

### C. Diagnostic Charts for All Cases

## Appendix C. Diagnostic Charts for All Cases

### Climate Change Phase II Resource Set

Case 1 - CLCPA Case - Summer - CCP2 Resource Set  
 Case 2 - CLCPA Case - Winter - CCP2 Resource Set  
 Case 3 - CLCPA Case - Shoulder - CCP2 Resource Set  
 Case 4 - CLCPA Case - Summer - CCP2 Resource Set - Heatwave  
 Case 5 - CLCPA Case - Winter - CCP2 Resource Set - Cold Snap  
 Case 6 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate  
 Case 7 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate  
 Case 8 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate  
 Case 9 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 10 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 11 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 12 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide  
 Case 13 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide  
 Case 14 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide  
 Case 15 - CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm  
 Case 16 - CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate  
 Case 17 - CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate  
 Case 18 - CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 19 - CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 20 - CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 21 - CLCPA Case - Summer - CCP2 Resource Set - Drought  
 Case 22 - CLCPA Case - Winter - CCP2 Resource Set - Drought  
 Case 23 - CLCPA Case - Winter - CCP2 Resource Set - Icing  
 Case 24 - Reference Case - Summer - CCP2 Resource Set  
 Case 25 - Reference Case - Winter - CCP2 Resource Set  
 Case 26 - Reference Case - Shoulder - CCP2 Resource Set  
 Case 27 - Reference Case - Summer - CCP2 Resource Set - Heatwave  
 Case 28 - Reference Case - Winter - CCP2 Resource Set - Cold Snap  
 Case 29 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate  
 Case 30 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate  
 Case 31 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate  
 Case 32 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 33 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 34 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore  
 Case 35 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide  
 Case 36 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide  
 Case 37 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide  
 Case 38 - Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm  
 Case 39 - Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate  
 Case 40 - Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate  
 Case 41 - Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 42 - Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 43 - Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore  
 Case 44 - Reference Case - Summer - CCP2 Resource Set - Drought  
 Case 45 - Reference Case - Winter - CCP2 Resource Set - Drought  
 Case 46 - Reference Case - Winter - CCP2 Resource Set - Icing

### Grid in Transition Resource Set

Case 47 - CLCPA Case - Summer - GIT Resource Set  
 Case 48 - CLCPA Case - Winter - GIT Resource Set  
 Case 49 - CLCPA Case - Shoulder - GIT Resource Set  
 Case 50 - CLCPA Case - Summer - GIT Resource Set - Heatwave  
 Case 51 - CLCPA Case - Winter - GIT Resource Set - Cold Snap  
 Case 52 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate  
 Case 53 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate  
 Case 54 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate  
 Case 55 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore  
 Case 56 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore  
 Case 57 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore  
 Case 58 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide  
 Case 59 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide  
 Case 60 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide  
 Case 61 - CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm  
 Case 62 - CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate  
 Case 63 - CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate  
 Case 64 - CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore  
 Case 65 - CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore  
 Case 66 - CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore  
 Case 67 - CLCPA Case - Summer - GIT Resource Set - Drought  
 Case 68 - CLCPA Case - Winter - GIT Resource Set - Drought  
 Case 69 - CLCPA Case - Winter - GIT Resource Set - Icing  
 Case 70 - Reference Case - Summer - GIT Resource Set  
 Case 71 - Reference Case - Winter - GIT Resource Set  
 Case 72 - Reference Case - Shoulder - GIT Resource Set

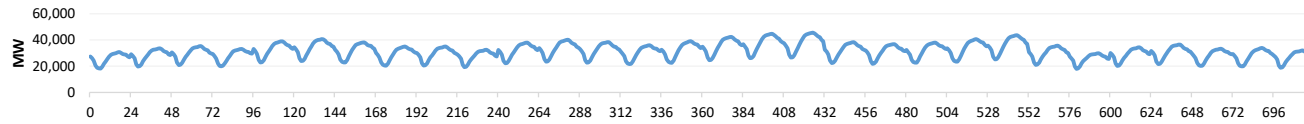
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 1 - CLCPA Case - Summer - CCP2 Resource Set**

### Hourly Results Summary

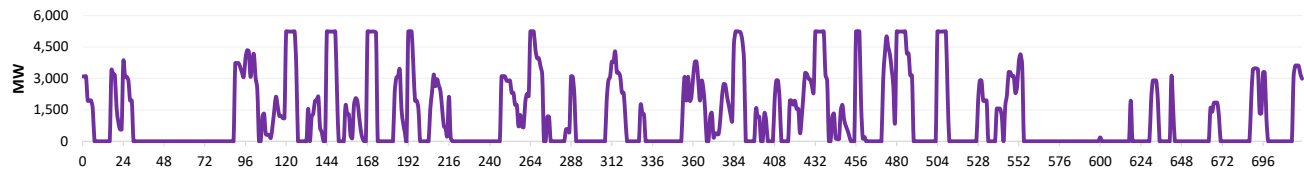
Case Name: CLCPA Case - Summer - CCP2 Resource Set

**Load During Modeling Period**



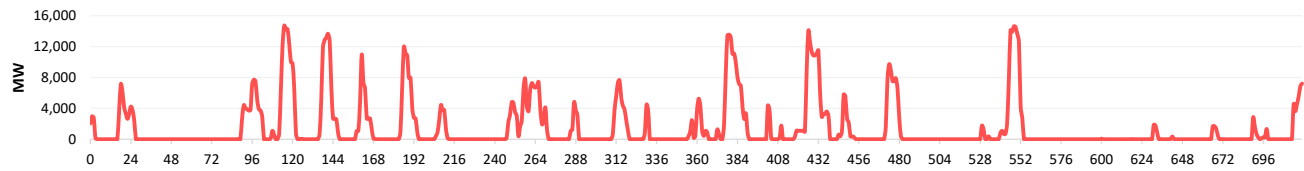
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



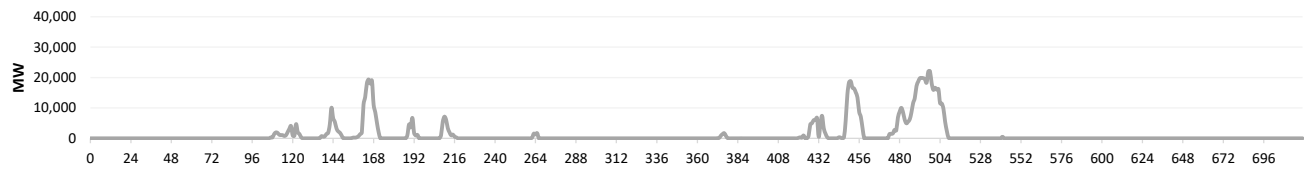
PRD Deployment	
Total Hrs.	323
Total MWh	855,608
Avg. MW	2,648.9

**Battery Energy Storage Deployed During Modeling Period**



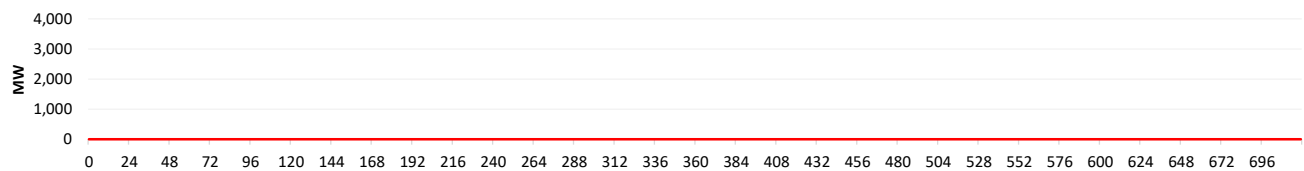
Battery Deployment	
Total Hrs.	247
Total MWh	1,096,902
Avg. MW	4,440.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	145
Total MWh	847,589
Avg. MW	5,845.4

**Loss of Load Occurrences During Modeling Period**



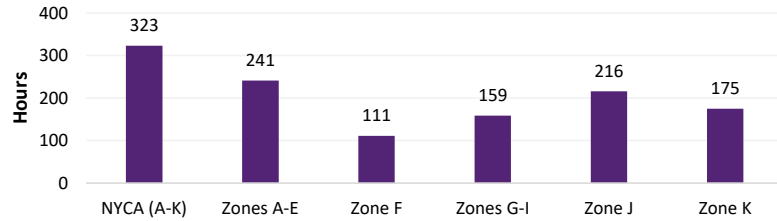
Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



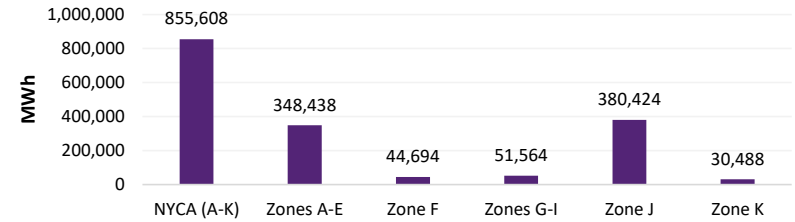
### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set

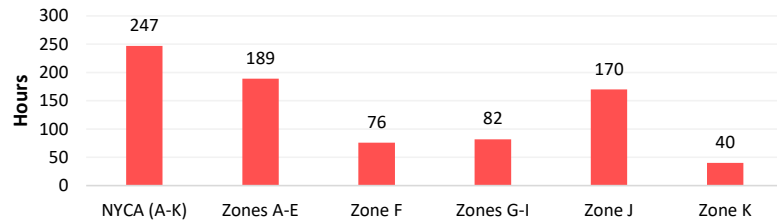
**Hours Price Responsive Demand Deployed**



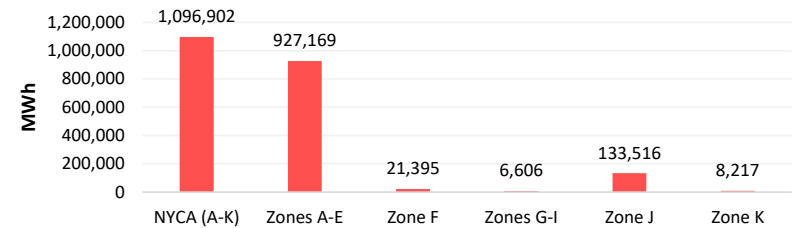
**Total MWh Price Responsive Demand Deployed**



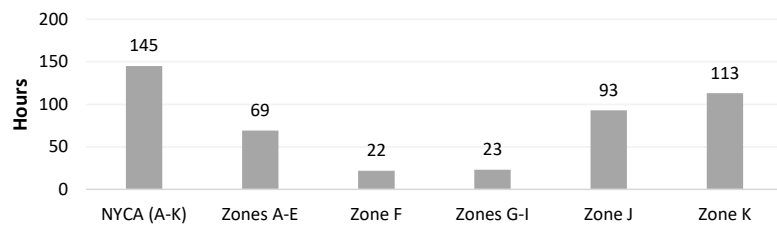
**Hours Battery Energy Storage Deployed**



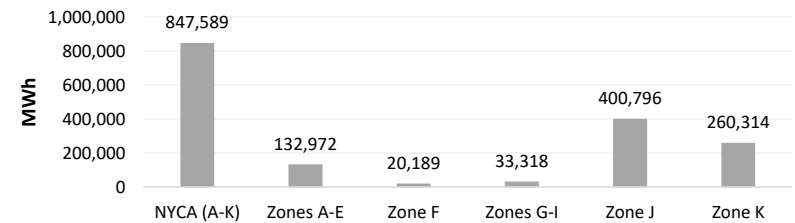
**Total MWh Battery Energy Storage Deployed**



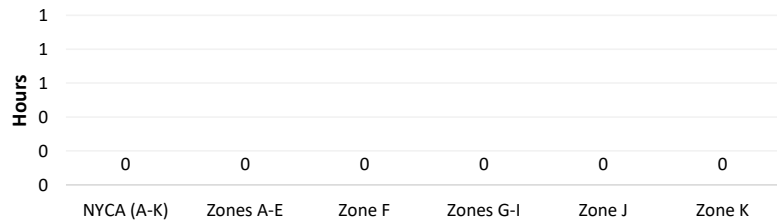
**Hours DE Resources Deployed**



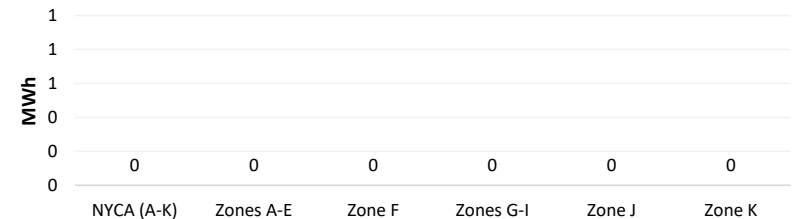
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



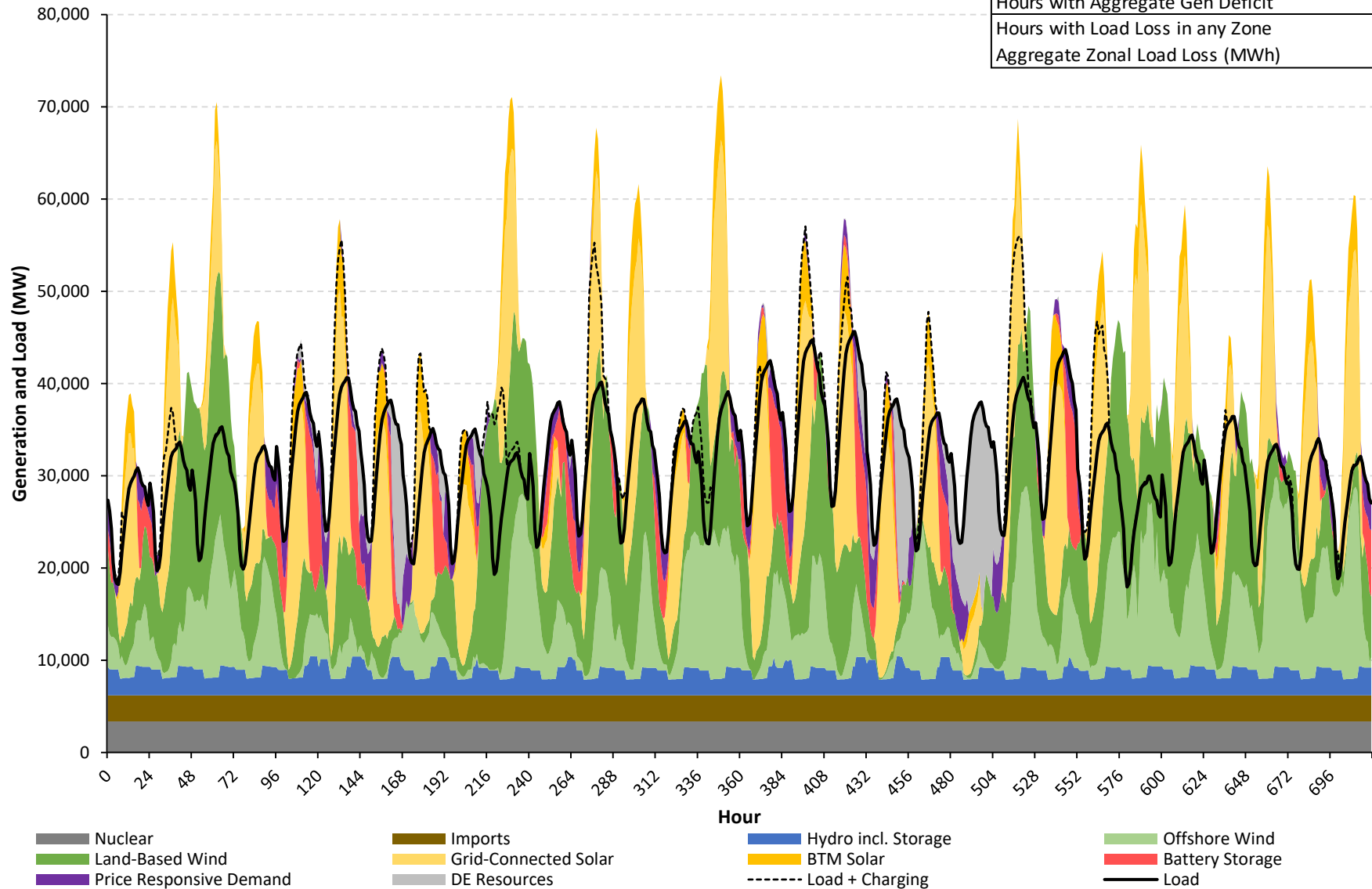
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set

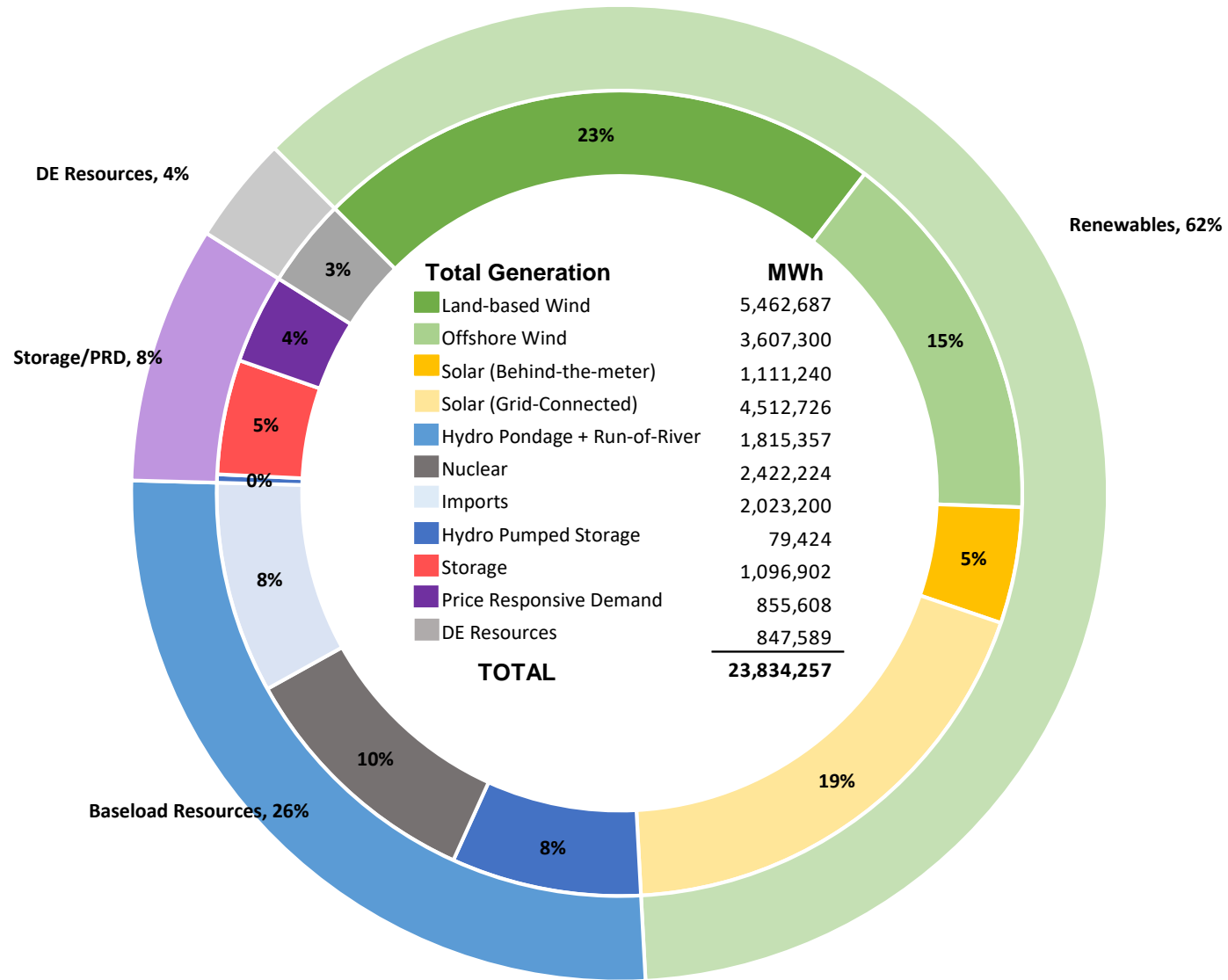
Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	27,760,491
Gen Surplus/Deficit (MWh)	5,284,536
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



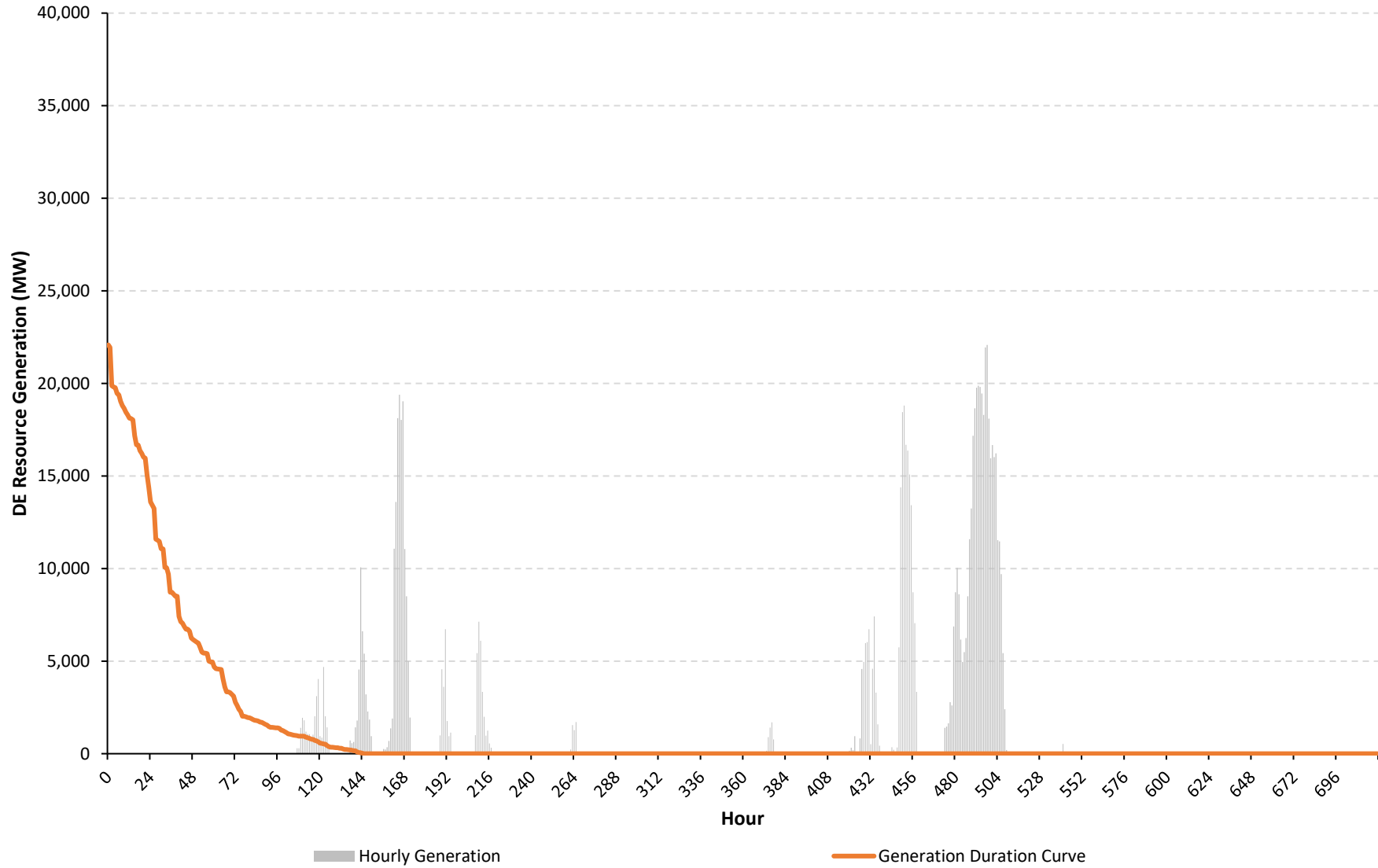
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

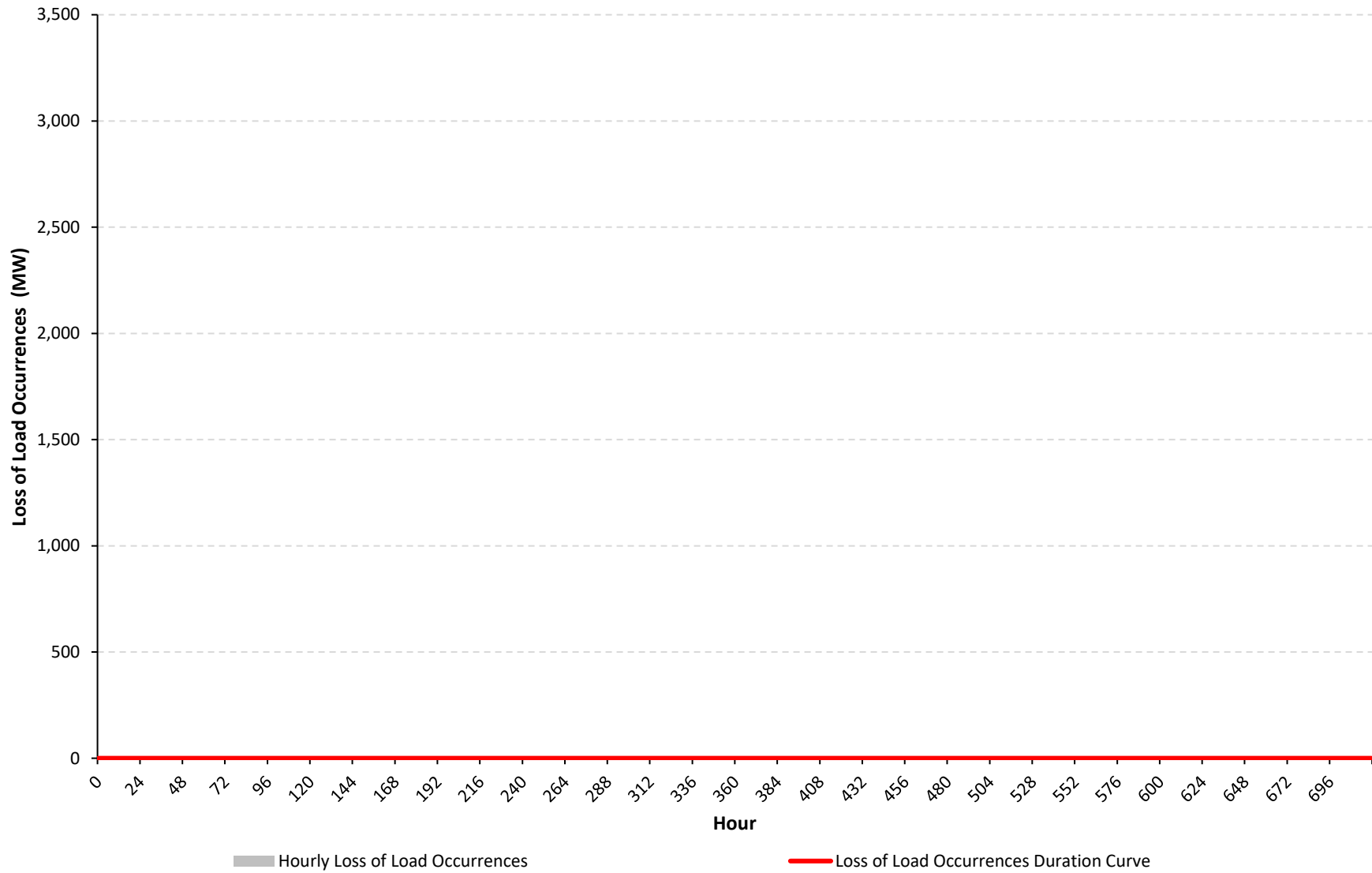
**Generation by Resource Type**  
 CLCPA Case - Summer - CCP2 Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - CCP2 Resource Set



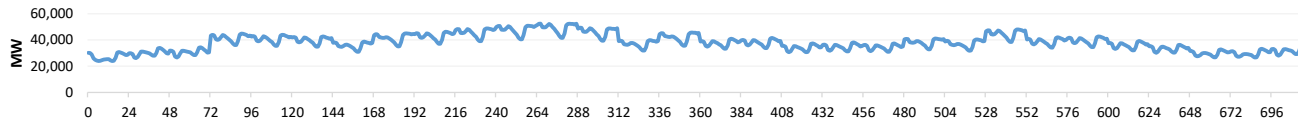
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 2 - CLCPA Case - Winter - CCP2 Resource Set**

### Hourly Results Summary

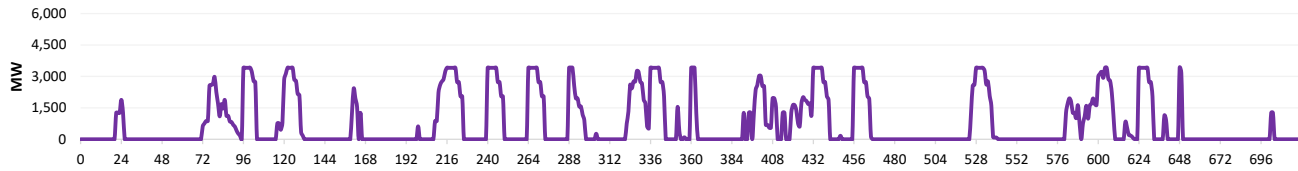
Case Name: CLCPA Case - Winter - CCP2 Resource Set

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



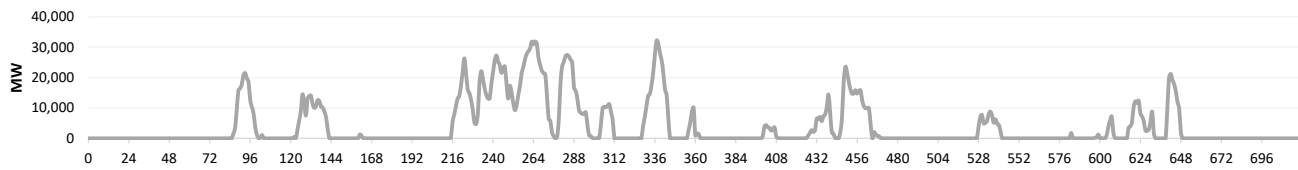
PRD Deployment	
Total Hrs.	255
Total MWh	544,857
Avg. MW	2,136.7

**Battery Energy Storage Deployed During Modeling Period**



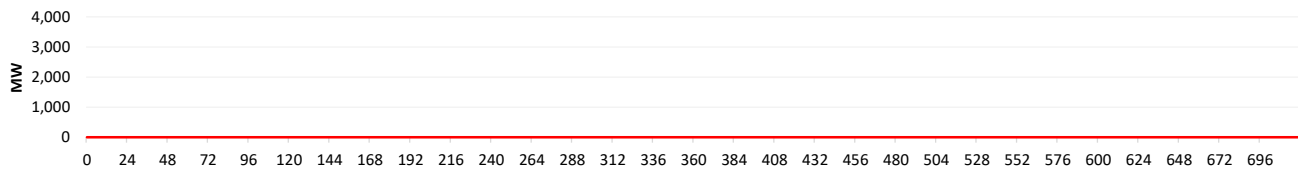
Battery Deployment	
Total Hrs.	185
Total MWh	878,084
Avg. MW	4,746.4

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	255
Total MWh	2,866,203
Avg. MW	11,240.0

**Loss of Load Occurrences During Modeling Period**

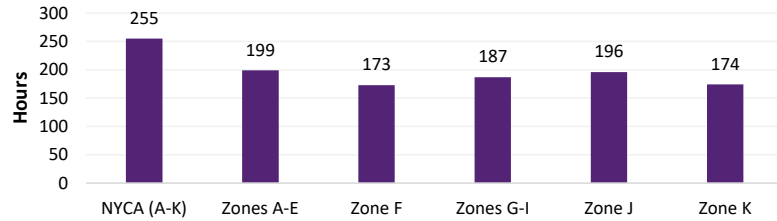


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

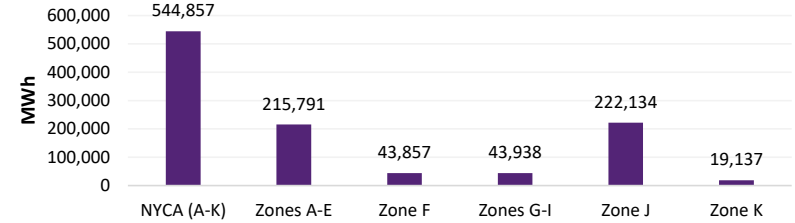
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set

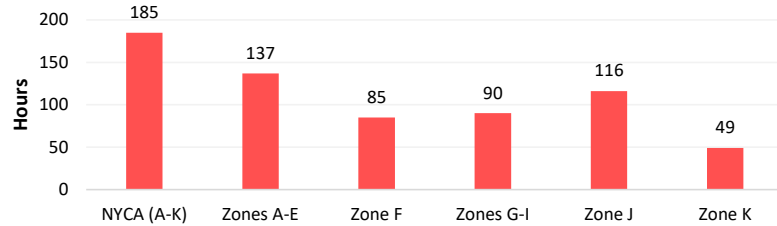
**Hours Price Responsive Demand Deployed**



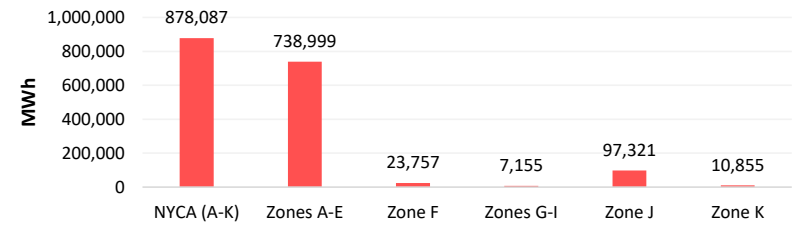
**Total MWh Price Responsive Demand Deployed**



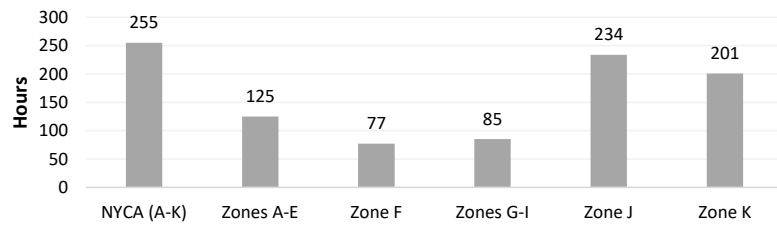
**Hours Battery Energy Storage Deployed**



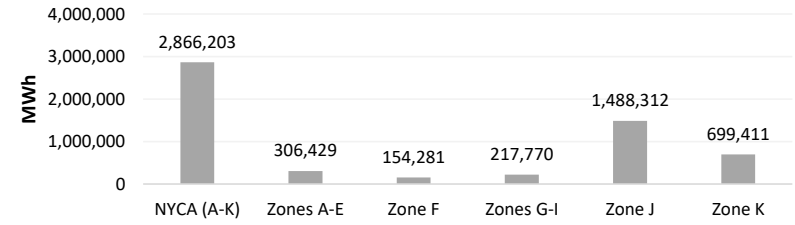
**Total MWh Battery Energy Storage Deployed**



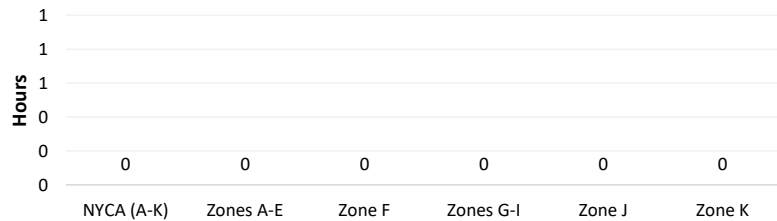
**Hours DE Resources Deployed**



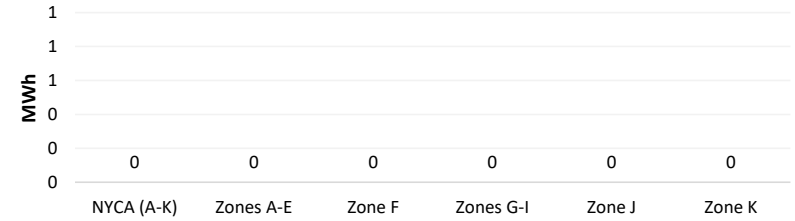
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

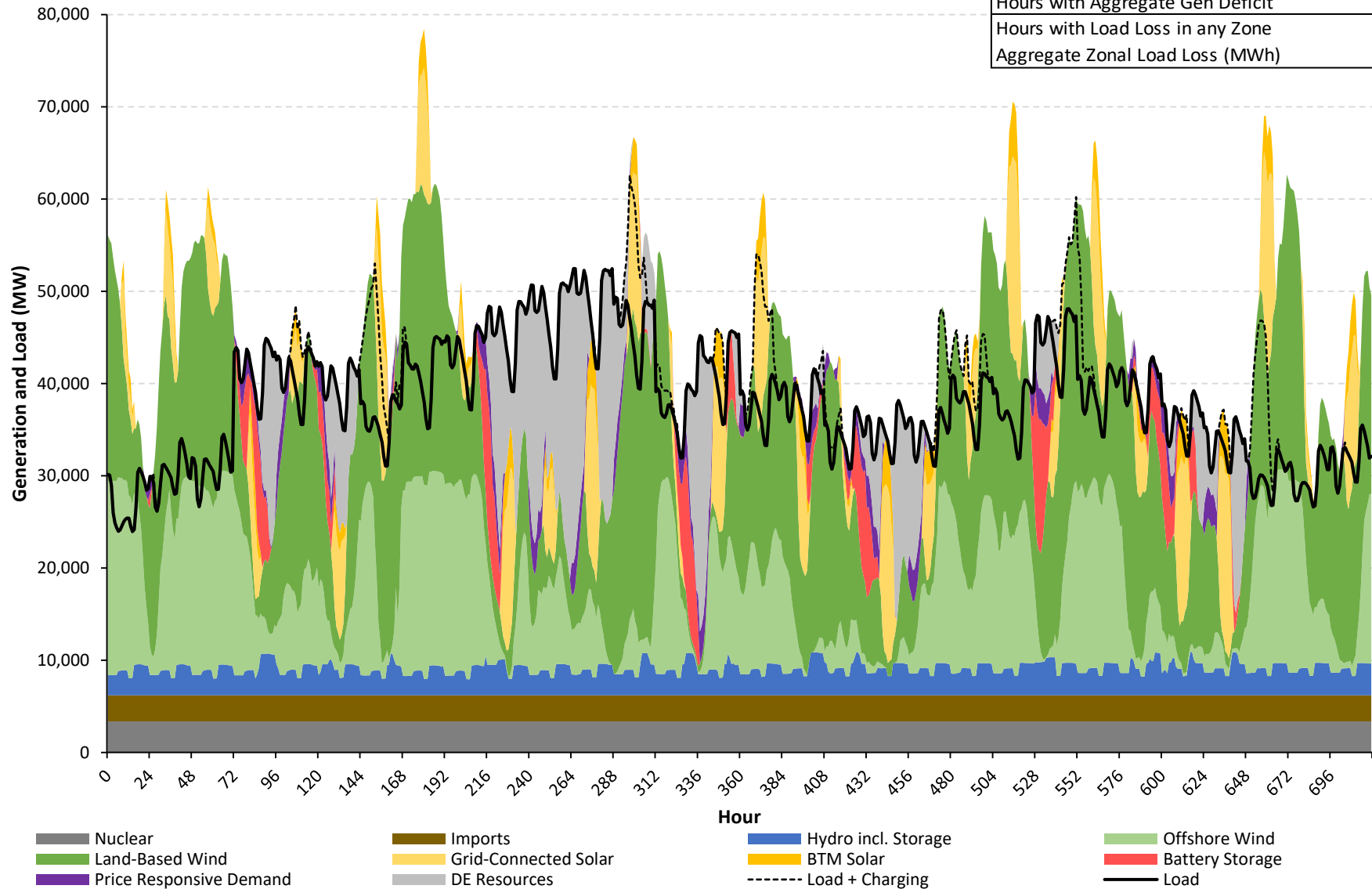




### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	32,894,710
Gen Surplus/Deficit (MWh)	5,572,673
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

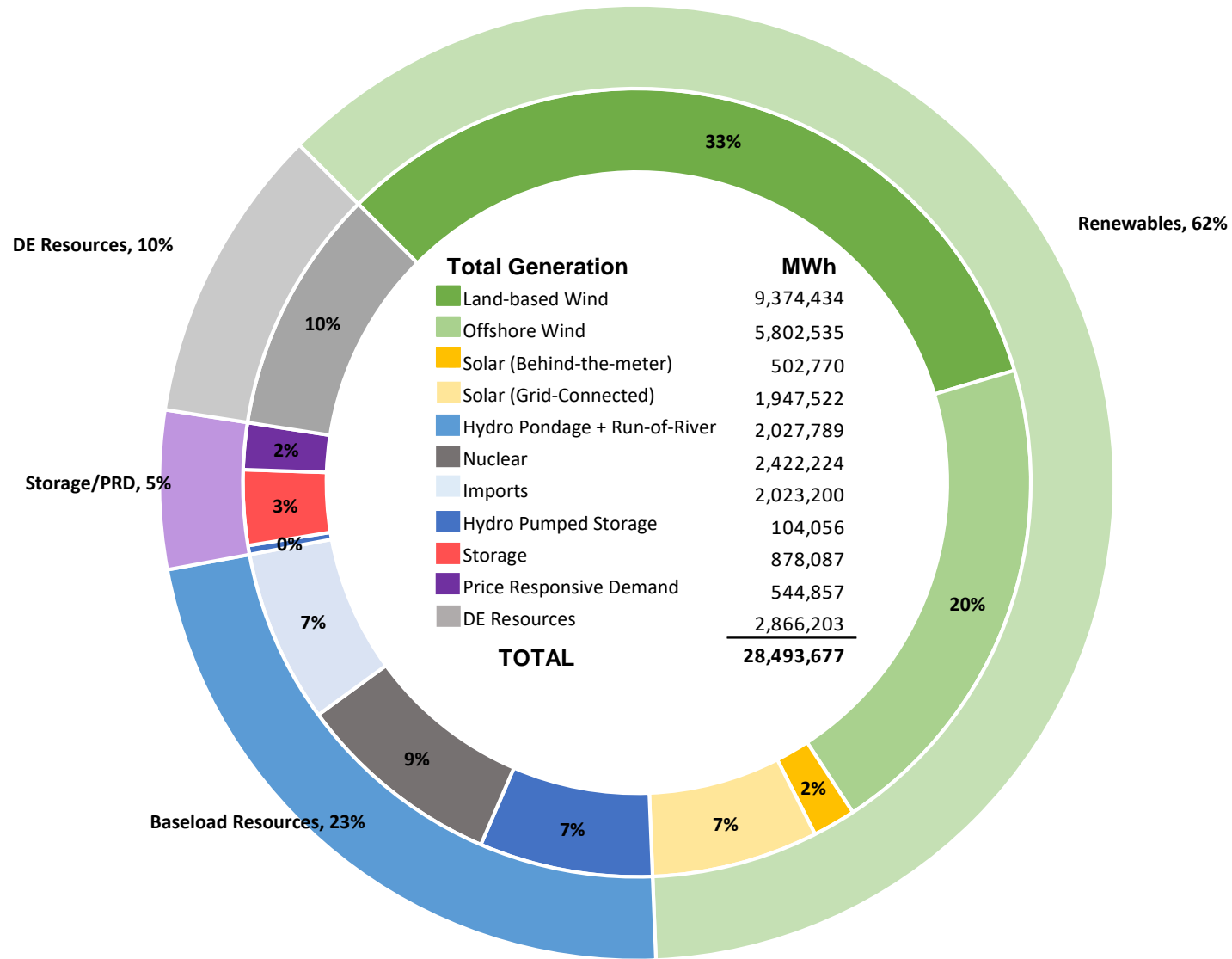


**Note:**

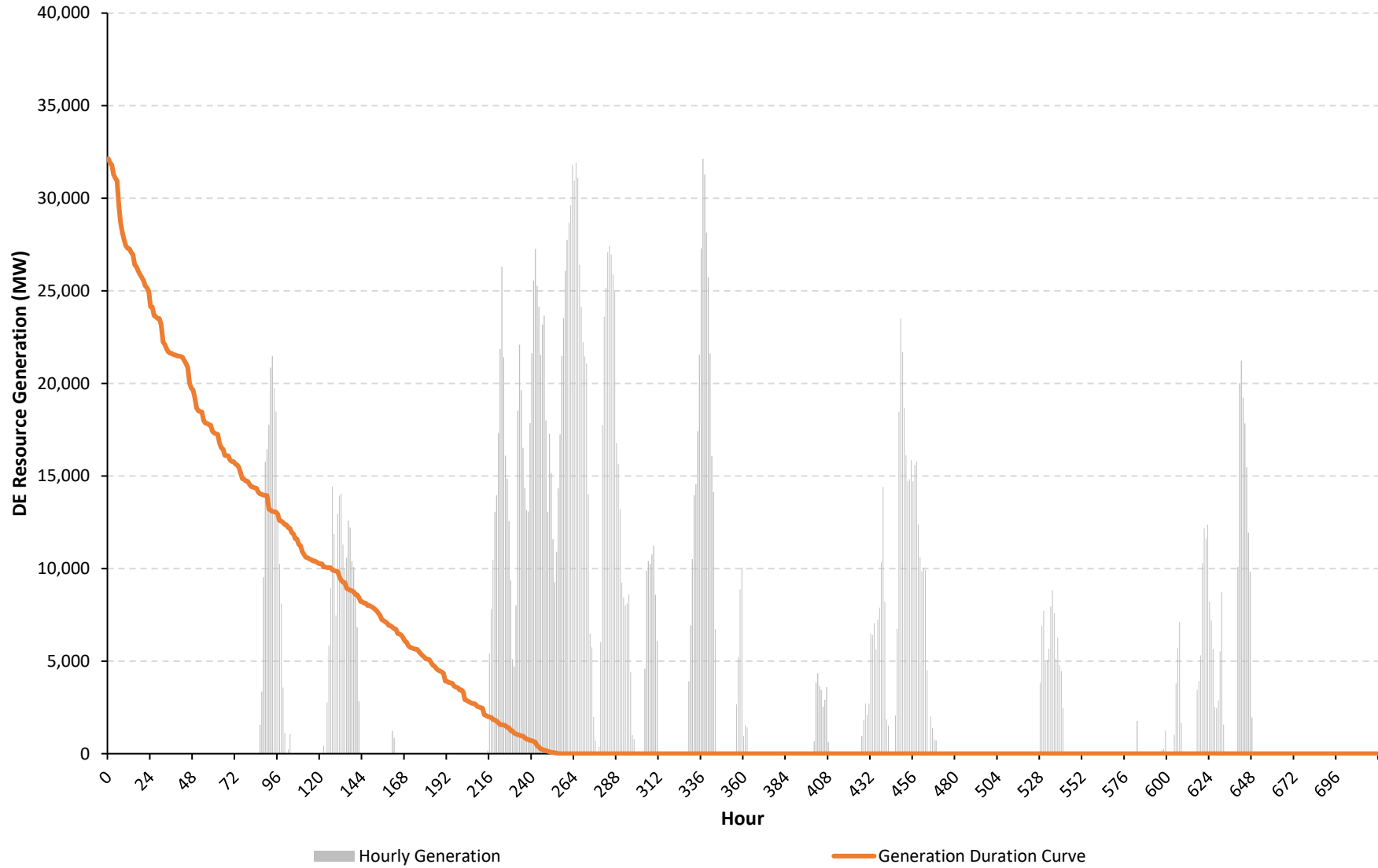
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

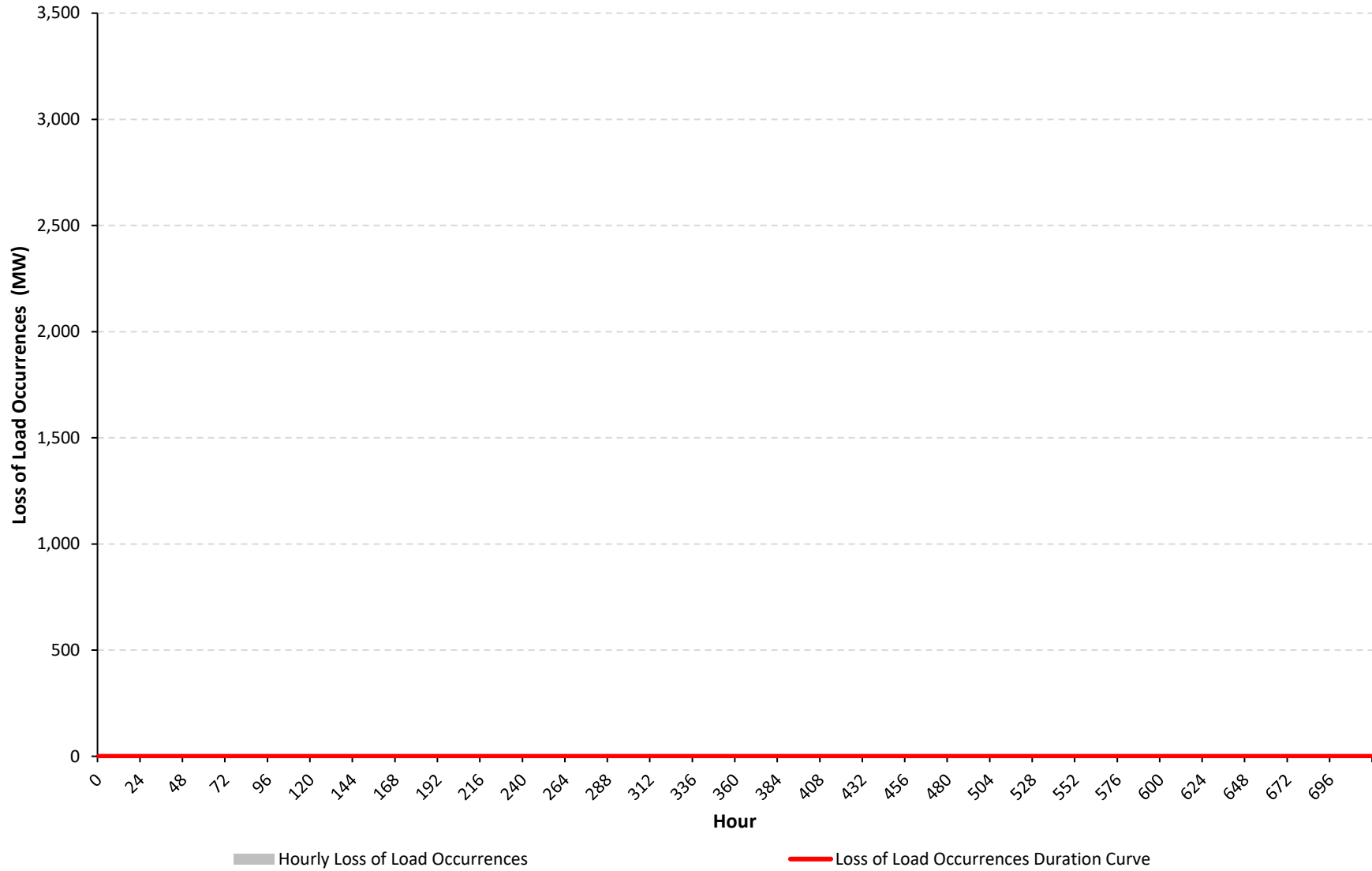
CLCPA Case - Winter - CCP2 Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set



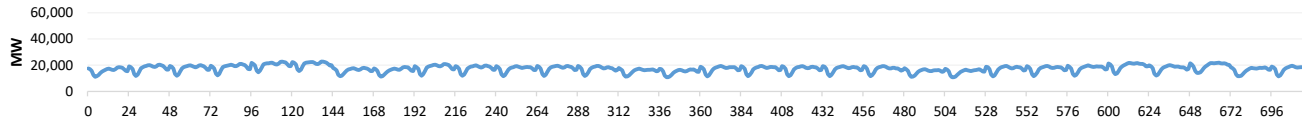
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 3 - CLCPA Case - Shoulder - CCP2 Resource Set**

### Hourly Results Summary

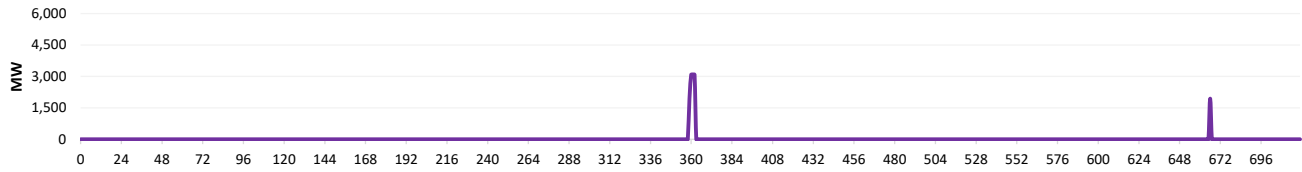
Case Name: CLCPA Case - Shoulder - CCP2 Resource Set

**Load During Modeling Period**



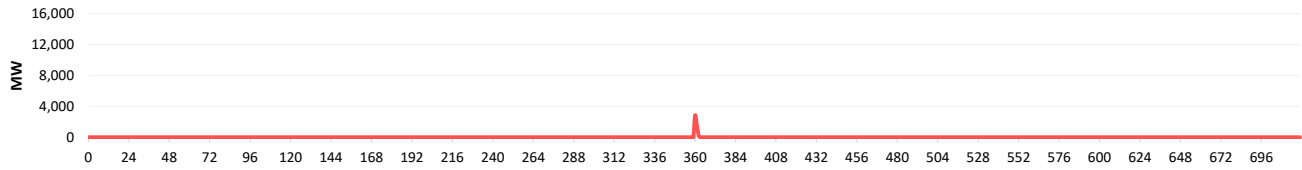
Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



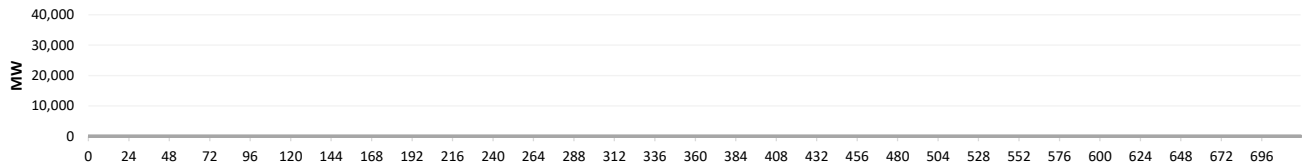
PRD Deployment	
Total Hrs.	5
Total MWh	13,119
Avg. MW	2,623.8

**Battery Energy Storage Deployed During Modeling Period**



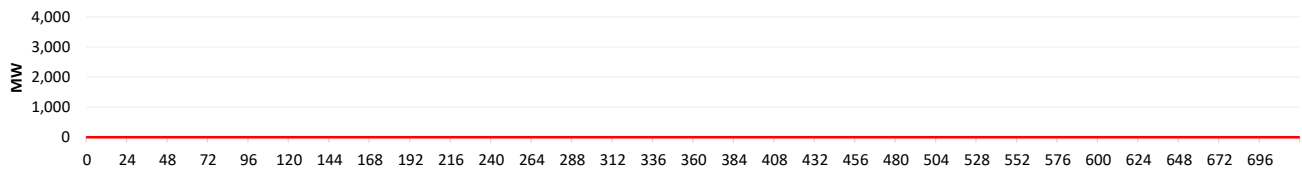
Battery Deployment	
Total Hrs.	3
Total MWh	4,852
Avg. MW	1,617.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

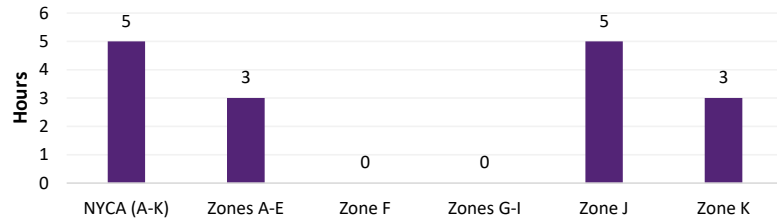


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

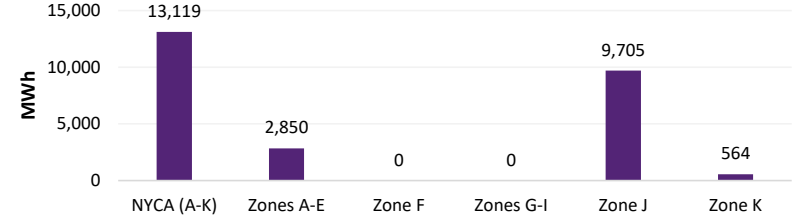
### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - CCP2 Resource Set

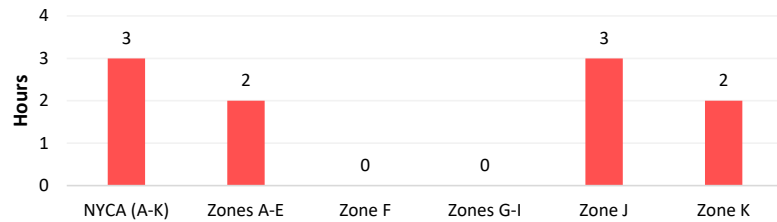
**Hours Price Responsive Demand Deployed**



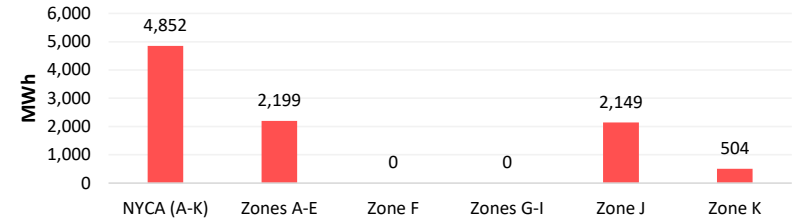
**Total MWh Price Responsive Demand Deployed**



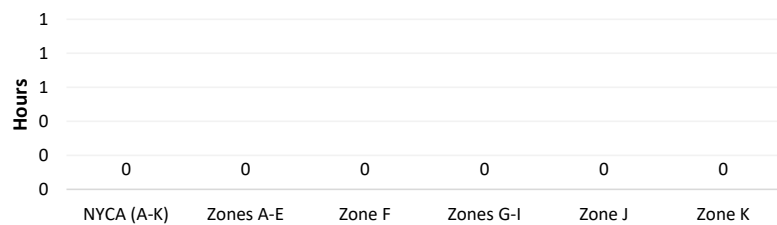
**Hours Battery Energy Storage Deployed**



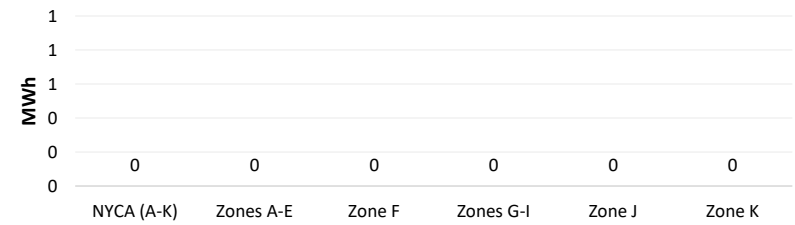
**Total MWh Battery Energy Storage Deployed**



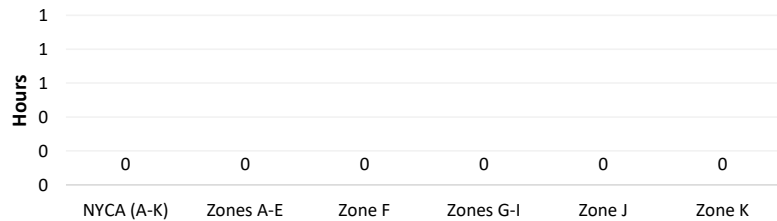
**Hours DE Resources Deployed**



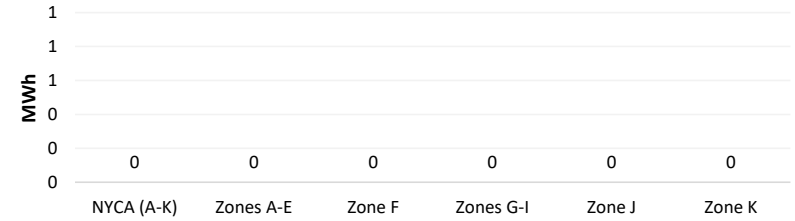
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



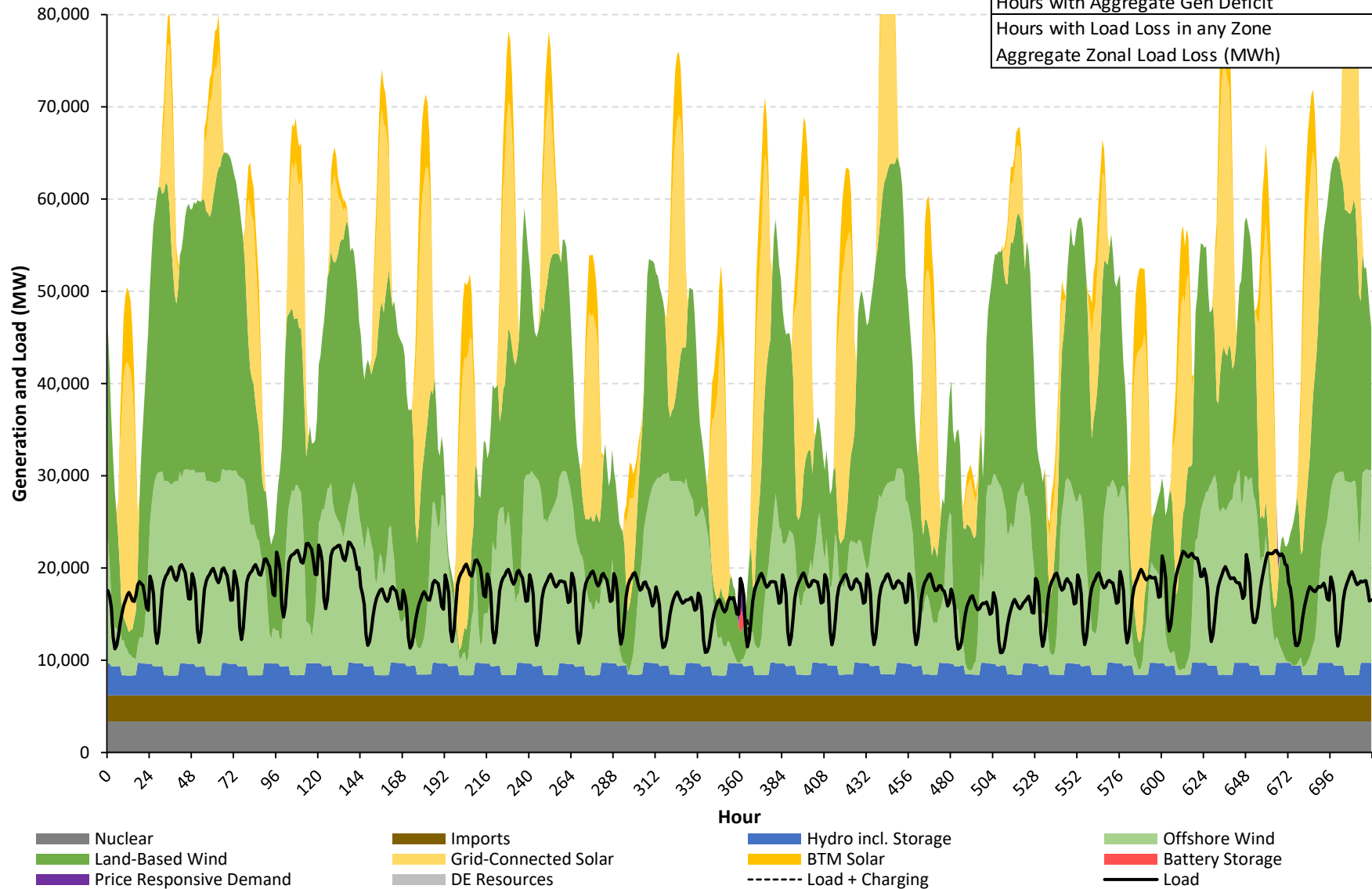
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	35,706,206
Gen Surplus/Deficit (MWh)	23,209,446
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

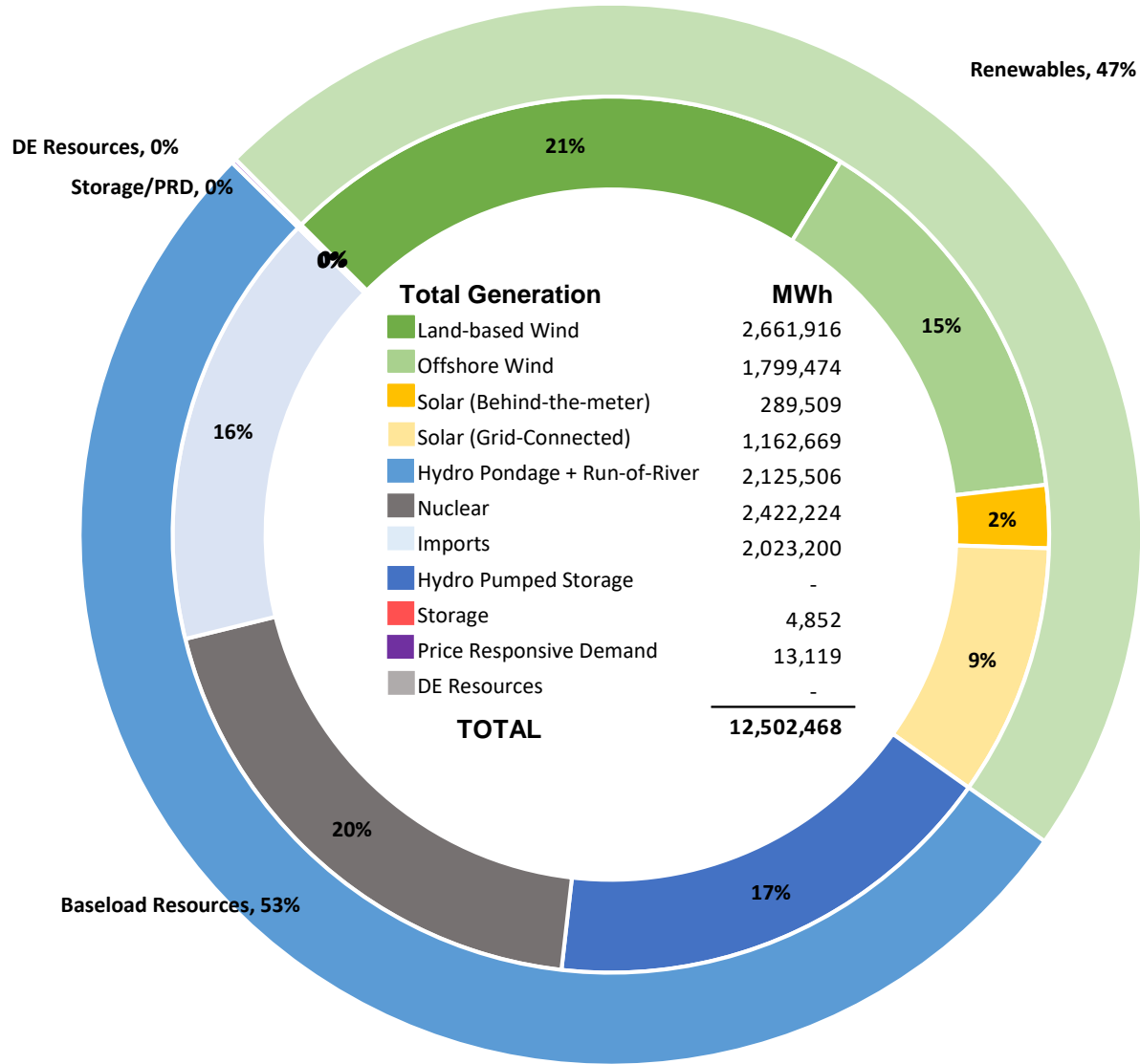


**Note:**

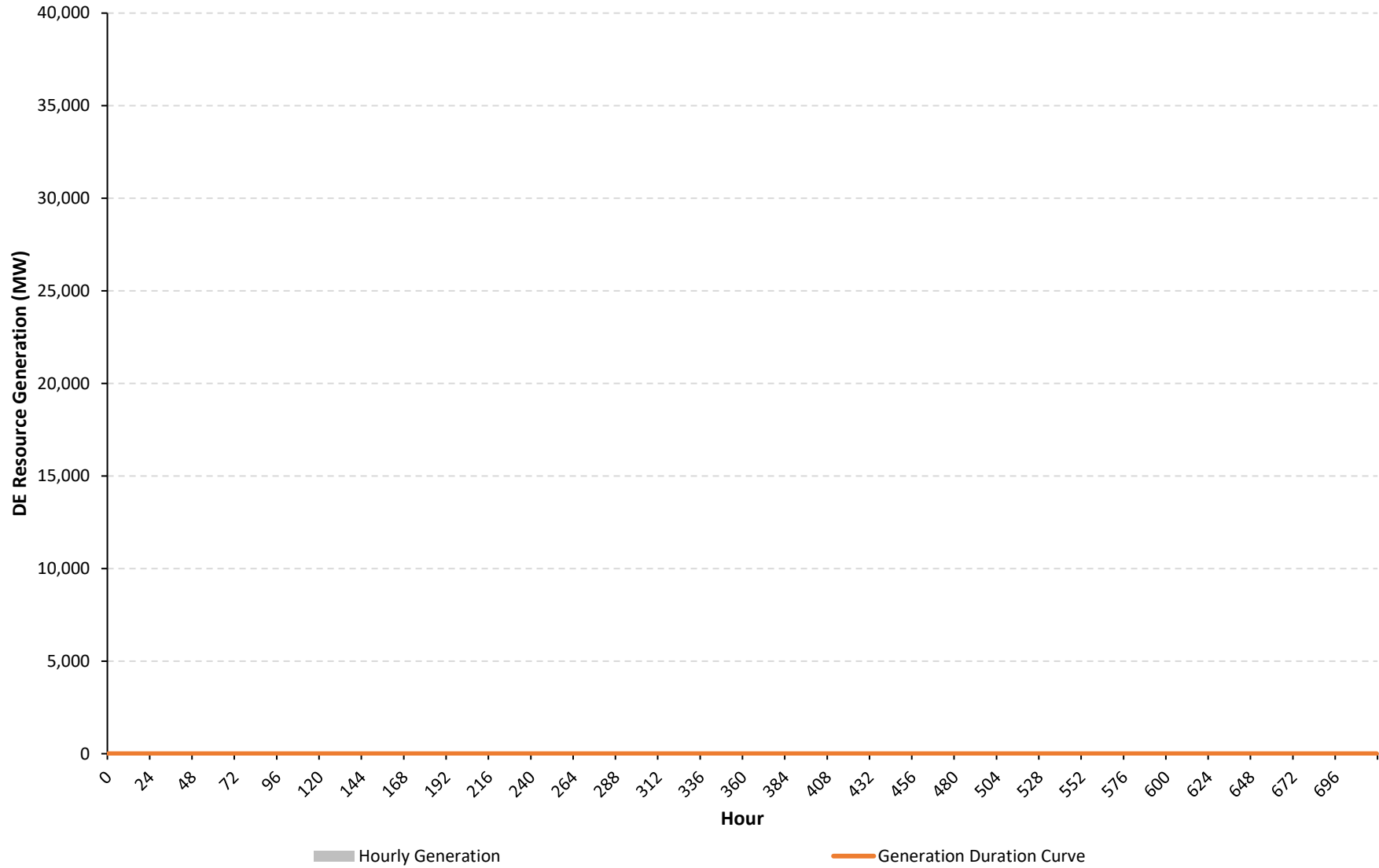
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



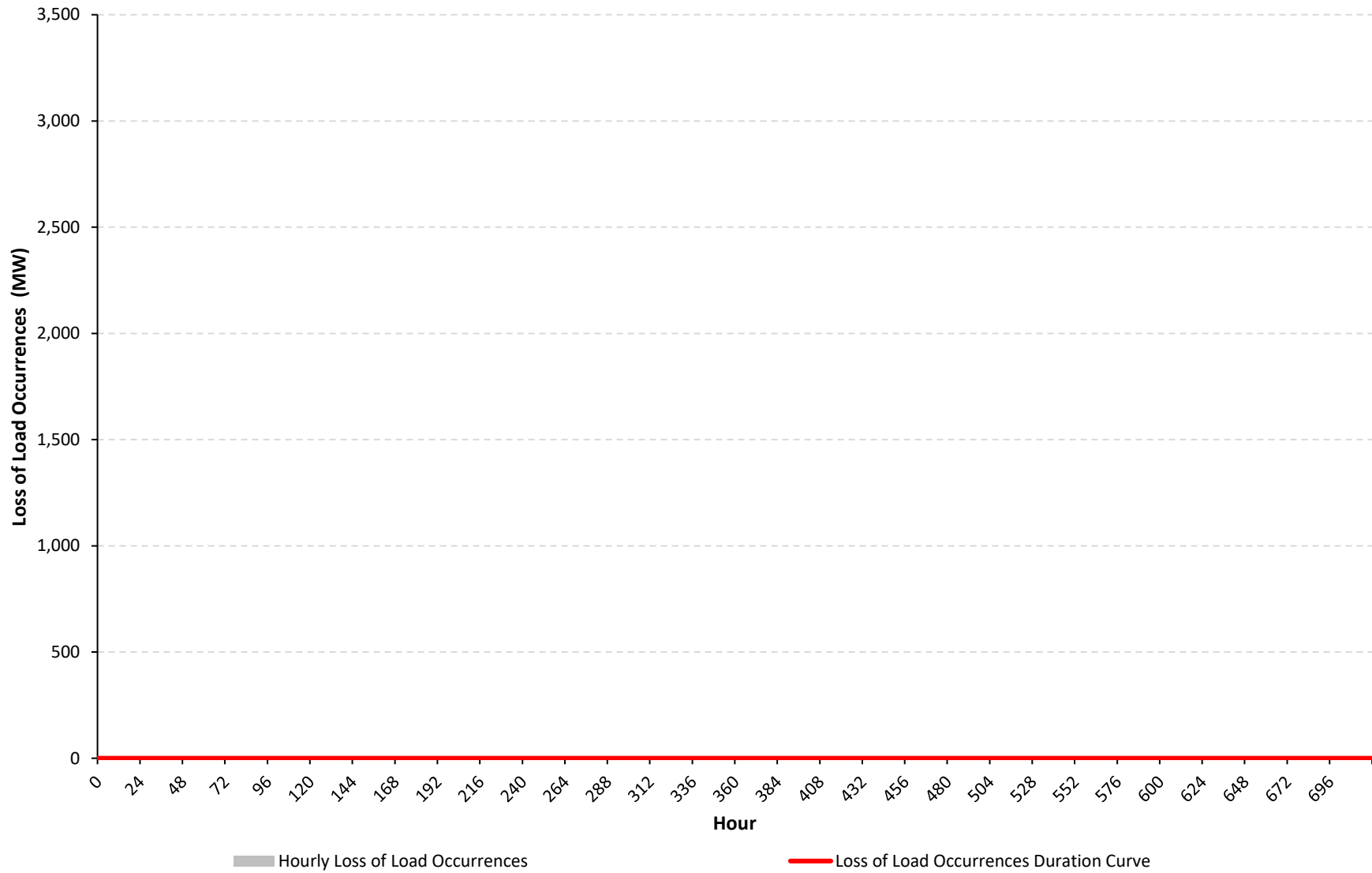
### Generation by Resource Type CLCPA Case - Shoulder - CCP2 Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Shoulder - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Shoulder - CCP2 Resource Set



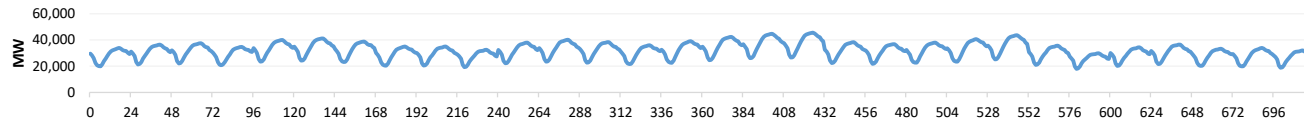
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 4 - CLCPA Case - Summer - CCP2 Resource Set - Heatwave**

**Hourly Results Summary**

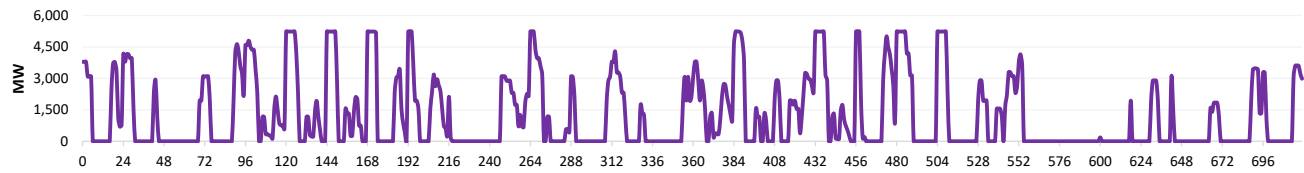
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Heatwave

**Load During Modeling Period**



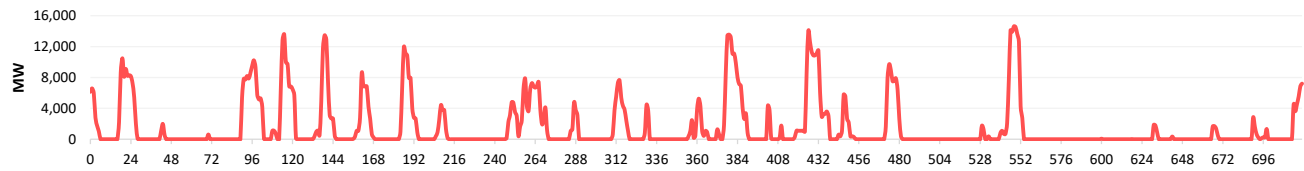
Loss of Load	
Total Hrs.	720
Total MWh	22,707,507
Avg. MW	31,538.2

**Price Responsive Demand Deployed During Modeling Period**



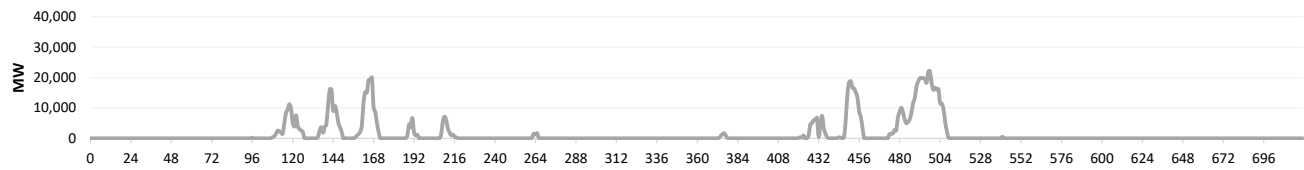
PRD Deployment	
Total Hrs.	335
Total MWh	900,108
Avg. MW	2,686.9

**Battery Energy Storage Deployed During Modeling Period**



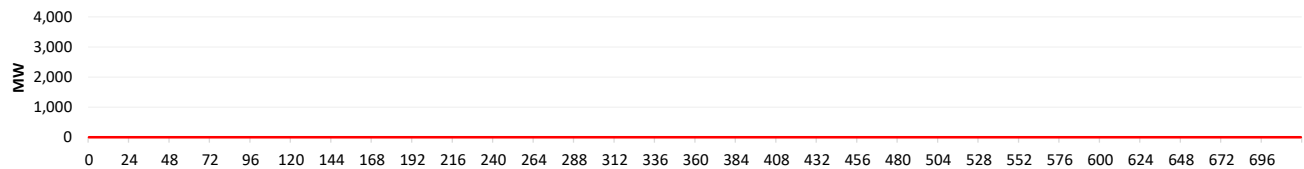
Battery Deployment	
Total Hrs.	256
Total MWh	1,146,324
Avg. MW	4,477.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	147
Total MWh	964,668
Avg. MW	6,562.4

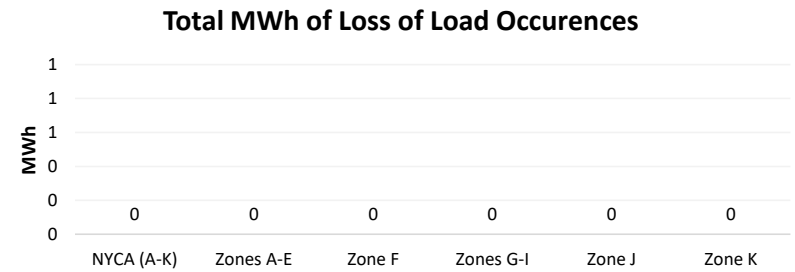
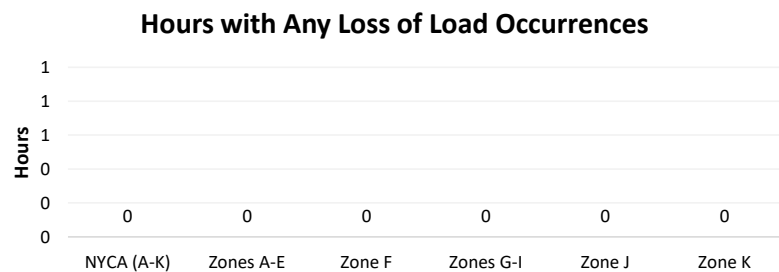
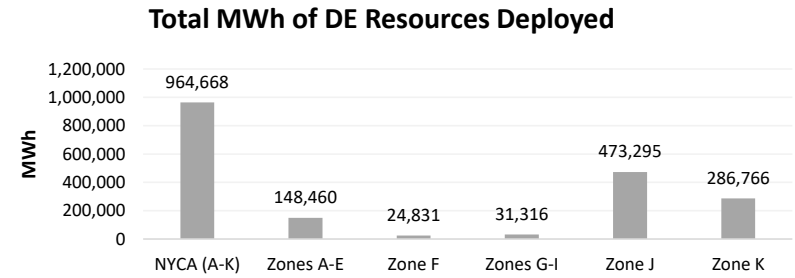
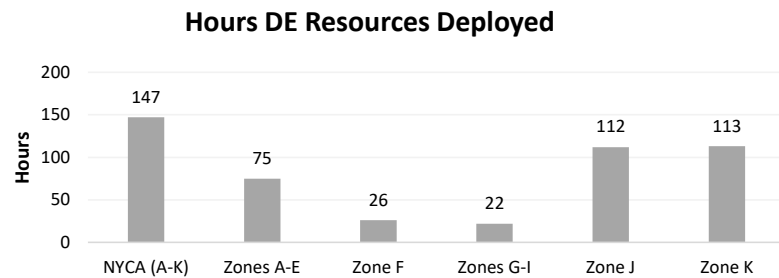
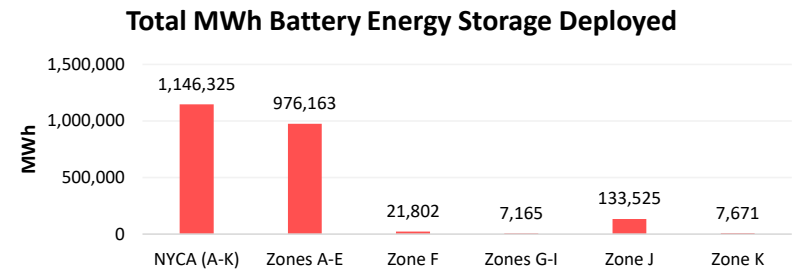
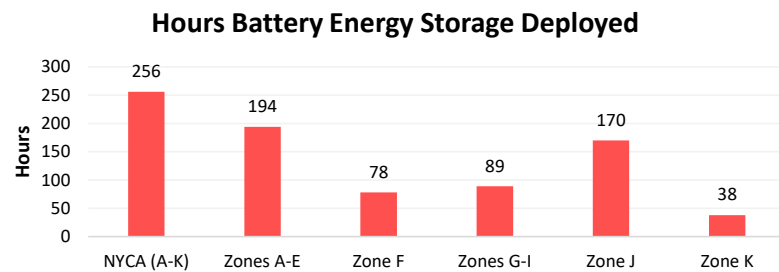
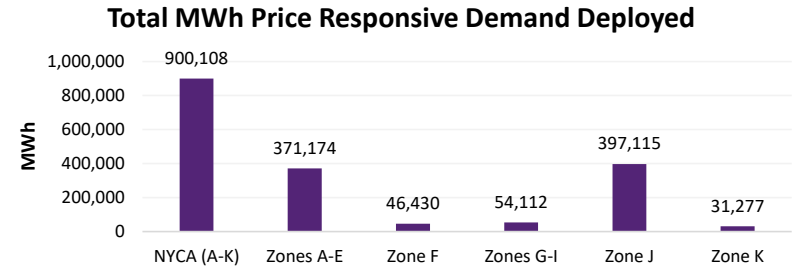
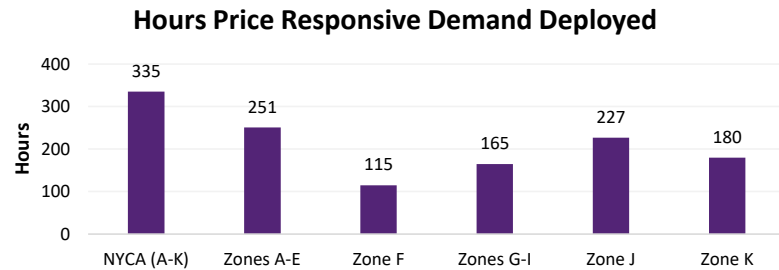
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

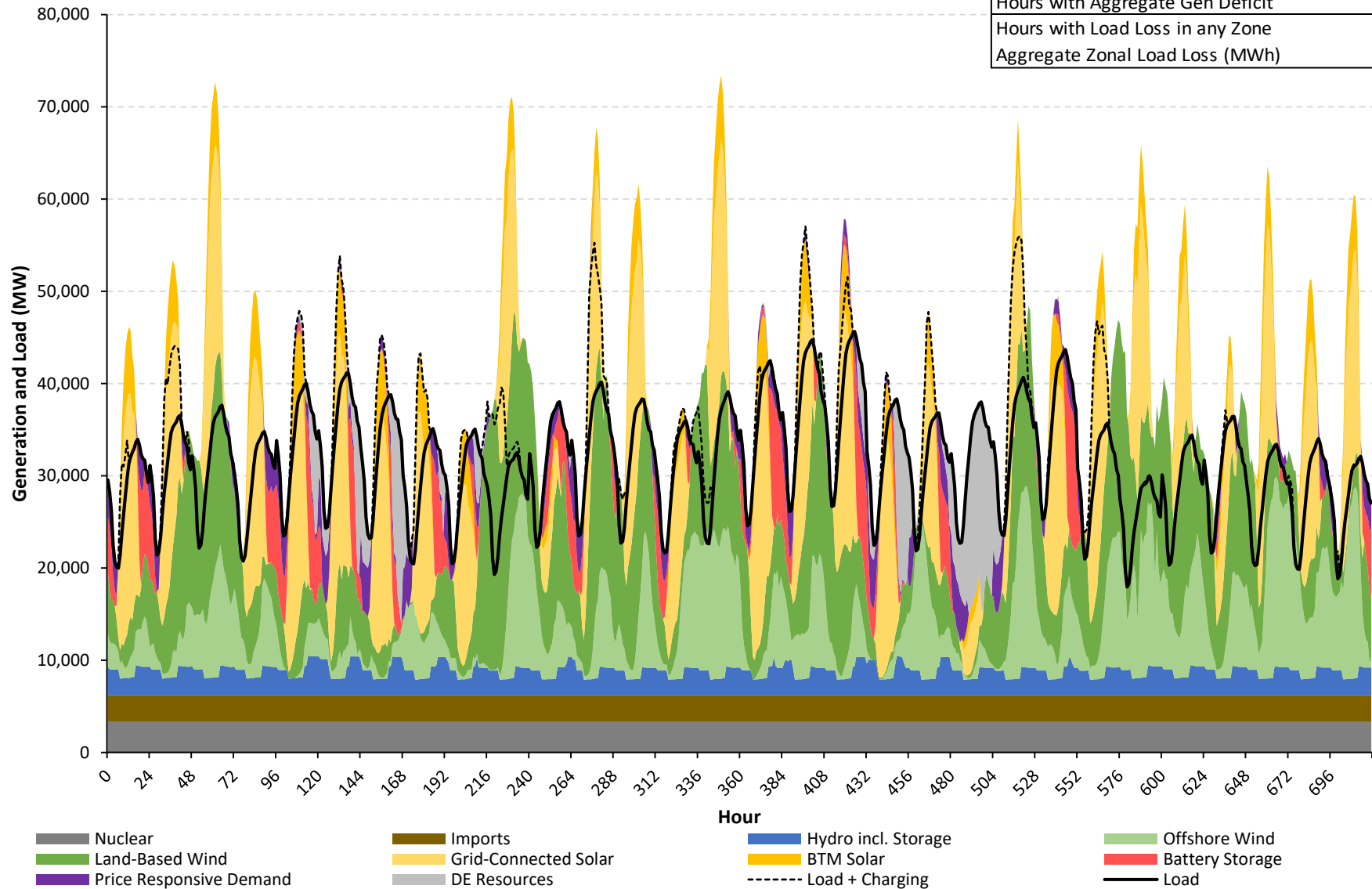
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Heatwave



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Heatwave

Aggregate Load in Period (MWh)	22,707,507
Aggregate Gen in Period (MWh)	27,902,648
Gen Surplus/Deficit (MWh)	5,195,141
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

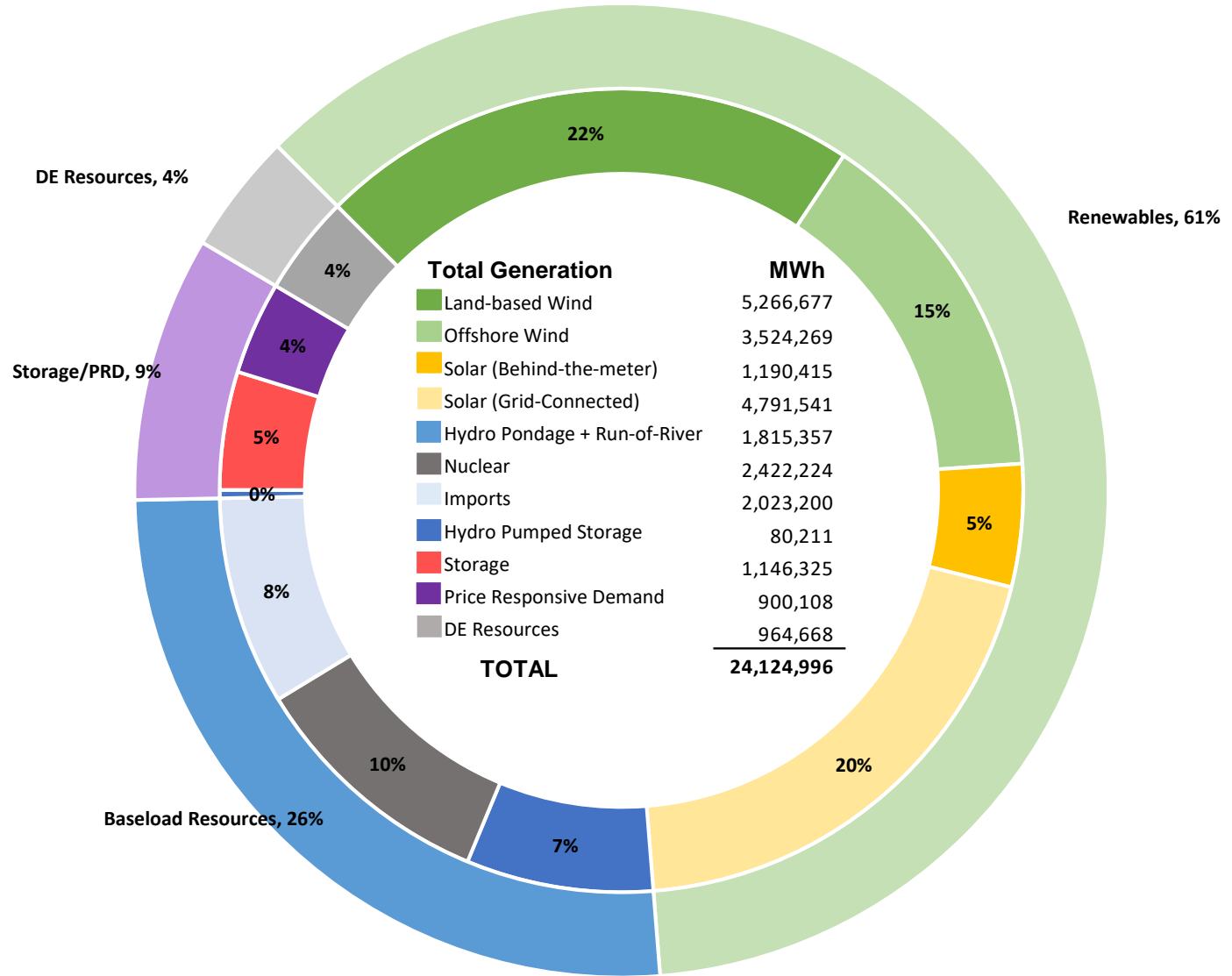


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

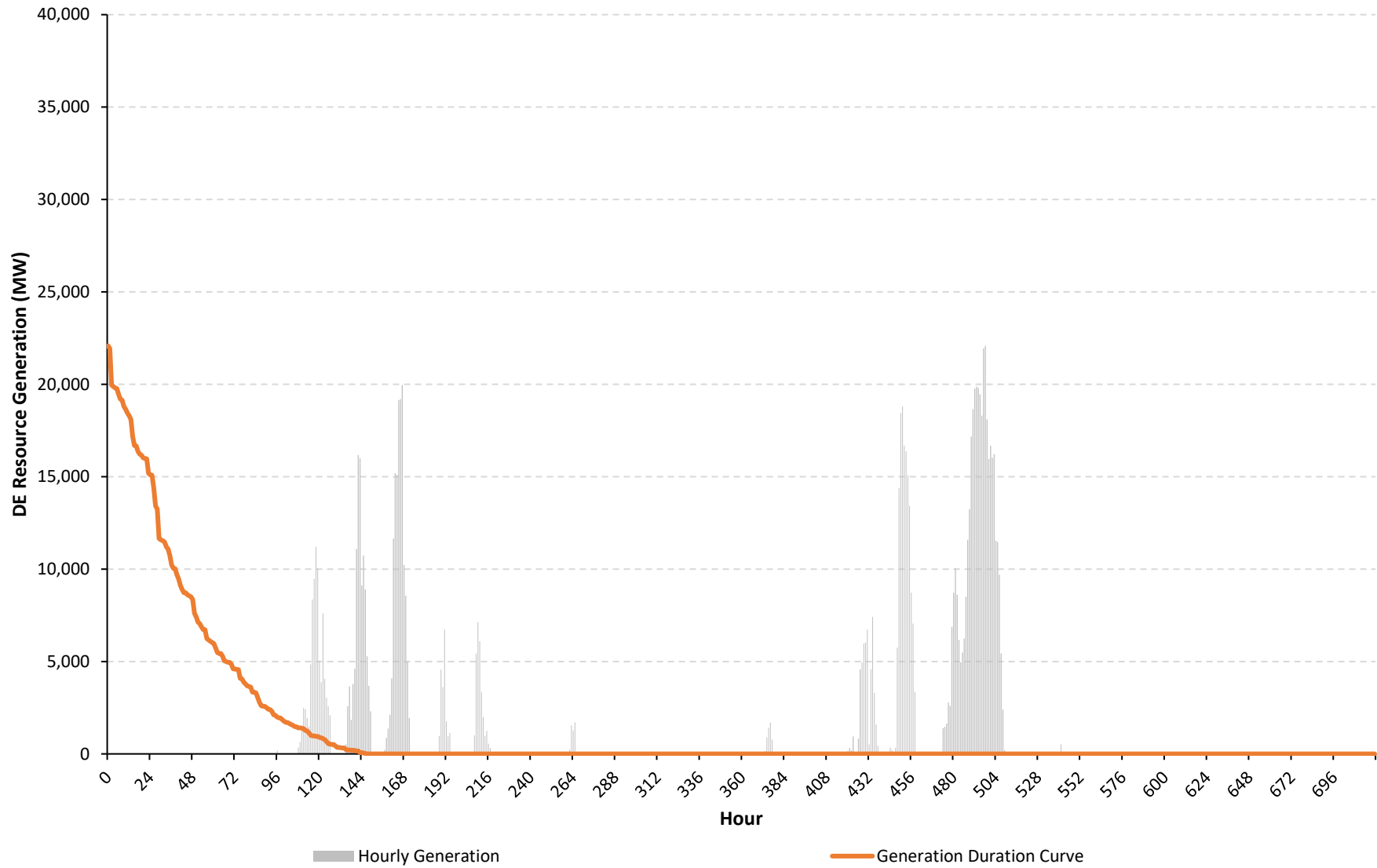
### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Heatwave

