In [1]:
```
import andes
import numpy as np
from matplotlib import pyplot as plt
%matplotlib inline
```

In [2]:
```
ieee_39=andes.utils.get_case('ieee39_full.xlsx')
ss=andes.load(ieee_39,setup=False)
```

In [31]:
```
ps = andes.load(ieee_39,setup=False)
ps.TDS.config.tf = 10
ps.TDS.config.tstep = 0.005
ps.PQ.config.p2p = 1.0
ps.PQ.config.p2i = 0
ps.PQ.config.p2z = 0
ps.PQ.config.q2q = 1.0
ps.PQ.config.q2i = 0
ps.PQ.config.q2z = 0
ps.add('Alter',dict(model='PQ',dev='PQ_1', src='Ppf',t=5.0,method='-',amount=6))
ps.setup()
ps.PFlow.run()
ps.TDS.run()
```

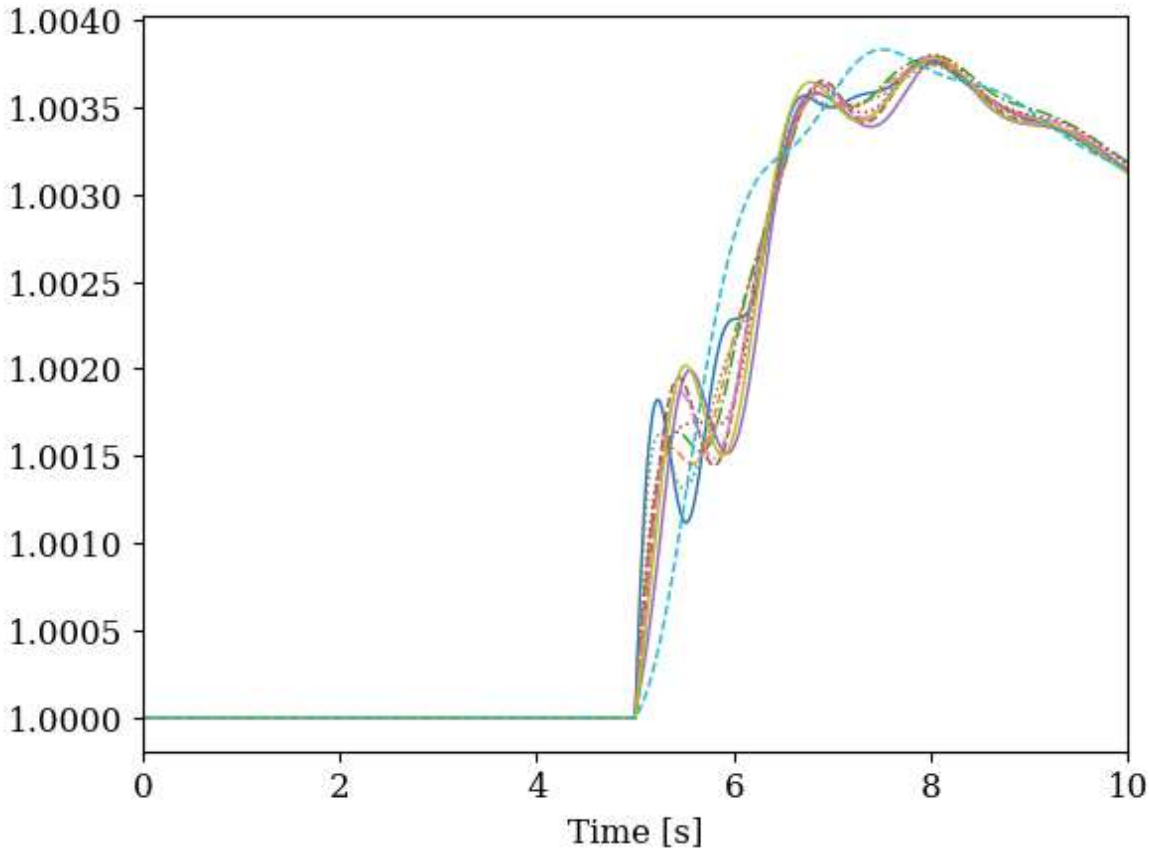
```
GENROU (xl <= xd2) out of typical upper limit.

   idx     | values | limit
-----------+--------+------
 GENROU_1  | 0.012  | 0.001
 GENROU_2  | 0.042  | 0.036
 GENROU_3  | 0.036  | 0.003
 GENROU_4  | 0.025  | 0.001
 GENROU_5  | 0.050  | 0.001
 GENROU_7  | 0.031  | 0.002
 GENROU_8  | 0.029  | 0.006
 GENROU_9  | 0.018  | 0.001
 GENROU_10 | 0.003  | 0.000


  0%|          | 0/100 [00:00<?, ?%/s]
<Alter Alter_2>: set PQ.PQ_1.Ppf.v=0 at t=5. Previous value was 6.
```

Out[31]: True

In [32]:
```
ps.TDS.plt.plot(ps.GENROU.omega)
```



Out[32]: (<Figure size 640x480 with 1 Axes>, <Axes: xlabel='Time [s]'>)