

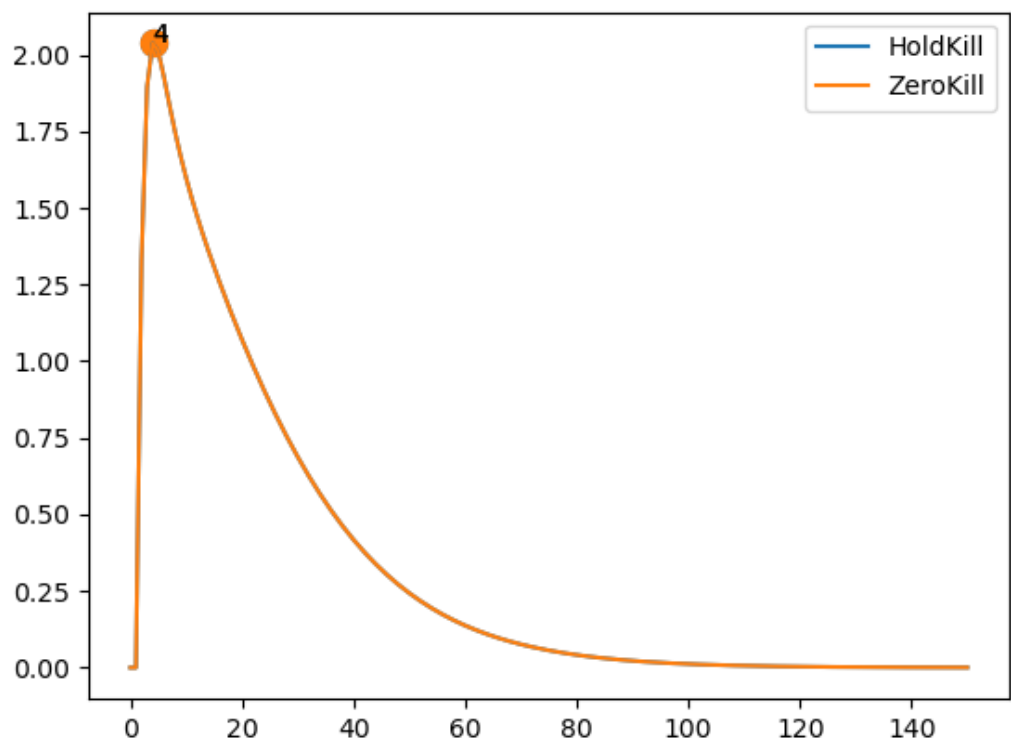
Report: DC Motor

Parameters

```
* Initial Set: [[10,10],[10,10]]
* Time Bound: 150
```

Report: Using Uncertain Linear Systems

- Table



- Note: Two of the policies were dropped due to plot skewing.

