

# Hackathon

May 24, 2024  
Sketchup of  
Predictive Maintenance Dashboard



Time Frame

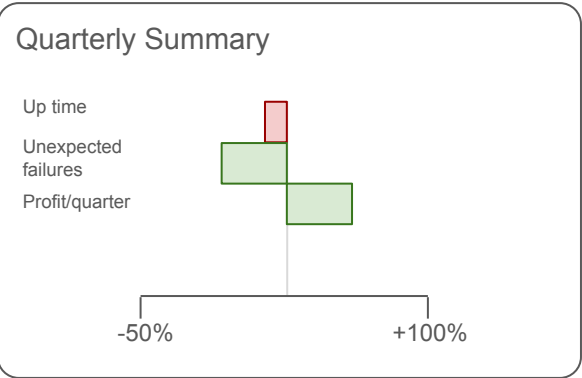
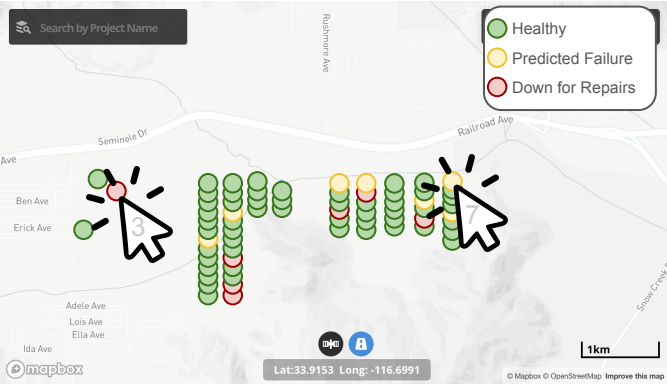
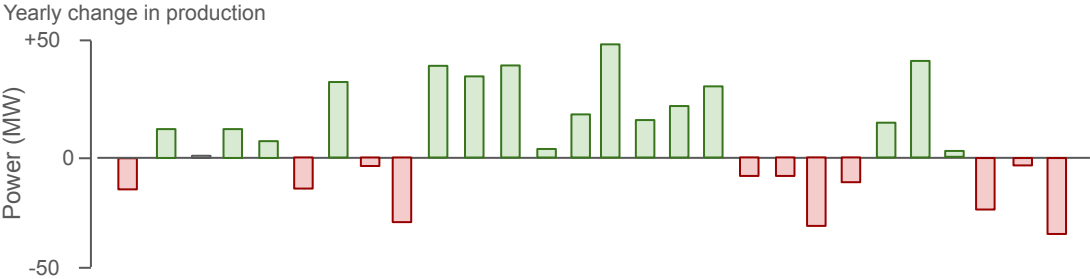
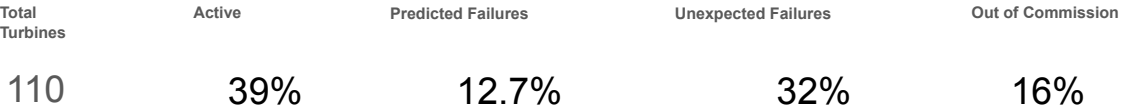
Month

