Electricity provider

- You are a local electricity provider company contracted to supply electric energy for your county. **You need to find a cost minimizing production plan to fulfill the demands:**
- You have a forecast of 1230, 1190, 845, 935, 915, 1625, 1510 MWhr daily demands for the next week.
- You have your own power plants where you can generate energy up to 500 MWhr daily at a cost of $ 20/MWhr.
- You could also use rented power plants to produce electricity up to 600 MWhr daily, at a cost of $ 25/MWhr.
- You could also purchase electricity form the neighboring county for $ 45+**x.yz**/MWhr, up to 500 MWhr daily.
- You can also store electricity in a new battery storage at $ 2+**x.yz**/MWhr/day.
- **Extra credit** (10pts): How to modify the model if electricity is lost during storage, and next day you can use only 90% of what you stored previous day.