Pseudo Code

Wednesday, February 8, 2023 9:17 AM

```
* load price data and convert to dictionary
prices = prepare_data_array(day, num_days)
data_dict = {}
for i in range(len(price)):
    data_dict[i+1] = prices[i]
* set value for how many hours to optimize at a time
N = 2
* initialize value)
new_E0 = 0
* loop over timesteps
for i in range(prices)
    * prepare price data
    price_data = prices(i : N+i)
    * check for first time step
    if i == 0:
        * build model
        model = build_model(data_dict, N)
    else:
        * update model: update mutable parameters E0 and price data
        update_model(model, price_data, new_E0)
    * solve model
    solver = pyo.SolverFactory('ipopt')
    solver.solve(model, tee = True)
    * extract solution
    c_control = value(model.HORIZON.first())
    d_control = "                    "
    E_control = "                    "
    revenue_control = (d_control[i] - c_control[i]) price_data[i]
    * update initial energy
    newE0 = E_control[i]
```