Year

5Y

Custom

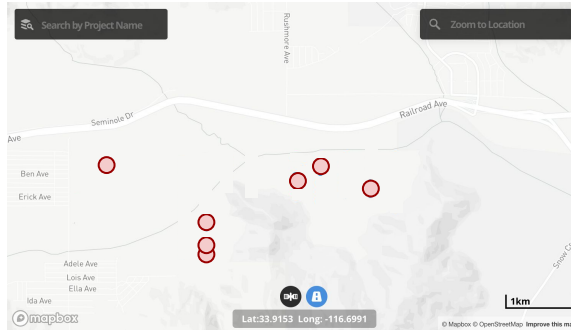
Wind Farm Dashboard



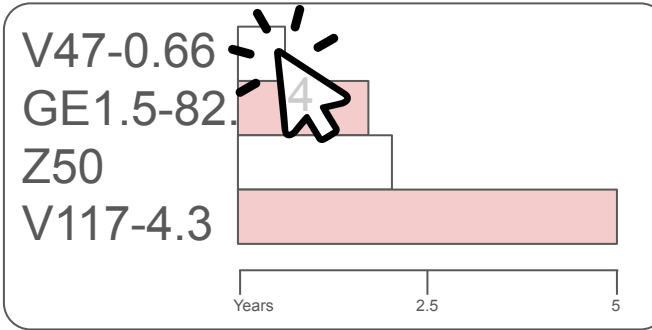
# Failure Summary

Down for Repair Map

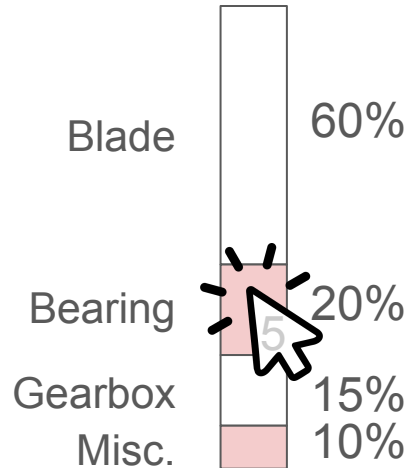
Time Frame



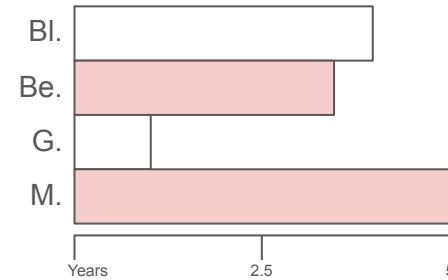
Mean Time to Failure by Turbine Model



Top 3 Root Cause of Failure

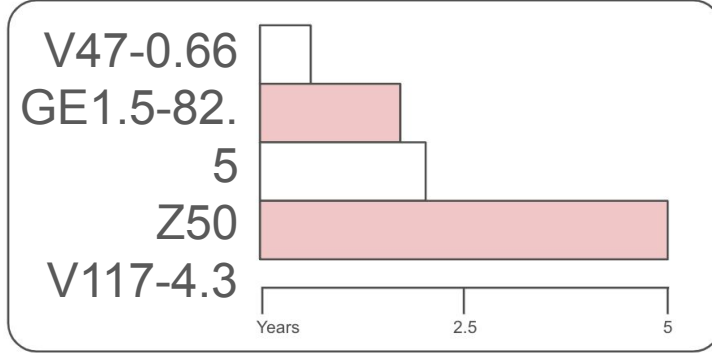


Mean Time to Failure

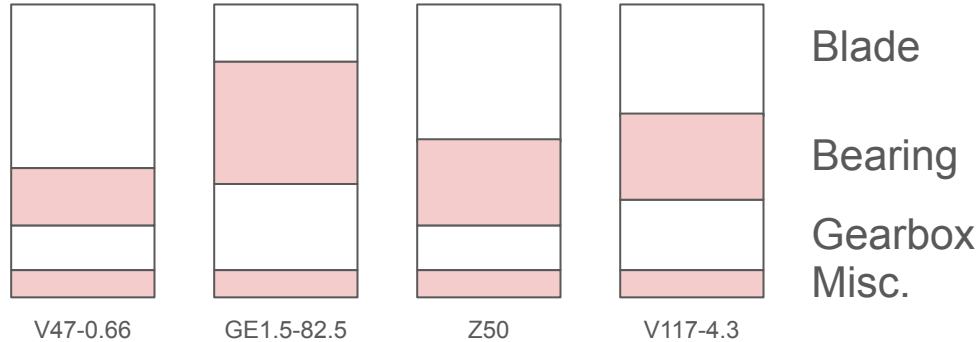


# Turbine Model Overview

Mean Time to Failure by Well Model



