

CorpTech

Functional Specification (Enhancement)

H2R 2.2.2 E-1236 Custom Pay Rule - Fatigue Rule

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Sub-program: HR
Phase: Solution Design

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Distribution List for Current Version

Name	Title

Reference Documents

Document Title	Reference

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1 Introduction

1.1 Background

The Fatigue Rule has been used to calculate

- **The fatigue penalty** - If the worked time between the ceasing work on one shift and commencing work on the next shift is less than 8 or 10 hours based on the award conditions, then any worked time will attract a 100% Premium payment, on top of their regular pay, including any other premiums normally paid for that shift.

This is calculated as either Premium or Detail depending upon the value in parameter (20).

- **The fatigue leave** - If the employee does not return to work until they have had their 8 or 10 hour break, any scheduled regular shift times that occurs during this break are to be paid at the regular rate, including any penalties, and continues until the employee has been off work for 8 hours or 10 hours.

This is calculated as the Detail record.

- **The fatigue Unpaid leave** - If any scheduled time remains after they have had their 8 or 10 hour break and they do not return to work, this time will be unpaid fatigue leave.

This is calculated as the Detail record

For the purpose of the Fatigue Rule, the finish time on the previous shift and the start time on the current shift are determined using the new parameters 'Eligible Time Codes for work minutes' (11), 'Eligible Time Codes for work Inclusive' (12), 'Eligible Hour Types for work Minutes' (13), 'Eligible Hour Types for work Inclusive' (14).

If there is no start time on the current shift then use the scheduled start time from the actual scheduled shift.

The SSS Glossary contains definitions of many terms used in this document.

DBR/RICEF	Description	Fit or Gap
307B-WB	The system shall automatically generate penalties and other related payments based on Terms of Employment.	Fit

1.2 Reference Information

Business Process Owner	HRBS Roster Management Standard Offering	
Functional Owner	Roster Management Team	
Application Environment	Workbrain	
Cross Reference	Framework Reference	2.2.2 Record Time and Attendance
	Fit/Gap ID	n/a
	BPR Document(s)	n/a
	Detailed Process Design Report(s)	2.2.2 Record Time and Attendance
	Functional Specification(s)	n/a
	Configuration Document	TBA
	Testing document(s)	TBA

1.3 Purpose and Scope

Pay Rule is the automated interpretation of an employee's time according to award and business rules. Award Interpretation refers to a series of decisions and actions made to an employees actual work time to ensure the correct payment breakdown. For the purpose of pay rules, scheduling and time recording are not in scope, pay rules assumes that where these processes are required they have already occurred. The timesheet approval process and exporting of records to the payroll system are also not within the scope of pay rules.

1.4 Justification

Each agency must comply with all legislative, award and EBA requirements governing working conditions and compensation for employees.

1.4.1 Recommended Approach

The legislative, award and EBA requirements cannot be sufficiently met using existing Workbrain supplied pay rules, therefore it is proposed that a custom pay rule be created which will allow for automated interpretation of the award requirement. If custom work does not go ahead then application of legislative, award and EBA requirements will not be automated and will require manual interpretation of an employee's time worked to determine required payments.

1.4.2 Alternatives

All existing Workbrain supplied pay rules were investigated but were not able to meet all requirements specified.

1.4.3 Risks

If a custom rule is not implemented and manual interpretation is required to meet the requirements, then payroll errors are likely to be higher than if the interpretation was automated.

1.4.4 Assumptions

- Based on the calculation group and other eligibility, employees can have either 8 or 10 hours of minimum rest between two shifts, but not in-between hours. For example: 8.5 hours.

1.4.5 Issues Outstanding

None identified.

1.5 Further Considerations

None identified.

2 Enhancement Specification

2.1 General Information

Name	Fatigue Rule
Application Environment	WorkBrain
Application Modules	Pay Rules
Activation	n/a

The fatigue rule will be based on the delivered Insufficient Rest Rule with modifications as described in this document.

2.1.1 The Fatigue Penalty

- If the time between an employee ceasing work for their last shift, and commencing work for their current shift is less than the required fatigue break (eg 8 or 10 hours depending upon the award) then any worked time on the current shift will attract a fatigue penalty.

For example: a 100% Premium payment, on top of their regular pay including any other premiums normally paid for that shift. (Refer example 1)

A new parameter has been designed '*Guaranteed Rest Minute*' (1) to capture the minimum rest minutes that must be taken between two shifts.

New parameters '*Premium Time Code for Penalty*' (15) and '*Premium Hour Type for Penalty*' (16) have been designed to capture the codes for paying the fatigue penalty.

The fatigue penalty is calculated for the current shift for the Time Codes and Hour Types as listed under *Eligible Time Codes for Penalty* (17), *Eligible Hour Type for Penalty* (18)

Fatigue penalty either premium or detail

The fatigue penalty can be calculated as the 'premium' or 'detail' record based on the settings under '*Penalty as Premium*' (20) checkbox.

If this checkbox is TRUE (checked), then the fatigue penalty is to be paid as the Premium. The fatigue penalty will have the start and end time and will use the Time Code and Hour Type listed under '*Premium Time Code for Penalty*' (15) and '*Premium Hour Type for Penalty*' (16).

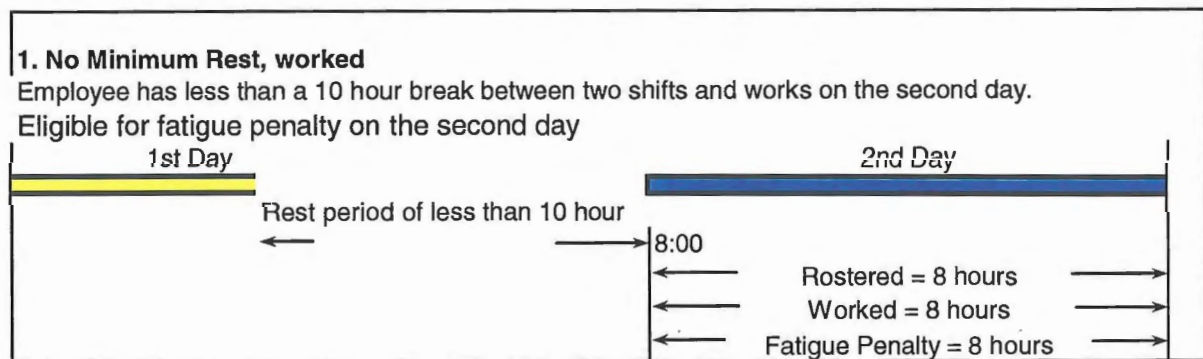
The fatigue penalty will be calculated for the duration of Time Codes and Hour Types as listed under *Eligible Time Codes for Penalty* (17), *Eligible Hour Type for Penalty* (18)

If the checkbox is FALSE (un-checked), then the fatigue penalty is calculated as the 'Detail' record. The Time Code and Hour Type listed under '*Eligible Time Codes for Penalty*' (17), '*Eligible Hour Type for Penalty*' (18) from the work detail record will be changed to the fatigue penalty Time Code and Hour Type ('*Premium Time Code for Penalty*' (15) and '*Premium Hour Type for Penalty*' (16).)

Note: - The guaranteed rest minutes can occur at any stage between the two shifts as long as they are consecutive. It does not have to be immediately prior to the start of the second shift. For example, if 8 hours off occurs between the end of the first shift and the first recall, this is sufficient to satisfy the rest requirement even if a 8 hour break is not received between the recall and the start of the next shift.

For example:

1. Full day Work



No Fatigue Penalty

- For certain calculation group there is no entitlement to a fatigue penalty even if the employee did not get the minimum rest period between the shifts and worked the scheduled hours.

In this scenario the *Eligible Time Codes for Penalty* (17), *Eligible Hour Type for Penalty* (18) will be left blank.

2.1.2 The Fatigue Leave

- If the employee does not have the minimum rest period between two shifts and did not return to work on the second day then calculate the not worked scheduled hours at regular rates (fatigue leave) including the penalties.

Calculate the paid fatigue leave until the employee has been off work until the required fatigue break of either 8 or 10 hours has been taken. Any remaining non-worked scheduled hours are calculated as unpaid fatigue leave.

