

# User 1 (Gary)

## Wind Turbine Technician

- Currently uses a system called MAXIMO
- Coordinate with supervisor to find out what's priority for the day
- **First priority is turbines that are down** (not producing power)
- Report to supervisor any turbines that are down when looking on-site
- Currently carries iPad and smartphone
- Need information at fingertips to complete work
  - Parts needed for repairs and assembly
    - Specific equipment needed (rigs, etc.)
  - Procedures needed to follow for a job
  - Safety tail boards (review safety issues)
  - Would be nice to monitor performance data

### Day to Day

- Reports to admin building for work order assignments in the morning
- Drive to turbine sites
- Perform work orders
- Return to building
- Login to work order management system
  - Enter how long each job had taken (time report)

### Current Process

- Manual process - Supervisor hands out work orders
- A board in office that marks out turbines and tells what work to be done that day
- Print out work orders (type of work, location, reference material/documents)
- Print out necessary procedures for work orders
- Drive to site
- Perform work order
- Sometimes notice something wrong with a turbine while on the site
  - Take picture
  - Problem sometimes knowing what turbine/site to report if at non-standard location
  - Upload to MAXIMO ticket with details of issue
  - Request to report from turbine or site and request new work order to possibly be performed immediately while on-site, depending on severity of issue
- Fill out paperwork in truck and review
- Keep paperwork in truck
- Return to main office and enter information into work order management system
  - How long it's taken to complete the job
- Worksite are a sometime a large distance apart
- May get notified by phone the day before about a work order

- Sometimes easier to go directly home from a work site instead of reporting back to main office
  - Driving takes time to deliver work order reports
  - Sometimes not allowed to take certain pieces of equipment home
  - Some jobs are just quick inspections and tech could drive directly home after work order fulfillment
- Works closely with other tech crew usually 2-3 tech members + site supervisor
  - Occasionally a crew member will not have the skills to perform the job which causes some issues
  - Would be nice to avoid reporting to admin building in the morning if possible (maybe if special equipment is not needed)
  - Most important part of work order is work procedure (steps to repair or preventative maintenance) (depending on exp. Level of tech)
  - Basic preventative maintenance (blade inspection) on a periodic basis
  - Worst part of day is returning back to admin building and updating all MAXIMO tickets
  - Doesn't want to do all the paperwork or return to building unless needed
  - 3 hrs a day doing paperwork is biggest headache
  - Gets calls from other sites (multiple sites around)
  - Could be lacking crew members at another location and get a phone call to report there
  - Turbine technology may be different at another site; Procedure documents may be needed (due to different technology) and referenced through the application at that point
  - Likes the idea of entering data into application in vehicle after finishing work order to deliver data to supervisor and MAXIMO management system (real-time)
  - Start time button (before leaving truck) / Stop time button (after work order is complete)
  - Hours spent in admin building updating reports in MAXIMO

#### What's most important

- What jobs I have to do that day
- What other techs are doing nearby (need help for some tasks) (supervisor)
- See what he's doing the following day (maybe complete other work nearby)
- Ability to pull in scheduled jobs from a day or two away if it's at the same location (especially if it's a simple preventative maintenance job)
- Ability to report down turbines sounds like a great feature (automatic sorting of site specific techs for down turbines)
- Calls from FPDC (Fleet performance and diagnostic center)
- Some techs look at telemetry of turbines (sounds secondary)
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