ELD

Enter Power Demand (MW)

Upload input as .txt file

Upload | Choose File | Sample_Input1.txt

(or)

Add Inputs

a | b | c | Pmin | Pmax | Add

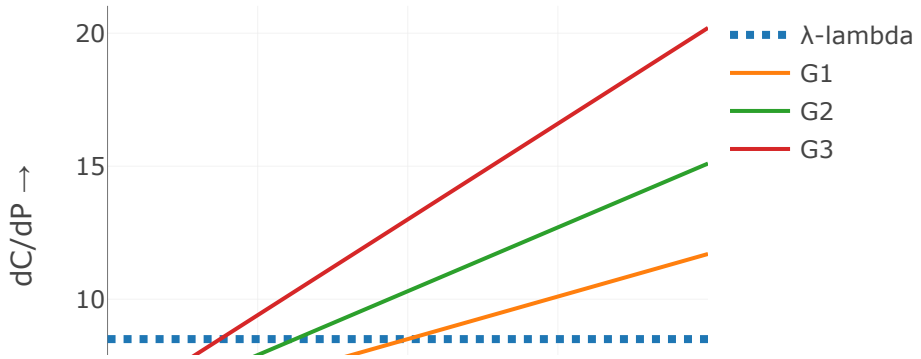
Generator	a	b	c	Pmin	Pmax		
G1	0.004	5.3	500	NaN	NaN		
G2	0.006	5.5	400	NaN	NaN		
G3	0.009	5.8	200	NaN	NaN		

Compute

Given Data

P_D = 800 MW

Incremental Cost Curves

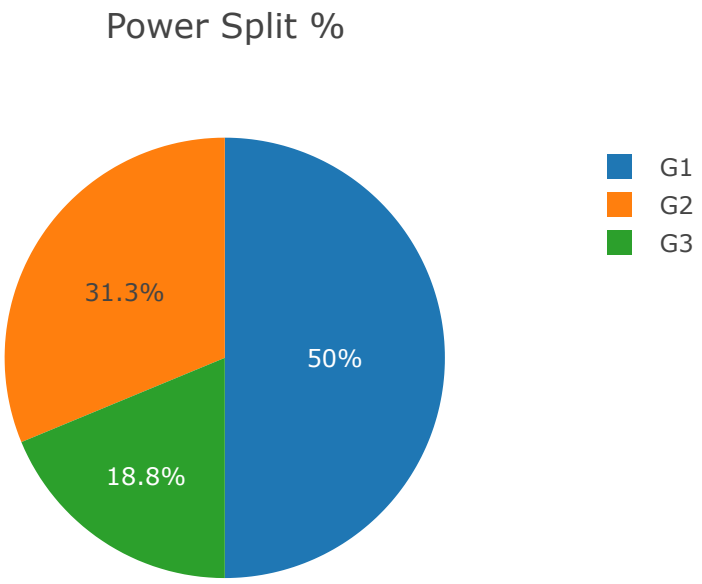


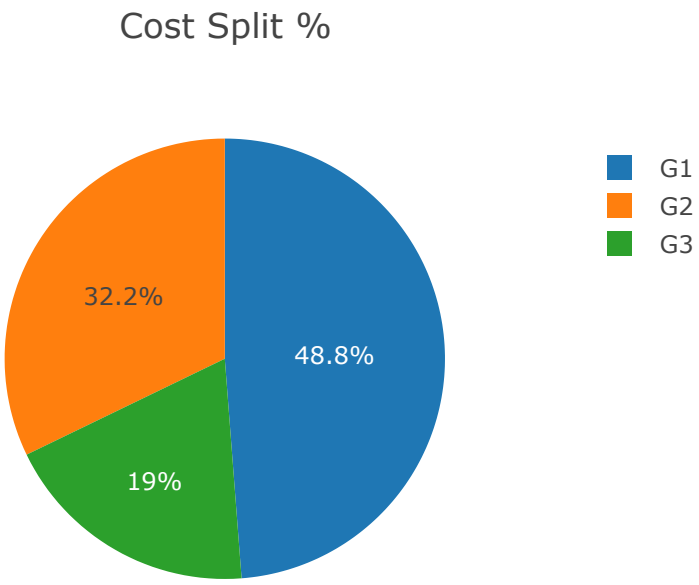
Generator	Cost Function	Incremental Cost Function
G1	$0.004\mathbf{P}^2 + 5.3\mathbf{P} + 500$	$0.008\mathbf{P} + 5.3$
G2	$0.006\mathbf{P}^2 + 5.5\mathbf{P} + 400$	$0.012\mathbf{P} + 5.5$
G3	$0.009\mathbf{P}^2 + 5.8\mathbf{P} + 200$	$0.018\mathbf{P} + 5.8$

Results

$\lambda = 8.500$

Generator	Power (MW)	Cost
G1	400.000	3260.00
G2	250.000	2150.00
G3	150.000	1272.50
Total	**800**	**6682.500**




Cost Split %
32.2%
48.8%
19%
G1
G2
G3