for Partners
- Change log for Order-WCA-WCD links
- Remove 'Deactivate' button on Approval screen if Partner assigned

Modifications (con't)

- Disable WCA Partner assignment until Approval is Green
- Disable WCA Partner assignment for some User statuses
- Disable activating WCA Test if Approval is Green
- Disable Untagging Items if WCD Approval is Green
- Disable WCA completion if Approval is Green

WCD Development

Partners & User Statuses

WCM: Change Operational WCD: Partners

Partner New entries

Funct	Partner
Tagging Developed By	BLD142
Tagging Checked By	PL0011
Tagging Developed By	
Tagging Checked By	
Test Developed By	
Test Checked By	
Retag Developed By	
Retag Checked By	
MOD Developed By	
MOD Checked By	
Untag Developed By	
Untag Checked By	

Change Operational Work Clearance Document: Header

Approvals WC application

WC document 3021159 Replace Exhaust Pipe 5225-CPD-02
Status PREP ITG CHK
Valid from 2006/10/12
Priority
Cond. op. syst.
Revision phase

Reference object

FunctLocation 0781-
Equipment
Train

Change Status

Status Business processes

System status

Stat Text

- ☒ PREP Prepared
- ☒ ITG Initial tagging status

Status with status no.

No Stat Text


- ☐ 10 CRTD Created
- ☐ 20 DEV WCD Developed
- ☒ 30 CHK WCD Isolations Checked
- ☐ 40 TCHK Test Conditions Checked
- ☐ 50 RCHK Reestablished Isolations C...



Status w/o status no.


- ☐ MOD Isolations Modified
- ☐ AFT Additions for Test
- ☐ WCDT Created from WCD Template
- ☐ ETUG Temporarily Untagged


Approvals





Change Work Clearance Application

Activate |  Approvals | Order | Operational WCD





Application: 2024430 Replace exhaust flex pipe on CP02 diesel   000



Status: PREP OPR2 


Valid from:  Approvals - Work clearance application


Priority	Permit	Short text	Cat	Pr	L	PI	Approv. by	Ent. by
Cond. op	APPROVER 1	CRO Approval for Tagging	W		<input type="checkbox"/>			
Revision	APPROVER 2	SS Approved	W		<input type="checkbox"/>			
	APPROVER 3	Other Approvals	W		<input type="checkbox"/>			
Referenc	FINAL APPV	Field Work Approved	W		<input type="checkbox"/>			



Change Operational Work Clearance Document: Header

    Approvals | WC application

WC document: 3021159 Replace Exhaust Pipe 5225-CPD-02   000







Status: 



Valid from:  Approvals - Operational Work Clearance Document

Priority	Permit	Short text	Cat	Pr	L	PI	Approv. by	Ent. by
Cond. op. s	WCD-INIT	WCD Auto Approval for Tagging	W		<input type="checkbox"/>			
Revision ph	WCD-FINAL	WCD Approval-Tagging Complete	W		<input type="checkbox"/>			












Execution






Change Work Clearance Application

 Activate |    Approvals |  Order |  Operational WCD

Application	2051300	Replace 5623-DS-06.	 	000
Status	PREP	OPR2		
Valid from	2010/02/25	00:00:00	Valid to	2011/02/25 00:00:00
Priority		Recall time	0	
Cond. op. syst.	1	Running Work Clearance		
Revision phase	PROTECTION GUARANTEE Protection Guarantee Permit			

Change CORRECTIVE MAINTENANCE (O&M) 634468: Central Header

    |      |  WC application |  Labor release | Complete (business)

Order	PL01	634468	Replace 5623-DS-06.	 
Sys.status	REL	PCNF WCM	DSEX GMPS MACM PPRT PR...	 PLND  RCAP 

Partner

Change Work Clearance Application

 Activate



Approvals



Order



Operational WCD

Application

2051300

WCM: Change WCA: Partners



Partner

New entries

Funct	Partner	Name	A. Address
WC Holder Signed-...	PLE423	Peter Hooper	Hooper, 659-6217,,

Change Work Clearance Application

 Activate



Approvals



Order



Operational WCD

Application

2024430

WCM: Change WCA: Partners



Partner

New entries

Funct	Partner	Name	A. Address



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Approval

Change Work Clearance Application

Application	2051300	Replace 5623-DS-06.	<input checked="" type="checkbox"/>	000
Status	PREP	OPR2	<input type="button" value="i"/>	
Valid from	2010/02/25	00:00:00	Valid to	2011/02/25 00:00:00
Priority				
Cond. op. syst.	1	Running Work Clearance		
Revision phase	PROTECTION GUARANTEE	Pr		

Permit	Short text
APPROVED 1	OPR2 1

WCM: Change WCA: Partner



 Partner
  New entries

Func	Partner
WC Holder Signed-...	PLE423

[illegible]

