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ORLANDO JUNE 1-3, 2026



From Spreadsheets to Smart Insights: How Vantage Won Over Port Wentworth Mill

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Agenda

- Company Overview
- Process Overview
- Existing Methods
- Vantage Rooms
- Reporting
- Key Learnings

Global Cellulose Fibers (GCF)

Global Cellulose Fibers is a supplier of high-performance cellulose fibers used in a wide range of industrial and consumer products. We focus on consistent quality, sustainable sourcing, and dependable supply to help our customers succeed. With a global network and a customer-first approach, we work closely with partners to deliver solutions they can rely on.

Absorbents

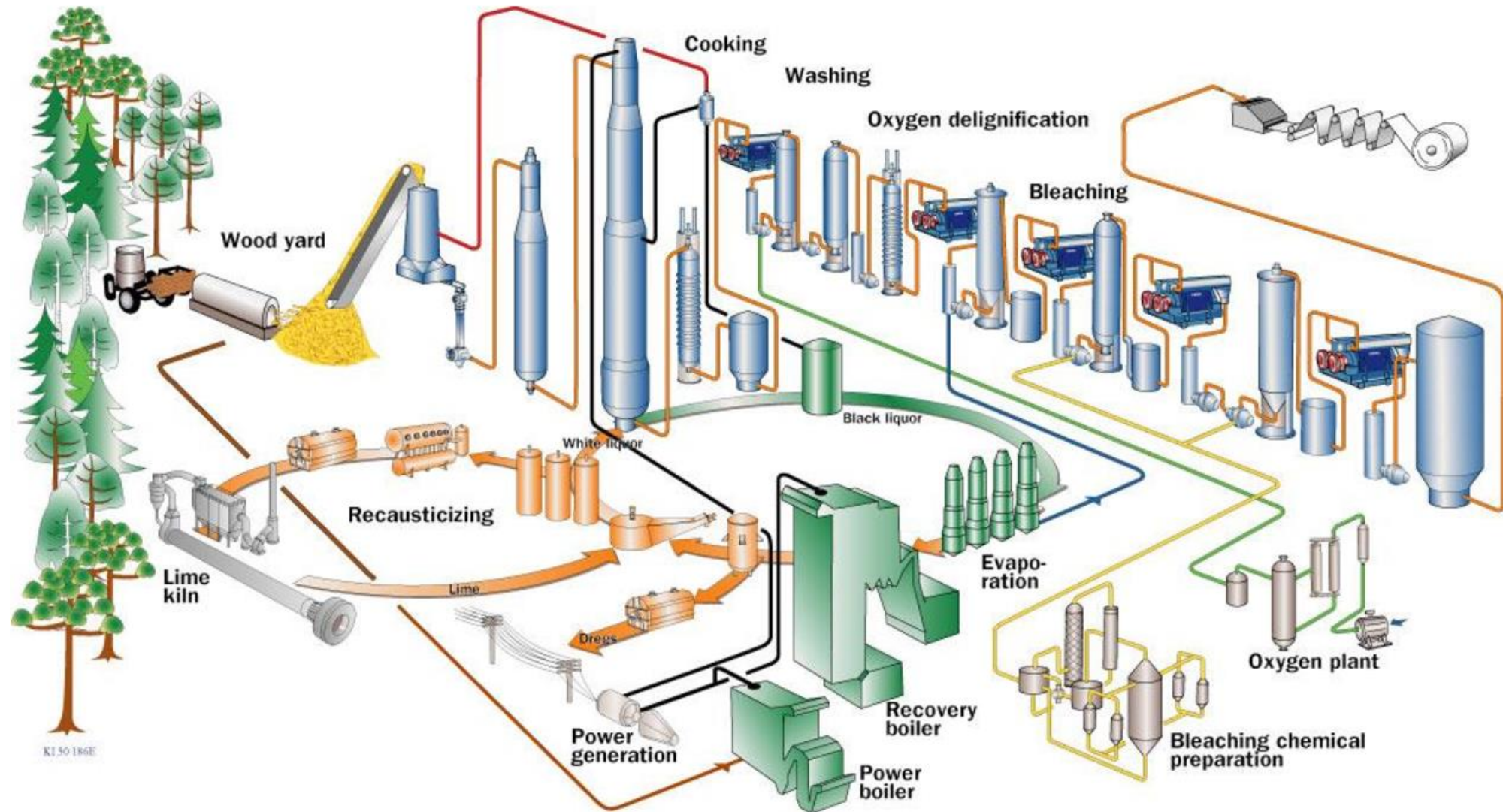
**Crosslink /
Modified Fiber**

Tissue + Towel

Specialty



Process Overview



Existing Methods

Fluff Machine

Incident List - Operator

Selection Criteria

Process: 67 AREA - PULP MACHINE
Monitor: PULP MACHINE
Id:

Show last 31 days
☒ Show updated
☐ Show deleted

Automatic Refresh
☐ Refresh on
☒ Refresh off

Monitor status: OK as of 11:12

Status	Monitor	Start	End
CLOSED	PULP MACHINE	4/26/2026 16:38:31	4/26/2026 23:40:50
CLOSED	PULP MACHINE	4/22/2026 18:38:00	4/24/2026 19:21:06
CLOSED	PULP MACHINE	4/22/2026 18:28:59	4/22/2026 18:38:00
CLOSED	PULP MACHINE	4/20/2026 06:11:00	4/22/2026 18:28:59
CLOSED	PULP MACHINE	4/20/2026 06:08:59	4/20/2026 06:11:00
CLOSED	PULP MACHINE	4/19/2026 14:22:00	4/20/2026 06:08:59
CLOSED	PULP MACHINE	4/19/2026 13:35:00	4/19/2026 14:22:00
CLOSED	PULP MACHINE	4/18/2026 21:54:01	4/18/2026 21:57:58
CLOSED	PULP MACHINE	4/17/2026 22:43:07	4/18/2026 08:52:38
CLOSED	PULP MACHINE	4/17/2026 11:01:01	4/17/2026 11:55:58
CLOSED	PULP MACHINE	4/16/2026 18:09:00	4/17/2026 09:45:19
CLOSED	PULP MACHINE	4/16/2026 08:18:59	4/16/2026 18:09:00
CLOSED	PULP MACHINE	4/15/2026 07:04:00	4/16/2026 08:18:59
CLOSED	PULP MACHINE	4/15/2026 06:57:59	4/15/2026 07:04:00
CLOSED	PULP MACHINE	4/15/2026 01:47:00	4/15/2026 06:57:59
CLOSED	PULP MACHINE	4/15/2026 01:33:59	4/15/2026 01:47:00
CLOSED	PULP MACHINE	4/14/2026 23:20:00	4/15/2026 01:33:59
CLOSED	PULP MACHINE	4/14/2026 19:05:01	4/14/2026 23:20:00
CLOSED	PULP MACHINE	4/14/2026 08:34:00	4/14/2026 10:28:20
CLOSED	PULP MACHINE	4/14/2026 08:23:01	4/14/2026 08:34:00
CLOSED	PULP MACHINE	4/14/2026 08:12:01	4/14/2026 08:17:58
CLOSED	PULP MACHINE	4/14/2026 07:25:01	4/14/2026 07:32:58
CLOSED	PULP MACHINE	4/14/2026 07:05:01	4/14/2026 07:10:58

Incident Record : # 191348 Status= CLOSED

Details

Comments

Ultimate Cause

Context Variables

Process: 67 AREA - PULP MACHI
Monitor: PULP MACHINE
Character: UNKNOWN
Category: UNKNOWN

Class: RTS
Aim Rate: 615 FPM
Grade: FLUFF (7%)
Shift: C

Creator: SYS
Updater:
Reviewer:
Ended: AUTOMATIC

Immediate Cause (User Determined)
Type: REDUCED RATE
Cause: INTERNAL
Component: 67 AREA - PULP MACHINE
Description: PROBLEM OCCURRED WITHIN

Severity (User Determined)
Start time: 4/26/2026 16:38:31
End time: 4/26/2026 23:40:50
Avg. Rate: 581.437 FPM
EqDT: 0 : 23 : 03 (h:m:s)
Duration: 7:02:19

Immediate Cause (System Determined)
Type: REDUCED RATE
Cause: INTERNAL
Component: 67 AREA - PULP MACHINE
Description: PROBLEM OCCURRED WITHIN THE

Severity (System Determined)
Start time: 4/26/2026 16:38:31
End time: 4/26/2026 23:40:50
Avg. Rate: 581.437 FPM
EqDT: 0 : 23 : 03 (h:m:s)
Duration: 7:02:19
update Avg Rate