New parameter '*Fatigue Leave Time Code*' (22) and '*Fatigue Leave Hour Type*' (23), '*Fatigue Leave Unpaid Time Code*' (24), '*Fatigue Leave Unpaid Hour Type*' (25) have been designed to capture the codes for paid/unpaid fatigue leave.

For example:

Full day Leave

Finish time on the previous shift = 3:00

Scheduled Start/End Time on next shift = 8:00/18:00

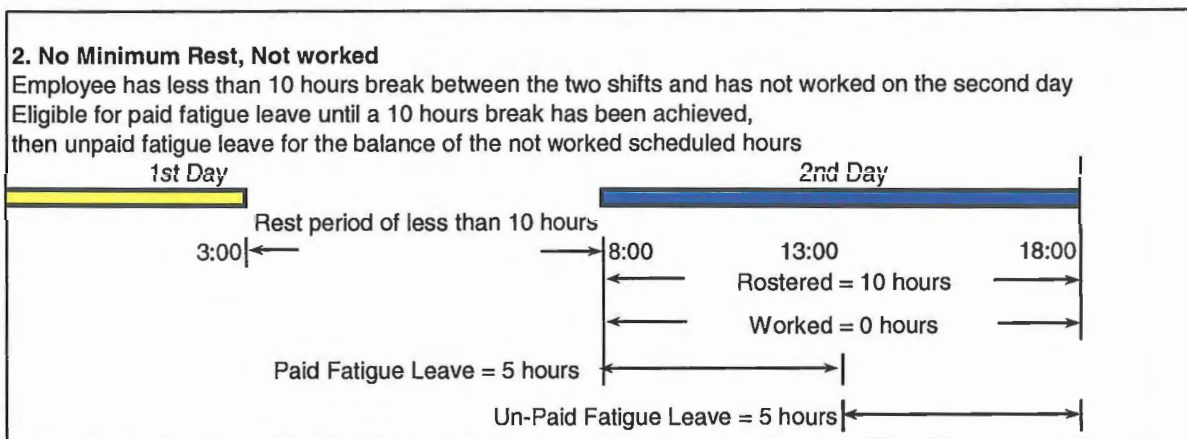
Minimum rest = 10 hour

If the employee does not work the scheduled shift

Calculate – Paid fatigue leave from 8:00 to 13:00

Until finishing of 10 hour period from the end time of last shift (3:00)

Unpaid Fatigue Leave from 13:00 to 18:00

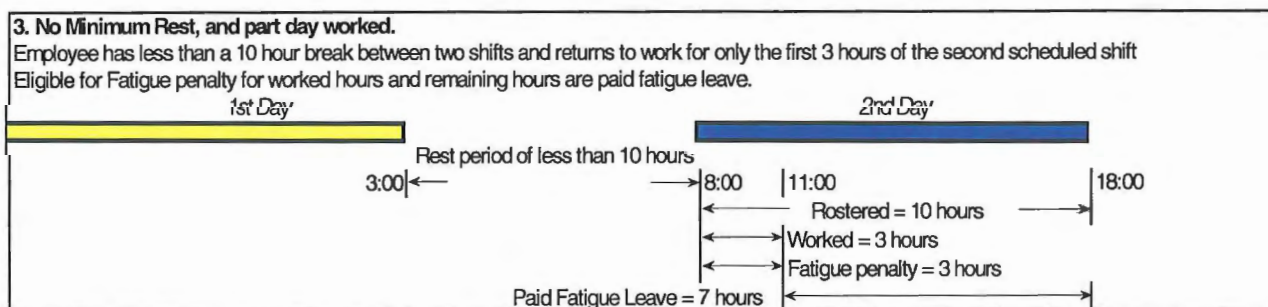


Part day Leave/work

If an employee is scheduled to work and then returns to work for the first part of their shift they will be eligible for a fatigue penalty on the actual worked hours. The remaining non-worked scheduled hours may be eligible for paid or unpaid fatigue leave depending upon the length of the shift.

The following scenarios describe how the payment will be calculated in cases of partial shift worked.

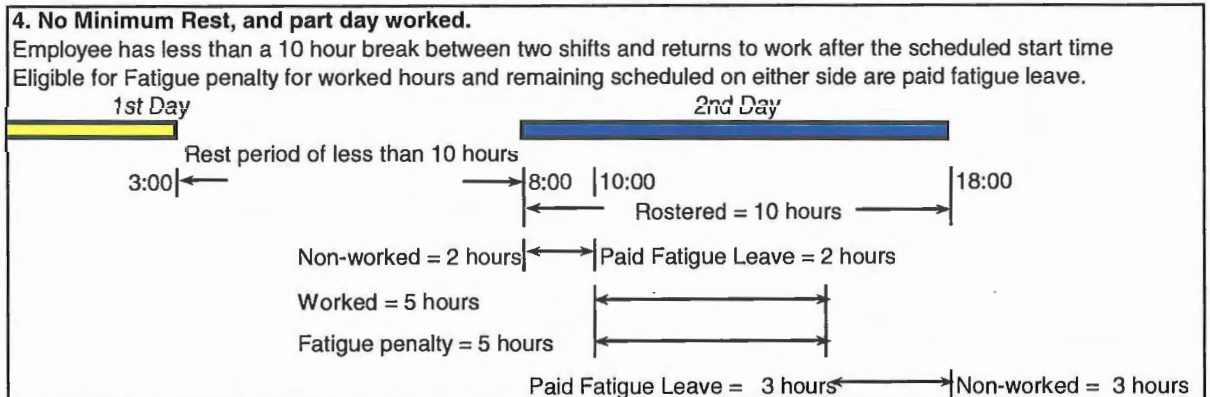
- If an employee comes to work on or before the scheduled time (invoking fatigue) then leaves early (before the end of shift).
The fatigue penalty of 100% will be paid for all actual worked hours and the remaining non-worked scheduled time will be paid at the regular rate including any penalties. This will only continue until the employee has been off work for minimum rest period (e.g. 10 hours).



- If an employee comes to work after the scheduled start time but before the minimum rest period has been taken, then
 - A fatigue penalty of 100% will be paid for all the actual worked hours on that shift.

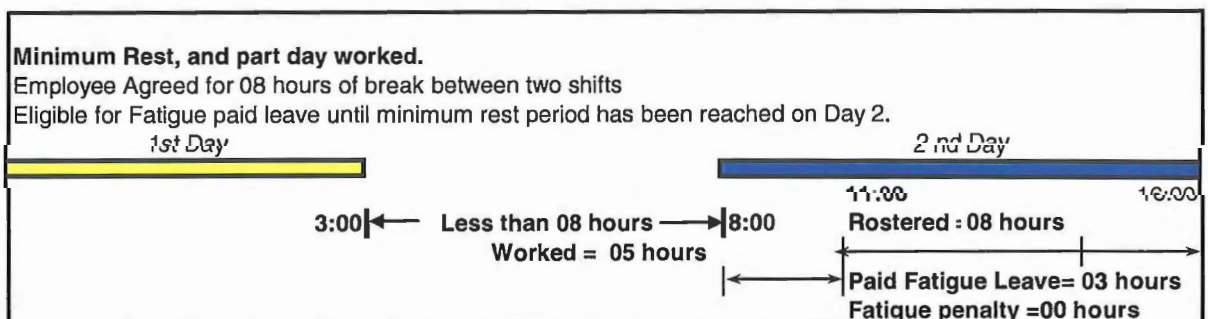
- The non-worked scheduled time from the scheduled start time until actual start time will be paid at the regular rate (paid fatigue leave) including any penalties.
- If the employee then leaves before completing all of the scheduled time, then the remaining non-worked time will be paid at the regular rate (paid fatigue leave) including any penalties.

The paid fatigue leave will only continue until the employee has been off work for minimum rest period (e.g. 10 hours). (Refer example 4)



- If employee does not return to work until they have had their minimum break period (e.g. 8 hours), any scheduled time that occurs during this break is to be paid at the regular rate (paid fatigue leave) including any penalties.

It will only continue until the employee has been off work for the required minimum period. If any scheduled time remains after they have had their break and they do not return to work, this time will become unpaid fatigue leave.



2.1.3 The 8 or 10 hour break

If agreed to by the employee the fatigue break can be reduced to 8 hr from 10 hr for the individual regardless of the calculation group default fatigue break (E.g. 10 hour).