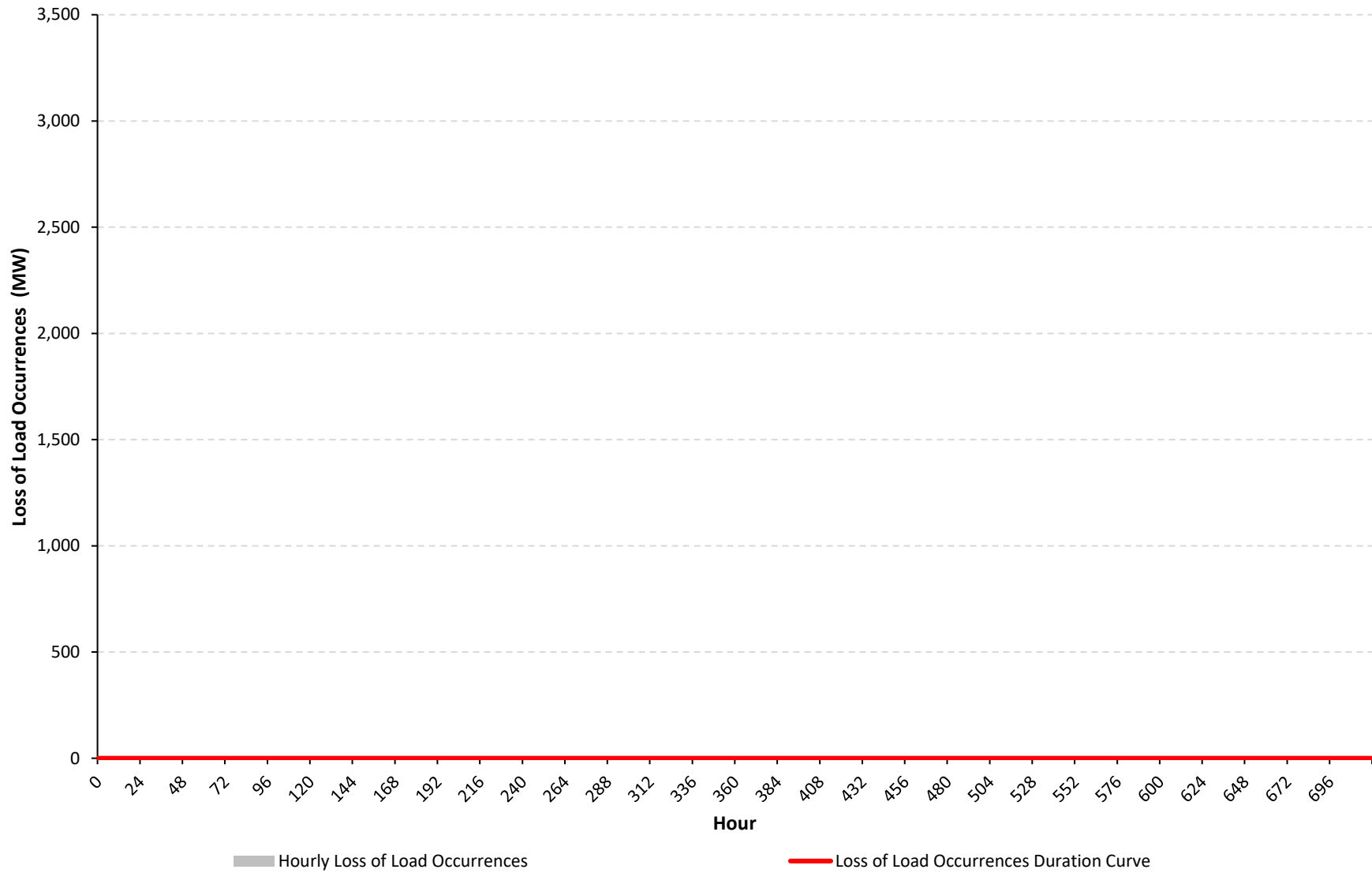




### NYCA DE Resource Generation (MW) CLCPA Case - Summer - CCP2 Resource Set - Heatwave



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - CCP2 Resource Set - Heatwave



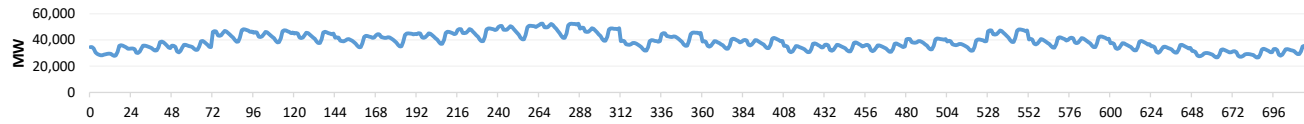
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 5 - CLCPA Case - Winter - CCP2 Resource Set - Cold Snap**

### Hourly Results Summary

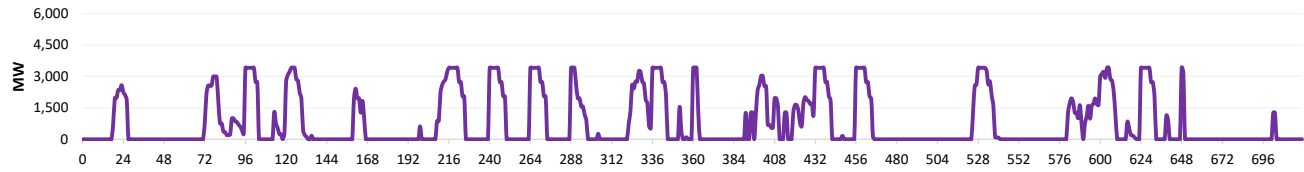
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Cold Snap

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	27,957,446
Avg. MW	38,829.8

**Price Responsive Demand Deployed During Modeling Period**



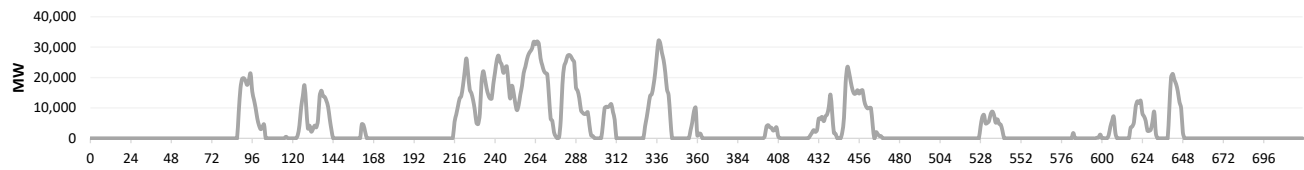
PRD Deployment	
Total Hrs.	266
Total MWh	560,652
Avg. MW	2,107.7

**Battery Energy Storage Deployed During Modeling Period**



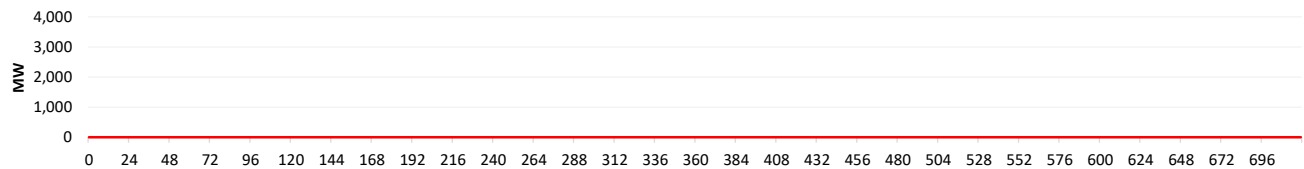
Battery Deployment	
Total Hrs.	200
Total MWh	946,000
Avg. MW	4,730.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	259
Total MWh	2,879,947
Avg. MW	11,119.5

**Loss of Load Occurrences During Modeling Period**

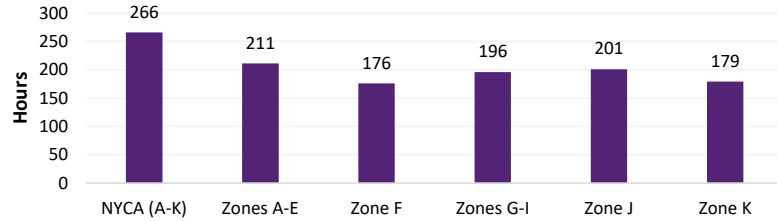


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

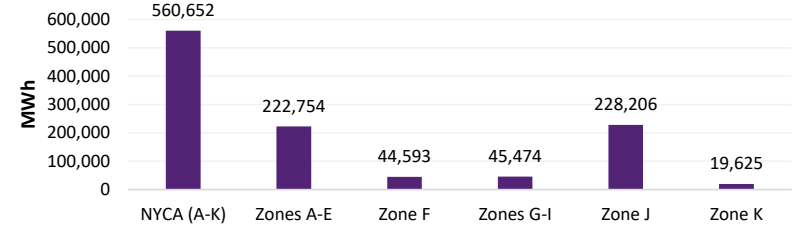
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Cold Snap

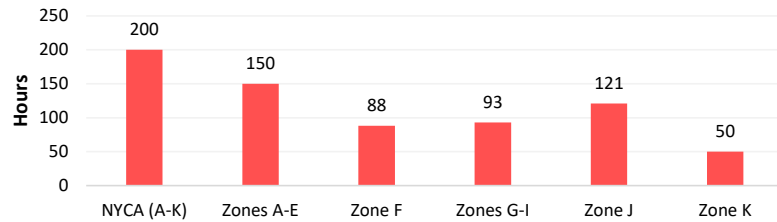
**Hours Price Responsive Demand Deployed**



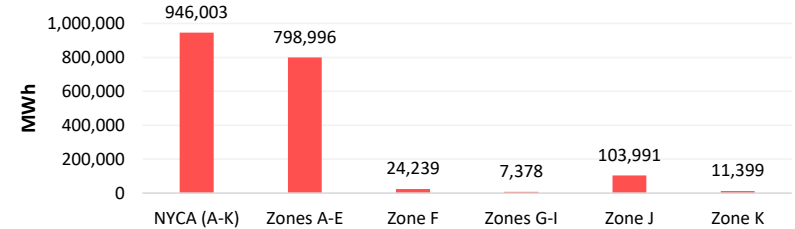
**Total MWh Price Responsive Demand Deployed**



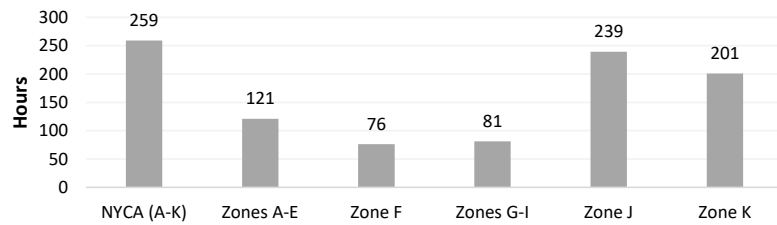
**Hours Battery Energy Storage Deployed**



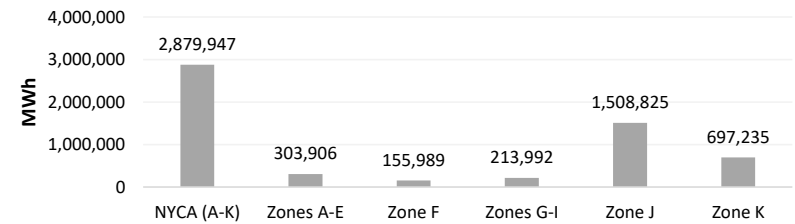
**Total MWh Battery Energy Storage Deployed**



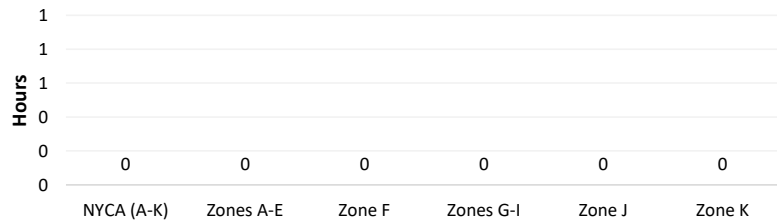
**Hours DE Resources Deployed**



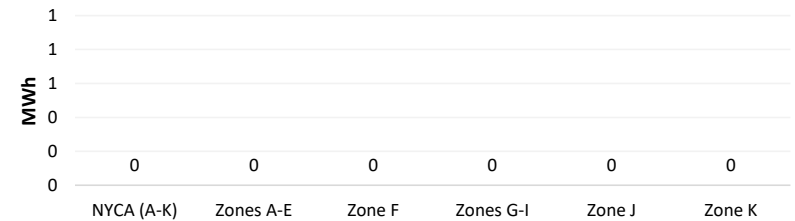
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



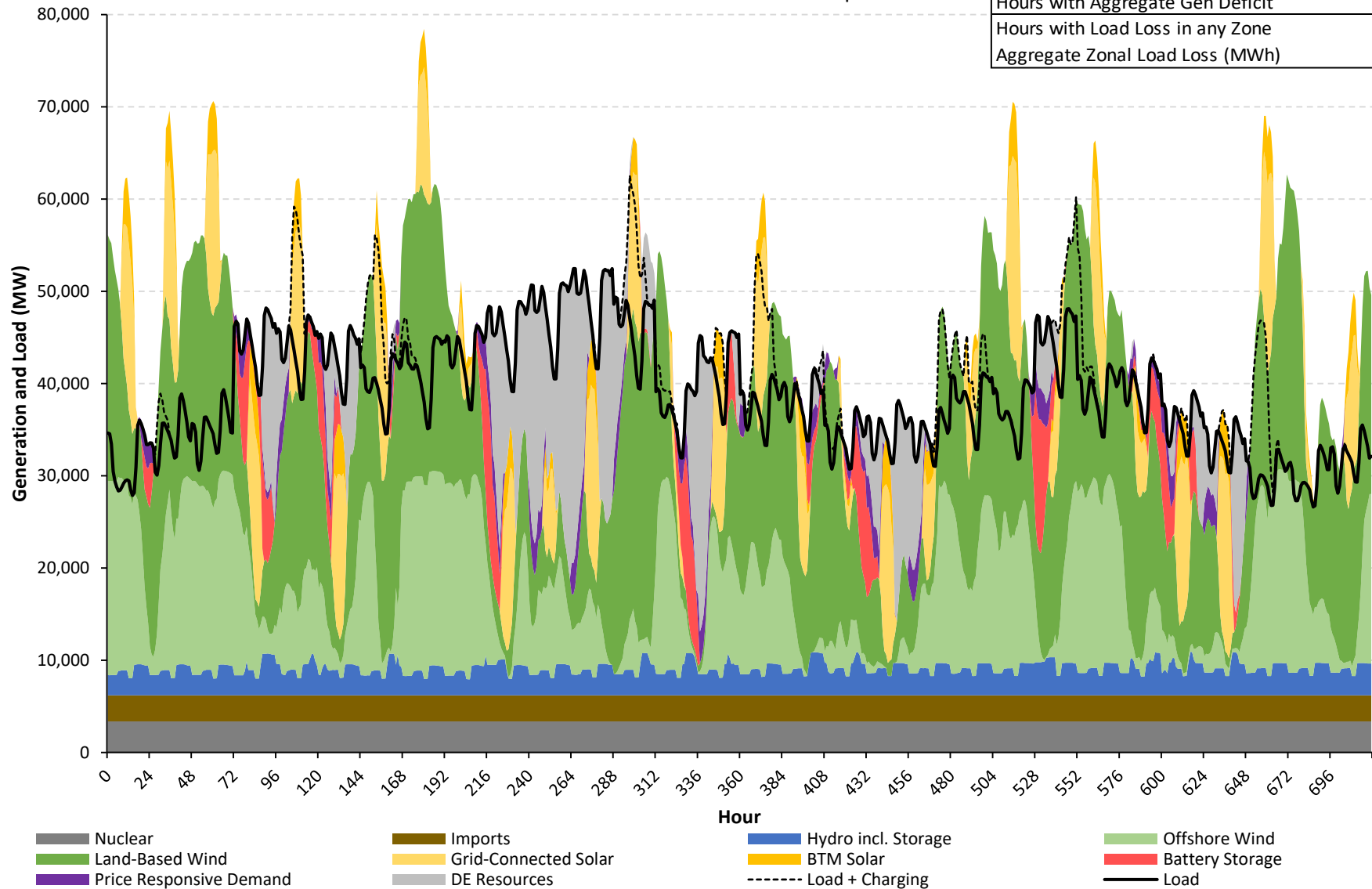
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Cold Snap

Aggregate Load in Period (MWh)	27,957,446
Aggregate Gen in Period (MWh)	33,528,073
Gen Surplus/Deficit (MWh)	5,570,626
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

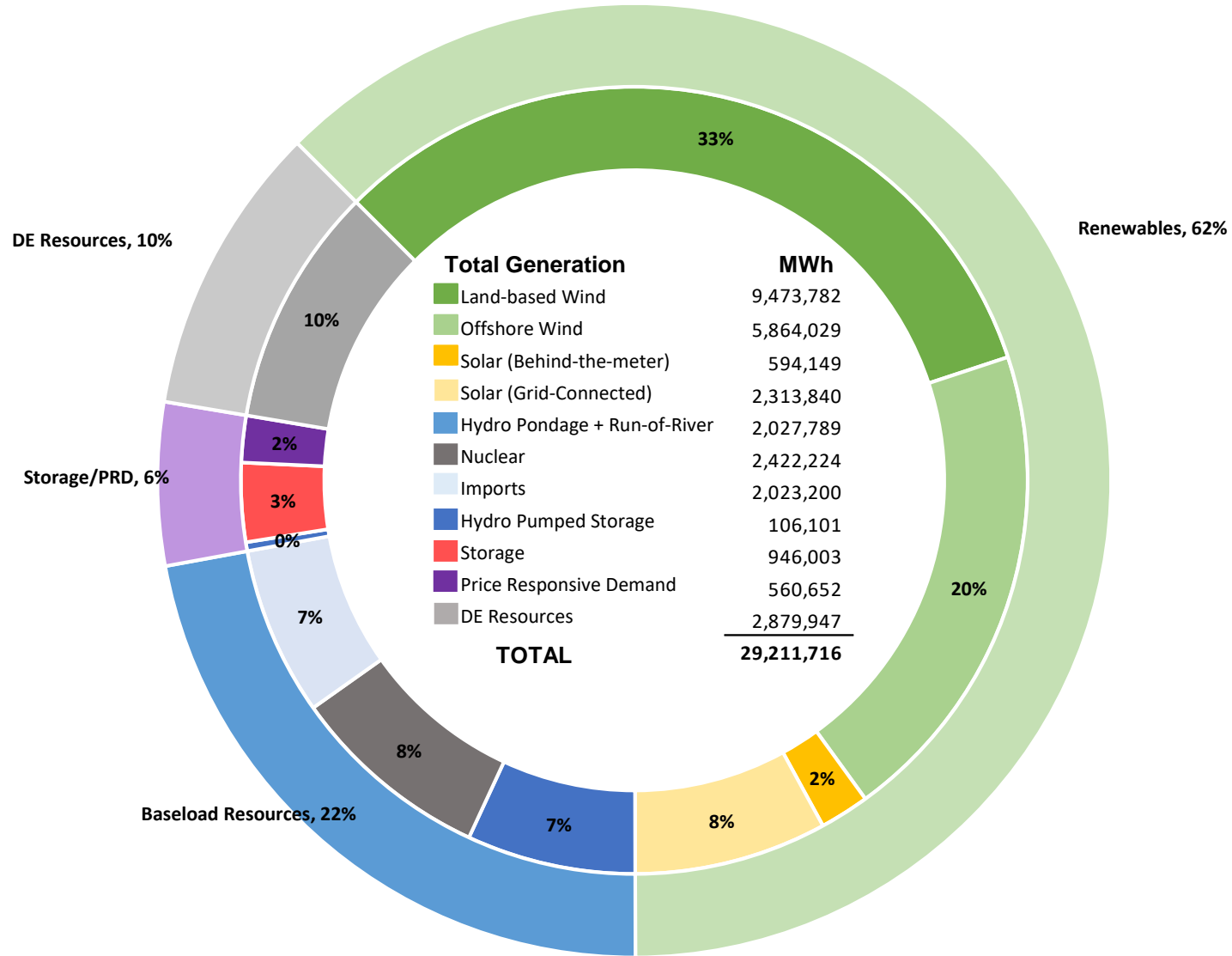


**Note:**

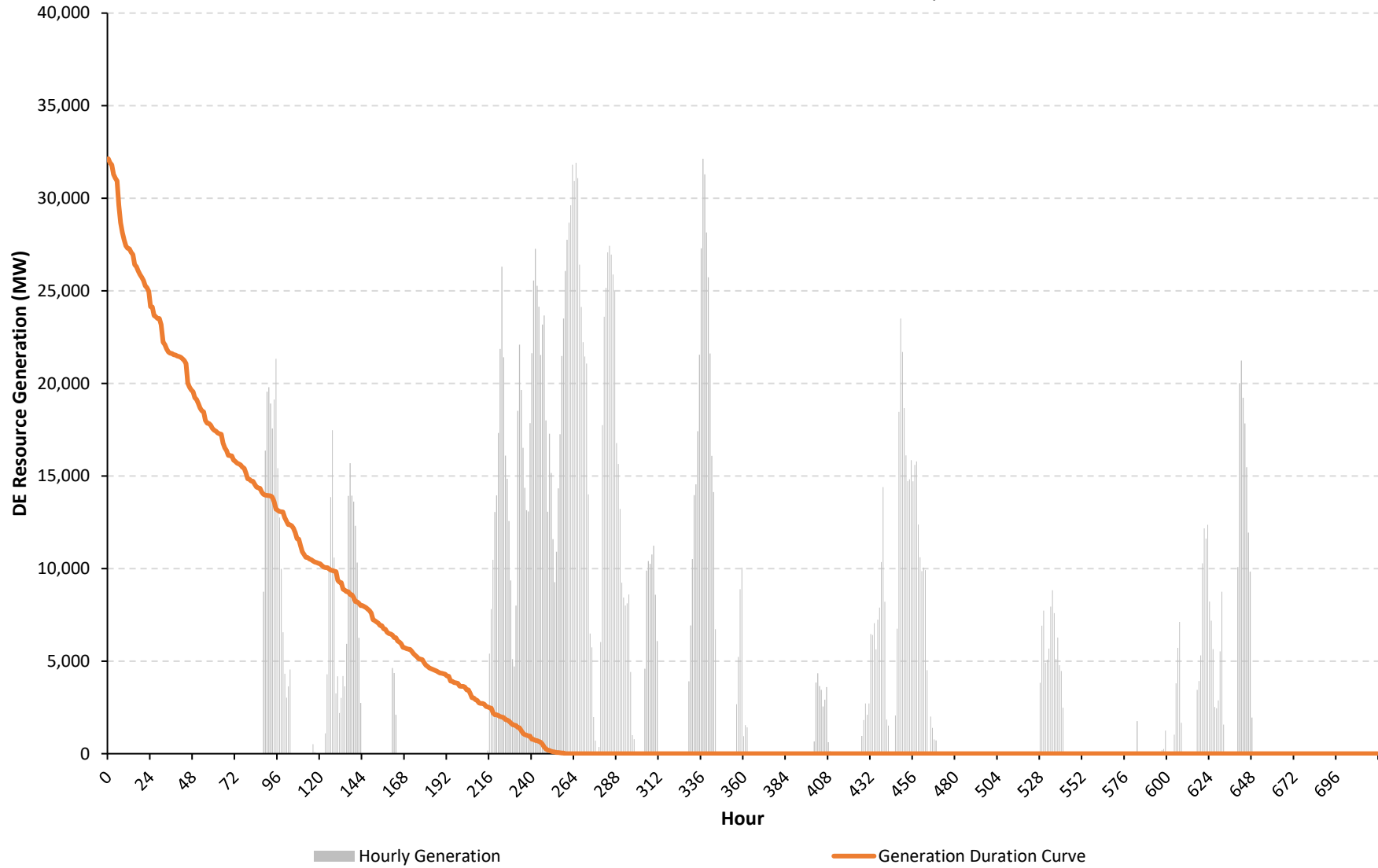
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Cold Snap

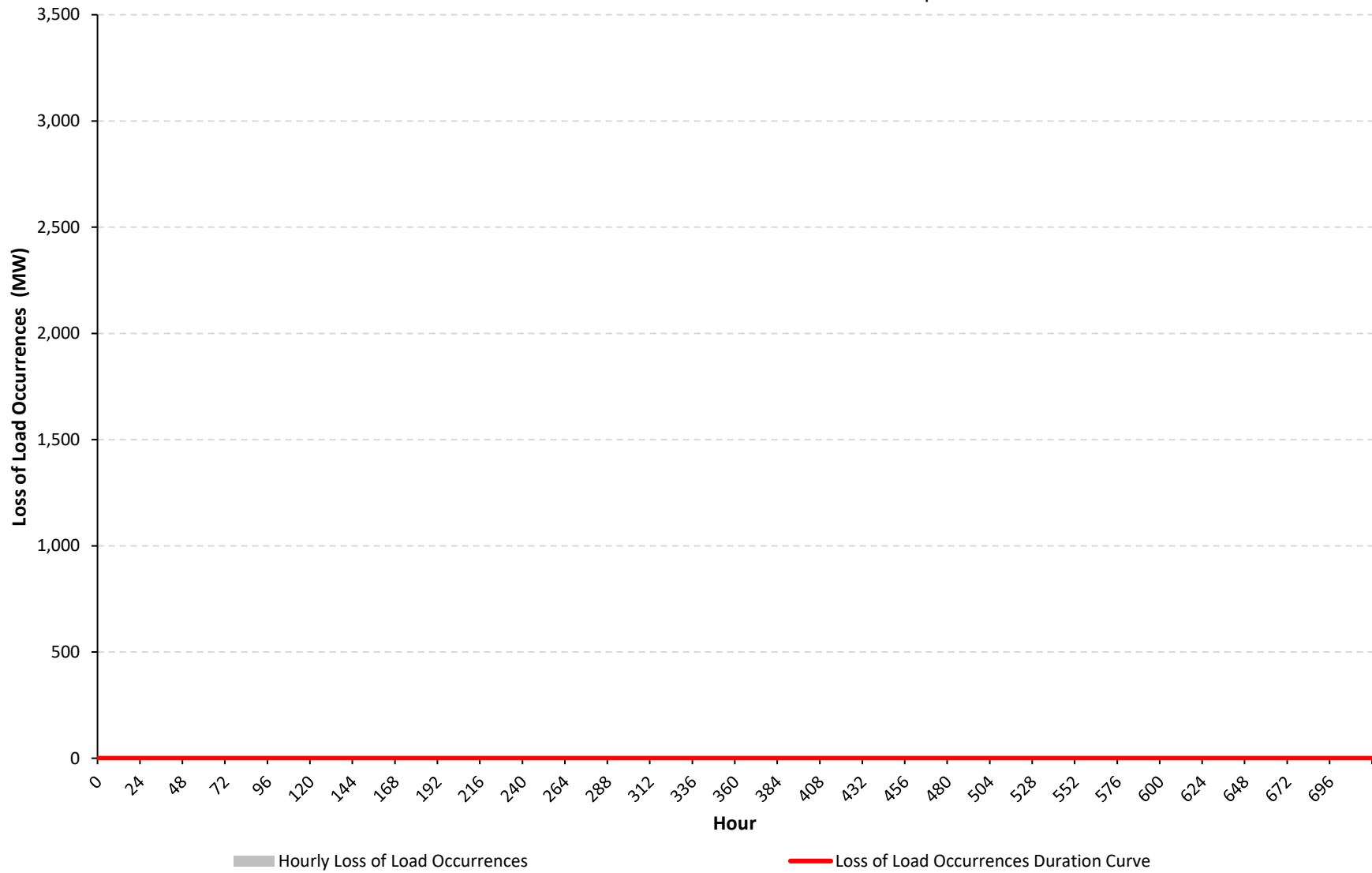


### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Cold Snap





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Cold Snap



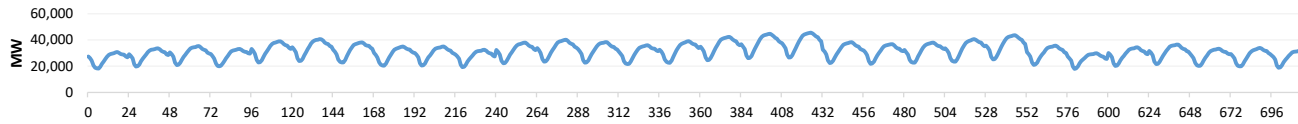
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 6 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

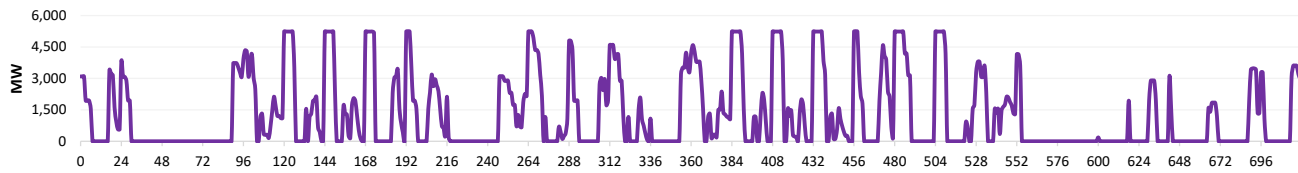
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



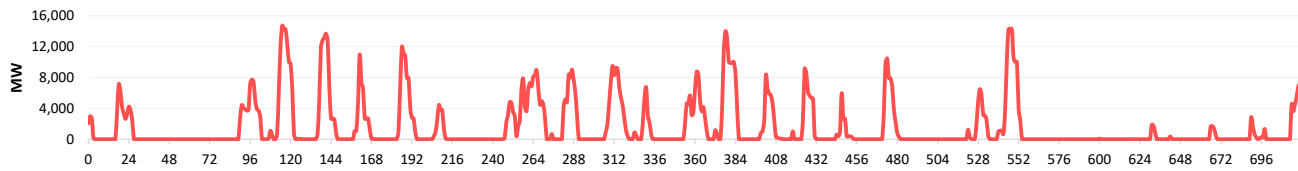
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



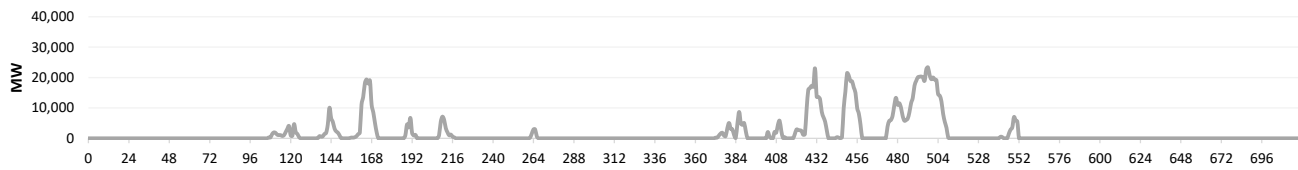
PRD Deployment	
Total Hrs.	344
Total MWh	917,925
Avg. MW	2,668.4

**Battery Energy Storage Deployed During Modeling Period**



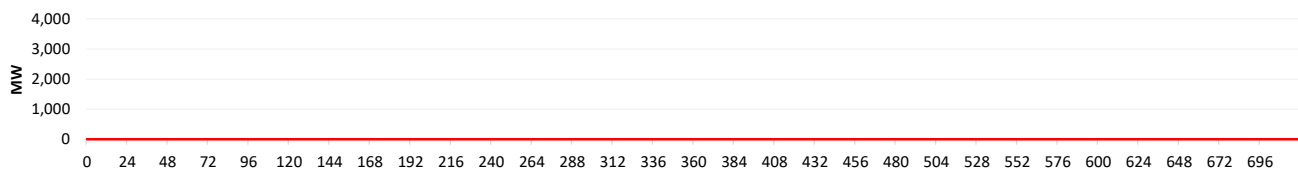
Battery Deployment	
Total Hrs.	264
Total MWh	1,177,628
Avg. MW	4,460.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	179
Total MWh	1,171,656
Avg. MW	6,545.6

**Loss of Load Occurrences During Modeling Period**

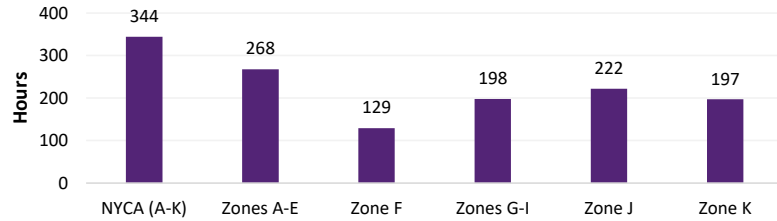


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

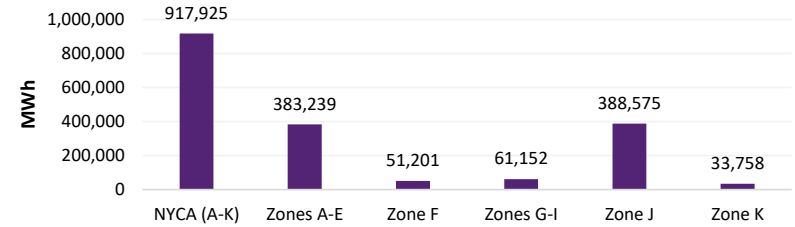
### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

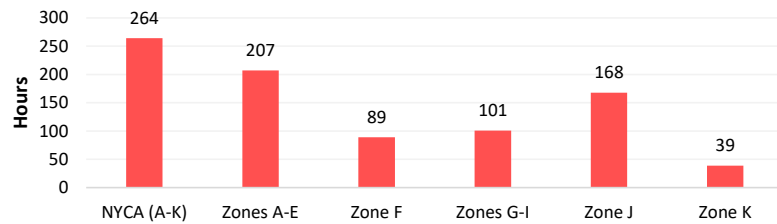
**Hours Price Responsive Demand Deployed**



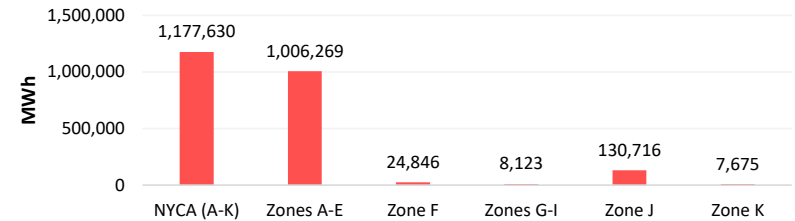
**Total MWh Price Responsive Demand Deployed**



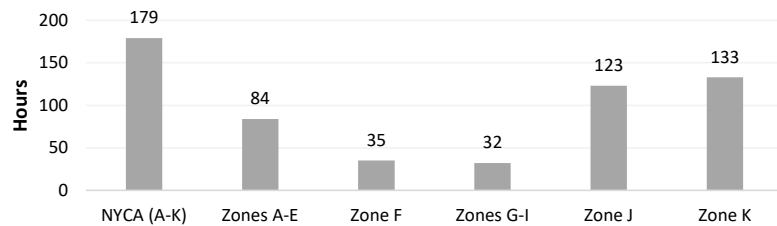
**Hours Battery Energy Storage Deployed**



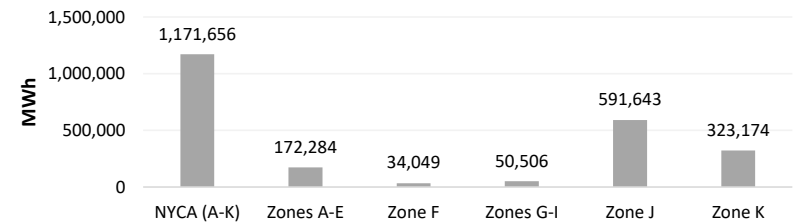
**Total MWh Battery Energy Storage Deployed**



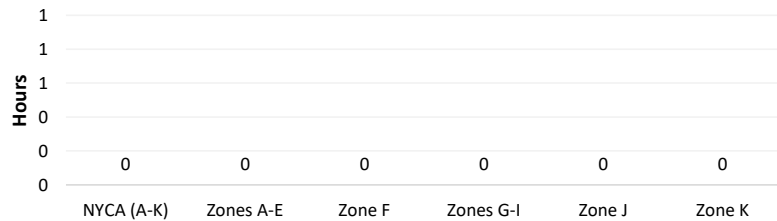
**Hours DE Resources Deployed**



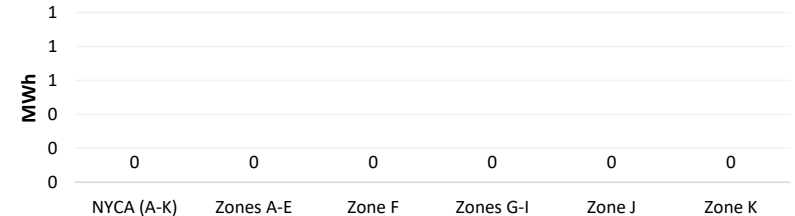
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

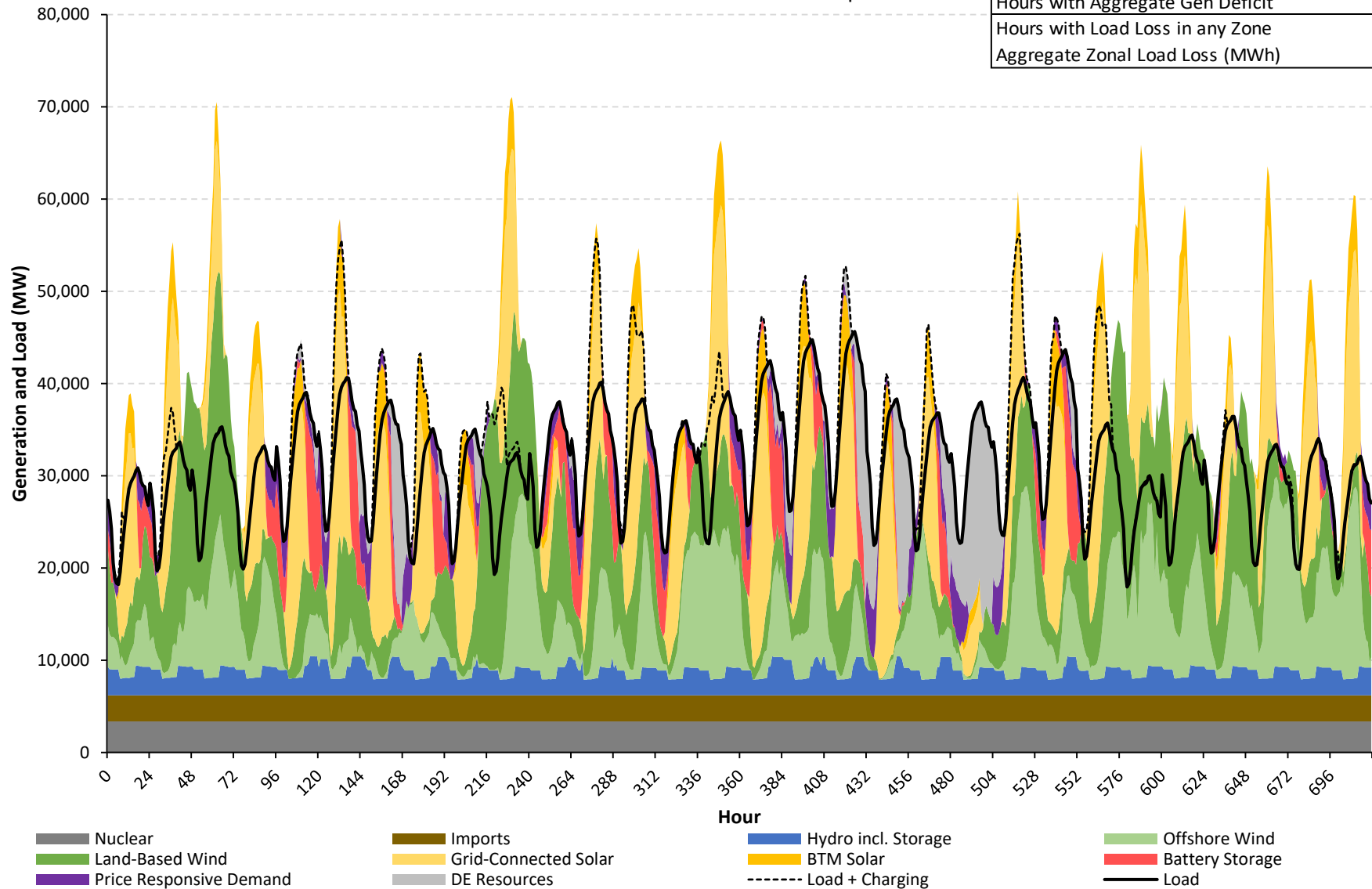


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	27,218,502
Gen Surplus/Deficit (MWh)	4,742,546
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

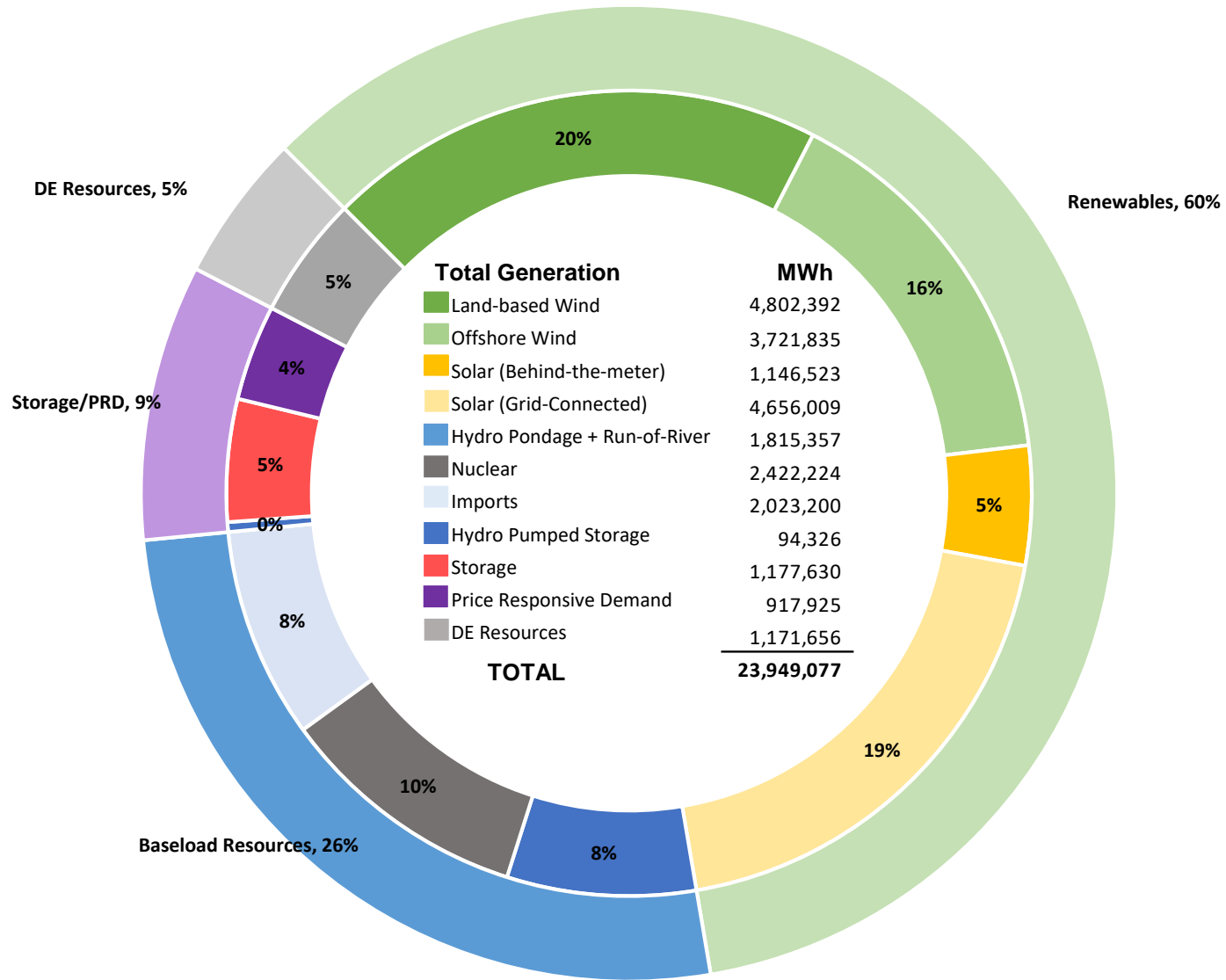


**Note:**

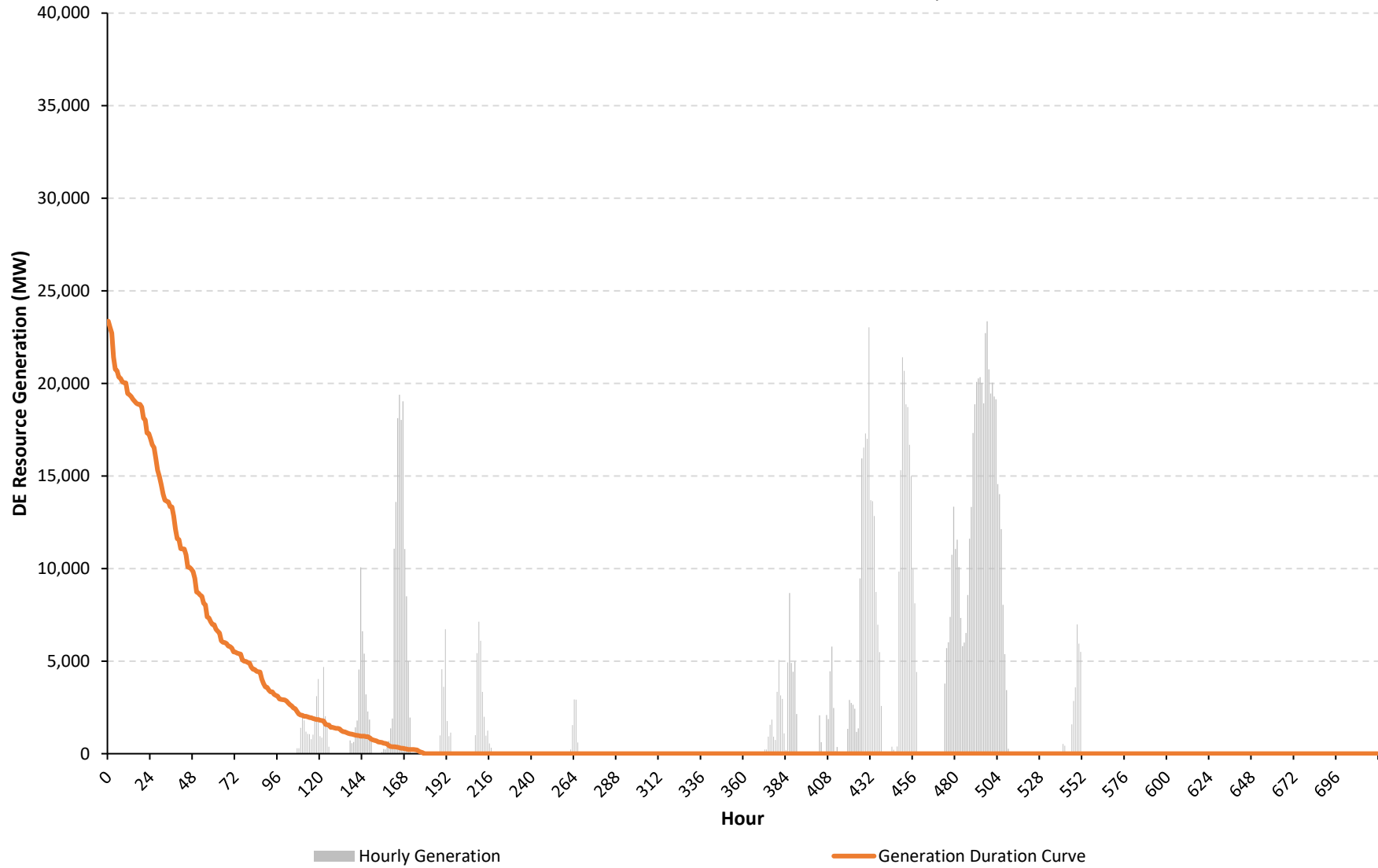
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

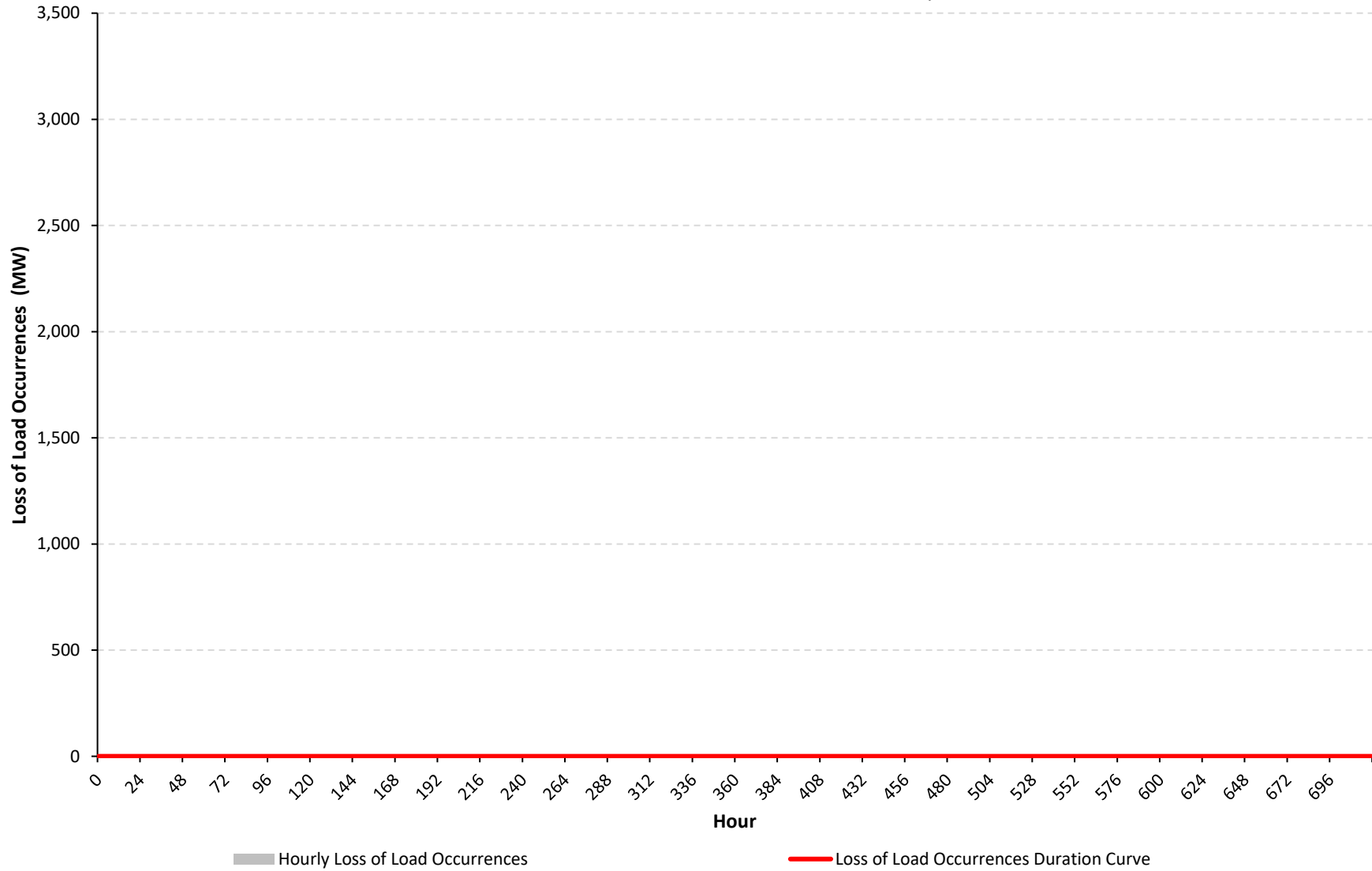
CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Upstate





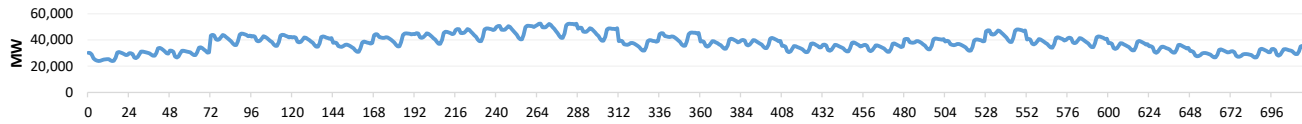
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 7 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate**

### Hourly Results Summary

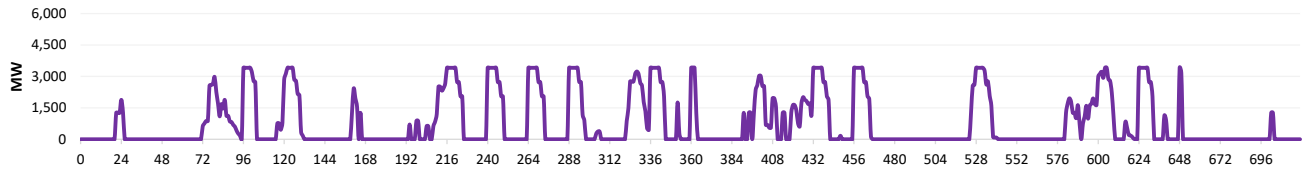
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



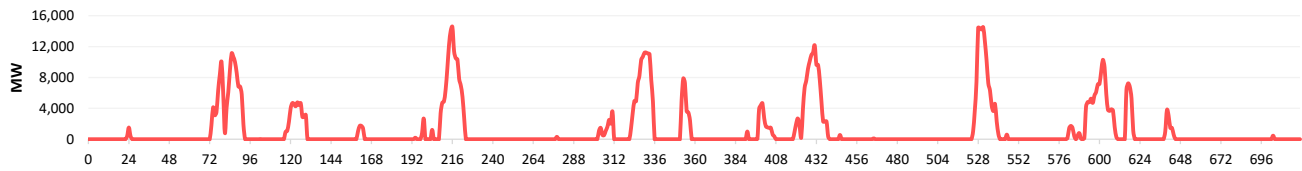
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



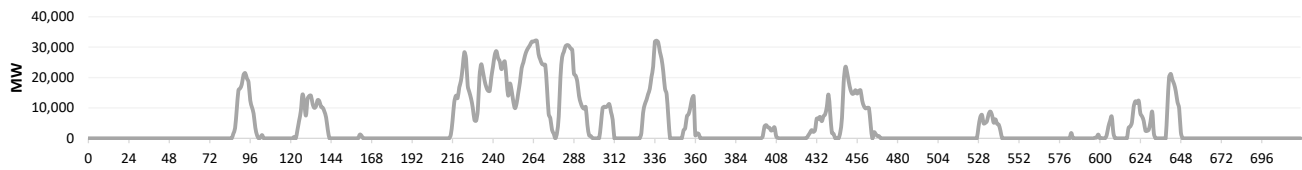
PRD Deployment	
Total Hrs.	261
Total MWh	554,658
Avg. MW	2,125.1

**Battery Energy Storage Deployed During Modeling Period**



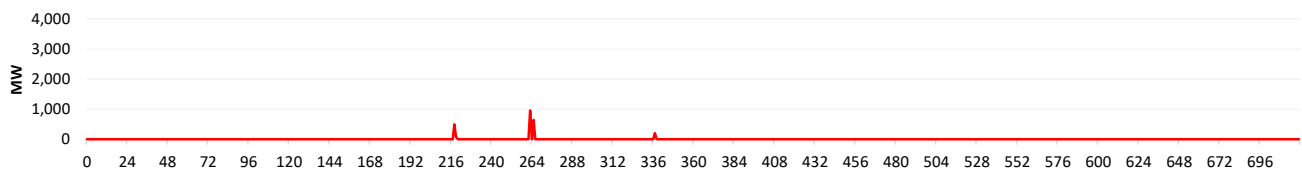
Battery Deployment	
Total Hrs.	184
Total MWh	871,384
Avg. MW	4,735.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	259
Total MWh	3,076,530
Avg. MW	11,878.5

**Loss of Load Occurrences During Modeling Period**

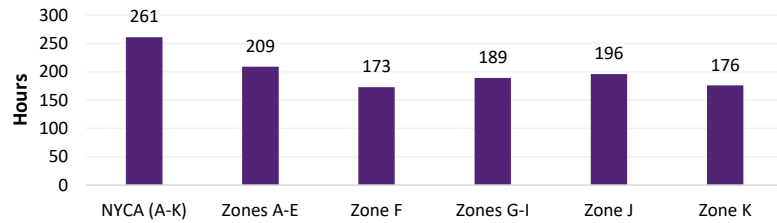


Loss of Load Occurrences	
Total Hrs.	5
Total MWh	2,373
Avg. MW	474.7

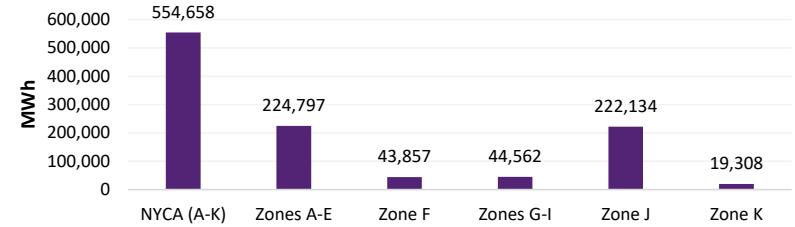
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

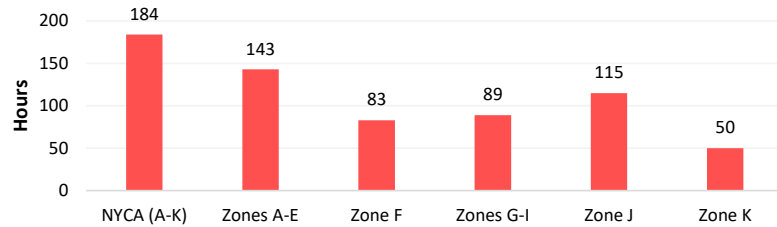
**Hours Price Responsive Demand Deployed**



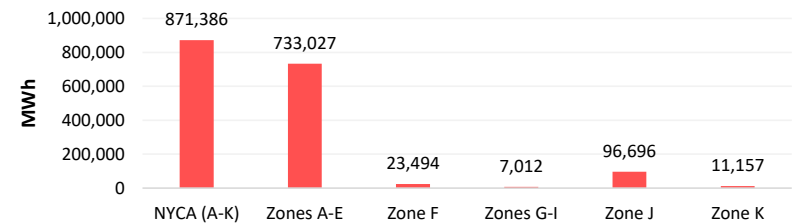
**Total MWh Price Responsive Demand Deployed**



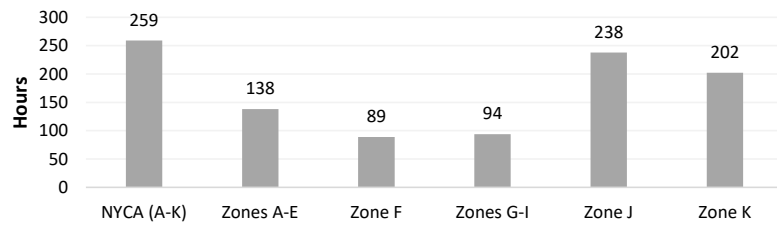
**Hours Battery Energy Storage Deployed**



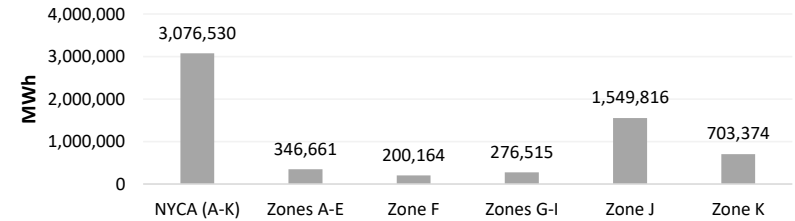
**Total MWh Battery Energy Storage Deployed**



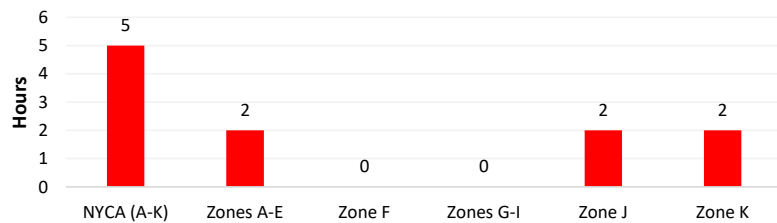
**Hours DE Resources Deployed**



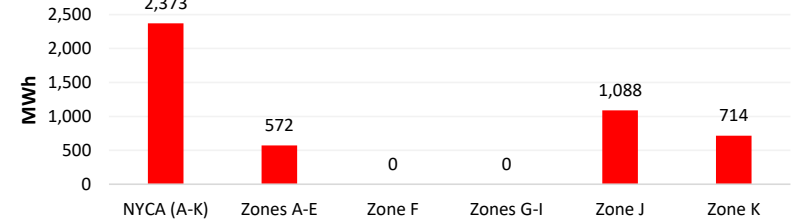
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



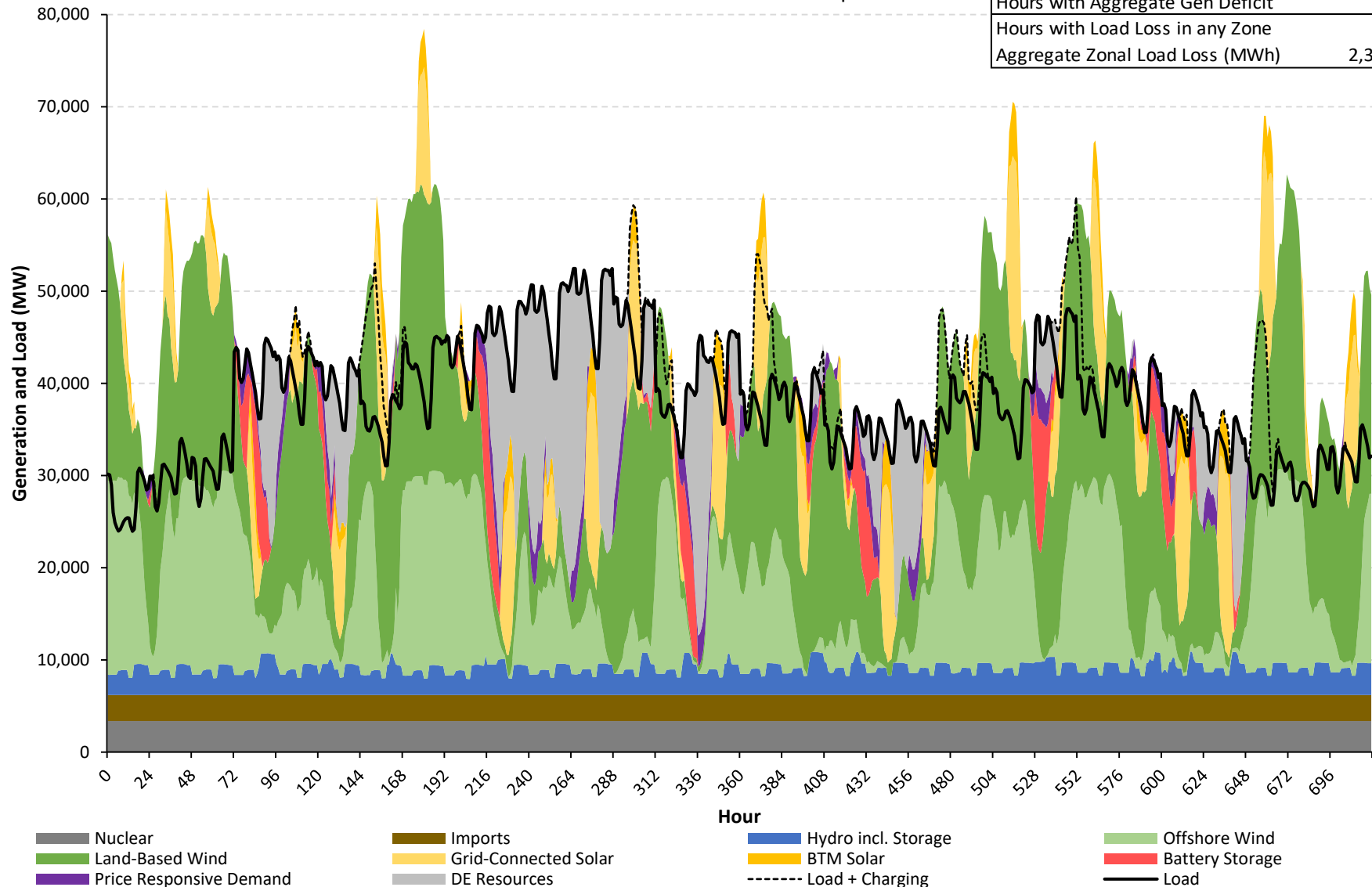
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	32,669,796
Gen Surplus/Deficit (MWh)	5,347,759
Hours with Aggregate Gen Deficit	5
Hours with Load Loss in any Zone	5
Aggregate Zonal Load Loss (MWh)	2,373

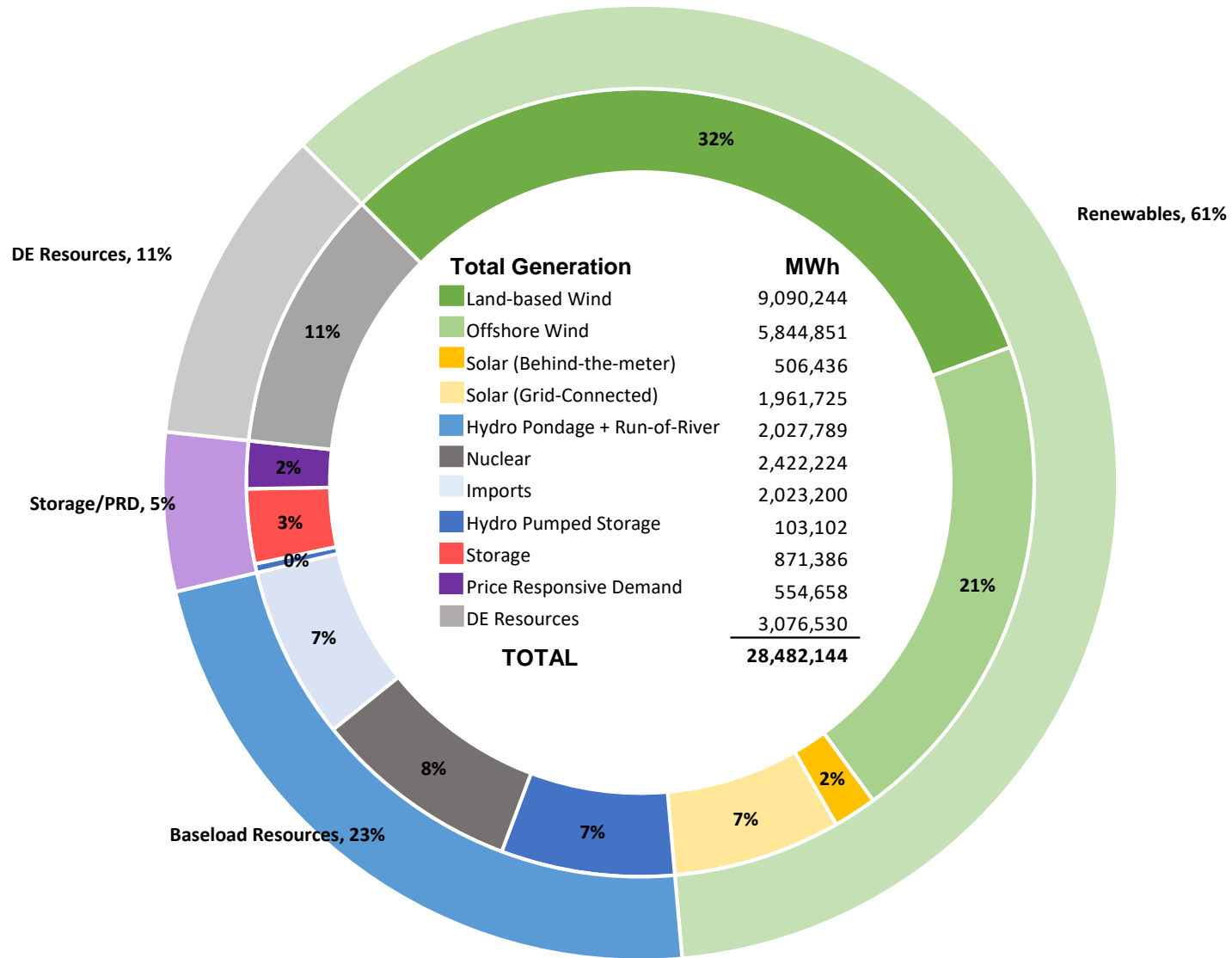


**Note:**

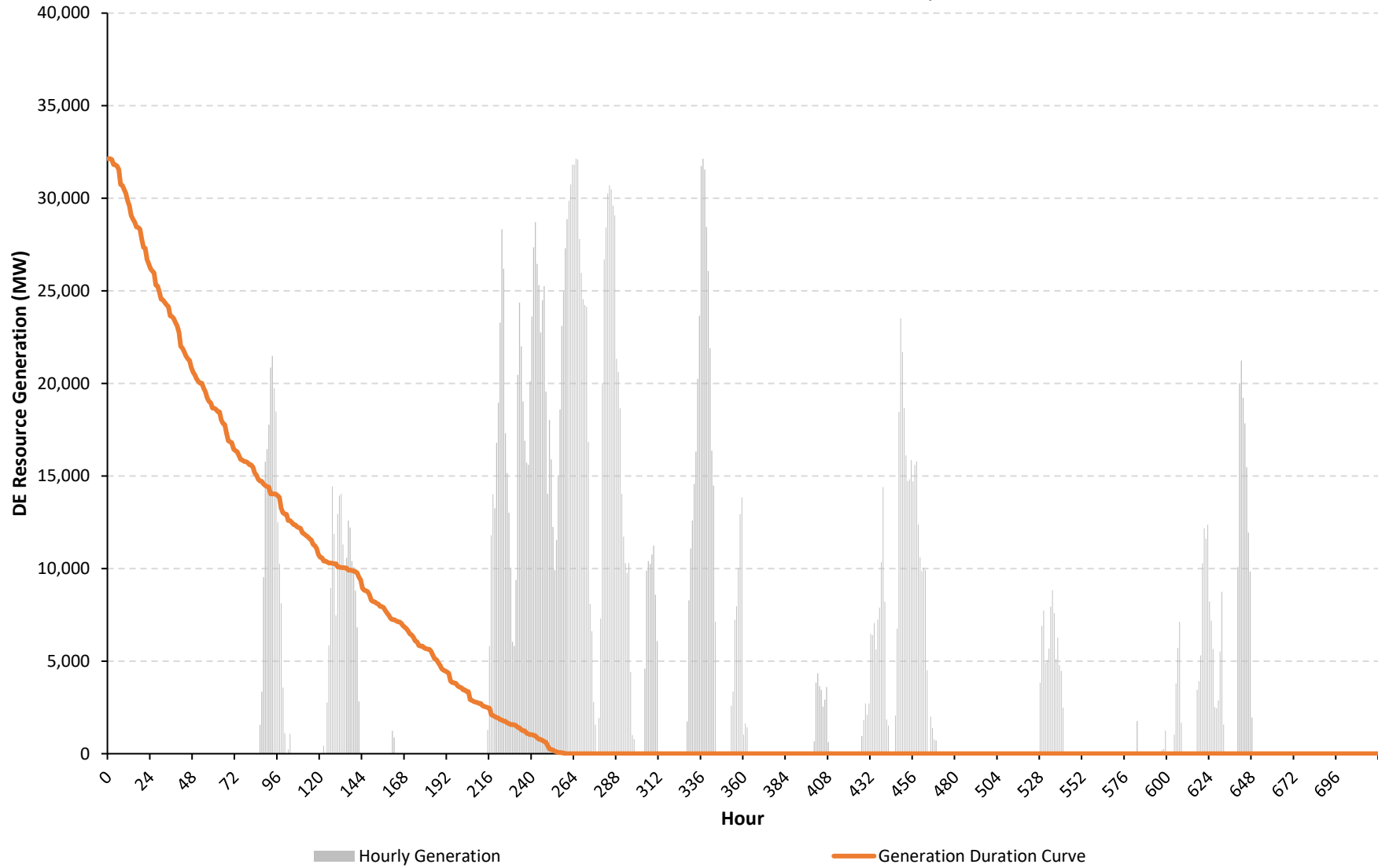
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

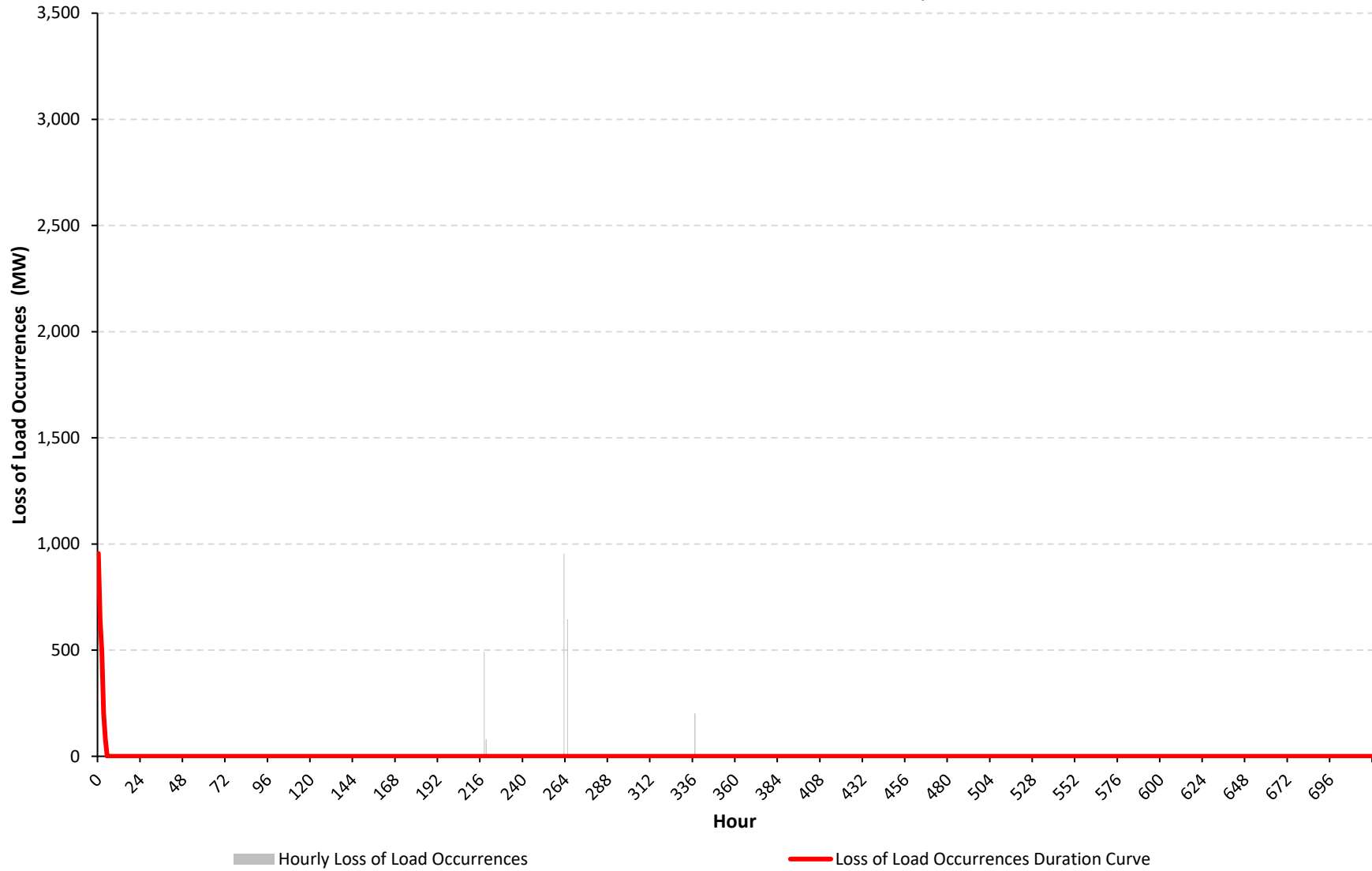
CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Upstate



## **Appendix C. Diagnostic Charts for All Cases**

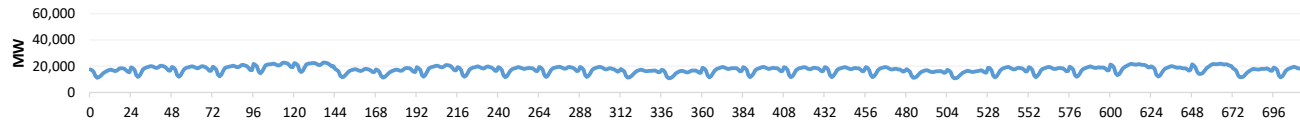
### **Case 8 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate**



**Hourly Results Summary**

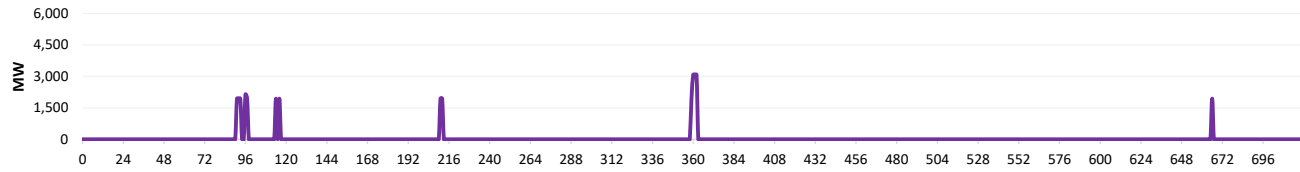
Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



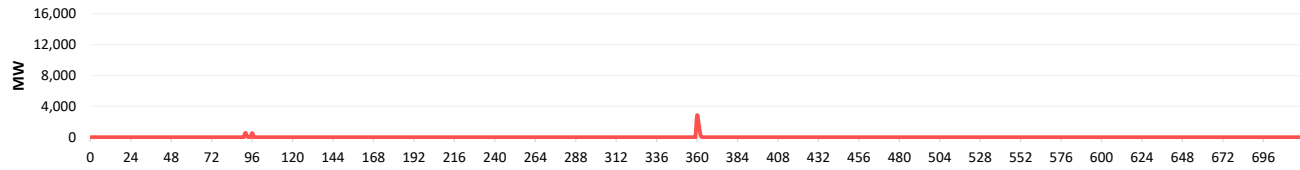
Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



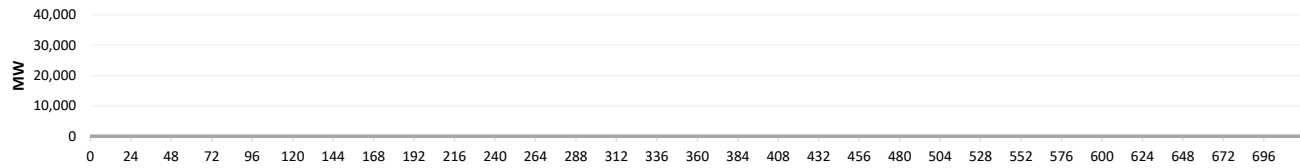
PRD Deployment	
Total Hrs.	14
Total MWh	30,776
Avg. MW	2,198.3

**Battery Energy Storage Deployed During Modeling Period**



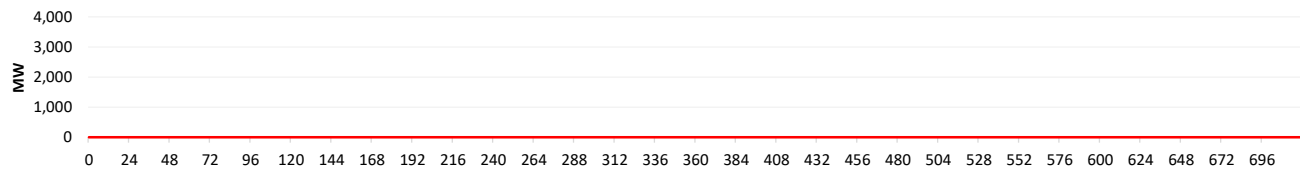
Battery Deployment	
Total Hrs.	6
Total MWh	6,125
Avg. MW	1,020.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

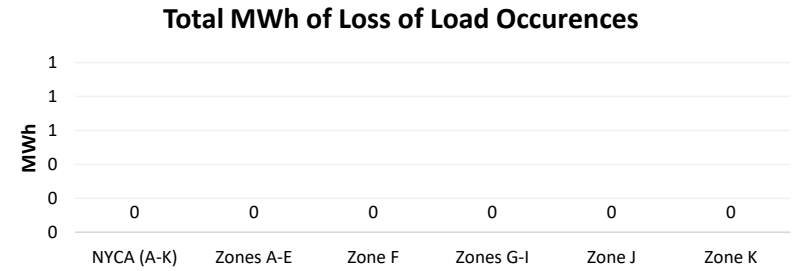
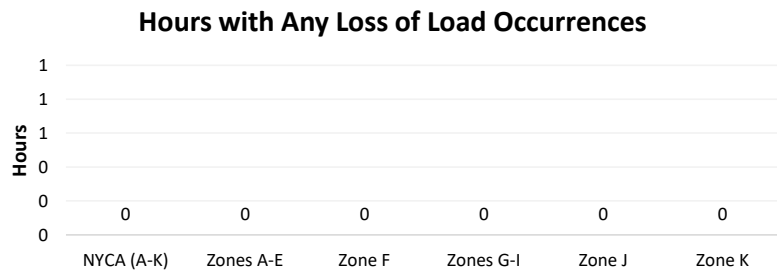
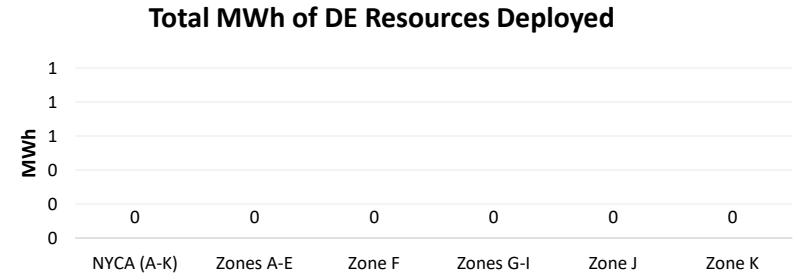
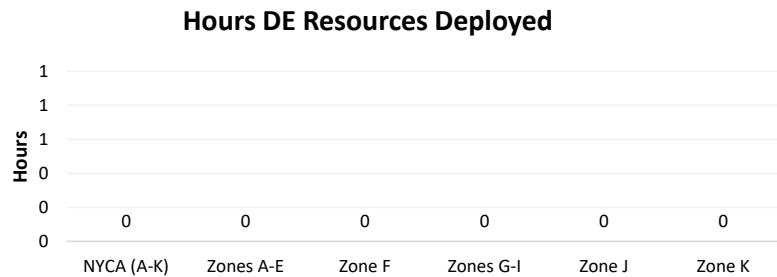
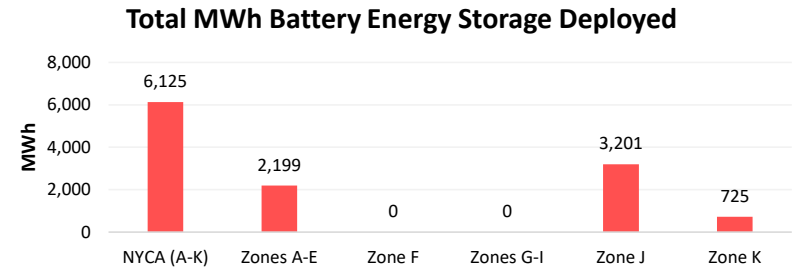
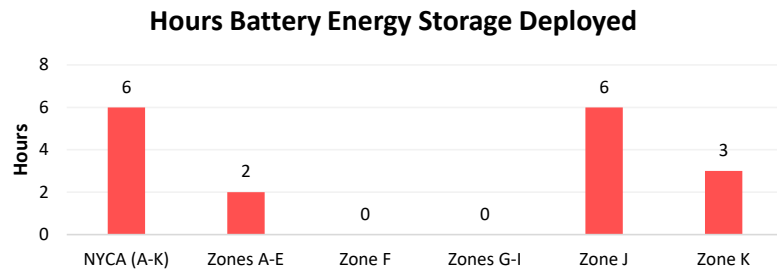
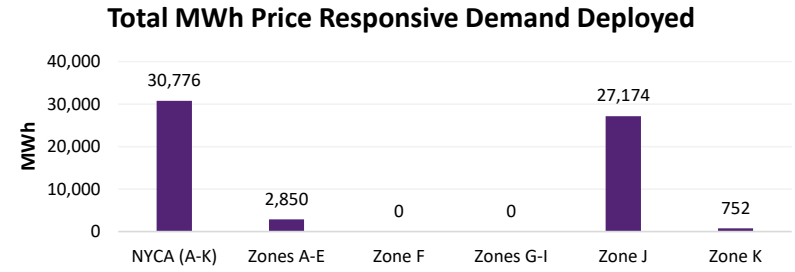
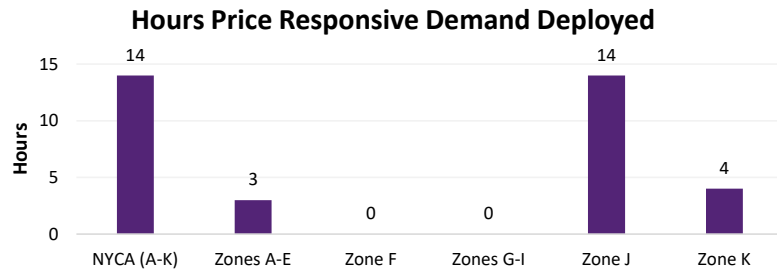
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

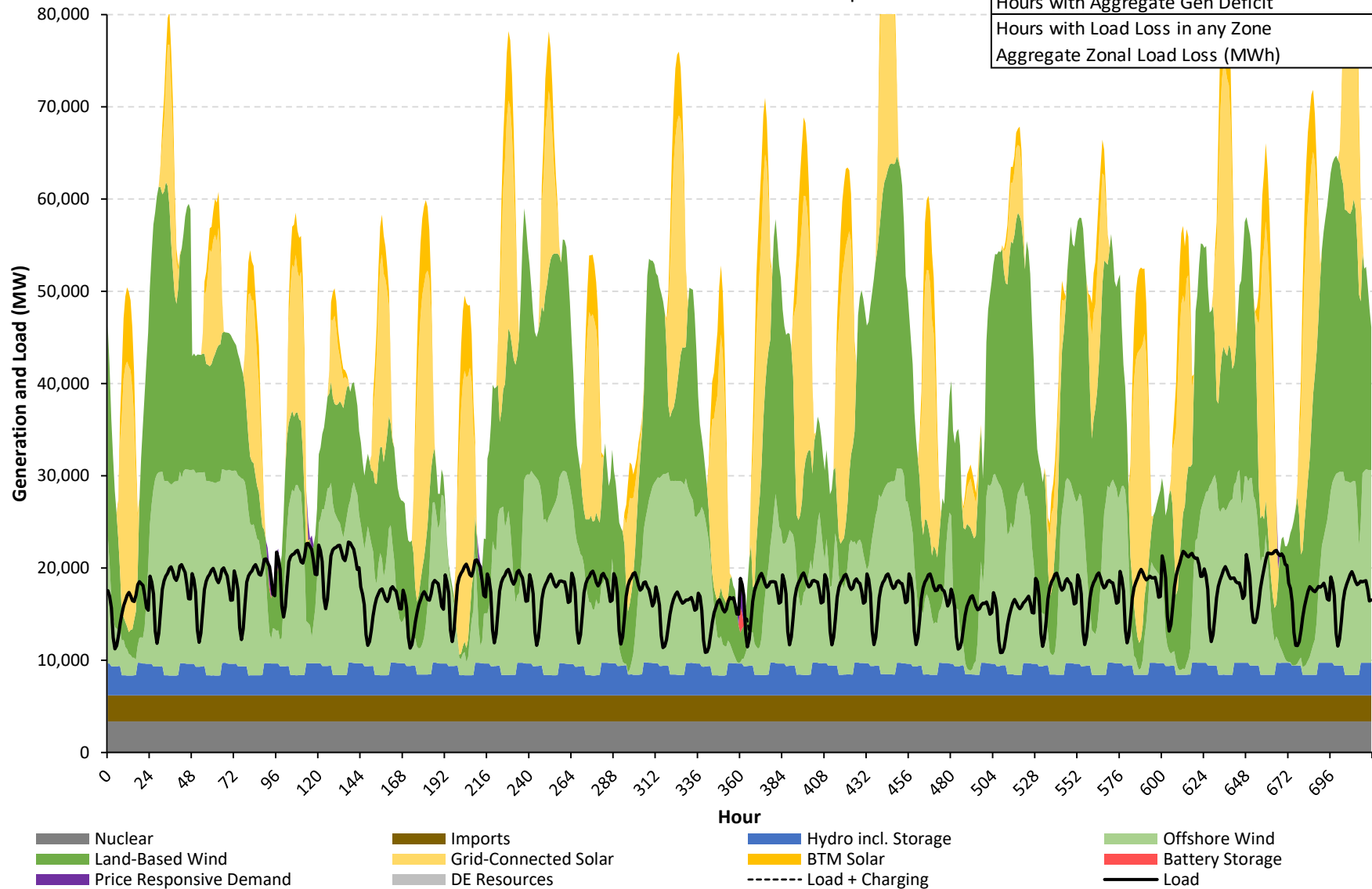


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	33,802,592
Gen Surplus/Deficit (MWh)	21,305,831
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

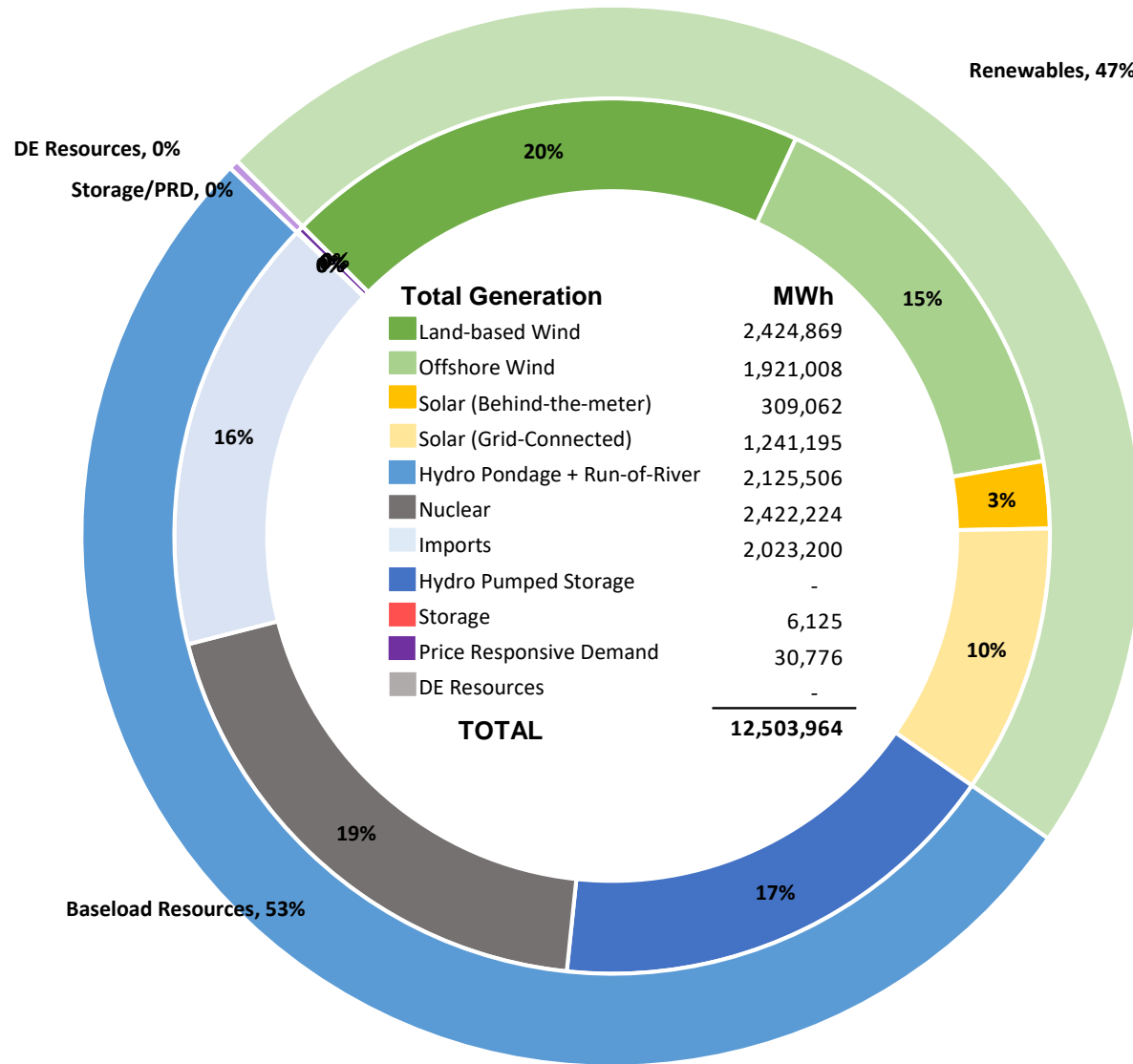


**Note:**

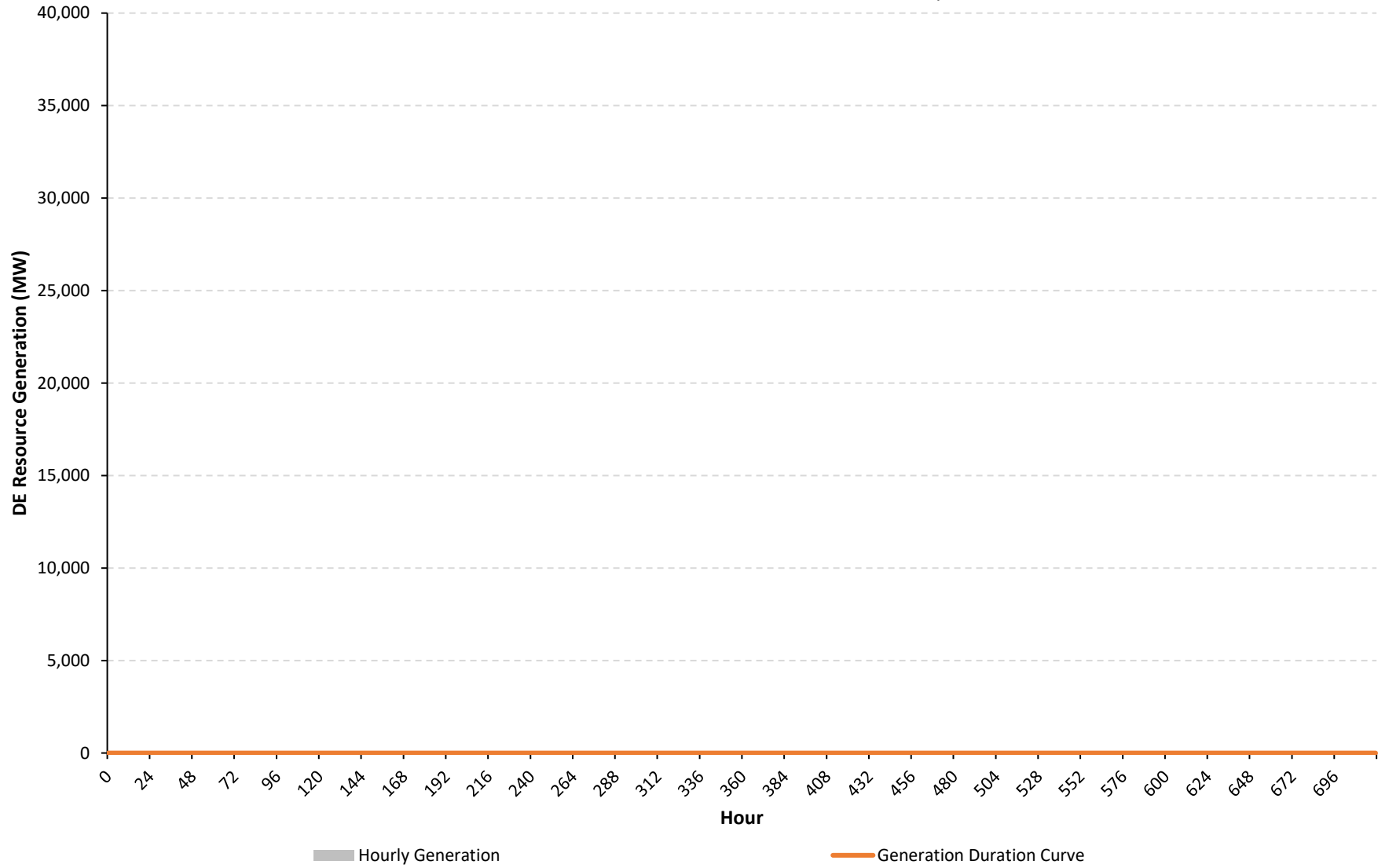
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