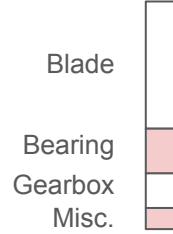
Proportion of Failure Types by Model



# Bearing Faults

Time Frame

Top 3 Root Cause of Failure



Monitored Bearings

384

Mean To  
Unplanned Failure

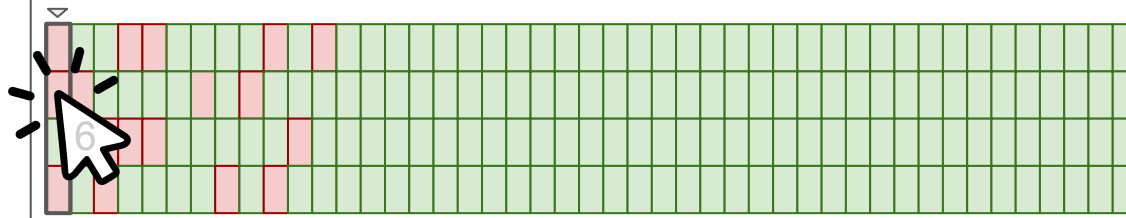
5 Yr.

Unplanned Downtime

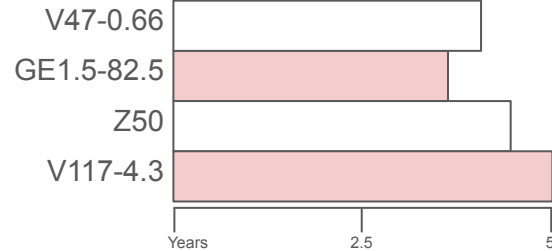
1%

## Bearing Health

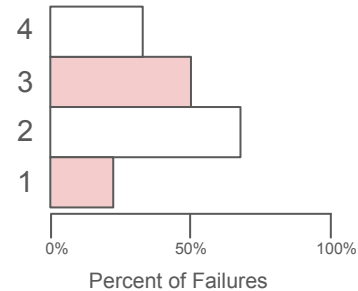
Turbine ID: 3072190



## Mean Time to Bearing Failure by Turbine Model

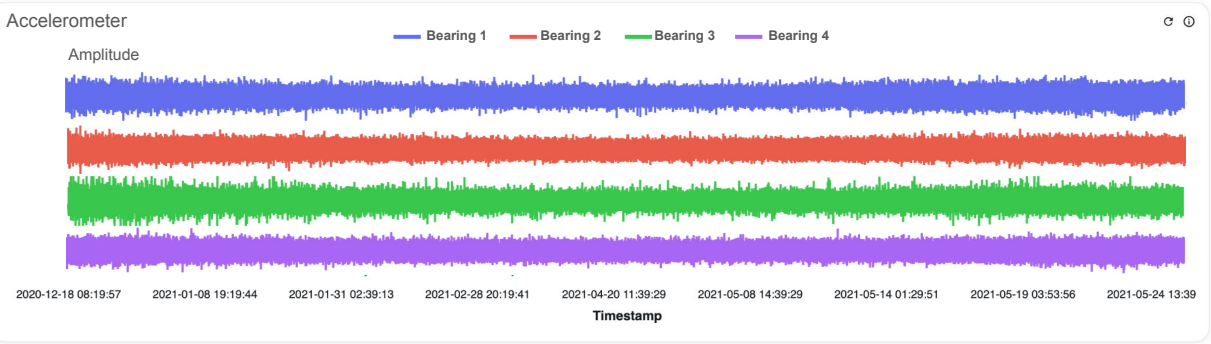
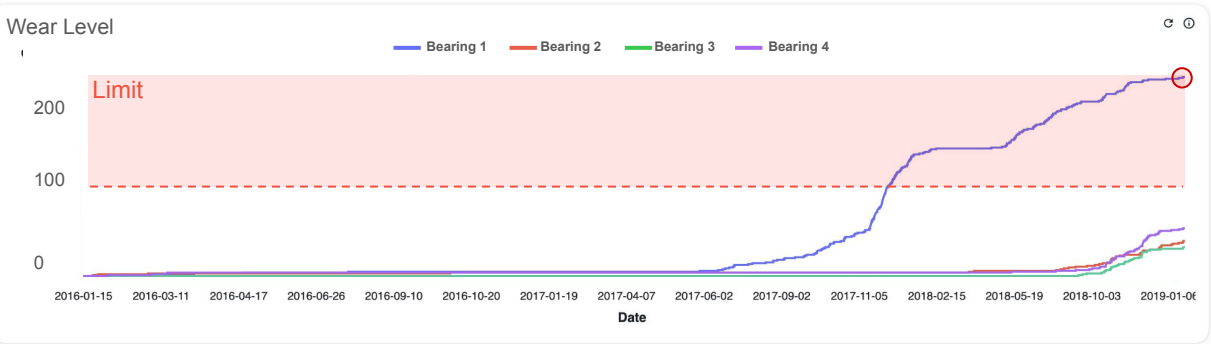