Record: 1 of 1 Ready

0:05:57 0:05:57 0 FPM DOWNTIME EXTERNAL DOWN: SBSK D 460 FPM 00190849 TWH TWH

Legend

Open

Updated

Reviewed

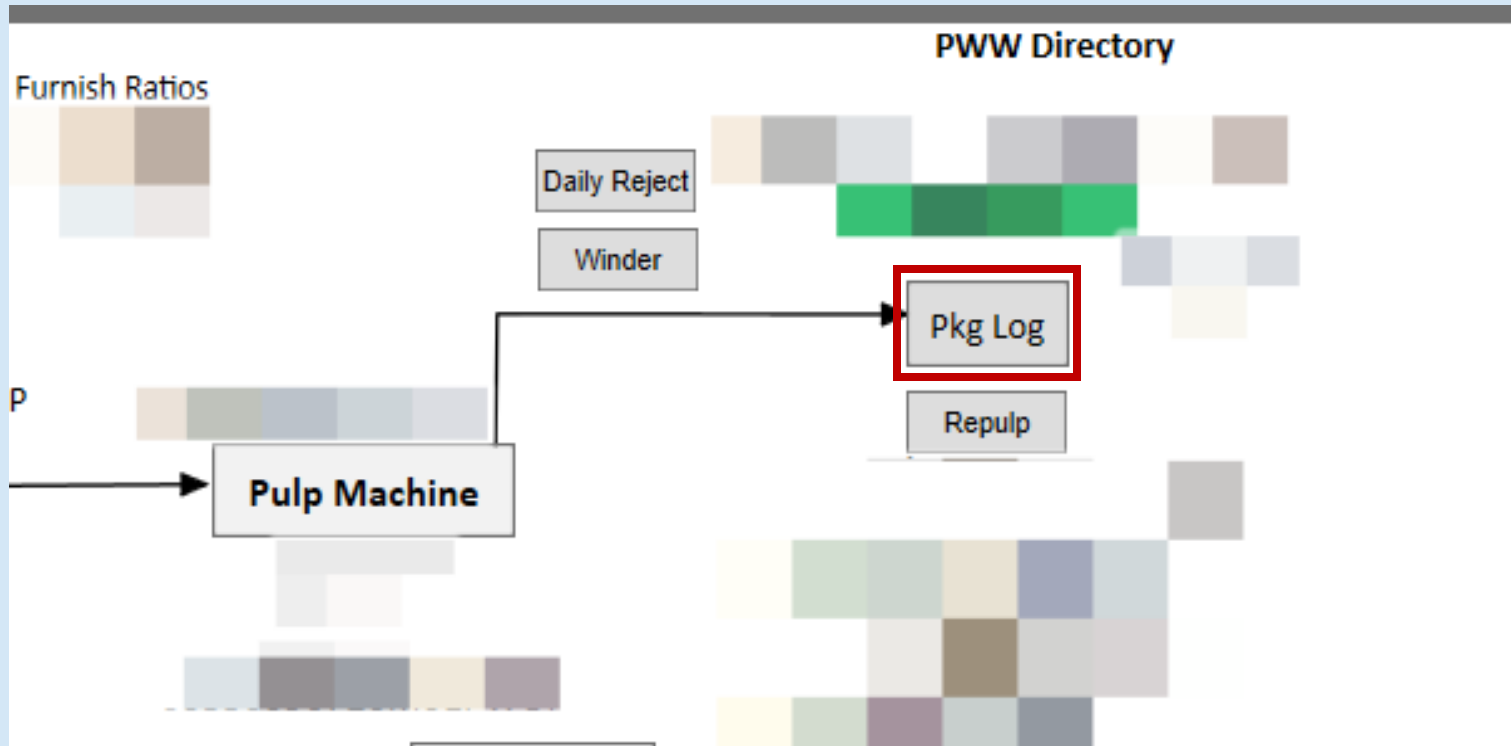
Locked

Deleted

Upd.	Rev.	Lck.	Deleted	Product Loss	Cost
48			No		
94			No		
93 TWH	TWH		No		
77			No		
76 TWH	TWH		No		
45			No		
43 JAC	TWH		No		
27 DZD	TWH		No		
97			No		
71 CH1	TWH		No		
41			No		
26 RF	TWH		No		
88			No		
87 TWH	TWH		No		
80			No		
79 TWH	TWH		No		
76			No		
73 TWH	TWH		No		
58			No		
57 TWH	TWH		No		
55 TWH	TWH		No		
50 TWH	TWH		No		
			No		

Record: 1 of 198 Ready

Winder



- Use PARCView to monitor winder events
- Button is located on main home page
- Viewed everyday