New parameters '*Guaranteed Rest Minutes*' (1), '*Employee Alternate Agreement UDF*' (2), '*Alternative Guaranteed Rest Minutes*' (3) have been created to capture the default fatigue break (10 hour) and the alternate fatigue break (8 hour)

- The default fatigue minutes are captured under the '*Guaranteed Rest Minutes*' (1)

- The alternate fatigue minutes are captured under the 'Alternative Guaranteed Rest Minutes' (3)
- The 'Employee Alternate Agreement' (2) has been used to capture the Employee flag name (Emp_Flag15) (only Employee flag can be used)

If the Employee UDF under the 'Employee Alternate Agreement UDF' (2) has been 'checked' for the individual

Then

Use the 'Alternative Guaranteed Rest Minutes' (3) for the purpose of fatigue break calculation for the individual.

Else,

If the Employee flag under the 'Employee Alternate Agreement UDF' (2) is blank or has been 'un-checked'

Then

Use the default fatigue break minutes from 'Guaranteed Rest Minutes' (1), for the purpose of fatigue break calculation

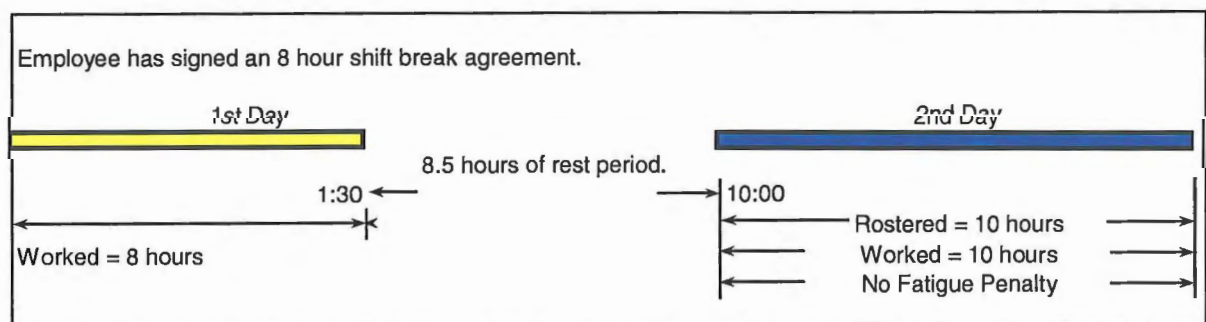
For example:

If 'Guaranteed Rest Minutes' (1), = 600

'Employee Alternate Agreement' (2) = Emp_Flag15 = True

'Employee Alternate Agreement' (3) = 480

If agreed to by the employee to reduce the fatigue break to 8 hour.



2.1.4 The 8 or 10 hour break - defaulted to 10 hour if worked OT.

If agreed to by the employee, the fatigue break can be reduced to 8 hr from 10 hr depending upon the calculation group. If overtime has been performed between the shifts then the fatigue break will be defaulted to 10 hour regardless of alternate agreement.

If the employee has any of the overtime codes on the timesheet between the current and previous shifts (actual shifts), then the default minimum rest time ('Guaranteed Rest Minutes' (1)) will be used for the calculation of the fatigue payment regardless of alternate agreement selection.

New parameter(s) 'Override Alternative Value Time Codes' (5), 'Override Alternative Value Hour Types' (6), have been created to capture the overtime Time Codes and Hour Types

For example:

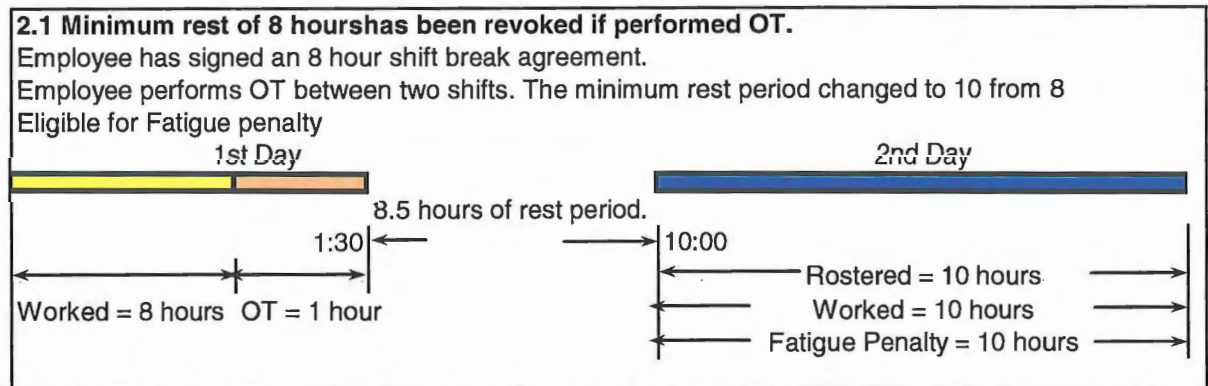
If 'Guaranteed Rest Minutes' (1), = 600

'Employee Alternate Agreement' (2) = Emp_Flag_15 = True

'Employee Alternate Agreement' (2) = 480

If agreed to by the employee to reduce the fatigue break to 8 hour.

If overtime has been done between two shifts, then use the 'Guaranteed Rest Minutes' (1)



2.1.5 Recall and Fatigue Break

The recall period will only count for the purpose of calculating time off for the fatigue break if the actual work on all recalls is more than 2 or 3 hours (depending on Calculation Group). Once 2 or 3 hours actual work on recalls is reached, all recalls need to be considered as the worked time that breaks the 8 or 10 hours off.

The rule will be able to be configured so that recalls can count for the purpose of calculating time off if the actual work on all recalls between two shifts is more than 2 or 3 hours

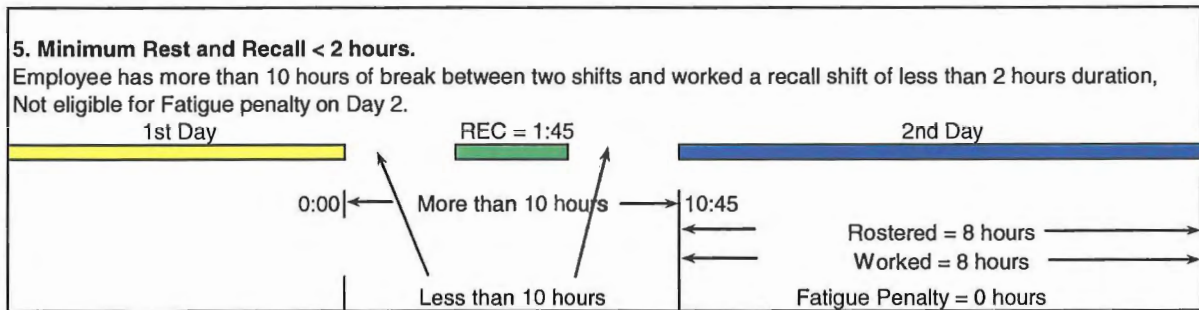
For example, once 2 hours actual work on recalls is performed, all recall will be considered as the worked time that will break the minimum rest period.

New parameter 'Time Codes for Recall' (8), and 'Hour Types for Recall' (9) have been created to capture the recall work Time Codes and Hour Types

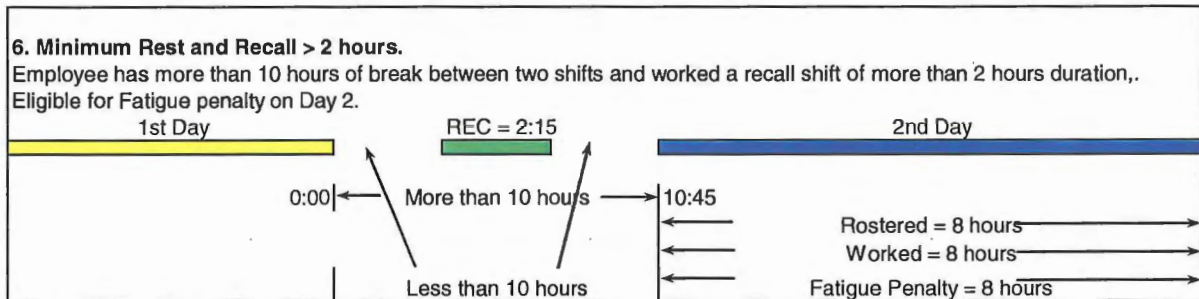
And 'Minimum time worked on Recall' (10) has been created to capture the minimum actual work on recall (e.g. 2 or 3 hour) before it will be considered as the worked time that breaks the 8 or 10 hour rest period.