## Failures by Bearing Position

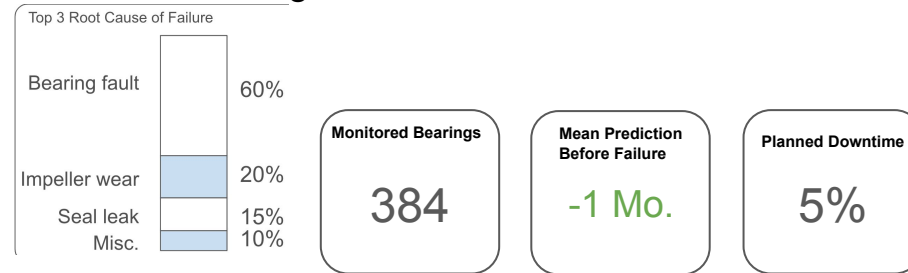


# Motor Bearing Health

Turbine ID: 3072190

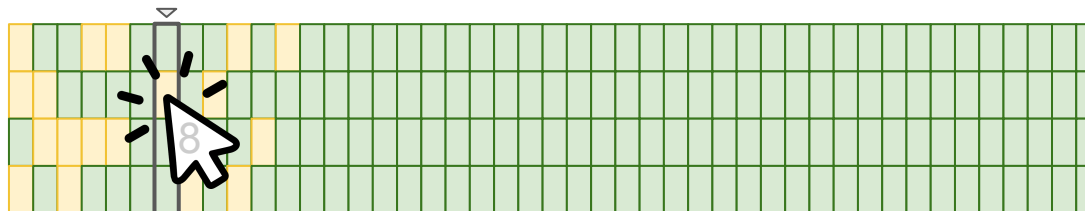


## Predicted Bearing Faults

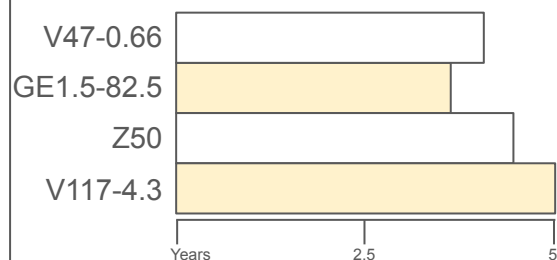


## Predicted Bearing Health

Turbine ID: 3072190



### Mean Time to Bearing Predicted Failure by Turbine Model



Turbine ID: 4568146  
Turbine ID: 2995300  
Turbine ID: 2904165  
Turbine ID: 3742042  
Turbine ID: 4081837  
Turbine ID: 2919034  
Turbine ID: 4541364  
Turbine ID: 5113379  
Turbine ID: 5392061  
Turbine ID: 9817989  
Turbine ID: 6554174  
Turbine ID: 1606713  
Turbine ID: 1781517  
Turbine ID: 3919066  
Turbine ID: 1283380  
Turbine ID: 7638057  
Turbine ID: 3966229  
Turbine ID: 3136162  
Turbine ID: 7118142  
Turbine ID: 6945434  
Turbine ID: 7725331  
Turbine ID: 5324516  
Turbine ID: 2738046  
Turbine ID: 2433942  
Turbine ID: 2442844  
Turbine ID: 6204927  
Turbine ID: 9157125  
Turbine ID: 2608488  
Turbine ID: 2085900  
Turbine ID: 7628648

# Motor Bearing Health

Turbine ID: 3072190