Winder

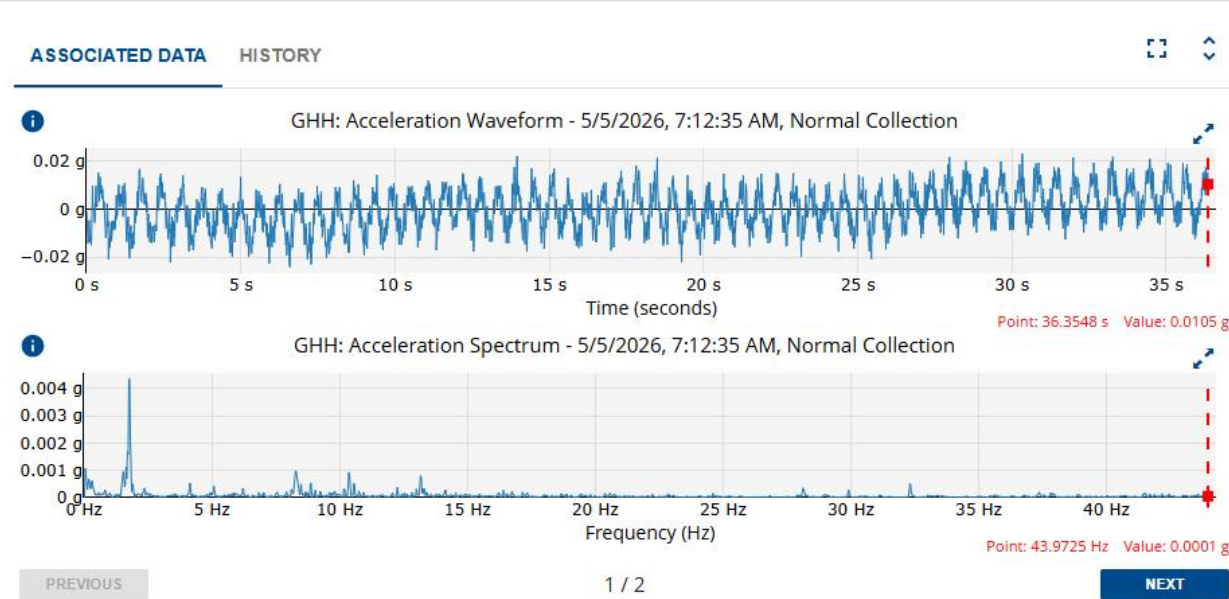
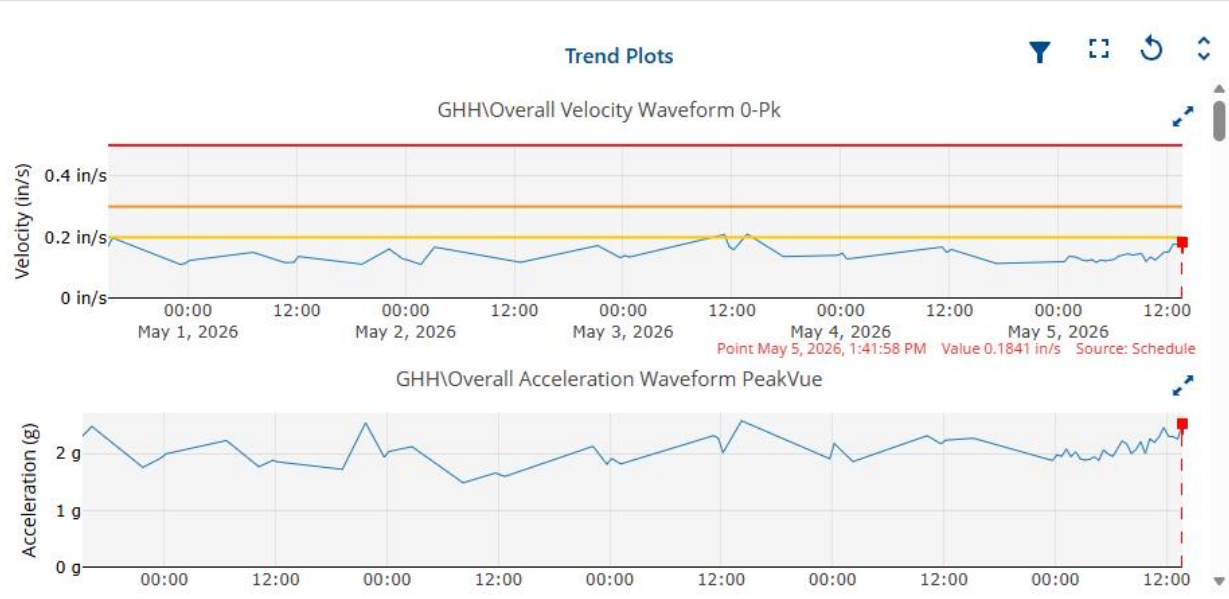
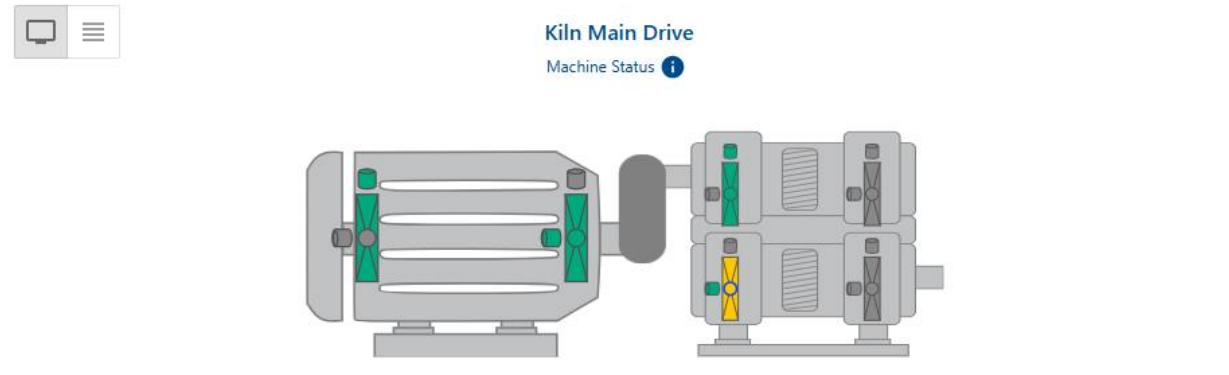
	Start Time ▼	End Time	PKG_COUNT_HRLY_PESM EL PKG	PKG_COUNT_HRL Y_CORELINK	PKG_COUNT_HRL Y_TOT Count	PKG_WEIGHT_HRL Y_TOT TONS	Trouble Area	E/I, Mech, Prod?	Reason	Trouble Area	E/I, Mech, Prod	Reason	Notes
	04/19/26 07:00	04/19/26 08:00	30.00	0.00	30.00	35.48	Winder ▼	▼	transfer cat #1 tripped out had to move jumbo	▼	▼		
	04/19/26 06:00	04/19/26 07:00	36.00	0.00	36.00	54.61	▼	▼		▼	▼		
	04/19/26 05:00	04/19/26 06:00	48.00	0.00	48.00	65.64	▼	▼		▼	▼		
	04/19/26 04:00	04/19/26 05:00	9.00	0.00	9.00	14.34	Area 3 ▼	E/I ▼	54 buffer was the issue, e/i fixed the buffer.	▼	▼		
	04/19/26 03:00	04/19/26 04:00	33.00	0.00	33.00	34.64	Area 3 ▼	E/I ▼	area 3 having issues with data moving on from	▼	▼		
	04/19/26 02:00	04/19/26 03:00	37.00	0.00	37.00	57.84	▼	▼		▼	▼		
	04/19/26 01:00	04/19/26 02:00	41.00	0.00	41.00	56.1	▼	▼		▼	▼		
	04/19/26 00:00	04/19/26 01:00	46.00	0.00	46.00	46.18	▼	▼		▼	▼		
	04/18/26 23:00	04/19/26 00:00	42.00	0.00	42.00	46.63	▼	▼		▼	▼		
	04/18/26 22:00	04/18/26 23:00	56.00	0.00	56.00	52.19	▼	▼		▼	▼		
	04/18/26 21:00	04/18/26 22:00	38.00	0.00	38.00	32.34	▼	▼		▼	▼		
	04/18/26 20:00	04/18/26 21:00	60.00	0.00	60.00	42.79	▼	▼		▼	▼		
	04/18/26 19:00	04/18/26 20:00	44.00	0.00	44.00	34.35	▼	▼		▼	▼		
	04/18/26 18:00	04/18/26 19:00	18.00	23.00	41.00	33.79	▼	▼		▼	▼		
	04/18/26 17:00	04/18/26 18:00	27.00	22.00	49.00	33.82	▼	▼	persistance paid off on new line	▼	▼		
	04/18/26 16:00	04/18/26 17:00	32.00	8.00	40.00	25.8	▼	▼	being persistant to get new line running \back	▼	▼		
	04/18/26 15:00	04/18/26 16:00	31.00	0.00	31.00	27.43	▼	▼	issue in new line with roll position switched back	▼	▼		
	04/18/26 14:00	04/18/26 15:00	4.00	20.00	24.00	16.95	▼	▼	axial wrapper breaking off	▼	▼		
	04/18/26 13:00	04/18/26 14:00		56.00	56.00	44.69	▼	▼		▼	▼		
	04/18/26 12:00	04/18/26 13:00		27.00	27.00	23.74	▼	▼	diameter error on new roll line issued resolved	▼	▼	also trying	
	04/18/26 11:00	04/18/26 12:00	0.00	30.00	30.00	28.61	Winder ▼	▼	going to new line/ cleaning unwind section	▼	▼	also trying	
	04/18/26 10:00	04/18/26 11:00	27.00	13.00	40.00	37.28	Area 1 ▼	▼	reciver 15 damaged roller causing metal	▼	▼	also trying	