Detailed Report

```
>> REPORT. Method: ULS. Policy: HoldKill .
>> STATUS: Computing Reachable Sets . . .
Time Taken: 2.7985076904296875
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 1.8085722923278809
>> STATUS: Deviations Computed!
Max Deviation: 2.0372777067240837 ; At time step: 4
Total Time Taken: 4.631383895874023
>> End of Report!

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```

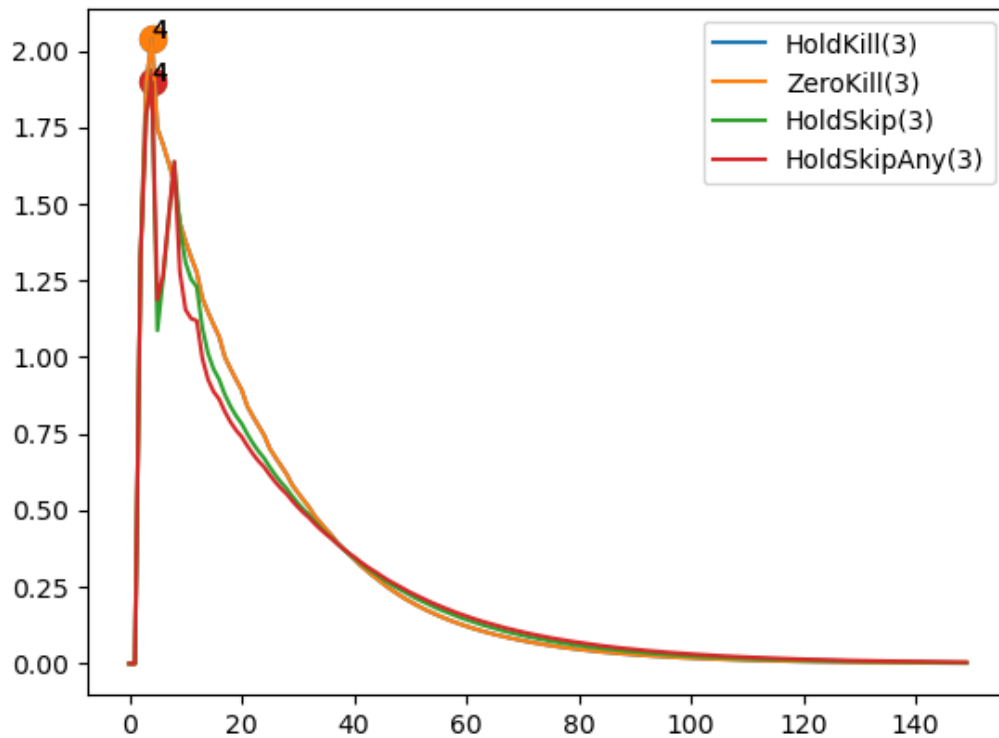
```
>> REPORT. Method: ULS. Policy: ZeroKill .
>> STATUS: Computing Reachable Sets . . .
Time Taken: 2.803809642791748
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 1.8675806522369385
>> STATUS: Deviations Computed!
Max Deviation: 2.0372777067240837 ; At time step: 4
Total Time Taken: 4.673230886459351
>> End of Report!
```

```
>> REPORT. Method: ULS. Policy: HoldSkip .
>> STATUS: Computing Reachable Sets . . .
Time Taken: 31.027464389801025
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 16.088818788528442
>> STATUS: Deviations Computed!
Max Deviation: 6410696260328.144 ; At time step: 150
Total Time Taken: 47.11883854866028
>> End of Report!
```

```
>> REPORT. Method: ULS. Policy: HoldSkipAny .
>> STATUS: Computing Reachable Sets . . .
Time Taken: 16.67229390144348
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 6.287854194641113
>> STATUS: Deviations Computed!
Max Deviation: 4.545056023539982e+25 ; At time step: 150
Total Time Taken: 22.962594032287598
>> End of Report!
```

Report: Using Generalized Recurrence Relations

- Table
- Max Deadline Miss: 4



Detailed Report

```
>> REPORT. Method: Recurrence Relation. Policy: HoldKill . Max Deadline
Miss: 3
>> STATUS: Computing Reachable Sets . . .
Time Taken: 0.25730323791503906
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 0.4684751033782959
>> STATUS: Deviations Computed!
Max Deviation: 2.0372777067240815 ; At time step: 4
Total Time Taken: 0.7550184726715088
>> End of Report!
```

```
>> REPORT. Method: Recurrence Relation. Policy: ZeroKill . Max Deadline
Miss: 3
>> STATUS: Computing Reachable Sets . . .
Time Taken: 0.2610435485839844
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 0.47759127616882324
>> STATUS: Deviations Computed!
Max Deviation: 2.0372777067240815 ; At time step: 4
Total Time Taken: 0.7403576374053955
>> End of Report!
```

```
>> REPORT. Method: Recurrence Relation. Policy: HoldSkip . Max Deadline
Miss: 3
>> STATUS: Computing Reachable Sets . . .
Time Taken: 1.2957615852355957
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 1.5597734451293945
>> STATUS: Deviations Computed!
Max Deviation: 1.897566590828919 ; At time step: 4
Total Time Taken: 2.857553482055664
>> End of Report!