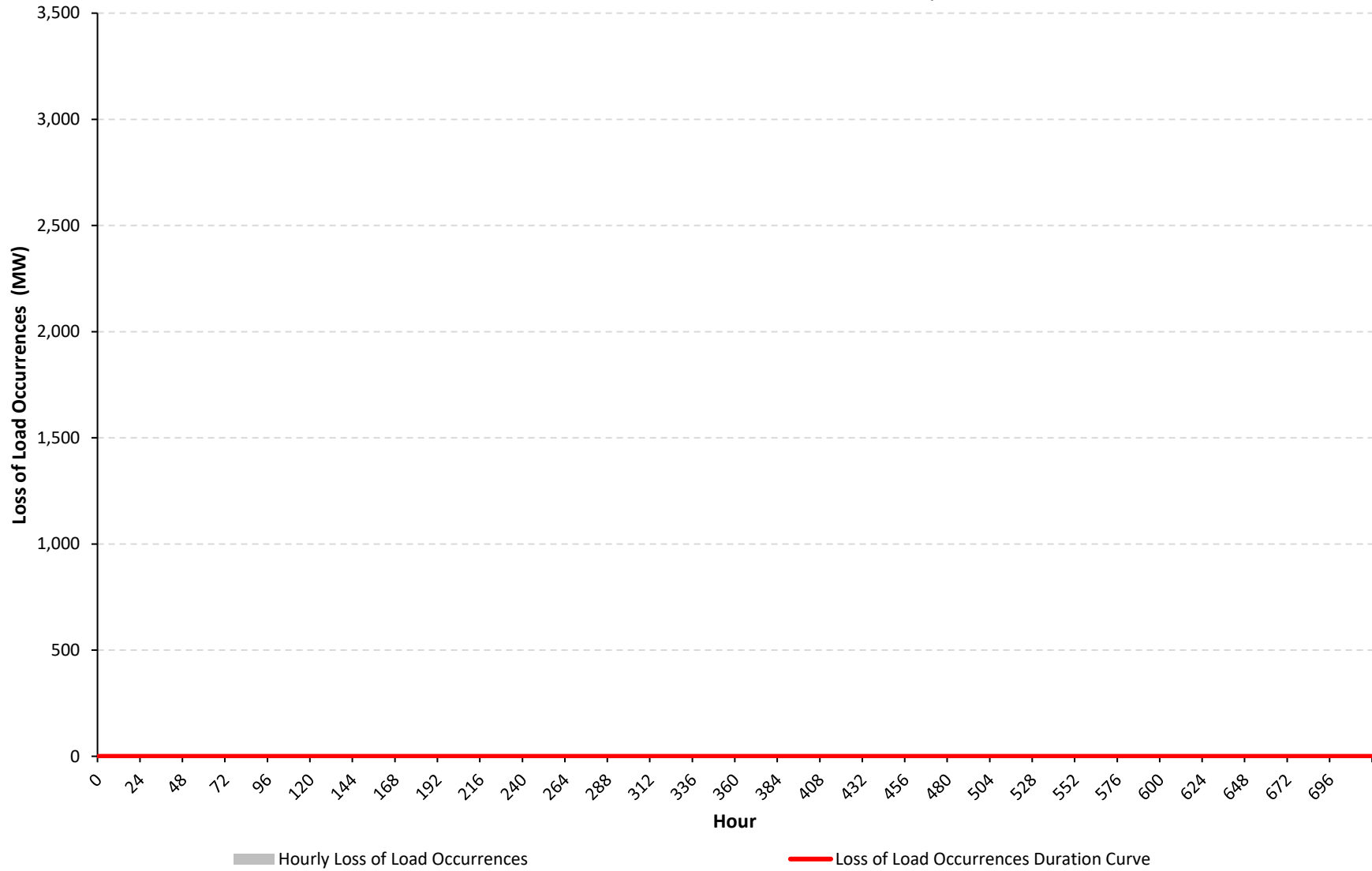


### NYCA DE Resource Generation (MW) CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate



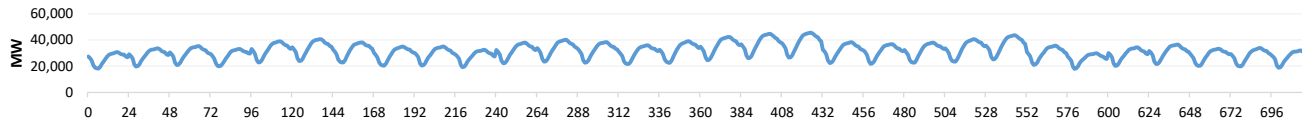
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 9 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore**

**Hourly Results Summary**

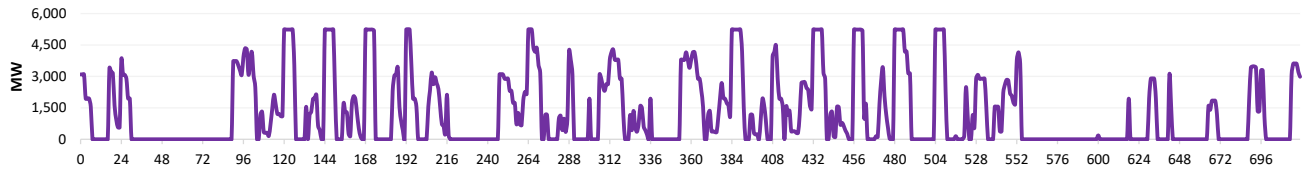
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



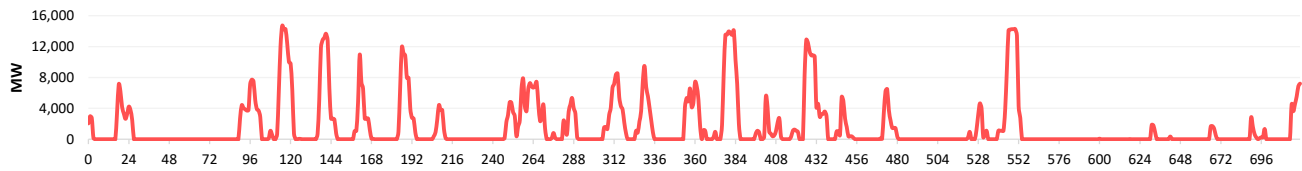
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



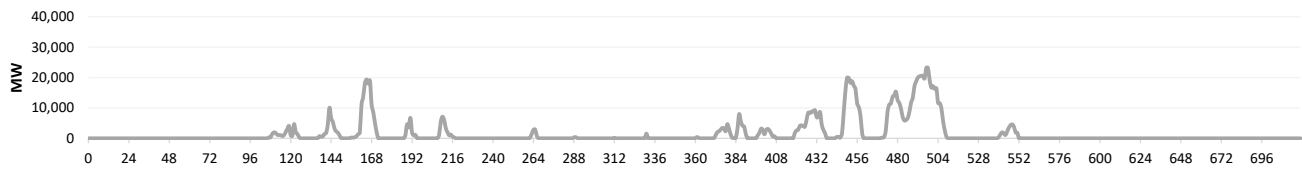
PRD Deployment	
Total Hrs.	359
Total MWh	908,883
Avg. MW	2,531.7

**Battery Energy Storage Deployed During Modeling Period**



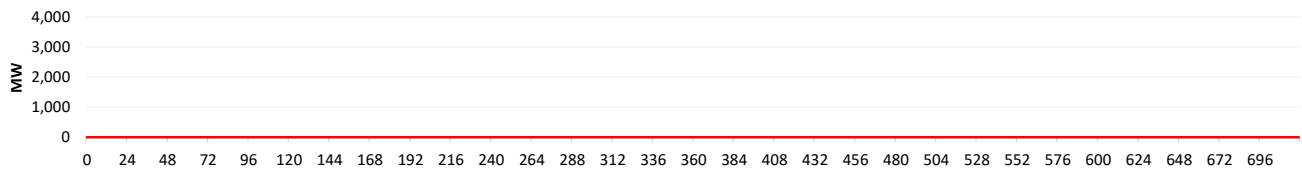
Battery Deployment	
Total Hrs.	275
Total MWh	1,174,283
Avg. MW	4,270.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	196
Total MWh	1,116,165
Avg. MW	5,694.7

**Loss of Load Occurrences During Modeling Period**

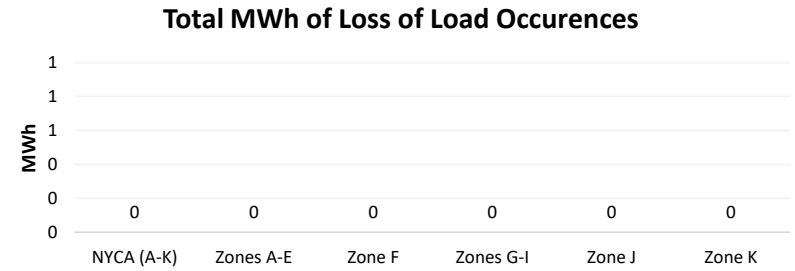
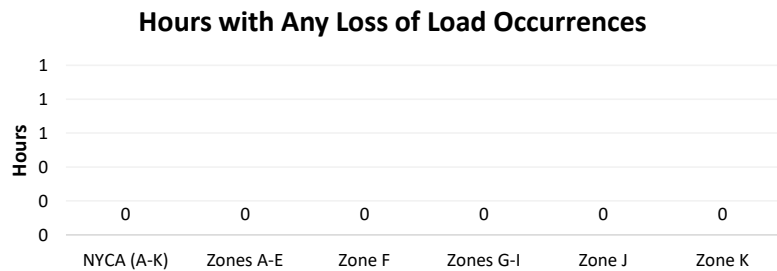
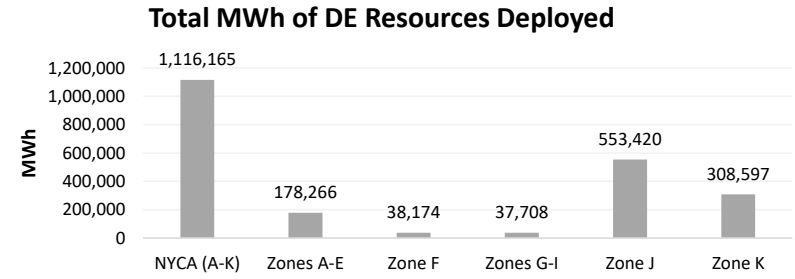
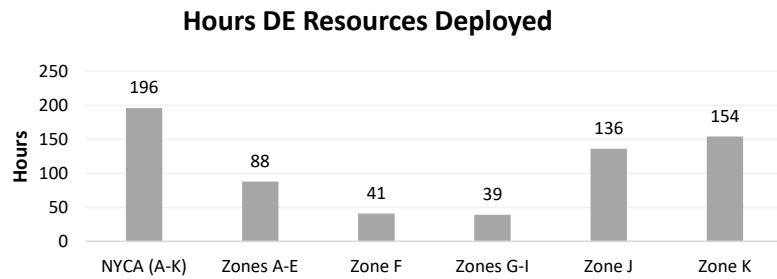
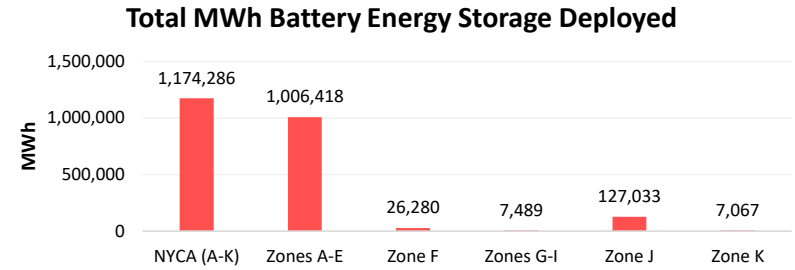
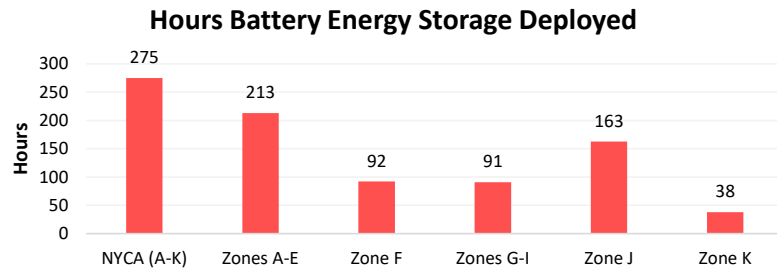
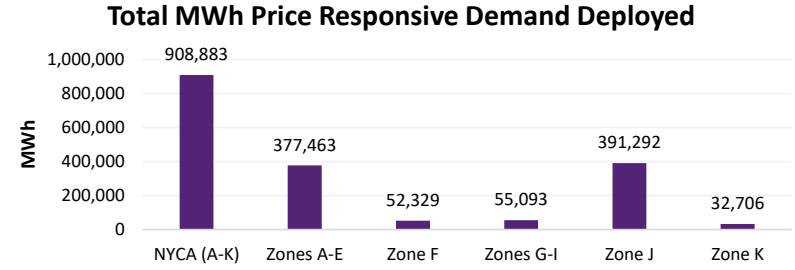
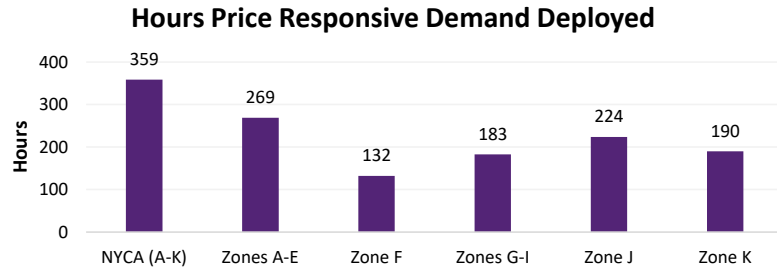


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

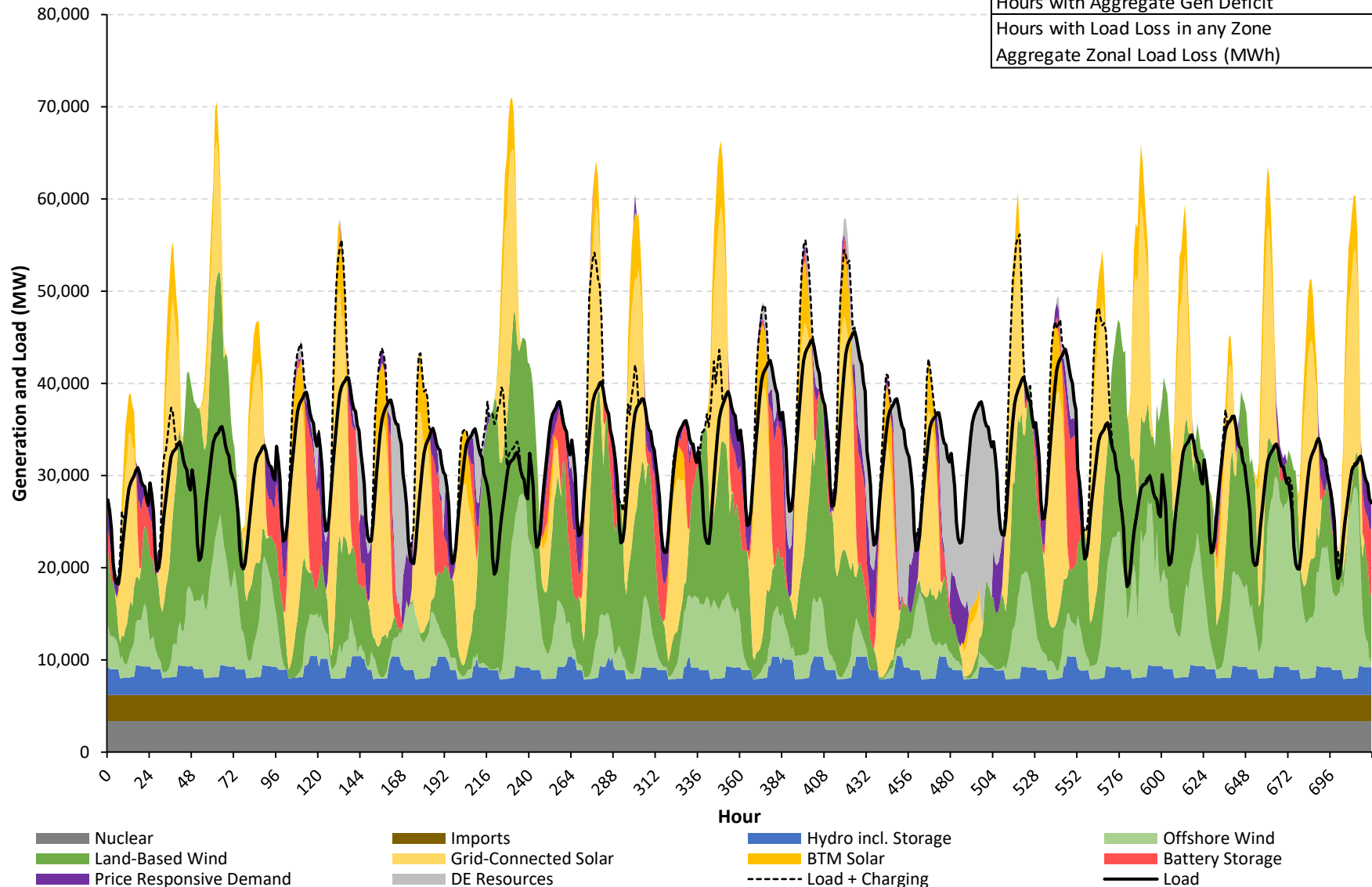


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	27,361,168
Gen Surplus/Deficit (MWh)	4,885,212
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

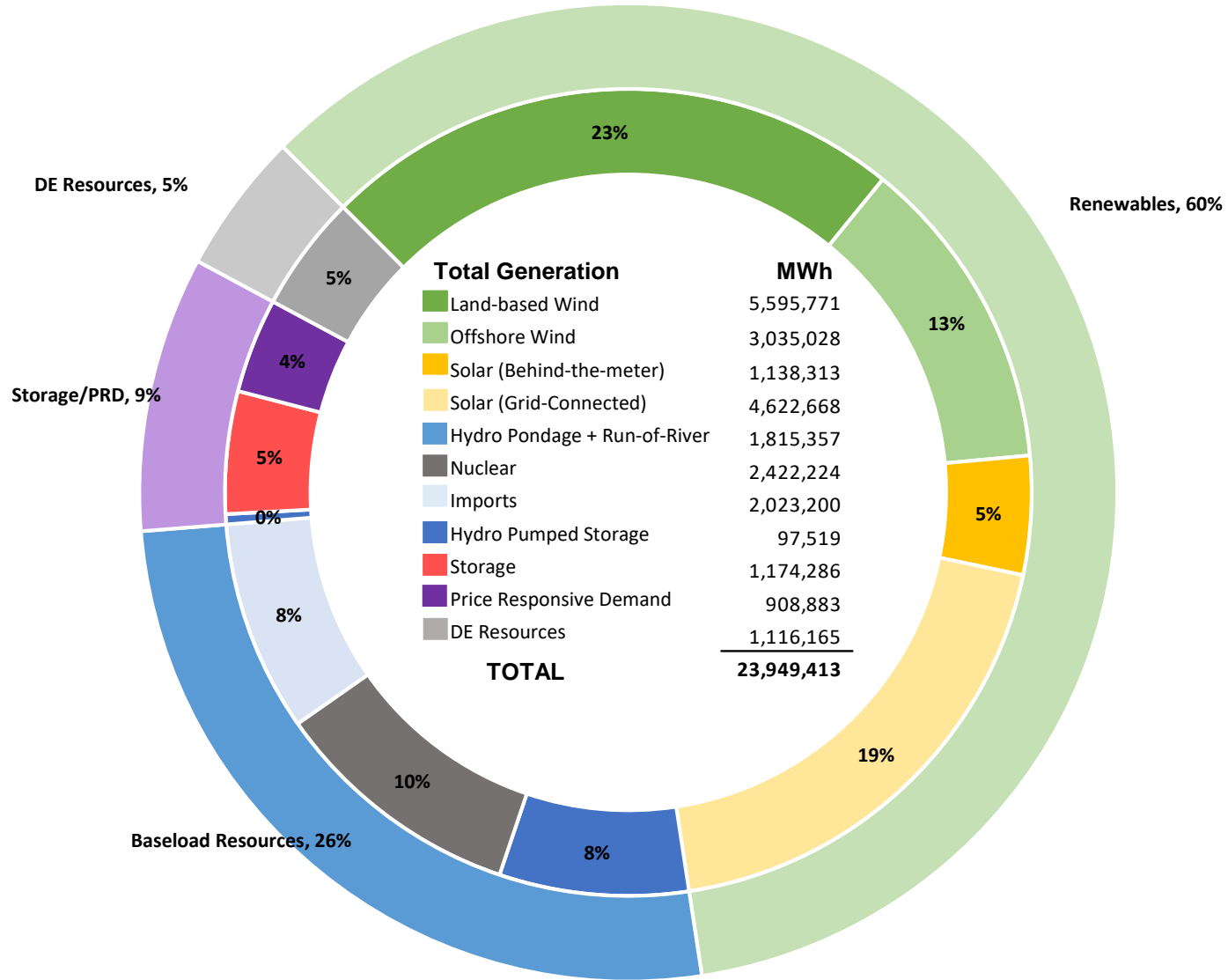


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

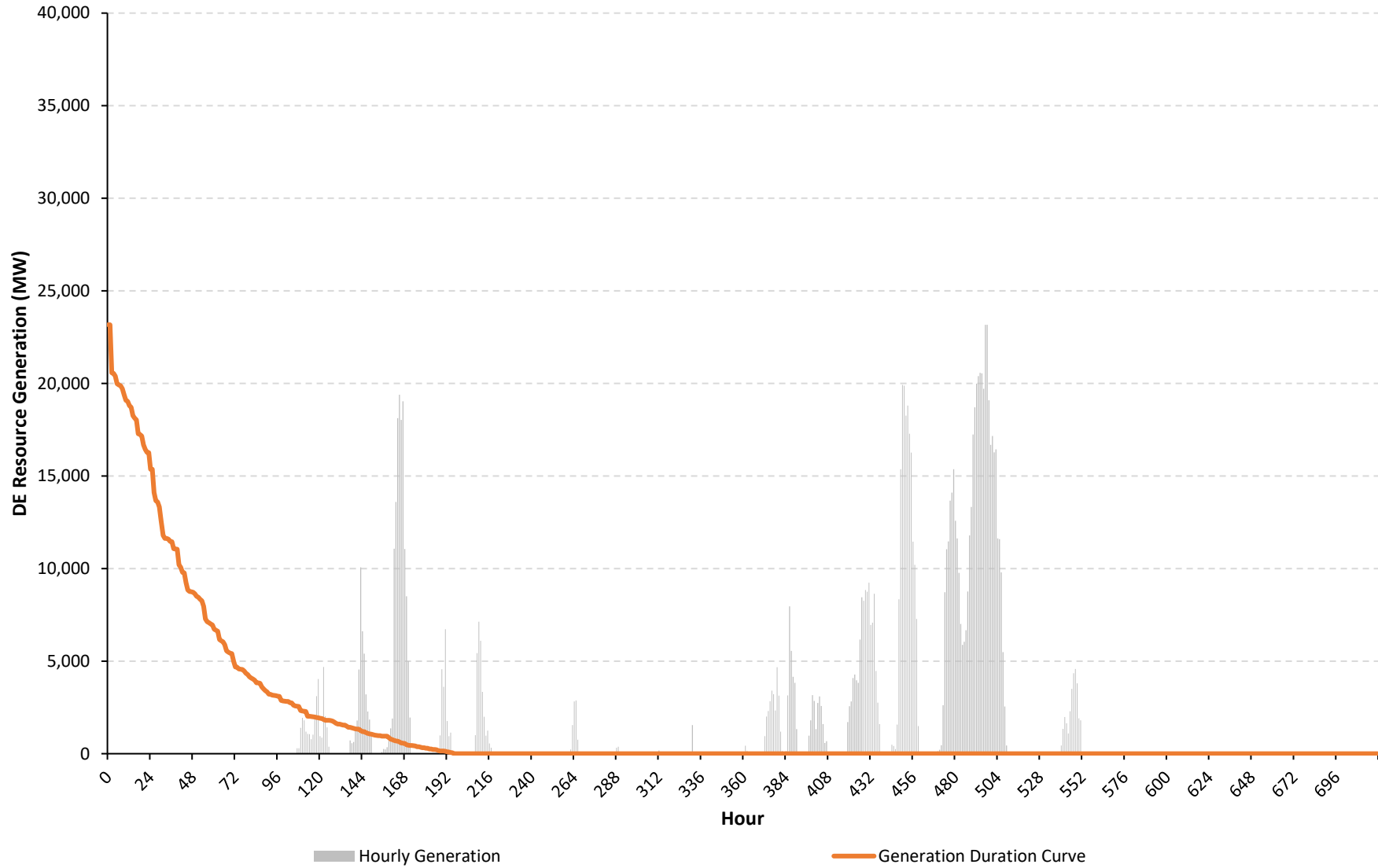
### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



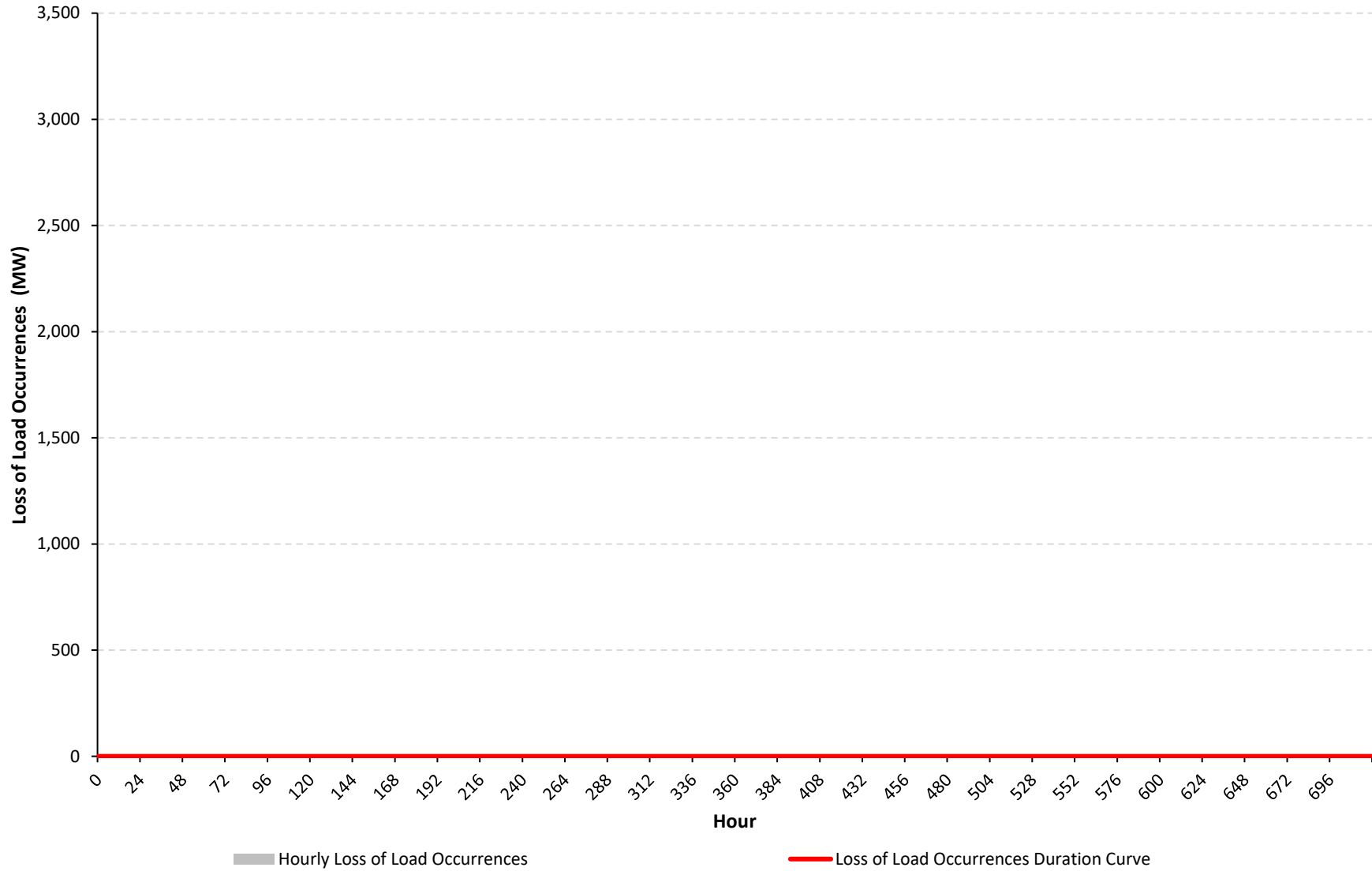
### NYCA DE Resource Generation (MW)

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



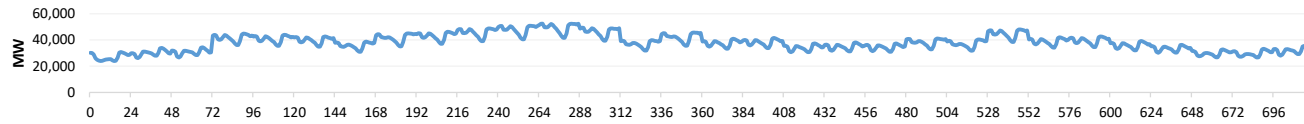
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 10 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore**

### Hourly Results Summary

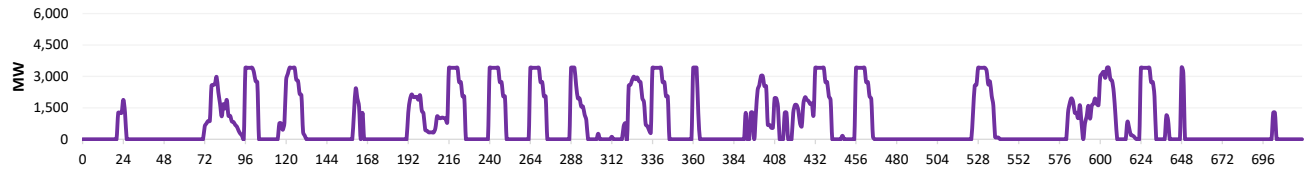
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



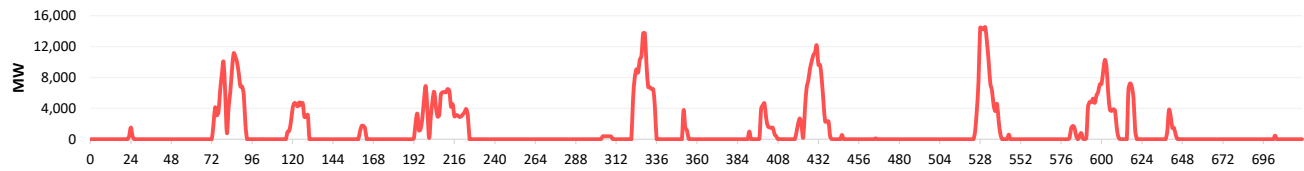
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



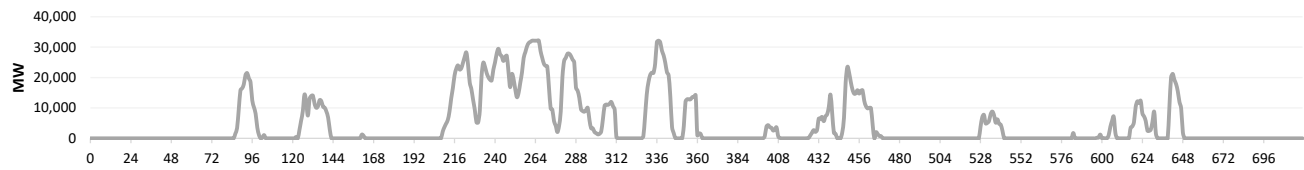
PRD Deployment	
Total Hrs.	272
Total MWh	556,764
Avg. MW	2,046.9

**Battery Energy Storage Deployed During Modeling Period**



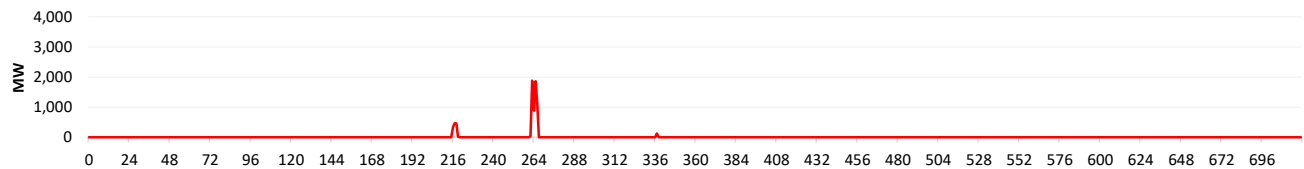
Battery Deployment	
Total Hrs.	192
Total MWh	842,668
Avg. MW	4,388.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	274
Total MWh	3,350,666
Avg. MW	12,228.7

**Loss of Load Occurrences During Modeling Period**

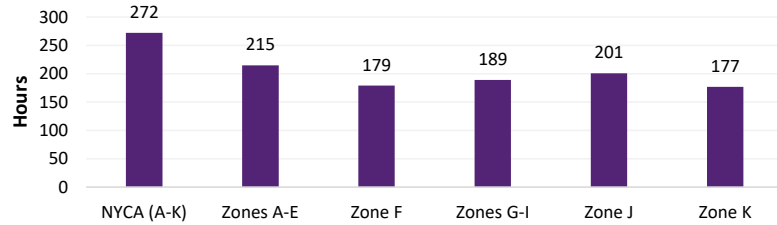


Loss of Load Occurrences	
Total Hrs.	10
Total MWh	7,184
Avg. MW	718.4

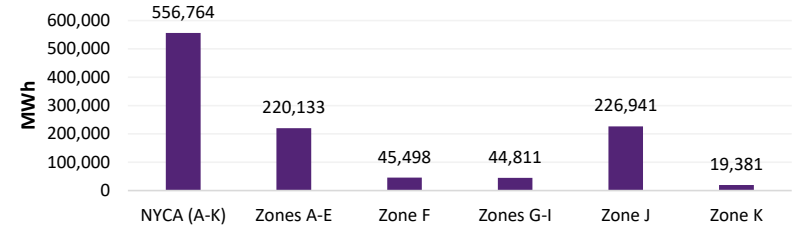
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

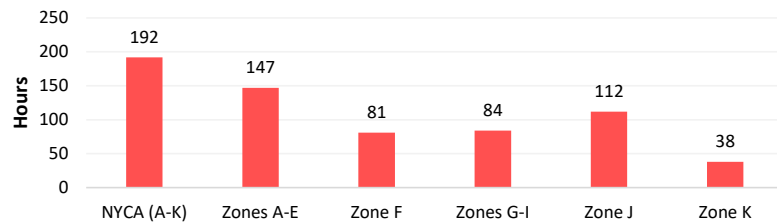
**Hours Price Responsive Demand Deployed**



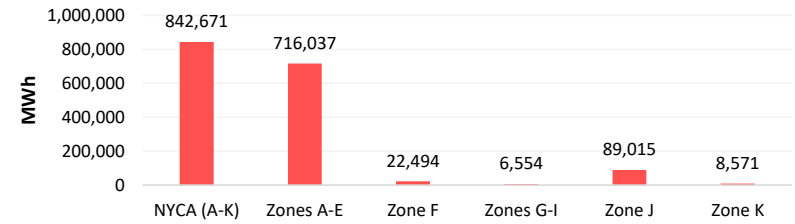
**Total MWh Price Responsive Demand Deployed**



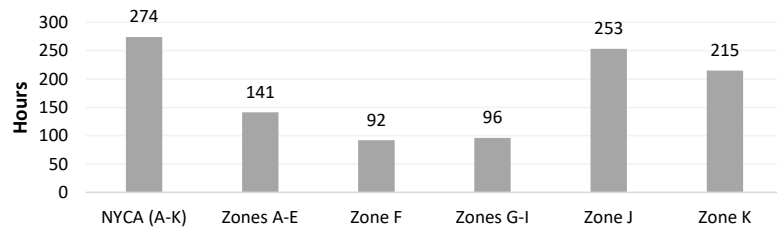
**Hours Battery Energy Storage Deployed**



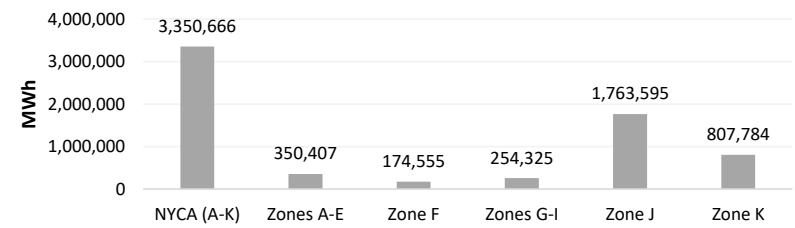
**Total MWh Battery Energy Storage Deployed**



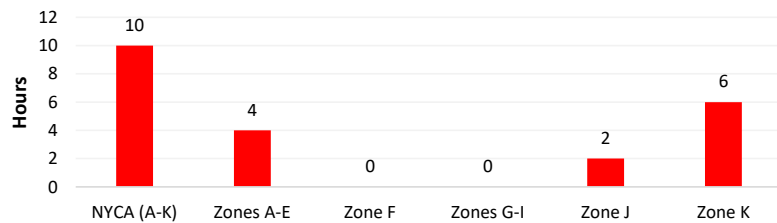
**Hours DE Resources Deployed**



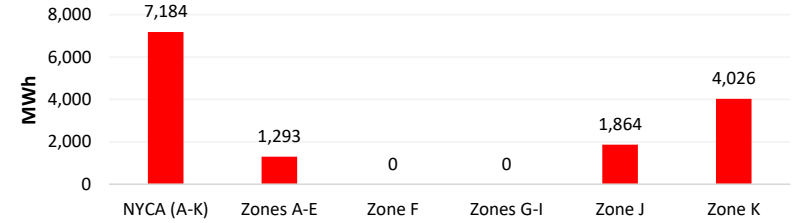
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**



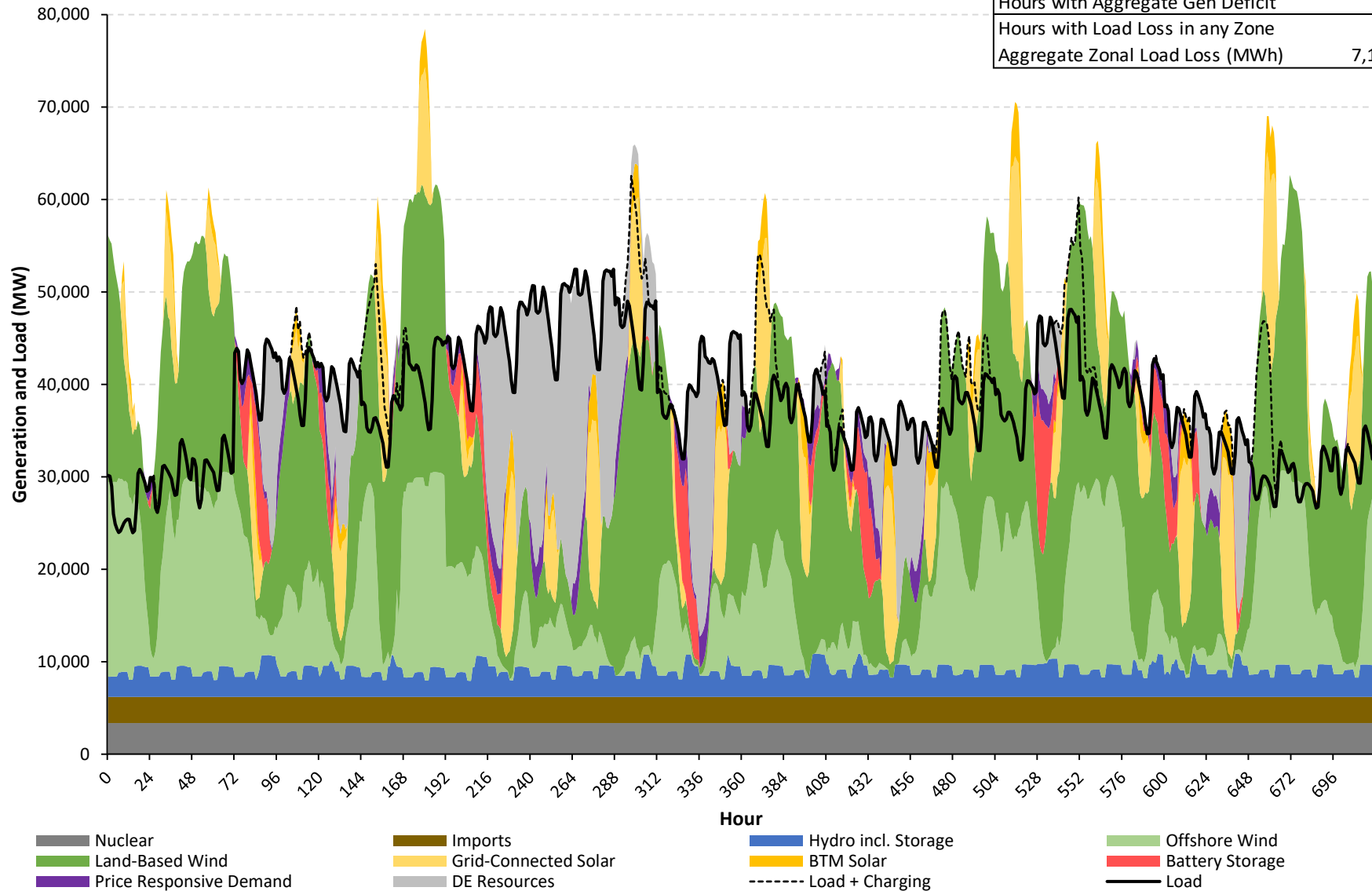


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	32,697,653
Gen Surplus/Deficit (MWh)	5,375,616
Hours with Aggregate Gen Deficit	10
Hours with Load Loss in any Zone	10
Aggregate Zonal Load Loss (MWh)	7,184

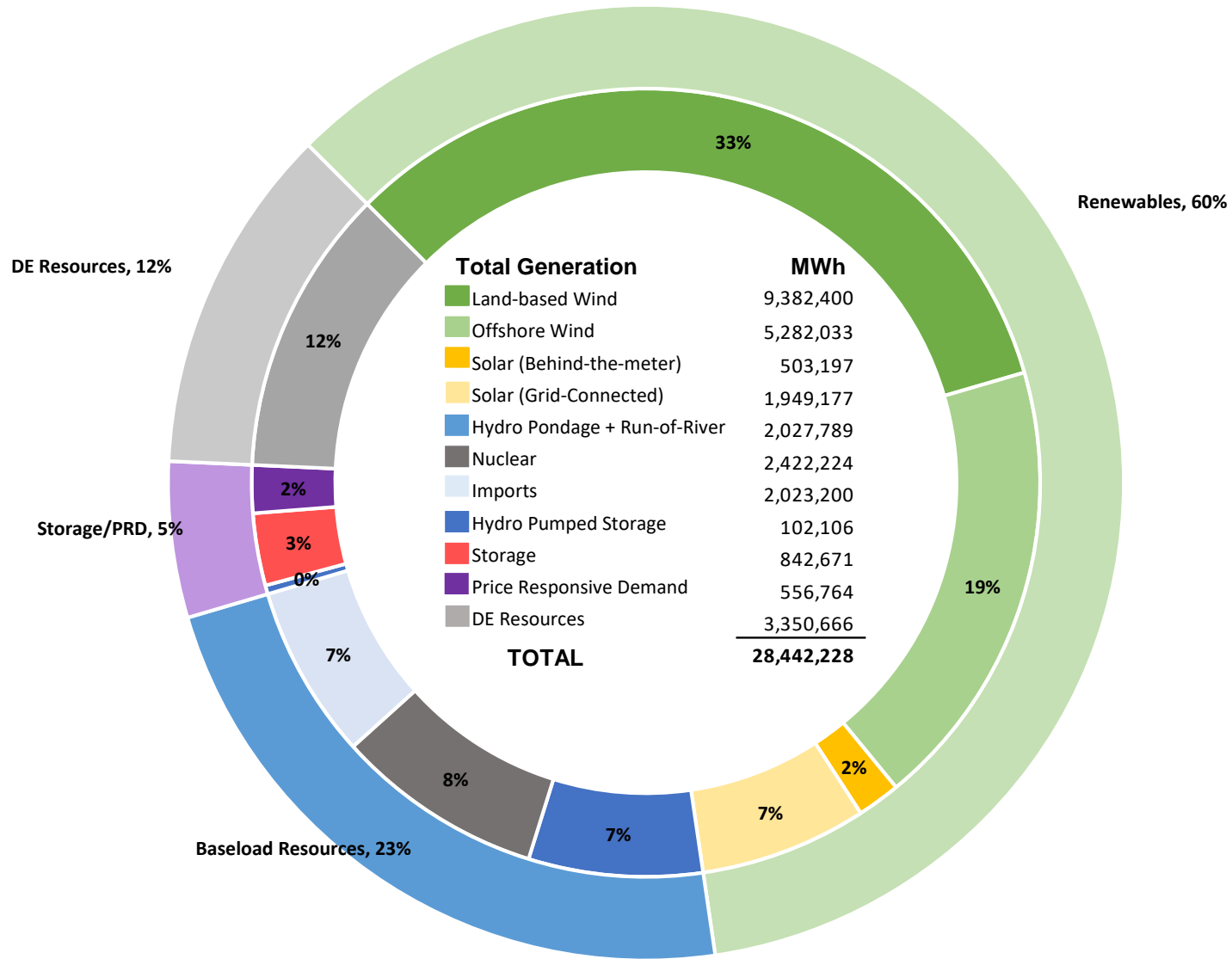


**Note:**

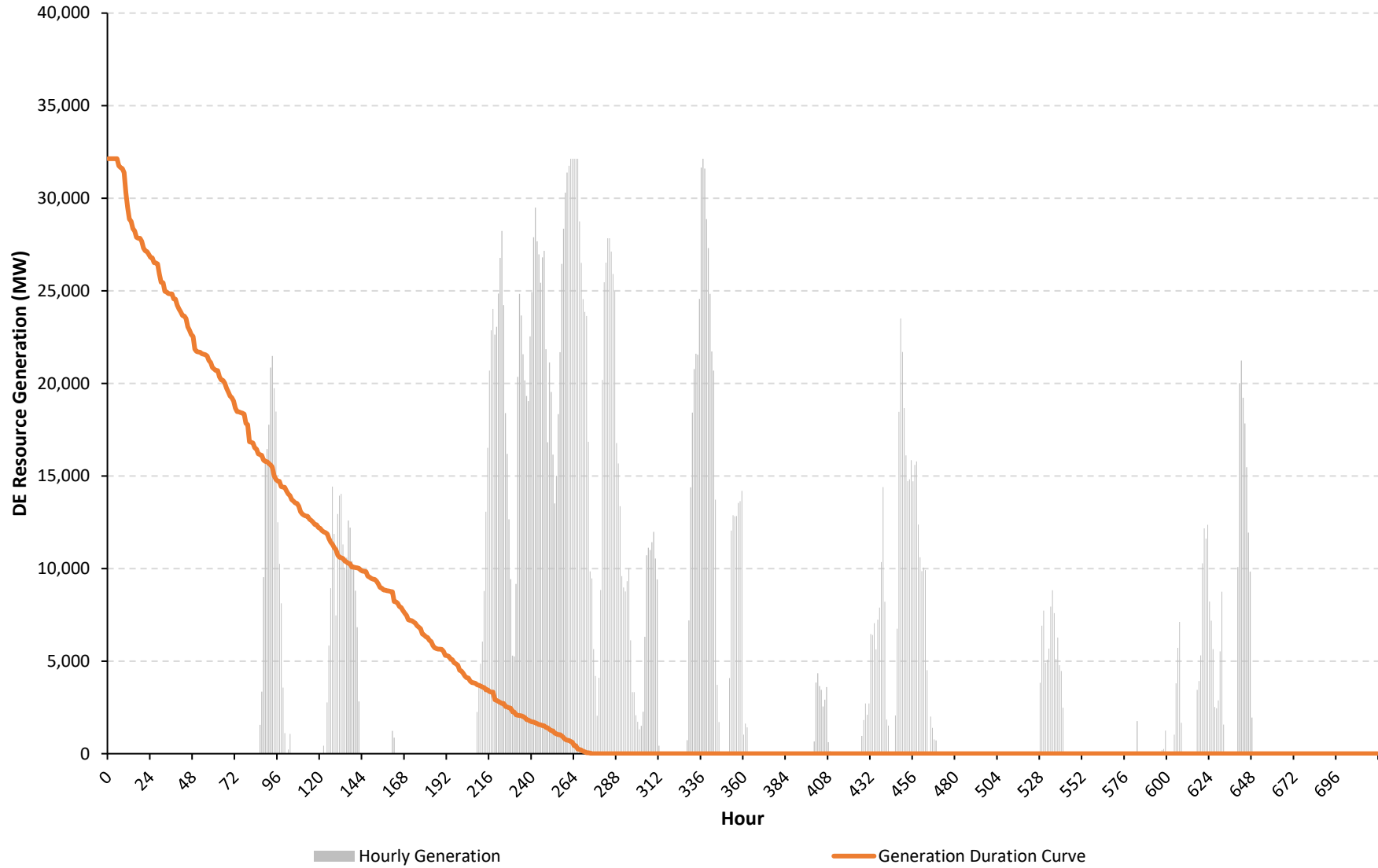
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

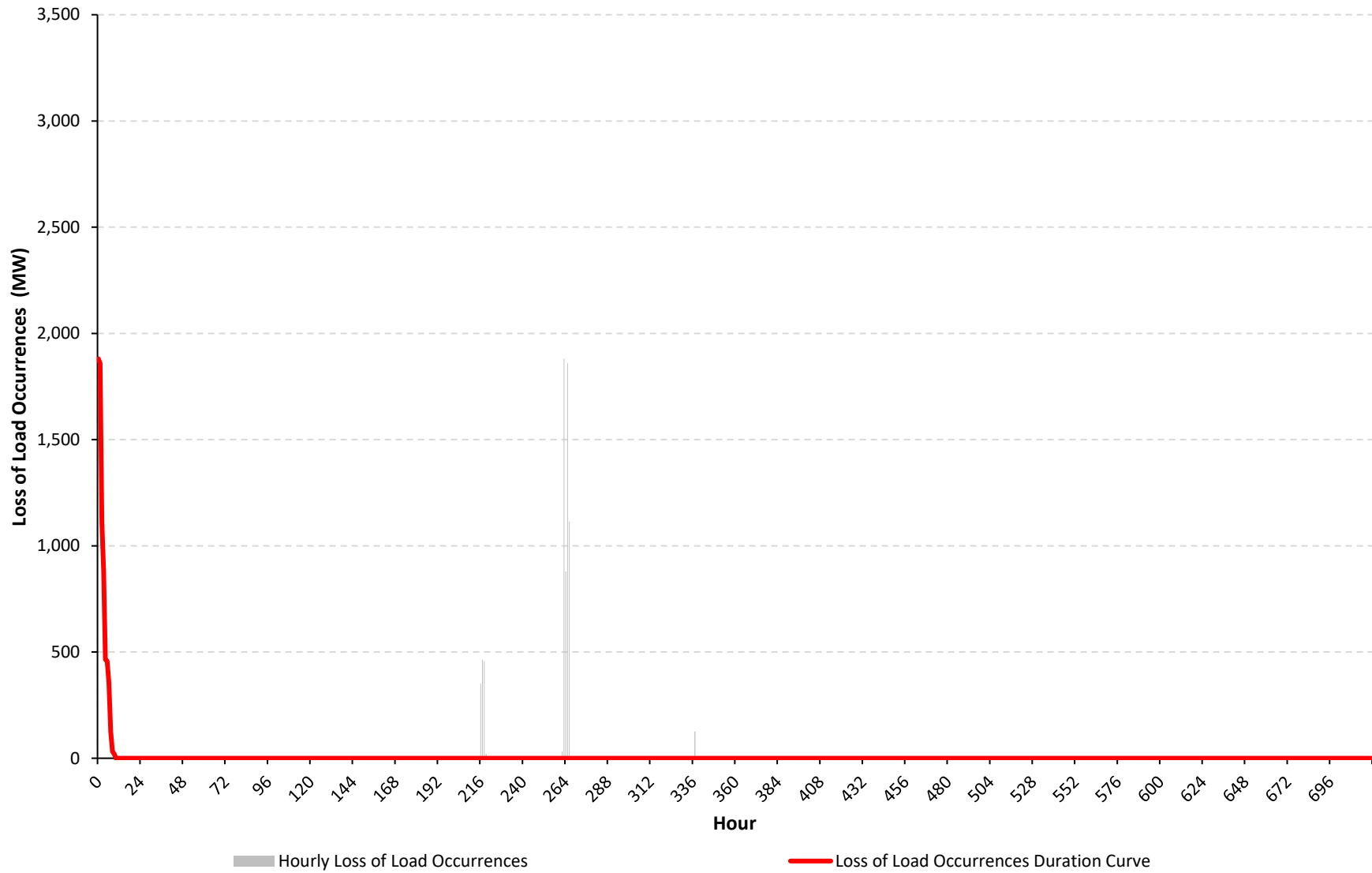
CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore



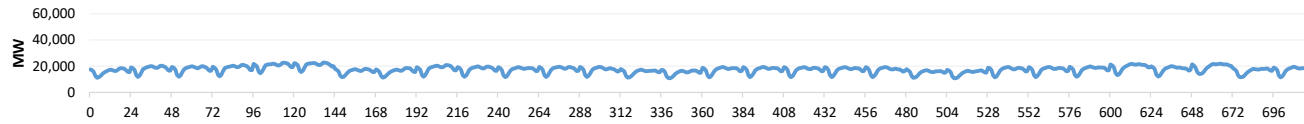
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 11 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore**

### Hourly Results Summary

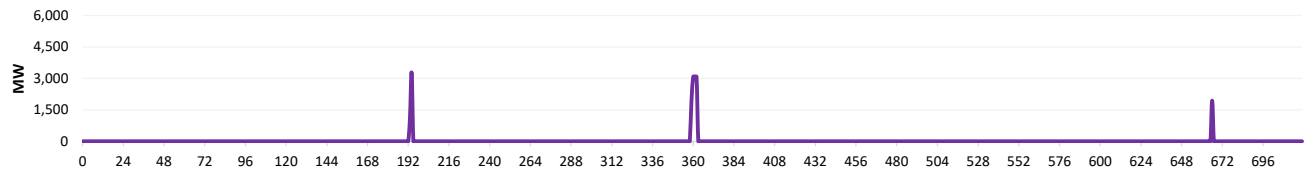
Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



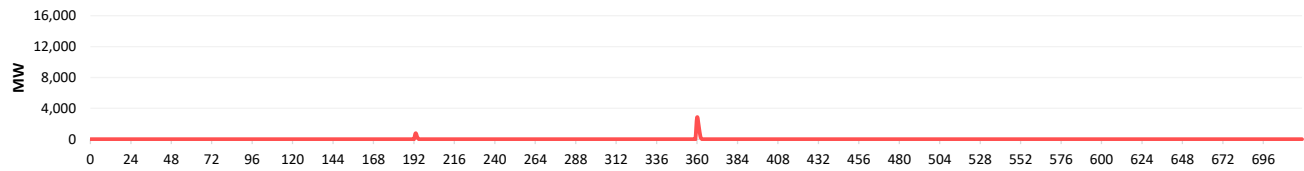
Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



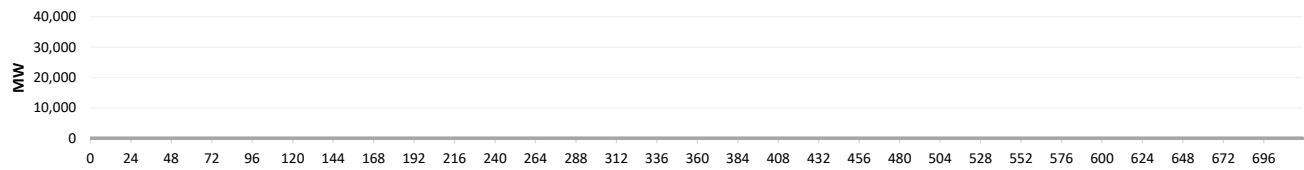
PRD Deployment	
Total Hrs.	7
Total MWh	17,488
Avg. MW	2,498.3

**Battery Energy Storage Deployed During Modeling Period**



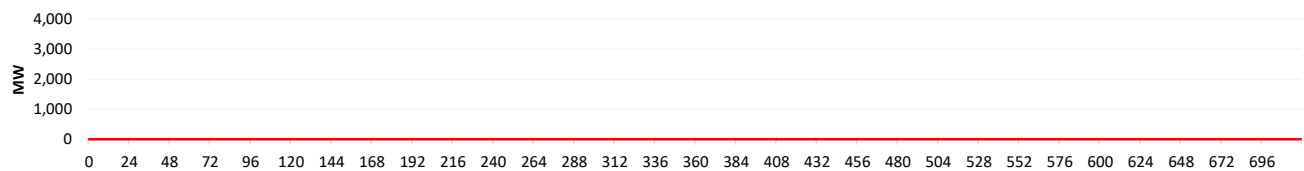
Battery Deployment	
Total Hrs.	5
Total MWh	5,879
Avg. MW	1,175.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

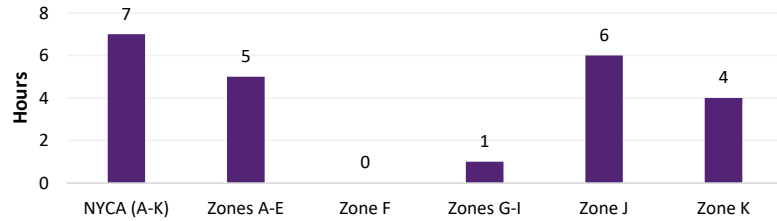


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

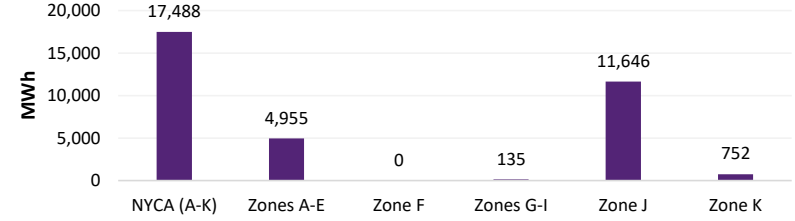
### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

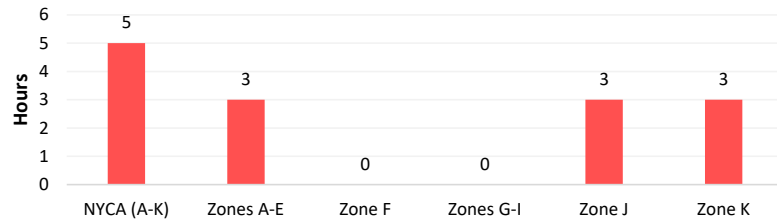
**Hours Price Responsive Demand Deployed**



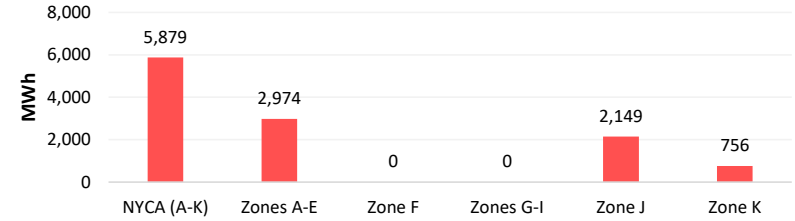
**Total MWh Price Responsive Demand Deployed**



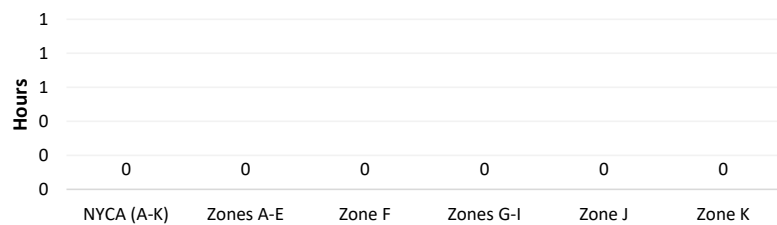
**Hours Battery Energy Storage Deployed**



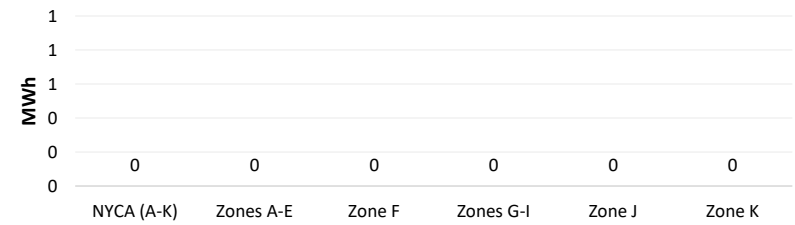
**Total MWh Battery Energy Storage Deployed**



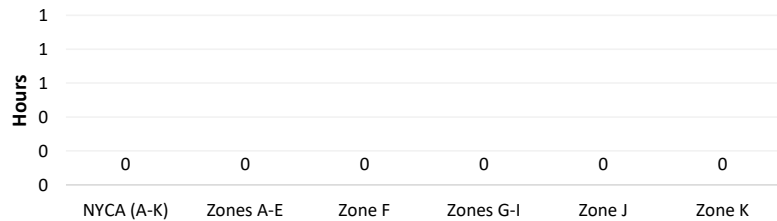
**Hours DE Resources Deployed**



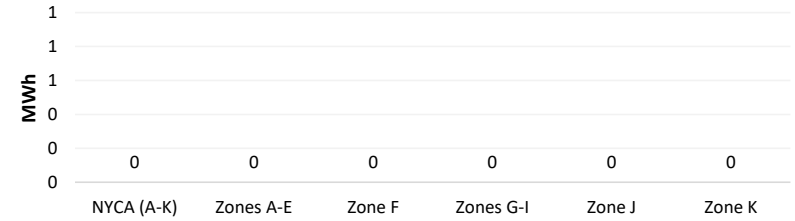
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

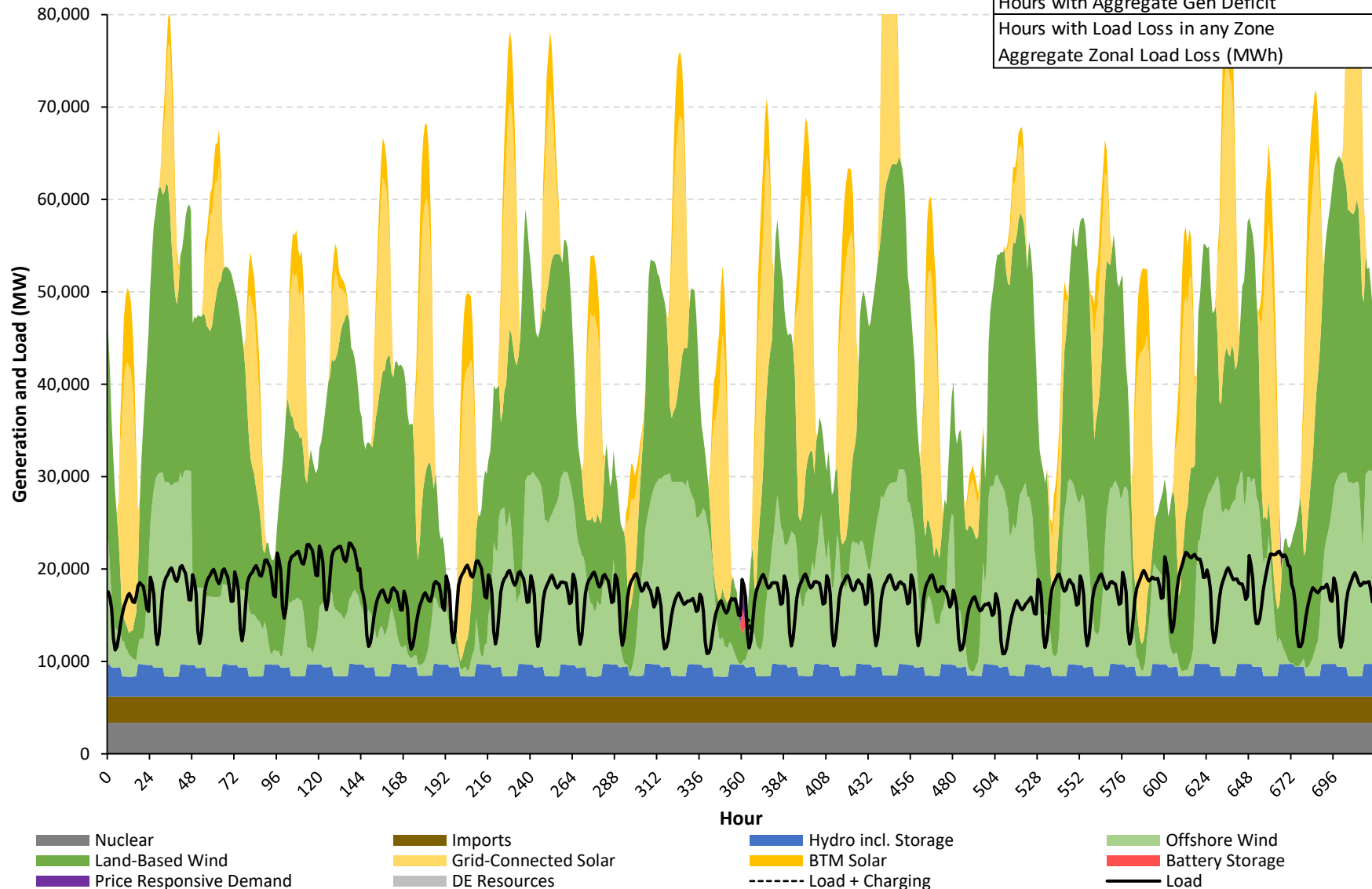


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	34,445,847
Gen Surplus/Deficit (MWh)	21,949,086
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



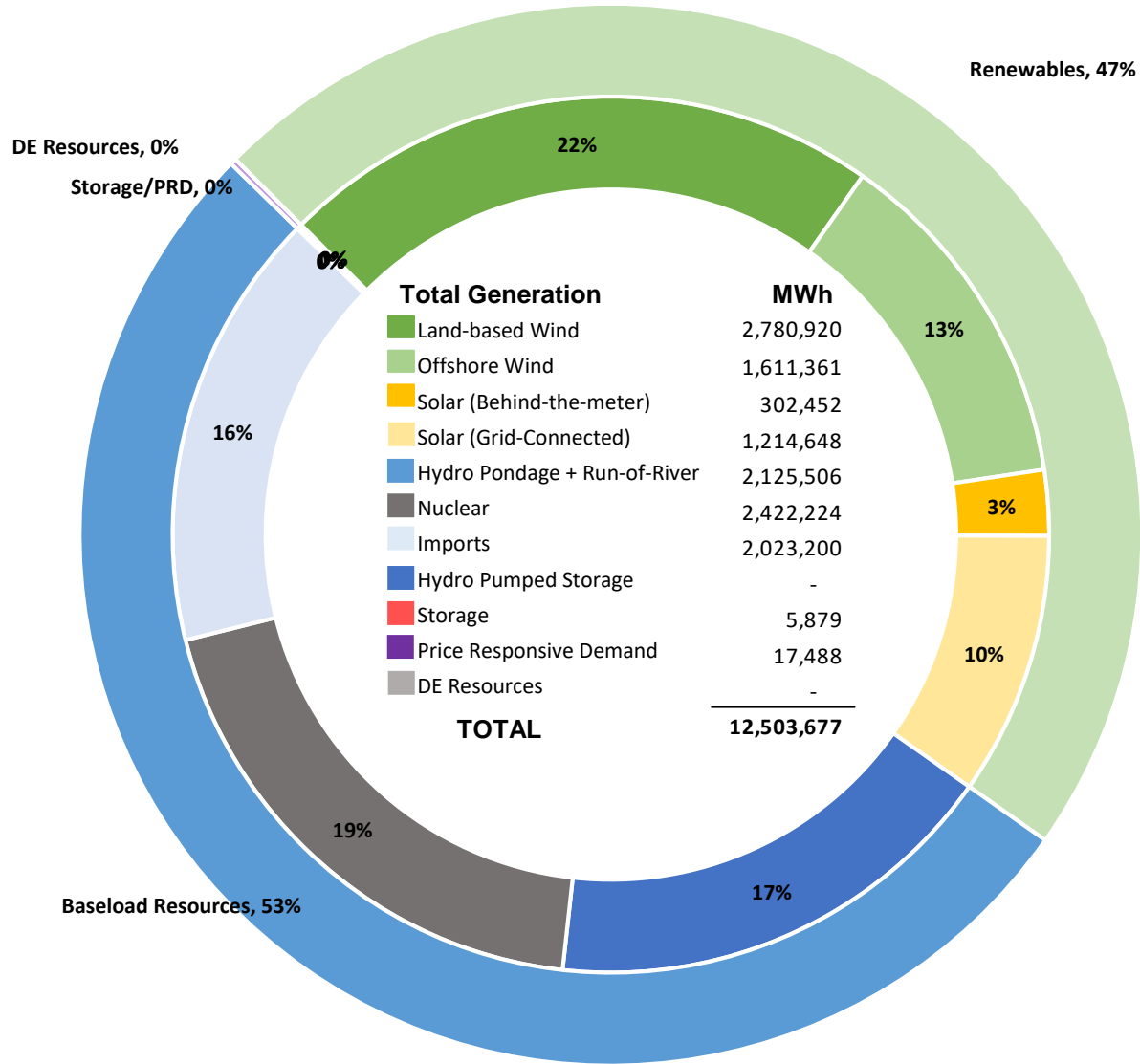
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



### Generation by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore



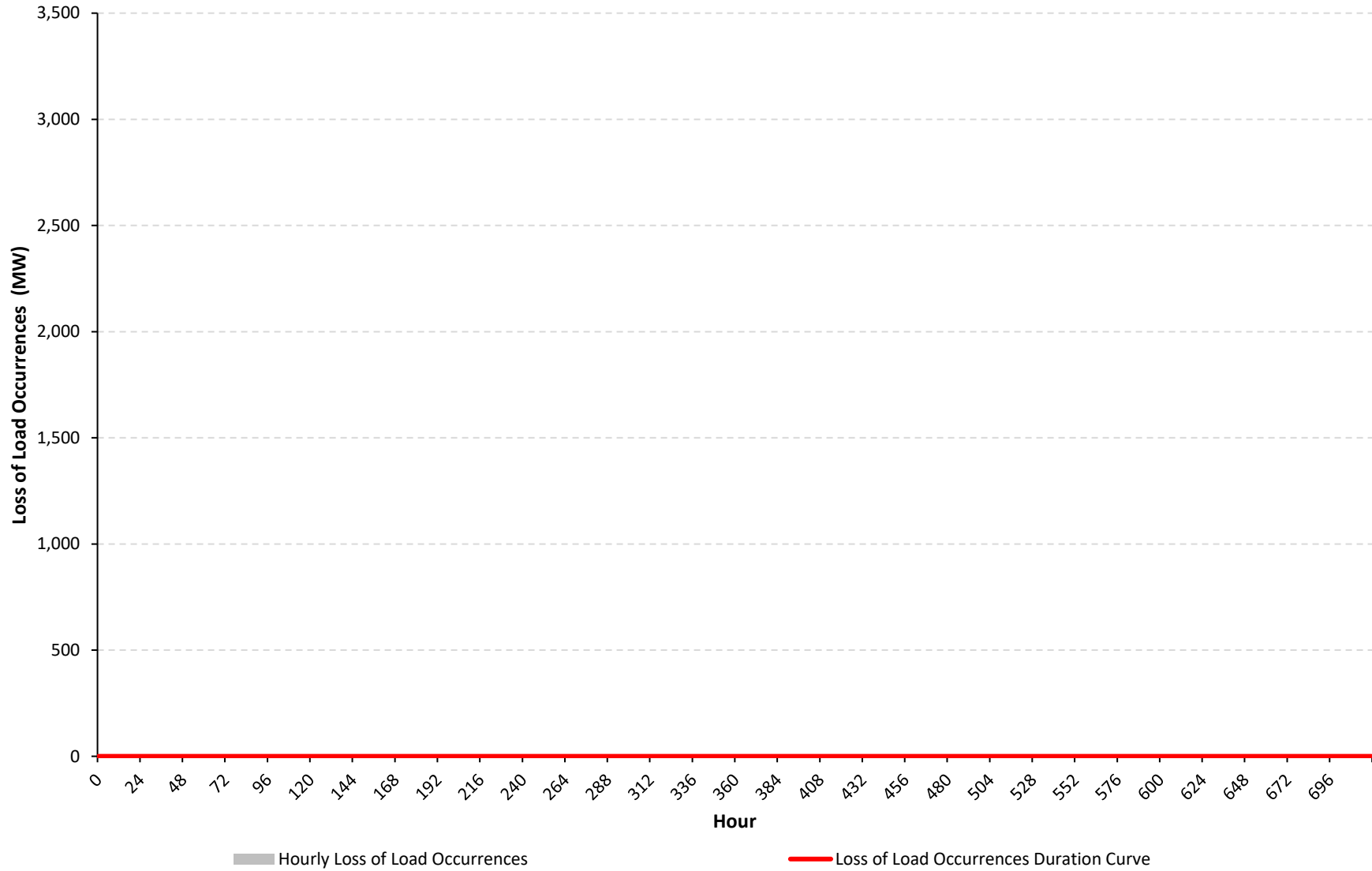
### NYCA DE Resource Generation (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore



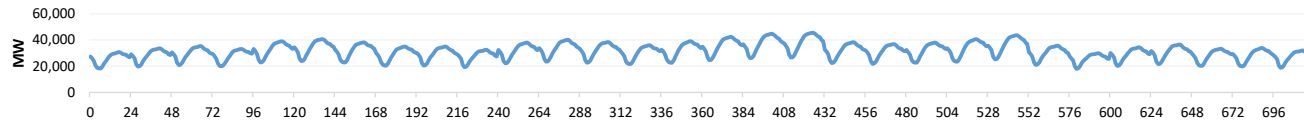
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 12 - CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

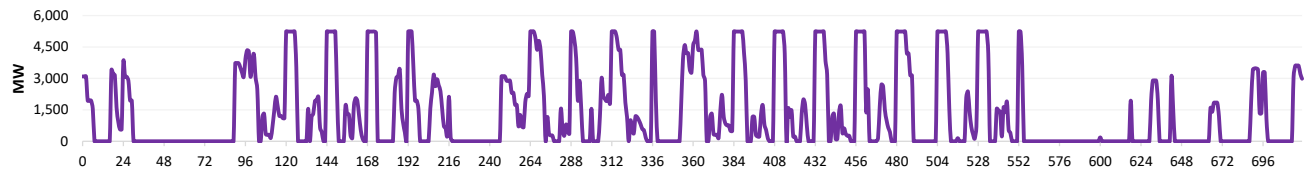
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



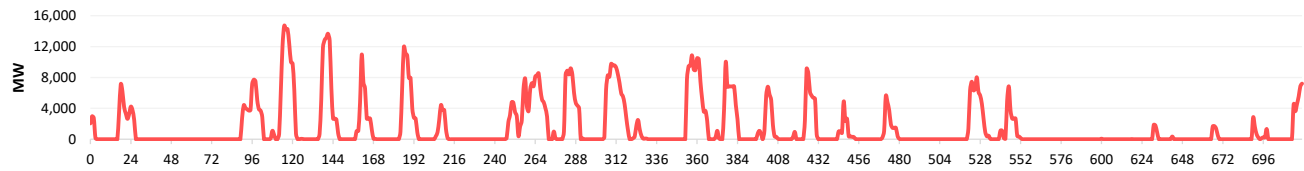
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



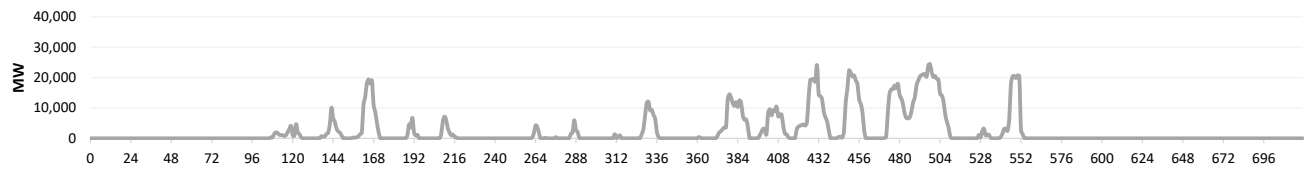
PRD Deployment	
Total Hrs.	362
Total MWh	960,664
Avg. MW	2,653.8

**Battery Energy Storage Deployed During Modeling Period**



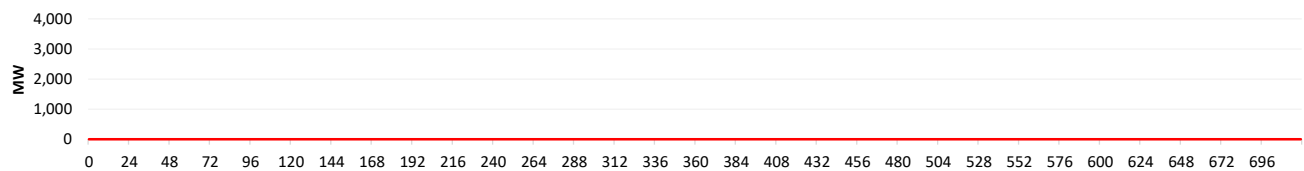
Battery Deployment	
Total Hrs.	268
Total MWh	1,108,076
Avg. MW	4,134.6

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	235
Total MWh	1,697,161
Avg. MW	7,222.0

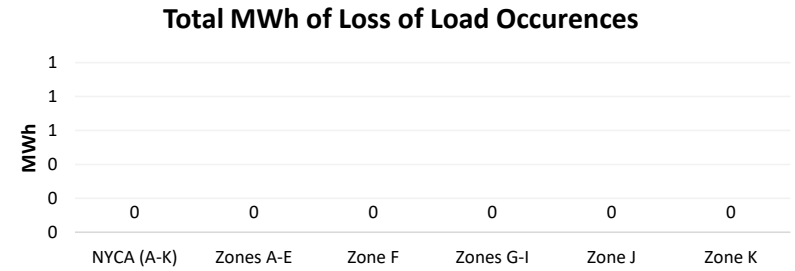
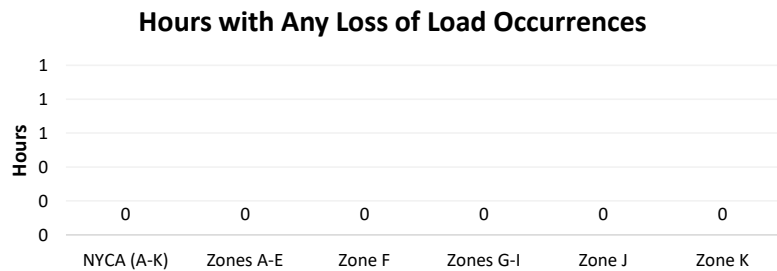
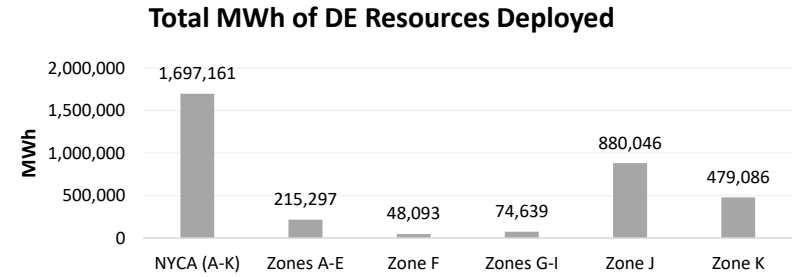
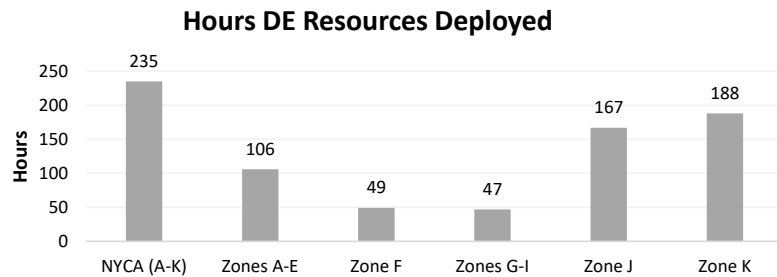
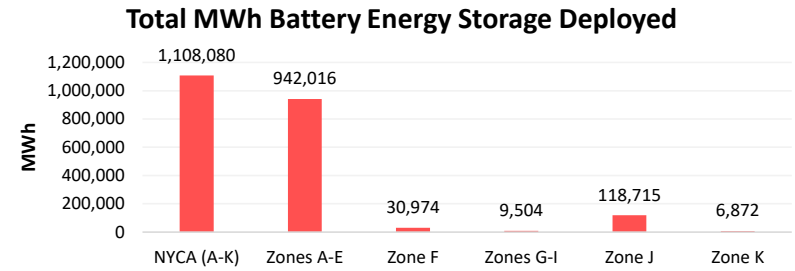
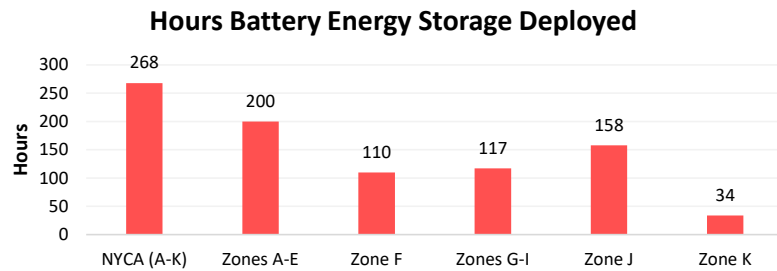
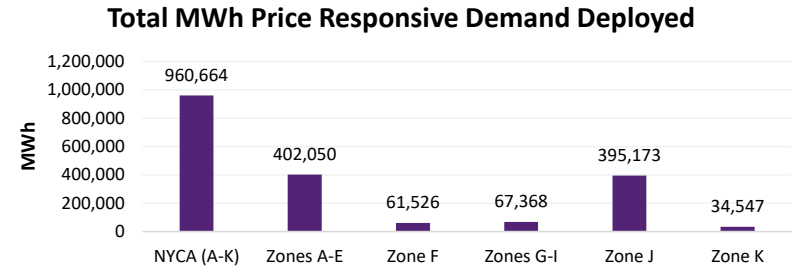
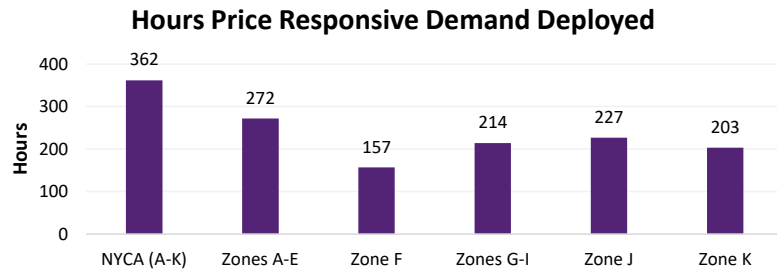
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

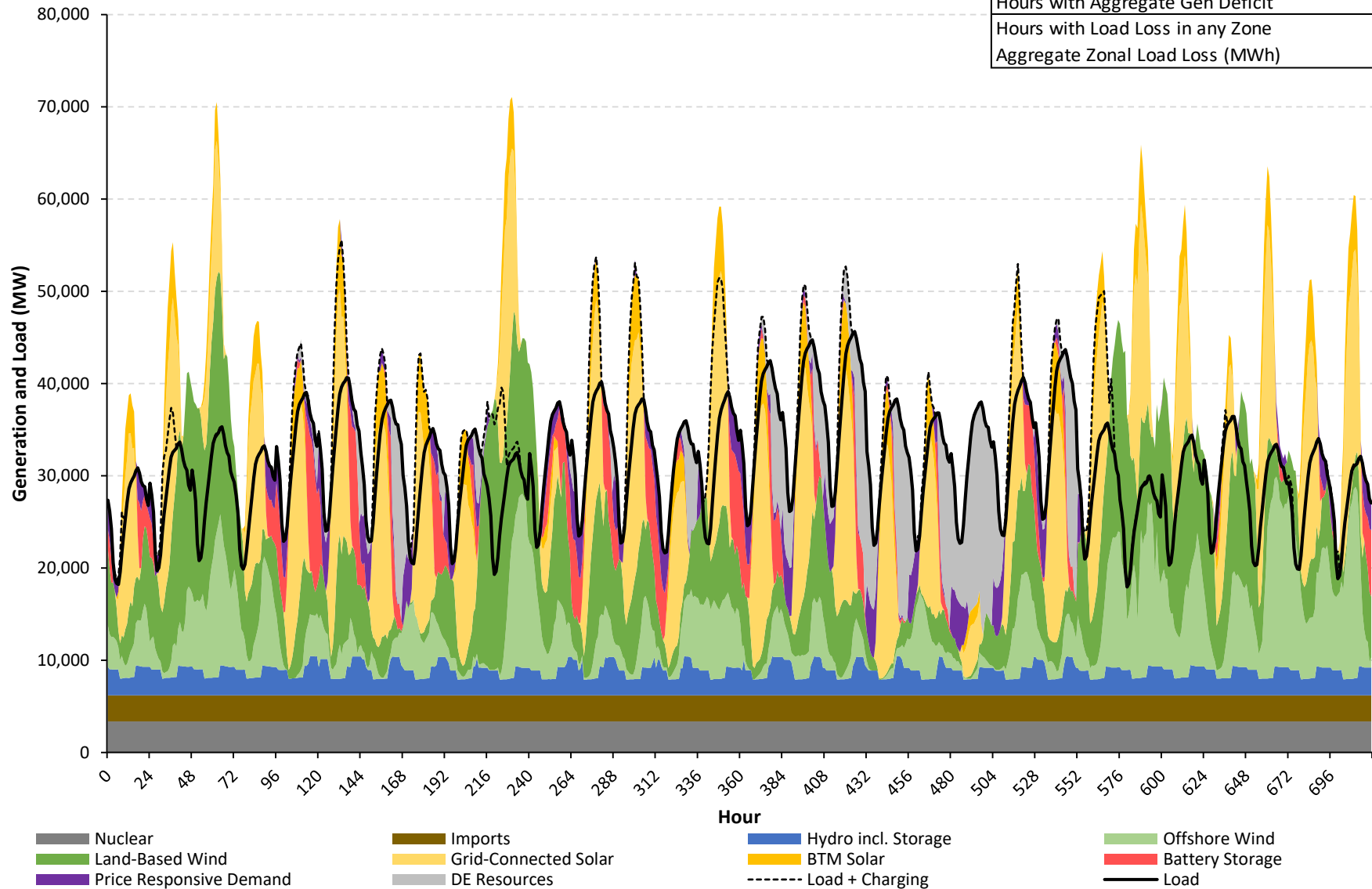


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	26,924,350
Gen Surplus/Deficit (MWh)	4,448,394
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

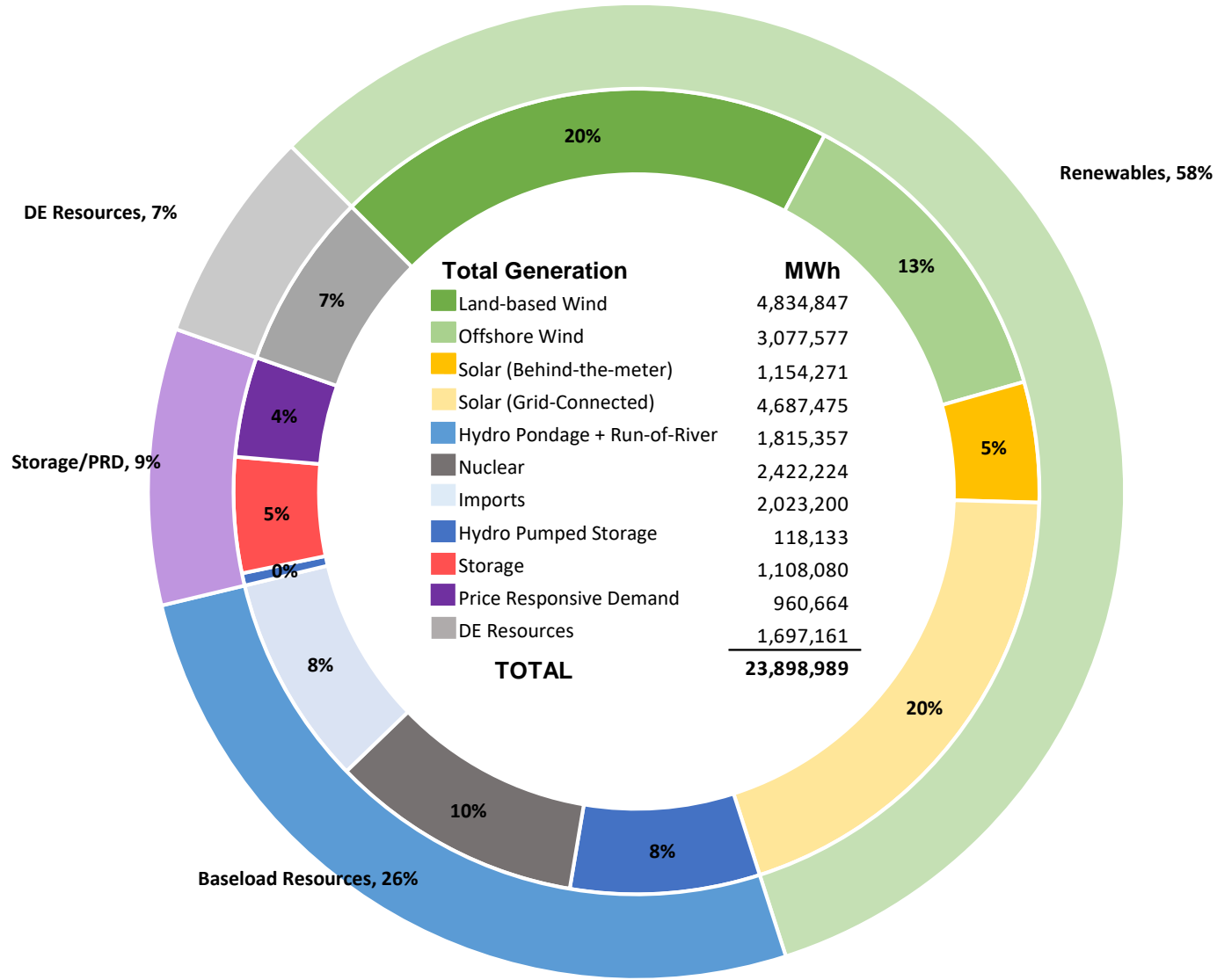


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

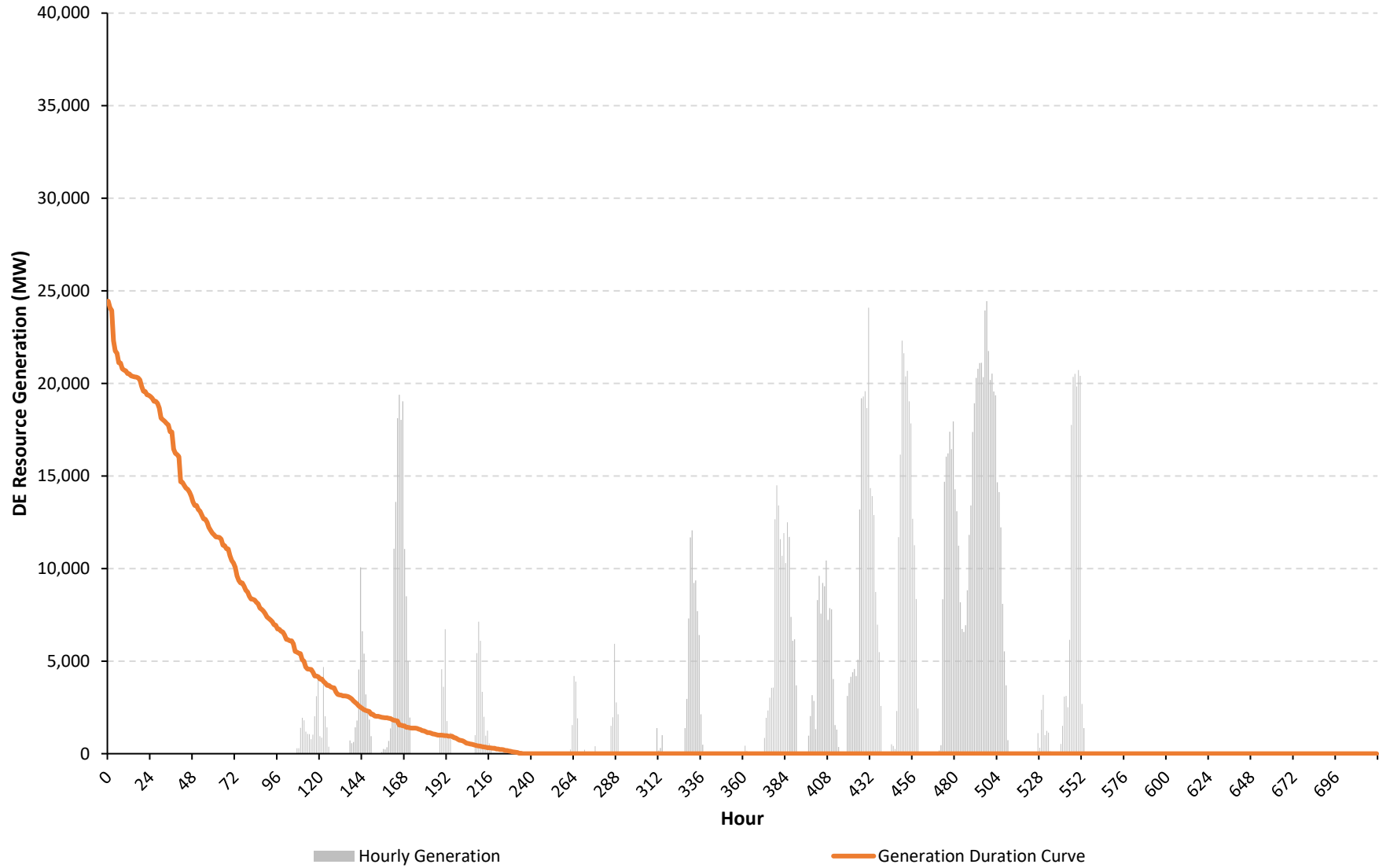
### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