Power Sales

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		PWW.PI.Shift_Crew/PLOT	PWW.PI.45JIKVMW_HR_END_AVG	PWW.PI.44FI00758.PV/PLOT	PWW.PI.42FI7010.PV/PLOT	PWW.PI.45JI1140A.PV/PLOT	PWW.PI.45JI0632.PV/PLOT								
2		Shift_Crew	45JIKVMW_HR_END_AVG	44FI00758.PV	42FI7010.PV	45JI1140A.PV	45JI0632.PV								
3		Crew on Shift	GA POWER 46KV - HOUR END AVG	RB 1250lbs STEAM FLOW	#4PB STM FLOW TO STM HDR	TG4 GENERATOR MEGAWATTS	TG5 GENERATOR POWER	MW Missed					Reason		
4	Hour	Team	MW	RB KPPH	PB KPPH	TG4 MW	TG5 MW	Premium	Capacity	\$ Prem Mis	MO Approved?	Cause	Details	Comments	
5	1/1/2024 0:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
6	1/1/2024 1:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
7	1/1/2024 2:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
8	1/1/2024 3:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
9	1/1/2024 4:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
10	1/1/2024 5:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
11	1/1/2024 6:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
12	1/1/2024 7:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
13	1/1/2024 8:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
14	1/1/2024 9:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
15	1/1/2024 10:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
16	1/1/2024 11:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
17	1/1/2024 12:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
18	1/1/2024 13:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
19	1/1/2024 14:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
20	1/1/2024 15:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
21	1/1/2024 16:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
22	1/1/2024 17:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
23	1/1/2024 18:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
24	1/1/2024 19:00	Crew A									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
25	1/1/2024 20:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
26	1/1/2024 21:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
27	1/1/2024 22:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended
28	1/1/2024 23:00	Crew C									No	TG5	TG5 Major Overhaul	TG5 Major Overhaul	Extended

- Manually update data every month which takes 1+ hour each time
- Owned and answered by one person
- Not able to be created in WiTS