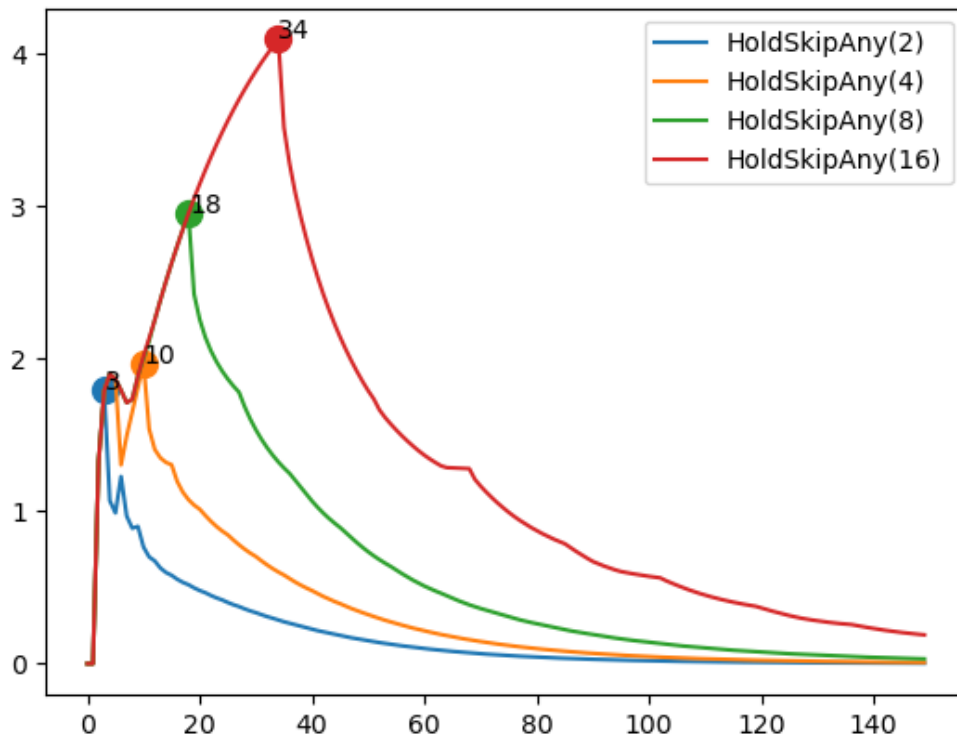
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>> REPORT. Method: Recurrence Relation. Policy: HoldSkipAny . Max Deadline
Miss: 3
>> STATUS: Computing Reachable Sets . . .
Time Taken: 0.4896402359008789
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 0.953507661819458
>> STATUS: Deviations Computed!
Max Deviation: 1.897566590828919 ; At time step: 4
Total Time Taken: 1.4453158378601074
>> End of Report!

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```

Report: Using Generalized Recurrence Relations on Hold-Skip-Any

- Comparing the effect of deadline misses



- So Hold&Kill and Zero&Kill is better, right?

Detailed Report

```
>> REPORT. Method: Recurrence Relation. Policy: HoldSkipAny . Max Deadline
Miss: 2
>> STATUS: Computing Reachable Sets . . .
Time Taken: 0.31814074516296387
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 0.6257350444793701
>> STATUS: Deviations Computed!
Max Deviation: 1.791379953474675 ; At time step: 3
Total Time Taken: 0.9705982208251953
>> End of Report!
```

```
>> REPORT. Method: Recurrence Relation. Policy: HoldSkipAny . Max Deadline
Miss: 4
>> STATUS: Computing Reachable Sets . . .
Time Taken: 0.5374925136566162
>> STATUS: Reachable Sets Computed!
>> STATUS: Computing Deviations . . .
Time Taken: 1.071831464767456
>> STATUS: Deviations Computed!
Max Deviation: 1.9697615725709692 ; At time step: 10
Total Time Taken: 1.6113216876983643
>> End of Report!
```

```
>> REPORT. Method: Recurrence Relation. Policy: HoldSkipAny . Max Deadline  
Miss: 8  
>> STATUS: Computing Reachable Sets . . .  
Time Taken: 0.9962079524993896  
>> STATUS: Reachable Sets Computed!  
>> STATUS: Computing Deviations . . .  
Time Taken: 2.0224573612213135  
>> STATUS: Deviations Computed!  
Max Deviation: 2.95240222850406 ; At time step: 18  
Total Time Taken: 3.020772933959961  
>> End of Report!
```

```
>> REPORT. Method: Recurrence Relation. Policy: HoldSkipAny . Max Deadline  
Miss: 16  
>> STATUS: Computing Reachable Sets . . .  
Time Taken: 1.8849682807922363  
>> STATUS: Reachable Sets Computed!  
>> STATUS: Computing Deviations . . .  
Time Taken: 3.7091805934906006  
>> STATUS: Deviations Computed!  
Max Deviation: 4.09577302012779 ; At time step: 34  
Total Time Taken: 5.596181154251099  
>> End of Report!
```