Note: - If multiple recalls have been worked, then add the actual recall period worked on all recalls.

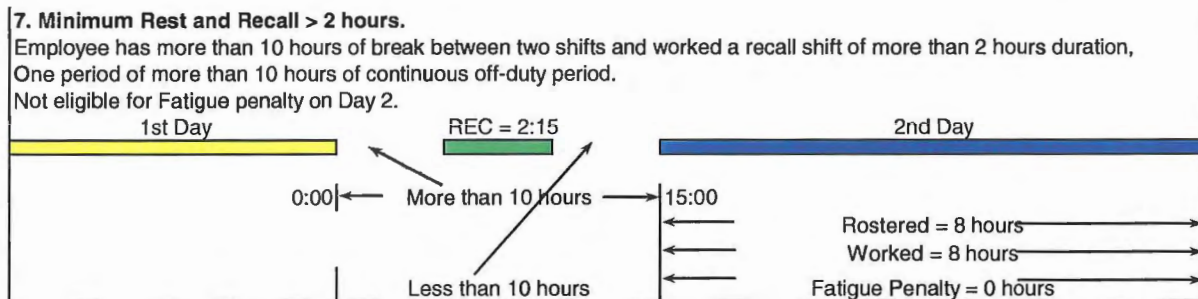
- < 2 hour of recall that does not count for 8 or 10 hour of break.



- > 2 hour of recall that does count for 8 or 10 hour of break.



- The minimum rest period minutes can occur at any stage between the two shifts as long they are consecutive. They do not have to be immediately prior to the start of the second shift. For example, if a 10 hour break occurs between the end of the first shift and the start of the first recall, this is sufficient to satisfy the rest requirement even if a 10 hour break is not received between the finish of the recall and the start of the next shift.



Fatigue continuity until break is taken

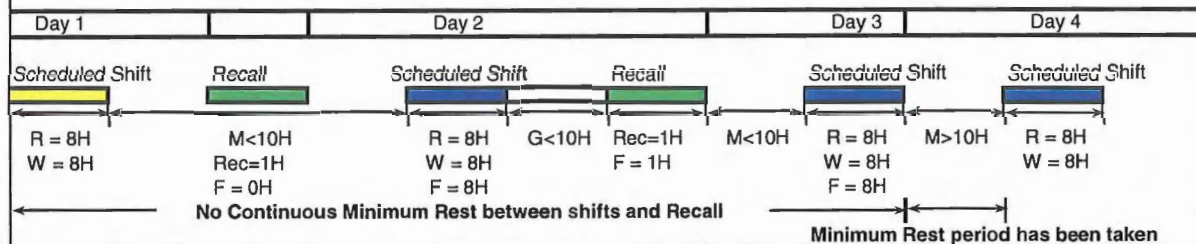
- If a fatigue penalty is invoked on a shift, the employee will continue to receive the fatigue penalty for any work until they have taken the required minimum rest minutes off work. Whilst recalls are not usually paid a fatigue penalty this condition will be an exception.

New parameter '*Eligible Time Codes for Fatigue penalty until break is taken*' (29), '*Eligible Time Codes for Fatigue penalty until break is Inclusive*' (30), '*Eligible Hour Types for Fatigue penalty until break is taken*' (31) and '*Eligible Hour Types for Fatigue penalty until break is taken Inclusive*' (32) have been created to capture the Time Codes and Hour Types that will attract the fatigue penalty. (Including recall Time Code)

8. No Minimum Rest between two shifts all subsequent work hours including Recalls eligible for Fatigue penalty.

Employee has less than 10 hours of break between two shifts and worked scheduled and recall shifts
Eligible for Fatigue penalty for all worked hours including Recall until minimum rest has been taken.

M - Rest period between two shifts.
G- Gap period between normal shift and recall
R - Rostered hours
W - Worked hours
F - Fatigue penalty
Rec - Recall period.
H - Hours



2.1.6 Fatigue Break within last 15 hour

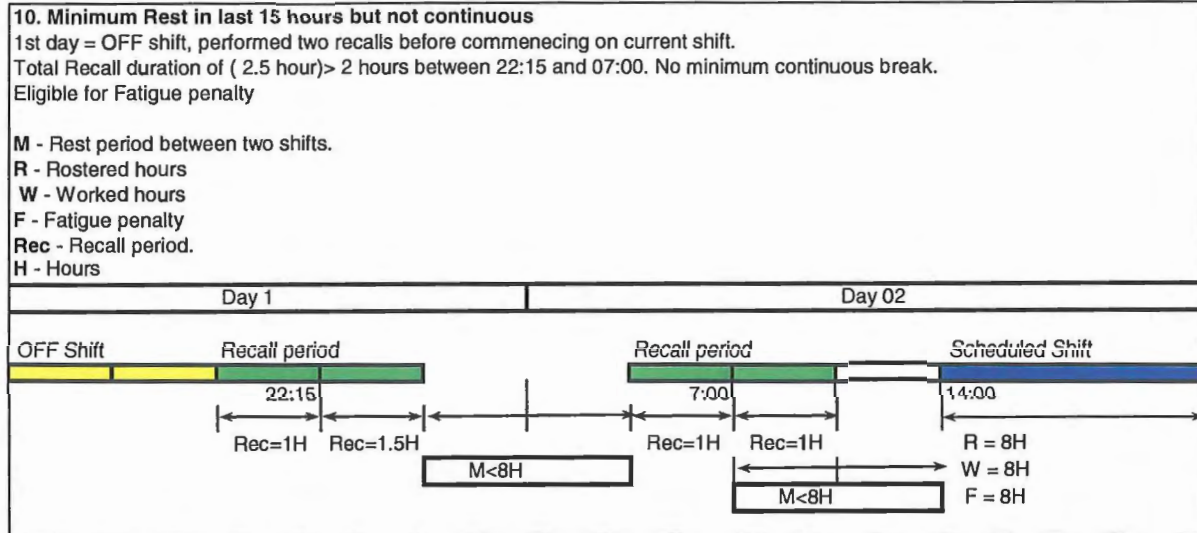
- In some cases employee must have at least one consecutive period of 8 hours off duty within the 15 hours preceding the start of their shift following a day off.

Any work performed on recalls prior to 22:15 the previous day will not be counted as time worked for the purpose of calculating the break time. Any recall will only count if the actual work on all recalls (cumulative) is more than 2 hours. Once 2 hours actual work on recalls is reached, all recalls within the time period will be considered as worked time that breaks the consecutive time off minutes.

- For example: a minimum of 10 consecutive hours off duty within the preceding 15 hours prior to the start of the current shift.

A new parameter '*Period to look*' (4) has been defined to capture such time. If there is a non-blank value defined for this parameter (e.g. 15 hours), then the fatigue rule will run a check to see if the minimum rest (e.g. 8 hours) has been taken at some point within the last 15 hours or else pay the fatigue penalty.

Only recalls after a certain time defined under '*Recall Time to look after*' (27) (e.g. 22:15) for the previous day and before a certain time defined under '*Recall Time to look before*' (28) (e.g. 7:00) for the current day are counted towards the calculation of the 2 hours minimum eligibility.



Recall worked during certain times of the day

- In some cases employee must have at least one consecutive period of 8 hours (or 10hr off duty within the 15 hours preceding the start of their shift following a day off. Only recall time worked after a certain time on the previous day (e.g. after 22:15 on previous day) or prior to a certain time on the current day (e.g. before 7:00 on the current day) are counted towards the calculation of the 2 hours.
 - If total recall time between 22:15 and 7:00 is more than 2 hours then all recalls that has been worked during last 15 hr will be considered as the worked time that will break the minimum rest period.
 - If total recall time between 22:15 and 7:00 is less than or equal to 2 hours then none of the recalls that has been worked during last 15 hr will be considered as the worked time that will break the minimum rest period. Employee will not be eligible for fatigue penalty.

New parameters '*Recall Time to look after*' (27), and '*Recall Time to look before*' (28), have been created to capture the before and after time.