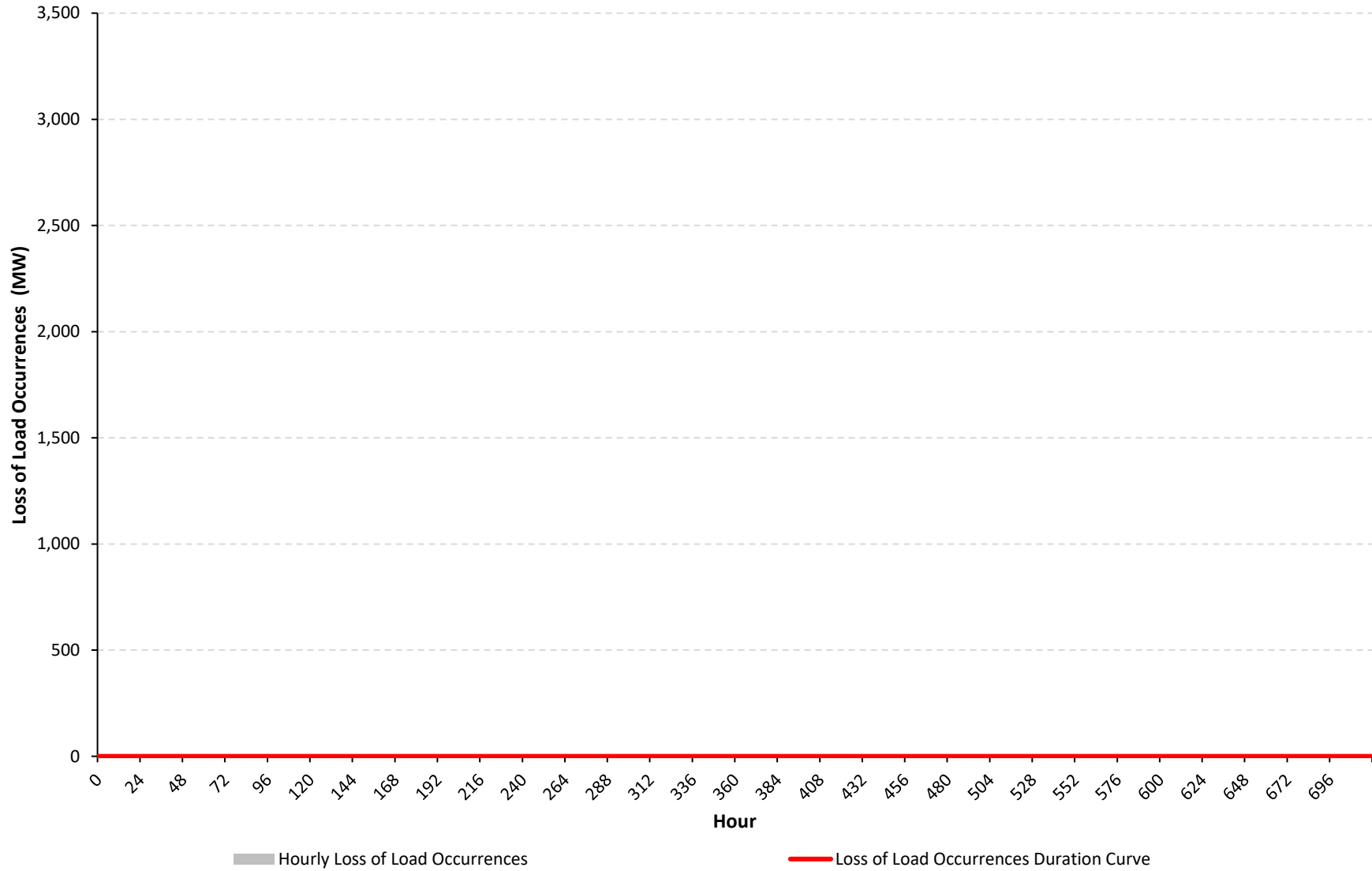


### NYCA DE Resource Generation (MW) CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



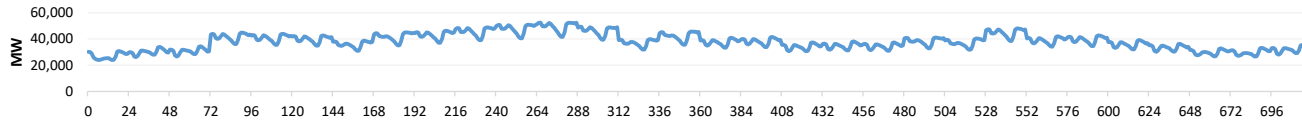
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 13 - CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

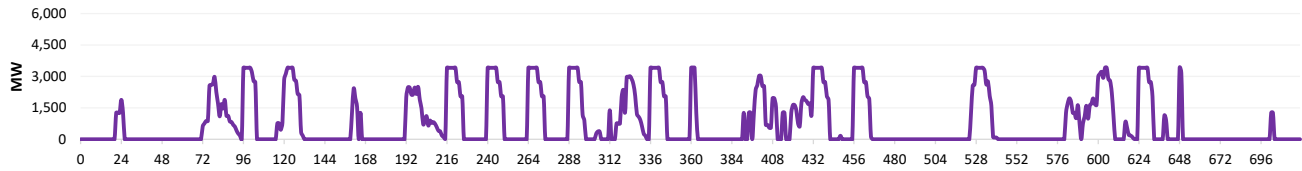
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



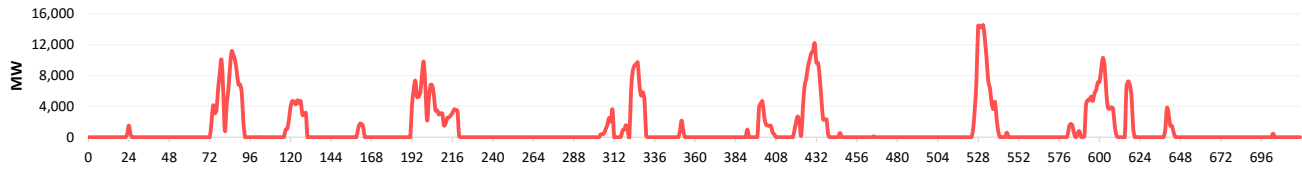
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



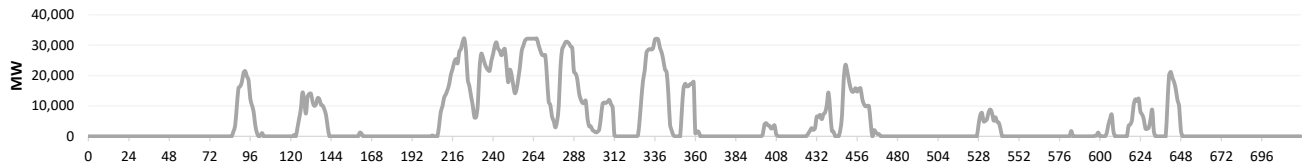
PRD Deployment	
Total Hrs.	276
Total MWh	566,429
Avg. MW	2,052.3

**Battery Energy Storage Deployed During Modeling Period**



Battery Deployment	
Total Hrs.	189
Total MWh	800,461
Avg. MW	4,235.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	278
Total MWh	3,653,404
Avg. MW	13,141.7

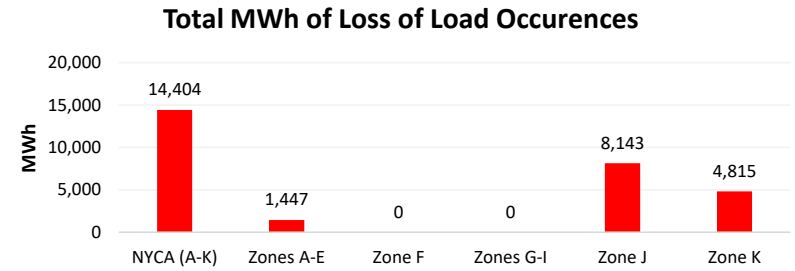
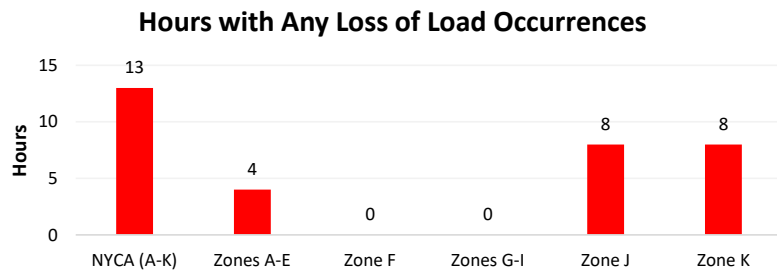
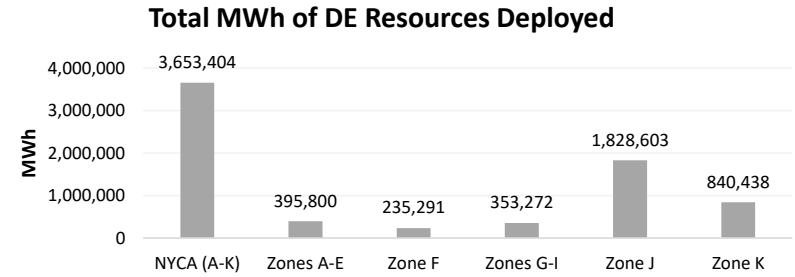
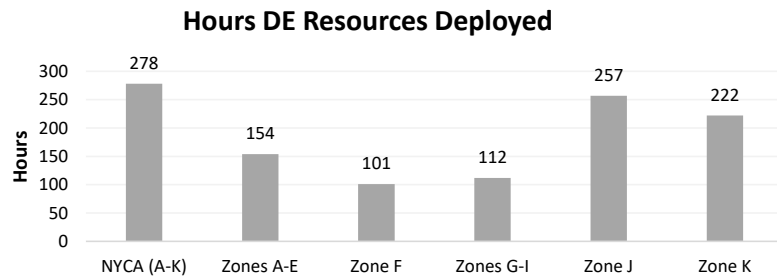
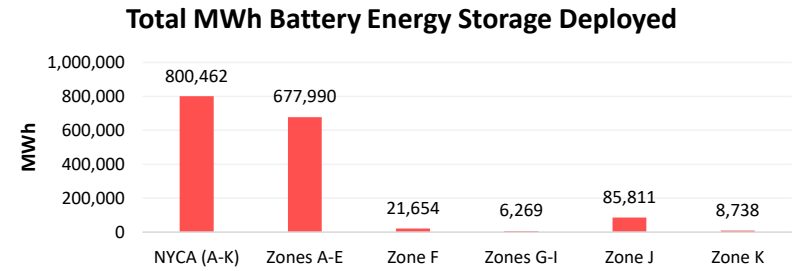
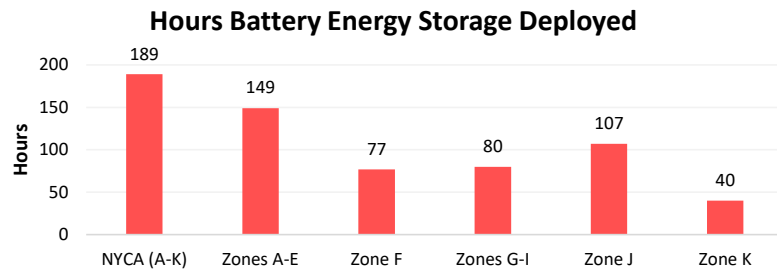
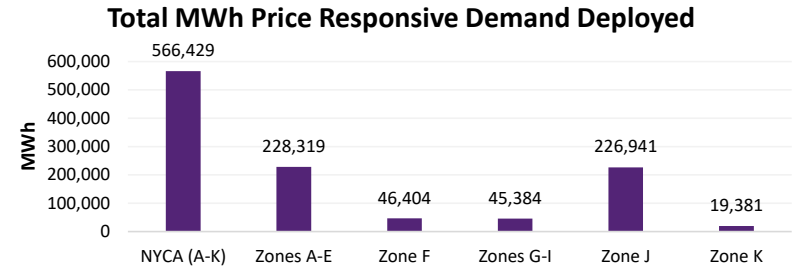
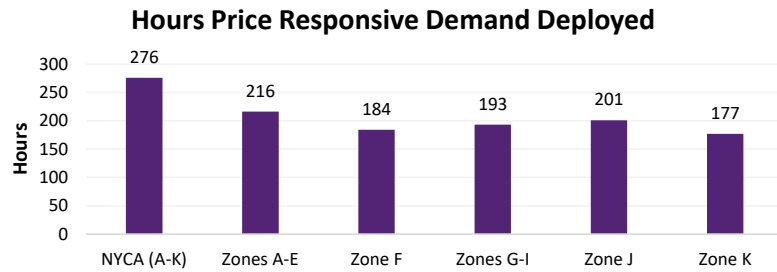
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	13
Total MWh	14,404
Avg. MW	1,108.0

### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

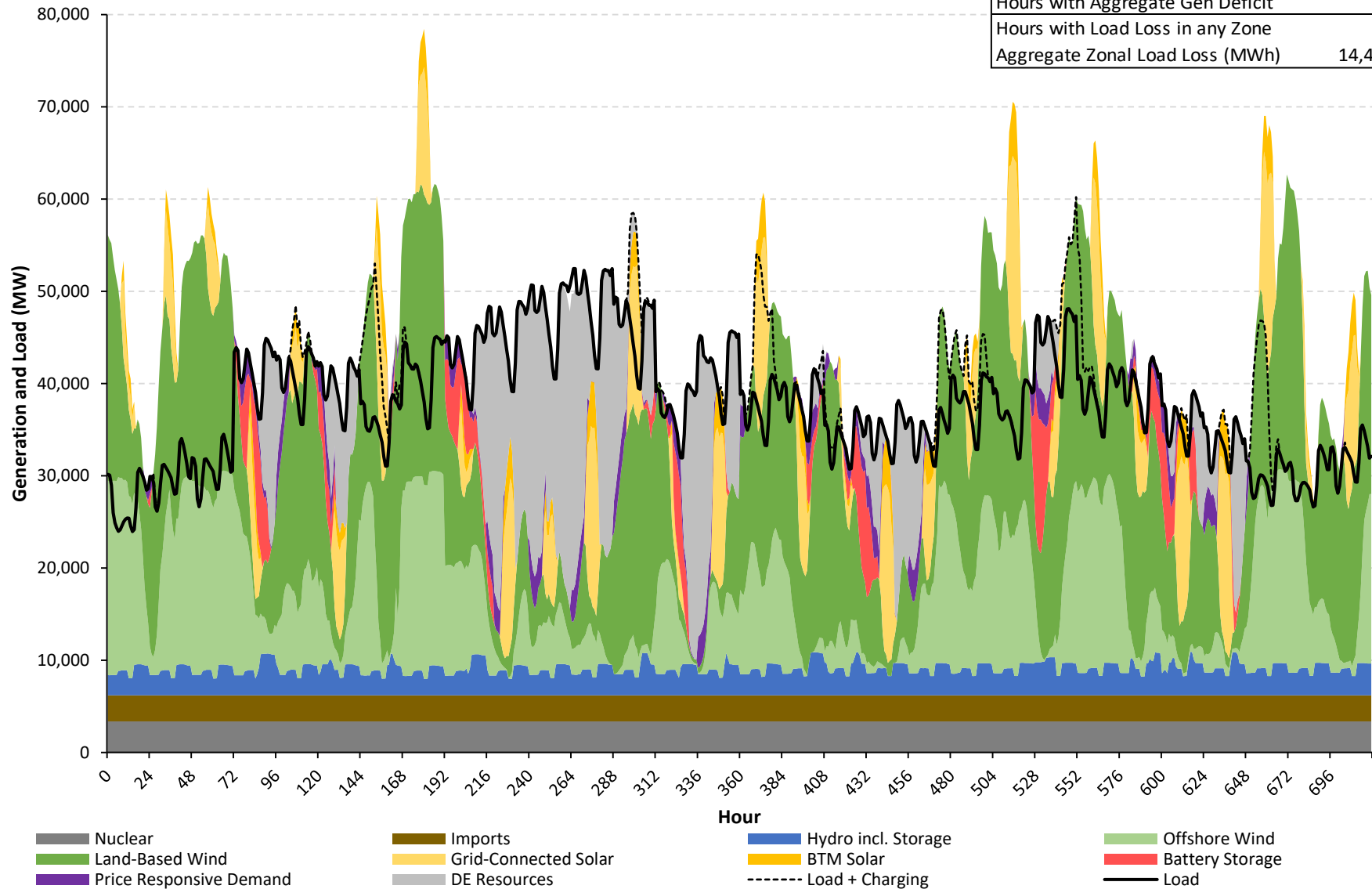


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	32,527,026
Gen Surplus/Deficit (MWh)	5,204,989
Hours with Aggregate Gen Deficit	13
Hours with Load Loss in any Zone	13
Aggregate Zonal Load Loss (MWh)	14,404

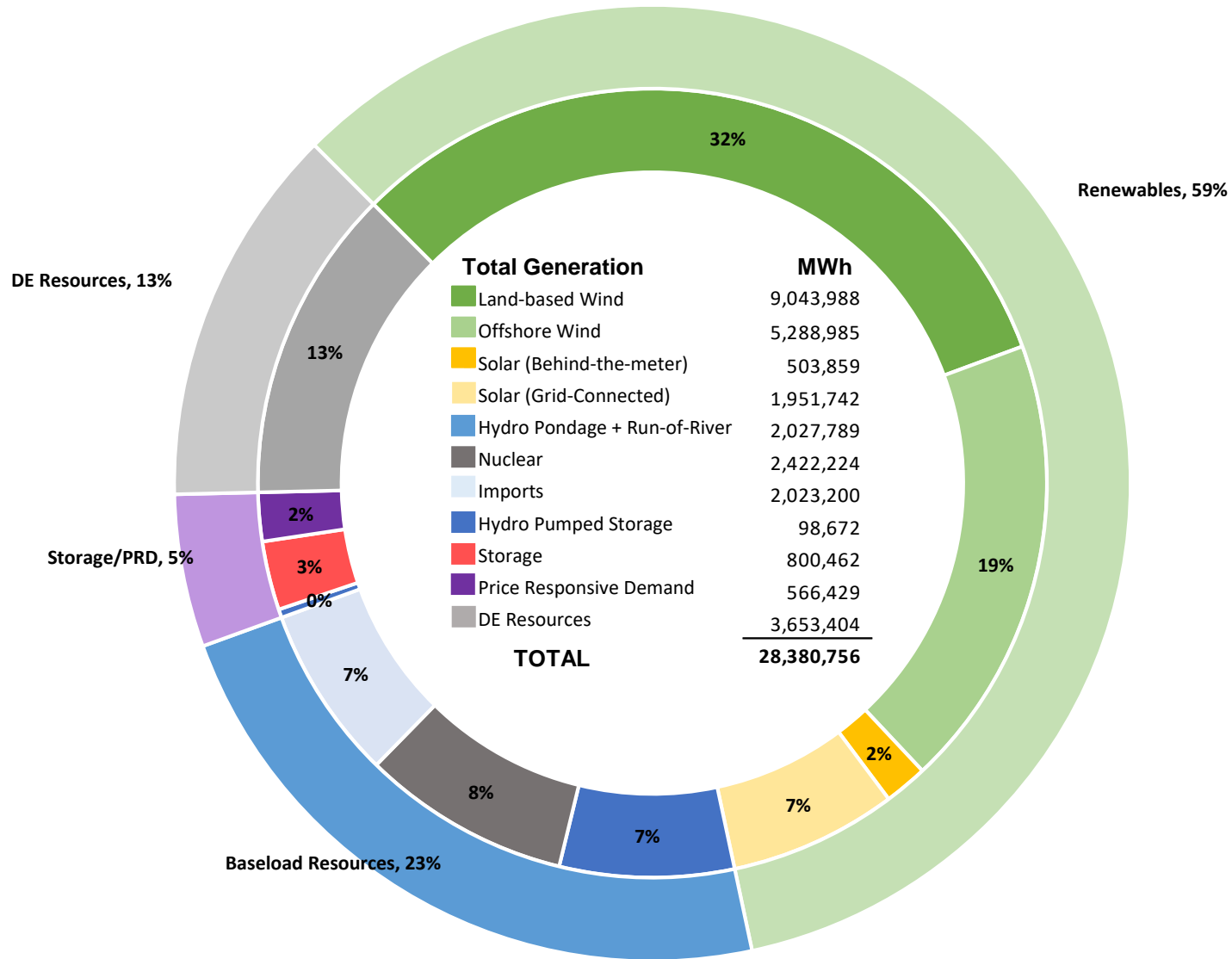


**Note:**

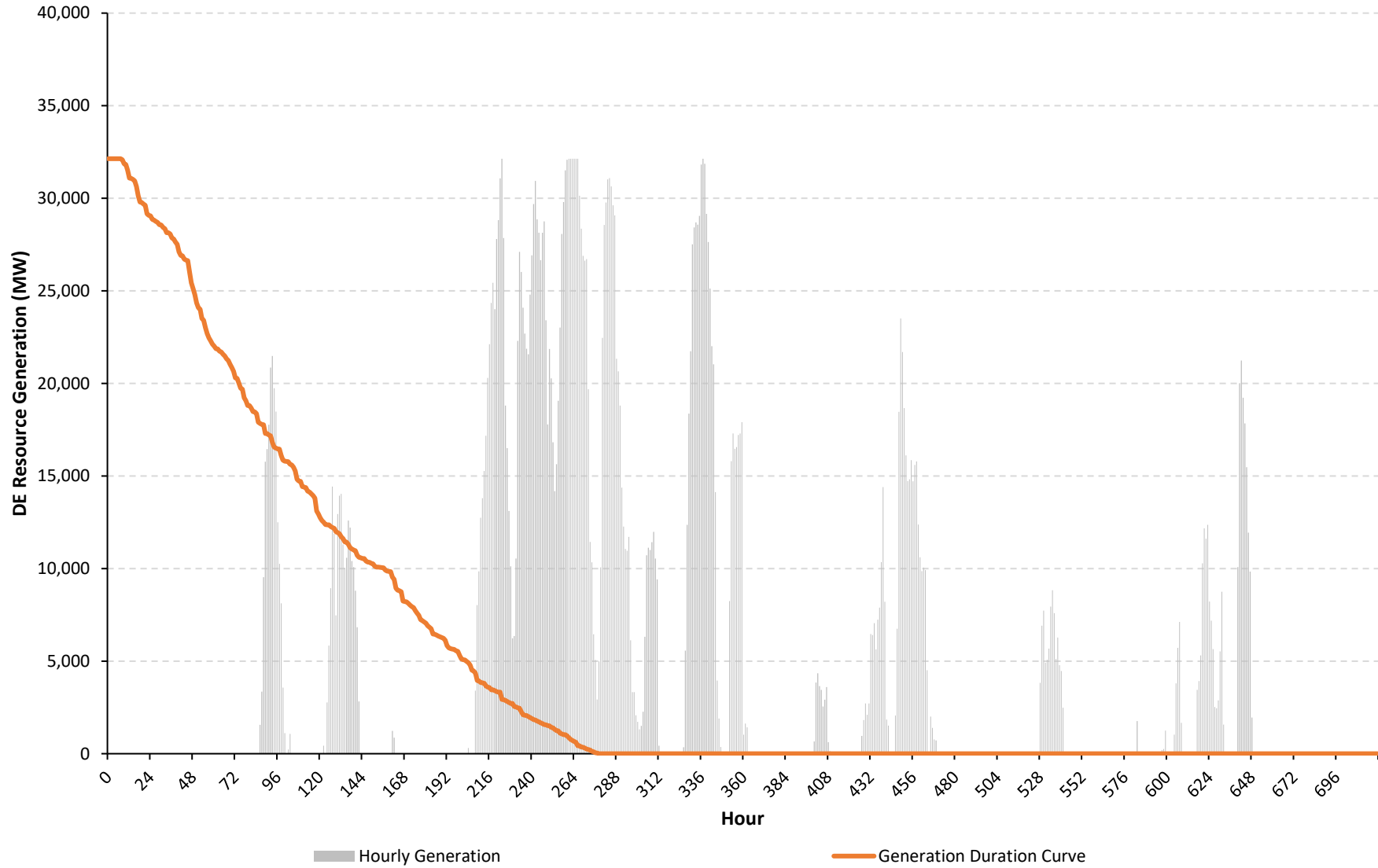
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

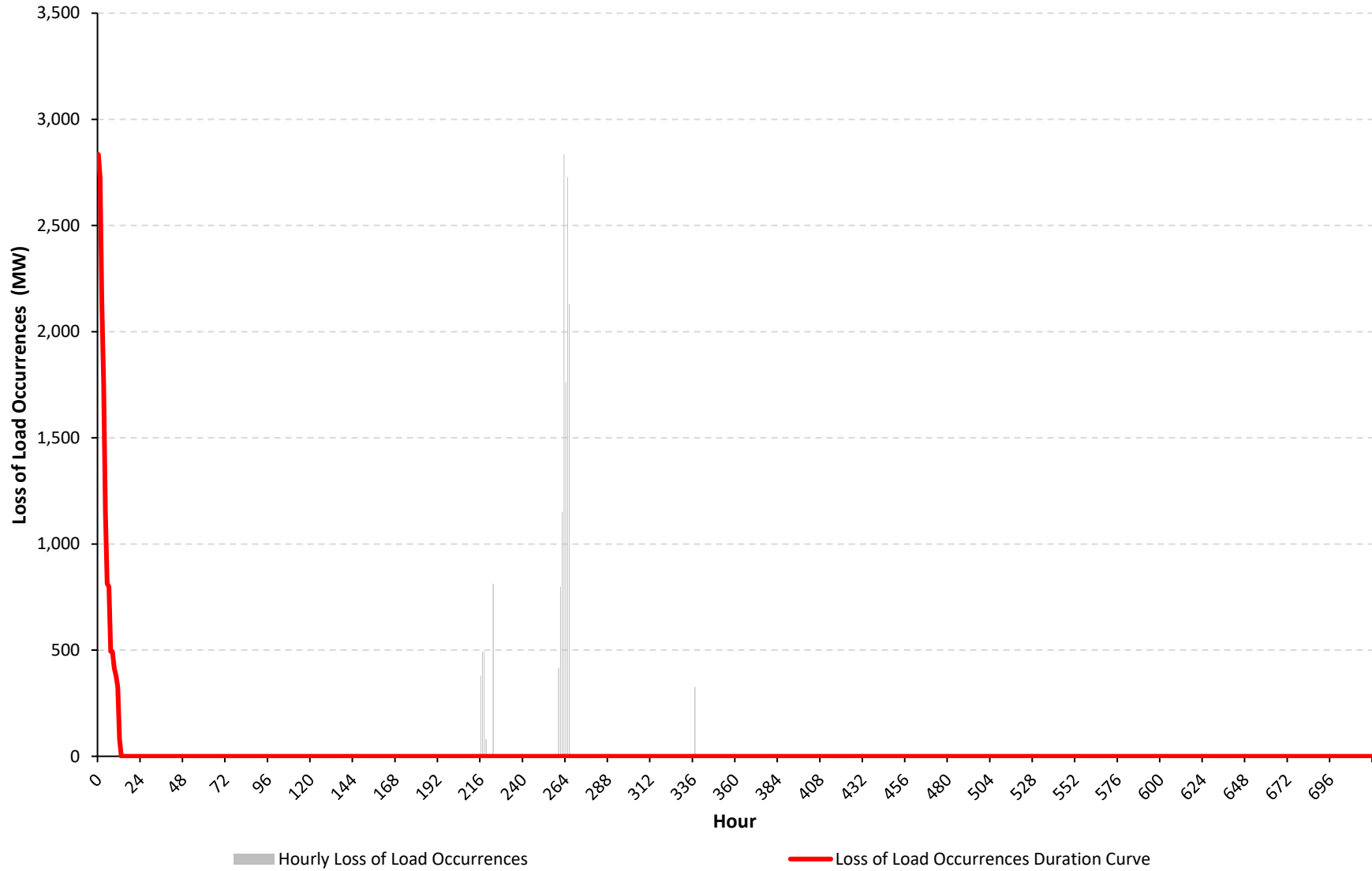


### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Wind Lull - State-wide



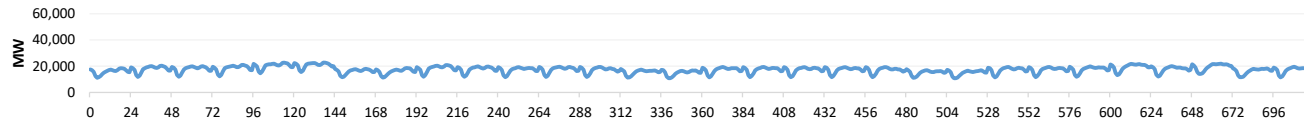
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 14 - CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

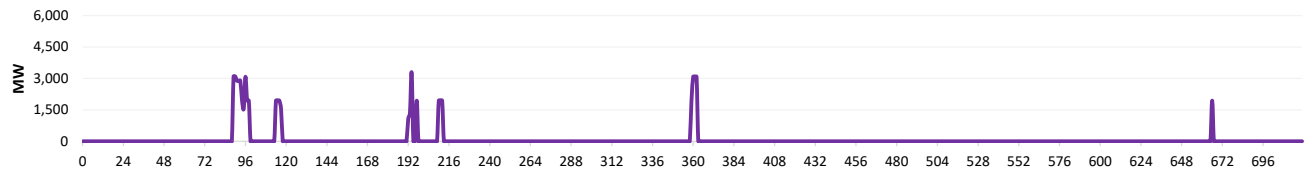
Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



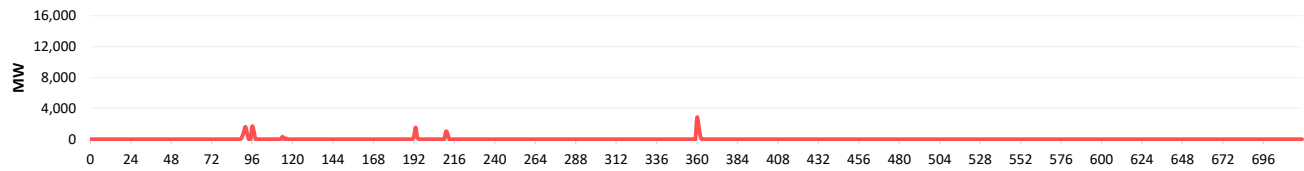
Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



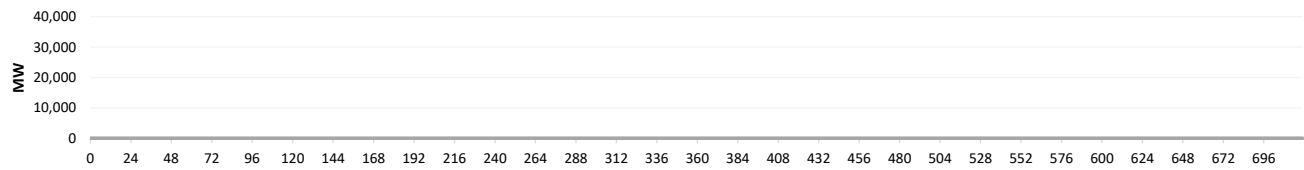
PRD Deployment	
Total Hrs.	26
Total MWh	59,291
Avg. MW	2,280.4

**Battery Energy Storage Deployed During Modeling Period**



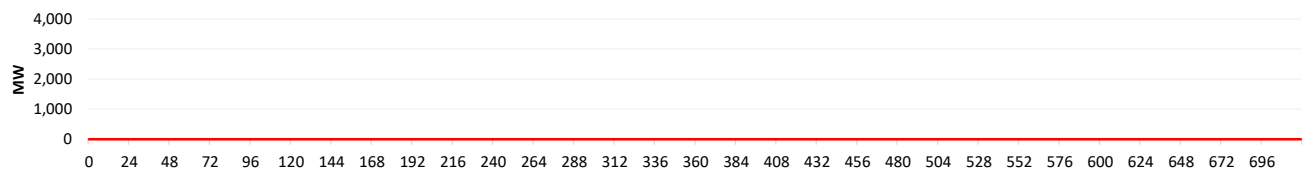
Battery Deployment	
Total Hrs.	16
Total MWh	15,493
Avg. MW	968.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

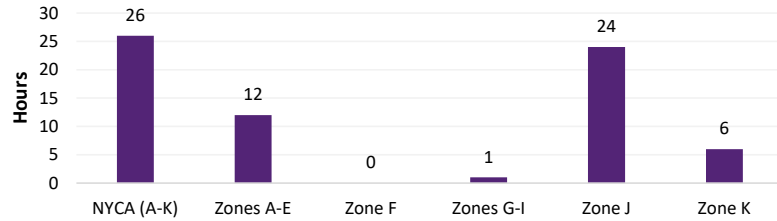


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

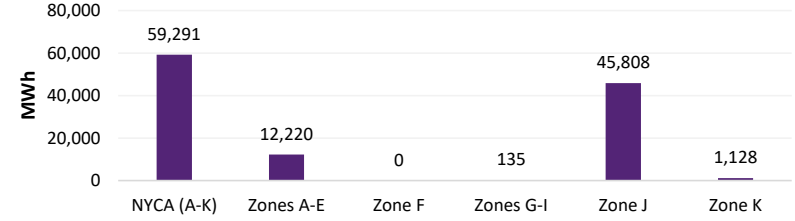
### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

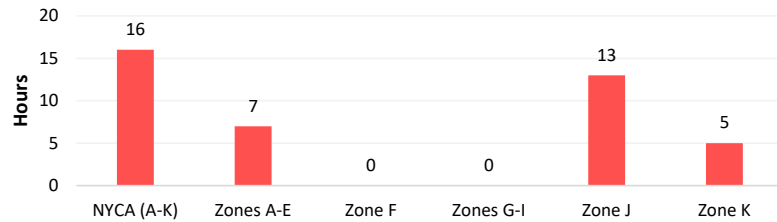
#### Hours Price Responsive Demand Deployed



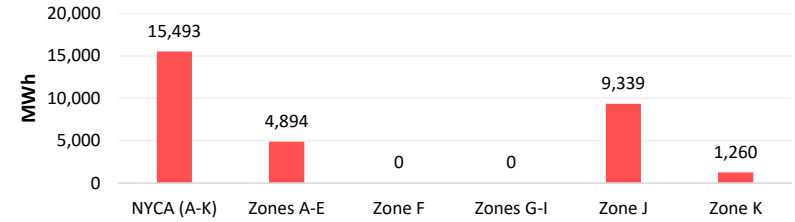
#### Total MWh Price Responsive Demand Deployed



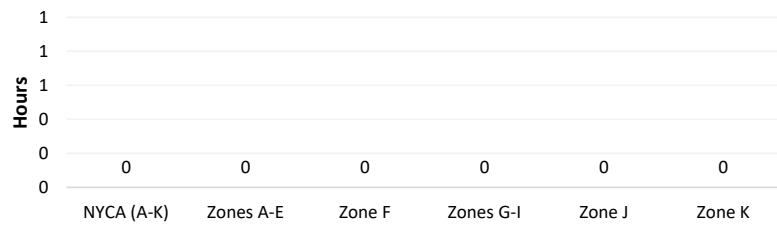
#### Hours Battery Energy Storage Deployed



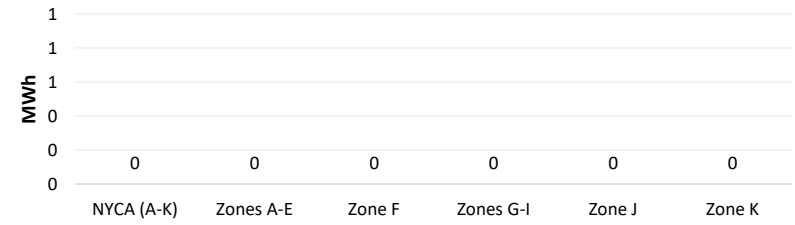
#### Total MWh Battery Energy Storage Deployed



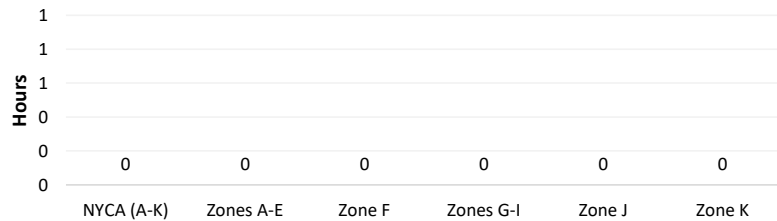
#### Hours DE Resources Deployed



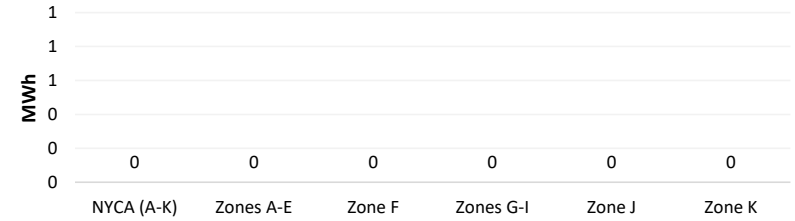
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



#### Total MWh of Loss of Load Occurrences

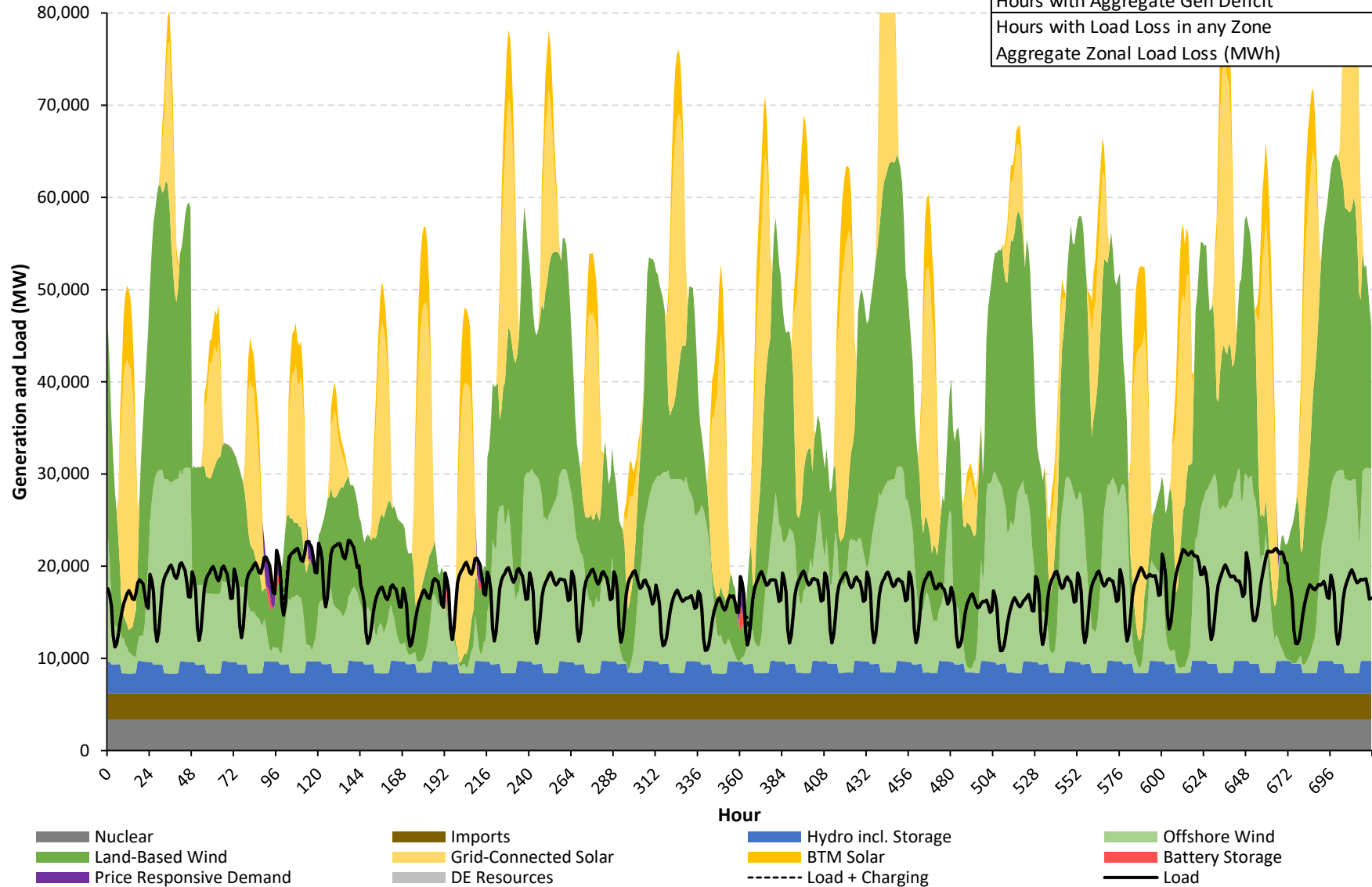


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	32,574,720
Gen Surplus/Deficit (MWh)	20,077,959
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

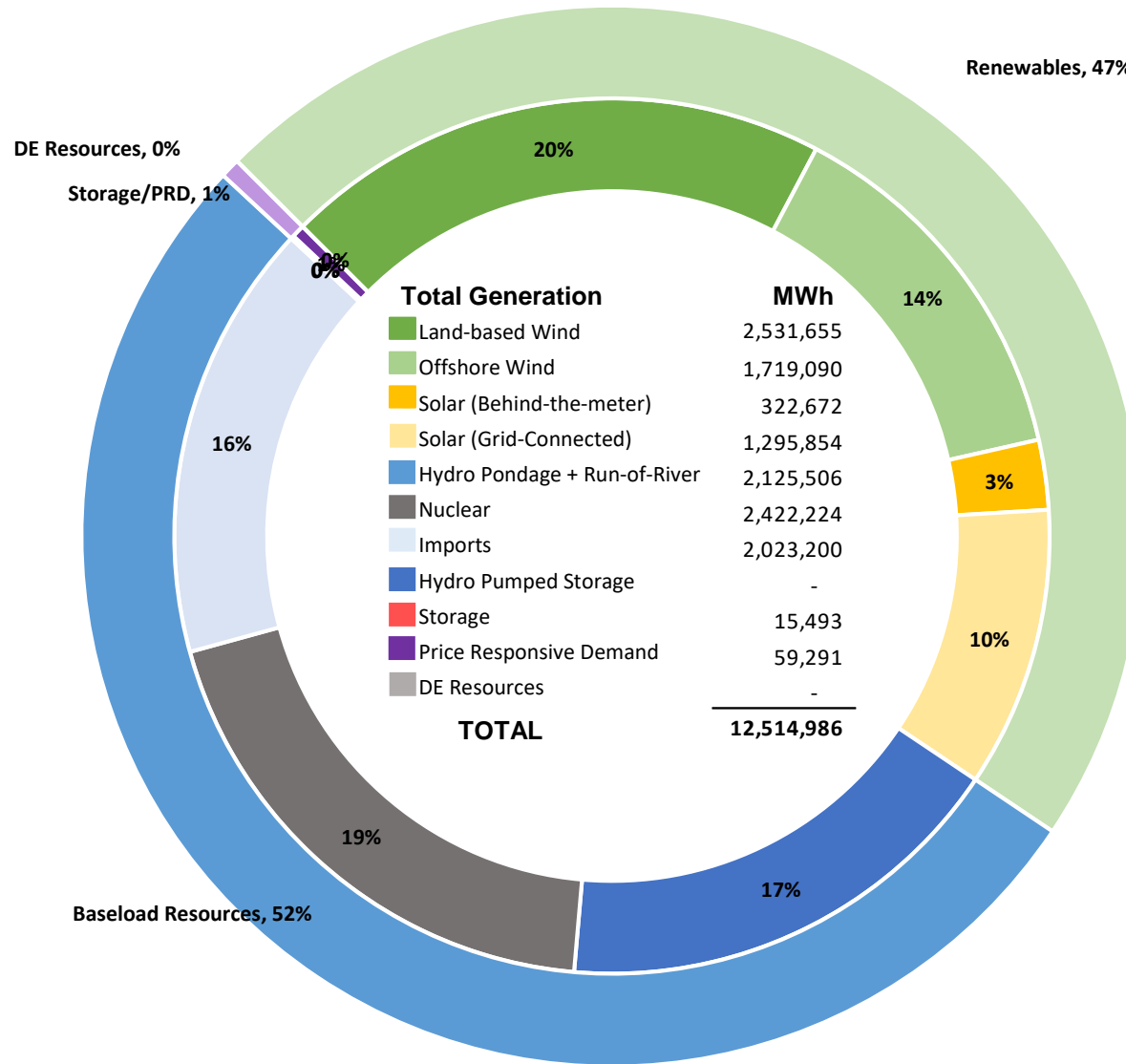


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide



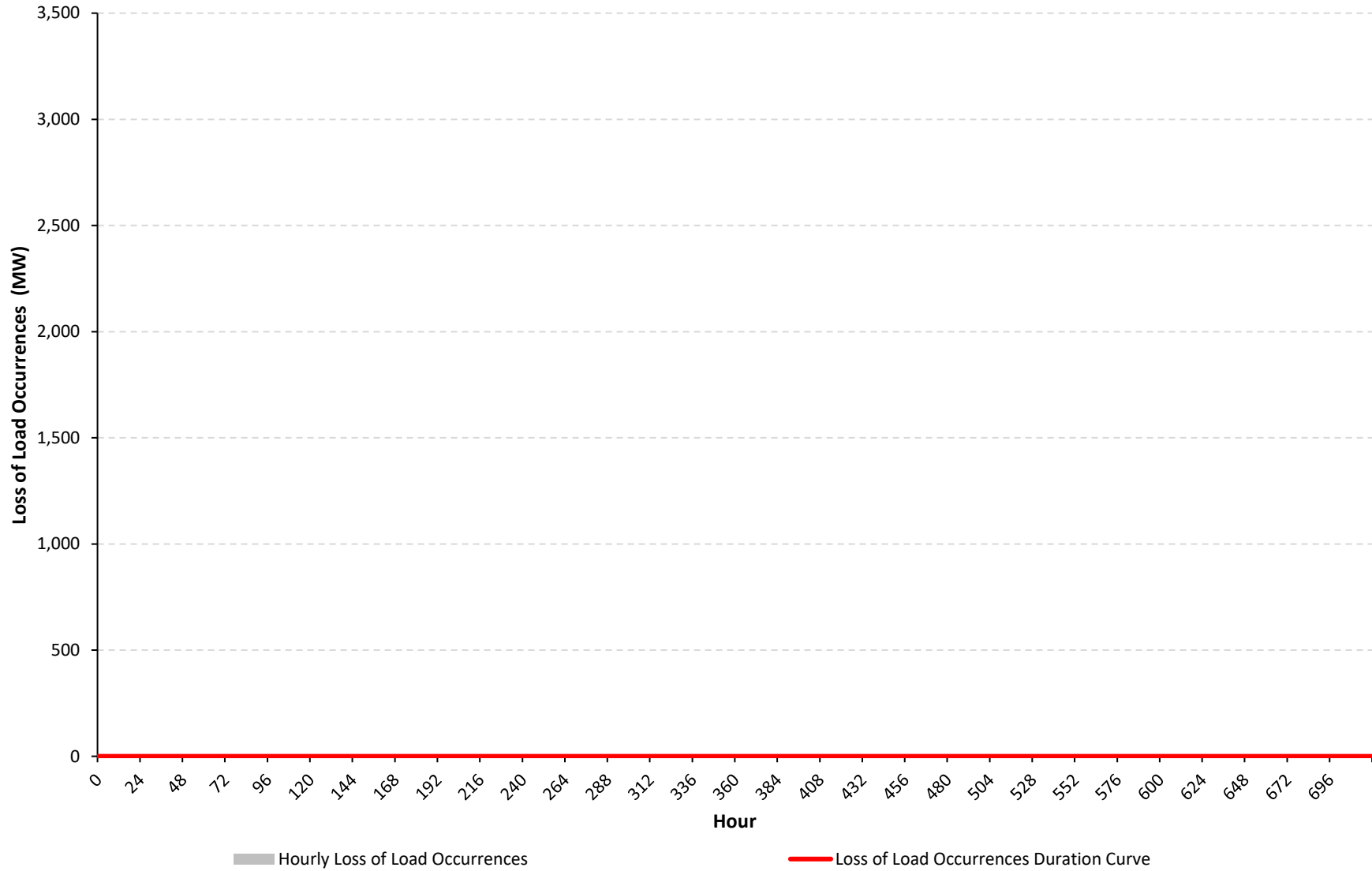
### NYCA DE Resource Generation (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide





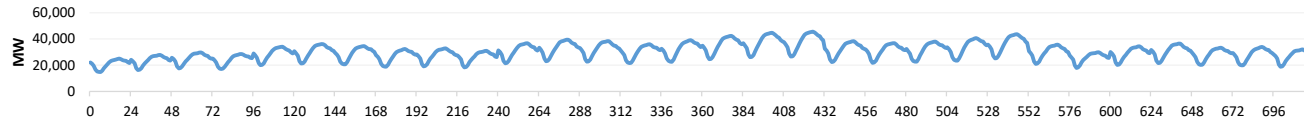
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 15 - CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm**

**Hourly Results Summary**

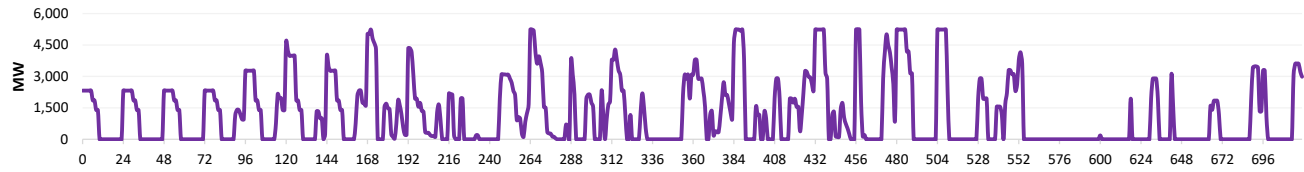
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

**Load During Modeling Period**



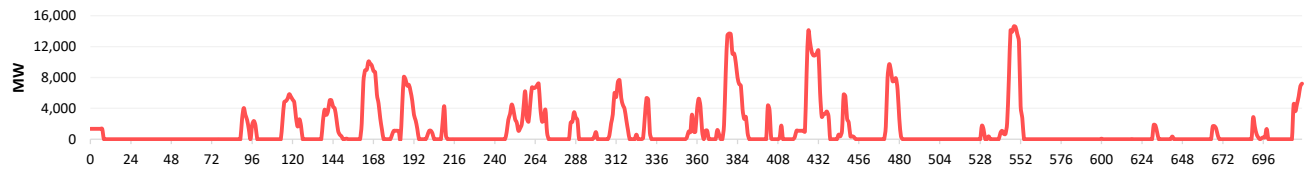
Loss of Load	
Total Hrs.	720
Total MWh	21,600,566
Avg. MW	30,000.8

**Price Responsive Demand Deployed During Modeling Period**



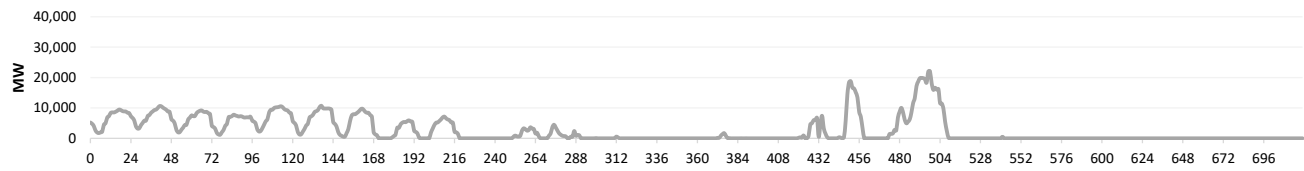
PRD Deployment	
Total Hrs.	366
Total MWh	858,127
Avg. MW	2,344.6

**Battery Energy Storage Deployed During Modeling Period**



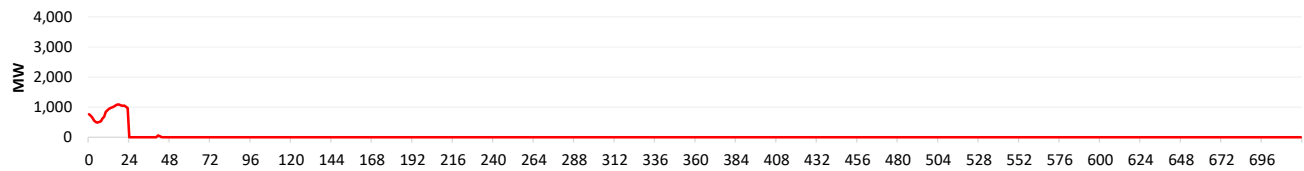
Battery Deployment	
Total Hrs.	245
Total MWh	948,165
Avg. MW	3,870.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	322
Total MWh	1,892,046
Avg. MW	5,875.9

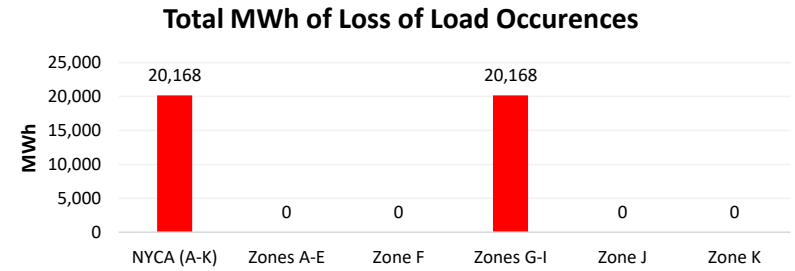
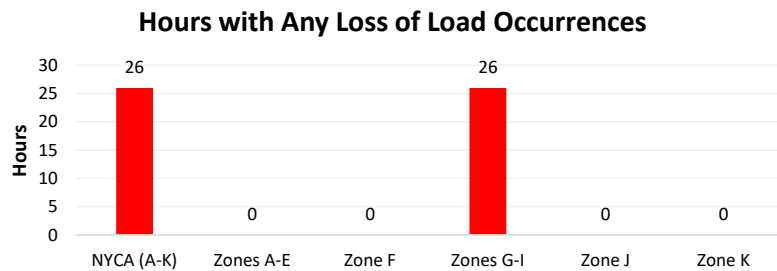
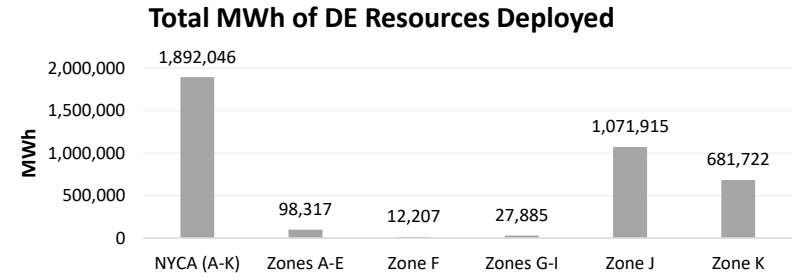
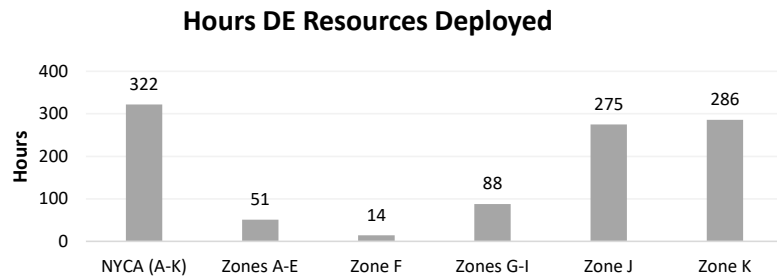
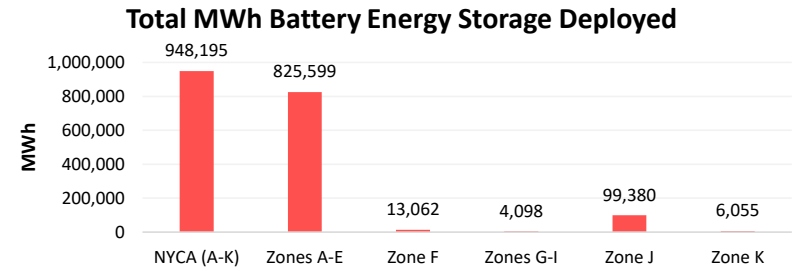
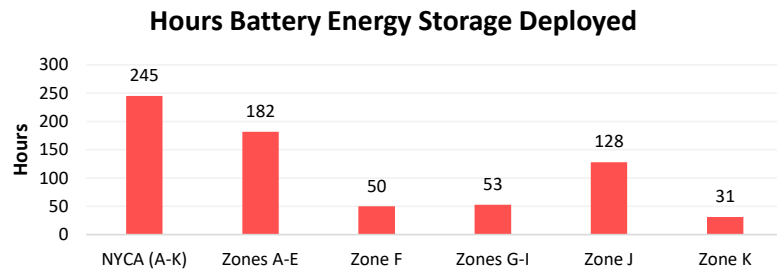
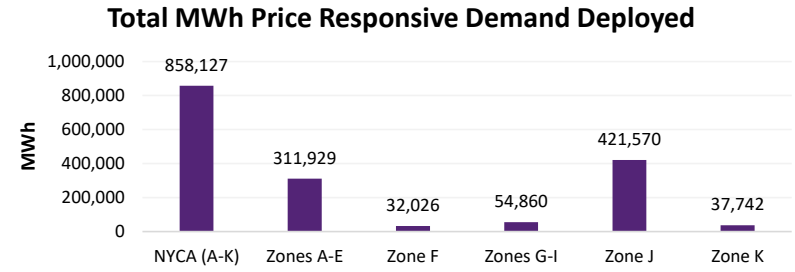
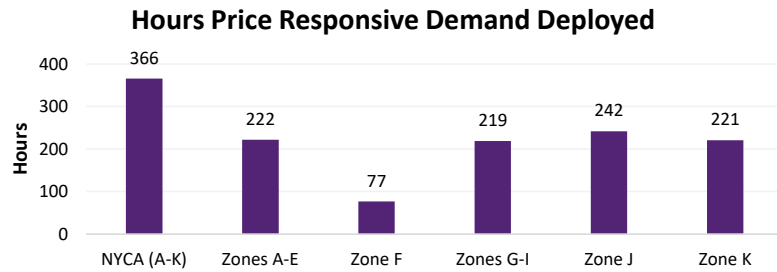
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	26
Total MWh	20,168
Avg. MW	775.7

### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

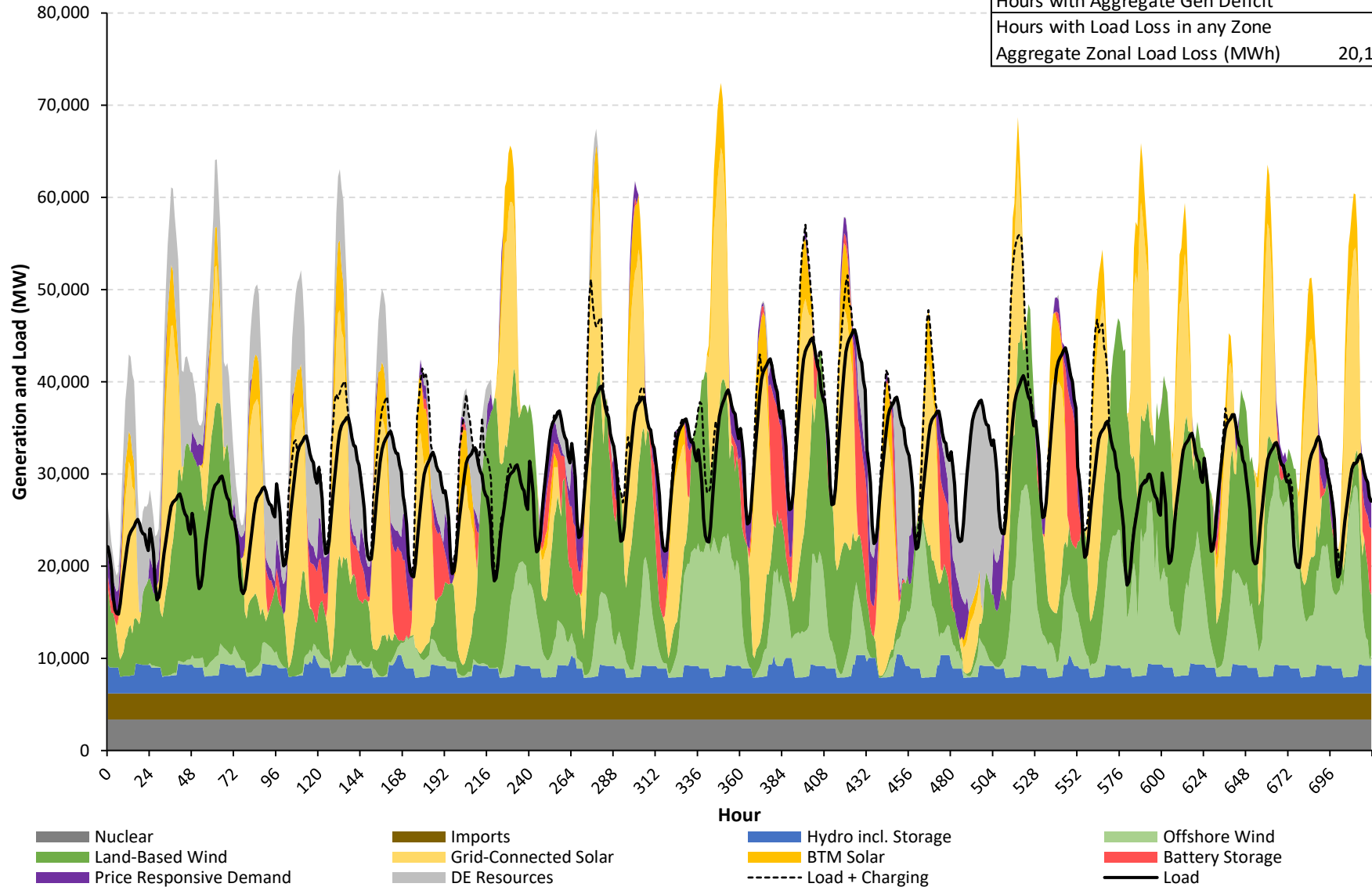


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

Aggregate Load in Period (MWh)	21,600,566
Aggregate Gen in Period (MWh)	27,683,256
Gen Surplus/Deficit (MWh)	6,082,690
Hours with Aggregate Gen Deficit	1
Hours with Load Loss in any Zone	26
Aggregate Zonal Load Loss (MWh)	20,168

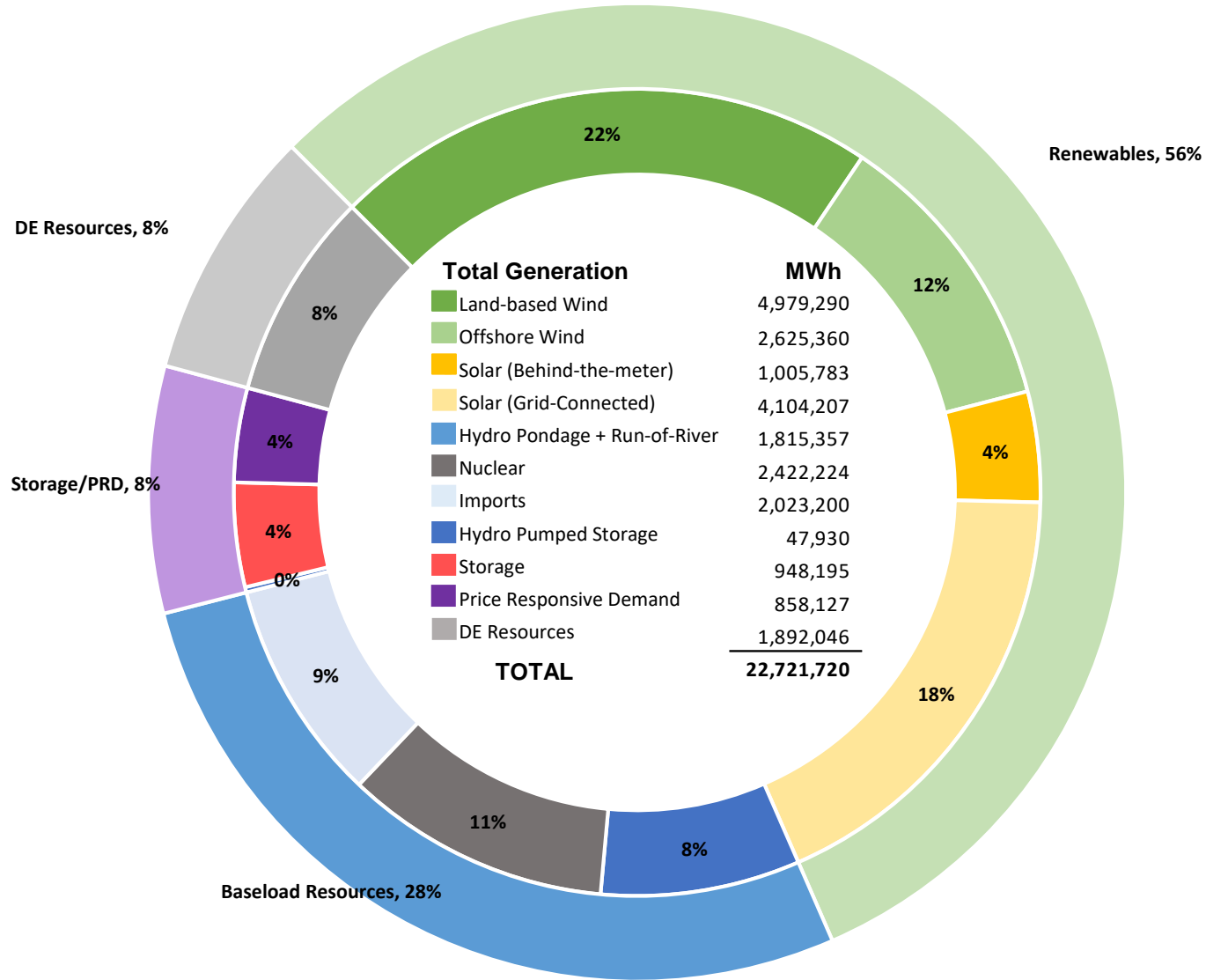


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

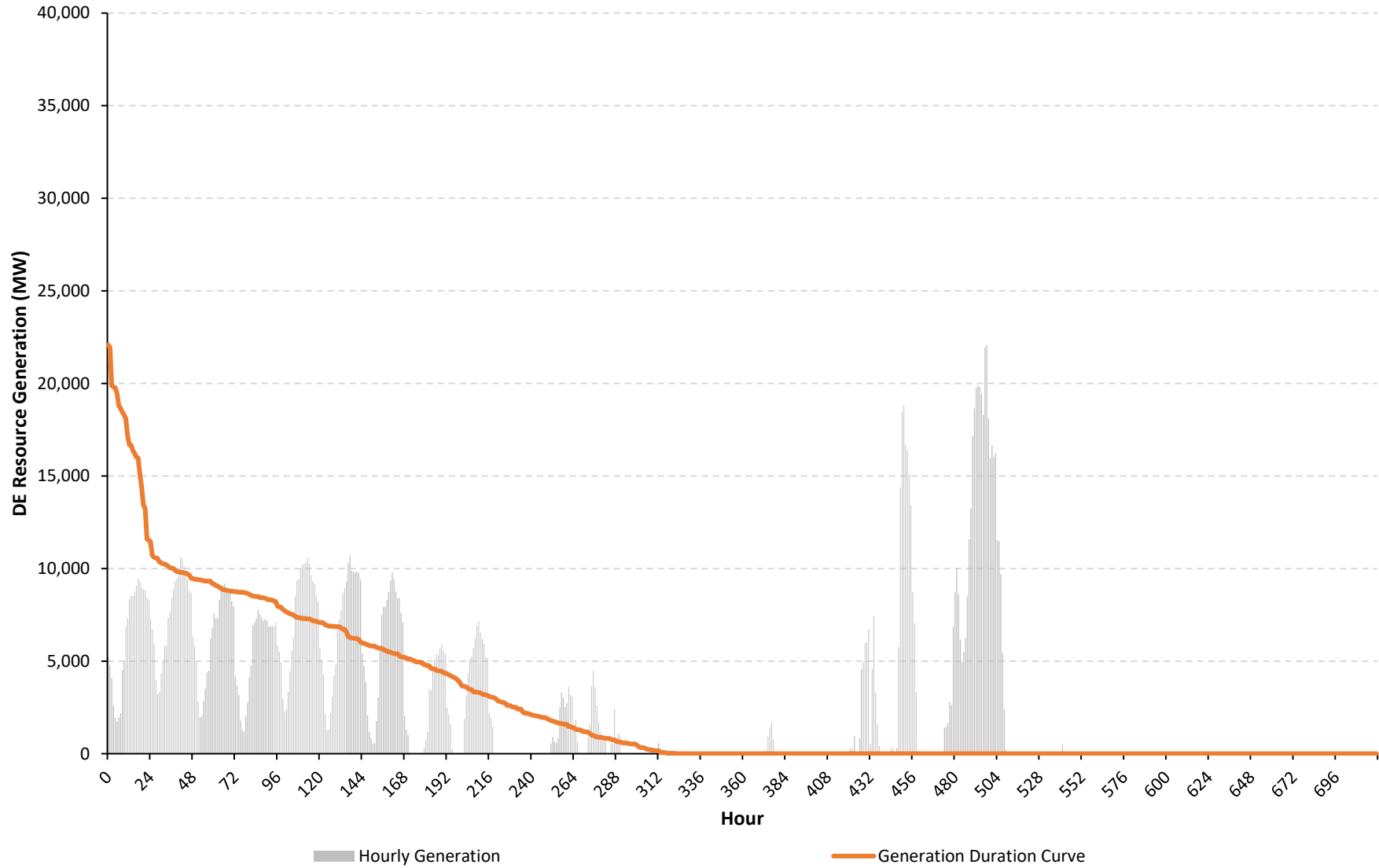
### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm



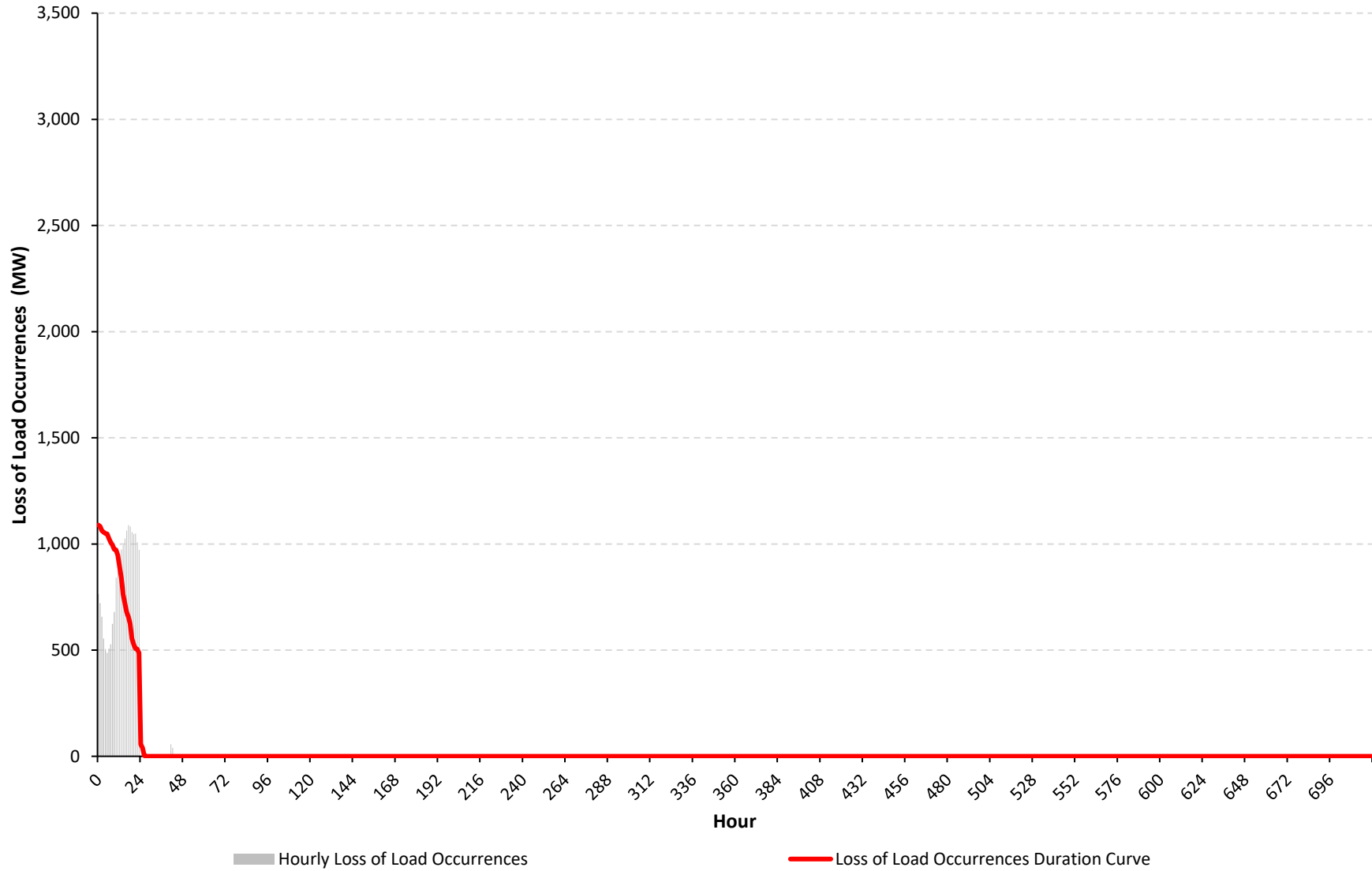
### NYCA DE Resource Generation (MW)

CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm



## **Appendix C. Diagnostic Charts for All Cases**

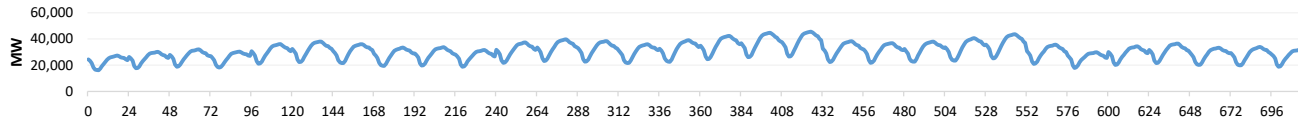
### **Case 16 - CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate**



**Hourly Results Summary**

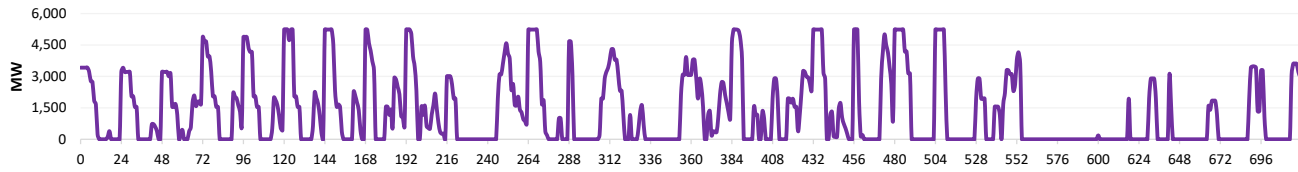
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



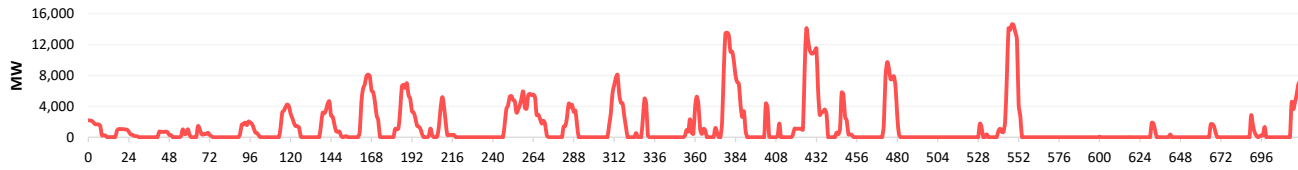
Loss of Load	
Total Hrs.	720
Total MWh	21,960,256
Avg. MW	30,500.4

**Price Responsive Demand Deployed During Modeling Period**



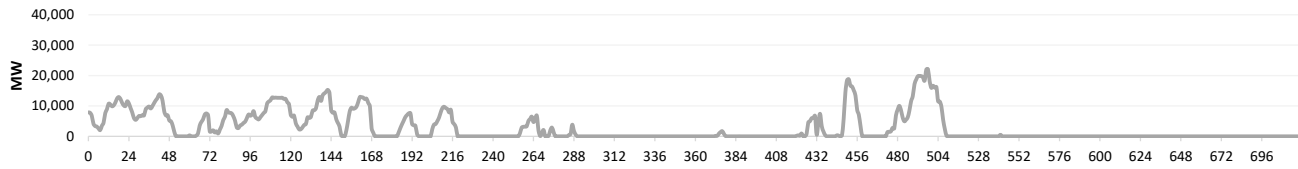
PRD Deployment	
Total Hrs.	373
Total MWh	969,018
Avg. MW	2,597.9

**Battery Energy Storage Deployed During Modeling Period**



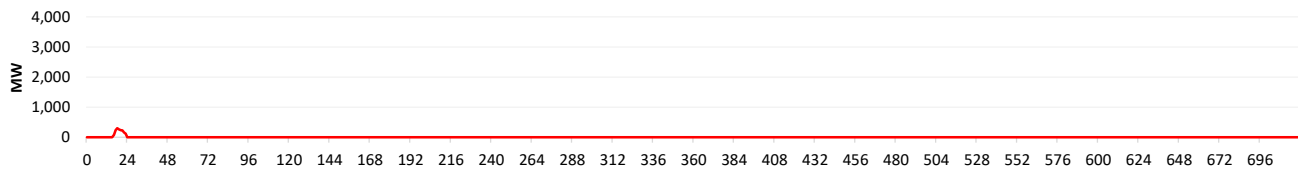
Battery Deployment	
Total Hrs.	309
Total MWh	951,395
Avg. MW	3,078.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	283
Total MWh	2,002,682
Avg. MW	7,076.6

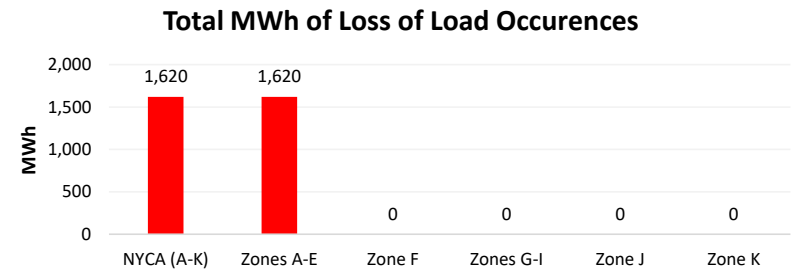
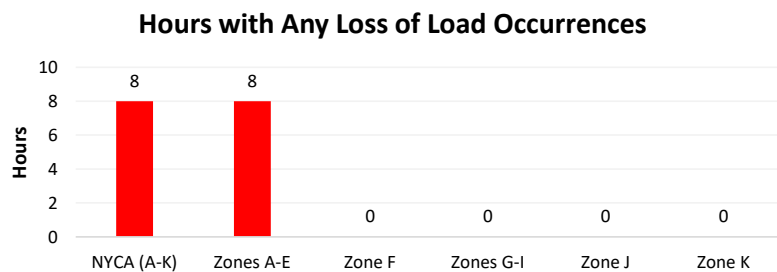
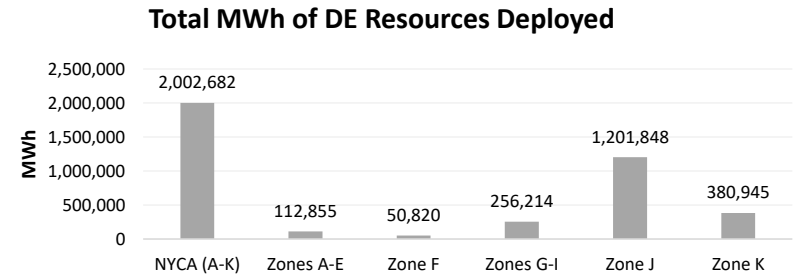
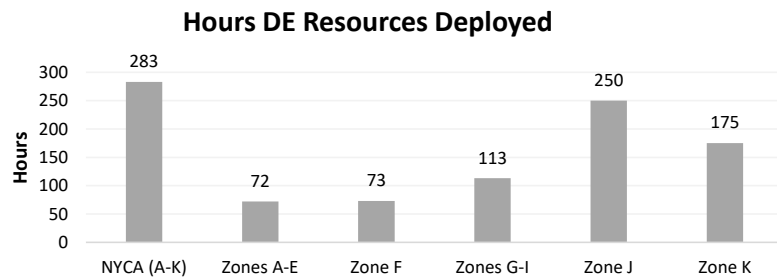
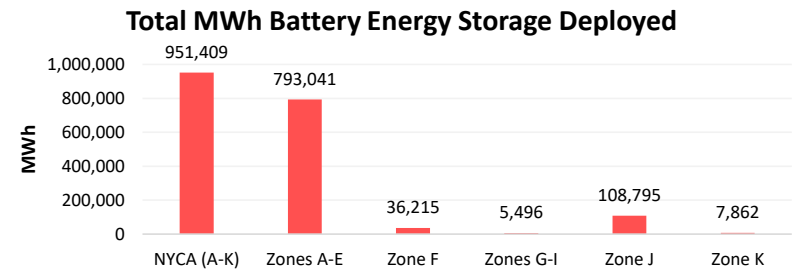
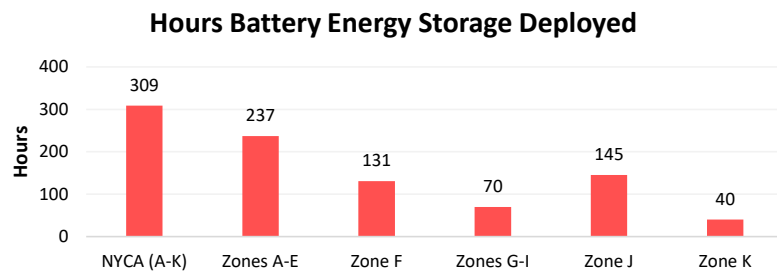
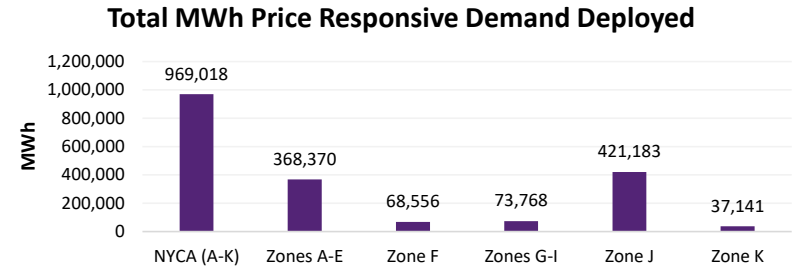
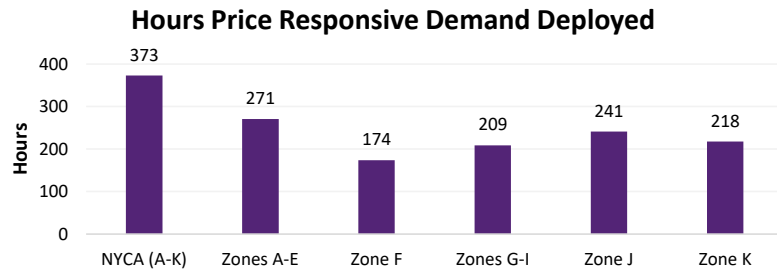
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	8
Total MWh	1,620
Avg. MW	202.5

### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

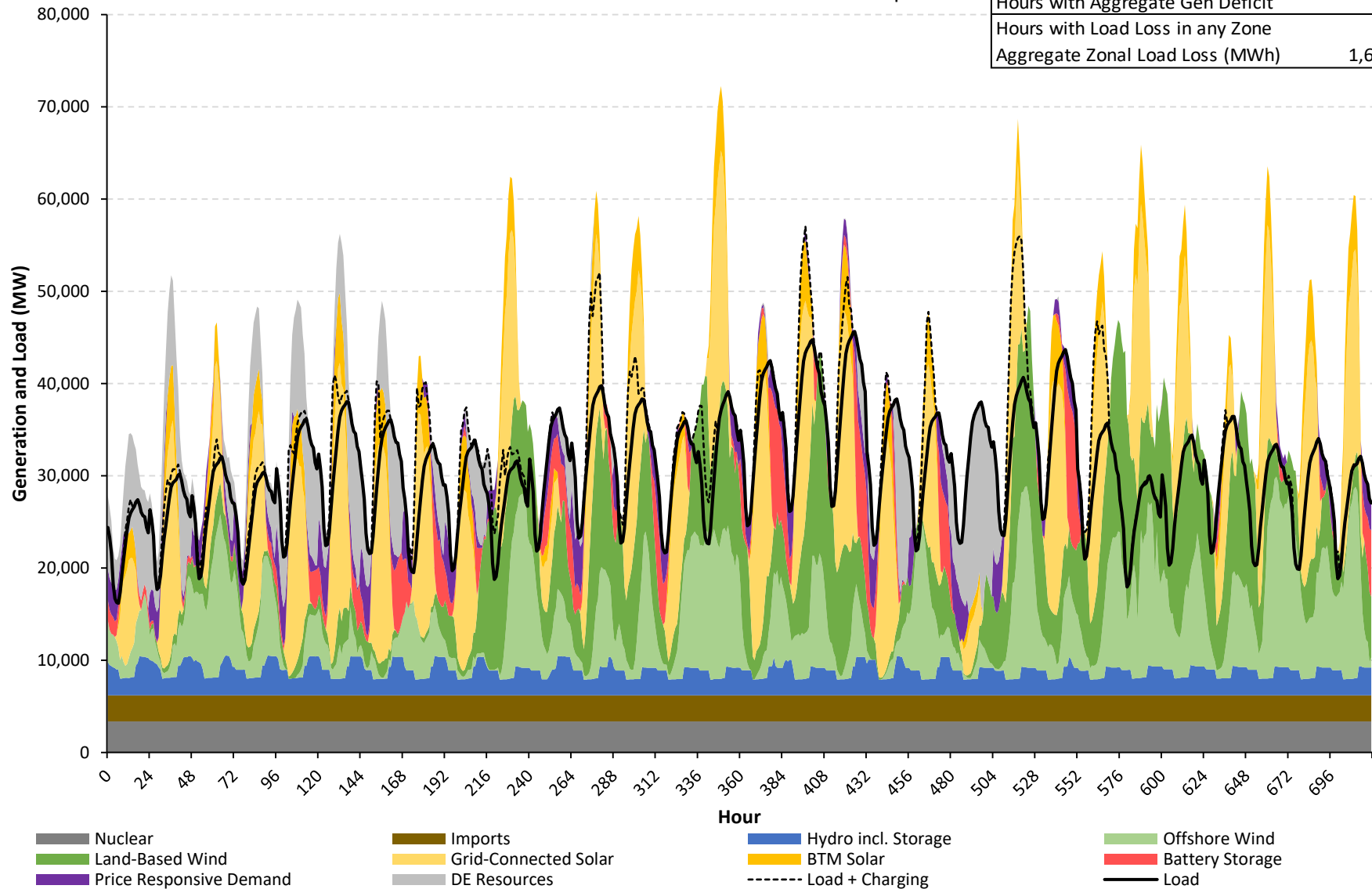


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	21,960,256
Aggregate Gen in Period (MWh)	26,943,089
Gen Surplus/Deficit (MWh)	4,982,833
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	8
Aggregate Zonal Load Loss (MWh)	1,620

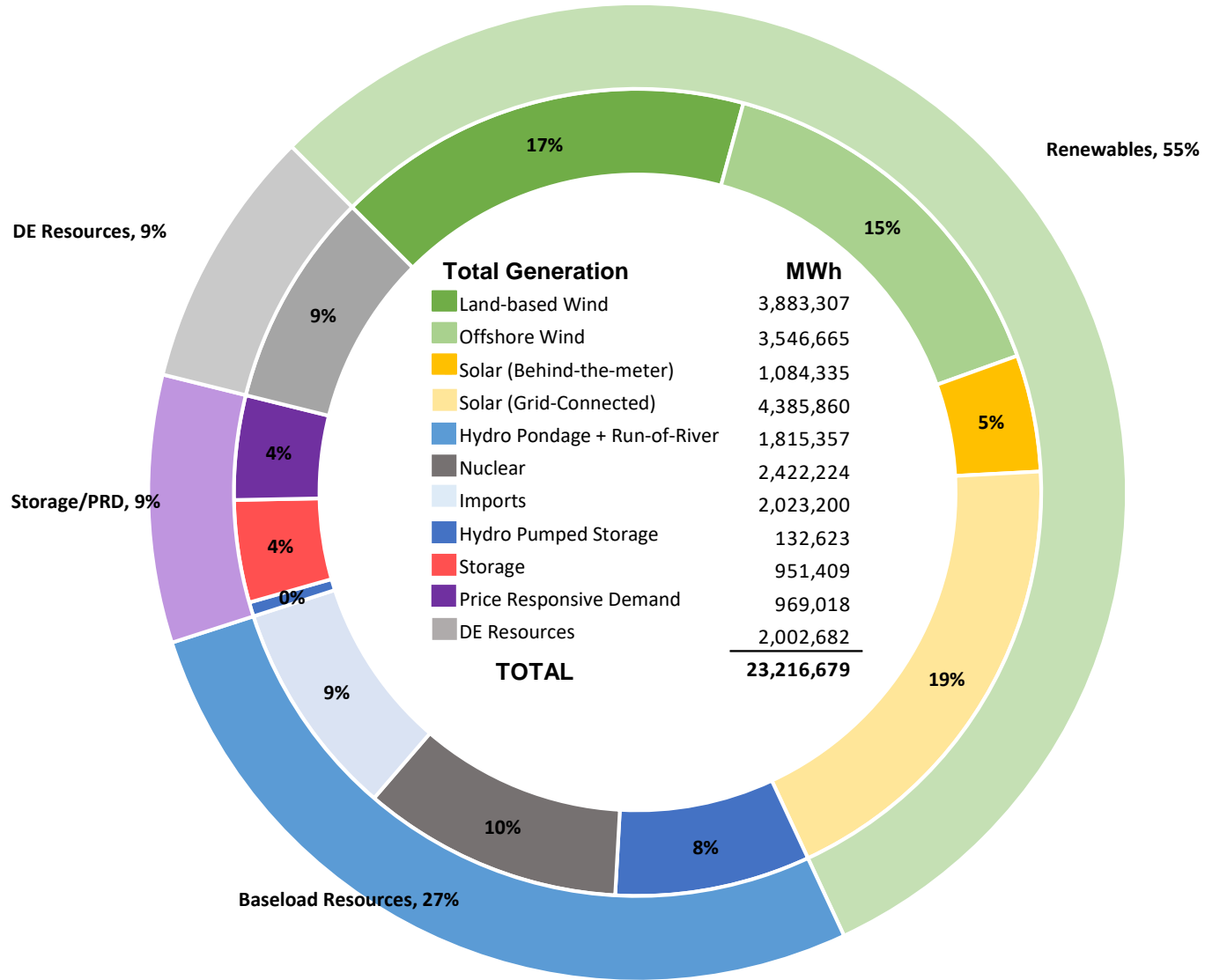


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

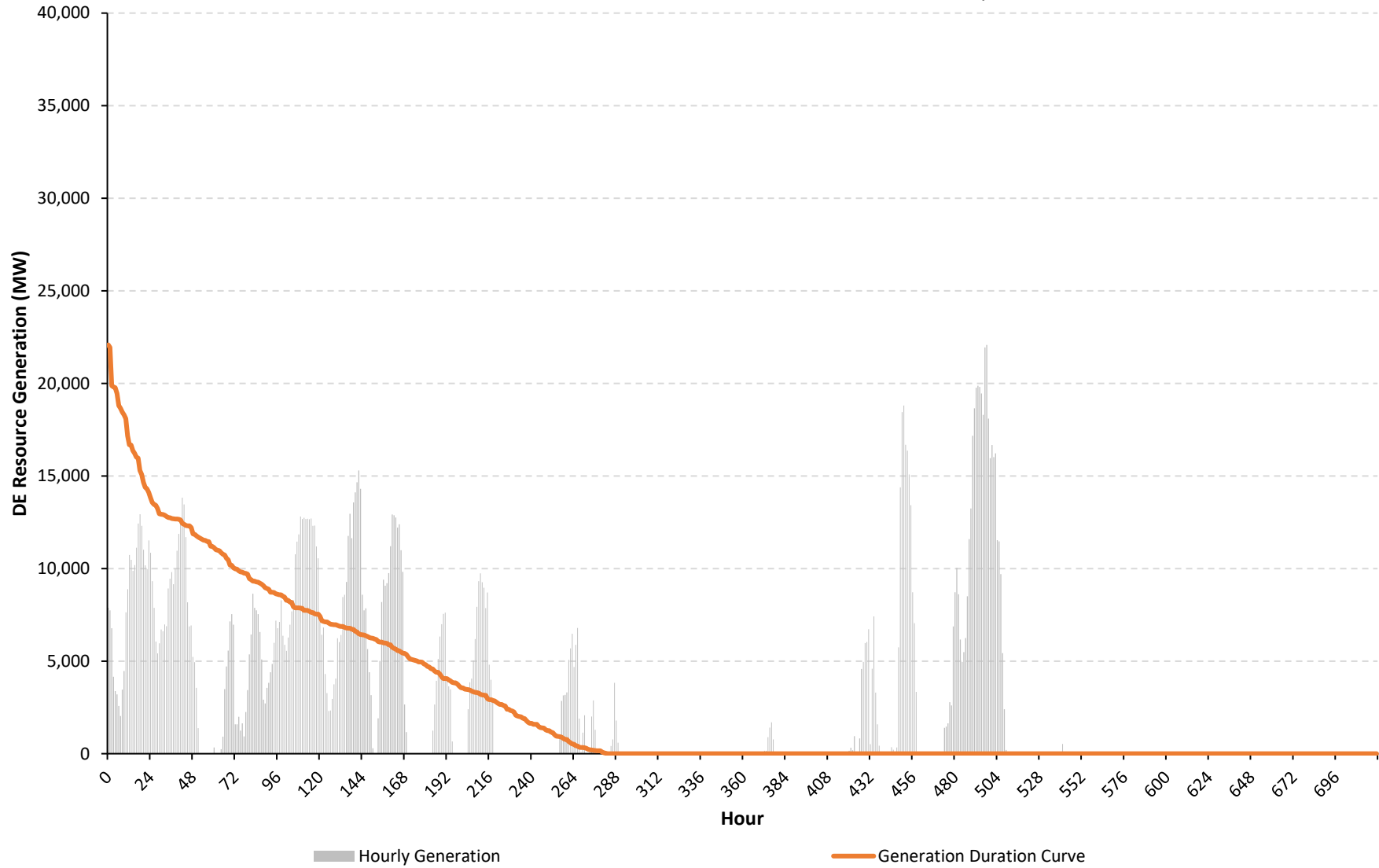
### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