Reliability

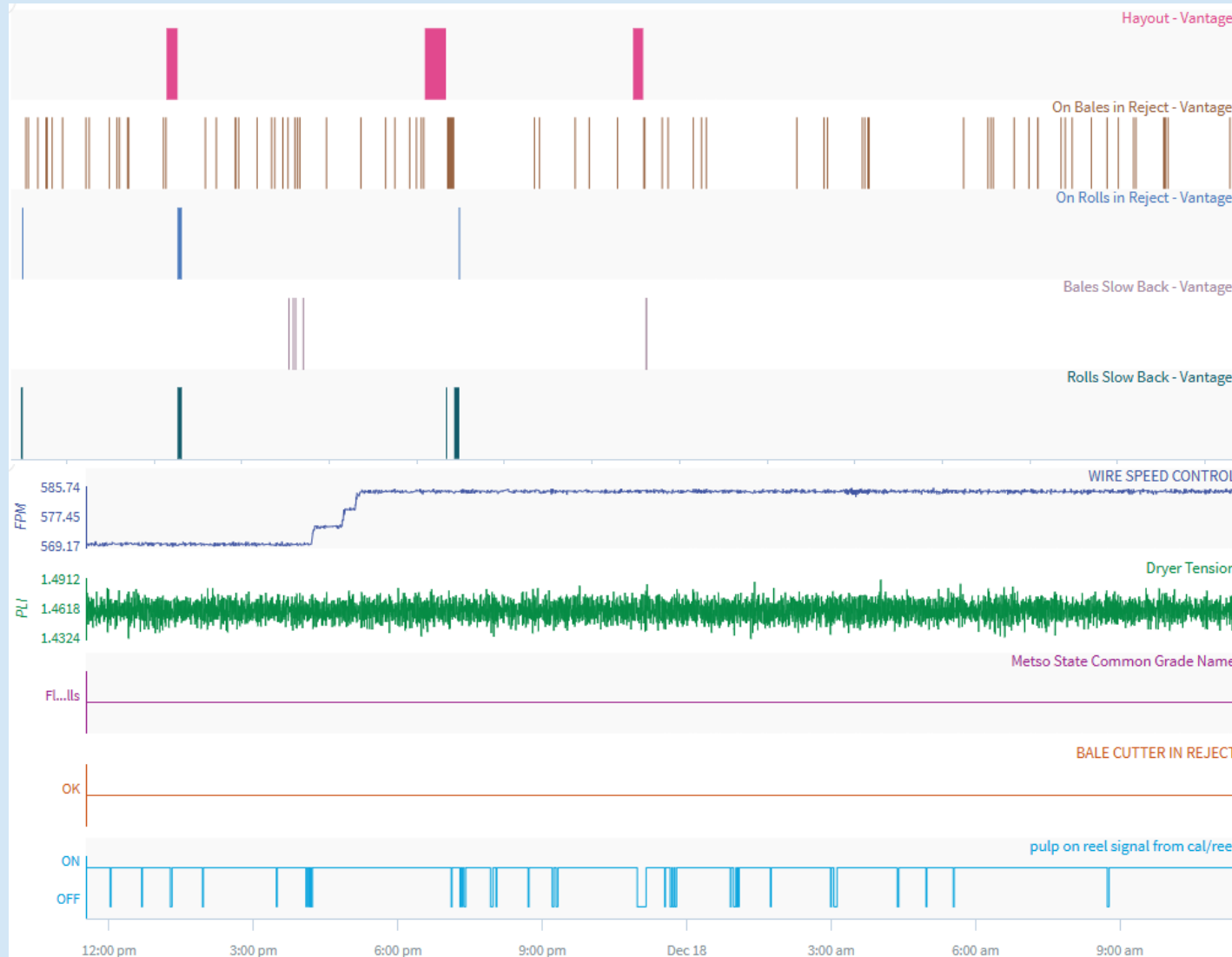


Existing Tools Summary

- **WiTS**
 - Struggles with customization for different applications
 - No longer supported software
- **PARCView**
 - Shows every hour no matter if good or bad
- **Excel Spreadsheets**
 - Owned and answered by one person
 - Must manually update each time it is used
- **Machine Works**
 - Holds last value, so it is hard to see when sensor is missing data
 - Need permission to be able to login to view program

Vantage Rooms

Building the Workbench



- Using guidelines from the mill, I brought in the same tags that WiTS uses
- Then tried to recreate the conditions that matched events in WiTS
- Finally, created calculations of extra information that mill wanted to see in table

Creating the Vantage Room

Source List

Collapse all

Source 1

Drag here to set row groups

Filter table...

Condition	Asset	Start	End	Duration	Path	Flagged	Re
On Rolls in Reject - Va...		Apr 19, 2026, 1:45 PM	Apr 19, 2026, 1:48 PM	00:03:00	On Rolls in Reject - Va...		
Rolls Slow Back - Vant...		Apr 19, 2026, 1:33 PM	Apr 19, 2026, 1:58 PM	00:24:54	Rolls Slow Back - Vant...		
On Rolls in Reject - Va...		Apr 18, 2026, 6:42 AM	Apr 18, 2026, 6:46 AM	00:04:00	On Rolls in Reject - Va...		
Rolls Slow Back - Vant...		Apr 17, 2026, 10:39 PM	Apr 18, 2026, 9:00 AM	10:21:29	Rolls Slow Back - Vant...		
On Rolls in Reject - Va...		Apr 17, 2026, 11:15 AM	Apr 17, 2026, 11:53 AM	00:38:00	On Rolls in Reject - Va...		

Property (select or enter property)

operator

value

Name

Contains

Vantage

+

+

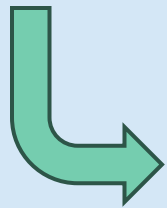
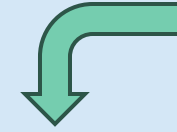
Adding Capsule Properties

Columns x

New column

Avg MW	 
MW Purchase Price	 
RTP Sales Price	 
Missed MW Sales	 
Total Purchased Power \$	 

```
$mps.setProperty('MW Purchase Price', $erp, average())  
$mps.setProperty('RTP Sales Price', $ers, average())  
$mps.setProperty('Missed MW Sales', $mms, average())  
$mps.setProperty('Avg MW', $a, average())
```



Condition		Avg MW	Total Purchased Power \$	Missed MW Sales	MW Purchase Price	RTP Sales Price
> Missing Power Sales - Vantage (100)						
> Missing Capacity Sales - Vantage (102)						
> Purchased MW - Vantage (8)						