Note: - If multiple recalls have been worked between these times then add the actual recall work hours on all the recalls between these times.

The Is Day off Extended condition has been used to check if the previous day has been OFF day.

If 'Guaranteed Rest Minutes' (1), = 600

'Employee Alternate Agreement' (2) = Emp_Flag15 = True

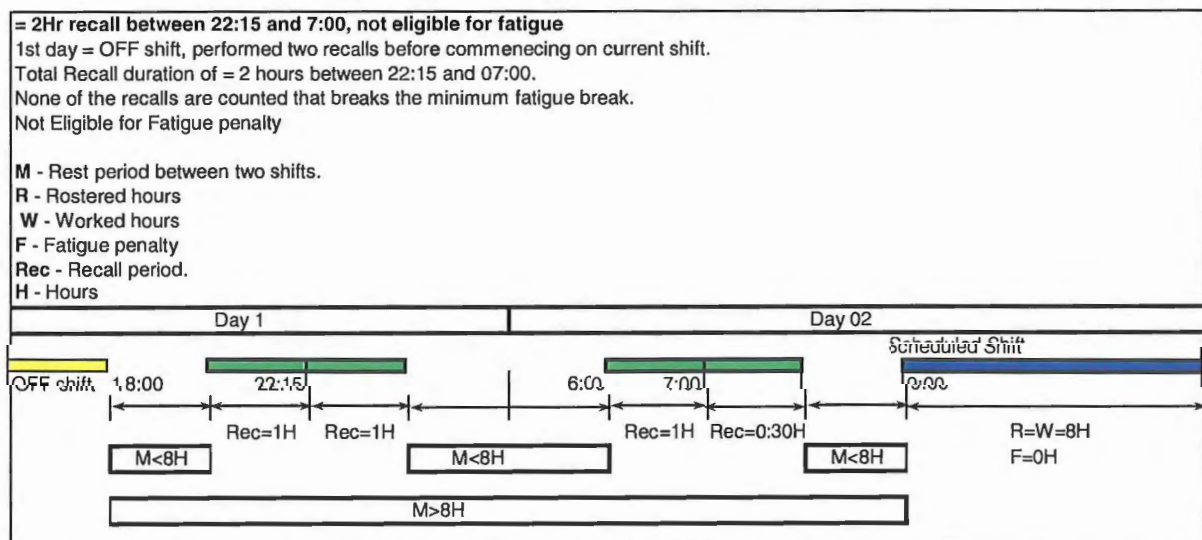
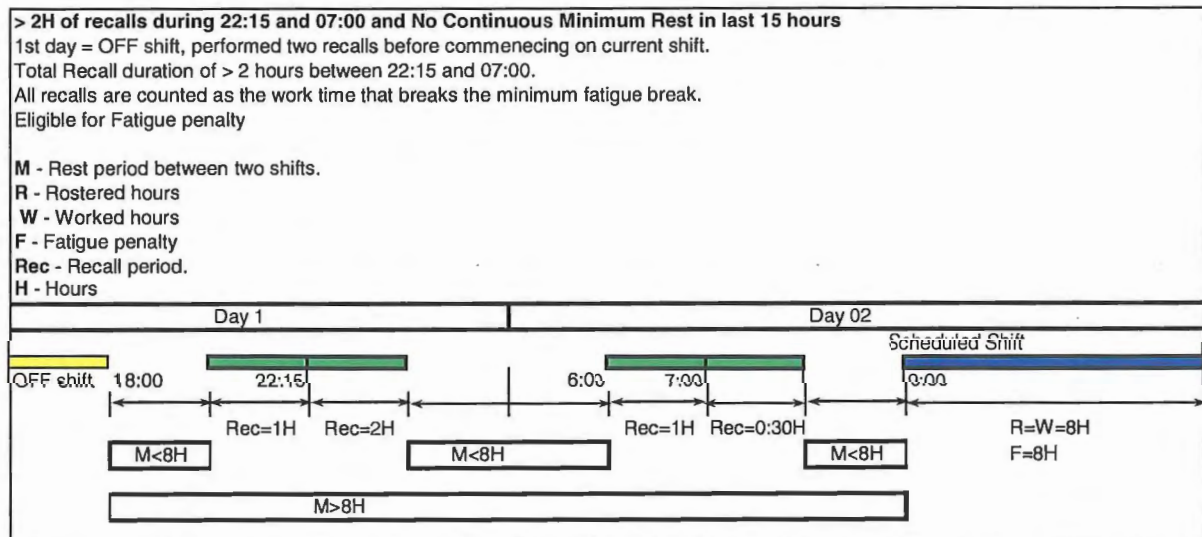
'Employee Alternate Agreement' (3) = 480

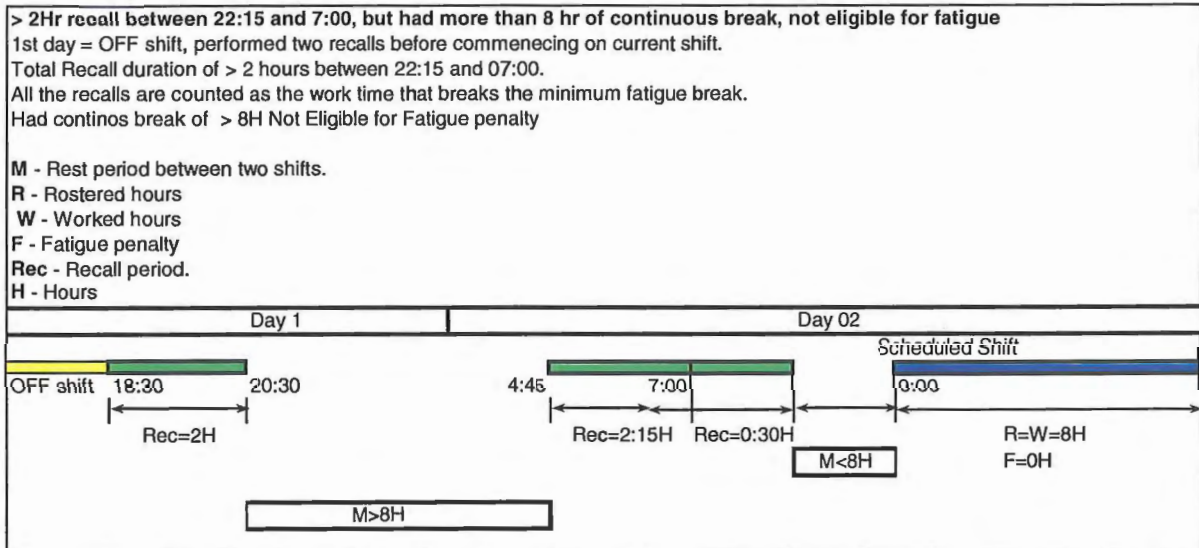
'Recall Time to look after' (27) = 22:15

'Recall Time to look before' (28) = 07:00

'Period to look' (4) = 15H

'Minimum time worked on Recall' (10) = 2:01





- Note:** - Fatigue rules can also be triggered due to an insufficient rest period between two or more scheduled shifts on one day (Not recall shifts). Employees can be scheduled to work on more than one shift on single day of the week.

2.1.7 If worked more than 20 hours on previous shift

For certain calculation group (e.g. Health Building & Engineering), If an employee has (including overtime) worked continuously (except for meal breaks) for twenty (20) hours then the employee shall be entitled for twelve hours of rest without loss of pay for ordinary time occurring during such absence. The fatigue penalty will be calculated if return to work before twelve hours of rest.

If *Previous shift Work minute* (33) := non-blank (e.g. 1200 min) then

Check

If the employee worked (including overtime) continuously (except for meal breaks) on previous shift for >= 1200 minutes

The worked Time Codes and Hour Types have been captured under 'Eligible Time Codes for work minutes' (11), 'Eligible Time Codes for work Inclusive' (12), 'Eligible Hour Types for work Minutes' (13), 'Eligible Hour Types for work Inclusive' (14).

The meal break Codes have been captured under 'Meal Break Time Code' (35) and 'Meal Break Time Code' (36)

The Meal break Time Code does not break the continuity of the shift but it does not count as the worked minutes (for 1200 minutes calculation).