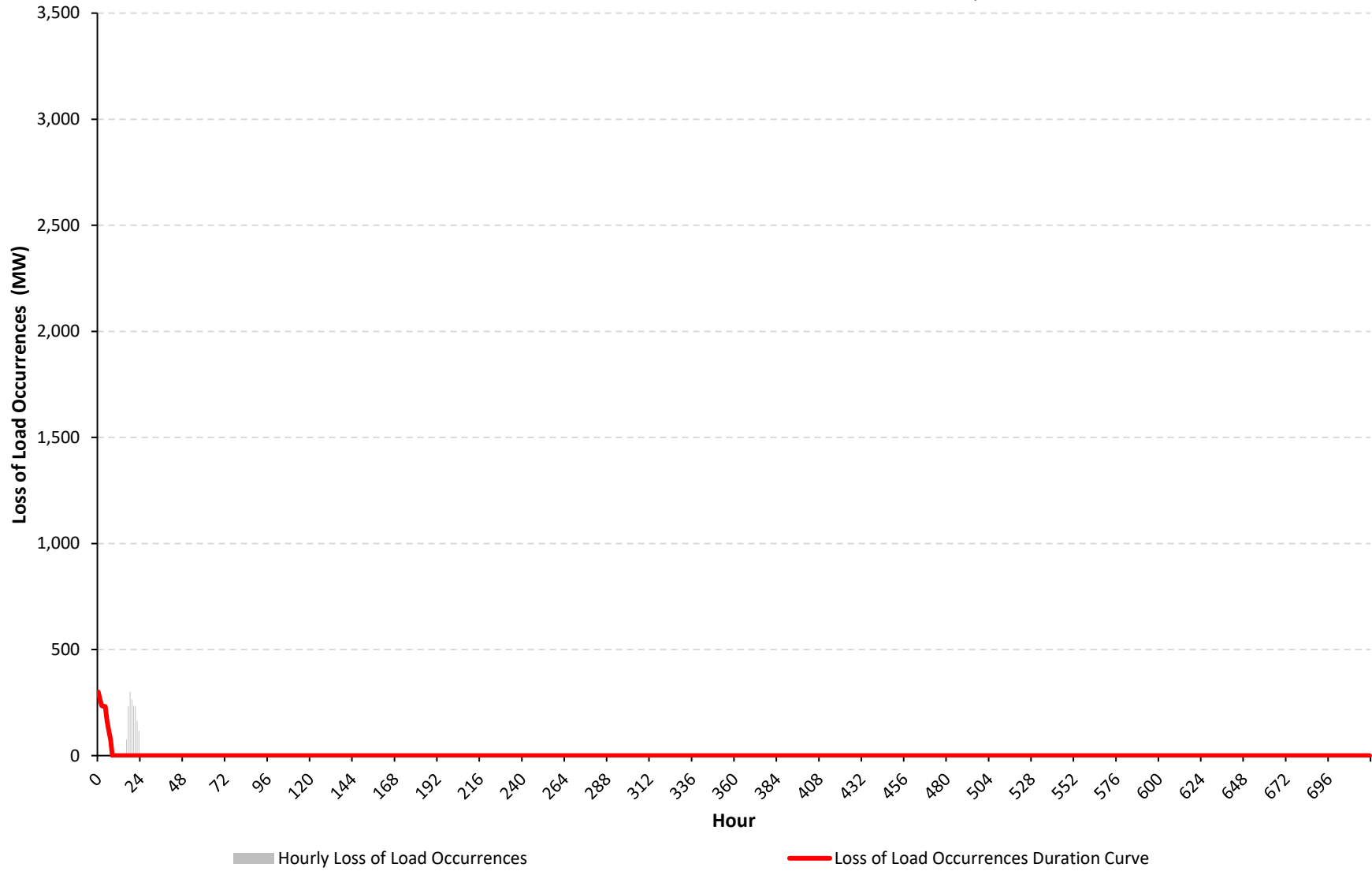
### NYCA DE Resource Generation (MW)

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



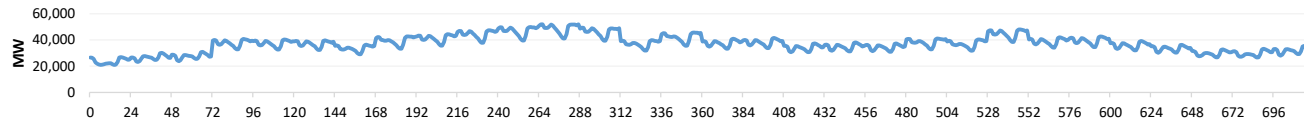
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 17 - CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate**

**Hourly Results Summary**

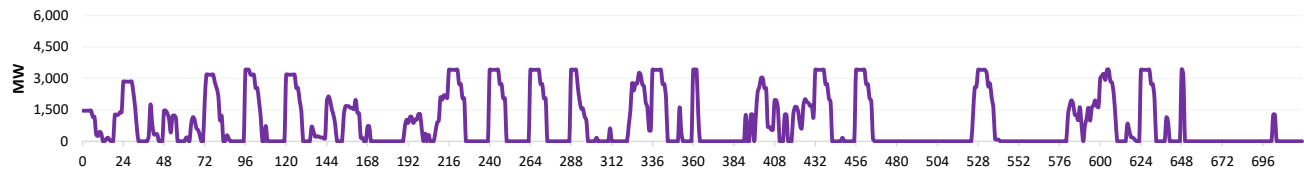
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



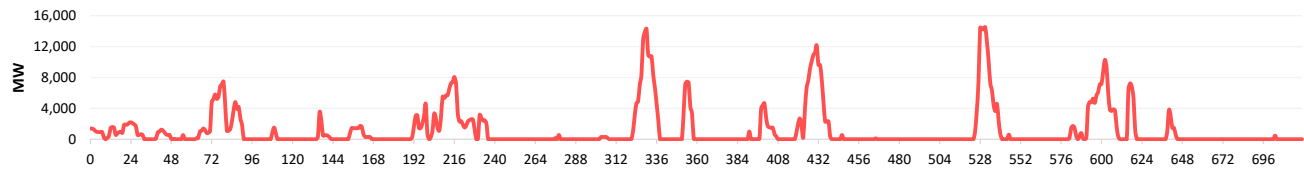
Loss of Load	
Total Hrs.	720
Total MWh	26,633,154
Avg. MW	36,990.5

**Price Responsive Demand Deployed During Modeling Period**



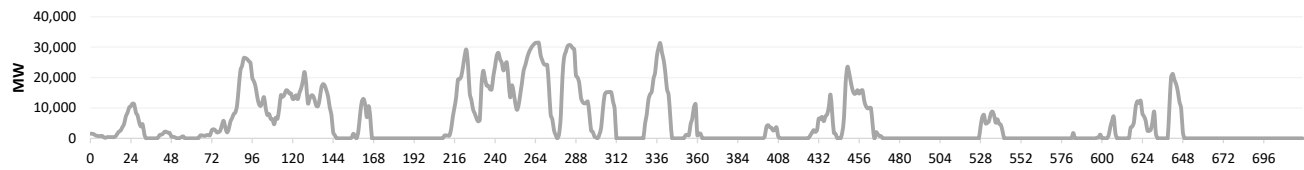
PRD Deployment	
Total Hrs.	325
Total MWh	623,946
Avg. MW	1,919.8

**Battery Energy Storage Deployed During Modeling Period**



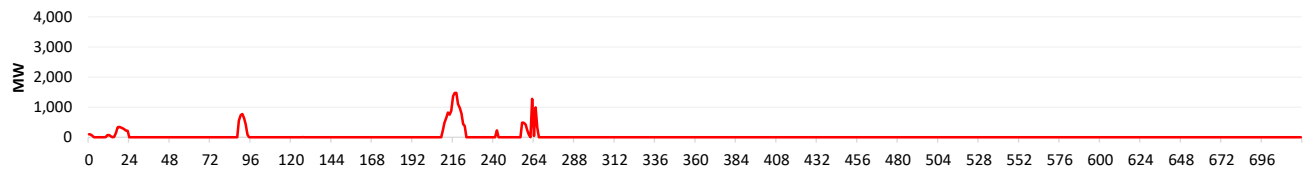
Battery Deployment	
Total Hrs.	262
Total MWh	856,262
Avg. MW	3,268.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	369
Total MWh	3,822,059
Avg. MW	10,357.9

**Loss of Load Occurrences During Modeling Period**



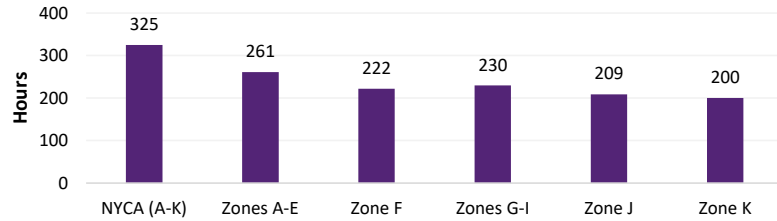
Loss of Load Occurrences	
Total Hrs.	45
Total MWh	22,150
Avg. MW	492.2



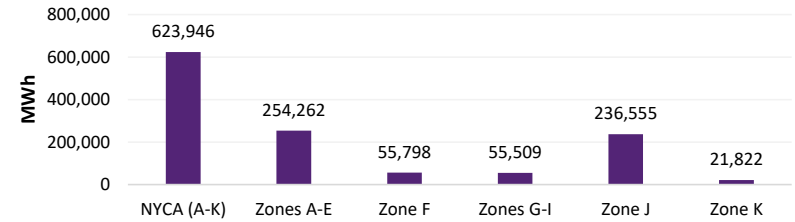
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

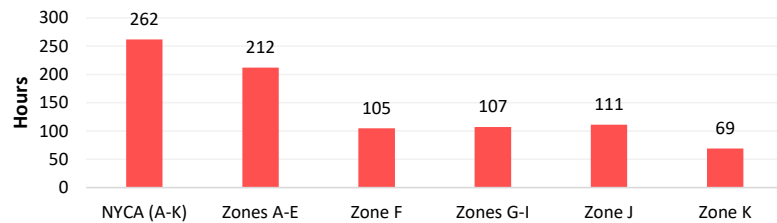
**Hours Price Responsive Demand Deployed**



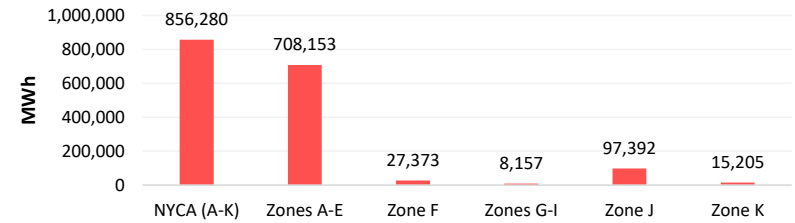
**Total MWh Price Responsive Demand Deployed**



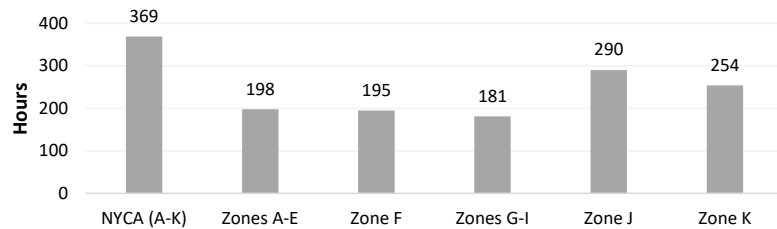
**Hours Battery Energy Storage Deployed**



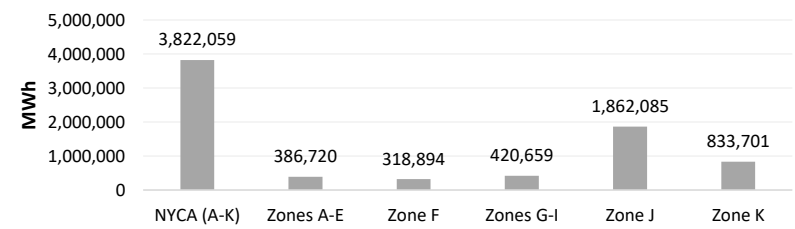
**Total MWh Battery Energy Storage Deployed**



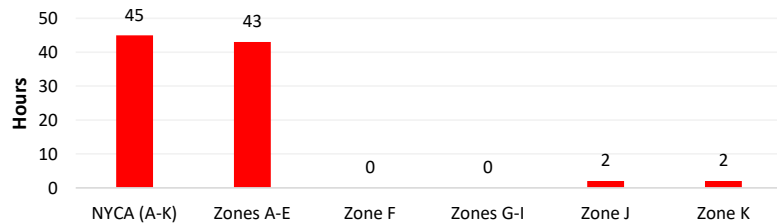
**Hours DE Resources Deployed**



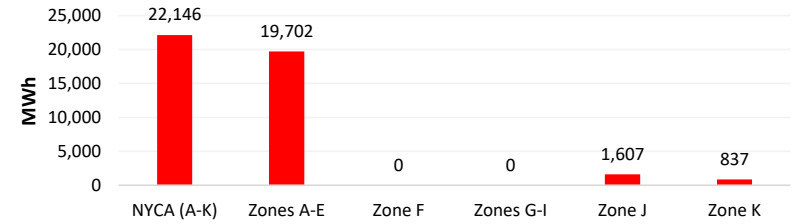
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

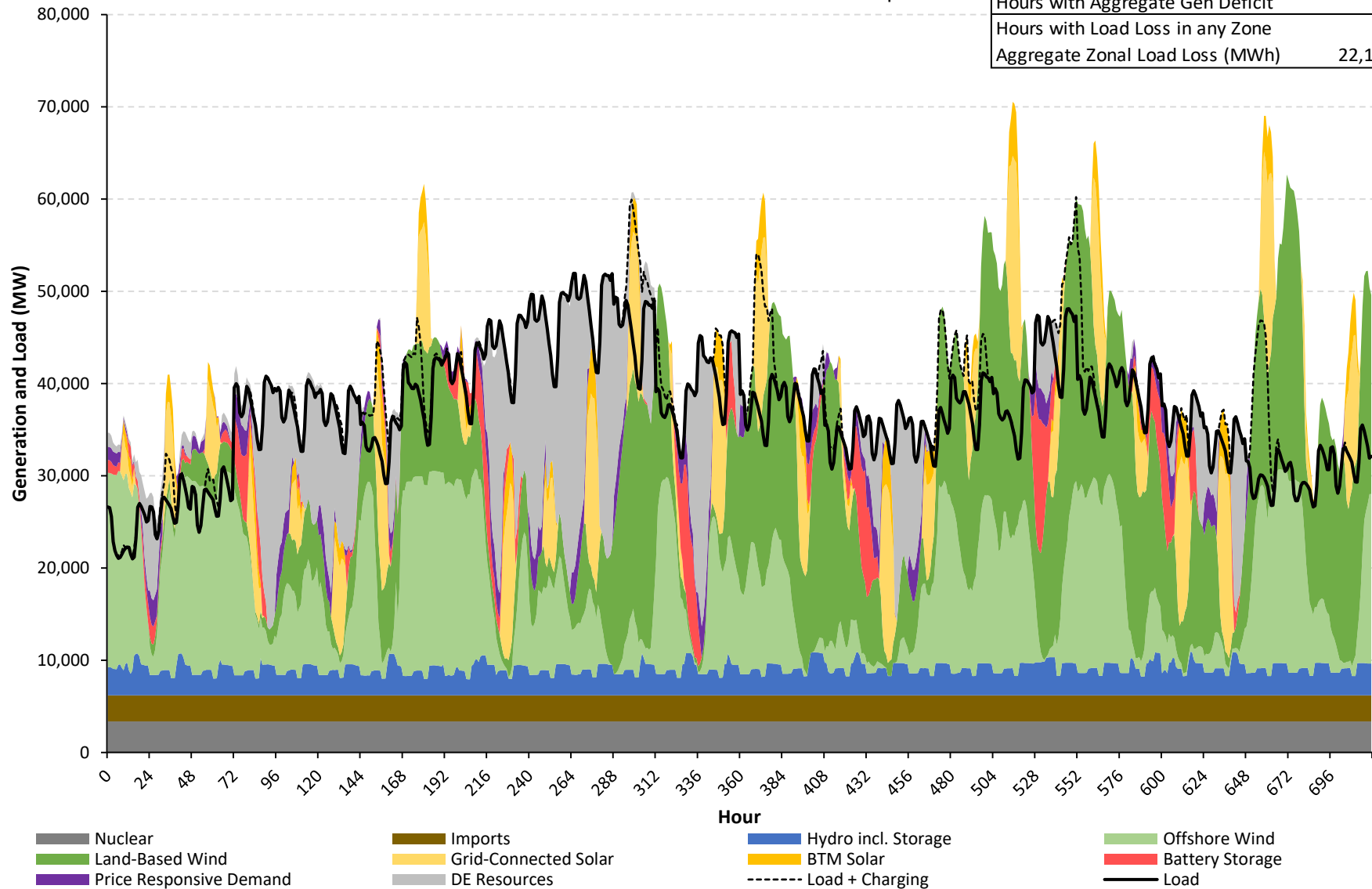


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	26,633,154
Aggregate Gen in Period (MWh)	30,709,581
Gen Surplus/Deficit (MWh)	4,076,427
Hours with Aggregate Gen Deficit	27
Hours with Load Loss in any Zone	45
Aggregate Zonal Load Loss (MWh)	22,146

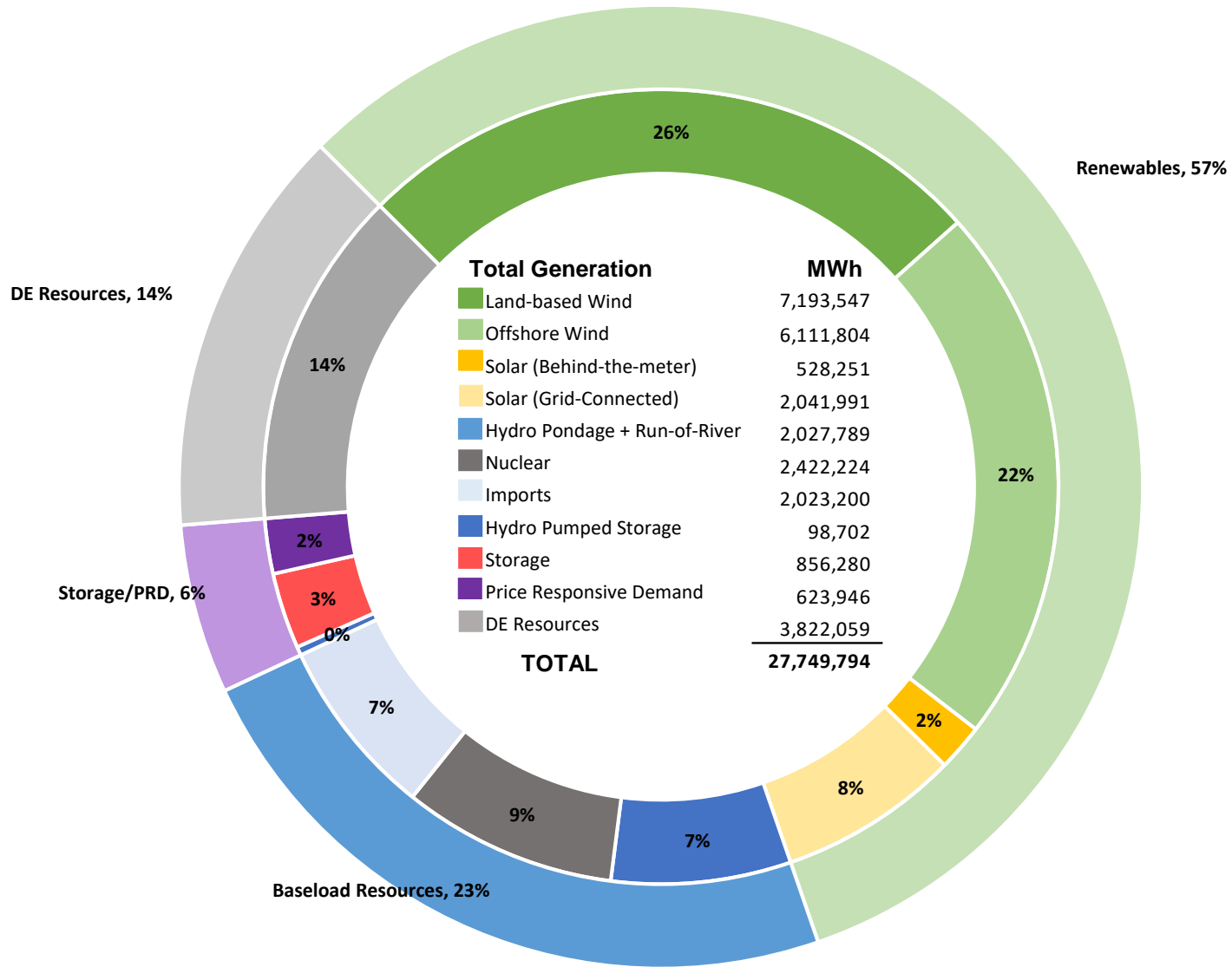


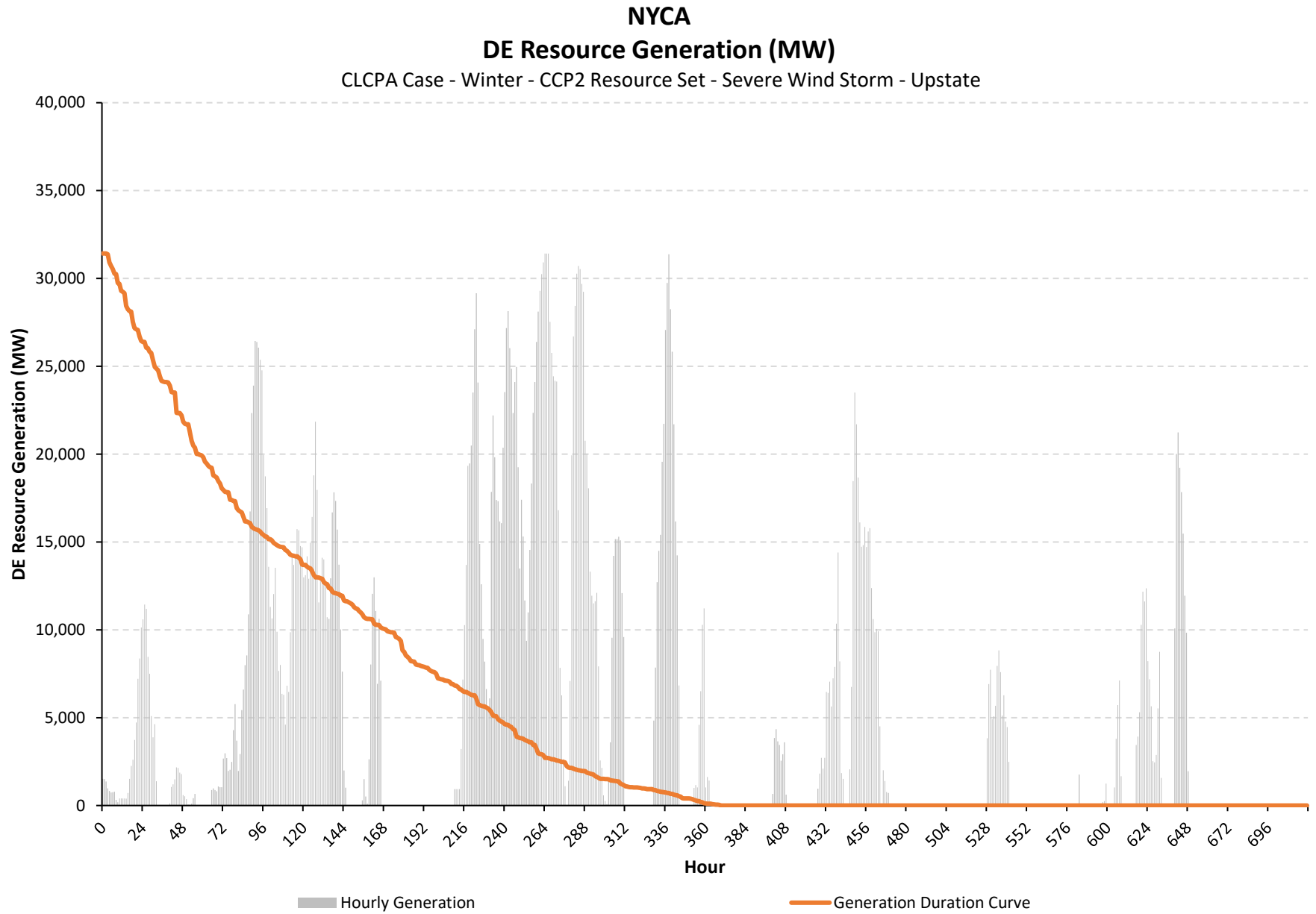
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

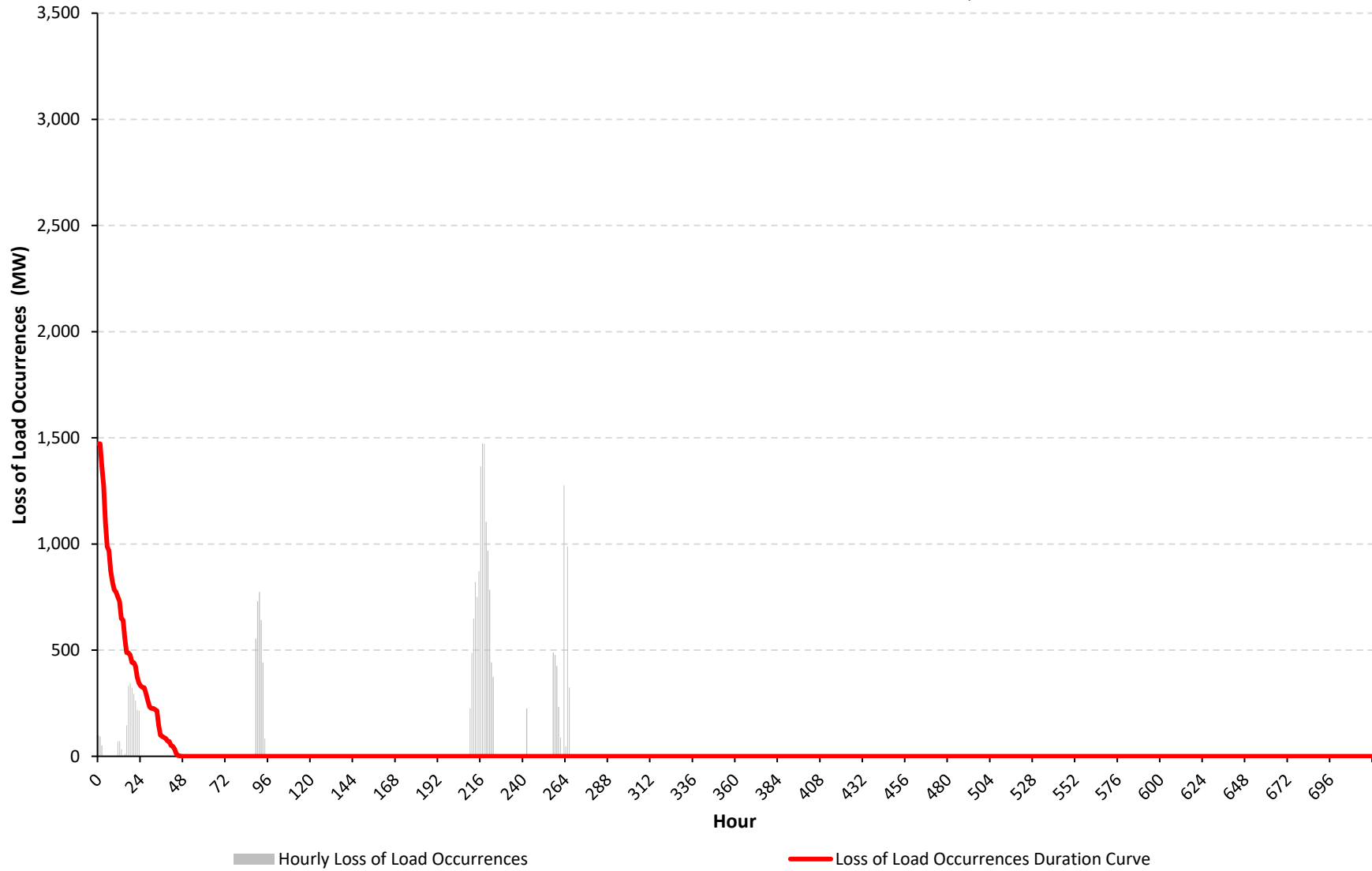
CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate



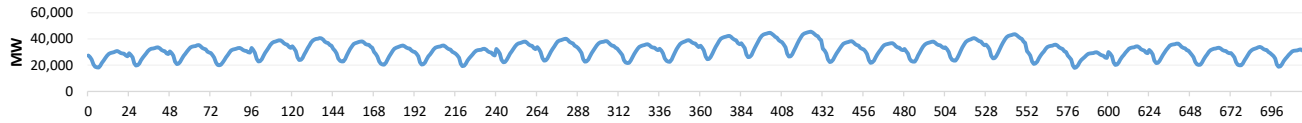
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 18 - CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

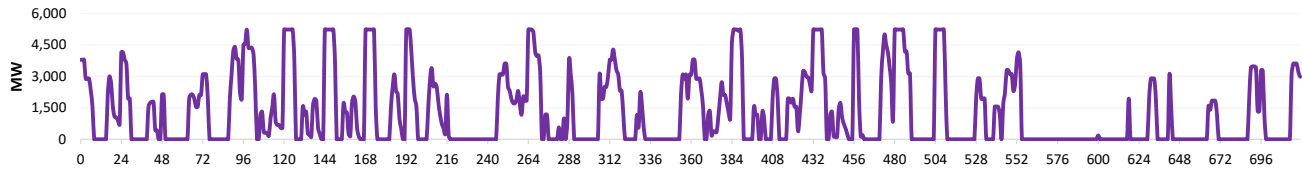
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



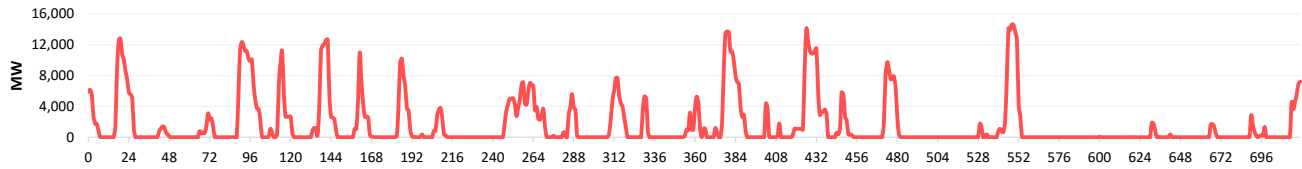
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



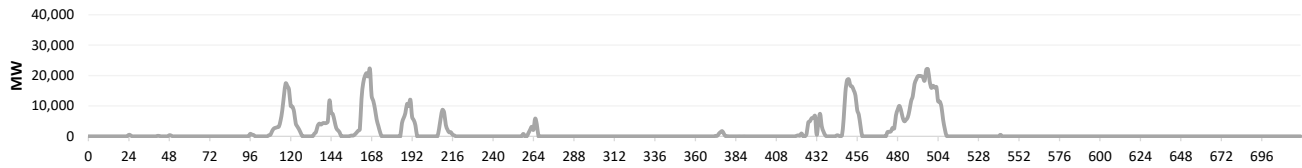
PRD Deployment	
Total Hrs.	356
Total MWh	931,315
Avg. MW	2,616.1

**Battery Energy Storage Deployed During Modeling Period**



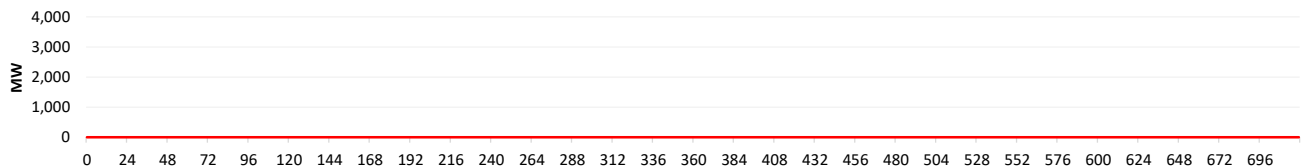
Battery Deployment	
Total Hrs.	279
Total MWh	1,175,299
Avg. MW	4,212.5

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	167
Total MWh	1,079,462
Avg. MW	6,463.8

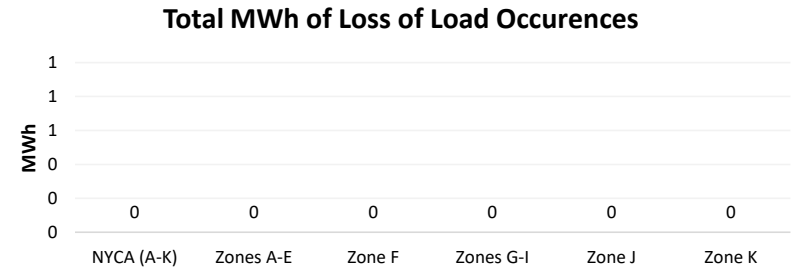
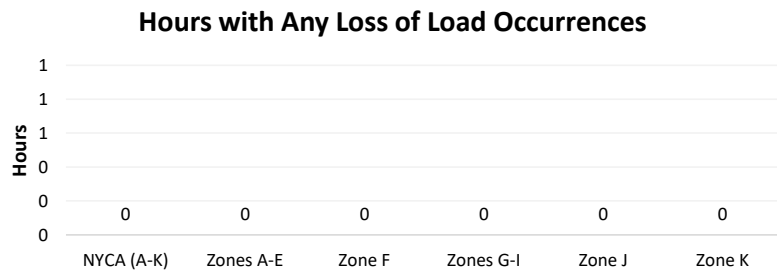
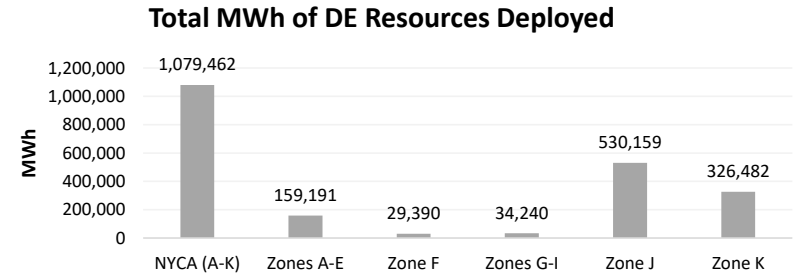
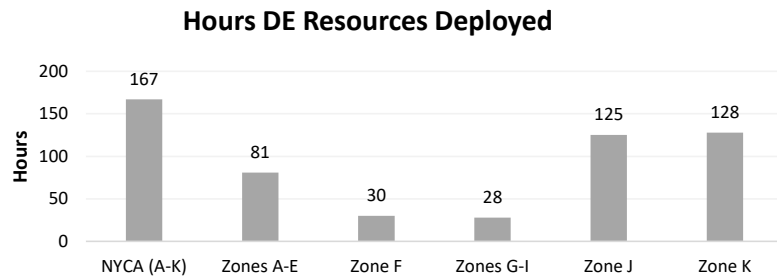
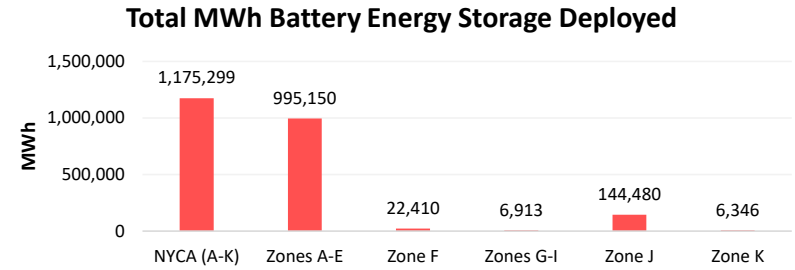
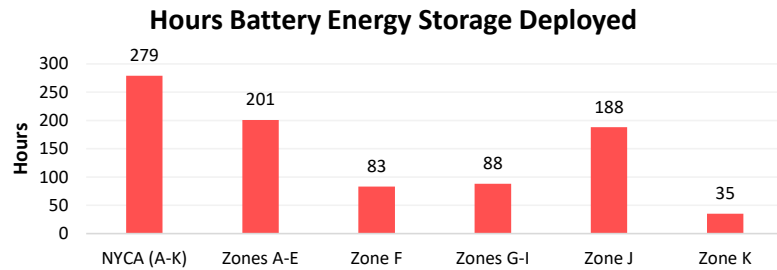
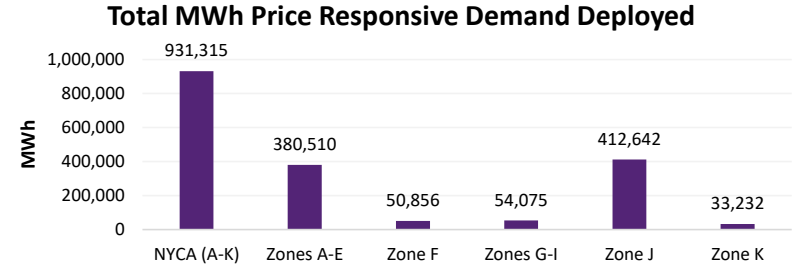
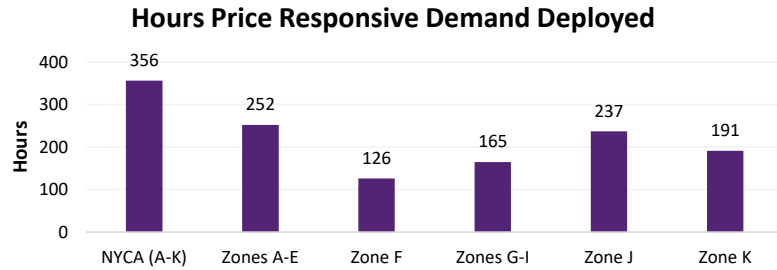
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore



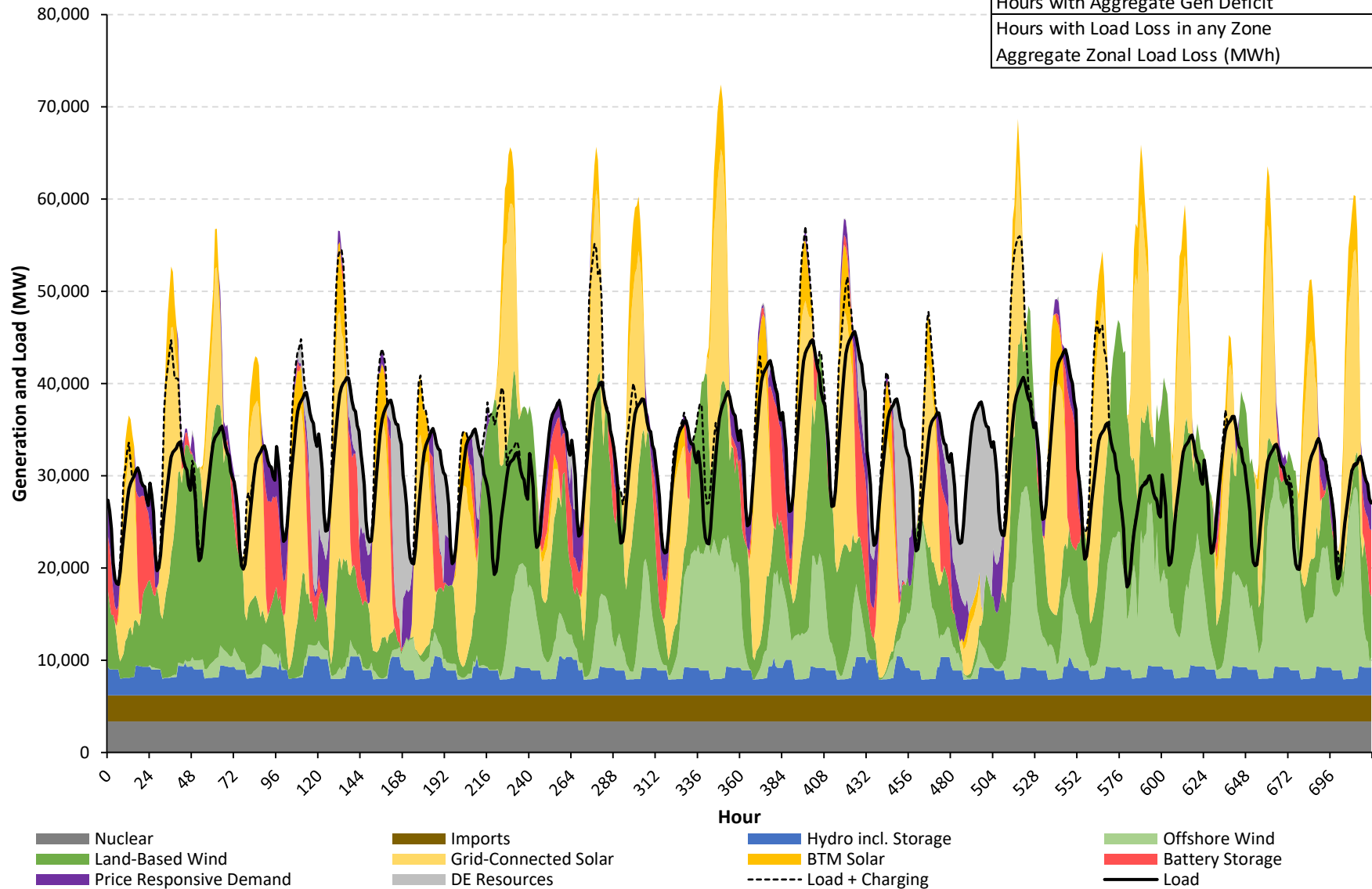


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	27,230,610
Gen Surplus/Deficit (MWh)	4,754,654
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

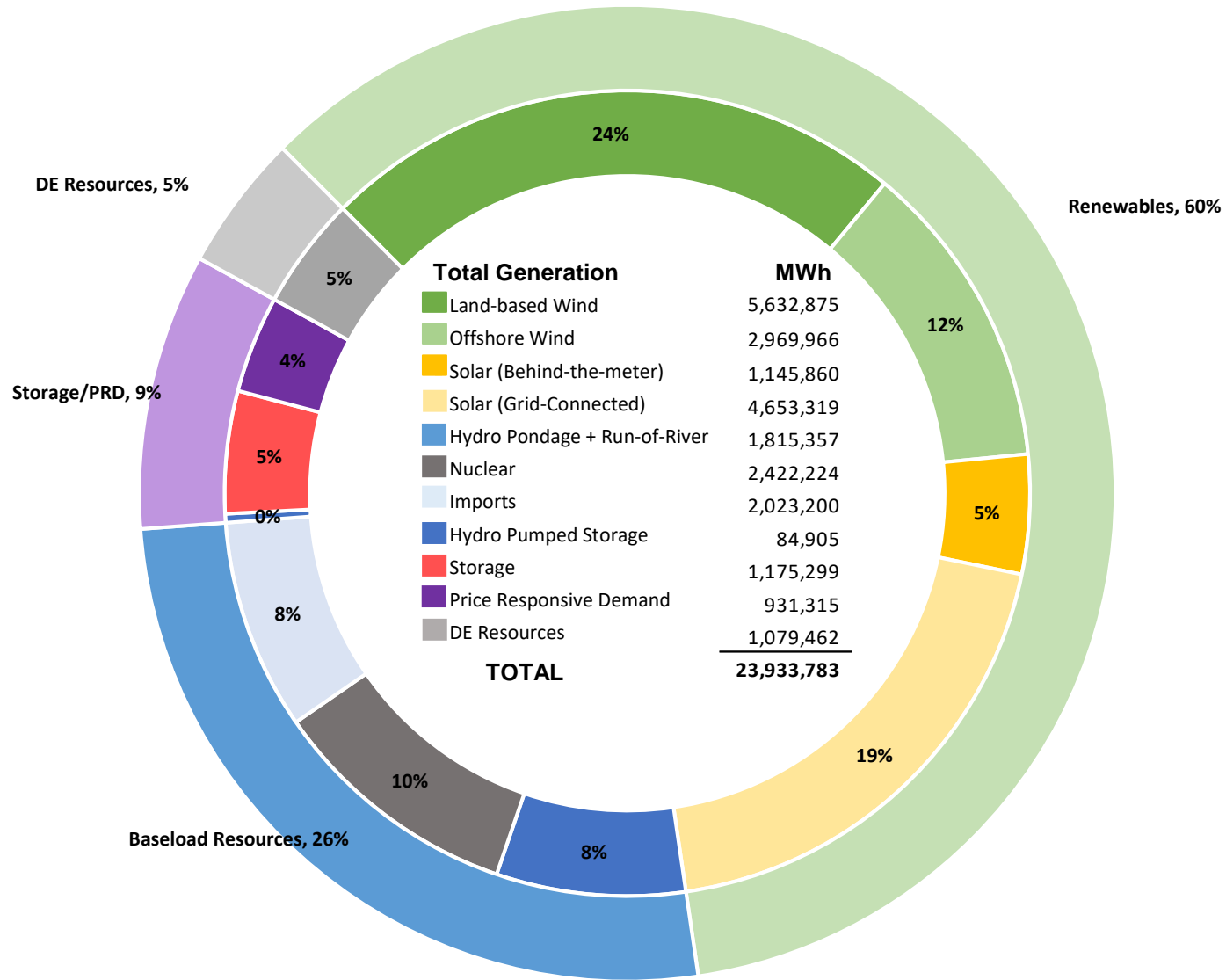


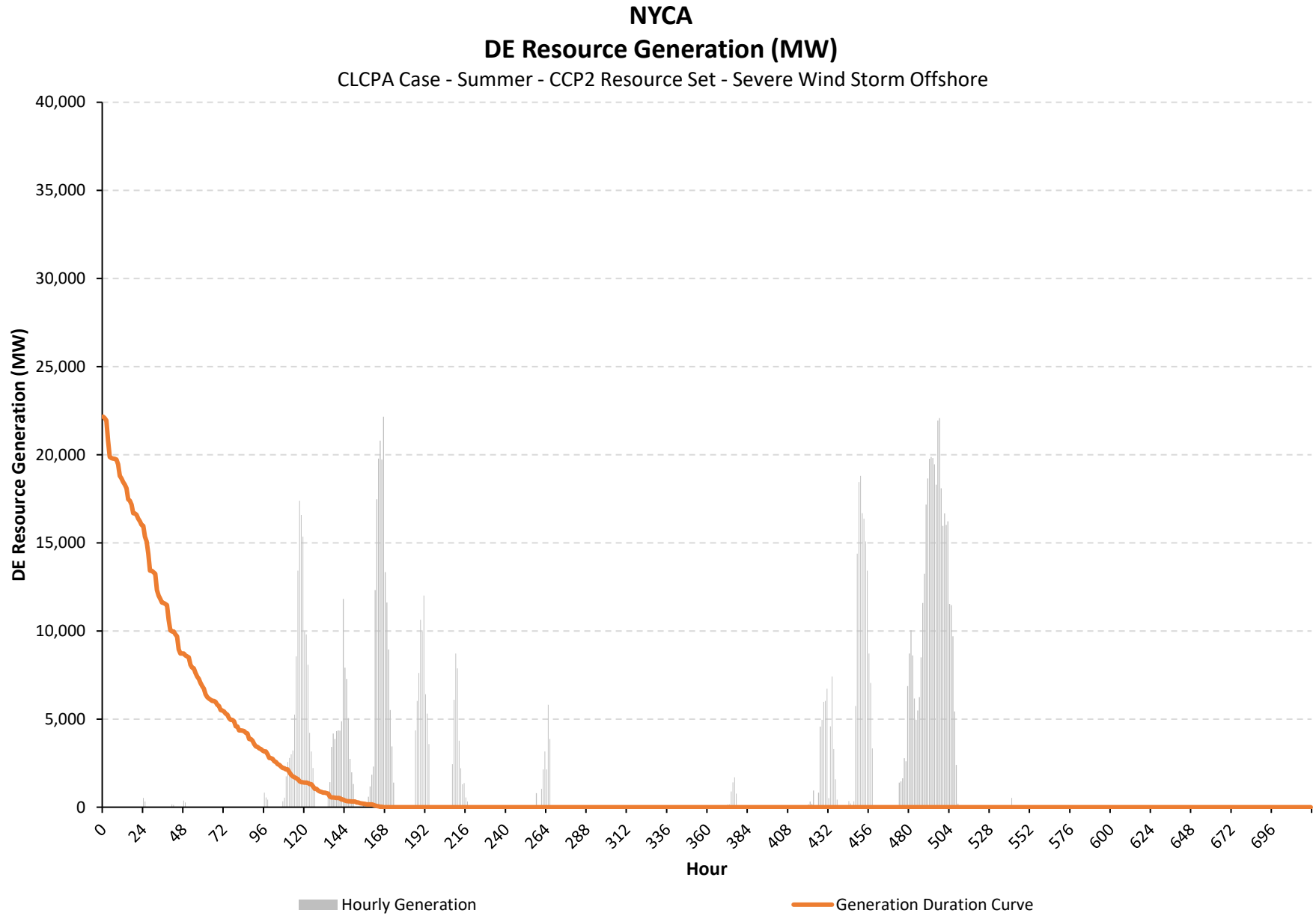
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

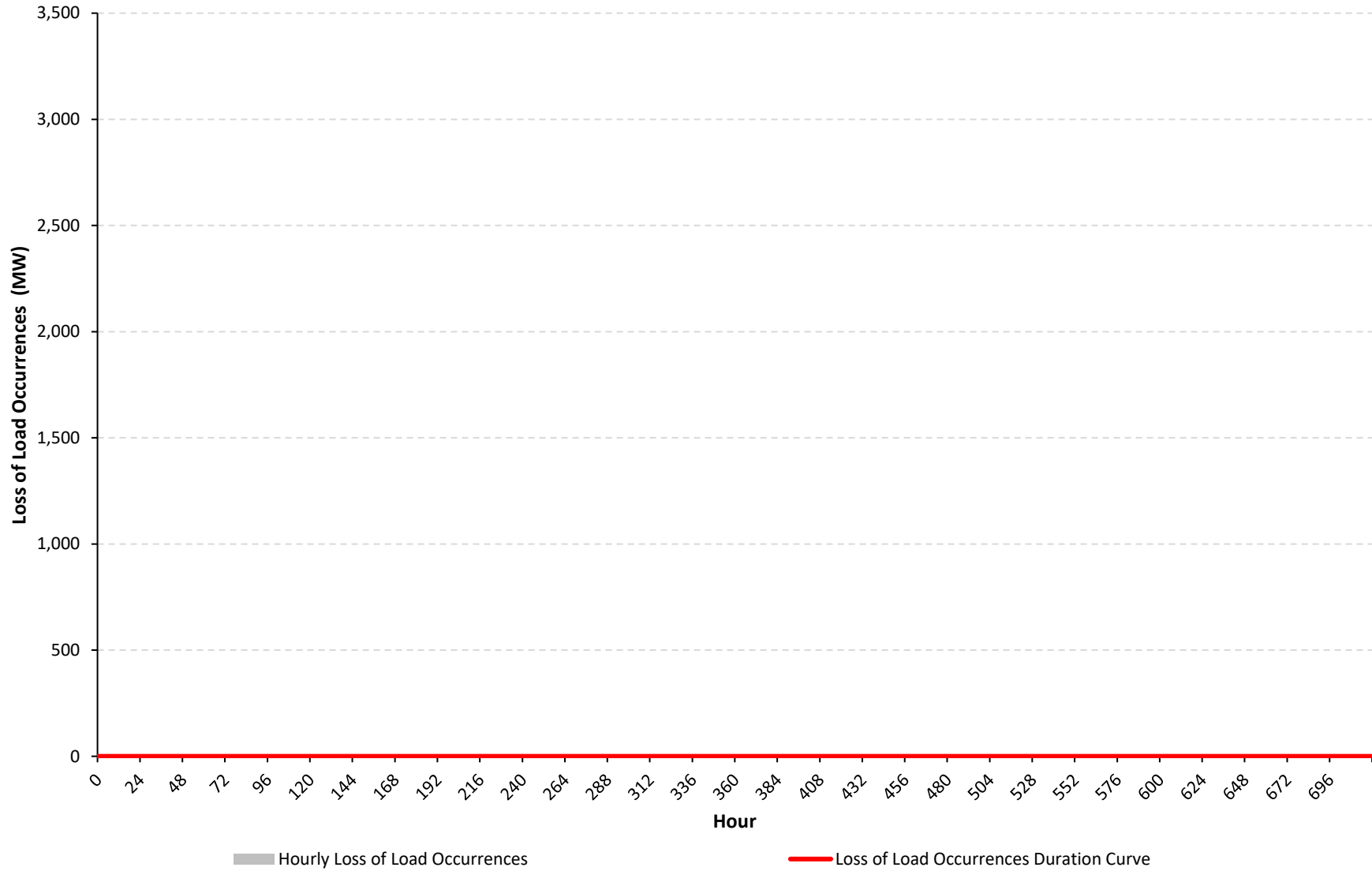
CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore



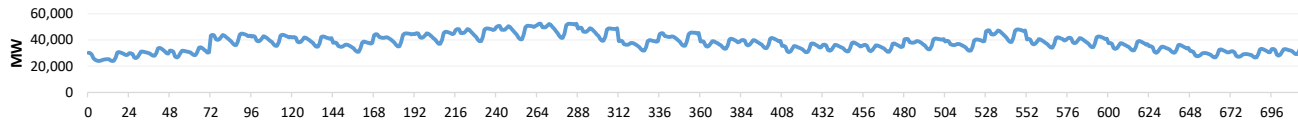
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 19 - CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

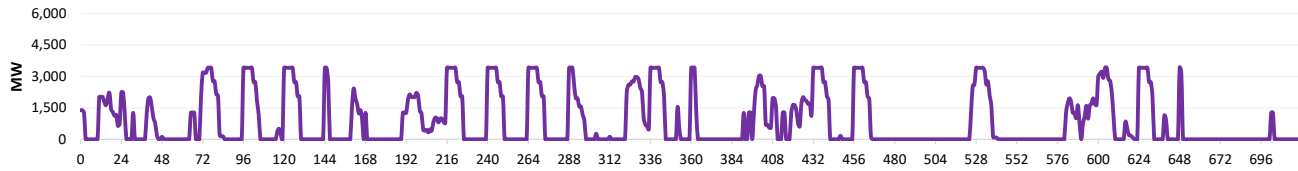
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



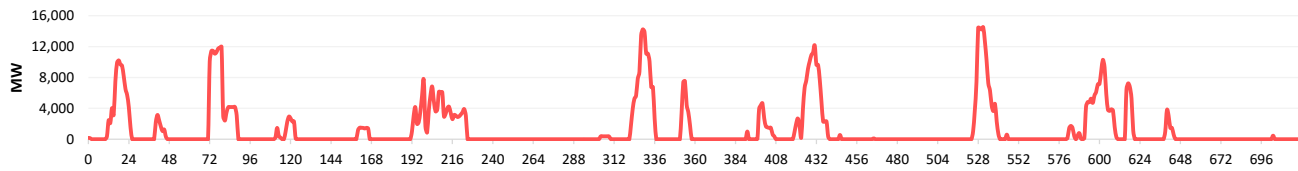
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



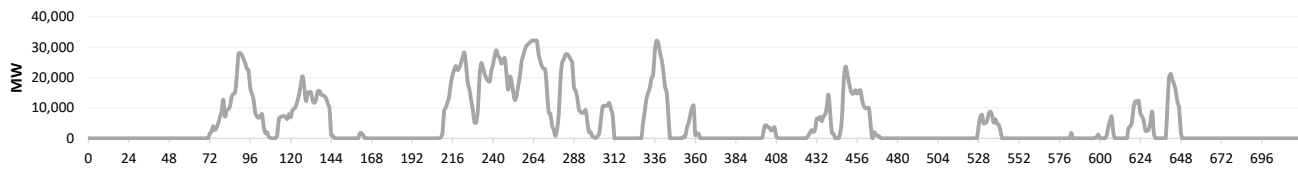
PRD Deployment	
Total Hrs.	295
Total MWh	613,244
Avg. MW	2,078.8

**Battery Energy Storage Deployed During Modeling Period**



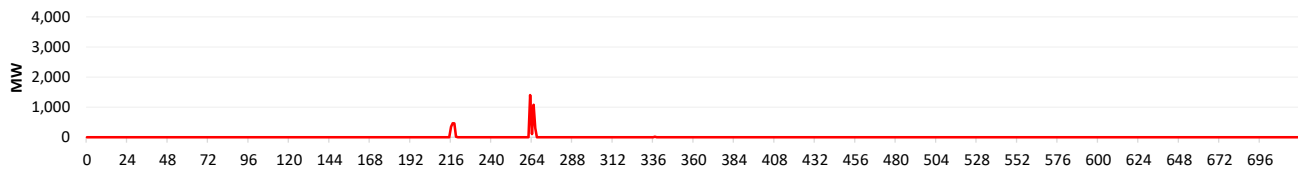
Battery Deployment	
Total Hrs.	214
Total MWh	936,751
Avg. MW	4,377.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	304
Total MWh	3,609,785
Avg. MW	11,874.3

**Loss of Load Occurrences During Modeling Period**

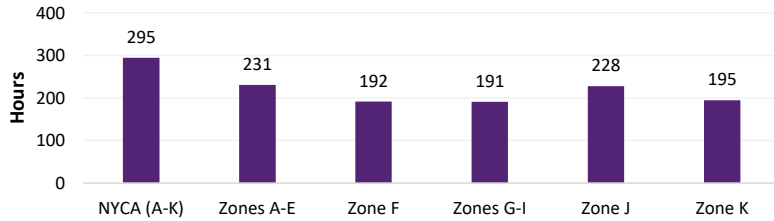


Loss of Load Occurrences	
Total Hrs.	9
Total MWh	4,203
Avg. MW	467.0

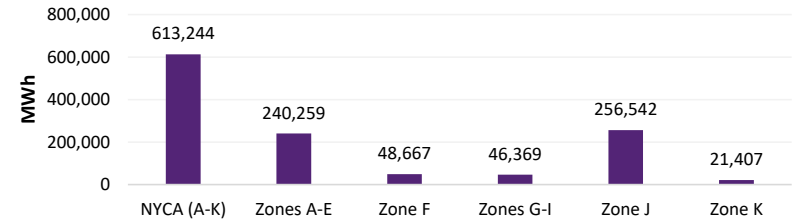
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

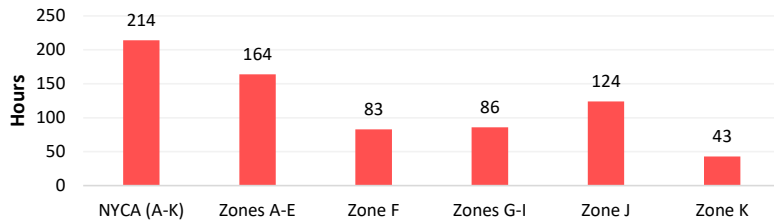
**Hours Price Responsive Demand Deployed**



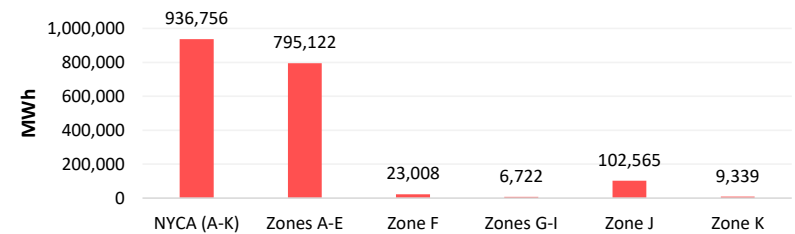
**Total MWh Price Responsive Demand Deployed**



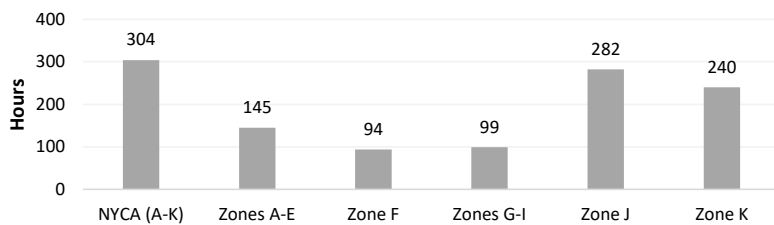
**Hours Battery Energy Storage Deployed**



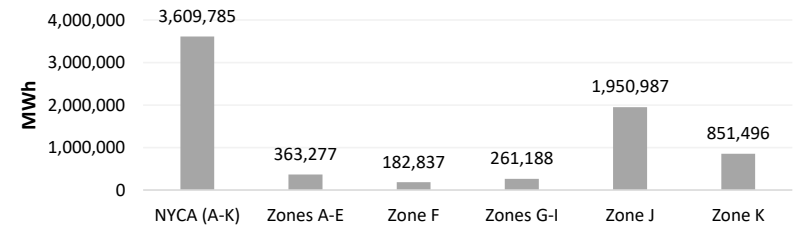
**Total MWh Battery Energy Storage Deployed**



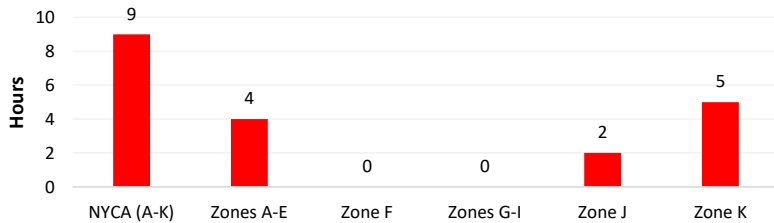
**Hours DE Resources Deployed**



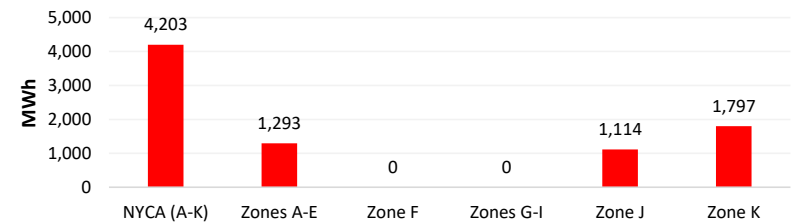
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



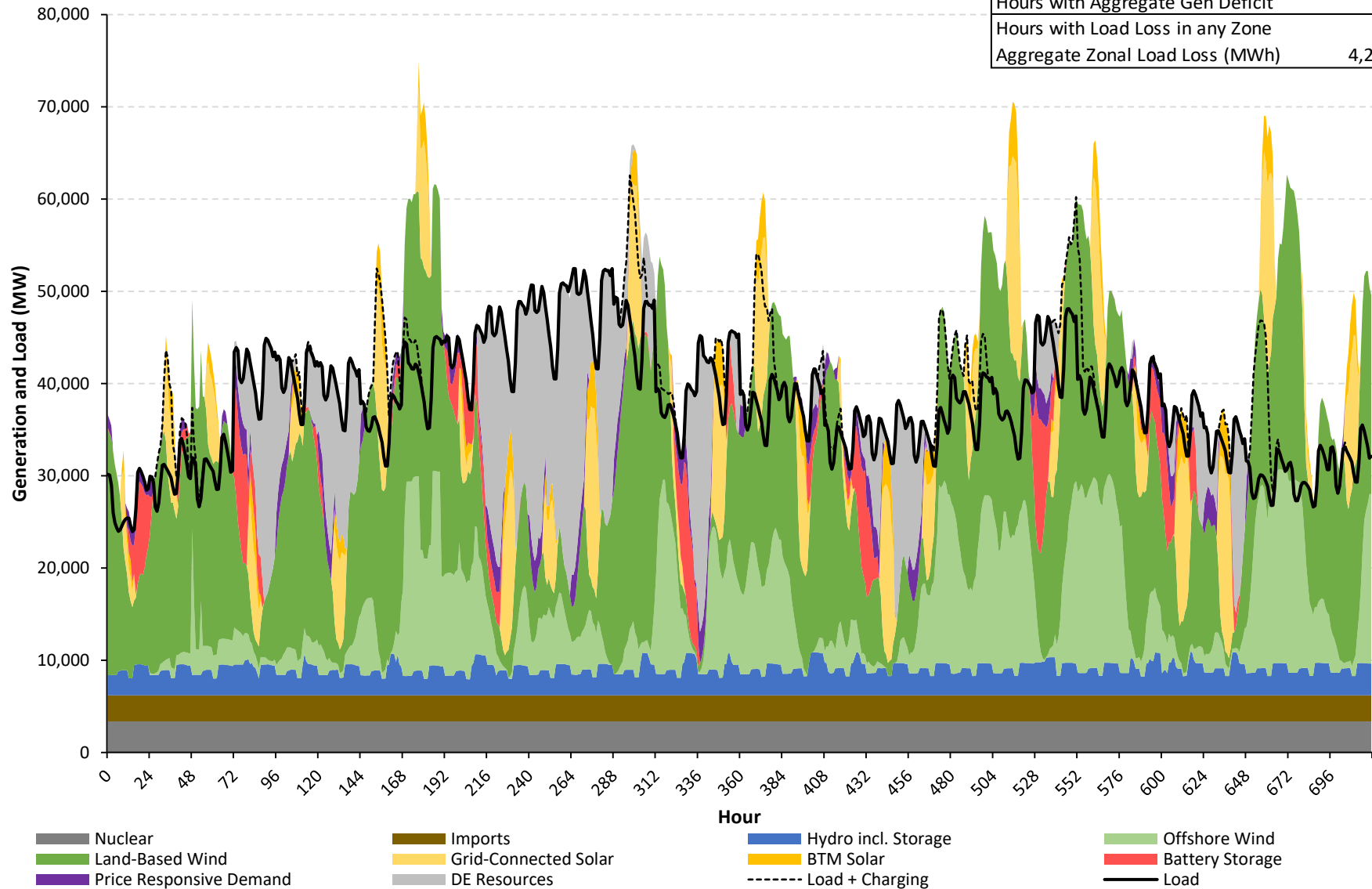
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	31,537,907
Gen Surplus/Deficit (MWh)	4,215,870
Hours with Aggregate Gen Deficit	9
Hours with Load Loss in any Zone	9
Aggregate Zonal Load Loss (MWh)	4,203



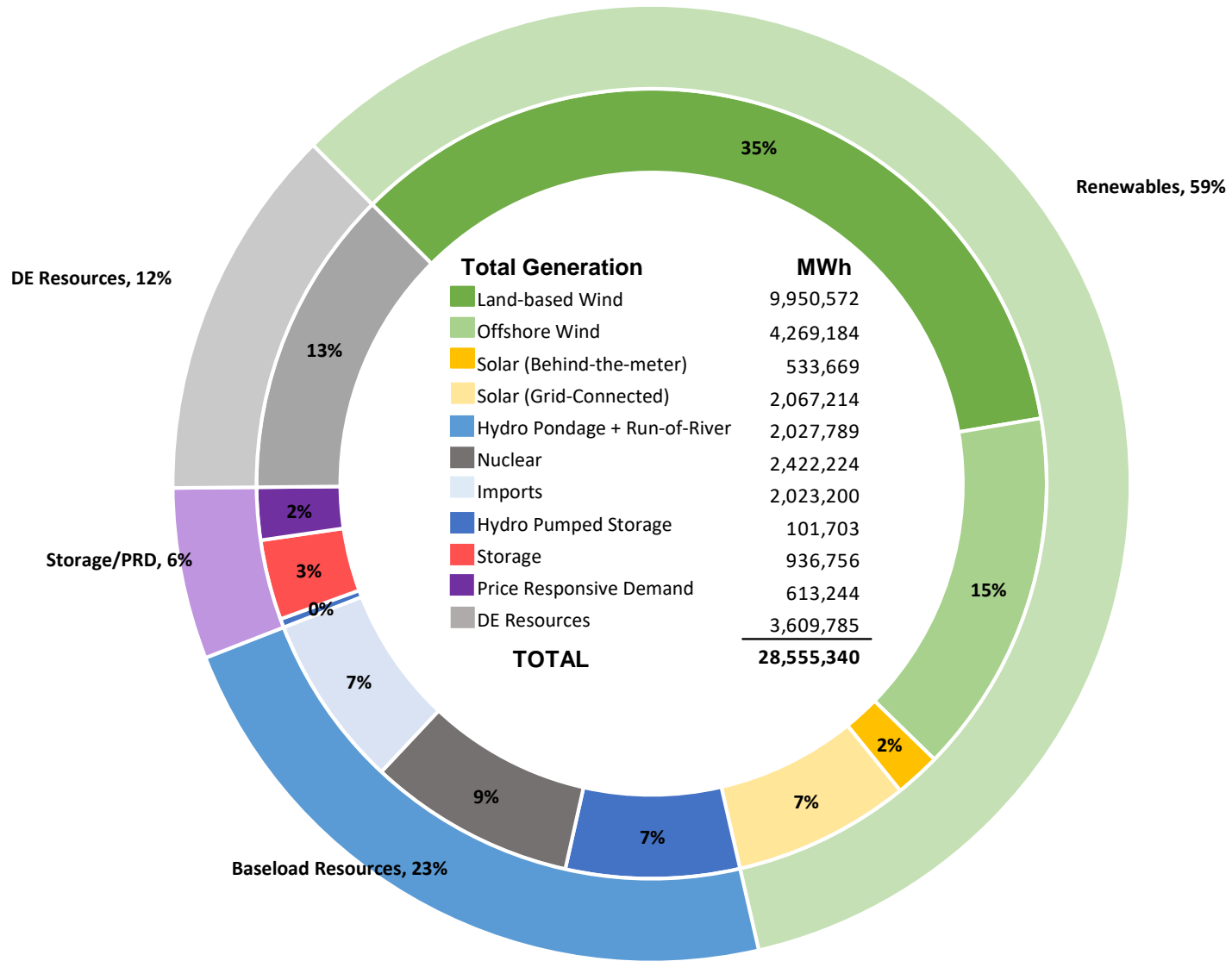
**Note:**

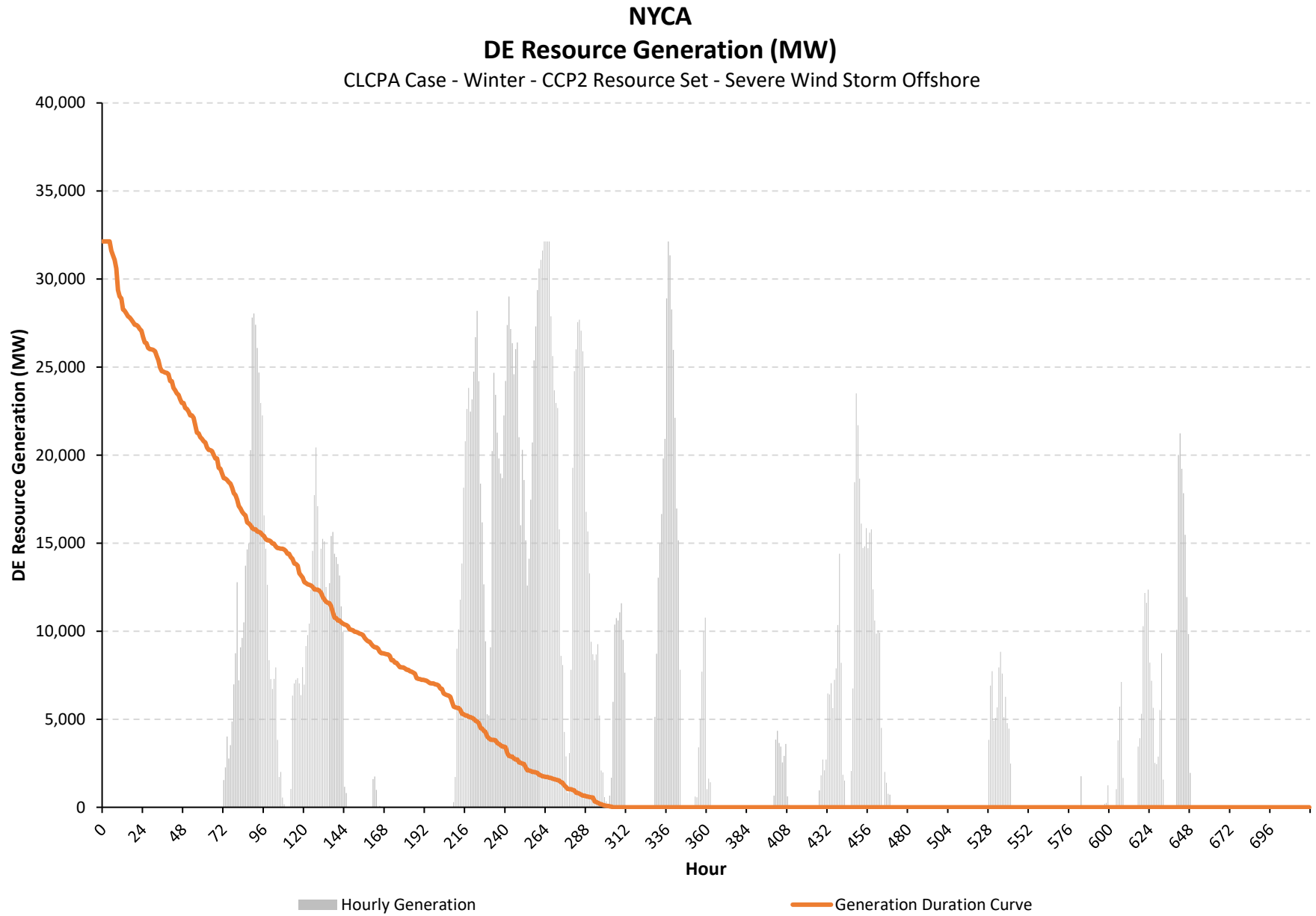
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



### Generation by Resource Type

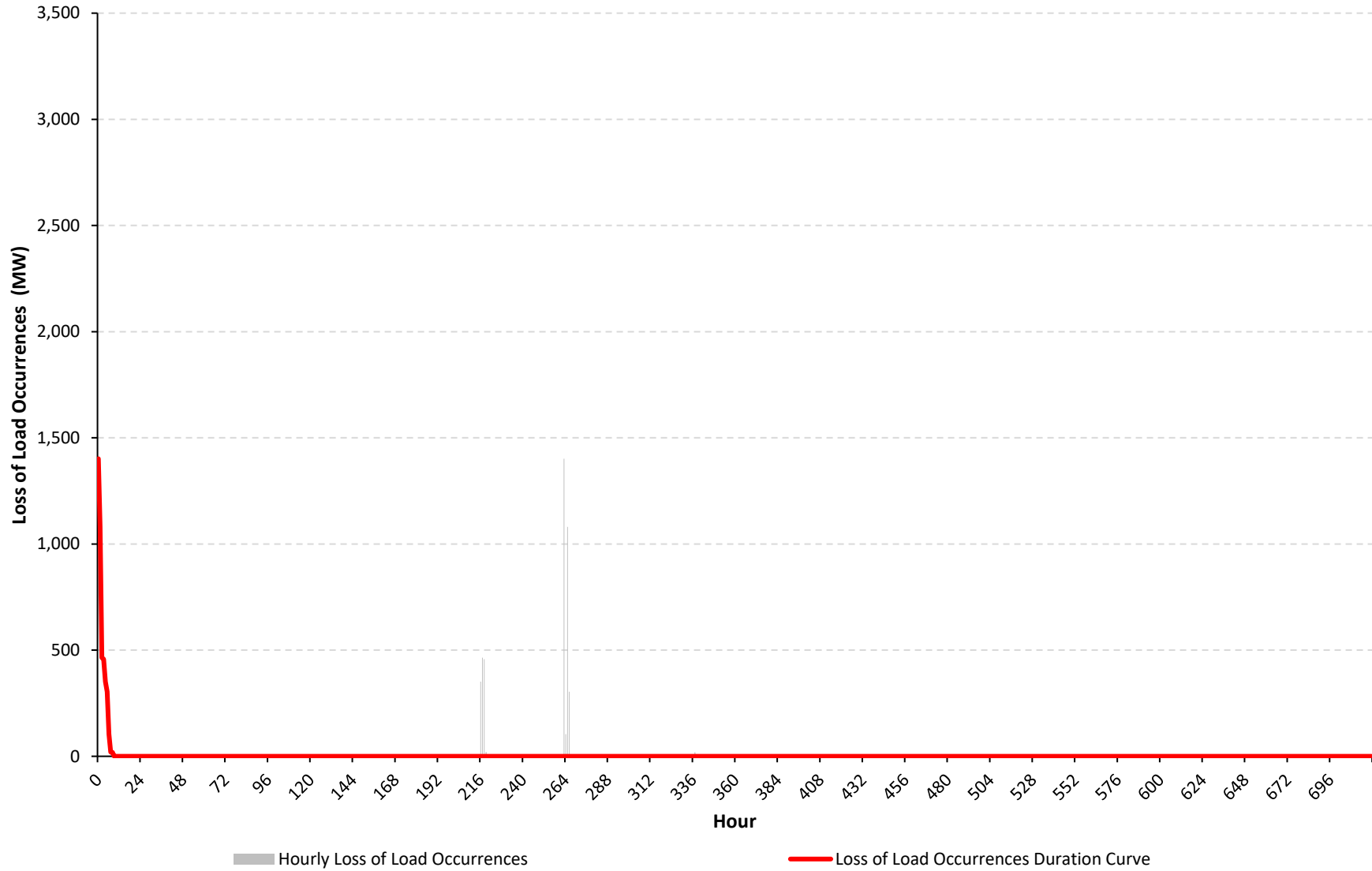
CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore



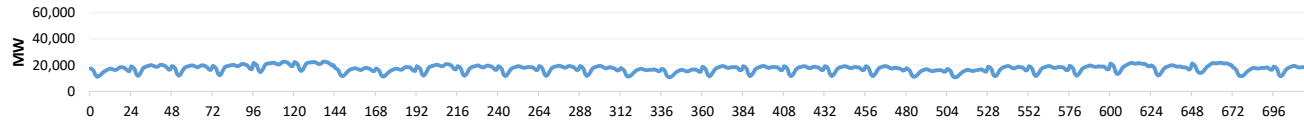
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 20 - CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

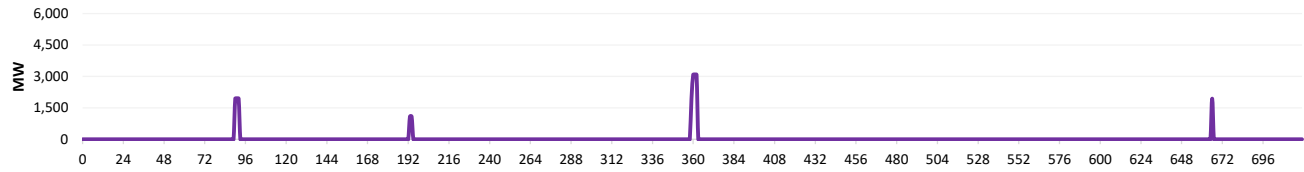
Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



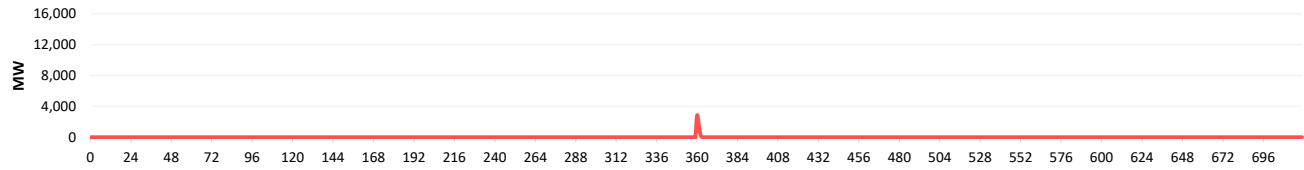
Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



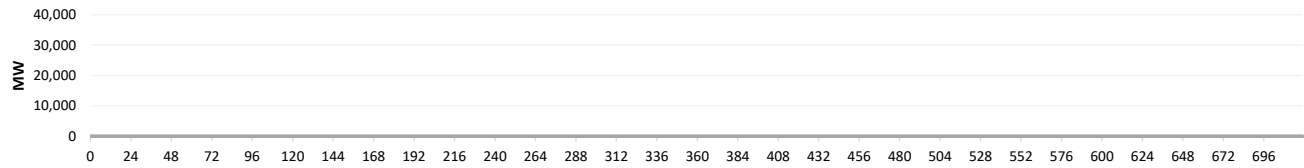
PRD Deployment	
Total Hrs.	10
Total MWh	21,112
Avg. MW	2,111.2

**Battery Energy Storage Deployed During Modeling Period**



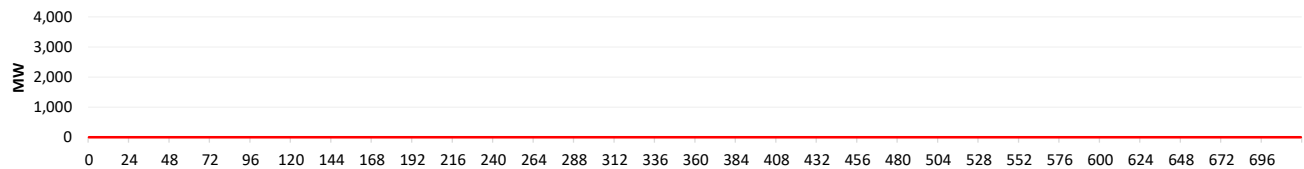
Battery Deployment	
Total Hrs.	3
Total MWh	4,852
Avg. MW	1,617.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

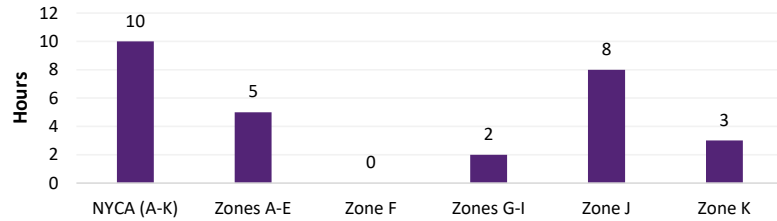


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

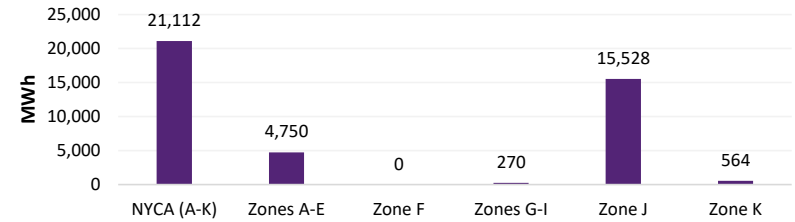
### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

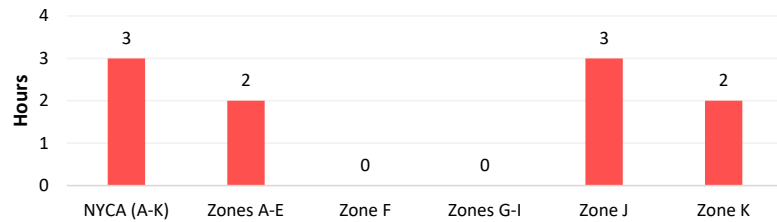
**Hours Price Responsive Demand Deployed**



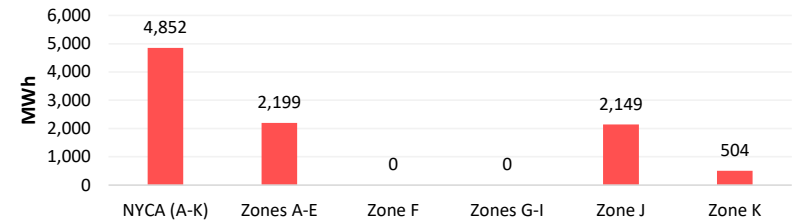
**Total MWh Price Responsive Demand Deployed**



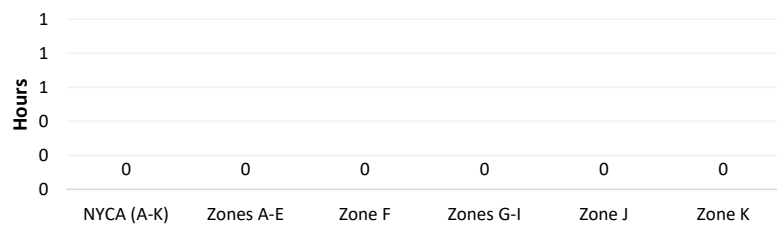
**Hours Battery Energy Storage Deployed**



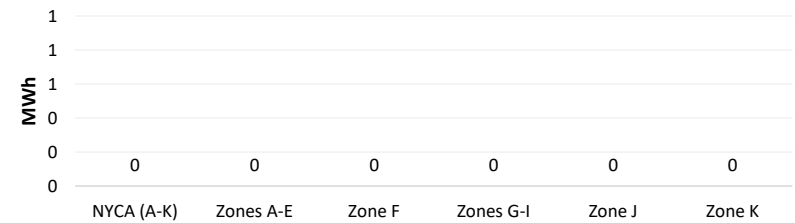
**Total MWh Battery Energy Storage Deployed**



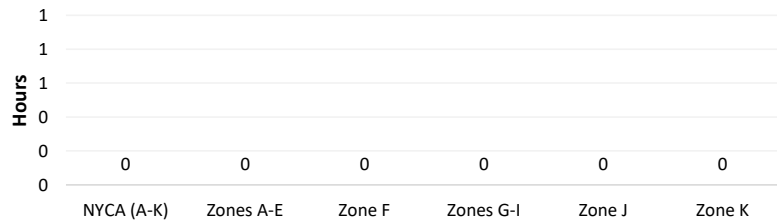
**Hours DE Resources Deployed**



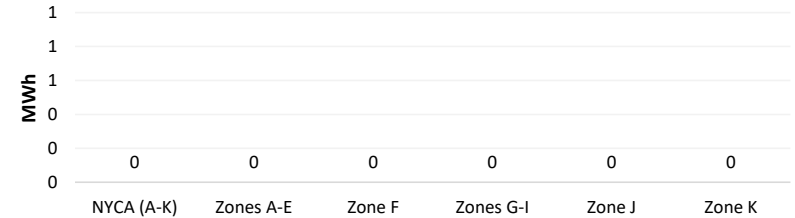
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

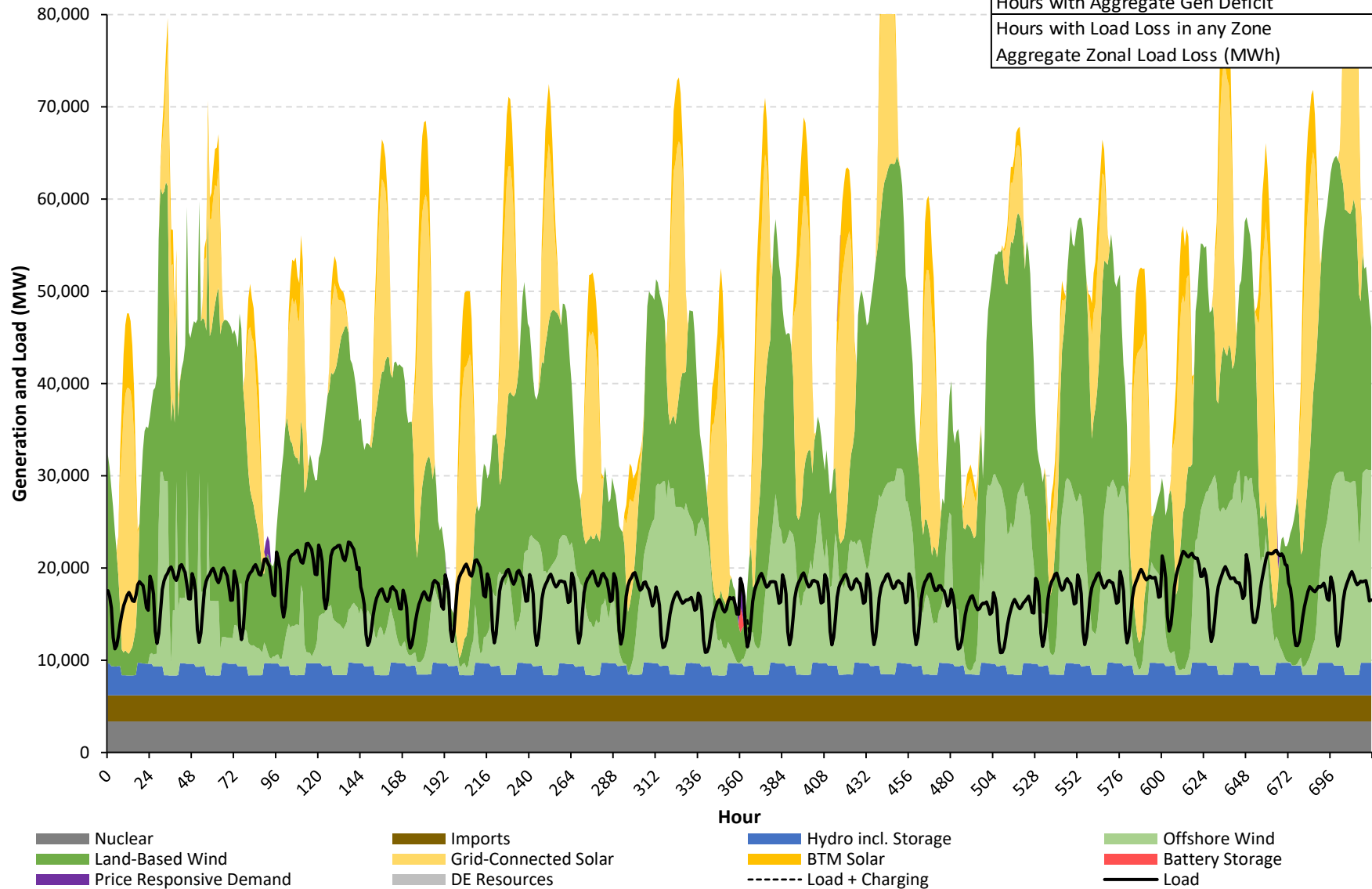


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	33,516,619
Gen Surplus/Deficit (MWh)	21,019,858
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

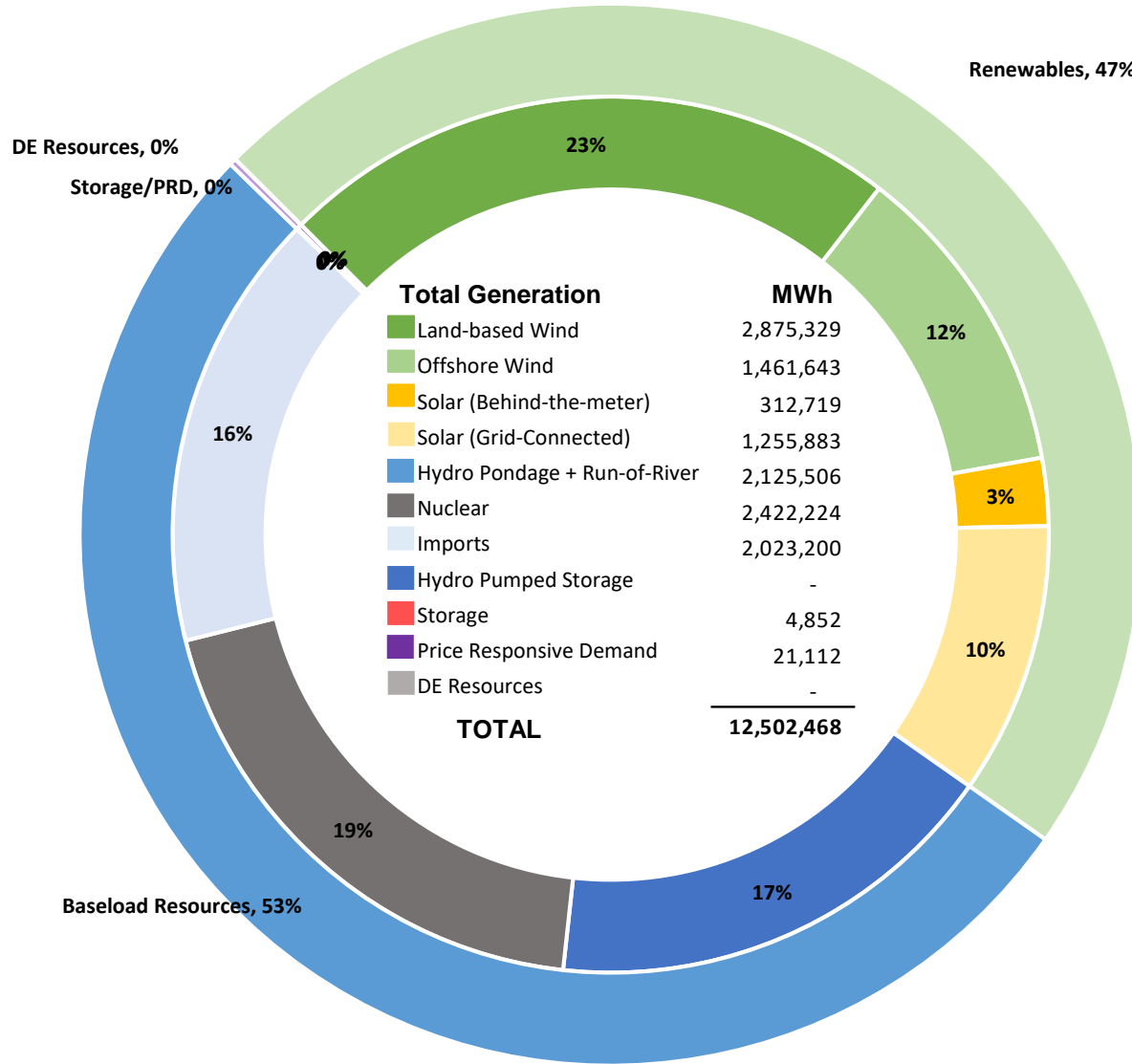


**Note:**

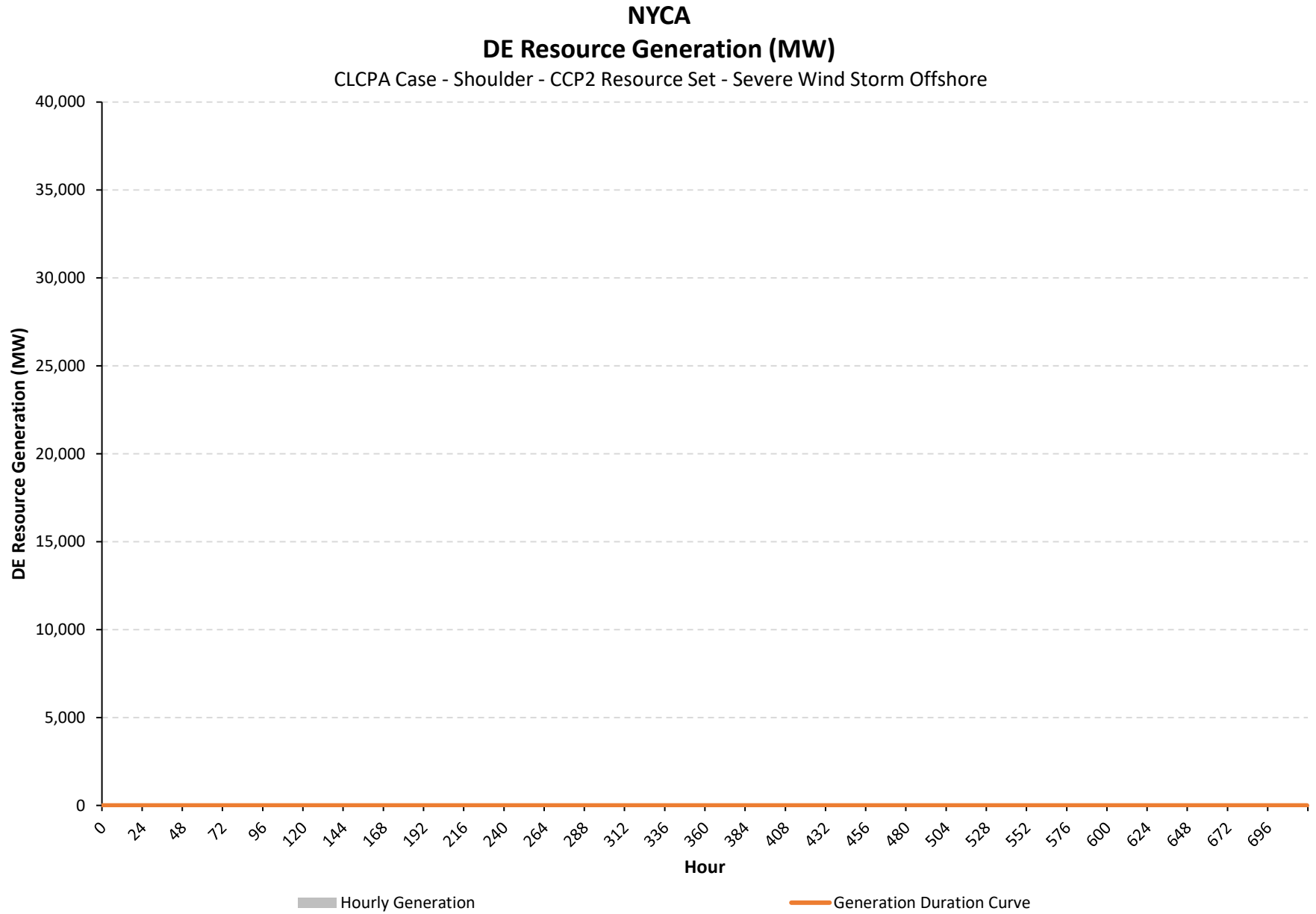
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

