ELD

Enter Power Demand (MW)

Upload input as .txt file

Upload | Choose File | Sample_Input3.txt

(or)

Add Inputs

a | b | c | Pmin | Pmax | Add

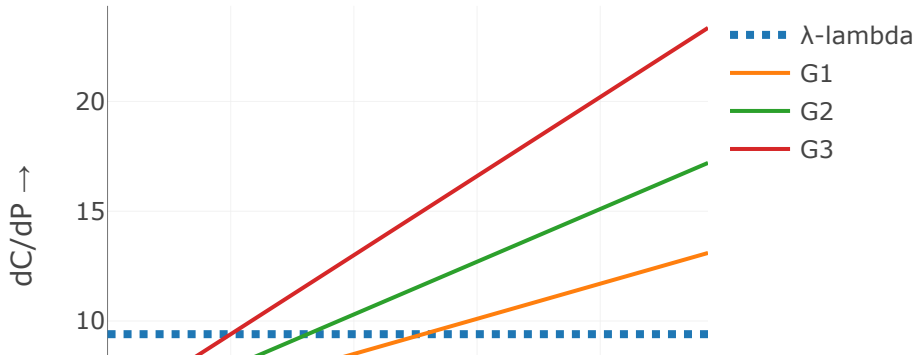
Generator	a	b	c	Pmin	Pmax		
G1	0.004	5.3	500	200	450		
G2	0.006	5.5	400	150	350		
G3	0.009	5.8	200	100	225		

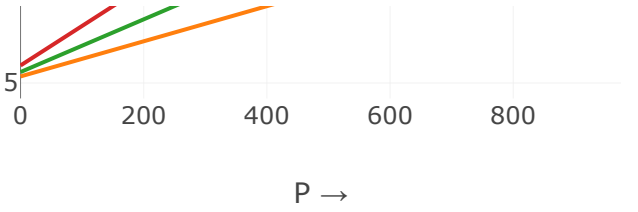
Compute

Given Data

P_D = 975 MW

Incremental Cost Curves



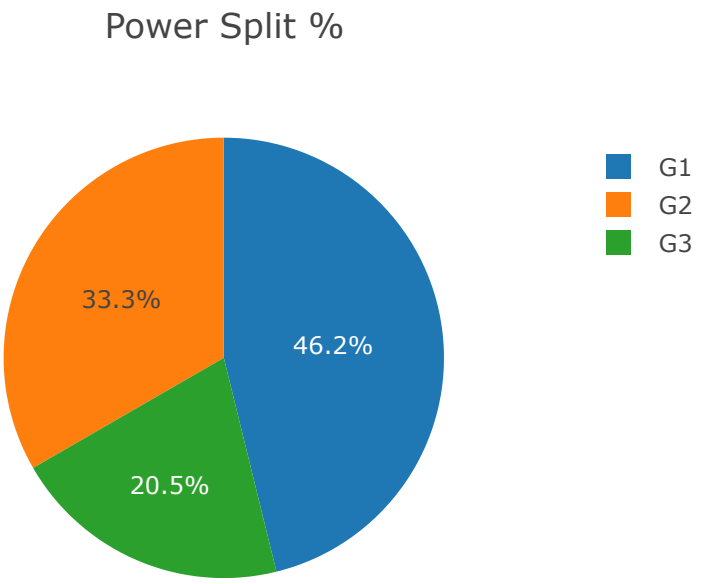


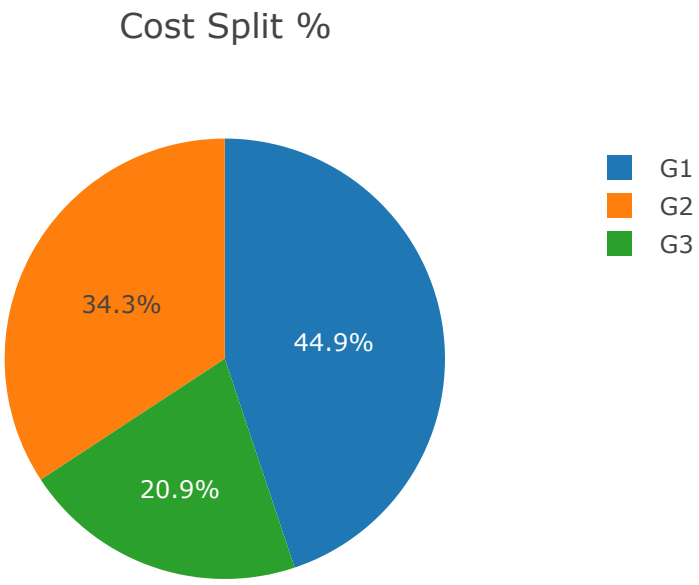
Generator	Cost Function	Incremental Cost Function
G1	$0.004\mathbf{P}^2 + 5.3\mathbf{P} + 500$	$0.008\mathbf{P} + 5.3$
G2	$0.006\mathbf{P}^2 + 5.5\mathbf{P} + 400$	$0.012\mathbf{P} + 5.5$
G3	$0.009\mathbf{P}^2 + 5.8\mathbf{P} + 200$	$0.018\mathbf{P} + 5.8$

Results

λ = 9.400

Generator	Power (MW)	Cost
G1	450.000	3695.00
G2	324.999	2821.24
G3	200.000	1720.00
Total	**975**	**8236.241**




Cost Split %
34.3%
44.9%
20.9%
G1
G2
G3