If True

Then use the Guaranteed Rest Minutes from 'Guaranteed Rest Minutes if worked for extended period of time' (34) (e.g. 720 min) instead of either 'Guaranteed Rest Minutes' (1) (e.g. 600 min) or 'Alternative Guaranteed Rest Minutes' (3) (e.g. 480 min).

If *Previous shift Work minute* (33) = blank or If the employee worked (including overtime) continuously (except for meal breaks) on previous shift for < (less than) the minutes under *Previous shift Work minute* (33) (e.g. 1200 minutes)

Then use the Guaranteed Rest Minutes from the *Guaranteed Rest Minutes'* (1), (e.g. 600 min) or *'Alternative Guaranteed Rest Minutes'* (3), (e.g. 480 min) per normal processing logic (ref 2.1.3)

2.2 Security

The rule will be available to any user with access to configure calc groups and pay rules.

2.3 Processing

2.3.1 Logic

The Fatigue pay rule is primarily based on the delivered Insufficient Rest rule with modifications.

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
1	<i>Guaranteed Rest Minutes</i>	New	Field Contents: Enter default guaranteed rest in number of minutes (for example 480 or 600) (Ref 2.1.1)	Integer	Blank	Yes
2	<i>Employee Alternate Agreement UDF</i>	New	Field Contents: for example emp_flagx This field should be able to accept the employee flag UDF only for default or alternate fatigue break. If the employee flag UDF = 'Y' for an individual, then use the alternate hour from <i>'Alternative Guaranteed Rest Minutes'</i> (3) or else use <i>'Guaranteed Rest Minutes'</i> (1) field E.g. <i>Emp_Flag15</i> (Ref 2.1.3)	String (Expression String)	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
3	<i>Alternative Guaranteed Rest Minutes</i>	New	Field Contents: Enter the alternate guaranteed rest in number of minutes (for example 480) The alternate minimum rest value will be used only if the 'Employee Alternate Agreement UDF' (2) parameter returns true. (Ref 2.1.3)	Integer	Blank	No
4	<i>Period to look</i>	New	Field Contents: Enter the number of minutes (e.g. 900) If entered, the fatigue rule will check if the employee has had the minimum rest period in last period to look prior to the commencement of the current shift. For example: last 15 hour If left blank then ignore this condition. i.e. the fatigue break is calculated between shifts (Ref 2.1.6)	Integer	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
5	<i>Override Alternative Value Time Codes</i>	New	<p>Field Contents: comma delimited list of Time Codes</p> <p>If any Time Codes are entered, then the fatigue rule will check if the employee has any of these Time Codes on the timesheet between the current and the previous shifts and if yes, then '<i>Alternative Guaranteed Rest Minutes</i>' (3) is revoked and the default minimum rest time will be used for the calculation of the fatigue payment.</p> <p>If left blank then ignore this condition.</p> <p>(Ref 2.1.4)</p>	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
6	<i>Override Alternative value Hour Types</i>	New	<p>Field Contents: comma delimited list of hour types</p> <p>If any Hour Types are entered, then the fatigue rule will check if the employee has any of these Hour Types on the timesheet between the current and the previous shifts and if yes, then '<i>Alternative Guaranteed Rest Minutes</i>' (3) is revoked and the default minimum rest minutes will be used for the calculation of the fatigue payment.</p> <p>This field works in conjunction with the '<i>Override Alternative Value Time Codes</i>' (5) field.</p> <p>If the '<i>Override Alternative Value Time Codes</i>' (5) has no value defined then any entry for the '<i>Override Alternative value Hour Types</i>' (6) will be ignored</p> <p>If left blank then ignore this condition.</p> <p>(Ref 2.1.3)</p>	String	Blank	No
7	<i>Yesterday Work Minutes Required</i> (Not required)	New	<p>Field Contents: Enter the number of minutes (for example 1)</p> <p>When specified, this will require that the employee must have worked at least this many minutes on the prior shift before being entitled to fatigue</p>	Integer	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
8	<i>Time Codes for Recall</i>	New	<p>Field Contents: comma delimited list of recall Time Codes</p> <p>This list of Time Code(s) here will be used to identify if the worked shift is a recall shift or not.</p> <p>Recall shift will have at least one of the Time Codes from the list.</p> <p>(Ref 2.1.4)</p>	String	Blank	No
9	<i>Hour Types for Recall</i>	New	<p>Field Contents: comma delimited list of recall Hour Types</p> <p>Enter the recall Hour Types here.</p> <p>If both recall Time Codes and Hour Types are non-blank values then the fatigue rule will check for any combination(s) of Time Codes and Hour Types that exist on the work detail record. If these code(s) exist then it is identified as recall shift.</p> <p>(Ref 2.1.4)</p>	String	Blank	No
10	<i>Minimum time worked on Recall</i>	New	<p>Field Contents: Number of minutes</p> <p>Minimum time that employee must work on recall duty before it can be counted for breach of the minimum rest minutes.</p> <p>(Ref 2.1.4)</p>	Integer	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
11	<i>Eligible Time Codes for work minutes</i>	New	Field Contents: Comma delimited list of work Time Codes For example: - Enter the work Time Codes here except leave and recall Time Code (Ref 1.1)	String	Blank	No
12	<i>Eligible Time Codes for work Inclusive</i>	New	If this checkbox is TRUE (checked), the Time Codes listed under ' <i>Eligible Time Codes for work minutes</i> ' (11) are inclusive If it is FALSE (un-checked), then the Time Codes entered are exclusive. For example: - If work Time Codes are entered this will be checked. If recall or leave time codes are entered this will be un-checked.	Checkbo x	Blank	No
13	<i>Eligible Hour Types for work Minutes</i>	New	Field Contents: Comma delimited list of work Hour Types If Time Code are entered in ' <i>Eligible Time Codes for work minutes</i> ' (11) and Hour Types are entered then fatigue rule will check for any combination of work Time Codes and Hour Type. (Ref 1.1)	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
14	<i>Eligible Hour Types for work Inclusive</i>	New	<p>If this checkbox is TRUE (checked), the Hour Types listed under 'Eligible Time Codes for work Inclusive' (12) and 'Eligible Hour Types for Penalty' (18) are inclusive</p> <p>If it is FALSE (un-checked), then the Hour Types entered are exclusive.</p> <p>For example: - If work 'Hour Types' are entered this checkbox will be checked. If recall or leave Hour Types are entered this checkbox will be un-checked.</p>	Checkbox	Blank	No
15	<i>Premium Time Code for Penalty</i>	New	<p>Field Contents: Single entry Time code</p> <p>Enter the Time Code that will be used to pay the fatigue penalty.</p> <p>(Ref 2.1.1)</p>	String	Blank	Y
16	<i>Premium Hour Type for Penalty</i>	New	<p>Field Contents: Single entry Hour Type</p> <p>Enter the Hour Type that will be used to pay the fatigue penalty.</p> <p>(Ref 2.1.1)</p>	String	Blank	Y
17	<i>Eligible Time Codes for Penalty</i>	New	<p>Field Contents: Comma delimited list of Time Codes that attract the fatigue penalty</p> <p>For example - Enter the work Time Code(s) that attract fatigue penalty</p> <p>(Ref 2.1.1)</p>	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
18	<i>Eligible Hour Types for Penalty</i>	New	Field Contents: Comma delimited list of Hour Types that attract the fatigue penalty For example - enter the work Hour Type(s) that attract fatigue penalty (Ref 2.1.1)	String	Blank	No
19	<i>Eligible Time Codes for Penalty Inclusive</i>	New	If TRUE (checked), the Time Codes listed under ' <i>Eligible Time Codes for Penalty</i> ' (17) will be inclusive If it is FALSE (un-checked) then the Time Codes entered are exclusive. For example: - If work Time Codes are entered this checkbox will be checked. If recall or leave Time Codes are entered this will be un-checked.	String	Blank	No
20	<i>Eligible Hour Types for Penalty Inclusive</i>	New	If this checkbox is TRUE (checked), then the Hour Types listed under parameter ' <i>Eligible Hour Types for Penalty</i> ' (18) will be inclusive If it is FALSE (un-checked), then the Hour Types entered are exclusive. For example: - If work Hour Types are entered this checkbox will be checked. If recall or leave Hour Types are entered this checkbox will be un-checked.	Checkbo x	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
19	<i>Premium Minutes</i> (Not required)	New	If defined, ' <i>PREMIUM MINUTES</i> ' is used to assign the Premiums. If this value is not defined then the Premium given is for all worked minutes based on ' <i>Eligible Time Codes for Penalty</i> ' (17) and ' <i>Eligible Hour Types for Penalty</i> ' (18).	Integer	Blank	No
20	<i>Penalty as Premium</i>	New	If this checkbox is TRUE (checked), then the fatigue penalty is to be paid as the Premium. If it is FALSE (un-checked), the ' <i>Premium Time Code for Penalty</i> ' (15) and ' <i>Premium Hour Type for Penalty</i> ' (16) will instead be used to update the work details Time Code and Hour Type of ' <i>Eligible Time Codes for Penalty</i> ' (17), ' <i>Eligible Time Codes for Penalty</i> ' (18). Ref 2.1.1	Checkbo x	Blank	No
21	<i>Guarantee Schedule</i> (Not required)	New	This parameter no longer required. Fatigue leave will be paid if non-blank Time Codes and/or Hour Types are entered in ' <i>Fatigue Leave Time Code</i> ' (22) and ' <i>Fatigue Leave Hour Type</i> ' (23).			