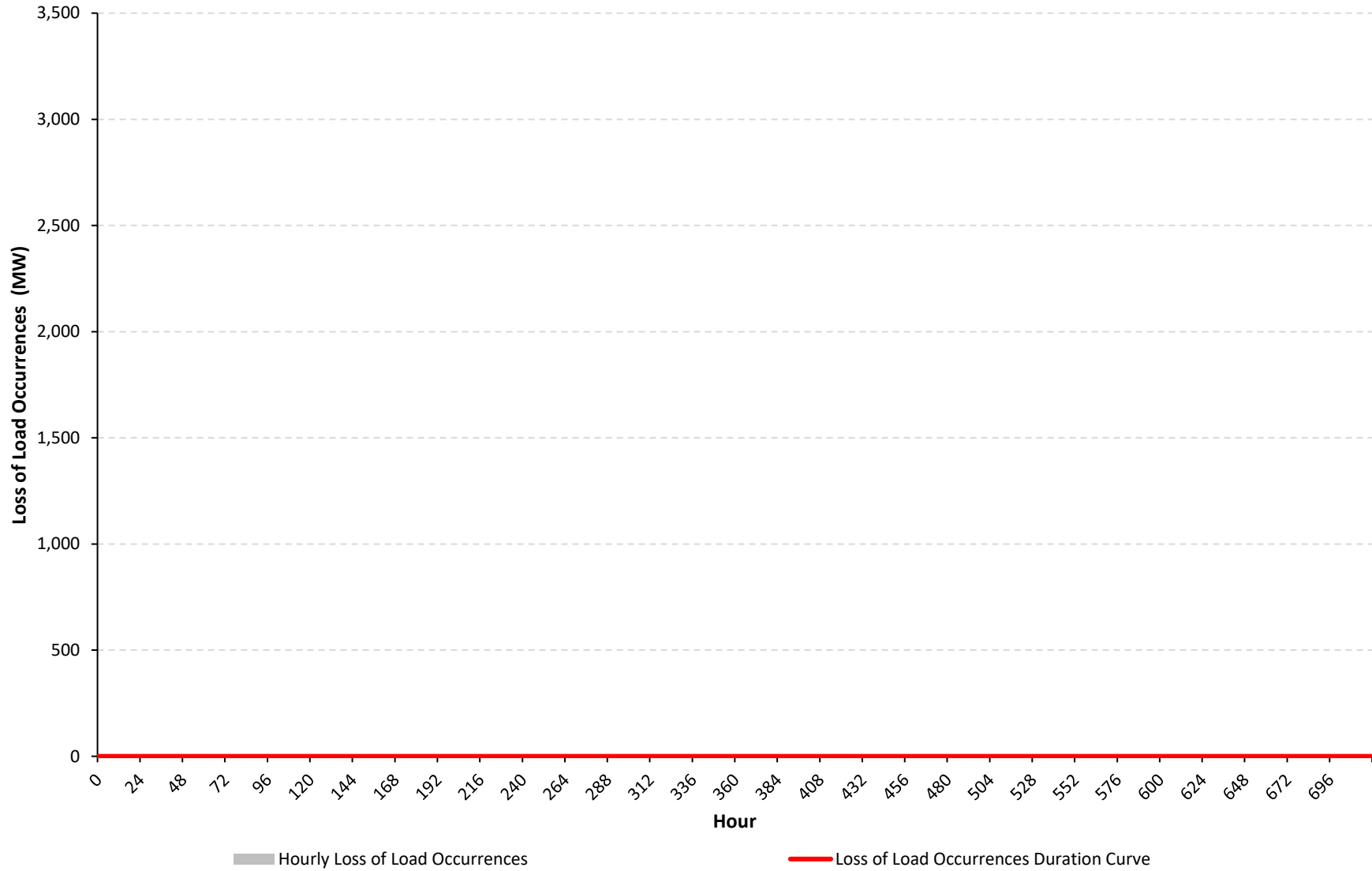






### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore



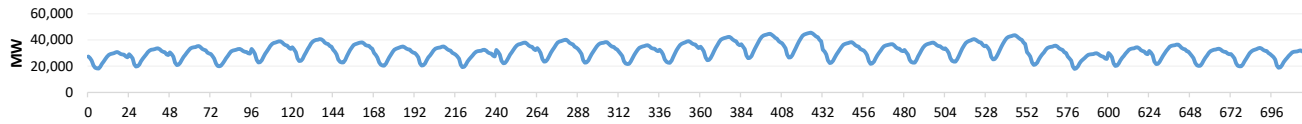
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 21 - CLCPA Case - Summer - CCP2 Resource Set - Drought**

**Hourly Results Summary**

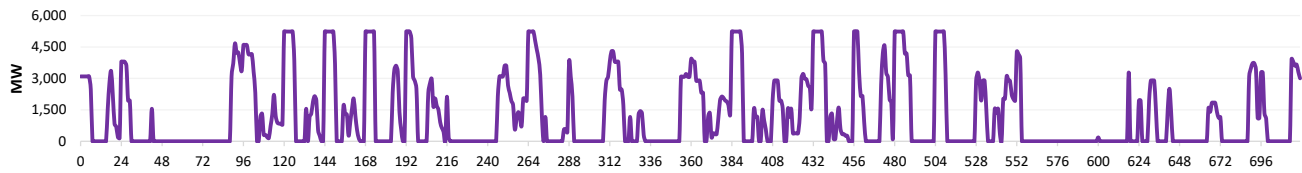
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Drought

**Load During Modeling Period**



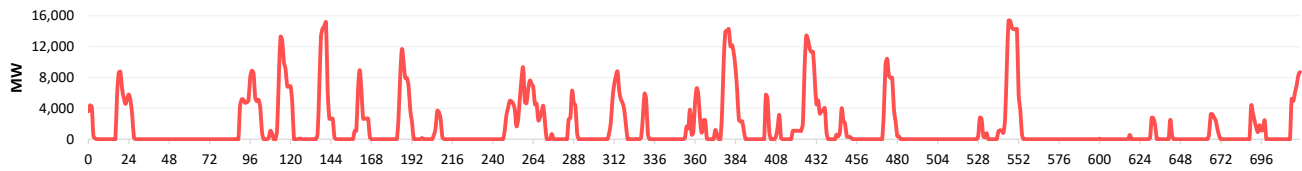
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



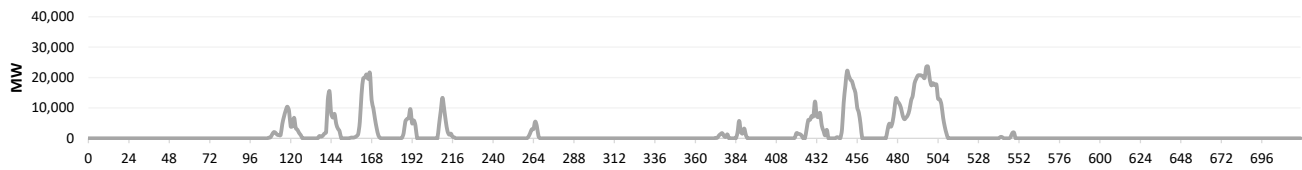
PRD Deployment	
Total Hrs.	338
Total MWh	903,658
Avg. MW	2,673.5

**Battery Energy Storage Deployed During Modeling Period**



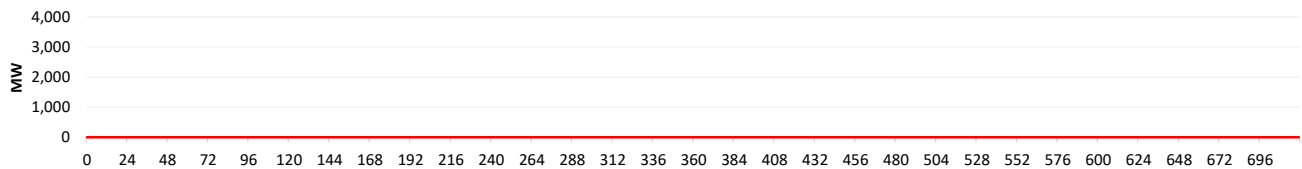
Battery Deployment	
Total Hrs.	265
Total MWh	1,172,564
Avg. MW	4,424.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	166
Total MWh	1,148,649
Avg. MW	6,919.6

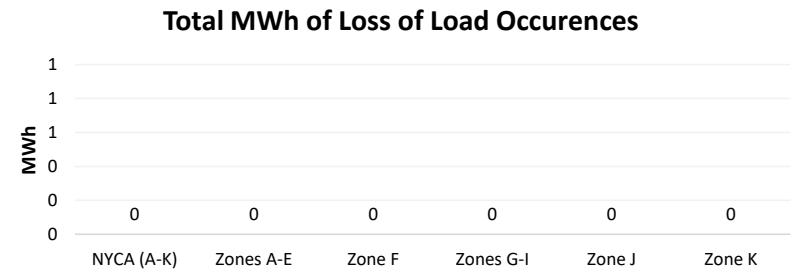
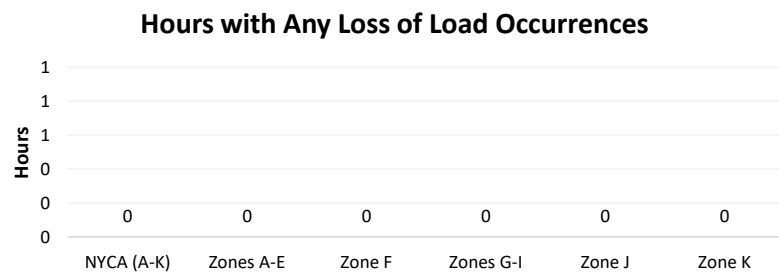
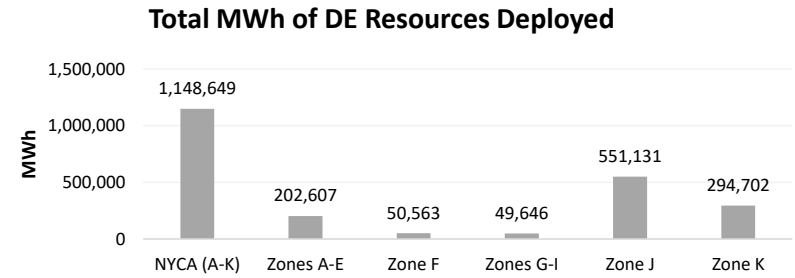
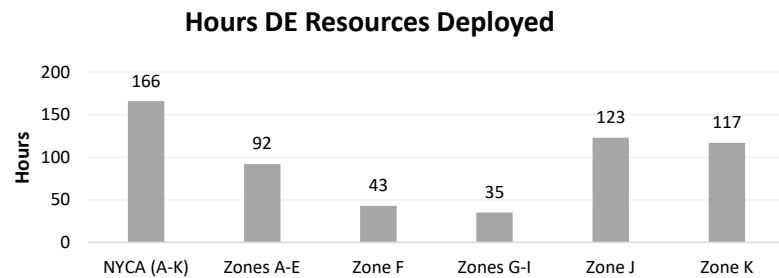
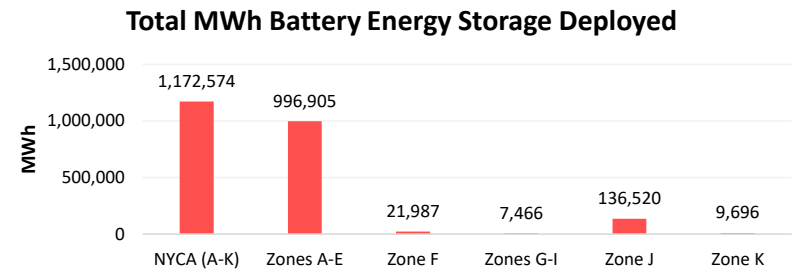
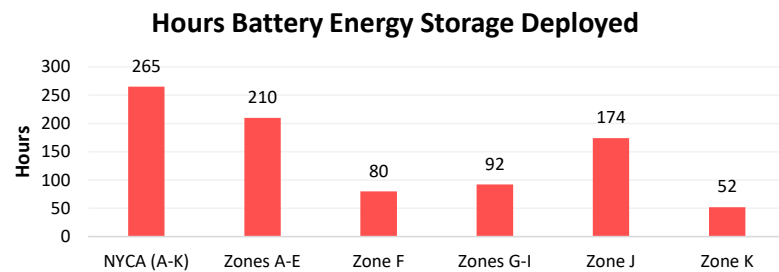
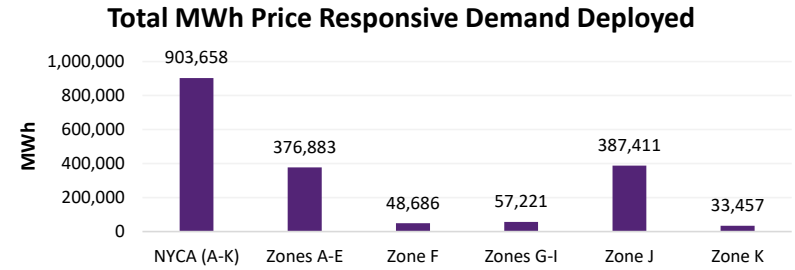
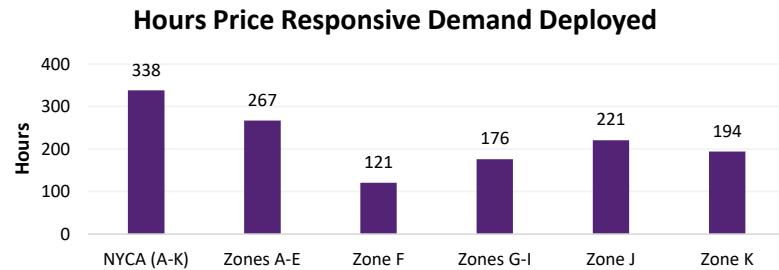
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

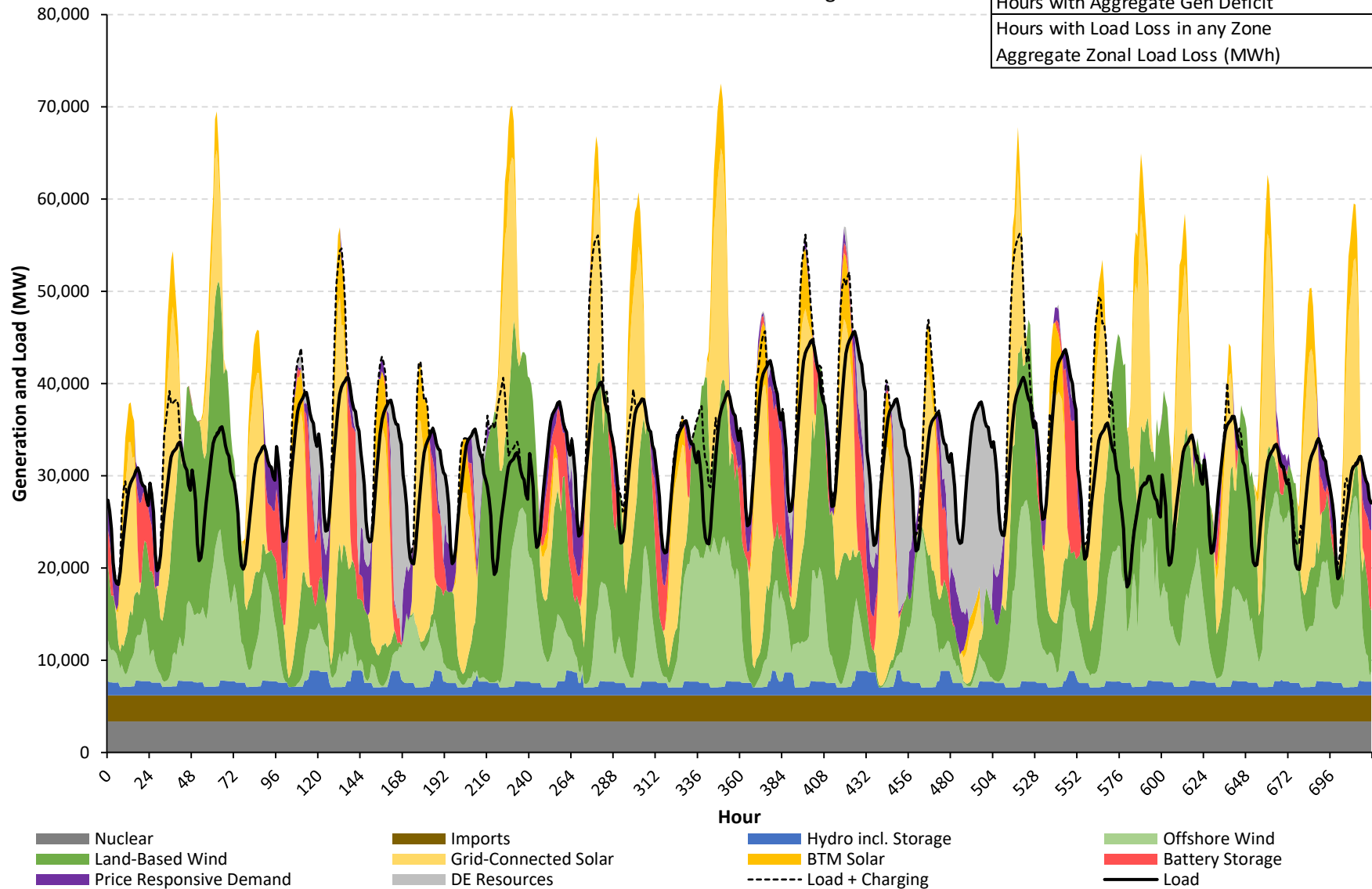
Case Name: CLCPA Case - Summer - CCP2 Resource Set - Drought



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Drought

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	27,284,119
Gen Surplus/Deficit (MWh)	4,808,164
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

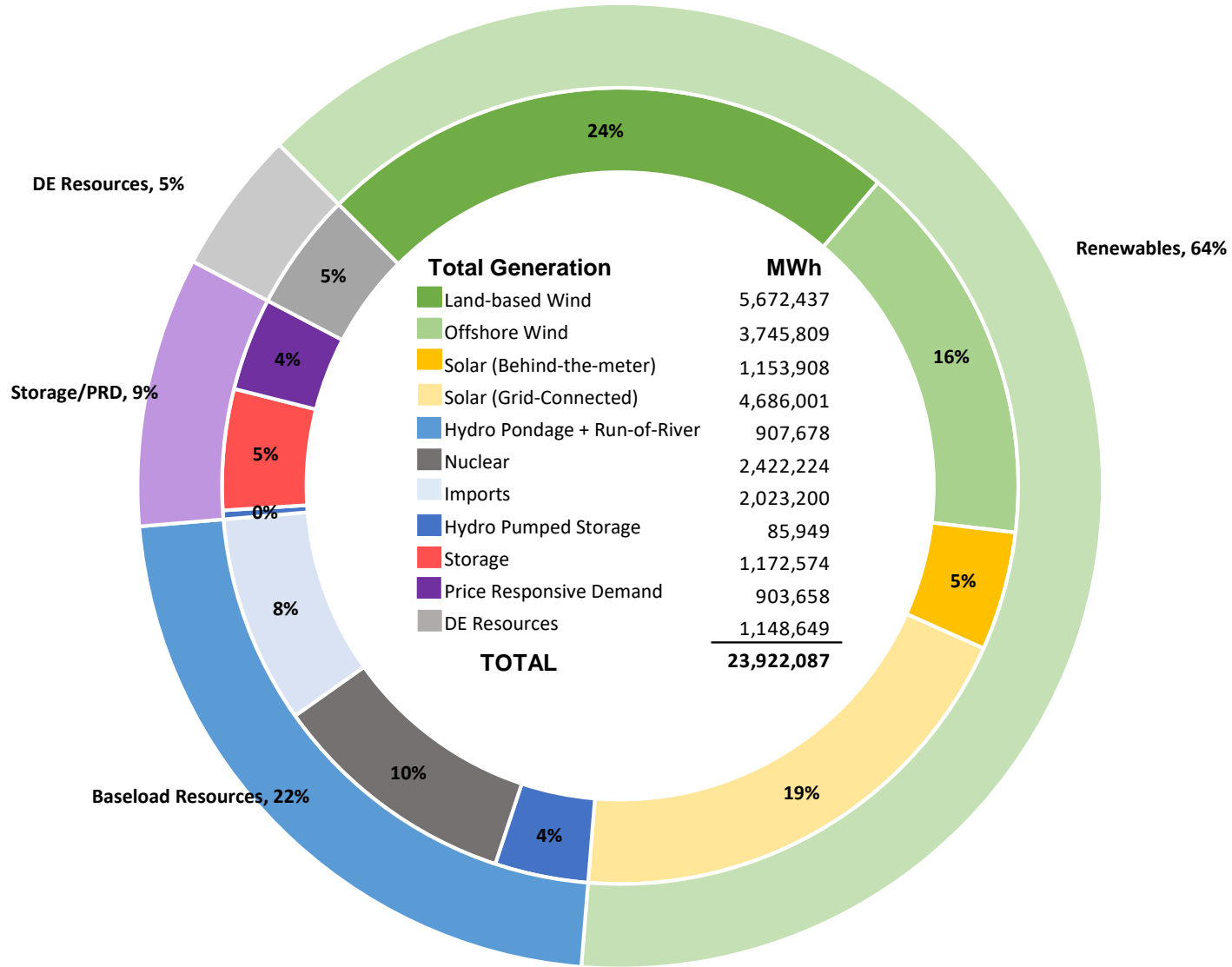


**Note:**

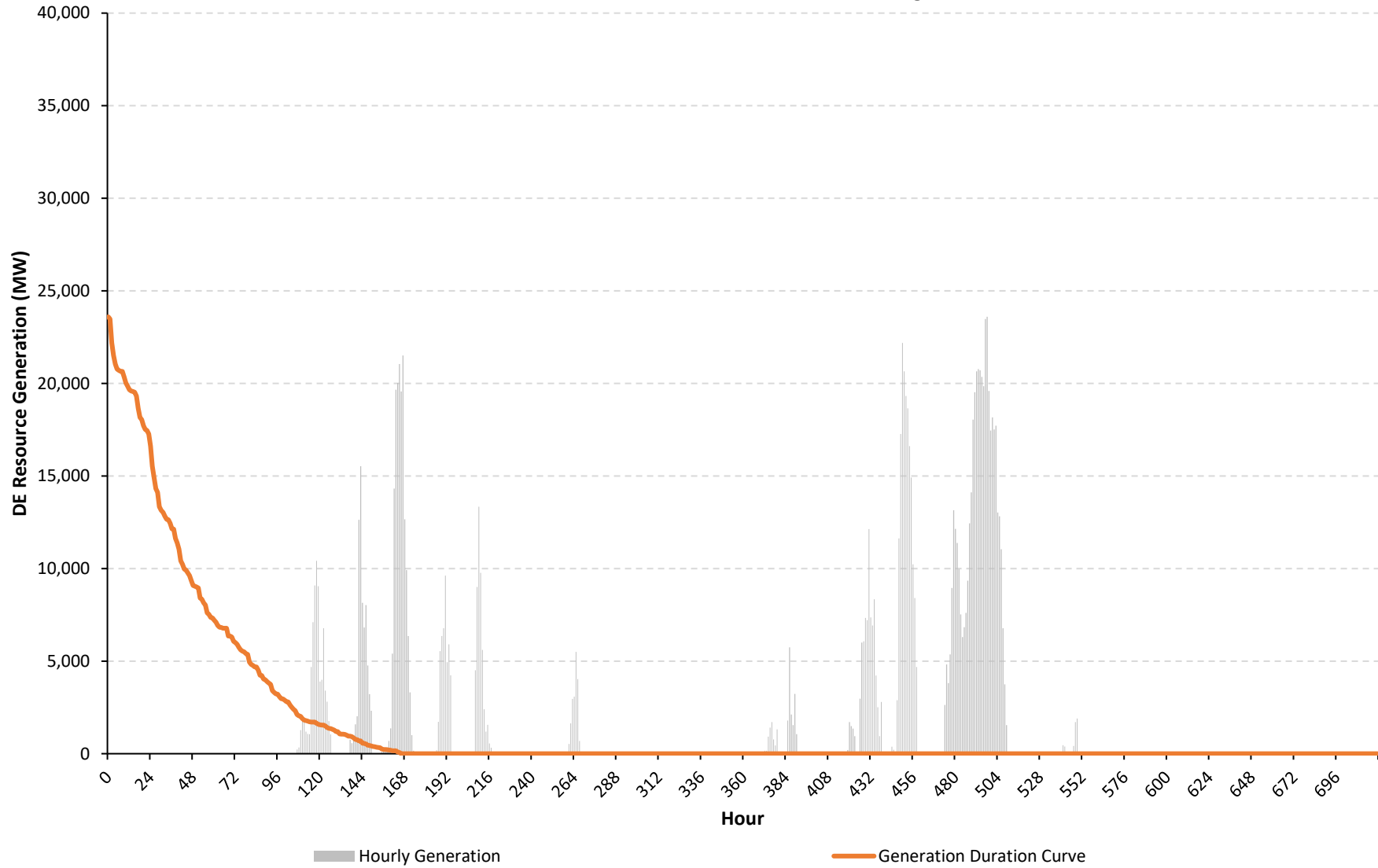
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Summer - CCP2 Resource Set - Drought

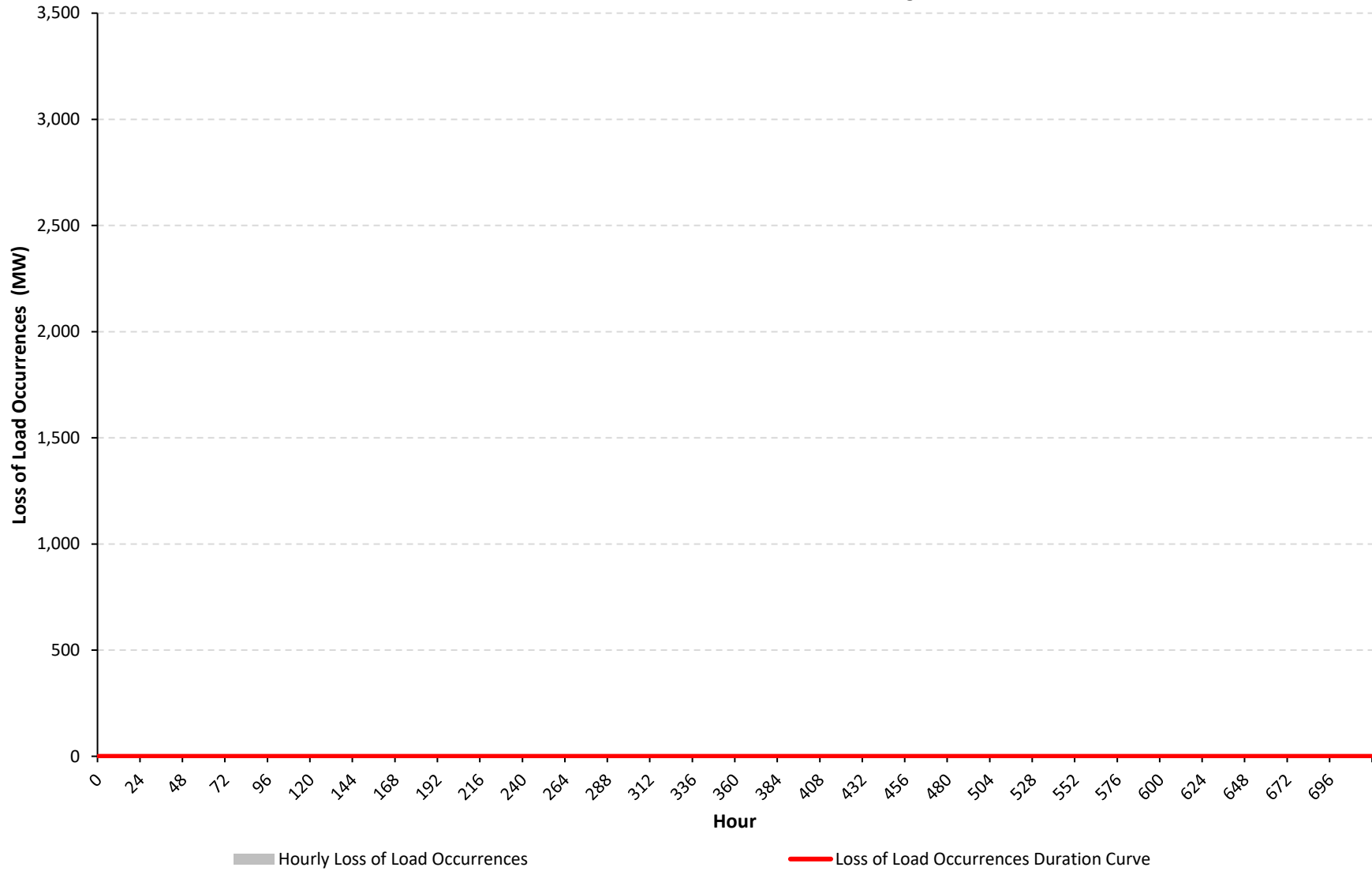


### NYCA DE Resource Generation (MW) CLCPA Case - Summer - CCP2 Resource Set - Drought





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - CCP2 Resource Set - Drought



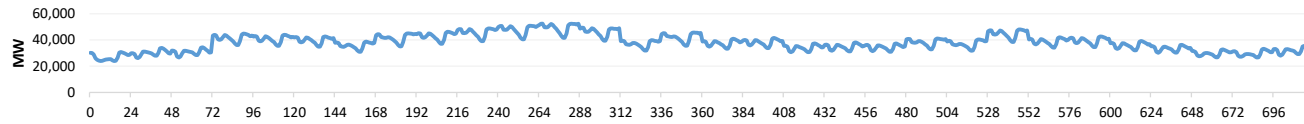
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 22 - CLCPA Case - Winter - CCP2 Resource Set - Drought**

### Hourly Results Summary

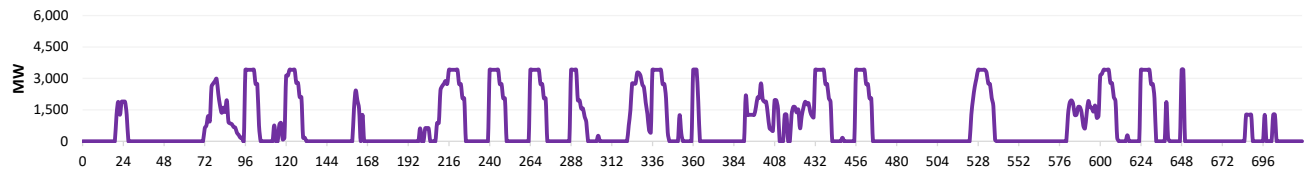
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Drought

**Load During Modeling Period**



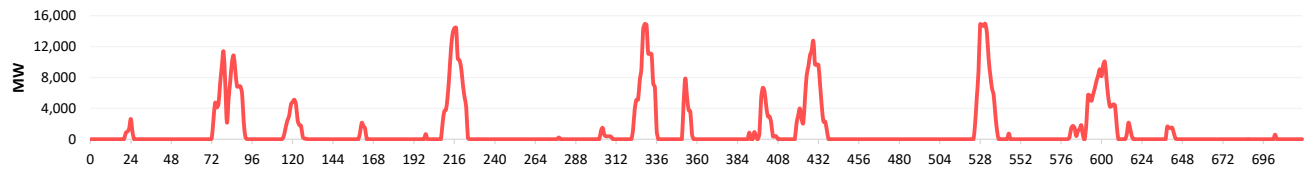
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



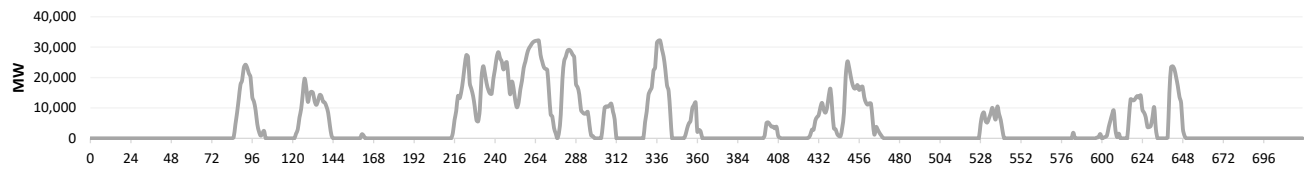
PRD Deployment	
Total Hrs.	266
Total MWh	567,452
Avg. MW	2,133.3

**Battery Energy Storage Deployed During Modeling Period**



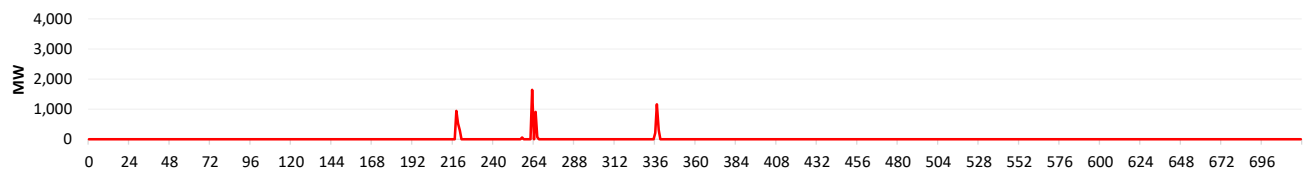
Battery Deployment	
Total Hrs.	181
Total MWh	866,940
Avg. MW	4,789.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	274
Total MWh	3,308,802
Avg. MW	12,075.9

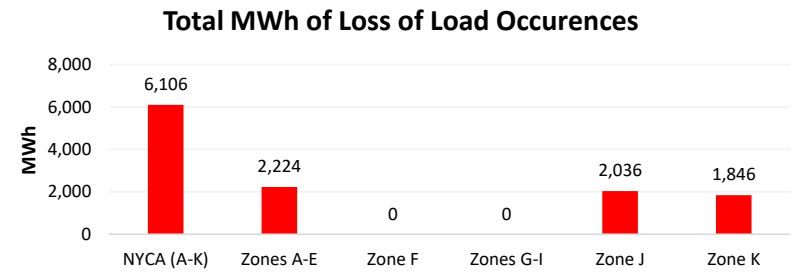
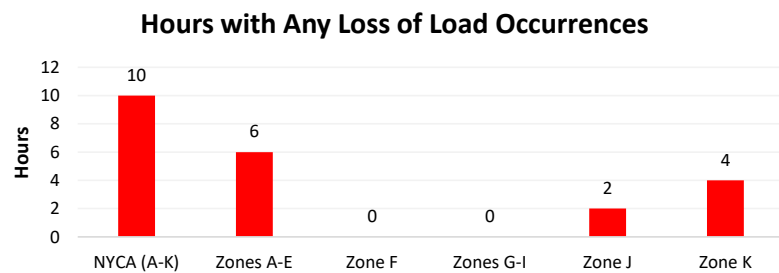
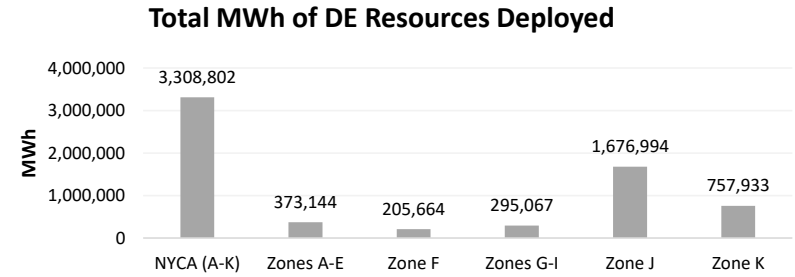
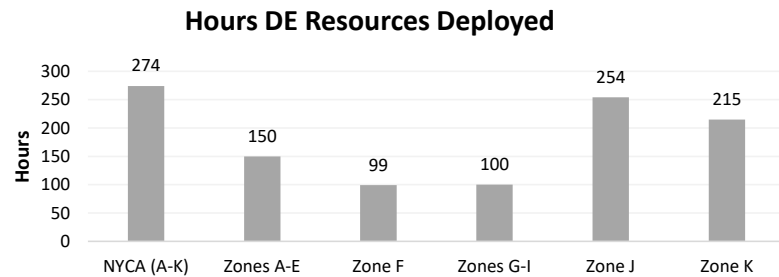
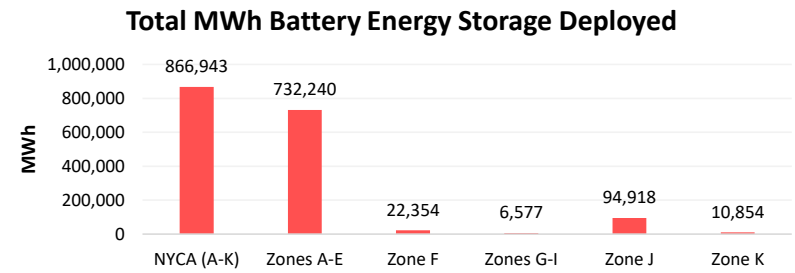
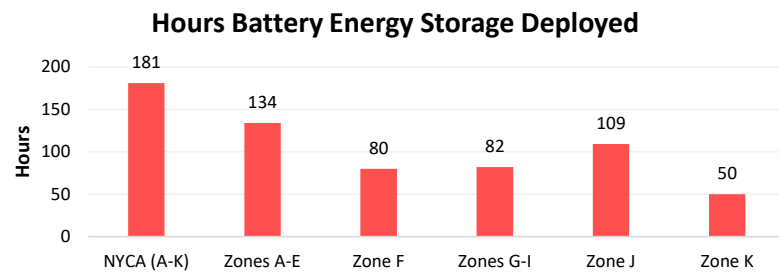
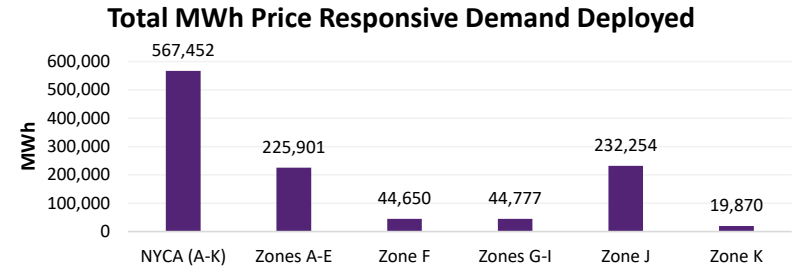
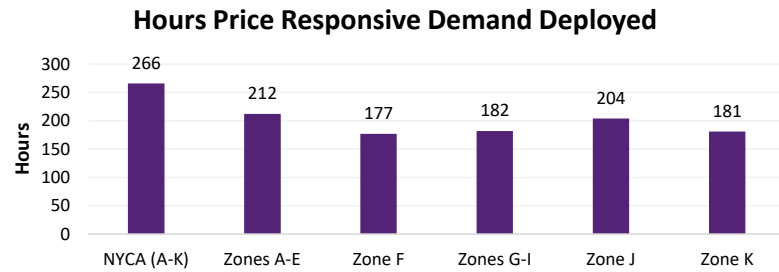
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	10
Total MWh	6,106
Avg. MW	610.6

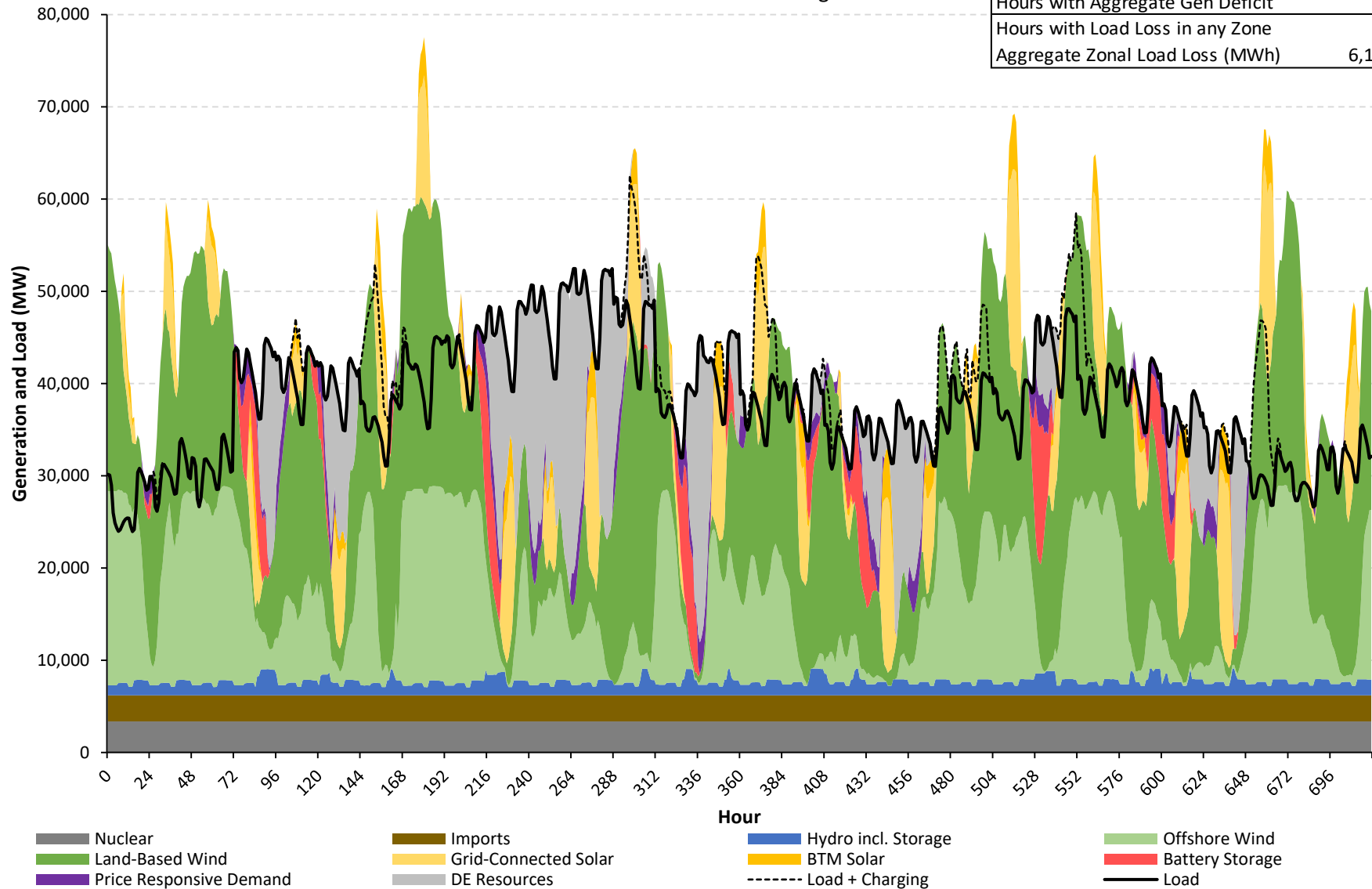
### Full Period Results Summary

Case Name: CLCPA Case - Winter - CCP2 Resource Set - Drought



### NYCA Hourly Load/Generation Balance by Resource Type CLCPA Case - Winter - CCP2 Resource Set - Drought

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	32,330,022
Gen Surplus/Deficit (MWh)	5,007,985
Hours with Aggregate Gen Deficit	10
Hours with Load Loss in any Zone	10
Aggregate Zonal Load Loss (MWh)	6,106

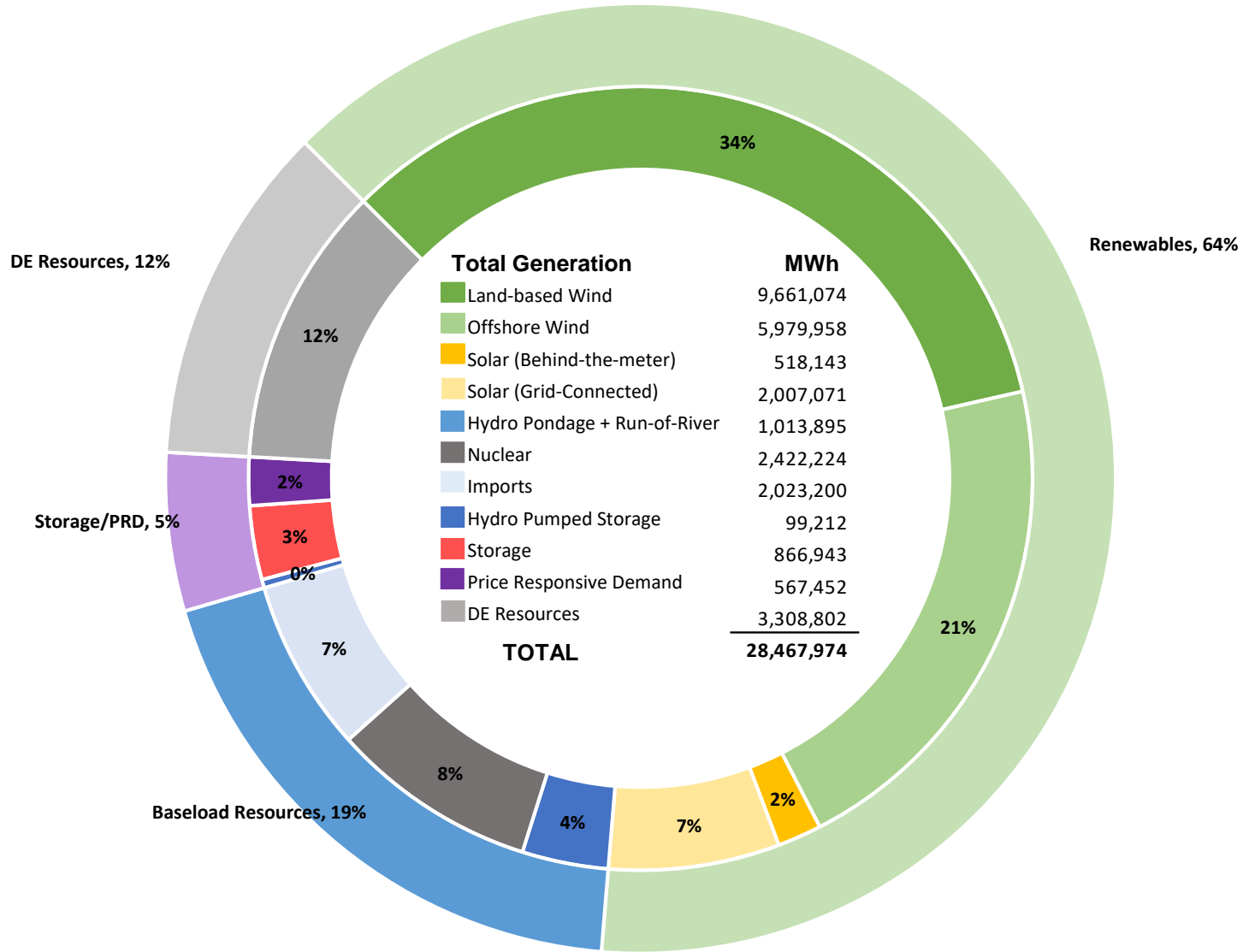


**Note:**

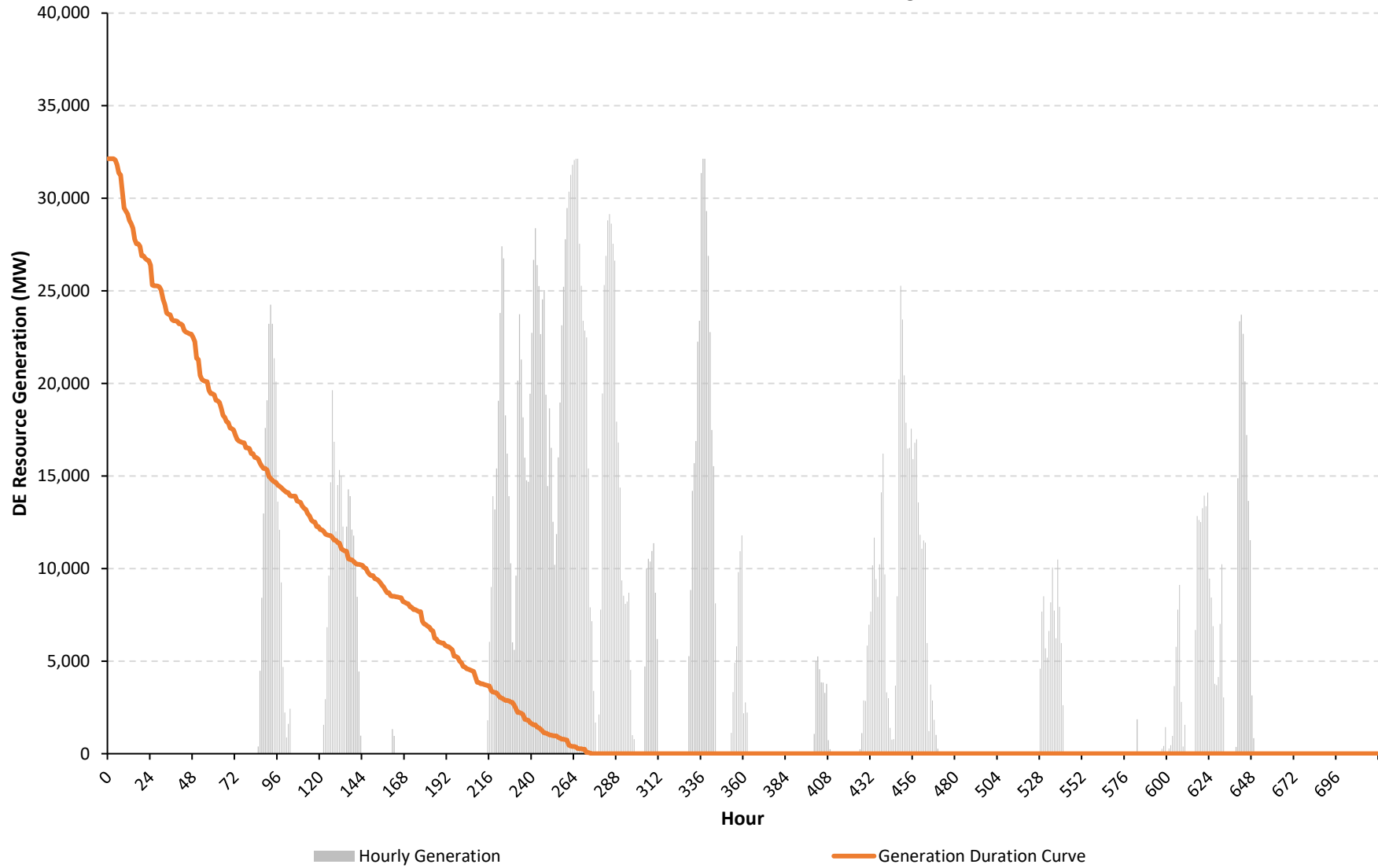
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

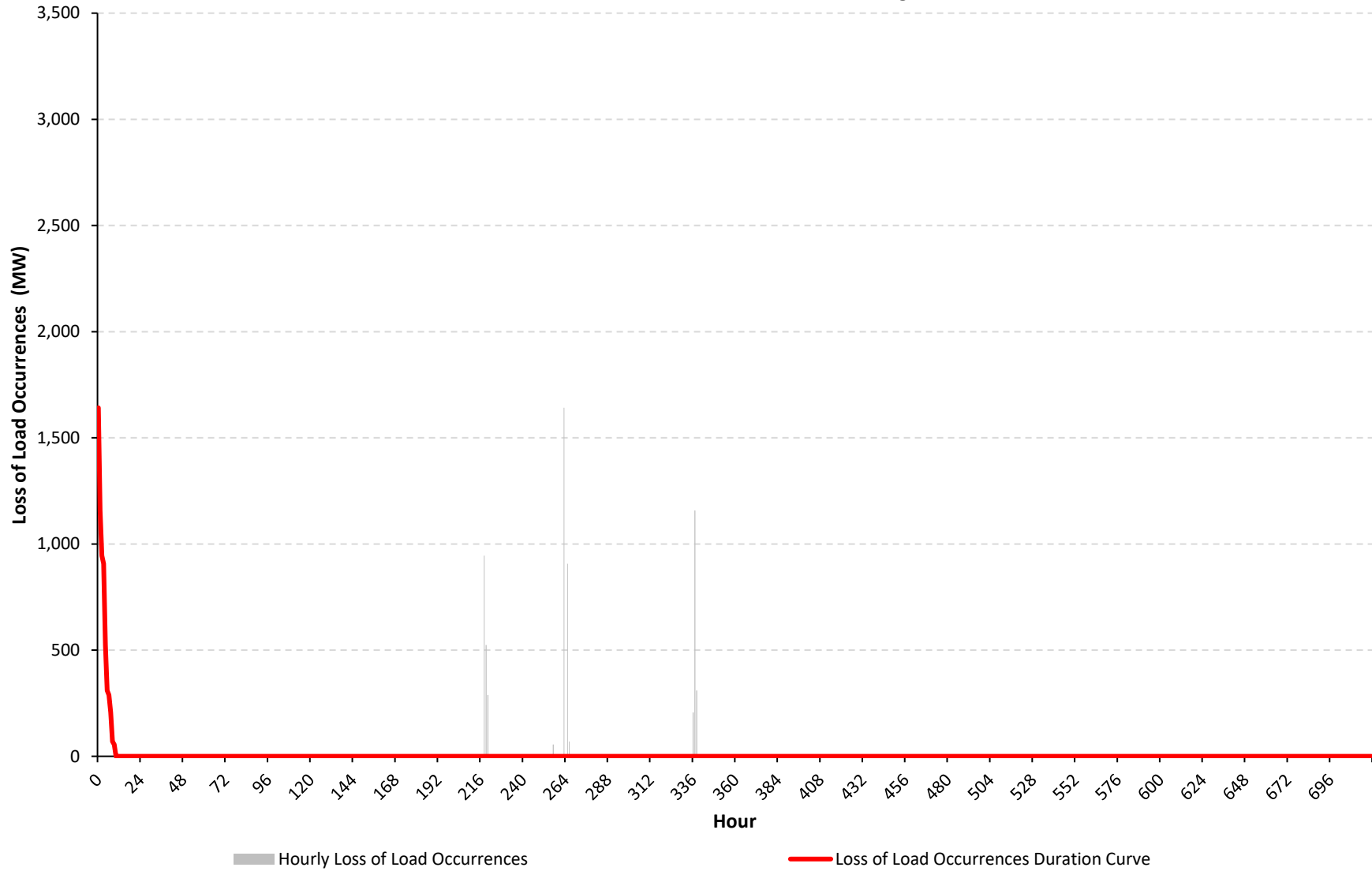
CLCPA Case - Winter - CCP2 Resource Set - Drought



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Drought



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Drought





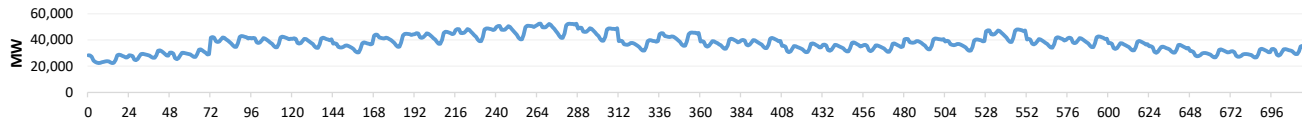
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 23 - CLCPA Case - Winter - CCP2 Resource Set - Icing**

**Hourly Results Summary**

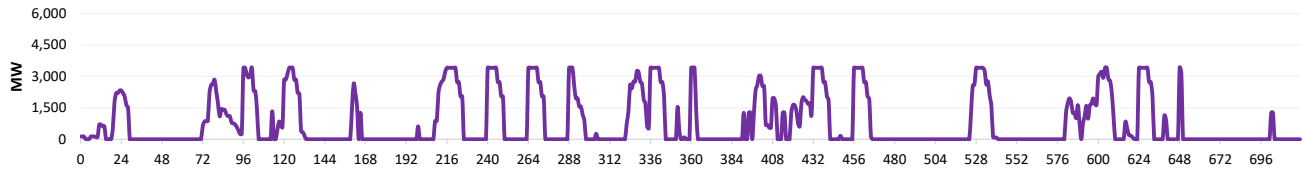
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Icing

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	27,087,588
Avg. MW	37,621.6

**Price Responsive Demand Deployed During Modeling Period**



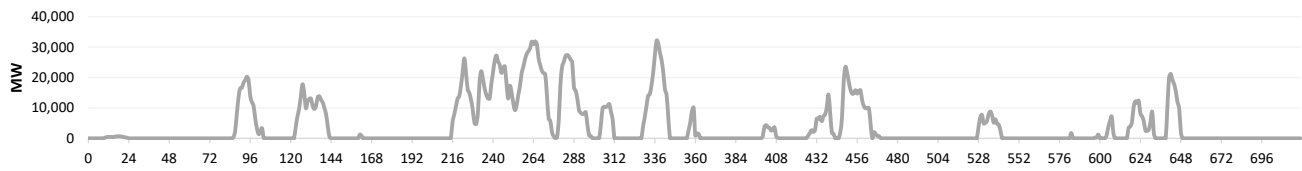
PRD Deployment	
Total Hrs.	276
Total MWh	561,710
Avg. MW	2,035.2

**Battery Energy Storage Deployed During Modeling Period**



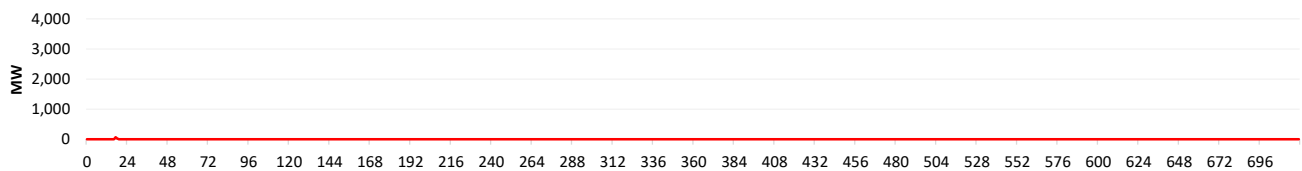
Battery Deployment	
Total Hrs.	210
Total MWh	923,534
Avg. MW	4,397.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	273
Total MWh	2,909,437
Avg. MW	10,657.3

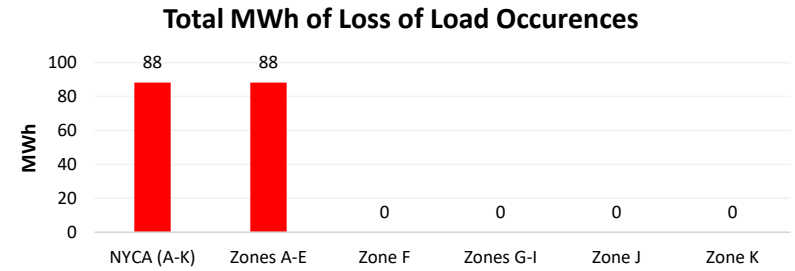
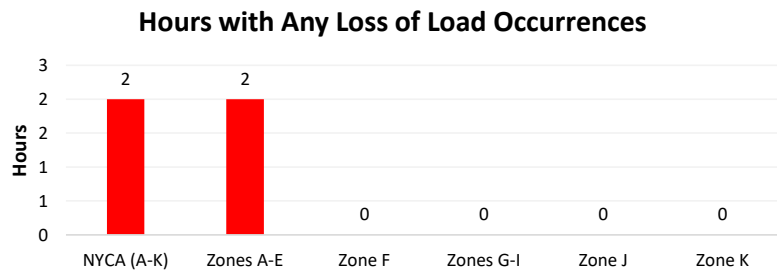
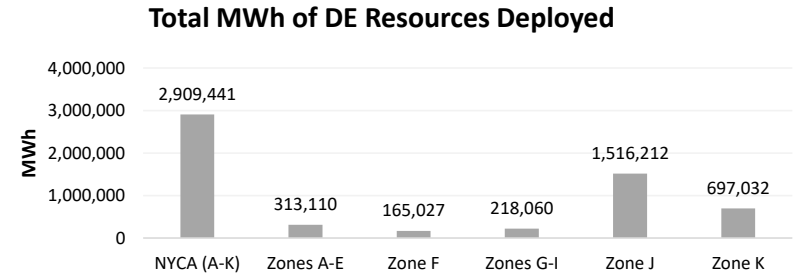
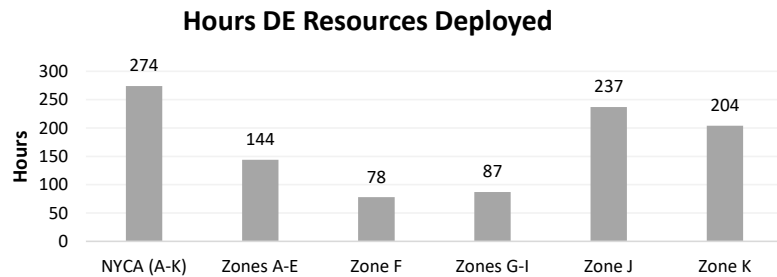
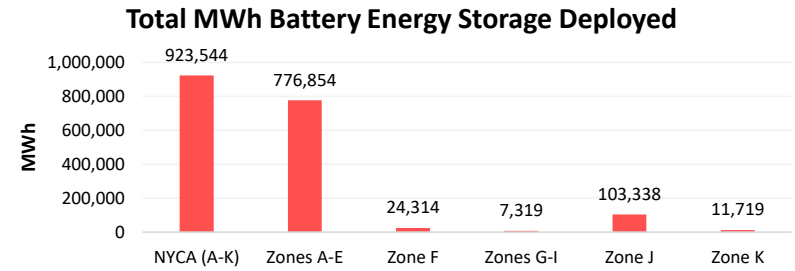
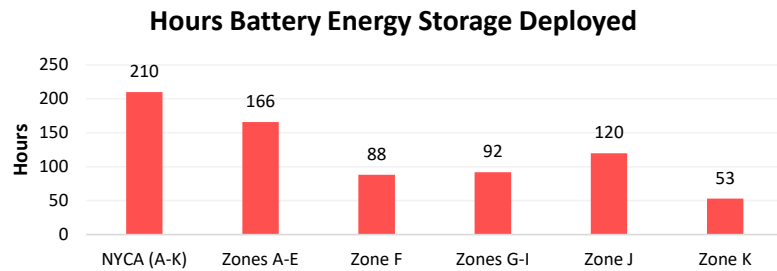
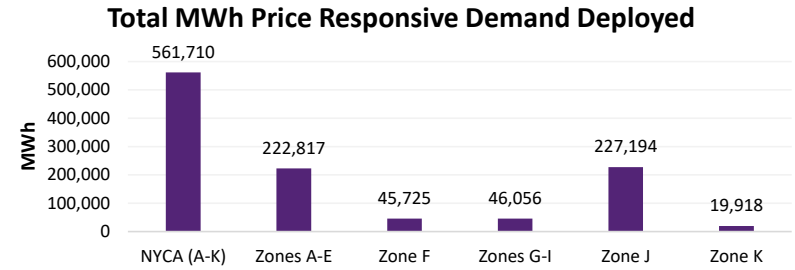
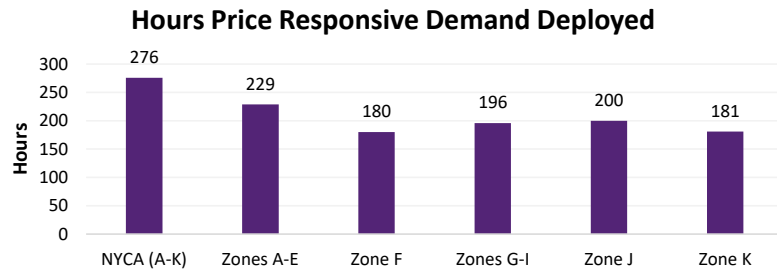
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	2
Total MWh	88
Avg. MW	44.1

### Full Period Results Summary

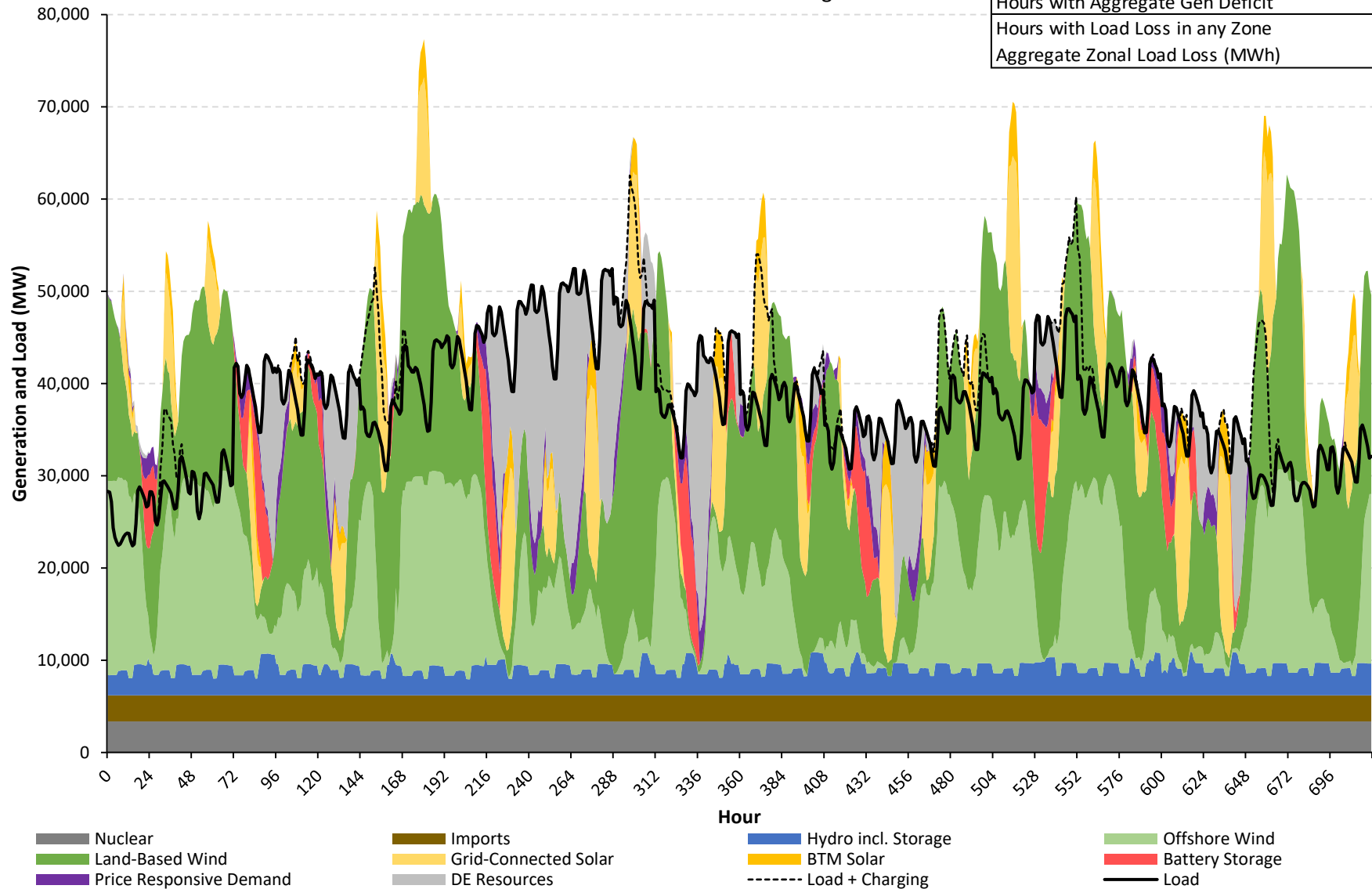
Case Name: CLCPA Case - Winter - CCP2 Resource Set - Icing



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - CCP2 Resource Set - Icing

Aggregate Load in Period (MWh)	27,087,588
Aggregate Gen in Period (MWh)	32,459,314
Gen Surplus/Deficit (MWh)	5,371,726
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	2
Aggregate Zonal Load Loss (MWh)	88

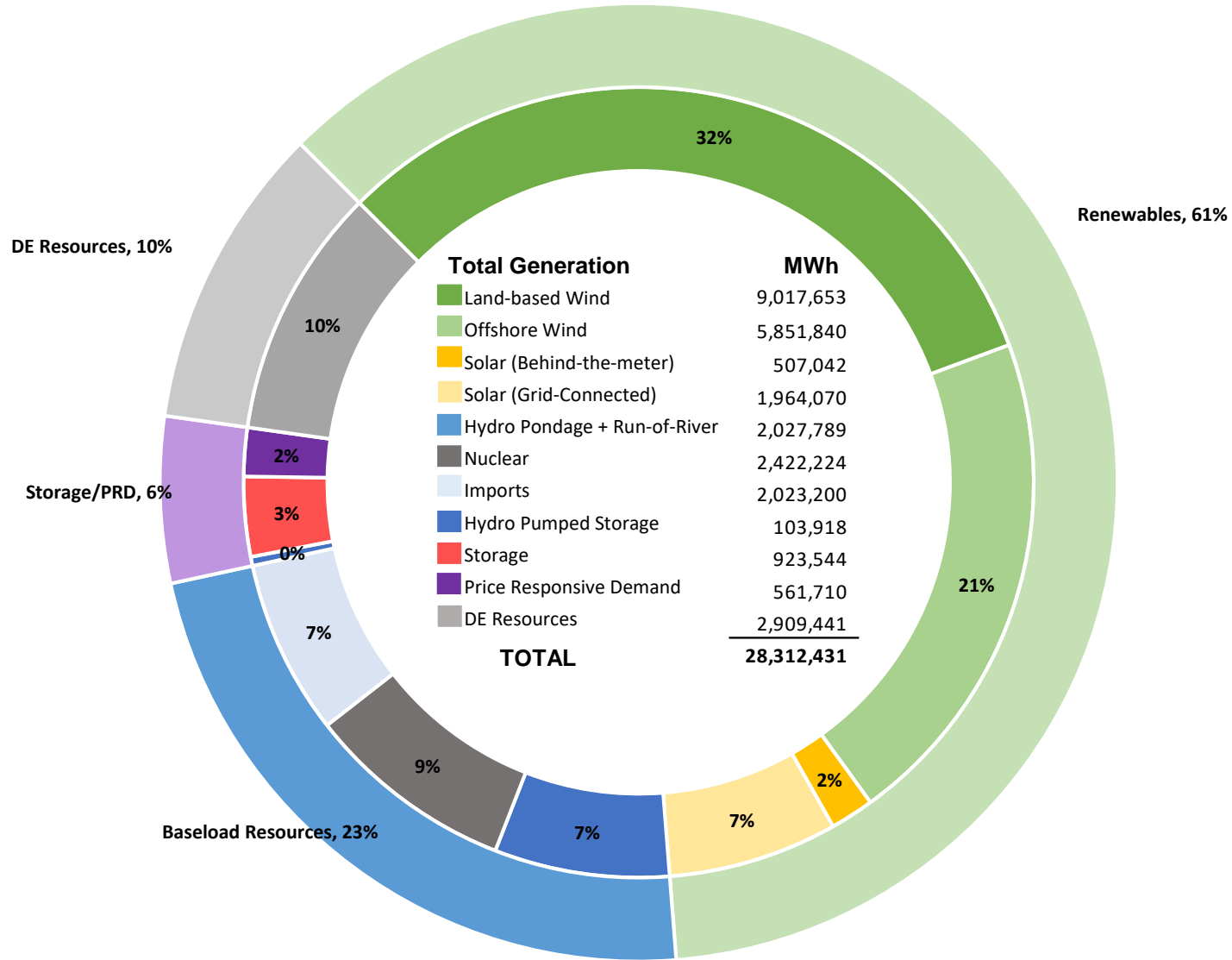


**Note:**

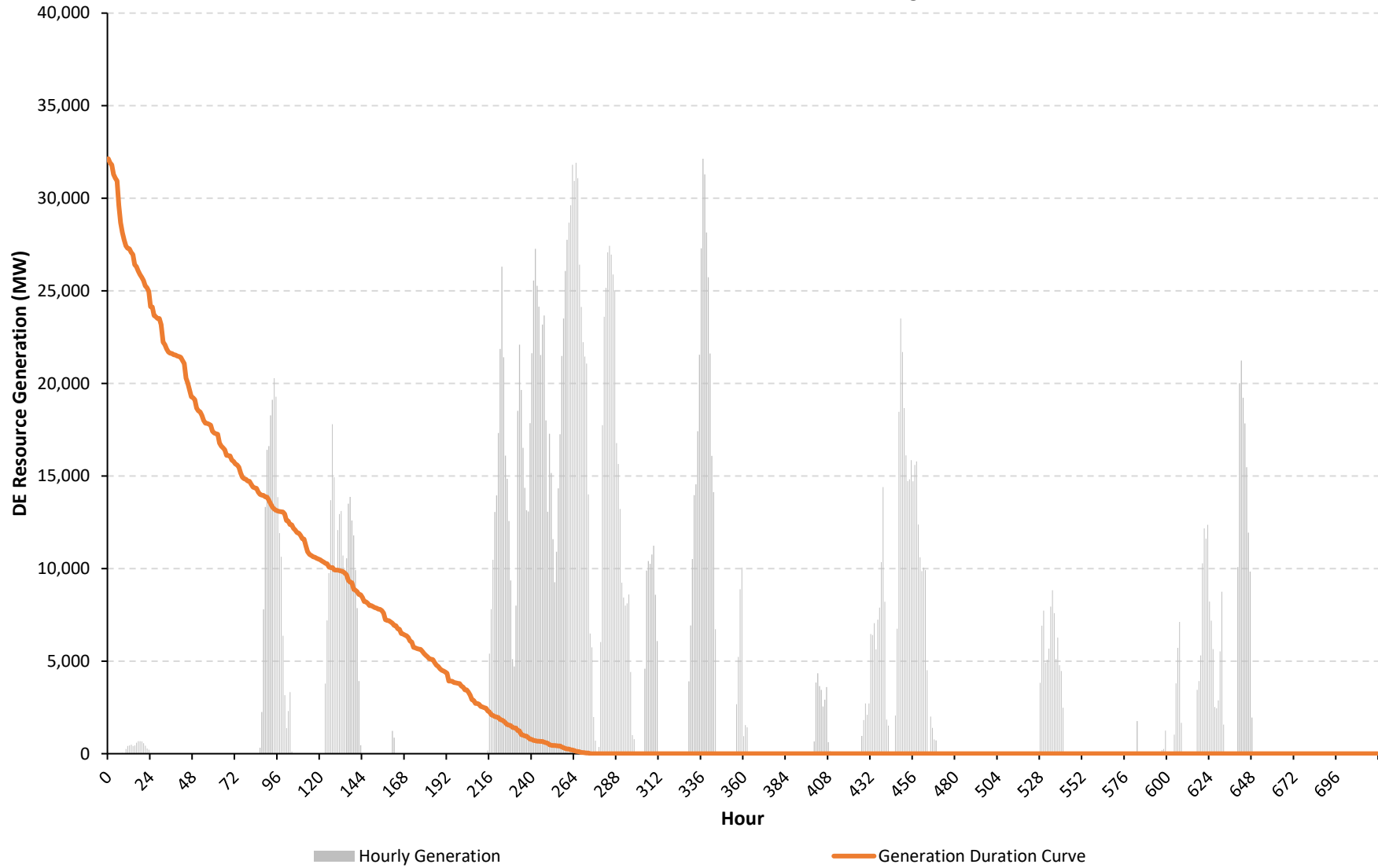
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

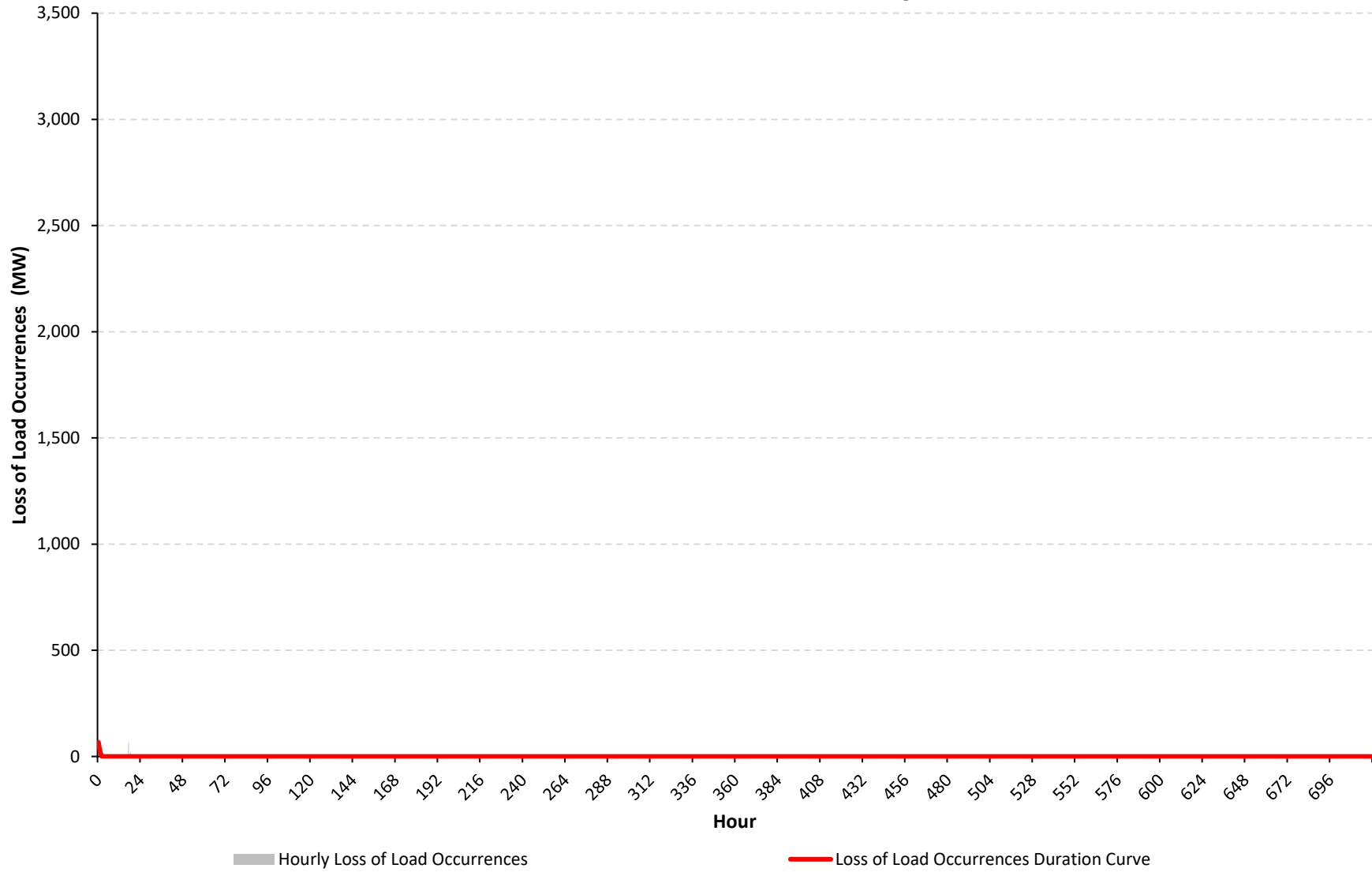
CLCPA Case - Winter - CCP2 Resource Set - Icing



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - CCP2 Resource Set - Icing



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - CCP2 Resource Set - Icing



## **Appendix C. Diagnostic Charts for All Cases**

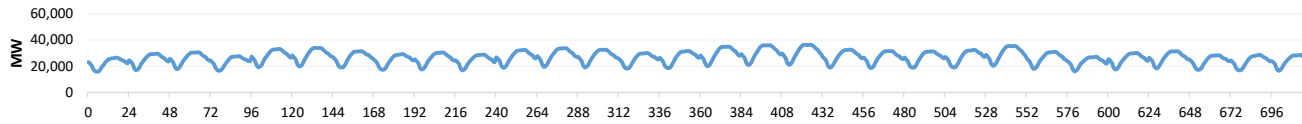
### **Case 24 - Reference Case - Summer - CCP2 Resource Set**



**Hourly Results Summary**

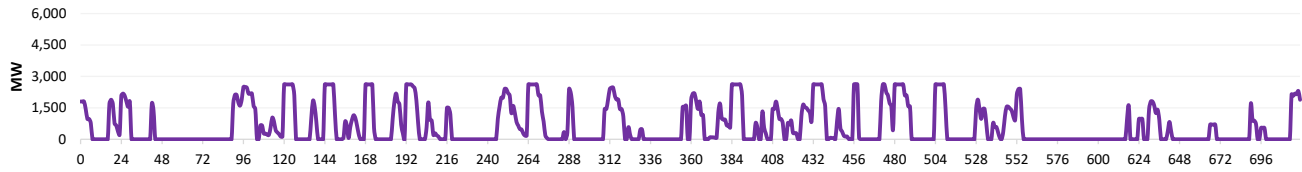
Case Name: Reference Case - Summer - CCP2 Resource Set

**Load During Modeling Period**



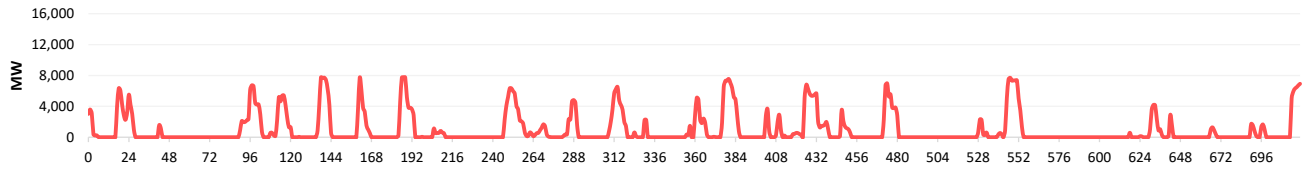
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



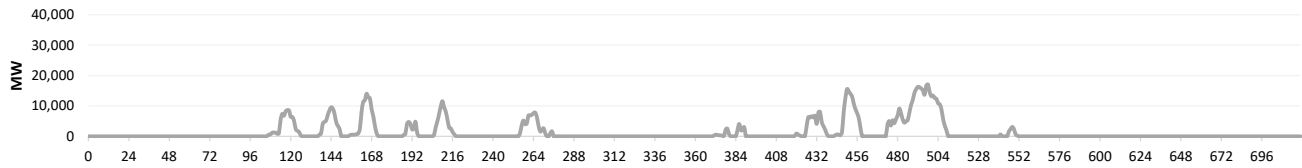
PRD Deployment	
Total Hrs.	320
Total MWh	460,868
Avg. MW	1,440.2

**Battery Energy Storage Deployed During Modeling Period**



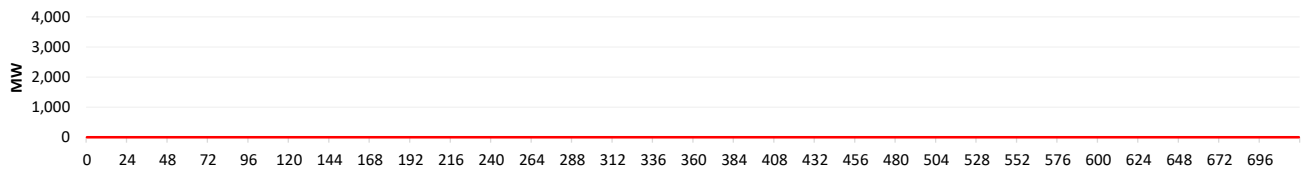
Battery Deployment	
Total Hrs.	254
Total MWh	734,112
Avg. MW	2,890.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	183
Total MWh	972,444
Avg. MW	5,313.9

**Loss of Load Occurrences During Modeling Period**

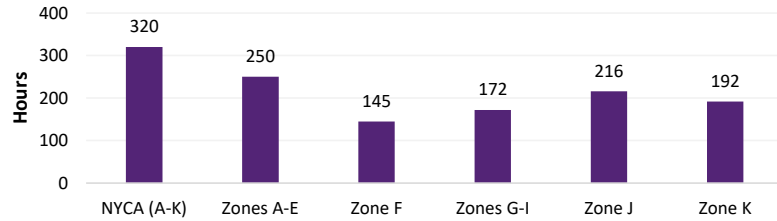


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

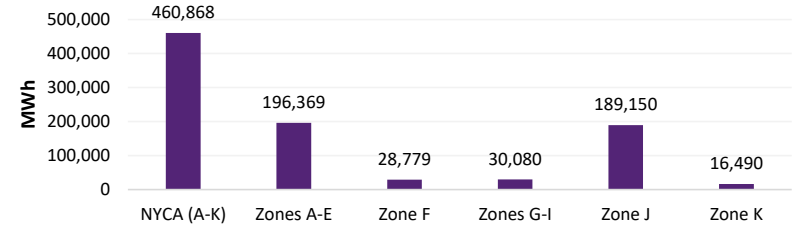
### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set

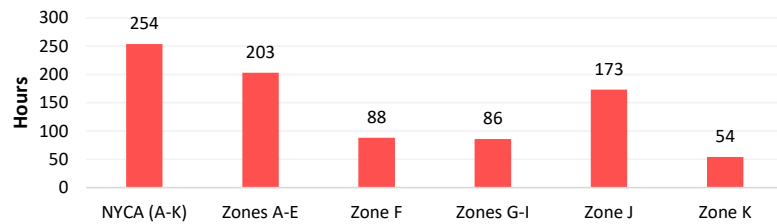
**Hours Price Responsive Demand Deployed**



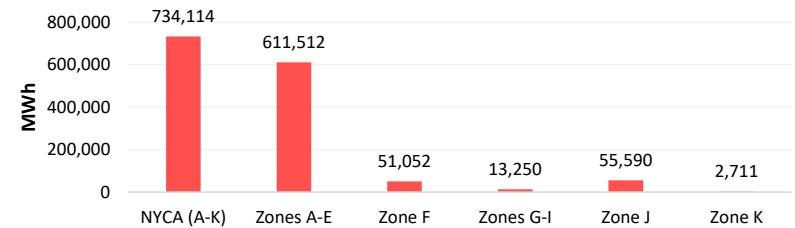
**Total MWh Price Responsive Demand Deployed**



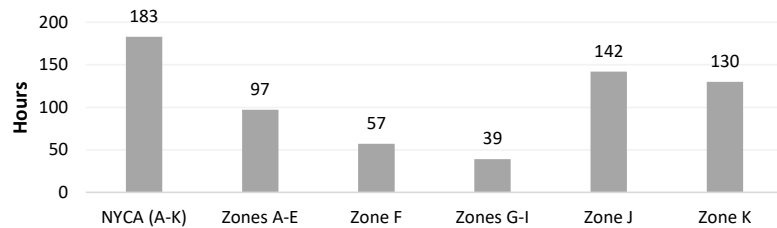
**Hours Battery Energy Storage Deployed**



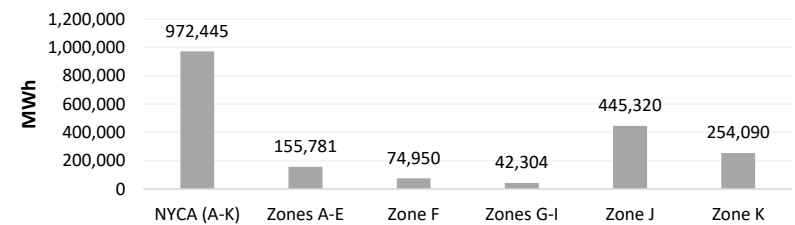
**Total MWh Battery Energy Storage Deployed**



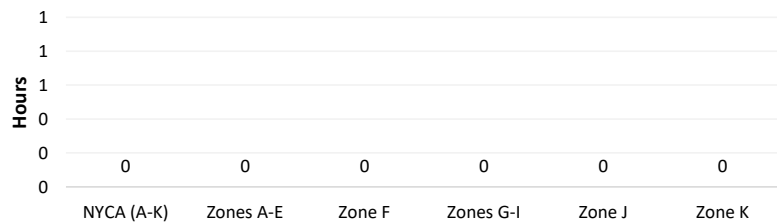
**Hours DE Resources Deployed**



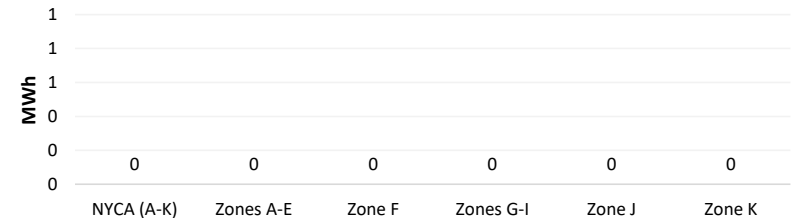
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



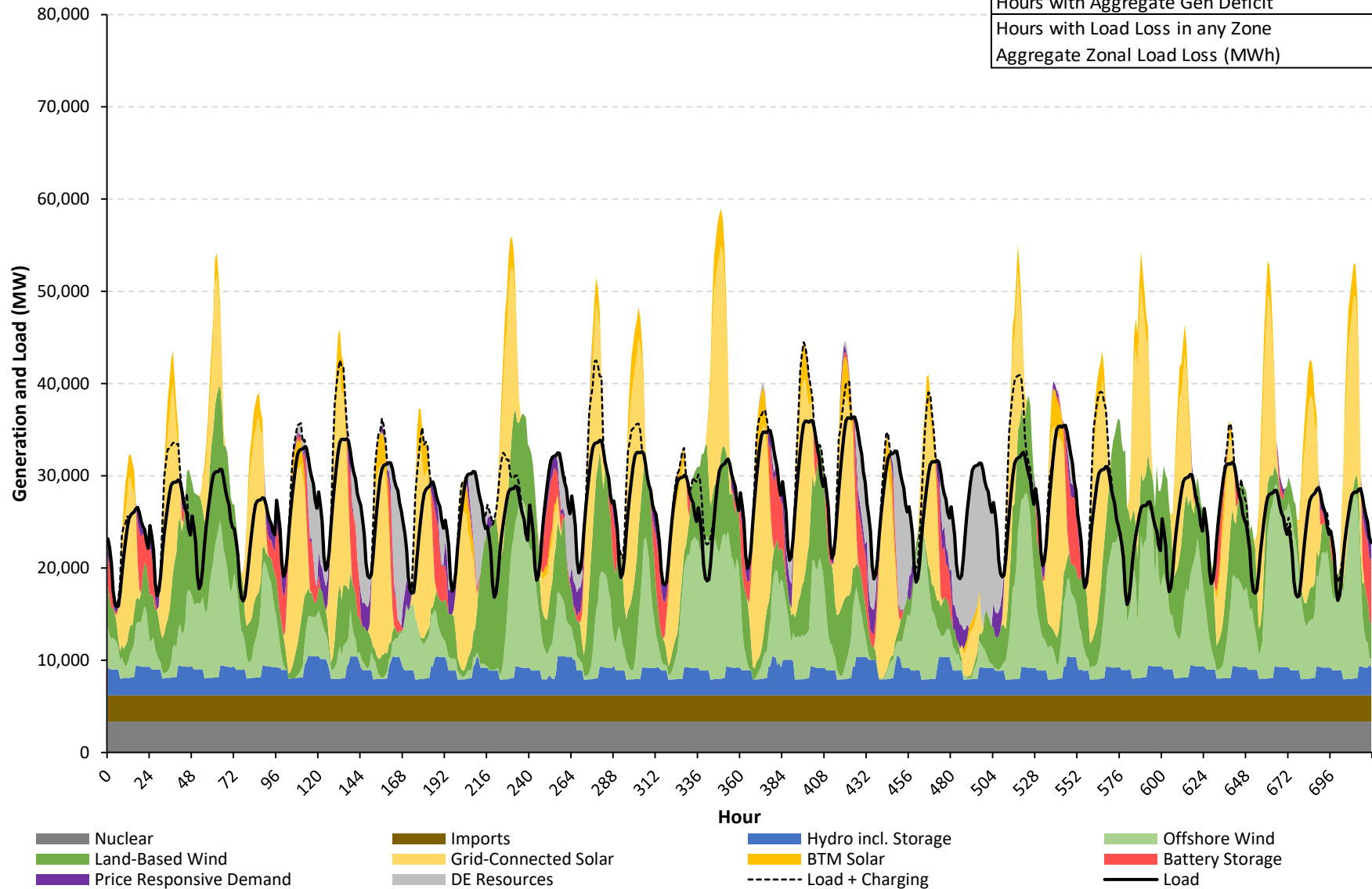
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	22,625,097
Gen Surplus/Deficit (MWh)	3,612,283
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

