

Stabilita alternatoru

Description

Jednoduchy model stability alternatoru.

Vznik poruchy na vazebnim dvojbranu a posleze jeji vypnuti.

Nedokonale respektovan dej po vzniku poruchy, protoze je brano v uvahu E za X_d nikoli E' za X_d'

Neuvazovan vliv regulace buzeni.

System Parameters

$$P_{max1} = 61.5$$

$$P_{max2} = 2.3$$

$$P_{max3} = 61.3$$

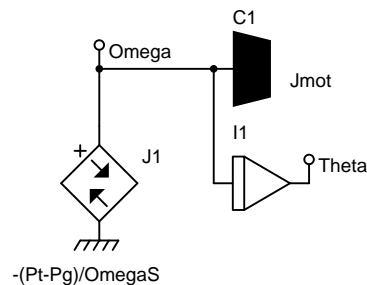
$$P_t = 40 \cdot 10^6$$

$$T_{vyp} = 1.16$$

$$\Omega_{megaS} = 100\pi$$

$$T_m = 7$$

Model



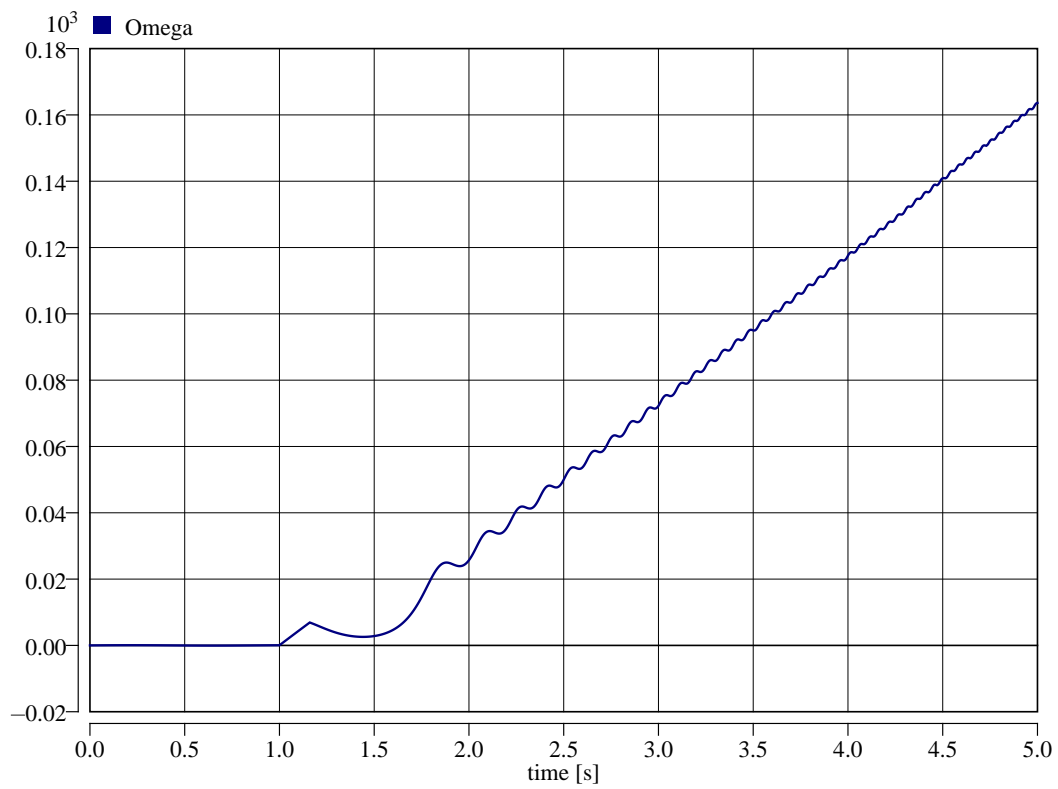
Data

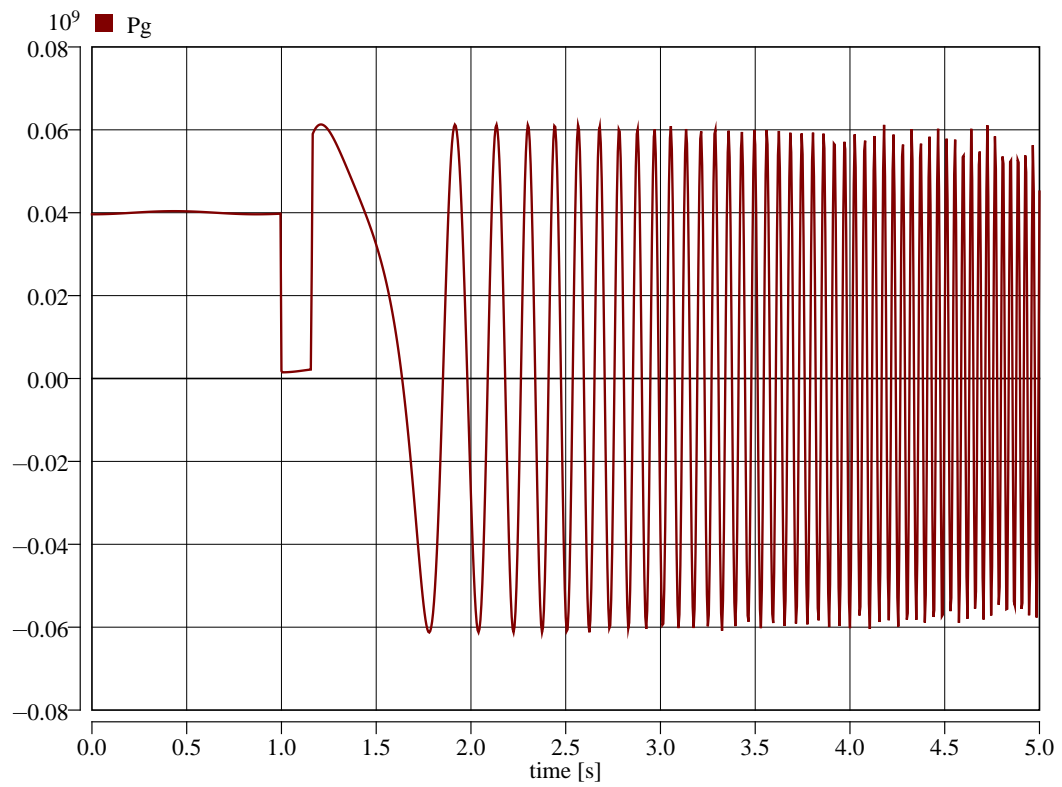
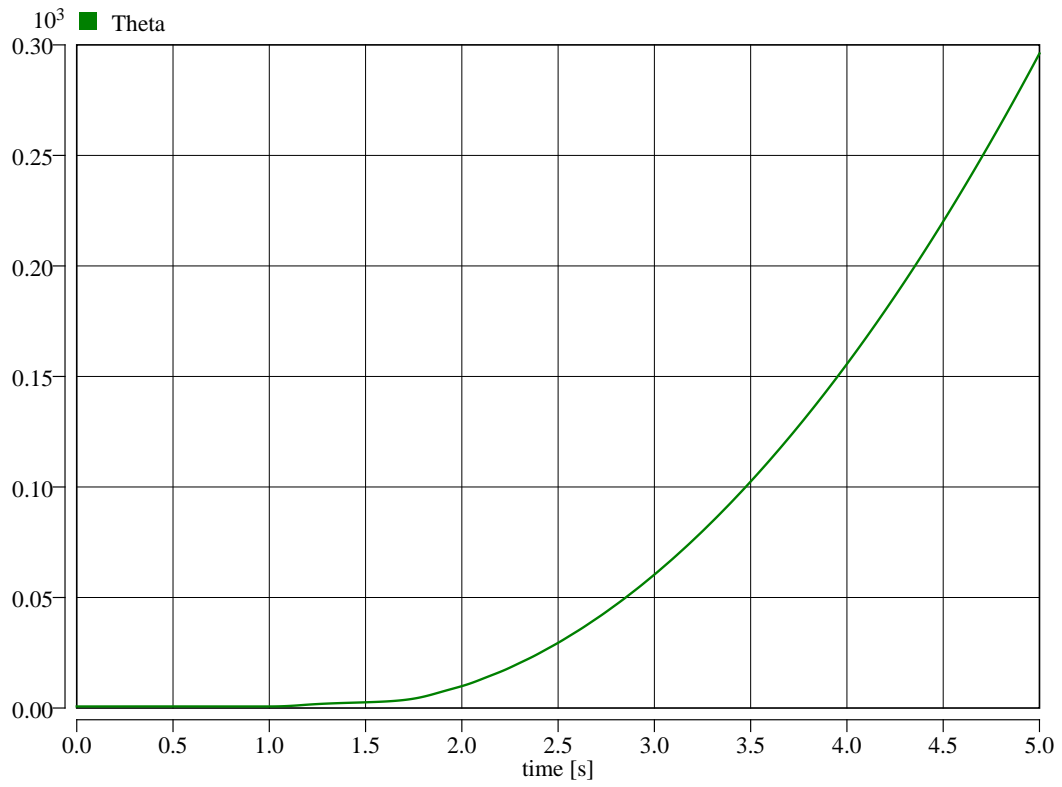
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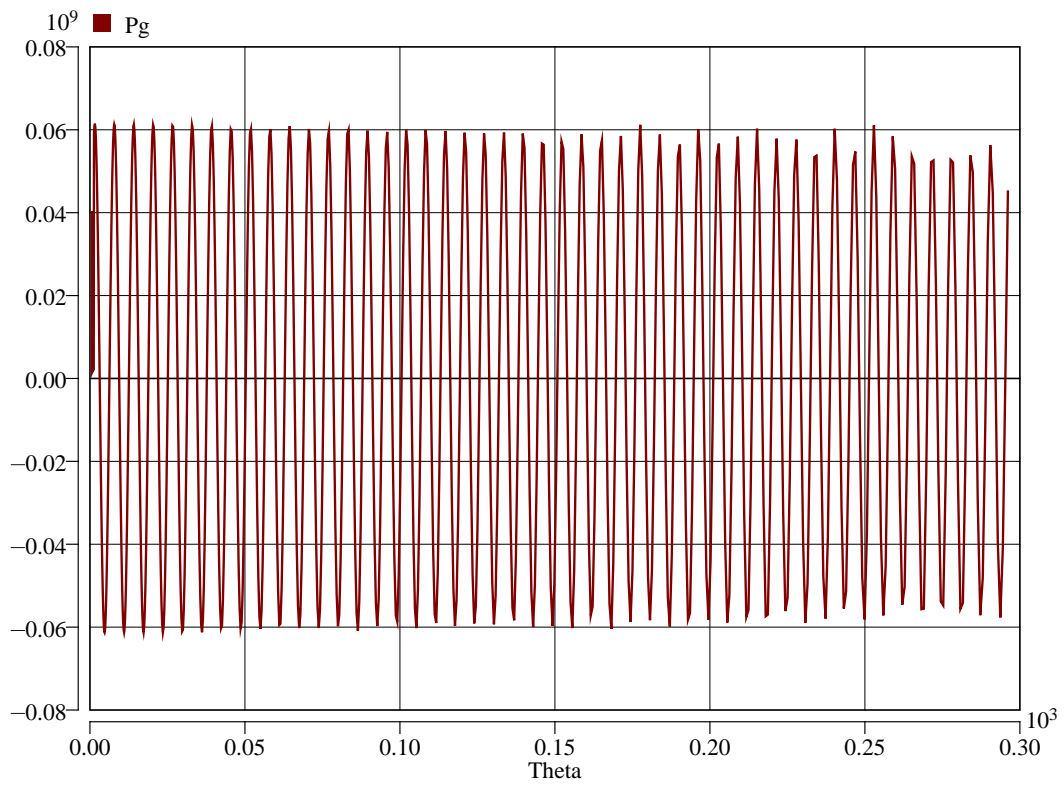
*: Stabilita alternatoru
*SYSTEM;
Pmax1=61.5;
Pmax2=2.3;
Pmax3=61.3;
Pt=40e6;
Tvyp=1.16;
Pg=Pmax1*1e6*sin(Theta)*(TIME<1)
  +Pmax2*1e6*sin(Theta)*(TIME>=1)*(TIME<Tvyp)
  +Pmax3*1e6*sin(Theta)*(TIME>=Tvyp);
OmegaS=100pi;
Tm=7;
Jmot=Tm*40e6/OmegaS**2;
J1 Omega = -(Pt-Pg)/OmegaS;
C1 Omega = Jmot;

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```
Il > @Int Omega,Theta;  
*TR;  
TR 0 5;  
PRINT(1001) Omega, Theta, Pg;  
INIT Theta=0.7, Omega=0;  
RUN;  
*END;
```







Origin

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Last Update

December 16, 2015