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
22	<i>Fatigue Leave Time Code</i>	New	Field Contents: Time Code that will be used for paying of non-worked scheduled hours if there is a breach of minimum rest period. Enter the fatigue leave time code (Ref 2.1.2)	String	Blank	No
23	<i>Fatigue Leave Hour Type</i>	New	Field Contents: Hour Type that will be used for paying of non-worked scheduled hours if there is a breach of minimum rest period Enter the fatigue leave paid Hour Type. If left blank then use the default hour type from ' <i>Fatigue Leave Time Code</i> ' (22) (Ref 2.1.2)	String	Blank	No
24	<i>Fatigue Leave Unpaid Time Code</i>	New	Field Contents: Time Code that will be used for paying of non-worked unpaid scheduled hours if minimum rest is reached. Enter the fatigue leave unpaid Time Code (Ref 2.1.2)	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
25	<i>Fatigue Leave Unpaid Hour Type</i>	New	Field Contents: Hour Type that will be used for paying of non-worked unpaid scheduled hours if minimum rest is reached, or if 'Guarantee Schedule' (21) is un-checked. Enter the fatigue leave unpaid Hour Type. If left blank then use the default Hour Type from 'Fatigue Leave Unpaid Time Code' (24) (Ref 2.1.2)	String	Blank	No
26	<i>GAP time codes</i> (Not required)	New	Enter the Time Codes that will be used for defining GAP period (e.g. (UAT, GAP)	String	Blank	No
27	<i>Recall Time to look after</i>	New	If entered, fatigue will only be calculated for recalls that have been worked after this time on the previous day. For example: - count recalls after 22:15 (HH:mm) (Ref 2.1.5)	String	Blank	No
28	<i>Recall Time to look before</i>	New	If entered, fatigue will only be calculated for recalls that have been worked before this time on the current shift. For example: - count recalls before 07:00 (HH:mm) (Ref 2.1.5)	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
29	<i>Eligible Time Codes for Fatigue penalty until break is taken</i>	New	Field contents: Comma delimited list of work Time Codes Enter the work Time Codes; including recall Time Codes that will be used to pay the employee a fatigue penalty until the minimum rest is taken. (except leave and non-work Time Codes) (Ref 2.1.5)	String	Blank	No
30	<i>Eligible Time Codes for Fatigue penalty until break is Inclusive</i>	New	If this checkbox is TRUE (checked), then the Time Codes listed under ' <i>Eligible Time Codes for Fatigue penalty until break is taken</i> ' (29) will be inclusive If it is False (un-checked), then the Time Codes entered are exclusive. (Ref 2.1.5)	Checkbox x	Blank	No
31	<i>Eligible Hour Types for Fatigue penalty until break is taken</i>	New	Field Contents: Comma delimited list of work Hour Types Enter the work Hour Types including recall Hour Types, that will be used to pay employee fatigue penalty until the minimum rest is taken. (except leave and non-work Hour Types) If both Time Code and Hour Types are entered then Fatigue rule will check for any combination of work Time Code and Hour Type. (Ref 2.1.5)	String	Blank	No

	PARAMETER	STATUS	DESCRIPTION	FIELD TYPE	DEFAULT VALUE	REQUIRED FIELD YES/NO
32	<i>Eligible Hour Types for Fatigue penalty until break is taken Inclusive</i>	New	<p>If this checkbox is TRUE (checked), then the Hour Types listed under '<i>Eligible Hour Types for Fatigue penalty until break is taken</i>' (31) will be inclusive</p> <p>If it is FALSE (un-checked), then the Hour Types entered are exclusive.</p> <p>(Ref 2.1.5)</p>	Checkbox	Blank	No
33	<i>Previous shift Work minute</i>	New	<p>Field Contents: Enter the number of minutes (for example 1200)</p> <p>(Ref 2.1.7 for further details on its use)</p>	Integer	Blank	No
34	<i>Guaranteed Rest Minutes if worked for extended period of time</i>		<p>Field Contents: Enter the number of minutes (for example 720)</p> <p>(Ref 2.1.7 for further details on its use)</p>	Integer	Blank	No
35	<i>Meal Break Time Code</i>		<p>Field contents: Comma delimited list of Time Codes</p> <p>Enter the Meal Break Time Code</p> <p>E.g. BRK</p>	String	Blank	No
36	<i>Meal Break Hour Type</i>		<p>Field Contents: Comma delimited list of Hour Types</p> <p>Enter the Unpaid Meal break Hour Type</p>	String	Blank	No

2.3.2 Calculations

Note: - The numbers in brackets represent parameter numbers in the 2.3.1 Logic section above.

Definitions used: -

- (A) – Represents the scheduled start time or actual start time whichever is earlier for current shift.

Actual start time can be determined using the start time of the first work record for current shift based on (11), (12), (13) & (14).

- (B) – Represents the actual stop time (Clock OFF) for the previous scheduled shift (not recalls)

Recall Time Codes and Hour Types have been captured under (8) & (9).

(B) = Actual stop time (clock OFF)

If the 'Period to look' (4) has non-blank value then

(B) = Actual stop Time (clock OFF) or (A) – (4) whichever is later.

E.g

If actual stop time on the previous shift = 18:00

Scheduled start time on current shift = 10:00

If period to look = 15

Then

(B) = 10:00 – 15 hour = 19:00 and not 18:00.

End

- (C) – Represents minimum rest required between the two shifts (current and previous)

Minimum Rest required =

If Previous shift Work minute (33) == non-blank (e.g. 1200) then

Check

If the employee worked (including overtime) continuously (except for meal breaks) on previous shift for >= 1200 minutes

The worked Time Code and Hour Type have been captured under 'Eligible Time Codes for work minutes' (11), 'Eligible Time Codes for work Inclusive' (12), 'Eligible Hour Types for work Minutes' (13), 'Eligible Hour Types for work Inclusive' (14).

The meal break Codes have been captured under 'Meal Break Time Code' (35) and 'Meal Break Time Code' (36)

The Meal break Time Code does not break the continuity of the shift but it does not count as the worked minutes (for 1200 minutes calculation).

If True

Then

Minimum Rest required (C) = 'Guaranteed Rest Minutes if worked for extended period of time' (34) (e.g. 720 min)

Else

If *Previous shift Work minute* (33) = blank or If the employee worked (including overtime) continuously (except for meal breaks) on previous shift for < (less than) under *Previous shift Work minute* (33) (e.g.1200 minutes)

If the '*Employee Alternate Agreement UDF*' (2) = Blank

Then (C) = '*Guaranteed Rest Minutes*' (1)

Else

If (5) or (6) are not blank **And**

If any Time Codes or Hour Types exist from (5) and/or (6) between the previous and current shifts

Then C) = Agreed '*Alternative Guaranteed Rest Minutes*' (3)

Else (C) = '*Guaranteed Rest Minutes*' (1)

End

End

End

Determine the Eligibility for Fatigue payment

Check Eligibility 1: - If fatigue penalty has been paid on previous shift and if the continuous minimum off-duty rest has been taken.

Main Logic: -

Check if previous shift (not recall) has been paid as fatigue penalty (15)

Note: - Fatigue penalty does not have start and end time. If the fatigue penalty has been paid on previous shift then this is True.