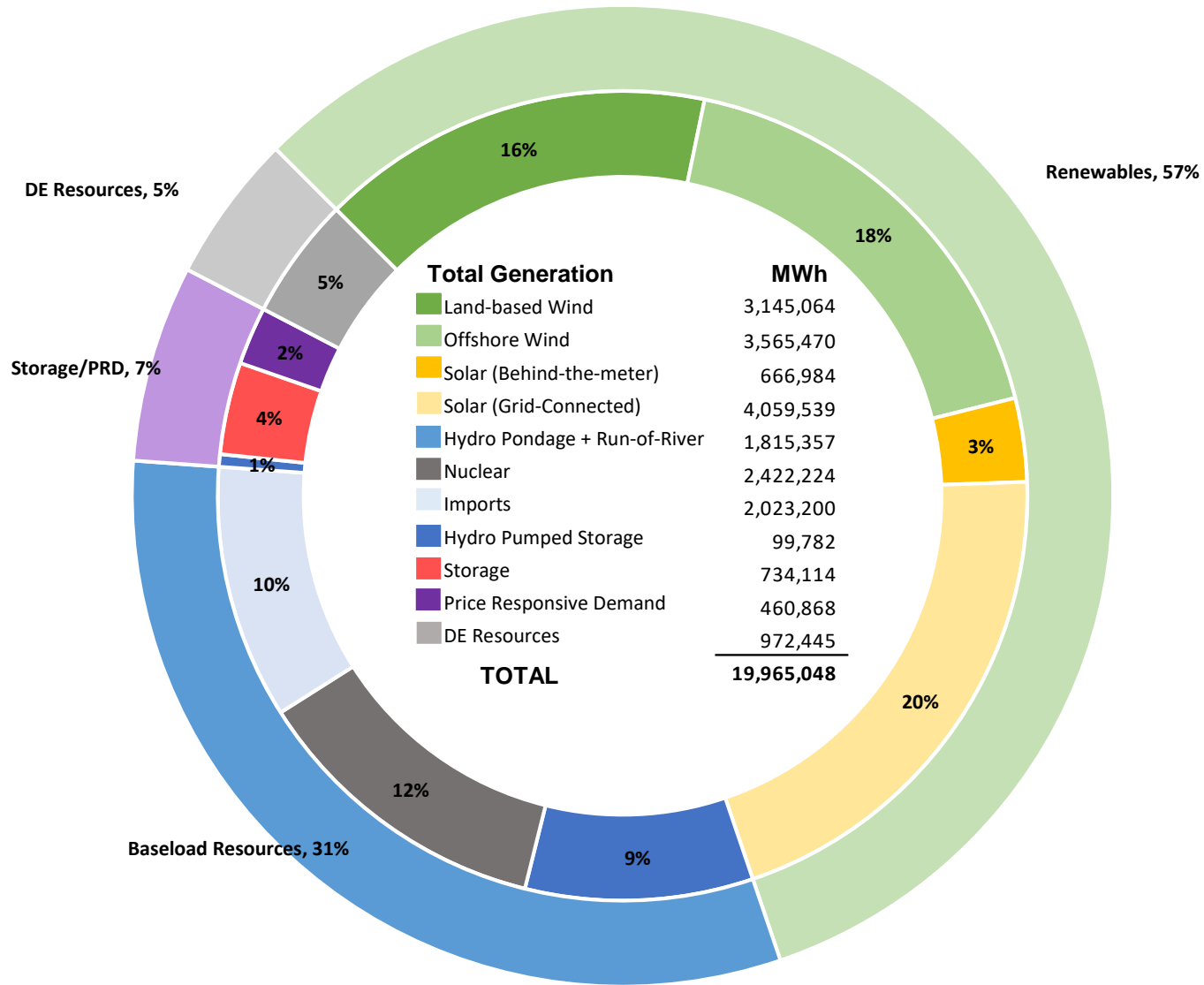


**Note:**

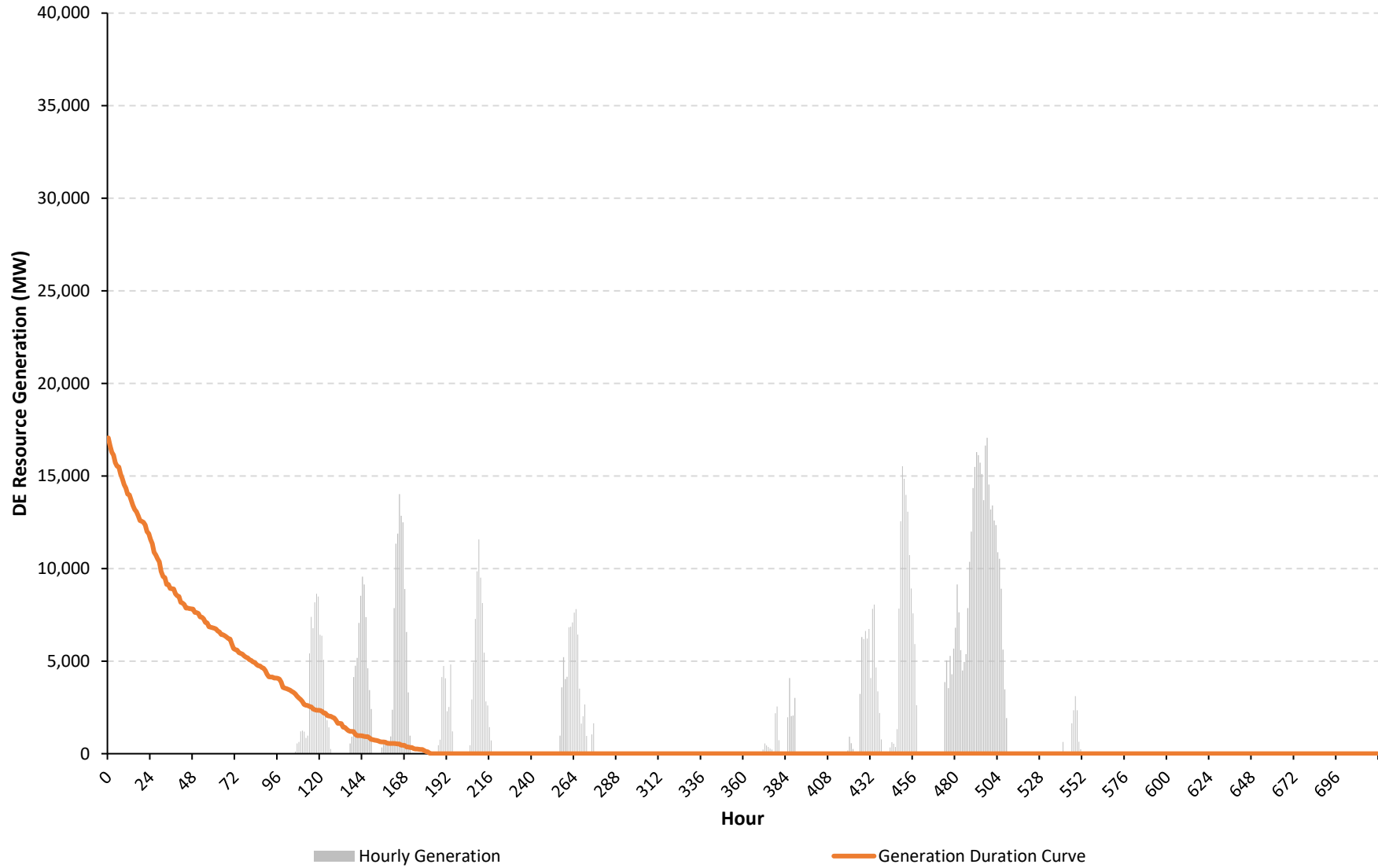
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

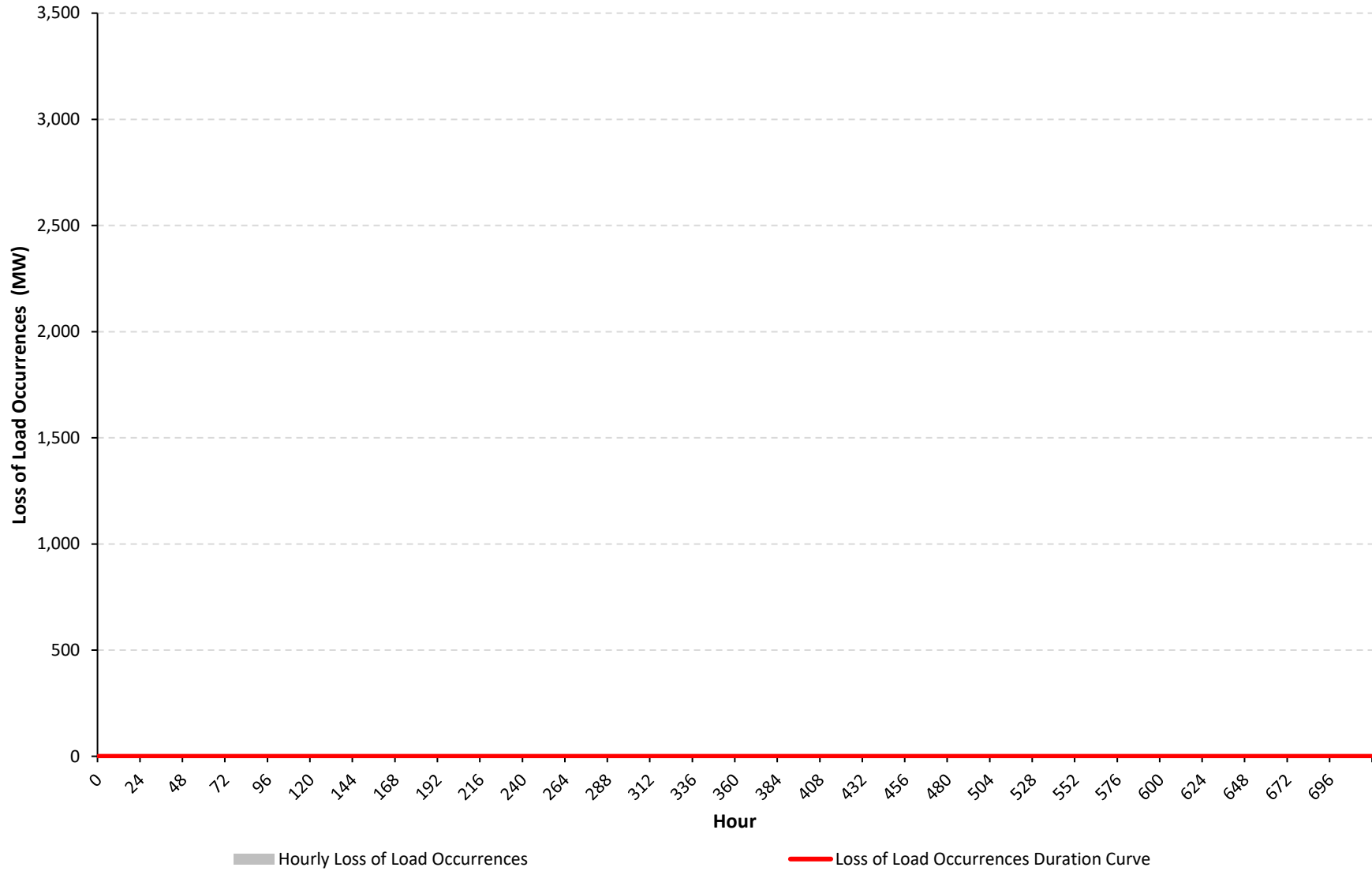
Reference Case - Summer - CCP2 Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Summer - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Summer - CCP2 Resource Set



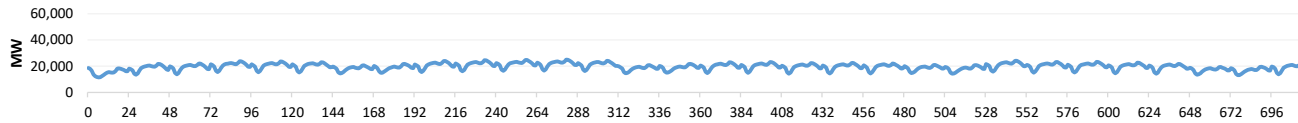
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 25 - Reference Case - Winter - CCP2 Resource Set**

### Hourly Results Summary

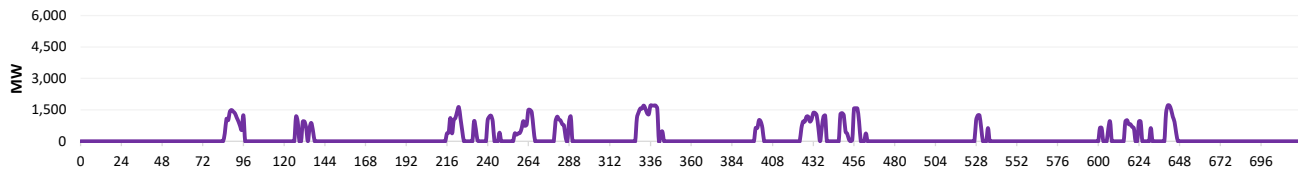
Case Name: Reference Case - Winter - CCP2 Resource Set

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



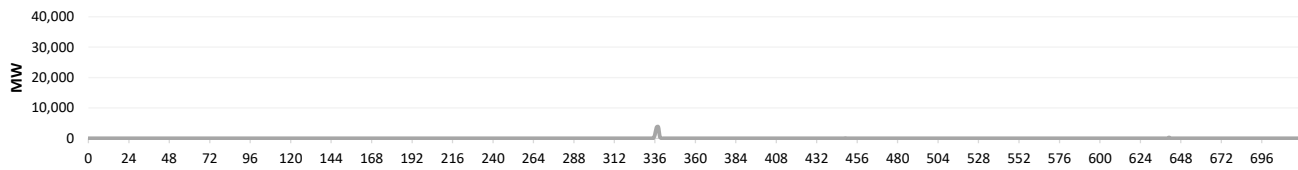
PRD Deployment	
Total Hrs.	130
Total MWh	125,986
Avg. MW	969.1

**Battery Energy Storage Deployed During Modeling Period**



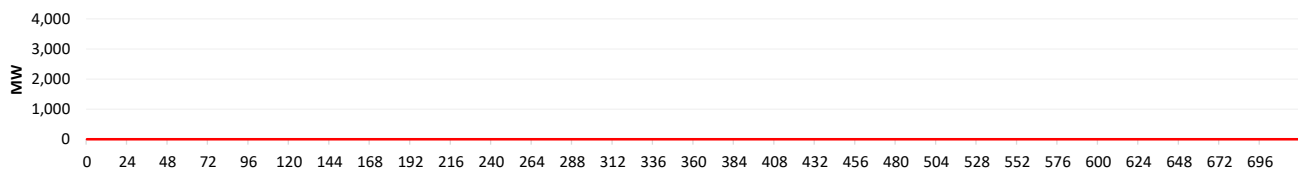
Battery Deployment	
Total Hrs.	115
Total MWh	312,542
Avg. MW	2,717.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	6
Total MWh	9,316
Avg. MW	1,552.7

**Loss of Load Occurrences During Modeling Period**

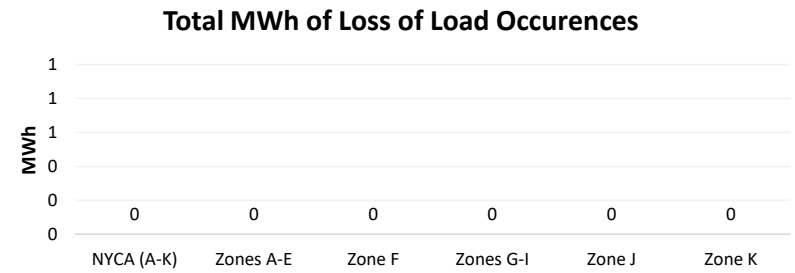
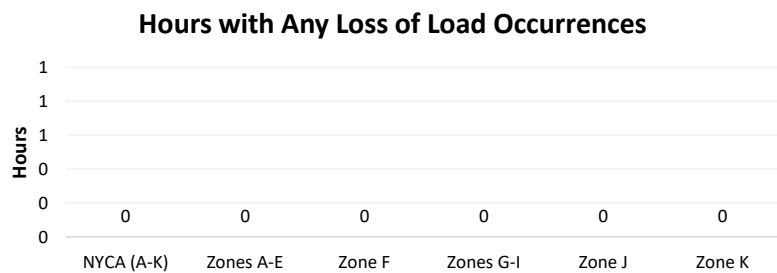
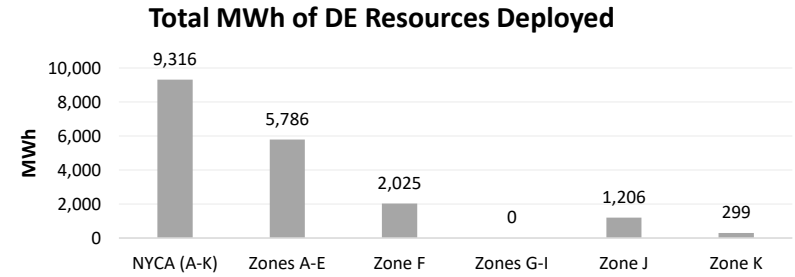
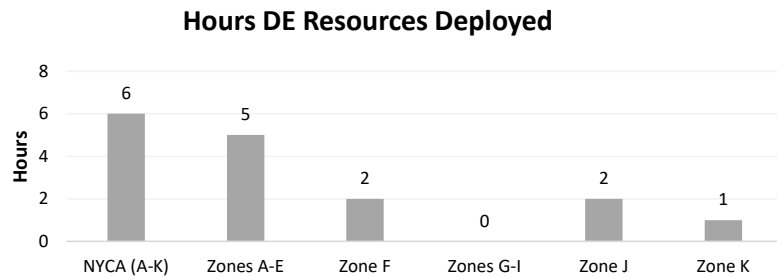
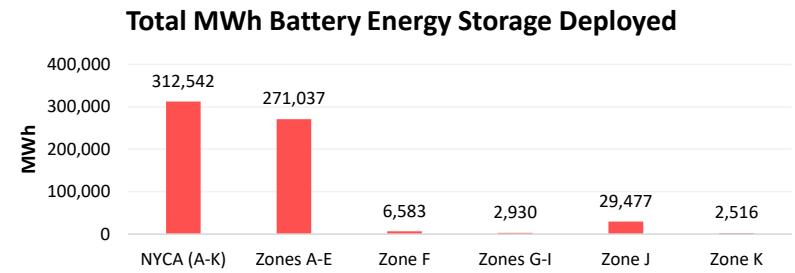
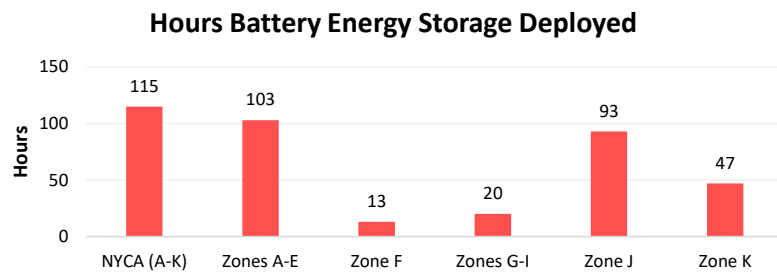
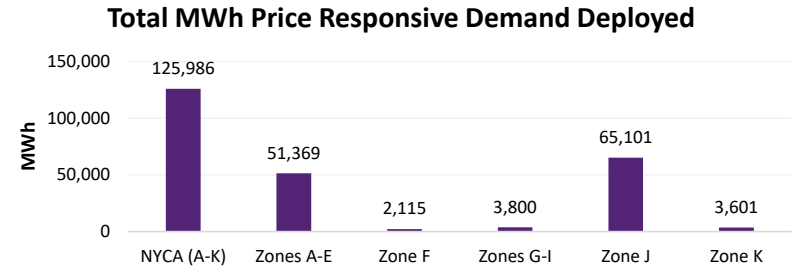
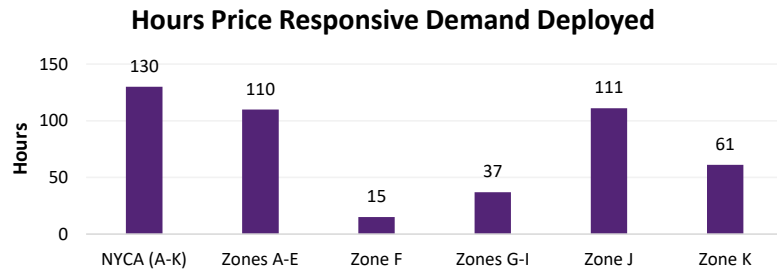


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



### Full Period Results Summary

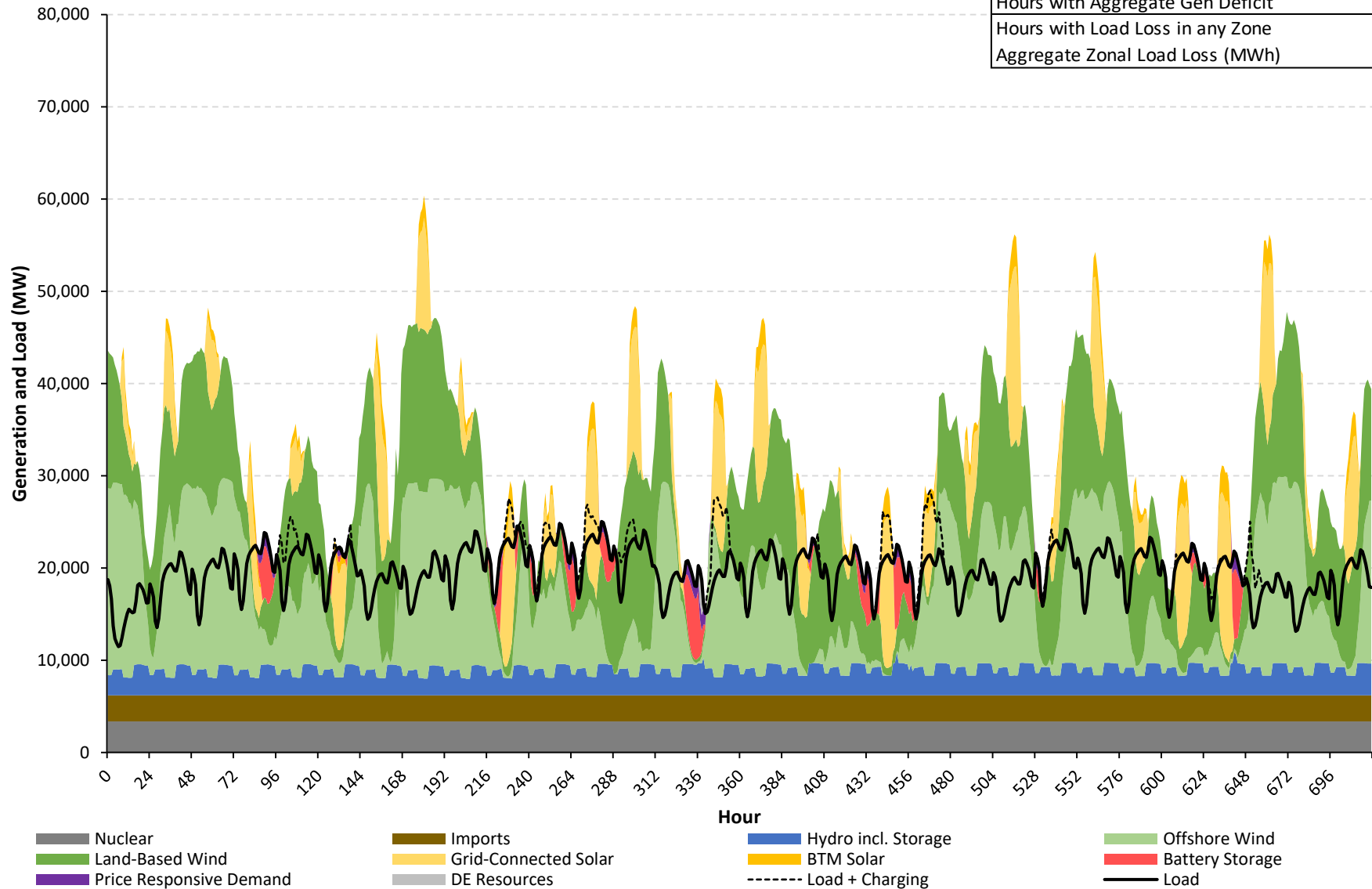
Case Name: Reference Case - Winter - CCP2 Resource Set



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	22,958,717
Gen Surplus/Deficit (MWh)	8,847,251
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

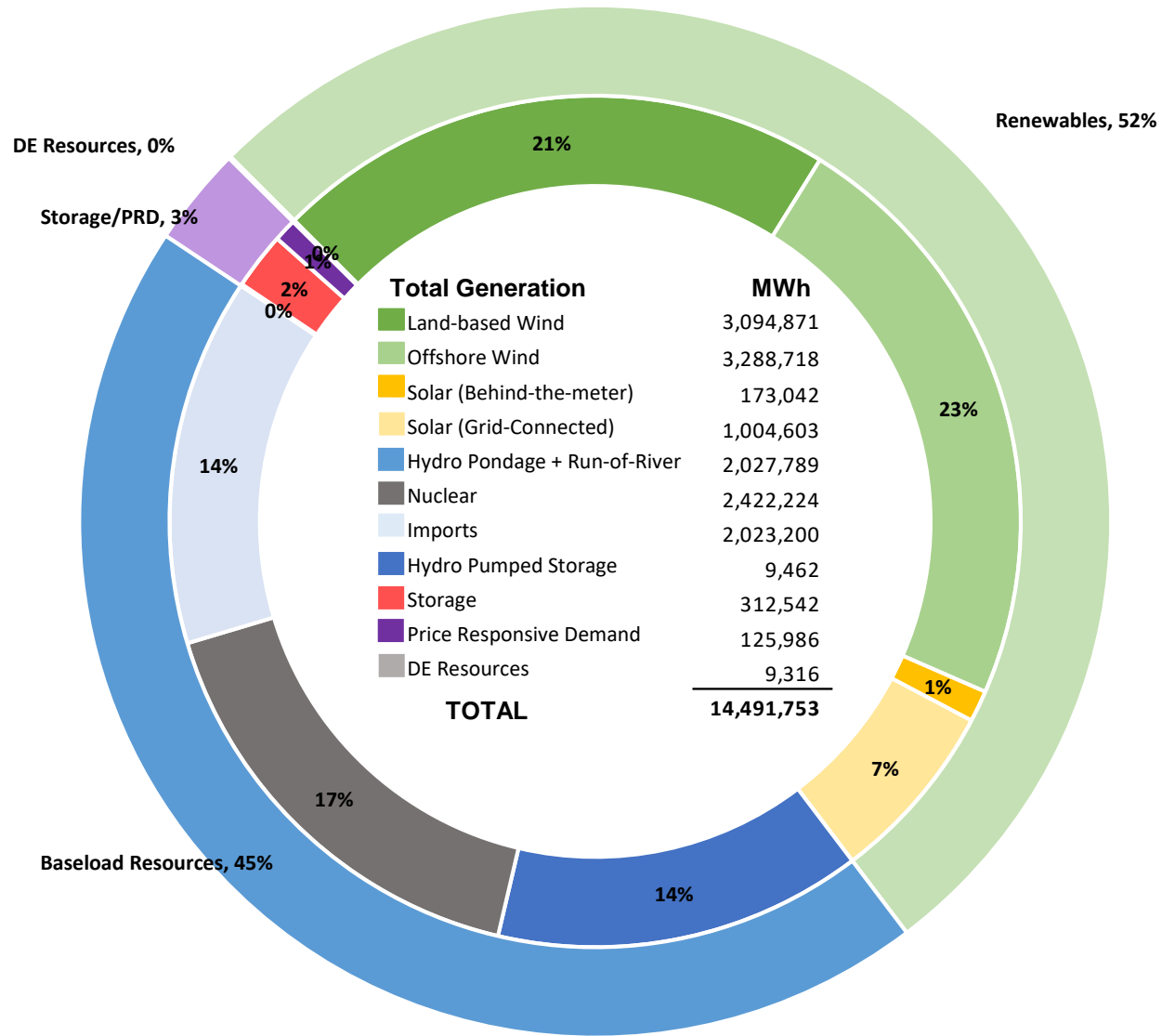


**Note:**

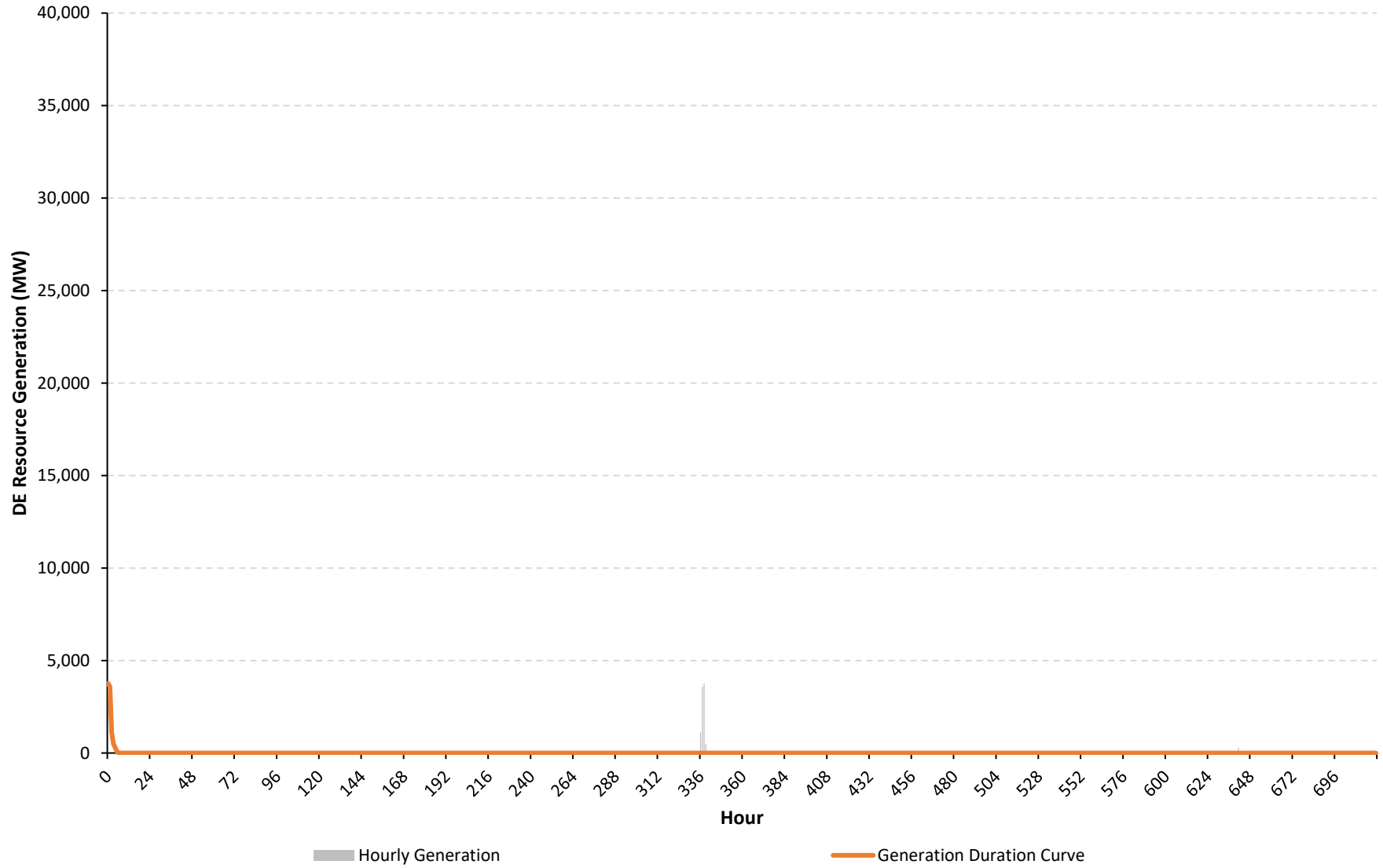
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

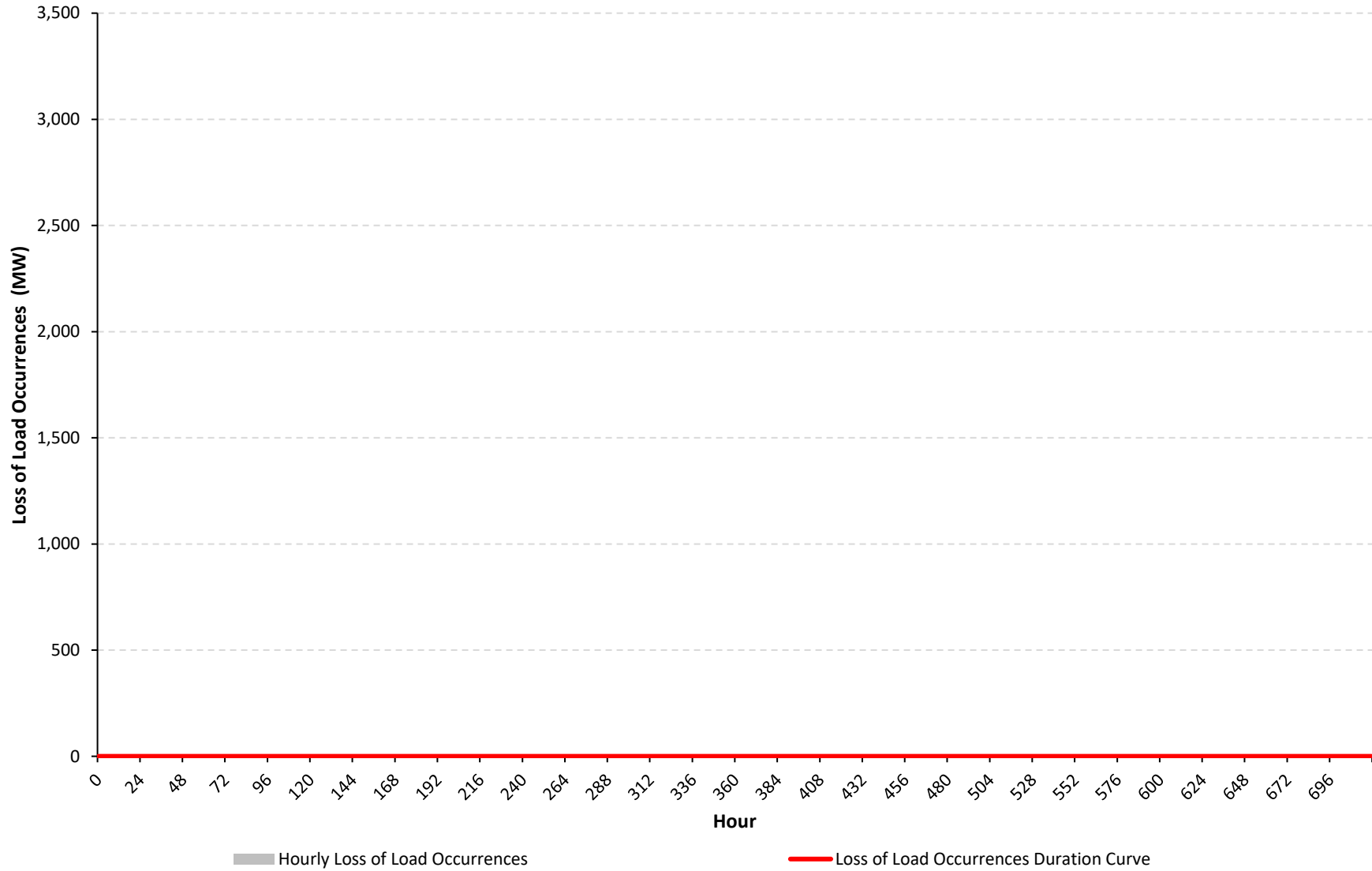
Reference Case - Winter - CCP2 Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Winter - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Winter - CCP2 Resource Set



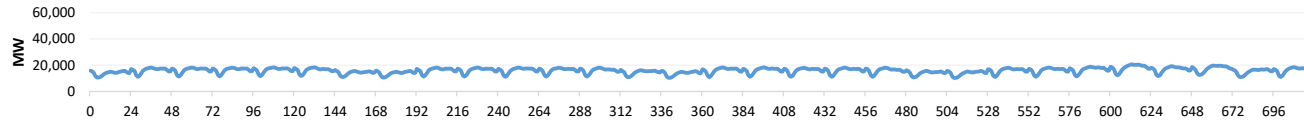
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 26 - Reference Case - Shoulder - CCP2 Resource Set**

**Hourly Results Summary**

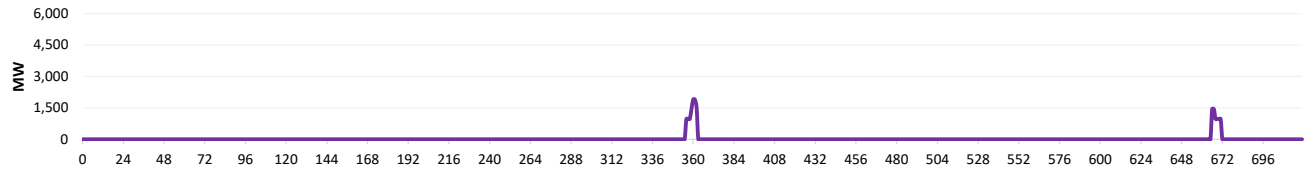
Case Name: Reference Case - Shoulder - CCP2 Resource Set

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



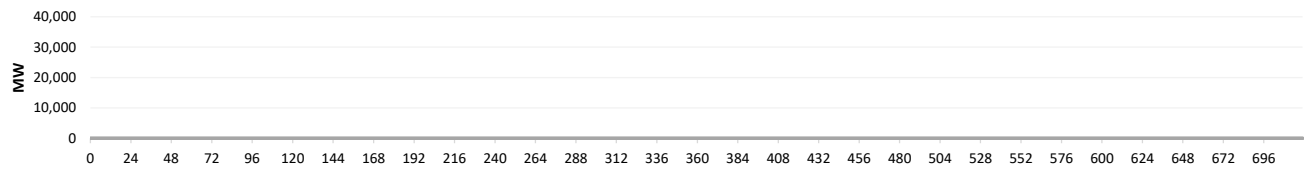
PRD Deployment	
Total Hrs.	13
Total MWh	16,458
Avg. MW	1,266.0

**Battery Energy Storage Deployed During Modeling Period**



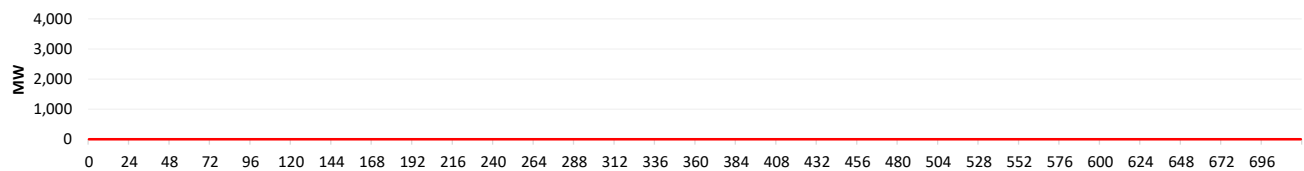
Battery Deployment	
Total Hrs.	7
Total MWh	9,745
Avg. MW	1,392.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

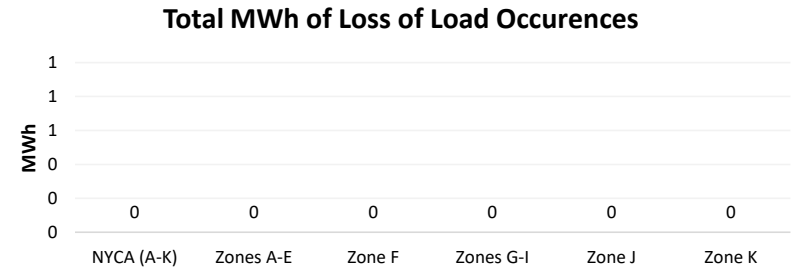
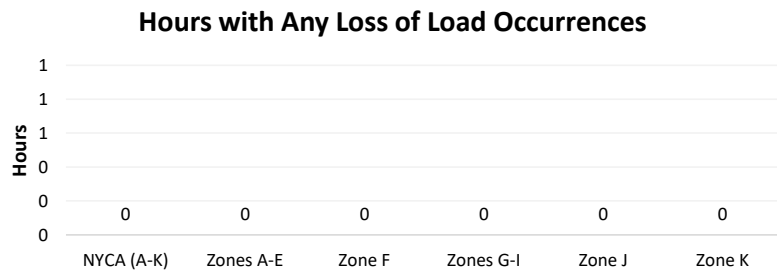
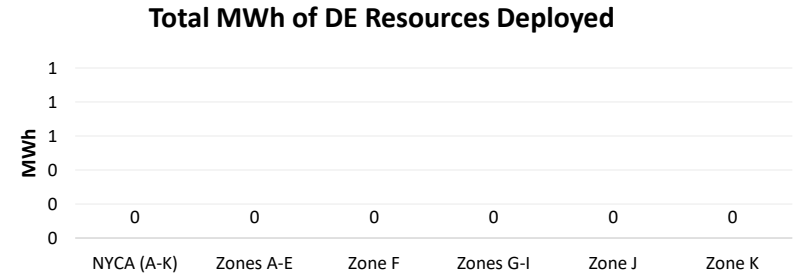
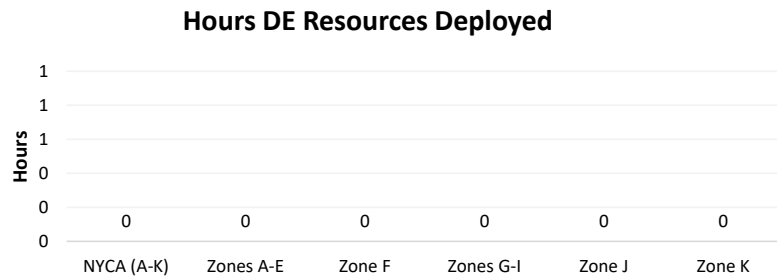
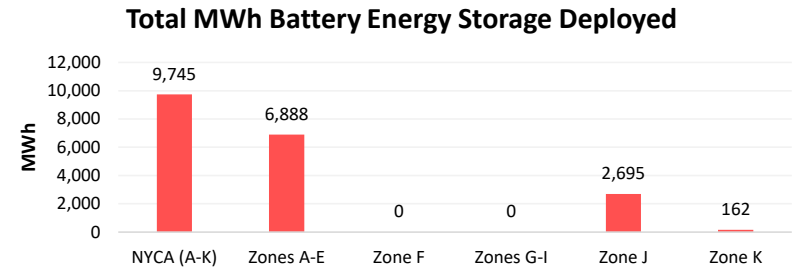
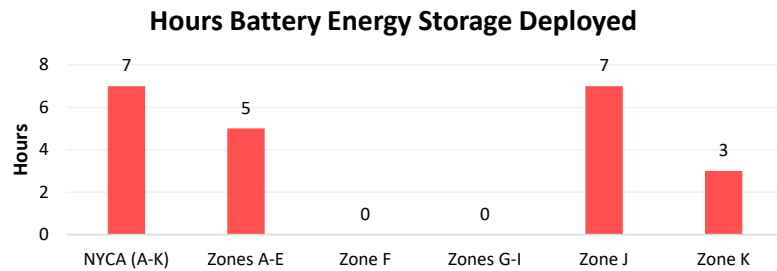
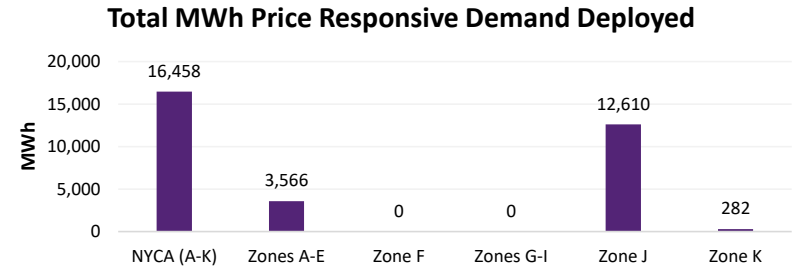
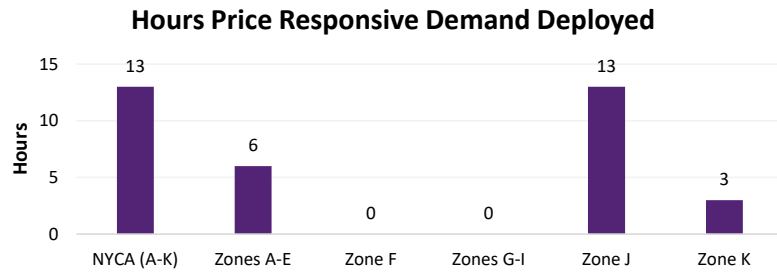
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: Reference Case - Shoulder - CCP2 Resource Set

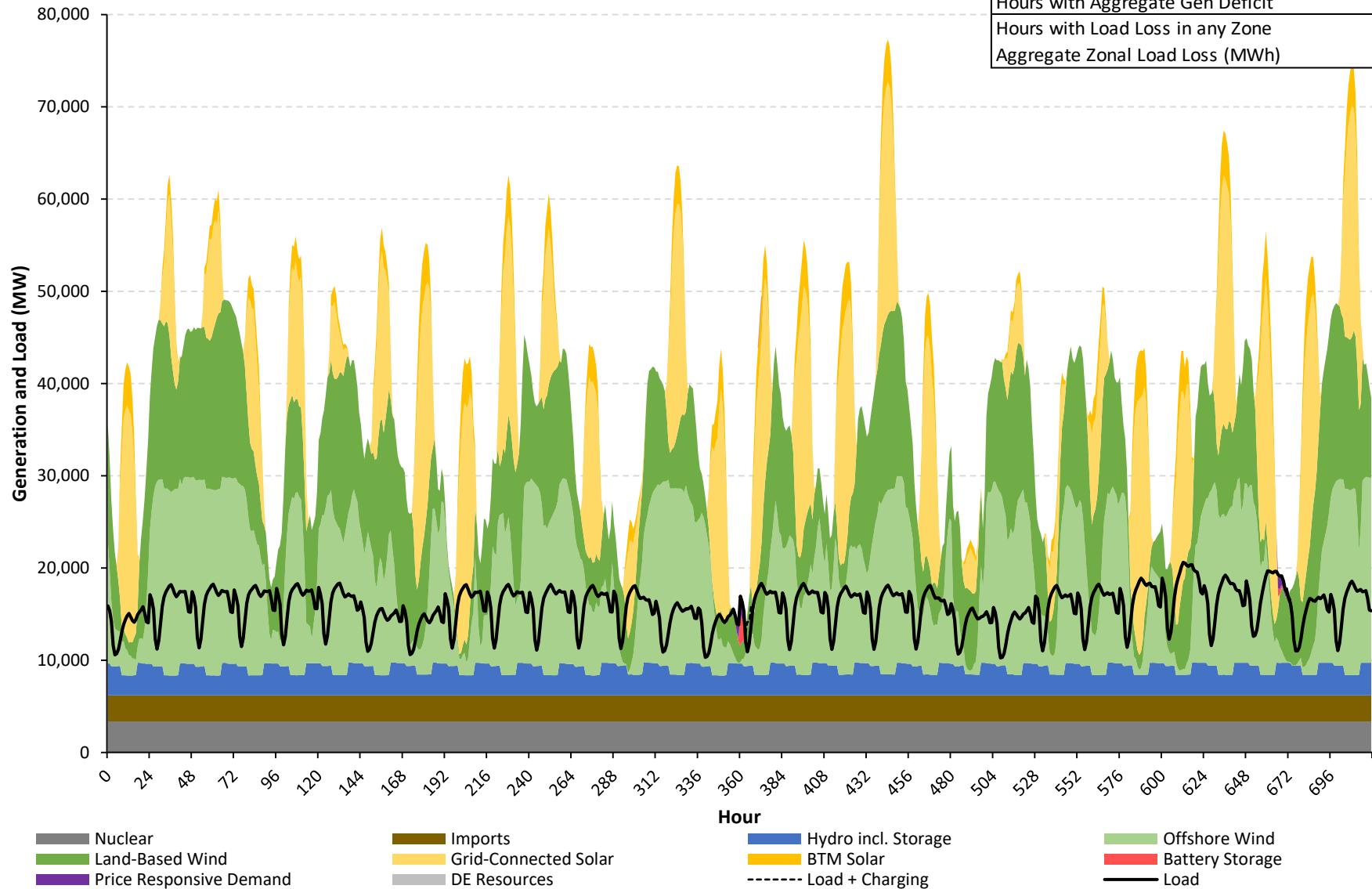




### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - CCP2 Resource Set

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	28,296,699
Gen Surplus/Deficit (MWh)	16,911,460
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

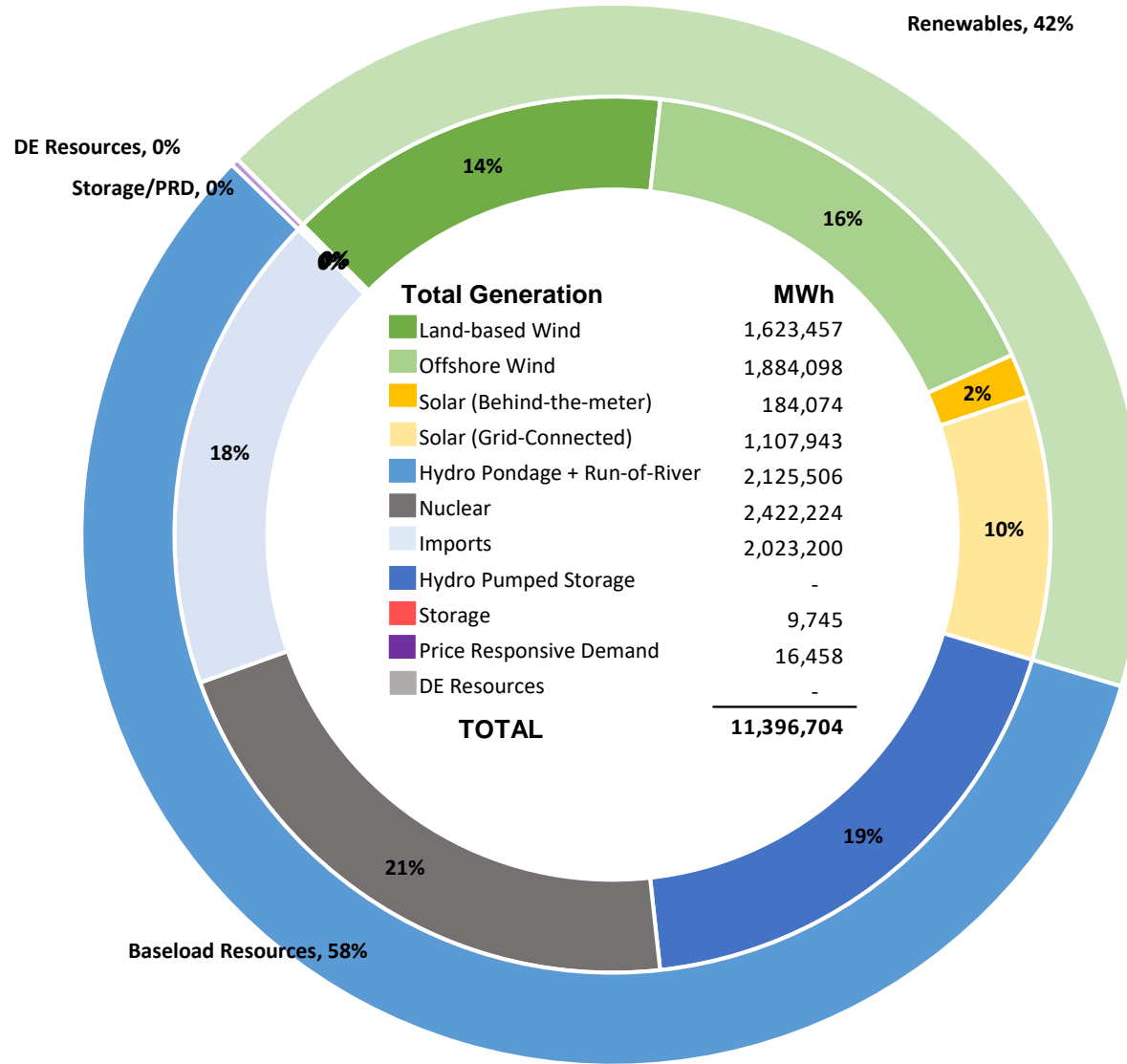


**Note:**

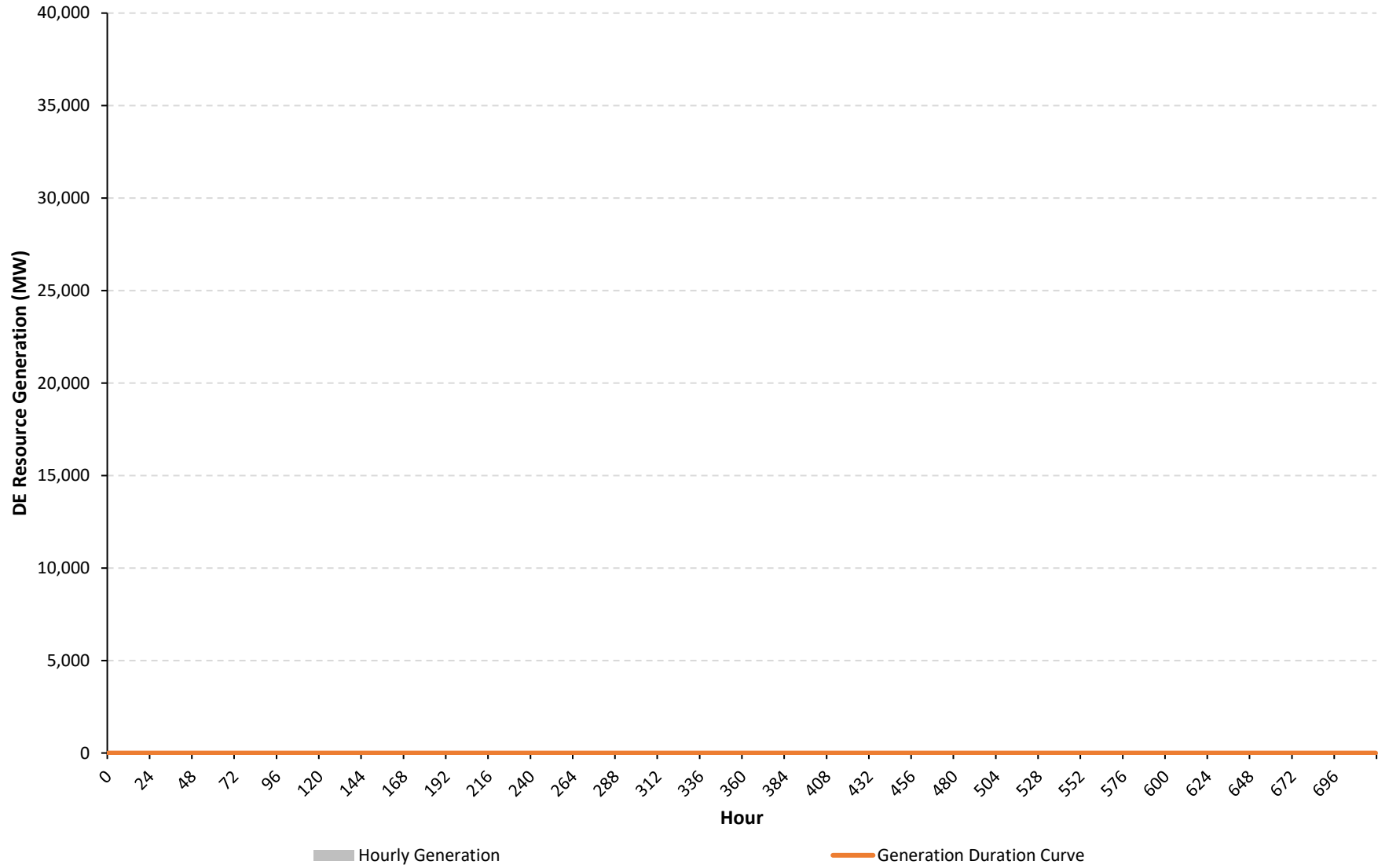
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

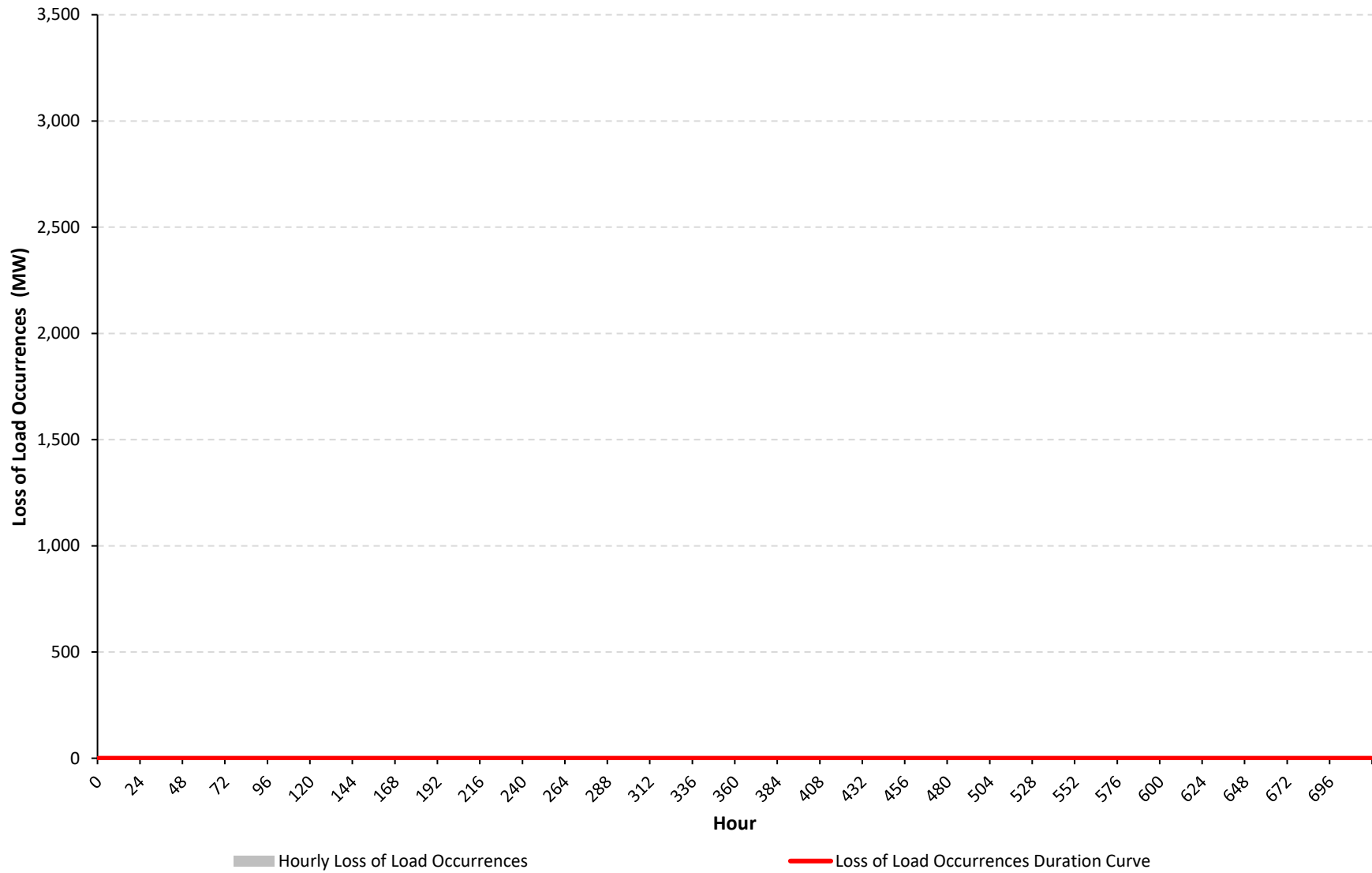
Reference Case - Shoulder - CCP2 Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Shoulder - CCP2 Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Shoulder - CCP2 Resource Set



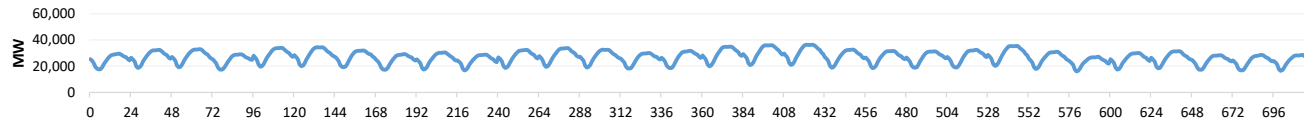
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 27 - Reference Case - Summer - CCP2 Resource Set - Heatwave**

**Hourly Results Summary**

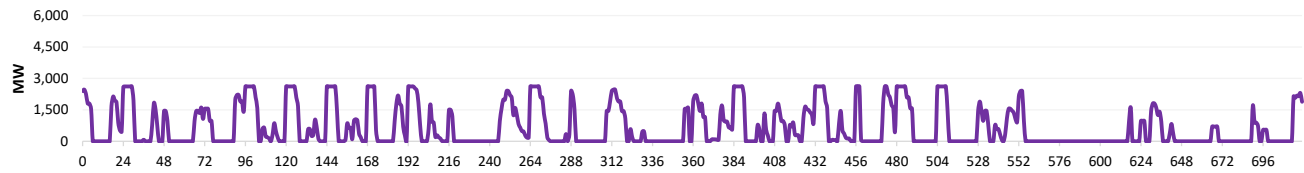
Case Name: Reference Case - Summer - CCP2 Resource Set - Heatwave

**Load During Modeling Period**



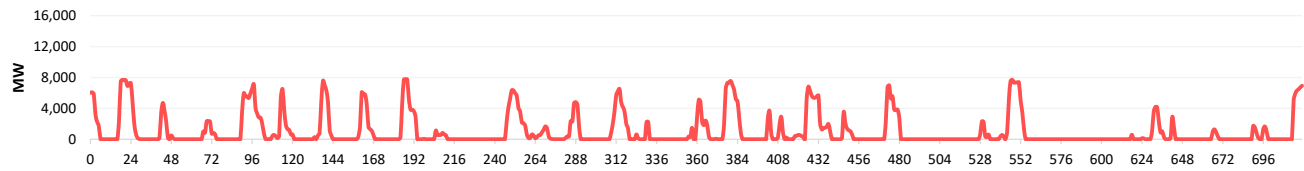
Loss of Load	
Total Hrs.	720
Total MWh	19,241,162
Avg. MW	26,723.8

**Price Responsive Demand Deployed During Modeling Period**



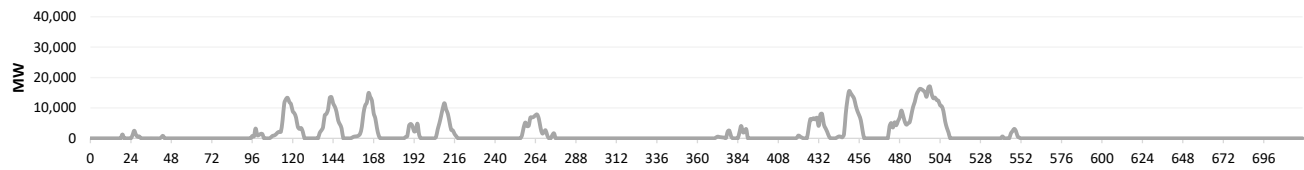
PRD Deployment	
Total Hrs.	336
Total MWh	492,505
Avg. MW	1,465.8

**Battery Energy Storage Deployed During Modeling Period**



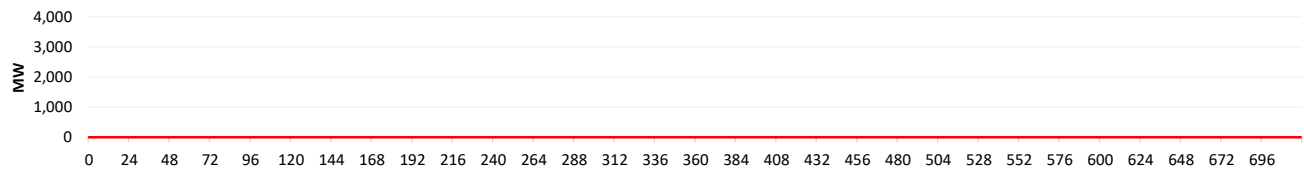
Battery Deployment	
Total Hrs.	272
Total MWh	783,111
Avg. MW	2,879.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	199
Total MWh	1,067,892
Avg. MW	5,366.3

**Loss of Load Occurrences During Modeling Period**

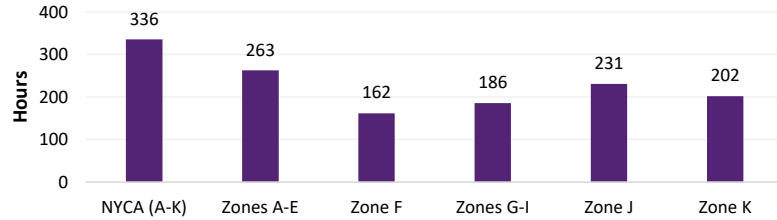


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

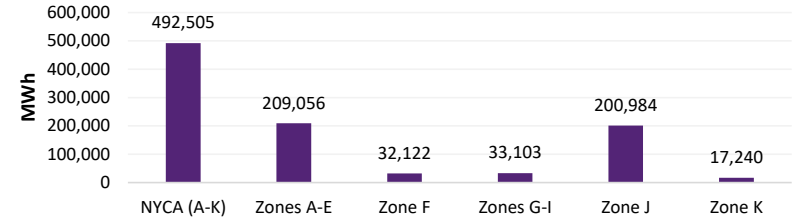
### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Heatwave

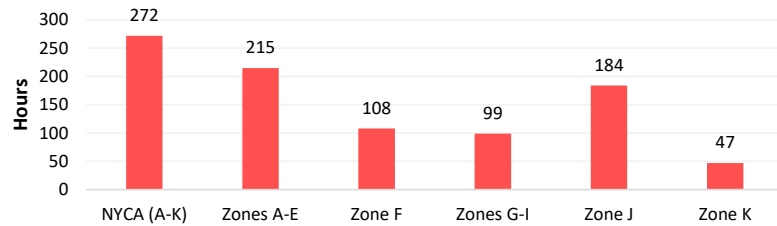
**Hours Price Responsive Demand Deployed**



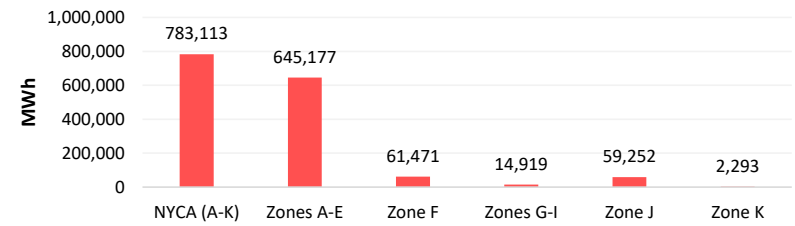
**Total MWh Price Responsive Demand Deployed**



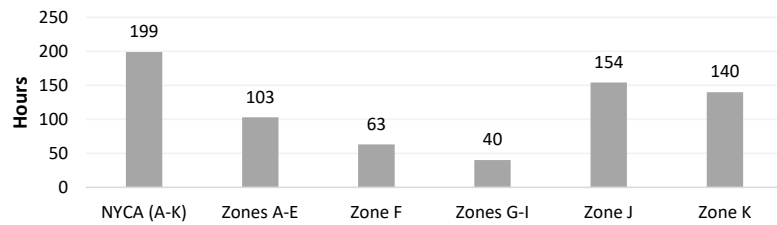
**Hours Battery Energy Storage Deployed**



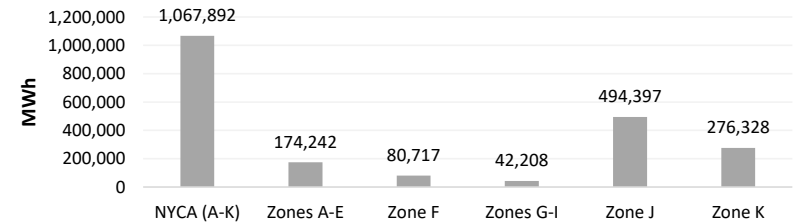
**Total MWh Battery Energy Storage Deployed**



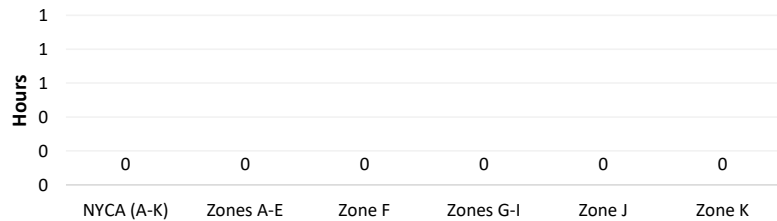
**Hours DE Resources Deployed**



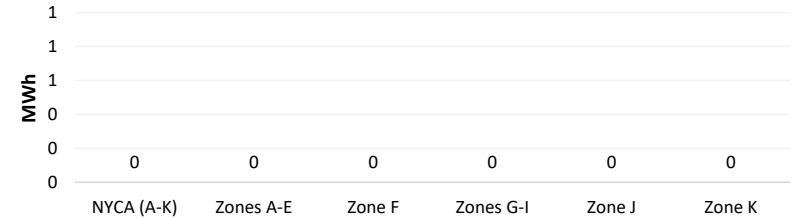
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



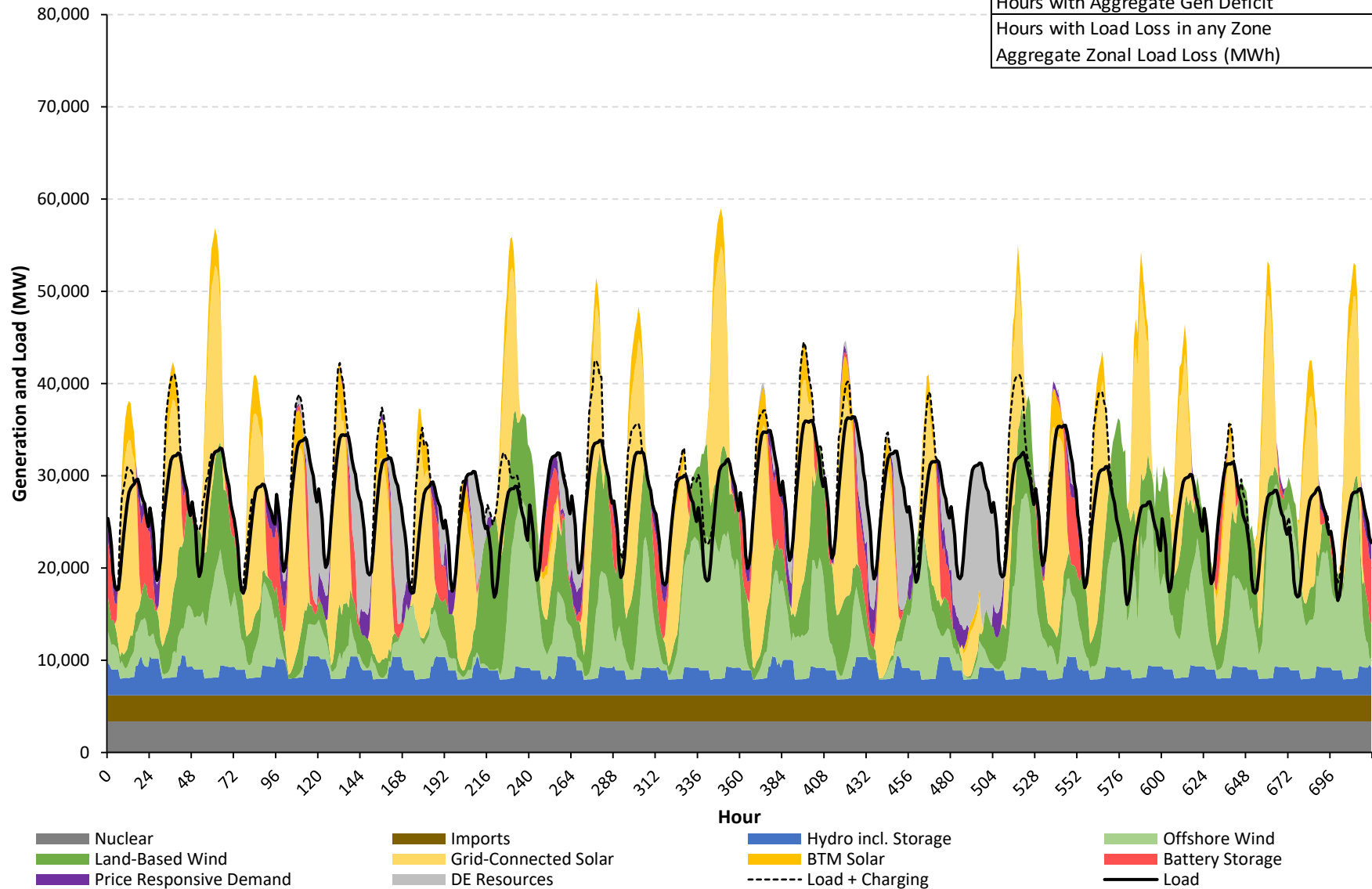
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Heatwave

Aggregate Load in Period (MWh)	19,241,162
Aggregate Gen in Period (MWh)	22,818,854
Gen Surplus/Deficit (MWh)	3,577,693
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



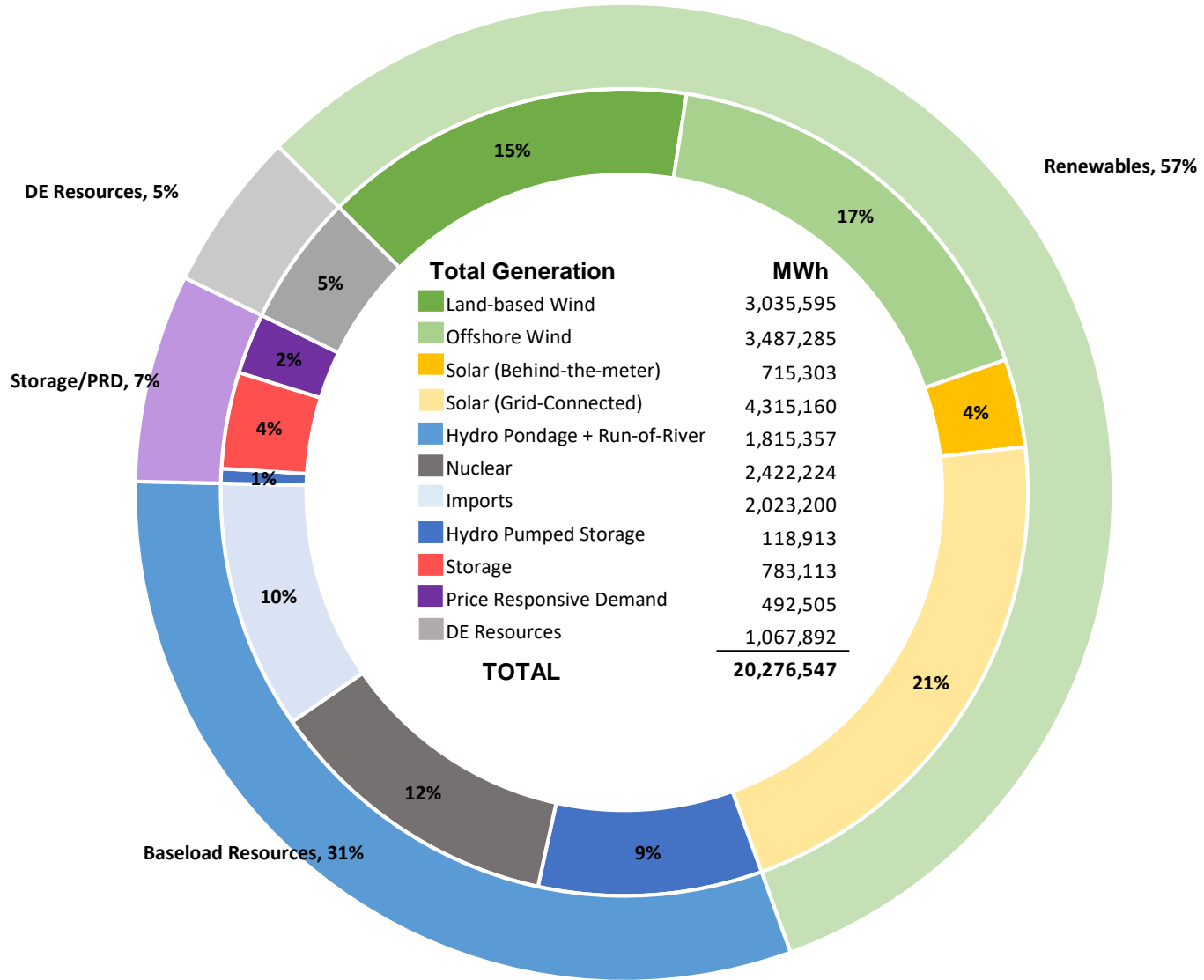
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

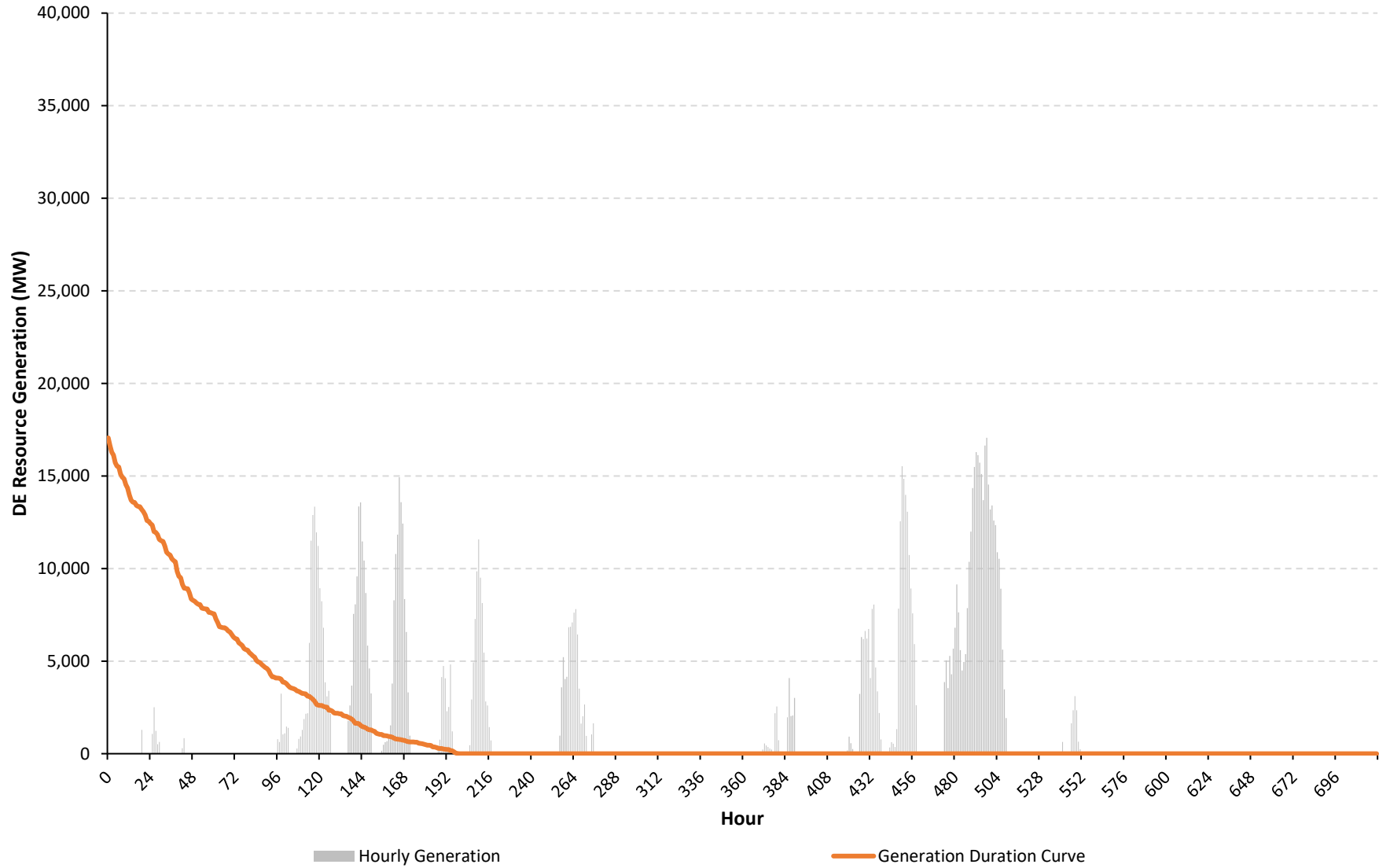


### Generation by Resource Type

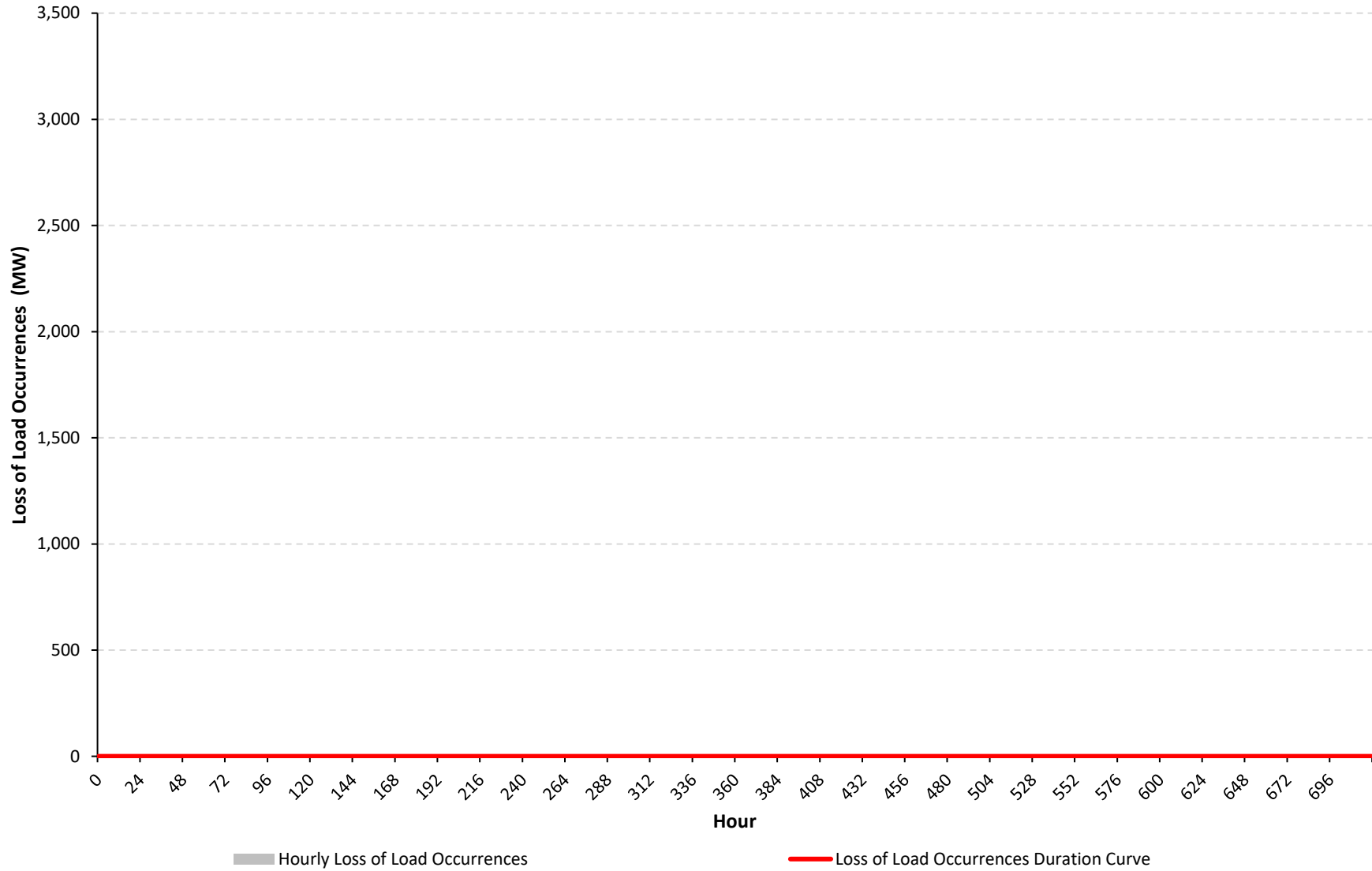
Reference Case - Summer - CCP2 Resource Set - Heatwave



### NYCA DE Resource Generation (MW) Reference Case - Summer - CCP2 Resource Set - Heatwave



### NYCA Loss of Load Occurrences (MW) Reference Case - Summer - CCP2 Resource Set - Heatwave



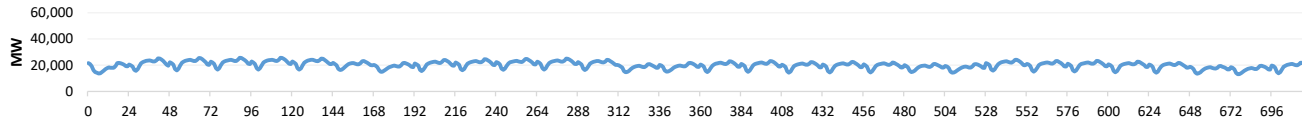
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 28 - Reference Case - Winter - CCP2 Resource Set - Cold Snap**

**Hourly Results Summary**

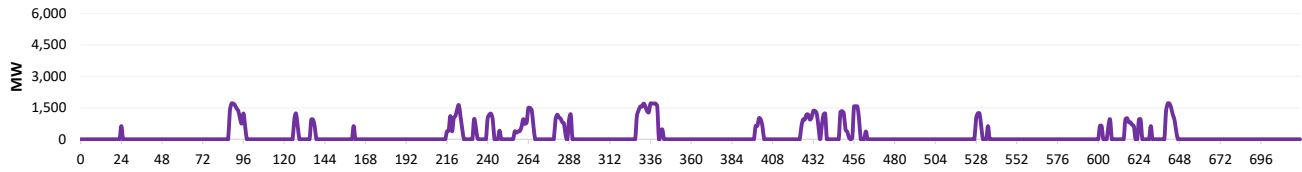
Case Name: Reference Case - Winter - CCP2 Resource Set - Cold Snap

**Load During Modeling Period**



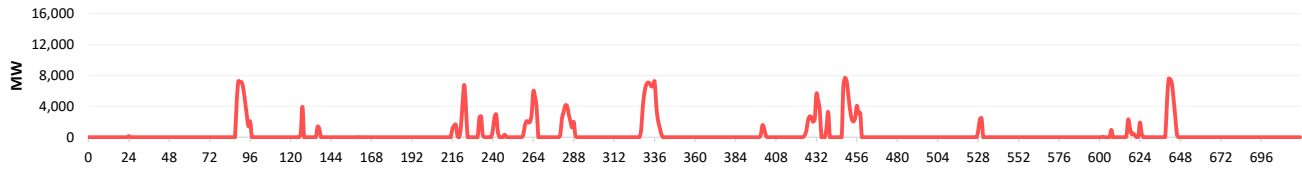
Loss of Load	
Total Hrs.	720
Total MWh	14,490,852
Avg. MW	20,126.2

**Price Responsive Demand Deployed During Modeling Period**



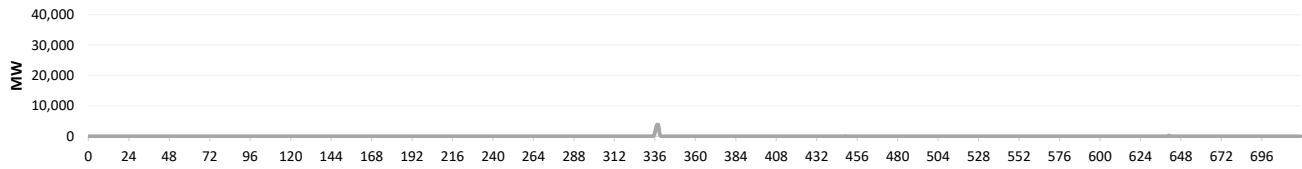
PRD Deployment	
Total Hrs.	128
Total MWh	126,012
Avg. MW	984.5

**Battery Energy Storage Deployed During Modeling Period**



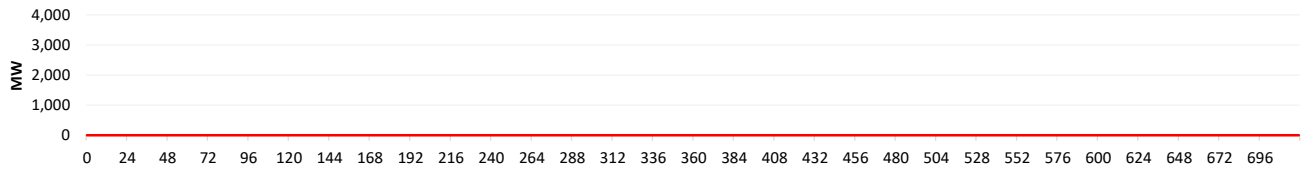
Battery Deployment	
Total Hrs.	113
Total MWh	322,290
Avg. MW	2,852.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	6
Total MWh	9,316
Avg. MW	1,552.7

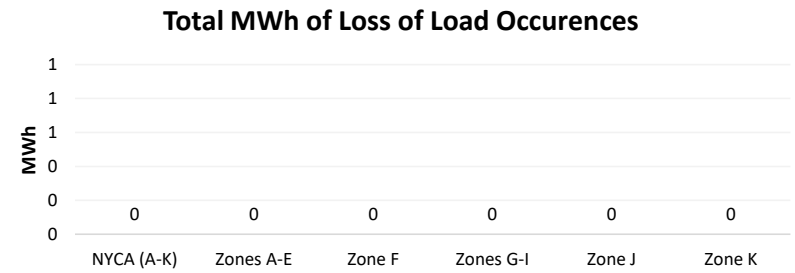
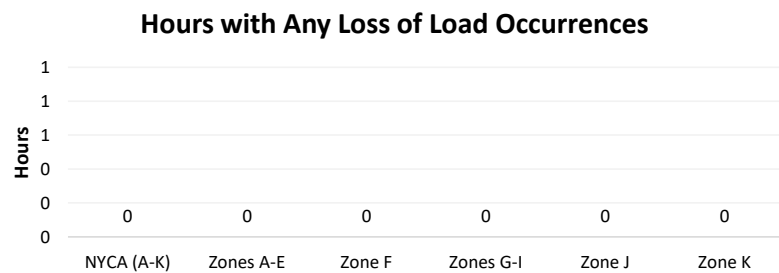
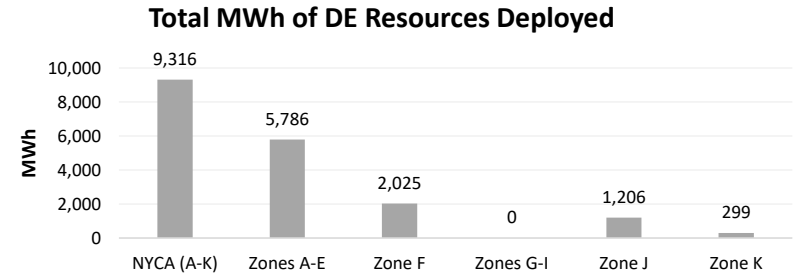
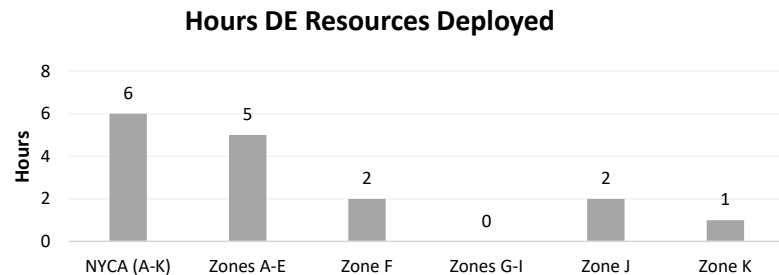
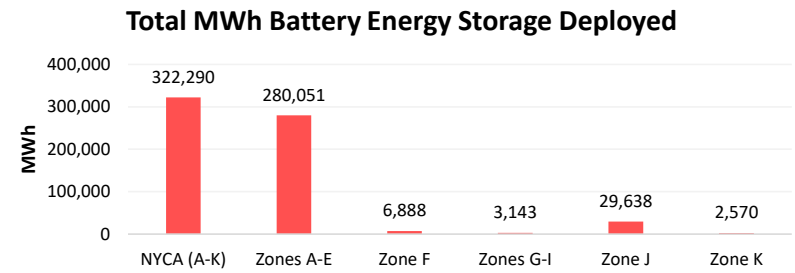
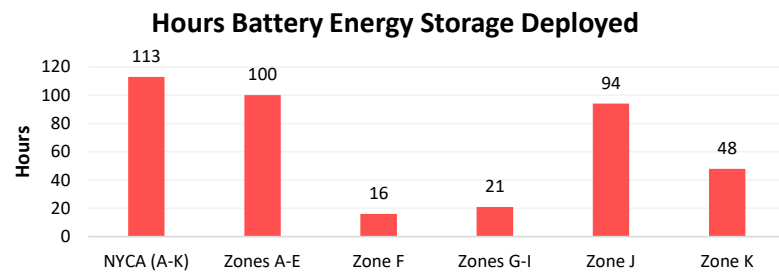
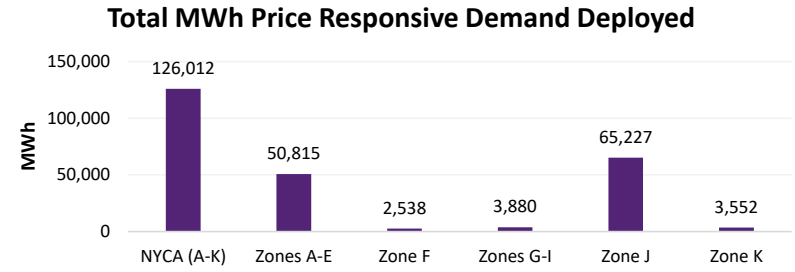
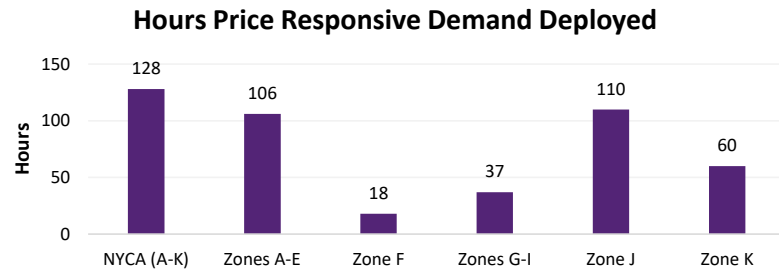
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

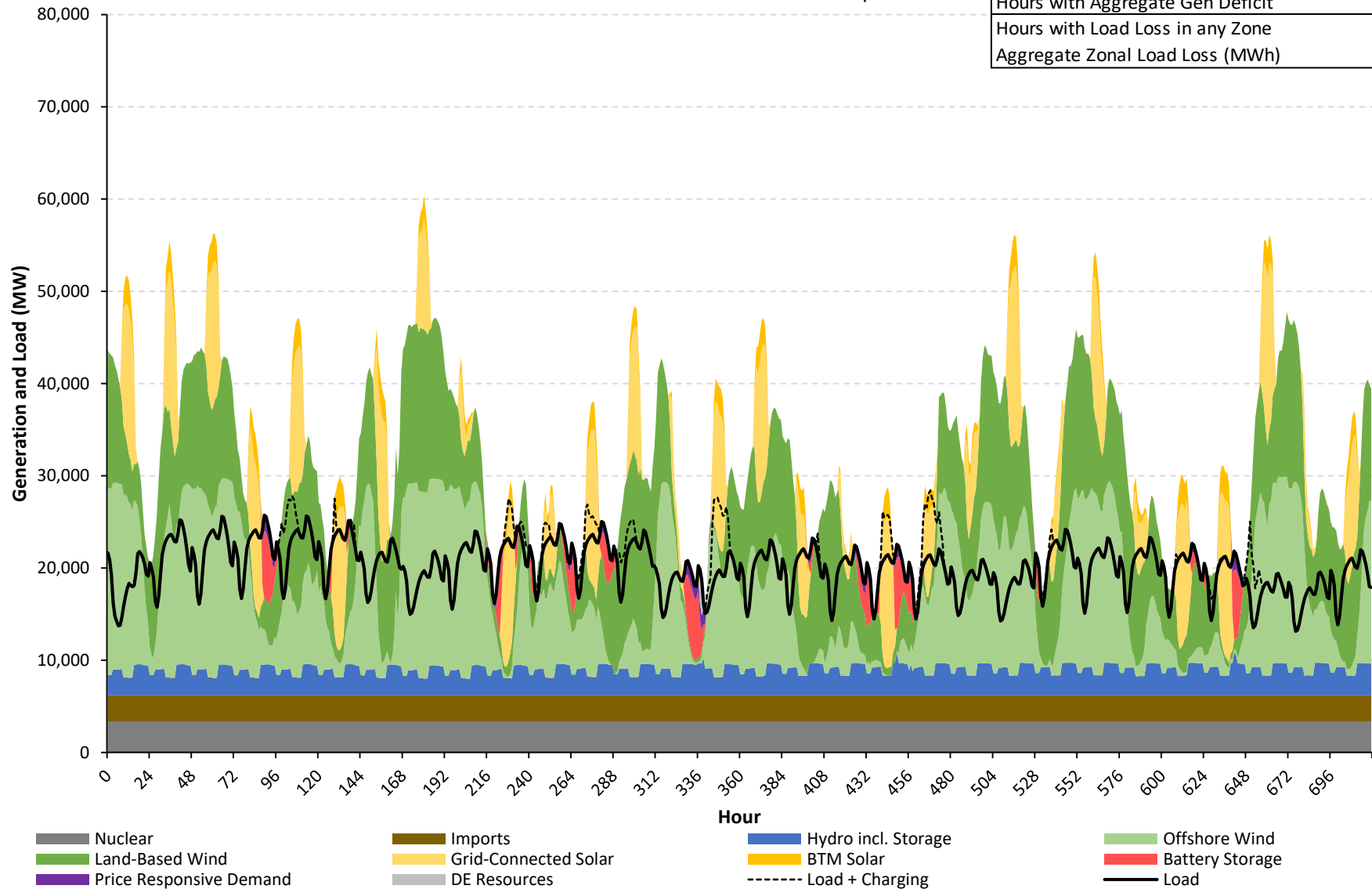
Case Name: Reference Case - Winter - CCP2 Resource Set - Cold Snap