Changing Table Views

The screenshot shows a web application interface. On the left is a sidebar with a dropdown menu currently set to 'Original View'. Below this are several view options: 'Original View' (with a ZB icon and a menu icon), 'Mine', 'Condition View' (with a ZB icon and a menu icon), 'Shift View' (with a ZB icon and a menu icon), 'Month & Day View' (with a ZB icon and a menu icon), and 'A-Shift View' (with a ZB icon and a menu icon). The main area displays a table with a date range filter at the top: '3/3/2026 5:08 PM EST - 3/10/2026 5:08 PM EDT'. The table has columns: 'End', 'Duration', 'Path', 'Flagged', and 'Rev'. A red box highlights the vertical ellipsis menu icon in the 'Duration' column header. The table contains several rows of data with timestamps and descriptions.

End	Duration	Path	Flagged	Rev
Mar 5, 2026, 1:15 AM	Mar 5, 2026, 5:31 AM	04:15:13	Hayout - Vantage	
Mar 10, 2026, 11:47 AM	Mar 10, 2026, 12:56 PM	01:09:05	On Bales in Reject - Va...	
Mar 10, 2026, 1:09 PM	Mar 10, 2026, 1:40 PM	00:31:34	On Bales in Reject - Va...	
Mar 10, 2026, 2:21 PM	Mar 10, 2026, 2:34 PM	00:12:49	On Bales in Reject - Va...	
Mar 10, 2026, 3:05 PM	Mar 10, 2026, 3:14 PM	00:09:03	On Bales in Reject - Va...	
Mar 10, 2026, 3:45 PM	Mar 10, 2026, 3:50 PM	00:04:54	On Bales in Reject - Va...	
Mar 3, 2026, 11:14 PM	Mar 3, 2026, 11:18 PM	00:04:00	On Rolls in Reject - Va...	
Mar 4, 2026, 12:25 AM	Mar 4, 2026, 12:28 AM	00:03:00	On Rolls in Reject - Va...	
Mar 4, 2026, 3:08 AM	Mar 4, 2026, 3:13 AM	00:05:00	On Rolls in Reject - Va...	

- Can change the order and add/remove columns
- Able to save multiple views

The 'Choose Columns' dialog box is shown, allowing users to select which columns to display in the table. It has a search bar at the top. The list of columns includes 'Condition', 'Asset', 'Start', 'End', 'Duration', 'Path', 'Flagged', 'Reviewed', 'Labels', 'Suppressed', 'Asset UUID', 'IsUncertain', 'Extinct', 'Deleted at', 'Condition Name', 'Formula', 'Condition ID', and 'Time Created'. Each column has a checkbox and a menu icon (three dots) to its left. The 'Condition', 'Start', 'End', 'Duration', 'Path', 'Flagged', 'Reviewed', and 'Labels' columns are currently selected (checked).

Search...
☒ Condition
☐ Asset
☒ Start
☒ End
☒ Duration
☒ Path
☒ Flagged
☒ Reviewed
☒ Labels
☐ Suppressed
☐ Asset UUID
☐ IsUncertain
☐ Extinct
☐ Deleted at
☐ Condition Name
☐ Formula
☐ Condition ID
☐ Time Created

Tracking Reason Codes

Flag

Review

Label

Suppress

Reason codes

Reason Codes

Split Capsule

Mill Department

Internal Wrapiines

x v

Surge *

Roll Line

x v

Area *

Wrapline 3

x v

Sub Area *

Area 22

x v

Equipment *

Data issues

x v

Downtime Type *

Electrical

x v

Enter a note by typing here...