Approval

Change Work Clearance Application

Activate | Approvals | Order | Operational WCD

Application: 2051300 Replace 5623-DS-06. 000

Status: PREP OPR2 i

Valid from: 2010/02/25 00:00:00 Valid to: 2011/02/25 00:00:00

Priority: Recall time: 0

Cond. op. syst. 1 Running Work Clearance

Revision phase: PROTECTION GUARANTEE Protection

WCM: Change WCA: Partners

Partner New entries

Funct	Partner	Name

Approvals - Work clearance application


Permit	Short text	Cat	Pr	L	PI	Approv. by	Ent. by
APPROVER 1	CRO Approval for Tagging	W			✓	G BEERS	PL0115
APPROVER 2	SS Approved	W			✓	N/A	PL0115
APPROVER 3	Other Approvals	W			✓	N/A	PL0115
FINAL APPV	Field Work Approved	W			✓	P HOOOPER	PLE423

Deactivate Cancel

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Partner / User Status

Change Work Clearance Application

 Activate





 Approvals



Order



Operational WCD



Application	2051300	Replace 5623-DS-06.		<input checked="" type="checkbox"/>	000
Status	PREP	STST			
Valid from	2010/				
Priority					
Cond. op. syst.	1	R			
Revision phase	PROTE				

WCM: Change WCA: Partners



Partner

New entries

	Funct	Partner	Name	A.	Address
					
					

Information











No authorization for activating user status OPR2




Test

Change Work Clearance Application

 **Activate**    **Approvals**  **Order**  **Operational WCD**

Application: 2051300 [Replace 5623-DS-06.](#)   000

Status: PREP TEST 

Valid from: 2010/02/25 00:00:00 Valid to: 2011/02/25 00:00:00

Priority:

Cond. op. syst.: 1 Run

Revision phase: PROTECT

Reference object


FunctLocation: [0781-56](#)

Equipment:

Train:

Error

Test status not allowed with final approval.

 OK Help

Change Log

Change Documents for Object Class WAPI



Object value	Doc. no.	User ID	First name	Last name	Date	Time	Field name (long)	Old value	New value	Change ID
000002050672	85106531	PLE465	Walter	Attoe	2010/02/01	10:46:26	WCM Link changed		New link to ORDER - 000000630547	I
000002050672	85107116	PLE465	Walter	Attoe	2010/02/01	10:55:17	WCM Link changed		New link to WCD - 000003036926	I
000002050672	85282267	BLD162	Randy	Doucette	2010/02/09	09:21:04	Partner		BLD162 : WC Holder Signed-on	I
000002050672	85282791	PLE561	Bruce	Jardine	2010/02/09	09:40:30	Partner		PLE561 : WC Holder Signed-on	I
000002050672	85289396	BLD162	Randy	Doucette	2010/02/09	13:02:48	Partner	BLD162 : WC Holder Signed-on		E
000002050672	85289462	PLE465	Walter	Attoe	2010/02/09	13:08:06	WCM Link changed		New link to ORDER - 000000631399	I
000002050672	85291102	PLE561	Bruce	Jardine	2010/02/09	14:09:43	Partner	PLE561 : WC Holder Signed-on		E
000002050672	85303934	PL0063	Gerry	Johnston	2010/02/10	08:00:23	Partner		PL0063 : WC Holder Signed-on	I
000002050672	85318020	PL0063	Gerry	Johnston	2010/02/10	14:20:57	Partner	PL0063 : WC Holder Signed-on		E
000002050672	85500037	PL0067	Peter	Thibodeau	2010/02/19	13:29:57	WCM Link changed		New link to ORDER - 000000634211	I



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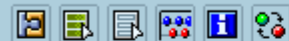
Temporarily Untag

Change Operational Work Clearance Document: Header

 Approvals

WC document	3037400	WCM Demo			000
Status	PREP PROC TEST UNT ETG		TCHK		
Valid from	2010/03/22				
Priority	<input type="text"/>				
Cond. op. syst.	<input type="text"/>				
Revision phase	<input type="text"/>				

Change Operational Work Clearance Document: Switching Operatio

 Untag Temporarily untag

WC document	3037400	WCM Demo
Status	PREP PROC TEST UNT ETG	TCHK

CONF ITG PTAG ETG BTUG ETUG BUG EUG INAK

Error

Remove final approval.



OK

Help

ECC 6 Upgrade Project

- Two options initially proposed for WCM
 - Implement EhPs and eliminate as many mods as possible
 - Include all existing modifications, configuration, and user exits so there is no change in functionality
- SAP Upgrade Committee guidelines
 - Enhancement packs will not be implemented at this time.
 - No new functionality – technical upgrade only
- Station management
 - Business process changes are not to be considered at this time.

ECC 6 Upgrade Project

- Developers are currently re-applying the modifications to ECC 6 Dev.
- Change log for Order-WCA-WCD links
 - Standard log available
- Partner change log has caused errors
 - Awaiting OSS response
- Unit testing will begin April 6
- Integration testing scheduled for early May

ECC 6 Upgrade Project

- Unit & integration testing to determine the extent of user training required
 - Communication
 - Job aid
 - User training

Challenges

- July 1 – 4 Go-Live is critical
- Short timeline to complete all the mods and testing
- Experienced resources for testing are not readily available
- Introduce little or no change for end users