If True

Check if employee has at least one continuous minimum rest off duty (C) between the ceasing of previous shift and commencement of current shift. In this case the recall period is considered an on-duty period and it breaks the continuity of the off-duty period. The Time Codes and Hour Types used for all worked time (including recall) are defined under (29), (30), (31) & (32)

If True

Exit – Not Eligible for Fatigue

Else

Eligible for fatigue penalty for all worked hours including recall periods until the employee has taken the minimum rest period

This includes all the recalls between previous and current shift and any recalls or scheduled hours that occur past the current shift until minimum break is taken.

The Time Codes and Hour Types used for all worked time (including recall) are defined under (29), (30), (31) & (32)

(Eligibility-2 – Referenced below)

End

End

Check Eligibility 2: - Minimum Rest period between the shifts on two different days

Main Logic: -

Check **(A) – (B) < (C)** (For A, B and C - Refer definitions above)

If True

Exit – Eligible for Fatigue (**Eligibility-2**)

Else

Check if no recalls are performed between the previous and current shifts

(Recall Time Codes and/or Hour Types are defined under **(8)** and **(9)**)

If no recall

Exit – Not Eligible for Fatigue

Else

If '*Recall Time to look after*' **(27)** and '*Recall Time to look before*' **(28)** are blank

Check if the total duration of all recalls (Add the duration of the recall Time Codes/Hour Types) between (B) and (A)

If < '*Minimum time worked on Recall*' **(10)**

Exit – Not Eligible for Fatigue

Else go to (**Check Eligibility 3**)

End

If '*Recall Time to look after*' **(27)** is non-blank and '*Recall Time to look before*' **(28)** is blank

For the calculation of **(10)** hours, the total recall period should consider only the recalls that occurred after the time under **(27)** the previous day following day off or public holiday. (Ref 2.4.1)

If any recall partially falls in this period then only the duration which falls after the required time should be considered.

For example, if the worked recall period is from 20:00 to 22:20 and if the required time **(27)** for calculation of the recall period is 22:00, then only the worked recall time between 22:00 to 22:20 should be considered towards the calculation of total recall period.

Check if the total duration of all eligible recall < **(10)**

Exit – Not Eligible for fatigue

Else go to (**Check Eligibility 3**)

End

If '*Recall Time to look after*' **(27)** is blank and '*Recall Time to look before*' **(28)** is non-blank

For the calculation of (10) hours, the total recall period should consider only the recalls that occurred between the time defined under (28) and the actual stop time on previous shift.

If any recalls partially fall in this period then only the duration which falls before the required time should be considered.

For example, if the worked recall period is from 05:00 to 07:20 and if the required time (28) for calculation of recall period is 07:00 then only the worked recall time between 05:00 to 07:00 should be considered towards the calculation of 2 hours of total recall period.

Check if the total duration of all eligible recall period < (10)

Exit – Not Eligible for Fatigue

Else go to (**Check Eligibility 3**)

End

If 'Recall Time to look after' (27) and 'Recall Time to look before' (28) are non-blank values

For the calculation of (10) hours, the total recall period should consider only the recalls that occurred between the times under (27) and (28)

If any recall partially fall in this period then only the duration which falls between the required times should be considered.

Check if the total duration of all recalls < (10)

Exit – Not Eligible for Fatigue

Else go to (**Check Eligibility 3**)

End

Check Eligibility 3: - Continuous break

Check if there is at least one consecutive minimum rest (C) off duty taken between any two consecutive engagements including recalls.

If true

Exit – Not Eligible for Fatigue

Else

Exit – Eligible for fatigue (**Eligibility-2**)

End

End

End

Eligibility: - Minimum Rest period interval between two shifts on one Day

Employees could be scheduled to work on more than one shift on the same day. If so, then check if the GAP between multiple shifts >= minimum time off required (C), if not, the employee could be eligible for fatigue payments

Note: - For verification of the fatigue penalty eligibility the code should look at the previous and the current shifts that may occur on the same day.

Fatigue payment

Fatigue payment should be calculated for each individual shift. There could be one or multiple shifts on one day.

If found eligible for fatigue (**Eligibility-1** or **Eligibility-2**)

Main Logic: -

Check if the employee has an actual start time **(A)** on the current shift.

If True

Check if worked the whole shift (actual start and stop time match scheduled start and stop time.) **OR**

If worked more than scheduled shift (actual start time before scheduled start time and/or actual stop time after scheduled stop time). Use the work Time Code and Hour Type specified under **(11)** and **(13)**

If True

Insert fatigue Premium for Time Code and Hour Type of **(15)** and **(16)**

Check if the fatigue is calculated due to fatigue **Eligibility 1** - (defined above) i.e. due to fatigue penalties calculated on previous shift

Then

Calculate fatigue penalty on 'All' worked hours, including recalls, using the Time Code and Hour Types under **(29)**, **(30)**, **(31)** and **(32)**

Else

Fatigue should be calculated for the total duration of the Time Code and Hour Type specified under **(11)** and **(13)**

Exit – Fatigue payment is complete.

End

Check if employee has started on time or early but left earlier than the end of the scheduled shift

If true

Insert fatigue Premium for the Time Code and Hour Type of **(15)** and **(16)**

Check if the fatigue is calculated due to fatigue **Eligibility 1** - (defined above) i.e. due to fatigue penalties calculated on previous shift

Then

Calculate fatigue penalty on 'All' worked hours including Recalls using the Time Code and Hour Types are specified under **(29)**, **(30)**, **(31)** and **(32)**

Else

Fatigue should be calculated for the total duration of the Time Code and Hour Type specified under **(11)** and **(13)**

Assign Time Code and Hour Type from (22) and (23) for not-worked scheduled hours for the duration of minimum fatigue period (e.g. 8, 10 hour)

If there are still any not-worked scheduled hours left, then change these hours to the Time Code and Hour Type from (24) and (25).

Exit – fatigue payment is complete.

End

Check if employee has started late but has still breached the fatigue period (minimum rest period) and they have left earlier than the end of scheduled shift

If true

Insert fatigue Premium for the Time Code and Hour Type of (15) and (16)

Check if the fatigue is calculated due to fatigue **Eligibility 1** - (defined above) i.e. due to fatigue penalties calculated on previous shift

Then

Calculate fatigue penalty on 'All' worked hours including Recalls using the Time Code and Hour Types are specified under (29), (30), (31) and (32)

Else

Fatigue should be calculated for the total duration of the Time Code and Hour Type specified under (11) and (13)

Any scheduled REG time before the employee started work is required to be paid at the regular rate plus any penalties they would normally receive.

Change the not worked scheduled hours to the Time Code and Hour Type from (22) and (23)

Assign Time Code and Hour Type from (22) and (23) for not-worked scheduled hours until the minimum fatigue period time ends. (8,10 hour)

If there are still any not-worked scheduled hours left, then change these hours to the Time Code and Hour Type from (24) and (25).

Exit – Fatigue payment is complete.

End

If no actual start time (no clock ON) exists for the scheduled current shift

Then

Assign time code and hour type from (22) and (23) for not-worked scheduled hours until the minimum fatigue period end time. (8,10 hour)

If there are still any not-worked scheduled hours left then change these hours to time code and hour type from (24) and (25).

Exit – Fatigue payment is complete.

End

2.3.3 Updates

None identified

2.3.4 Error Handling

EXCEPTION	RESULT

2.4 Comments

None identified

2.4.1 Conditions Used

Condition Name	Type	Additional Reference
Always True	Workbrain	Workbrain Implementation and Administration Manual.
Is Day off Extended	Custom	This condition will be used to check if the previous day has been OFF day. Functional Specification document. 'H2R 2.2.2 E-663 Custom Condition - Is Day Off Extended.doc'
Worked Last Next N Day condition	Workbrain	This condition will be used to check if previous day was a public holiday or not. Workbrain Implementation and Administration Manual.

2.4.2 Scenarios

For detailed unit testing scenarios please refer to the "*Solution Design - Appendix K Pay Rules Scenarios*" document

The following is a list of the rule numbers using the Holiday rule for which scenarios have been documented.

Rule Category: Holidays

- Rule 222
- Rule 980

- Rule 220
- Rule 221