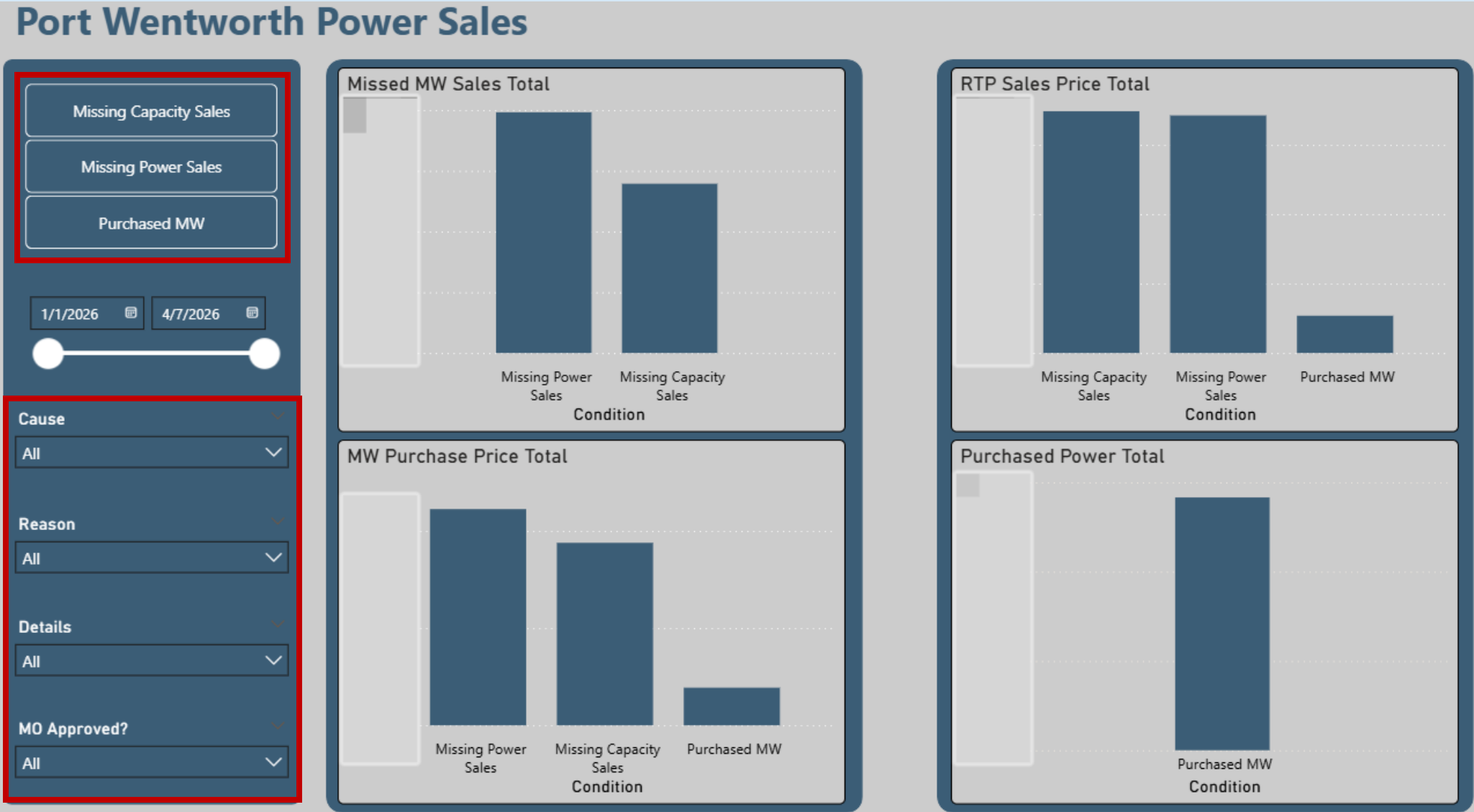
Mill Department	Surge	Area	Sub Area	Equipment	Downtime Type	Author
Internal Winder	Winder	Process	No Reels			
Internal Winder	Winder	Process	Windposit Time			
Internal Wrapiines	Roll Line	Wrapline 3	Area 22	Data issues	Electrical	
Internal Winder	Winder	Process	No Reels			
Internal Winder	Winder	Process	No Reels			
Internal Winder	Winder	Equipment	Slitter Section	Blade Issue	Process	
Internal Winder	Winder	Equipment	Trim System	Rotoclone	Process	

- Built Reason Tree using an Excel CSV file and Data Lab
- Can have as many levels as you want

Reporting

Reporting Results

Built Pareto Charts using Capsule Property Stats



Key Learnings

Key Learnings

- If you can create a condition for a signal, you can make a Vantage Room
- Capsule Properties are very important!
- Data Lab script really helped the Reason Code Tree building process
- Saving views for different users makes workflow much easier
- Nice to be able to track and troubleshoot within one tool
- Exporting OData to Power BI is a nice alternate reporting method
- Feedback is important since Vantage is still a new tool

Thank You

Appendix

Power Sales Comments

Columns B - G are pulled from Pi database for every hour. I add Boiler and Turbine data to help figure out causes

Seeq pulls automatically. Easy to add these boiler tags and more (eg tank levels, other process rates) to trends to help see the cause/impact

MW missed are calculated (H-I); Prem
mssed is calculated in \$ for column J.

14.21052 16.10052 \$ 1,018.61

Seeq calculates automatically, shows
Capacity MW lost, and Purch MW all
on one place. This sheet is already too
large for a Pivot table when I get more
than 3 years of hourly data.

An attempt to make sense of the
capcaity missed...

Seeq will have automated.

I enter all of these "causes" and descriptions (K-O)

Seeq allows multiple users to enter data, limits the responses based on previous
selections, and helps keep the reason trees standard. While I am sure I can make a
table for drop down values in excel, it is time consuming and using a spreadsheet
doesn't allow the best "control" over how items are saved. Seeq offers a much more

I build a Pivot table with the data on
the previous tab. This can be modified
to show more specifics (expanding
from chart). It does not include \$ lost
from capacity or purchased MW.

While we don't have the Power BI set up as we want it at the moment, it is
coming. However, I can always export the data from seeq and create one.
This will only include the hours we were losing \$ and won't have as many
data points to bog it down like the hourly data.

- Blue Boxes -
What/Why it is
used
- Green Boxes -
How Seeq is
better

Abstract

We have begun deploying Vantage at the Port Wentworth Mill to replace outdated software and manual spreadsheets and to explore entirely new use cases for event tracking and decision support. By first demonstrating that Vantage could match the capabilities of our existing tracking tools, we quickly built confidence in its resilience, then used that foundation to ask, “how can we make this even better?” As teams across process, reliability, maintenance, and other functions saw what the tool could do, ideas accelerated with 6X in the 2 months. Although we are still in the early stages of rollout, the speed and breadth of mill-wide buy-in have exceeded expectations and highlighted Vantage’s potential as a unifying platform for capturing events, sharing insights, and driving continuous improvement.