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Cold Snap

Aggregate Load in Period (MWh)	14,490,852
Aggregate Gen in Period (MWh)	23,404,636
Gen Surplus/Deficit (MWh)	8,913,784
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

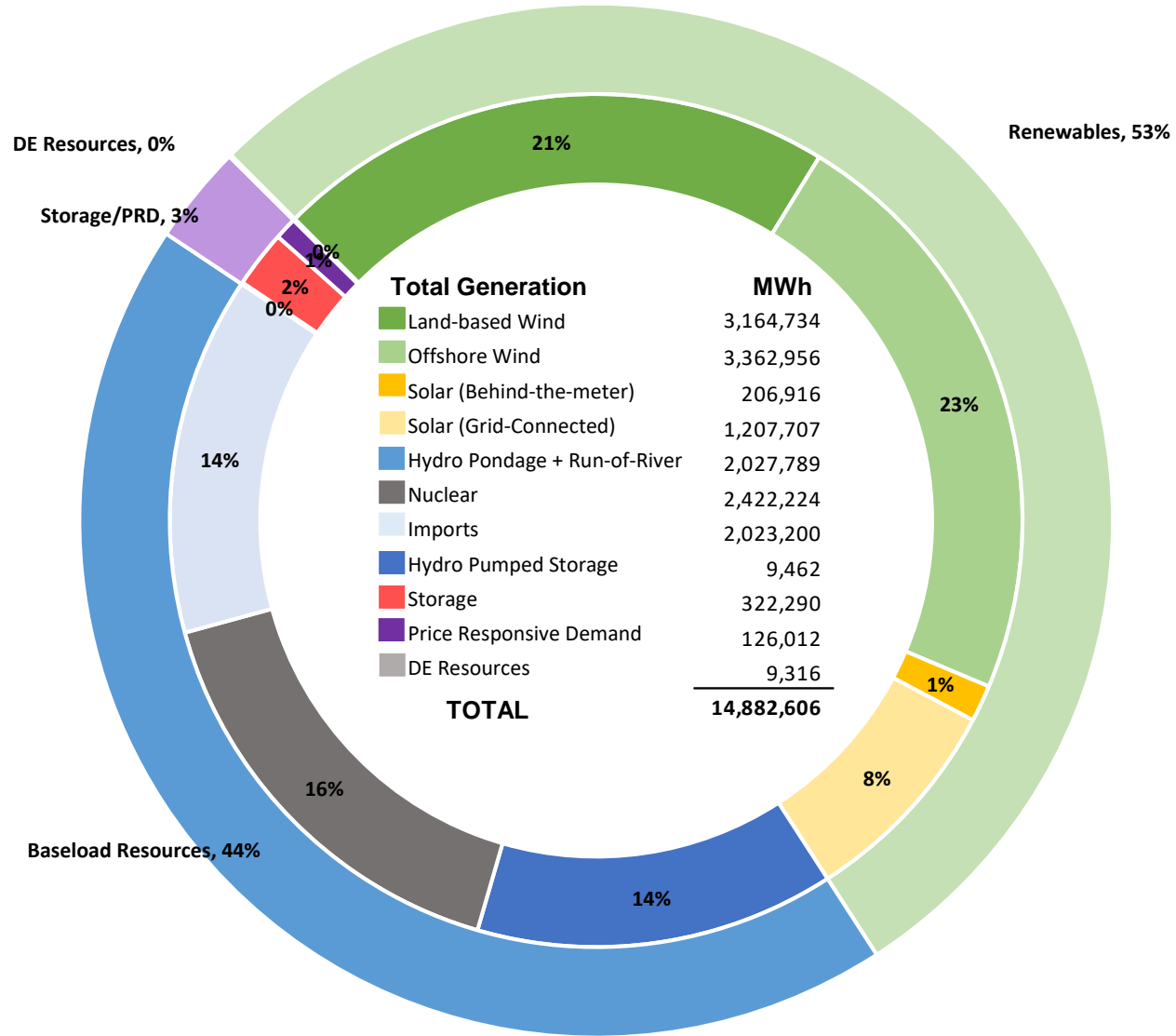


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

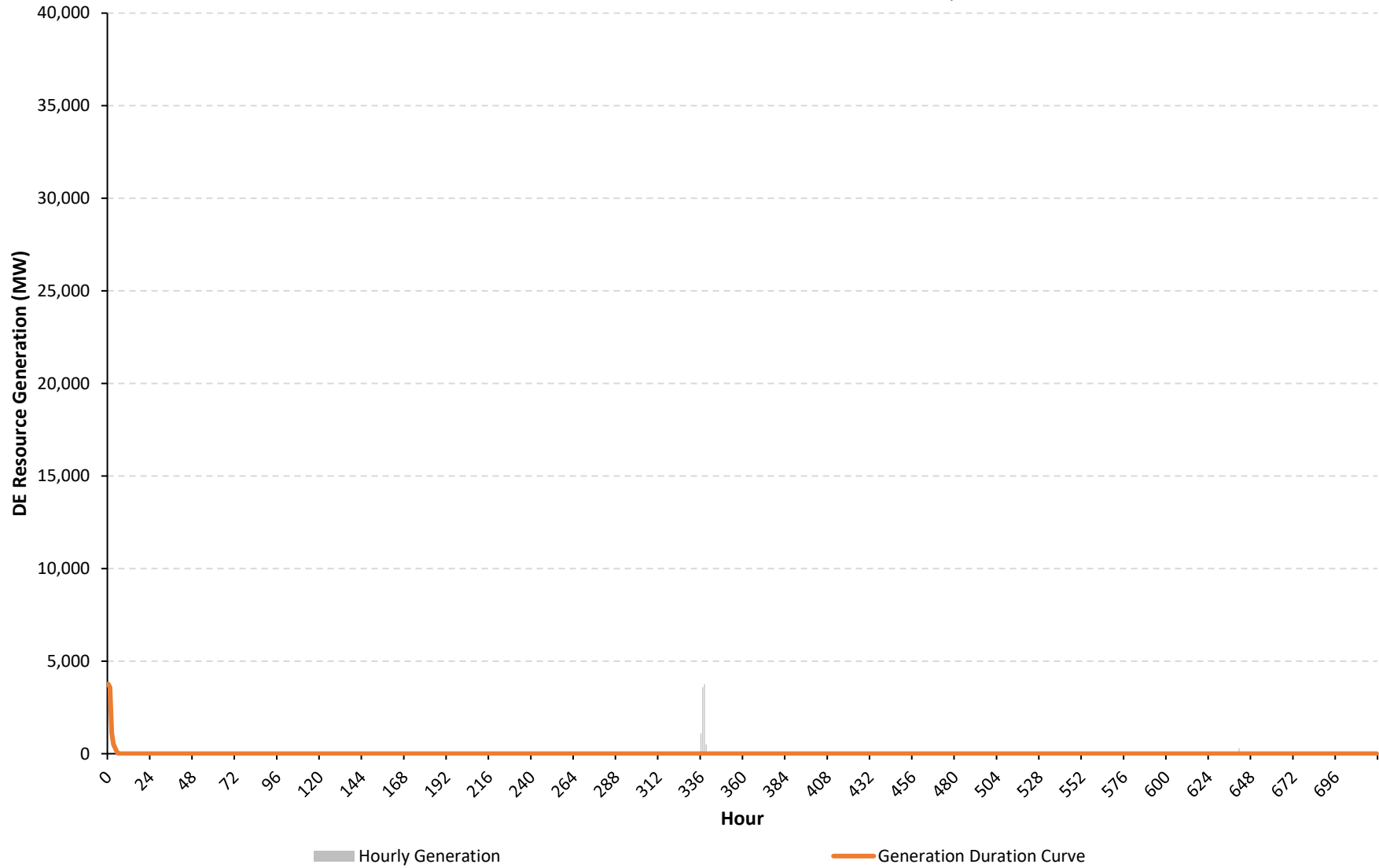
### Generation by Resource Type

Reference Case - Winter - CCP2 Resource Set - Cold Snap

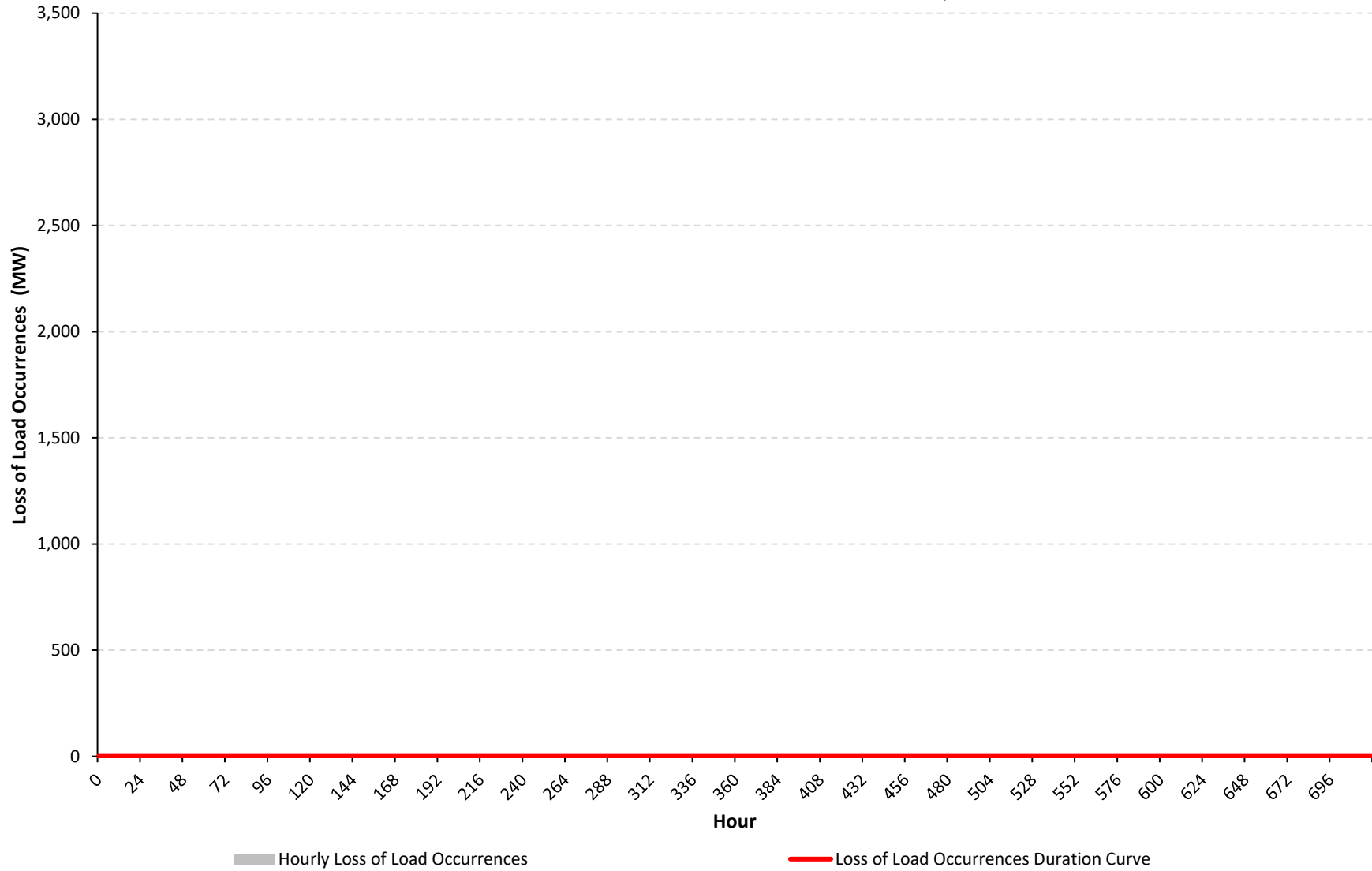




### NYCA DE Resource Generation (MW) Reference Case - Winter - CCP2 Resource Set - Cold Snap



### NYCA Loss of Load Occurrences (MW) Reference Case - Winter - CCP2 Resource Set - Cold Snap



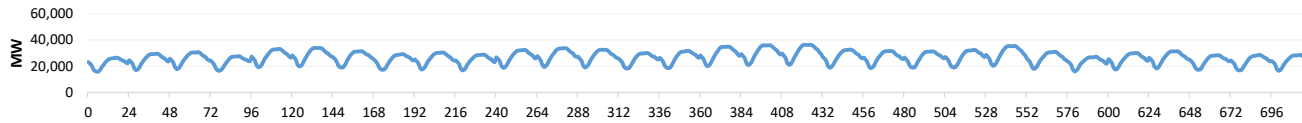
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 29 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

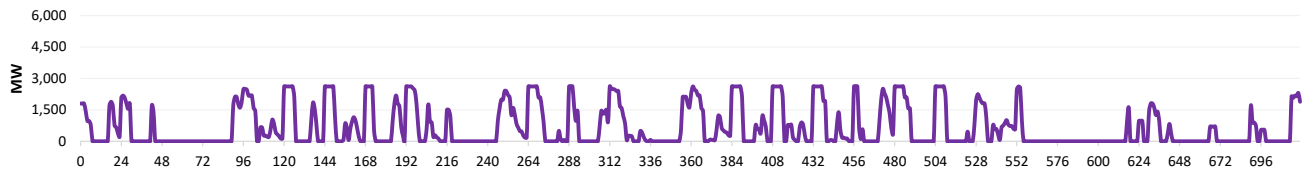
Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



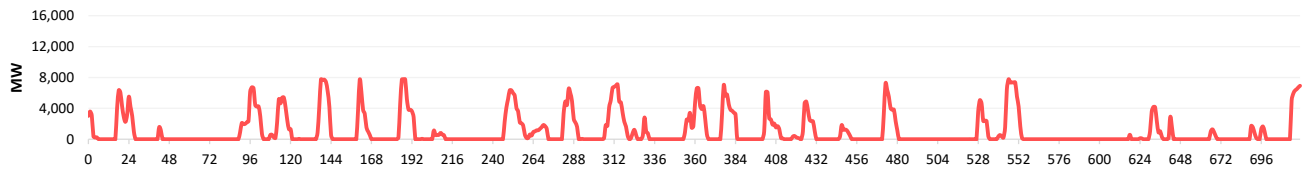
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



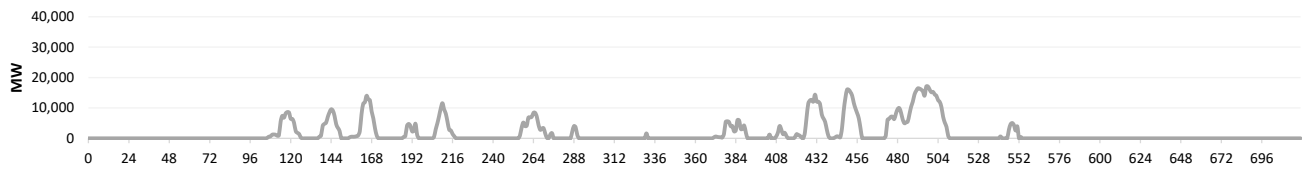
PRD Deployment	
Total Hrs.	337
Total MWh	485,968
Avg. MW	1,442.0

**Battery Energy Storage Deployed During Modeling Period**



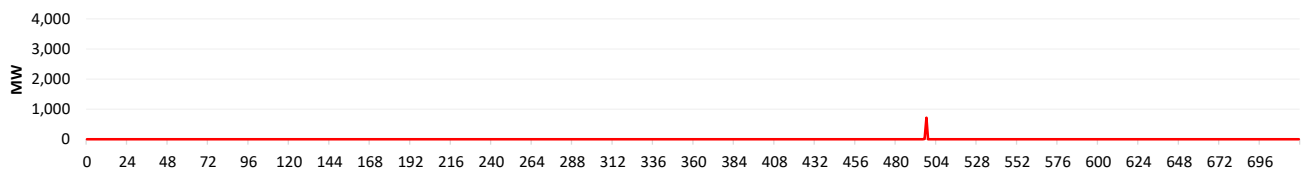
Battery Deployment	
Total Hrs.	260
Total MWh	762,049
Avg. MW	2,931.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	209
Total MWh	1,175,961
Avg. MW	5,626.6

**Loss of Load Occurrences During Modeling Period**

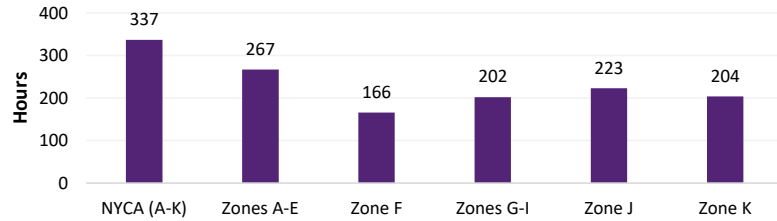


Loss of Load Occurrences	
Total Hrs.	2
Total MWh	729
Avg. MW	364.7

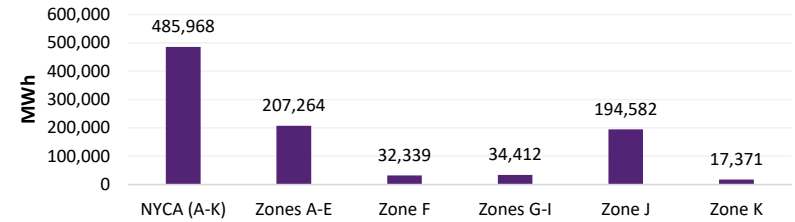
### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

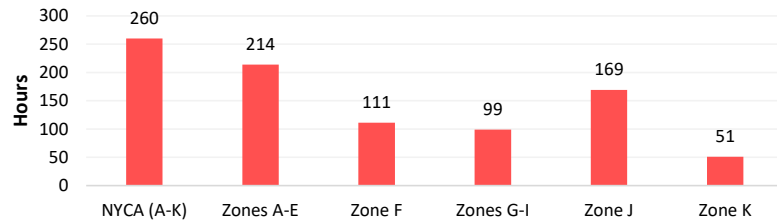
#### Hours Price Responsive Demand Deployed



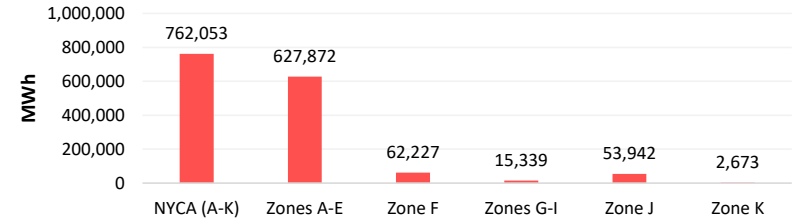
#### Total MWh Price Responsive Demand Deployed



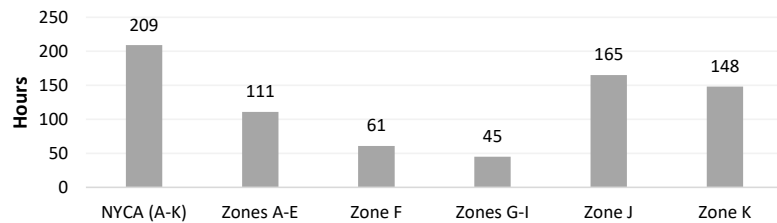
#### Hours Battery Energy Storage Deployed



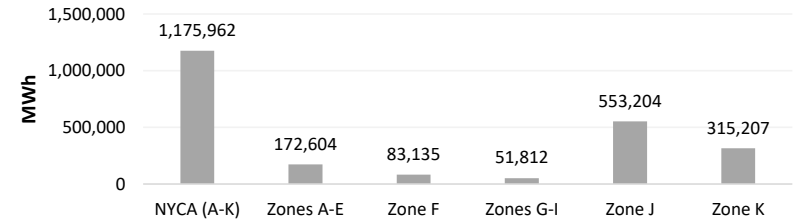
#### Total MWh Battery Energy Storage Deployed



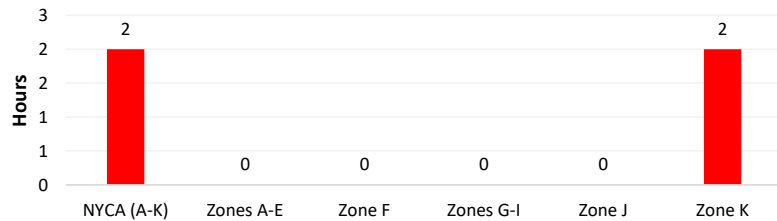
#### Hours DE Resources Deployed



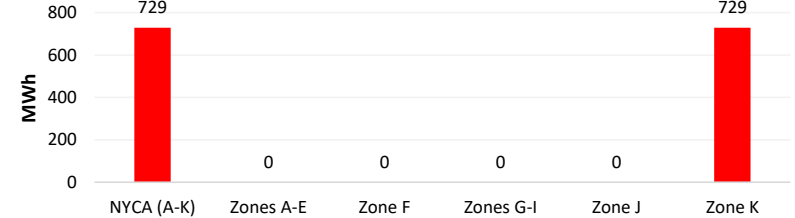
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



#### Total MWh of Loss of Load Occurrences

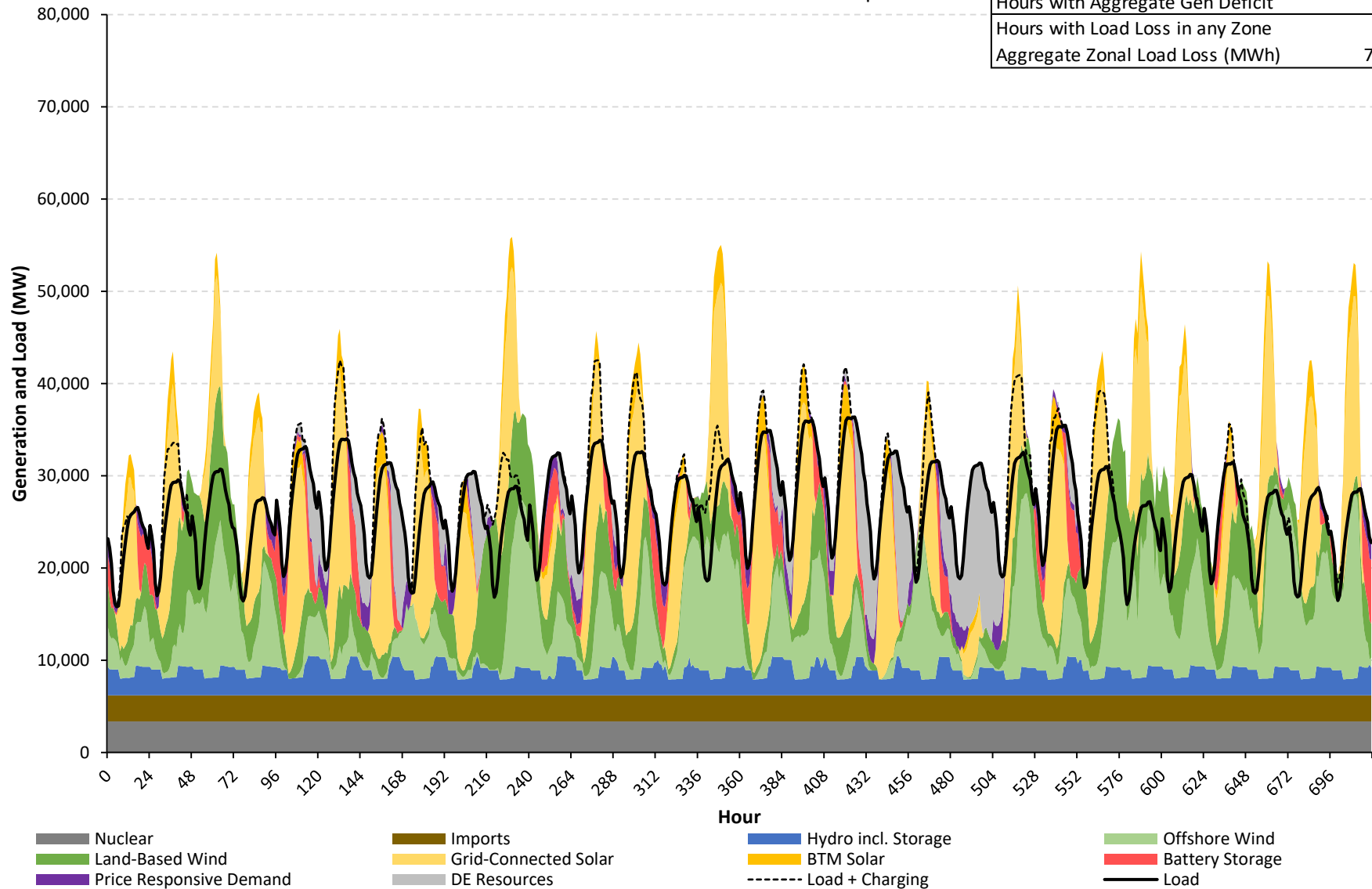


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	22,321,374
Gen Surplus/Deficit (MWh)	3,308,560
Hours with Aggregate Gen Deficit	2
Hours with Load Loss in any Zone	2
Aggregate Zonal Load Loss (MWh)	729

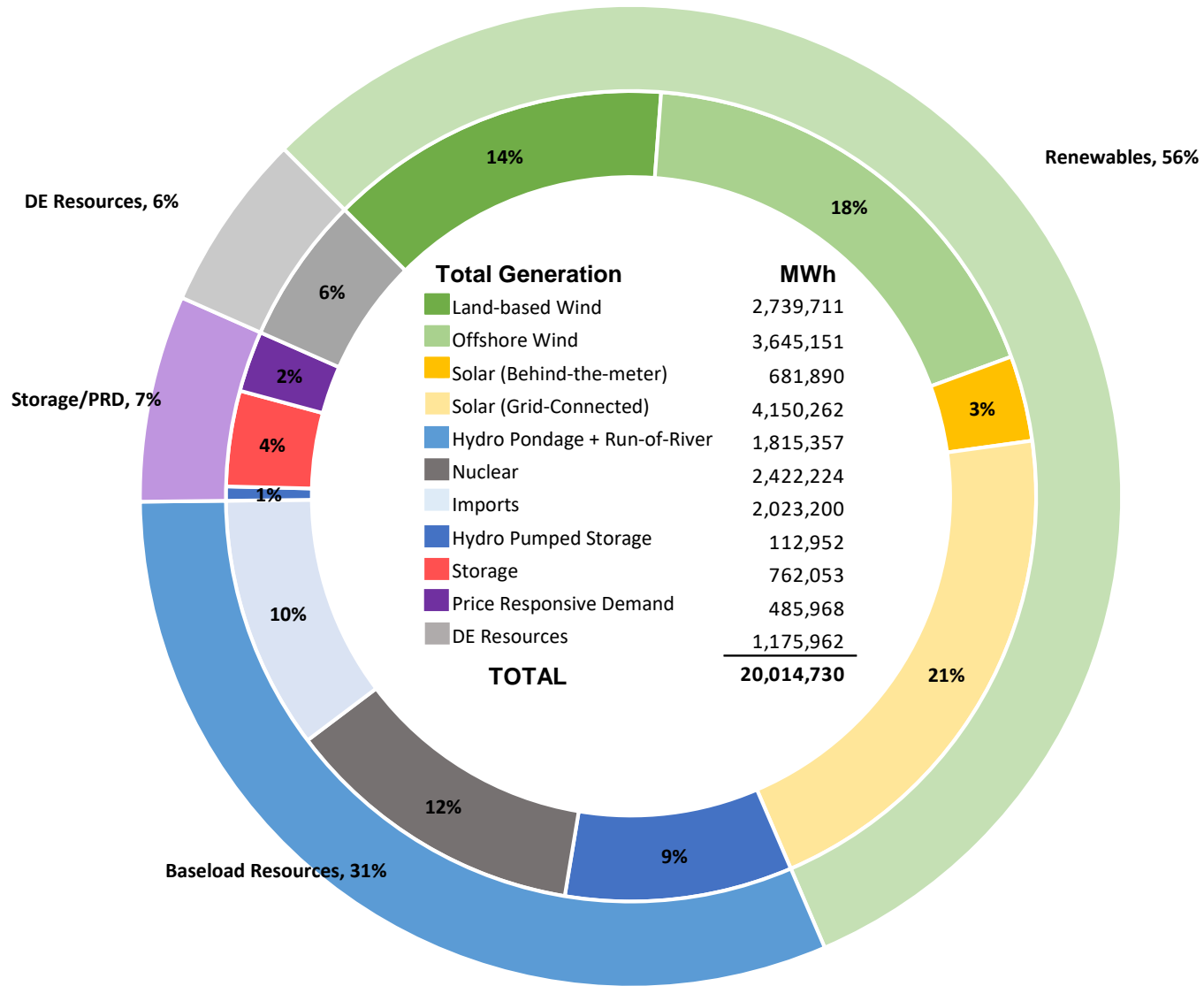


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

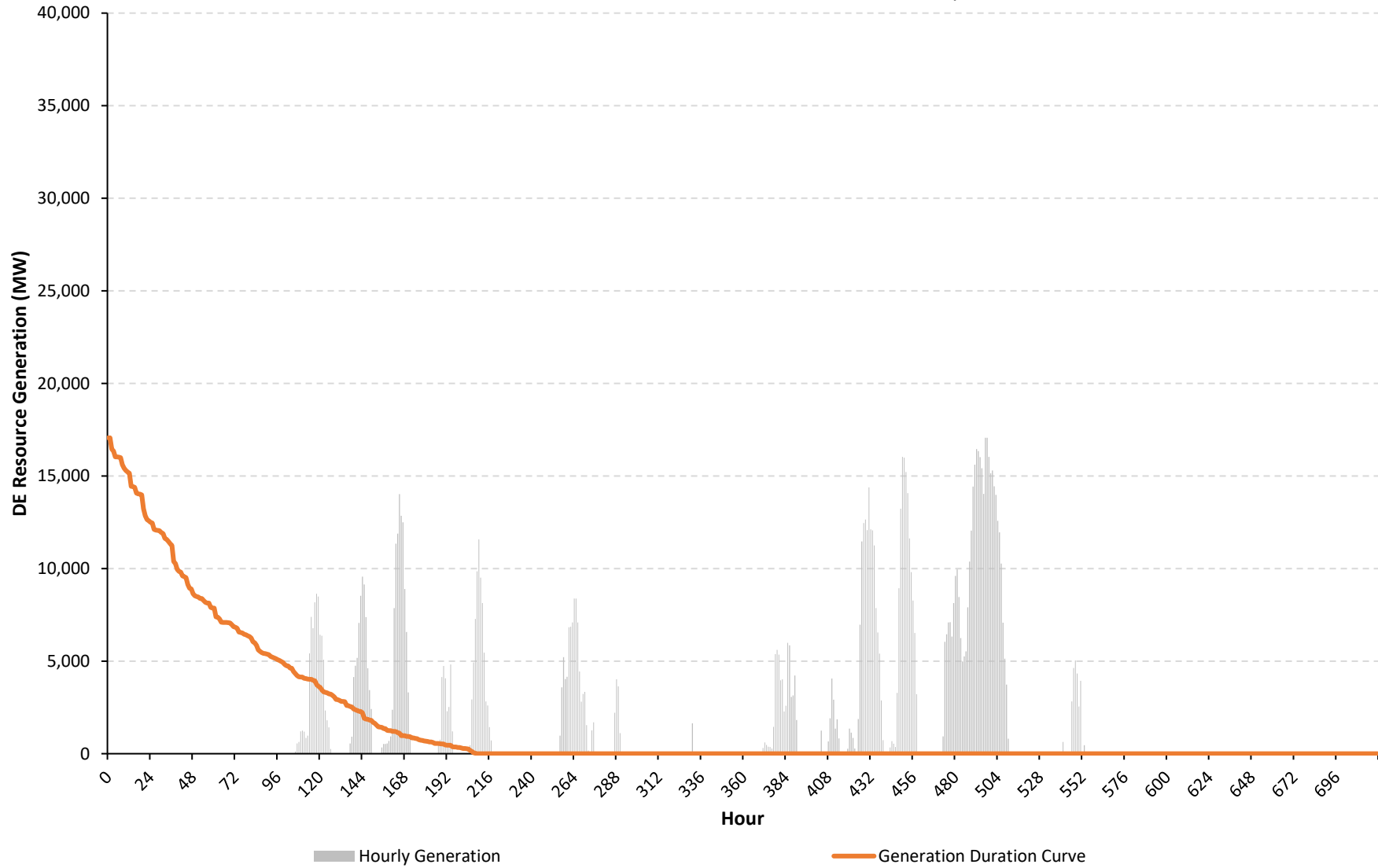
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate



### NYCA DE Resource Generation (MW)

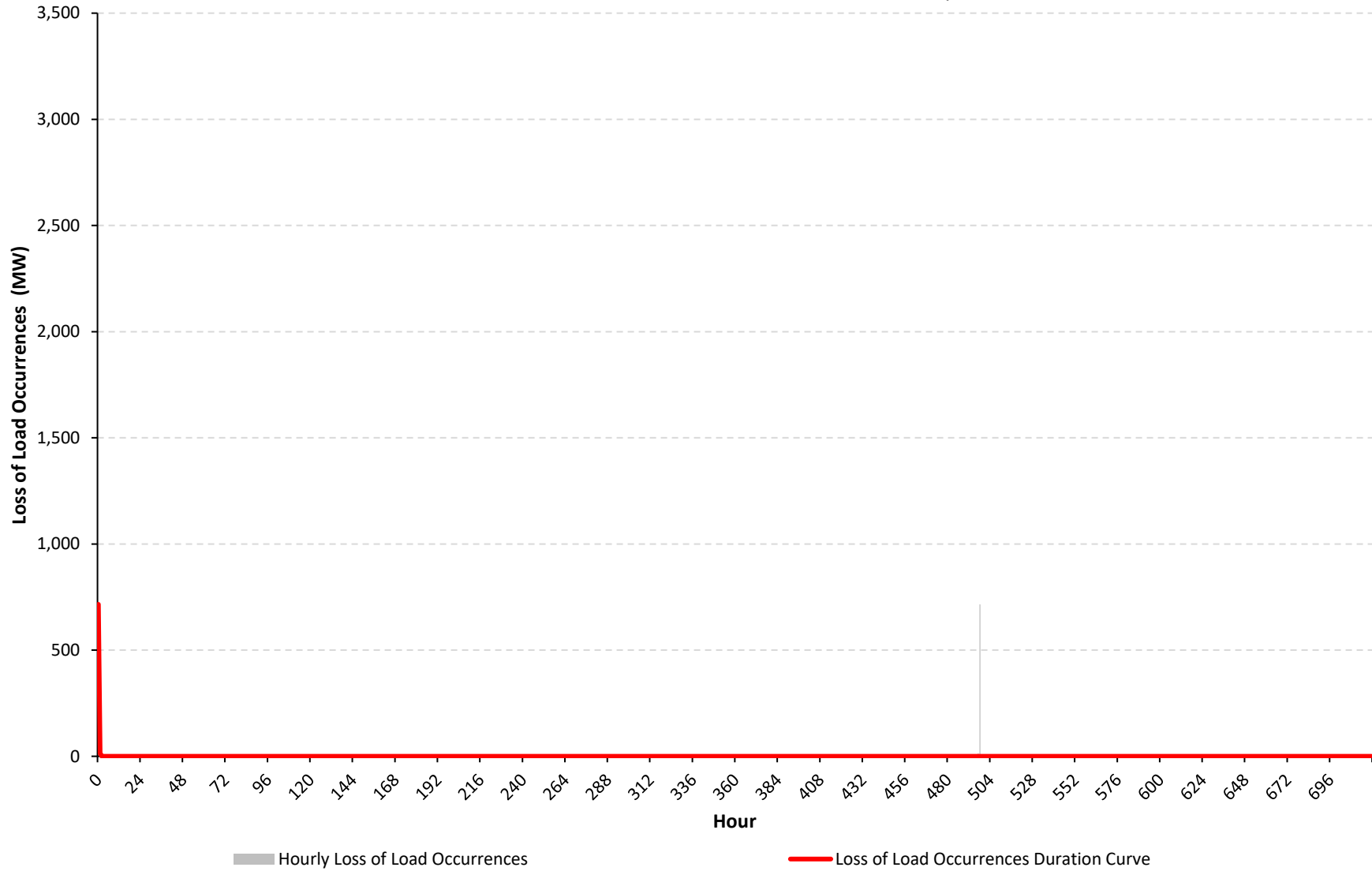
Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate





### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Upstate



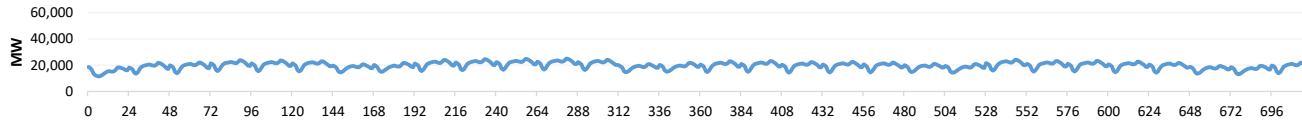
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 30 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

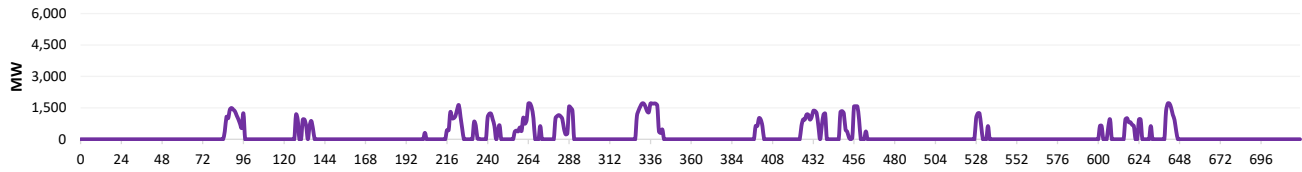
Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



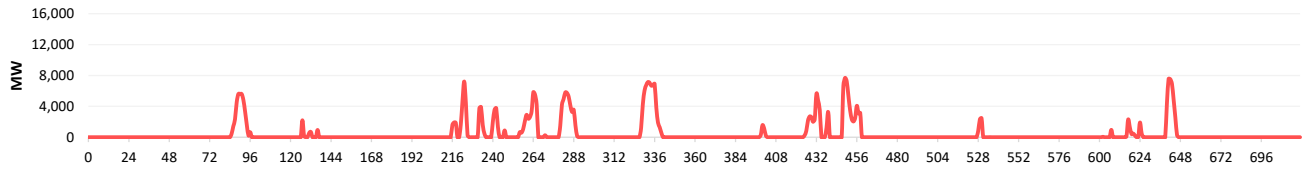
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



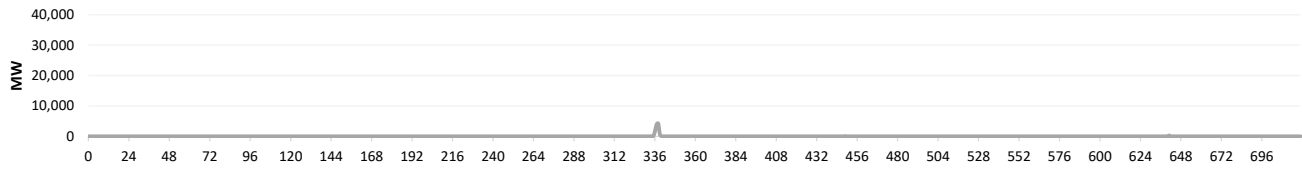
PRD Deployment	
Total Hrs.	138
Total MWh	133,493
Avg. MW	967.3

**Battery Energy Storage Deployed During Modeling Period**



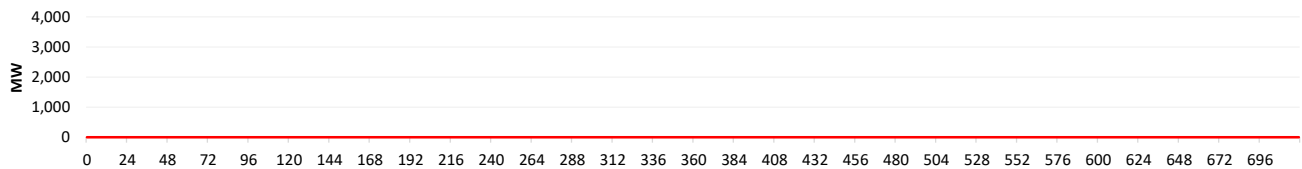
Battery Deployment	
Total Hrs.	119
Total MWh	347,391
Avg. MW	2,919.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	6
Total MWh	10,646
Avg. MW	1,774.3

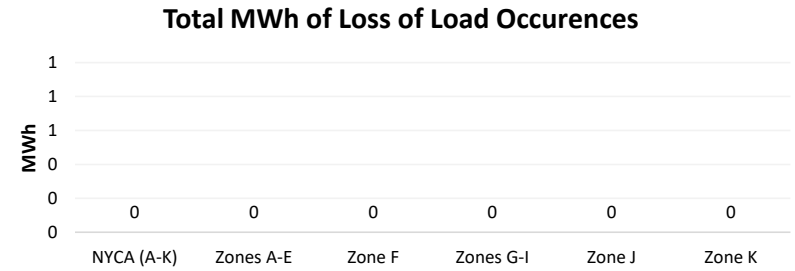
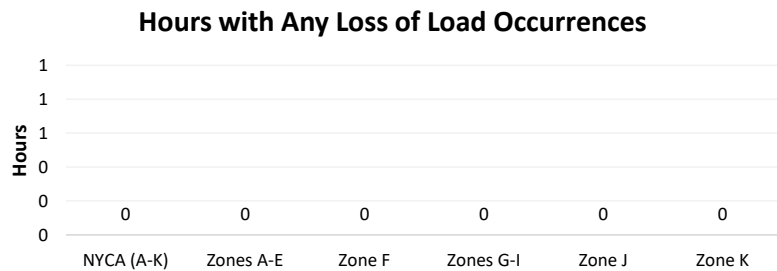
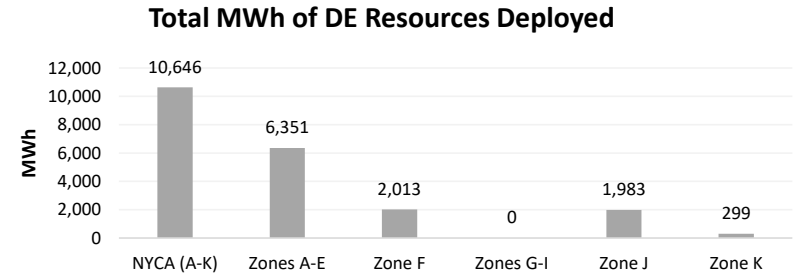
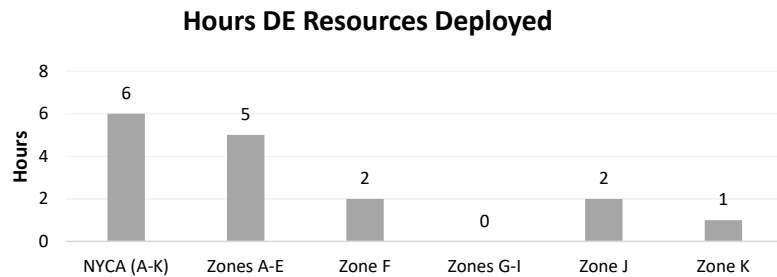
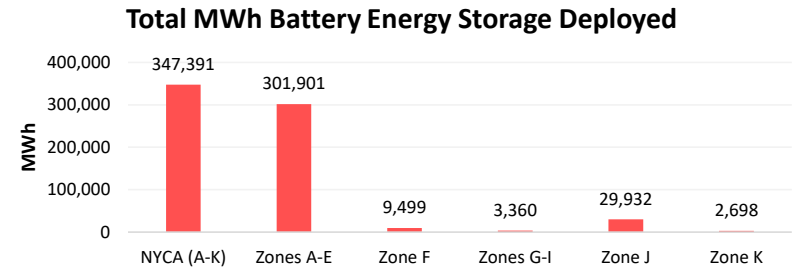
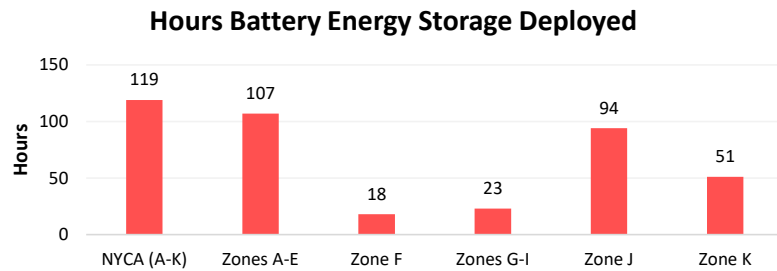
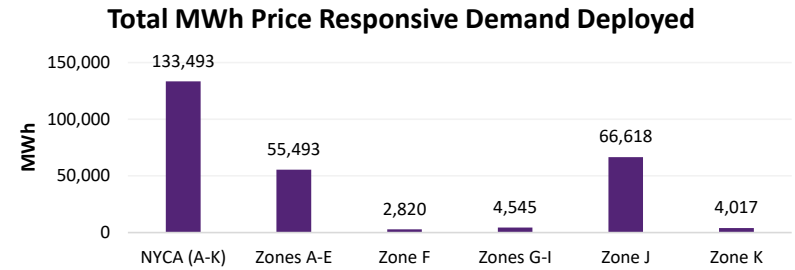
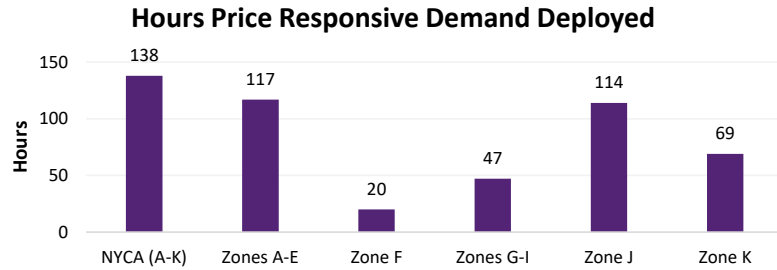
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

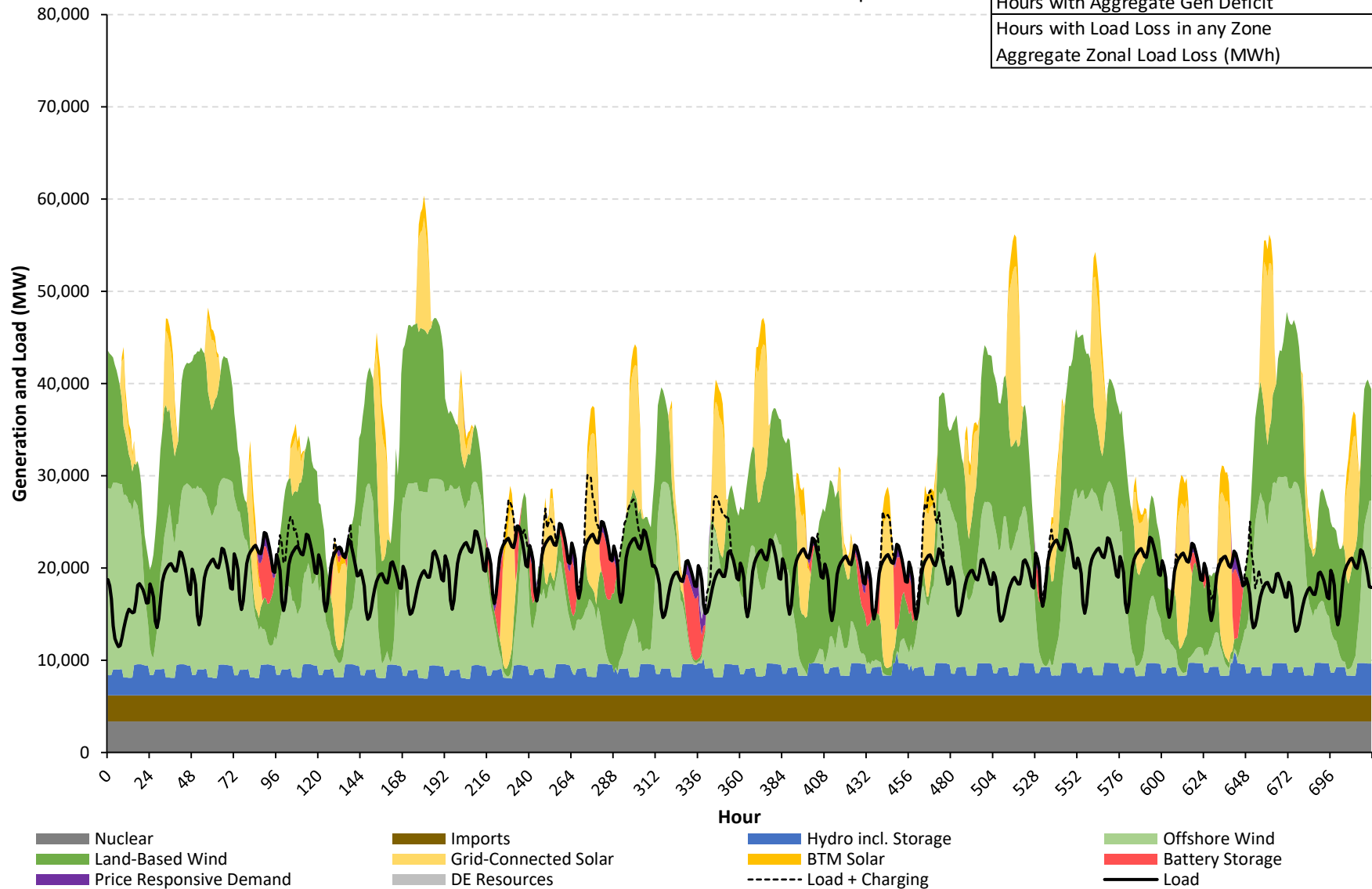


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	22,758,704
Gen Surplus/Deficit (MWh)	8,647,237
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

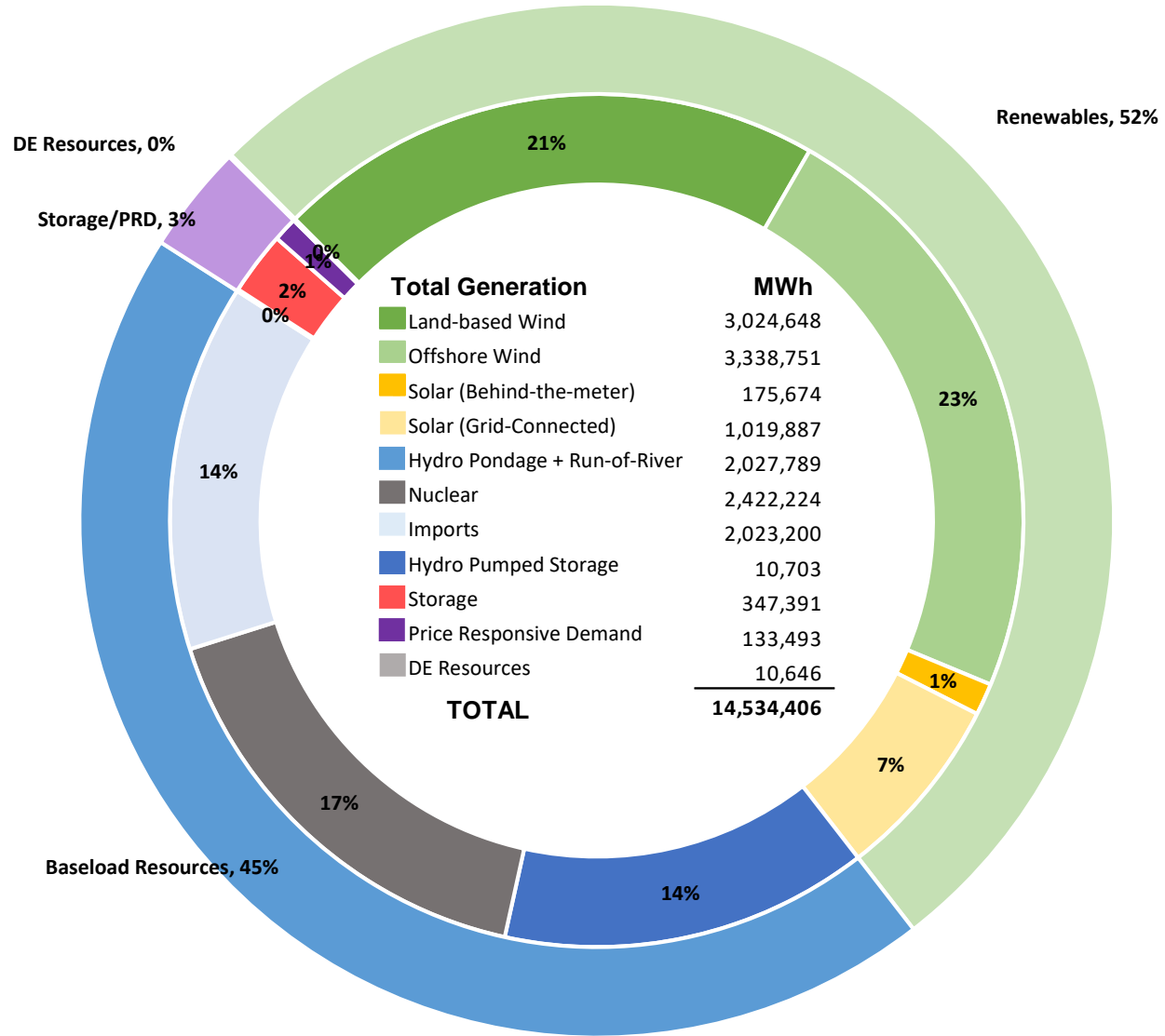


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate

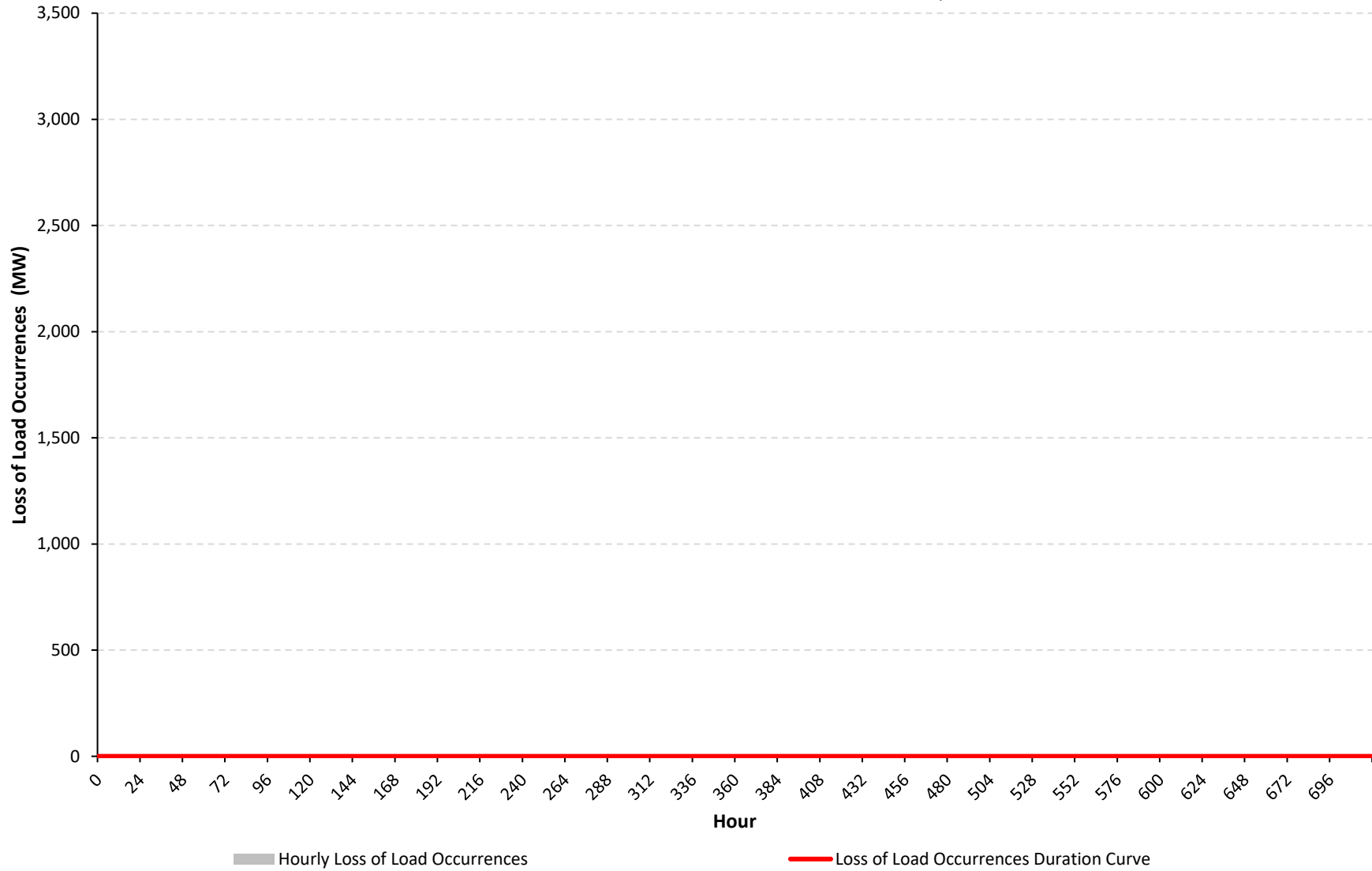


### NYCA DE Resource Generation (MW) Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW)

Reference Case - Winter - CCP2 Resource Set - Wind Lull - Upstate





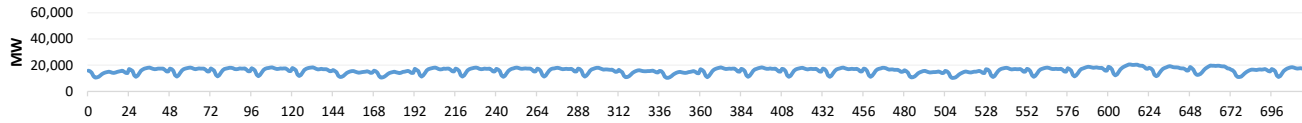
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 31 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

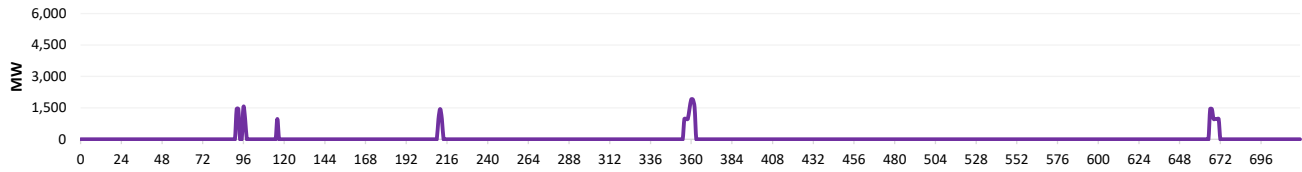
Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



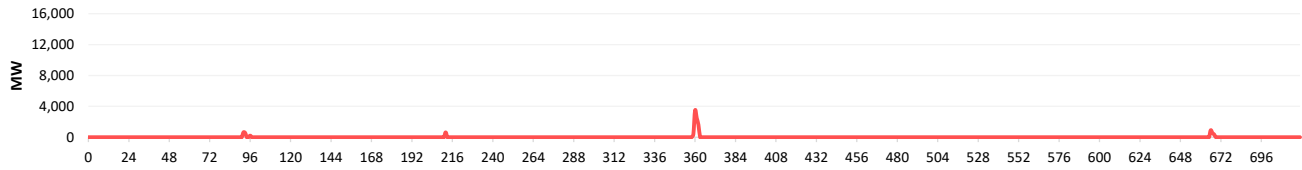
Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



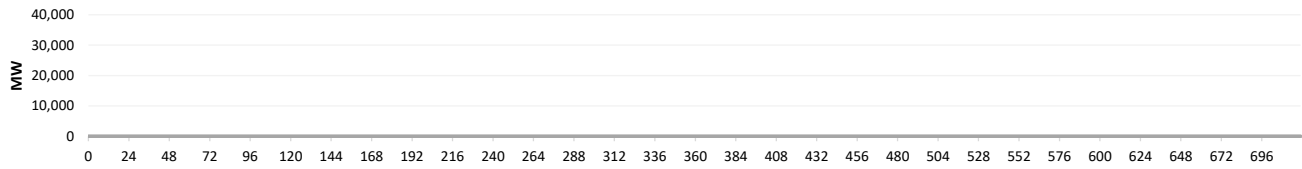
PRD Deployment	
Total Hrs.	21
Total MWh	26,212
Avg. MW	1,248.2

**Battery Energy Storage Deployed During Modeling Period**



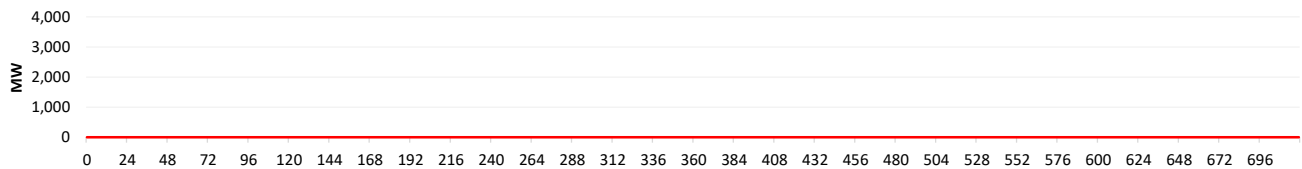
Battery Deployment	
Total Hrs.	11
Total MWh	11,779
Avg. MW	1,070.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

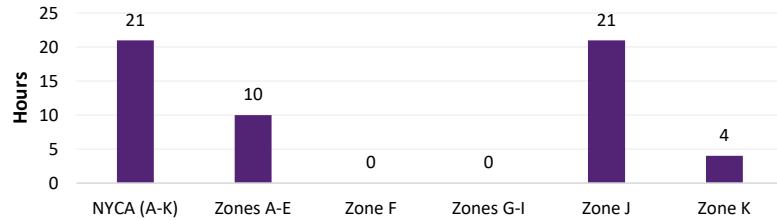


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

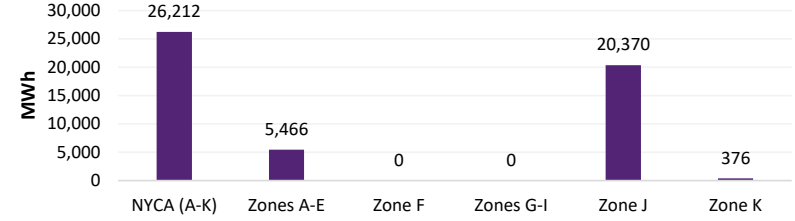
### Full Period Results Summary

Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

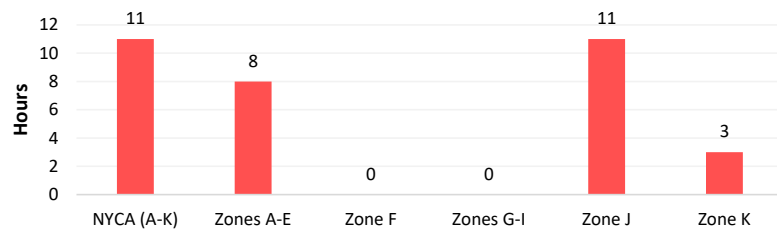
**Hours Price Responsive Demand Deployed**



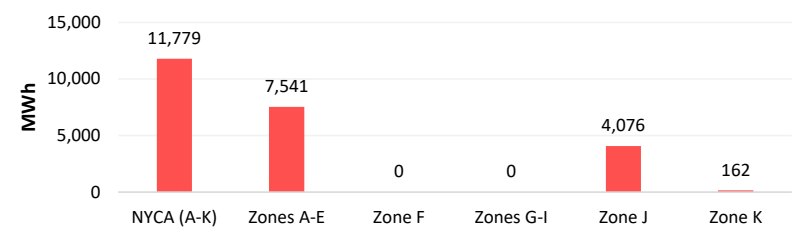
**Total MWh Price Responsive Demand Deployed**



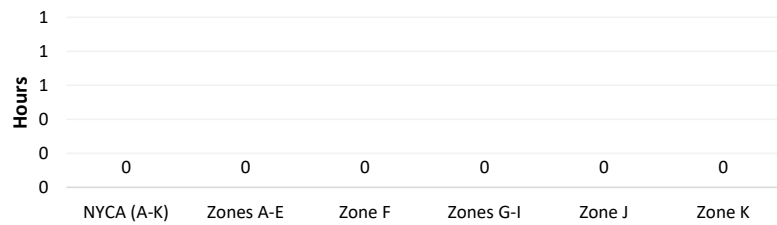
**Hours Battery Energy Storage Deployed**



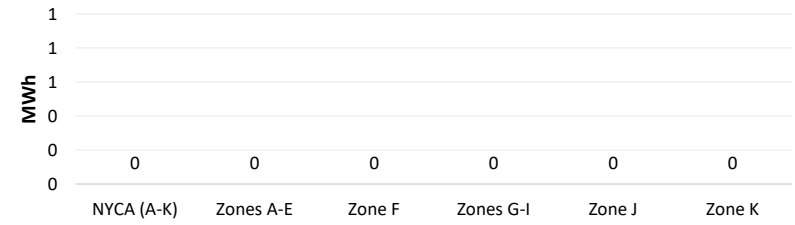
**Total MWh Battery Energy Storage Deployed**



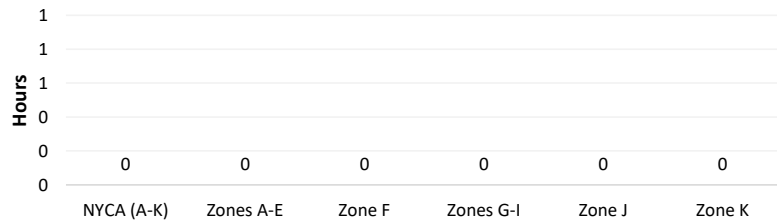
**Hours DE Resources Deployed**



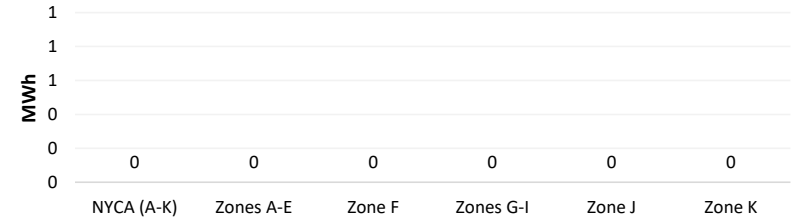
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

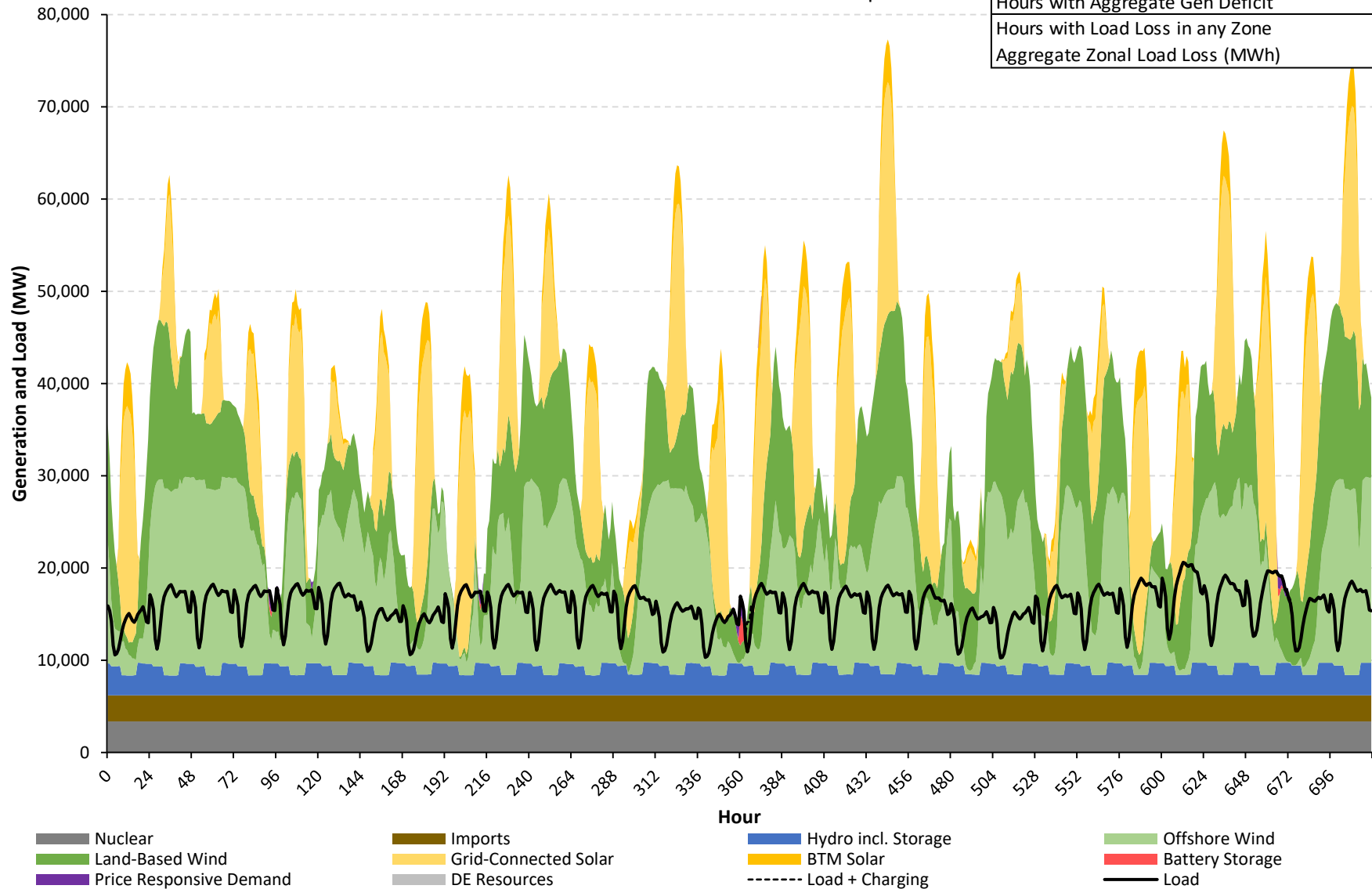


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	27,231,849
Gen Surplus/Deficit (MWh)	15,846,609
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

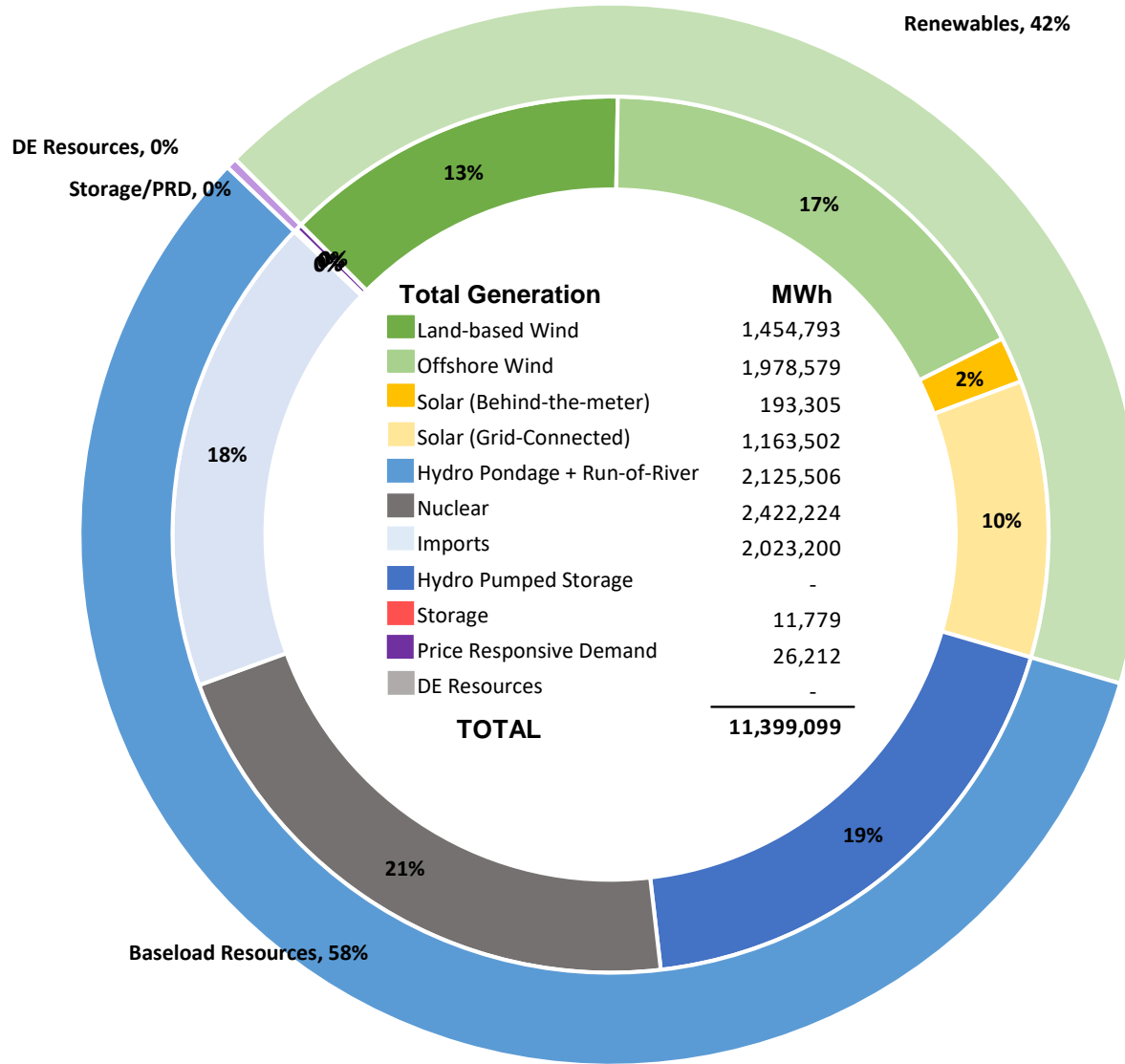


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

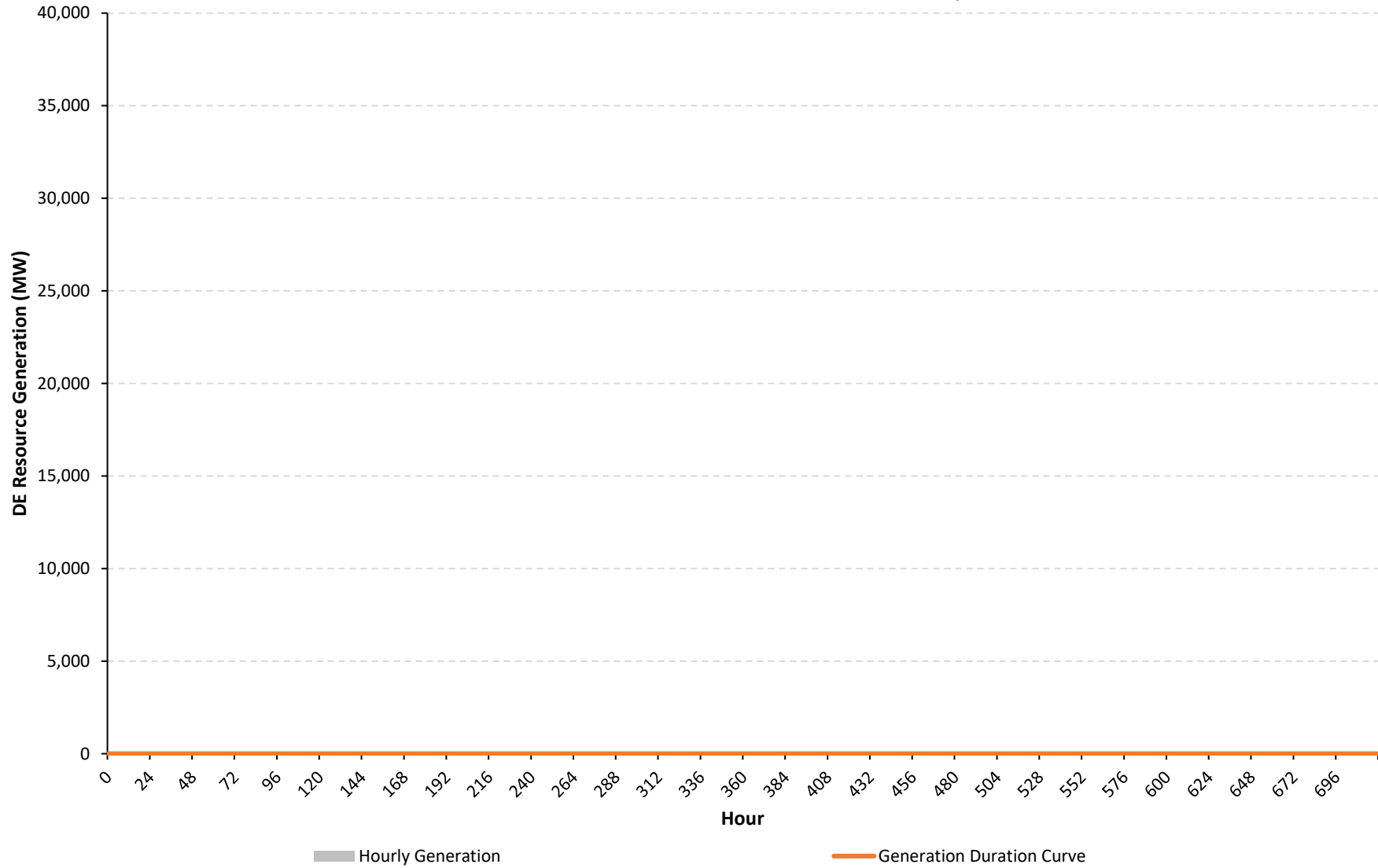
### Generation by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate



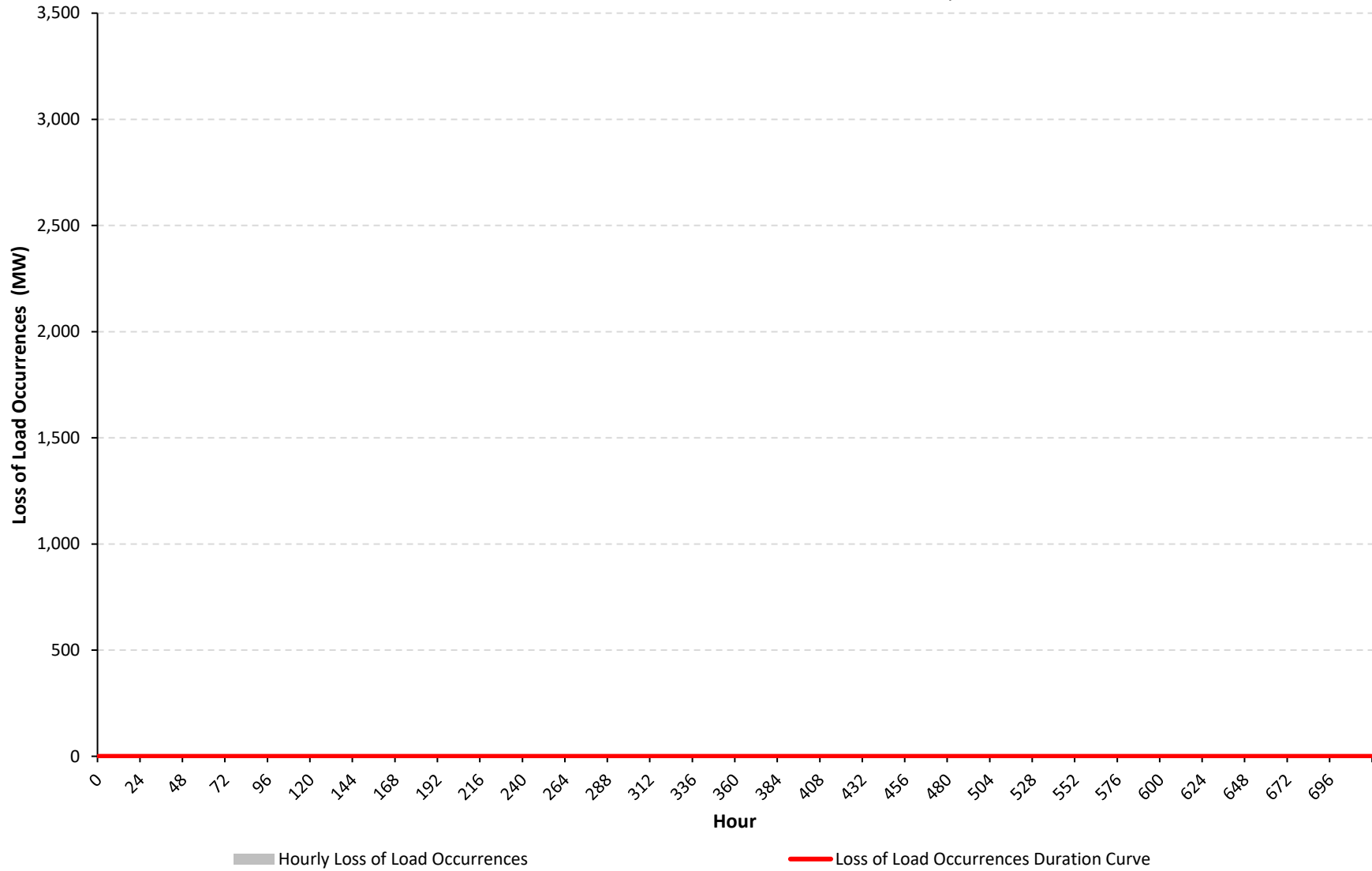
### NYCA DE Resource Generation (MW)

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW)

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Upstate



## **Appendix C. Diagnostic Charts for All Cases**

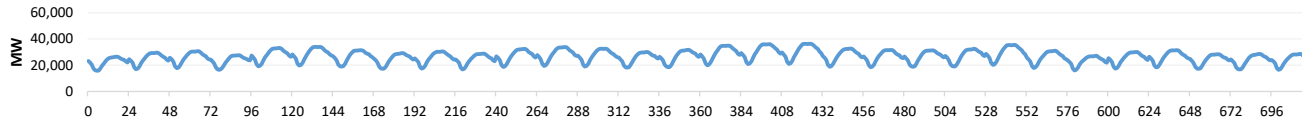
### **Case 32 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore**



**Hourly Results Summary**

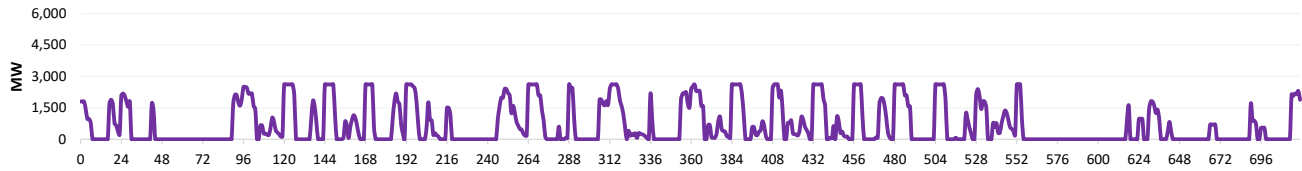
Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



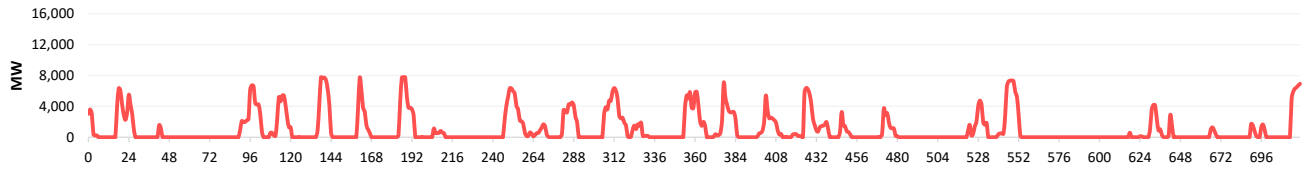
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



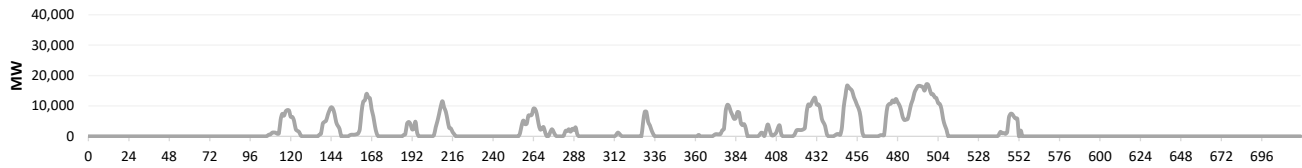
PRD Deployment	
Total Hrs.	353
Total MWh	494,222
Avg. MW	1,400.1

**Battery Energy Storage Deployed During Modeling Period**



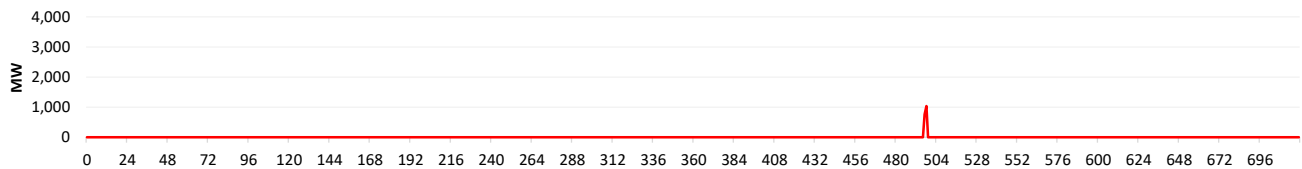
Battery Deployment	
Total Hrs.	288
Total MWh	750,524
Avg. MW	2,606.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	243
Total MWh	1,307,211
Avg. MW	5,379.5

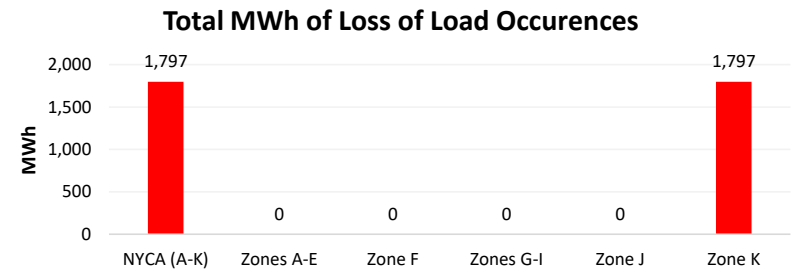
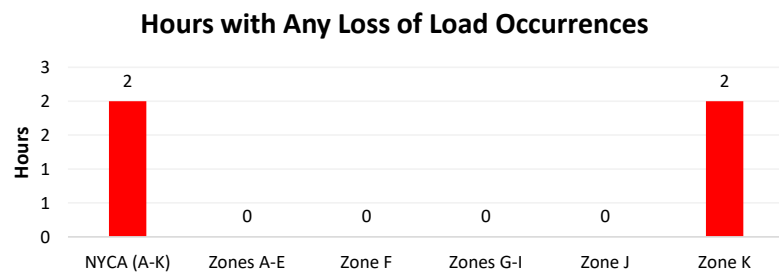
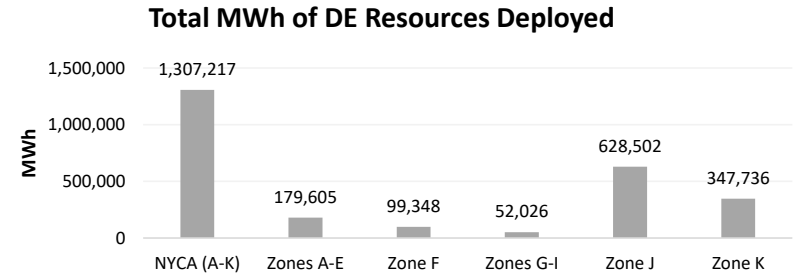
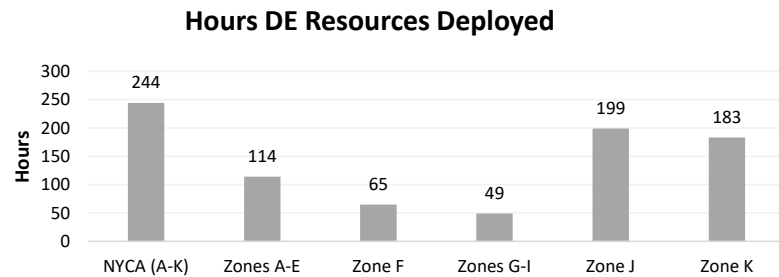
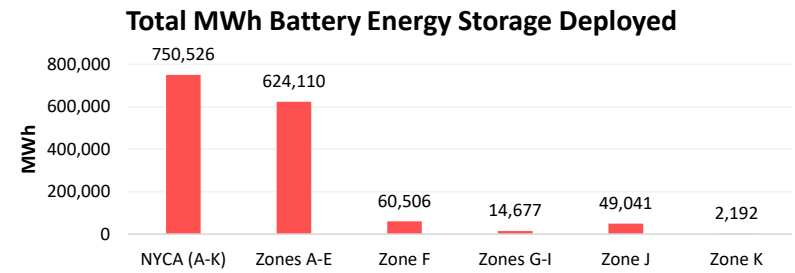
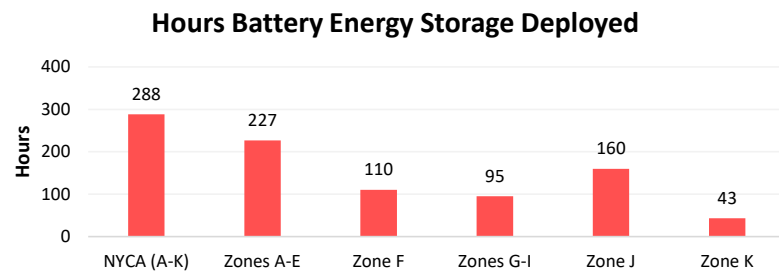
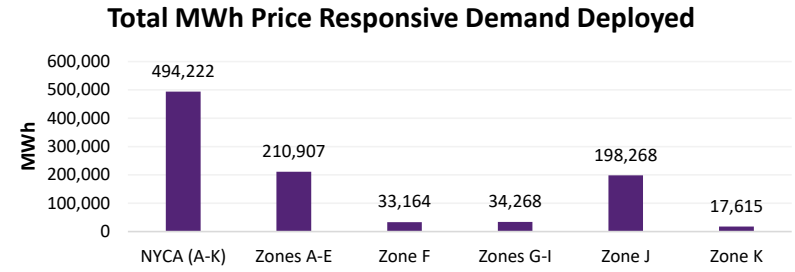
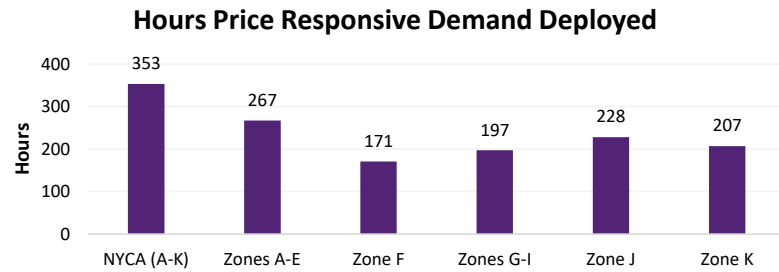
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	2
Total MWh	1,797
Avg. MW	898.4

### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

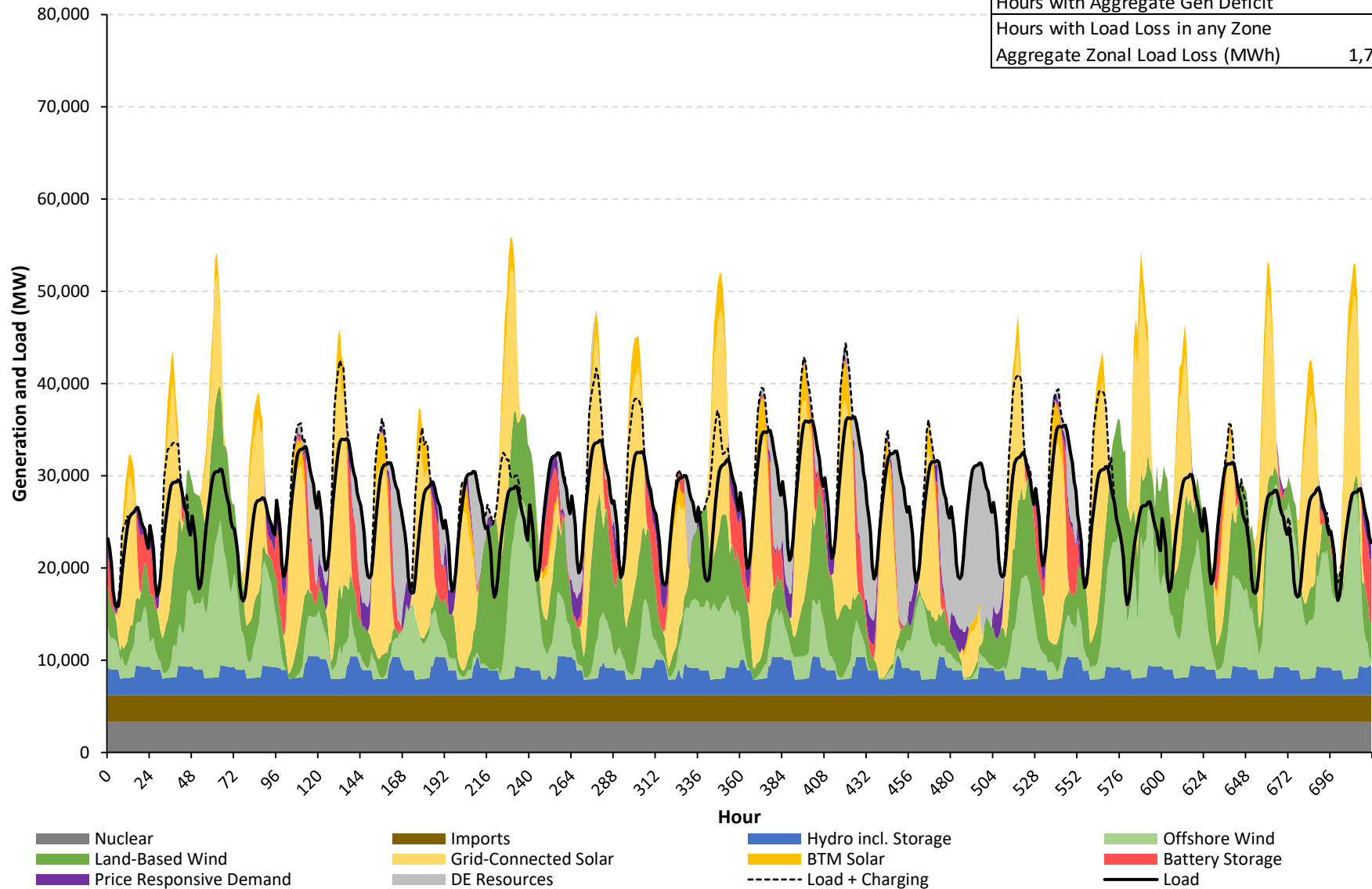


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	22,238,625
Gen Surplus/Deficit (MWh)	3,225,811
Hours with Aggregate Gen Deficit	2
Hours with Load Loss in any Zone	2
Aggregate Zonal Load Loss (MWh)	1,797

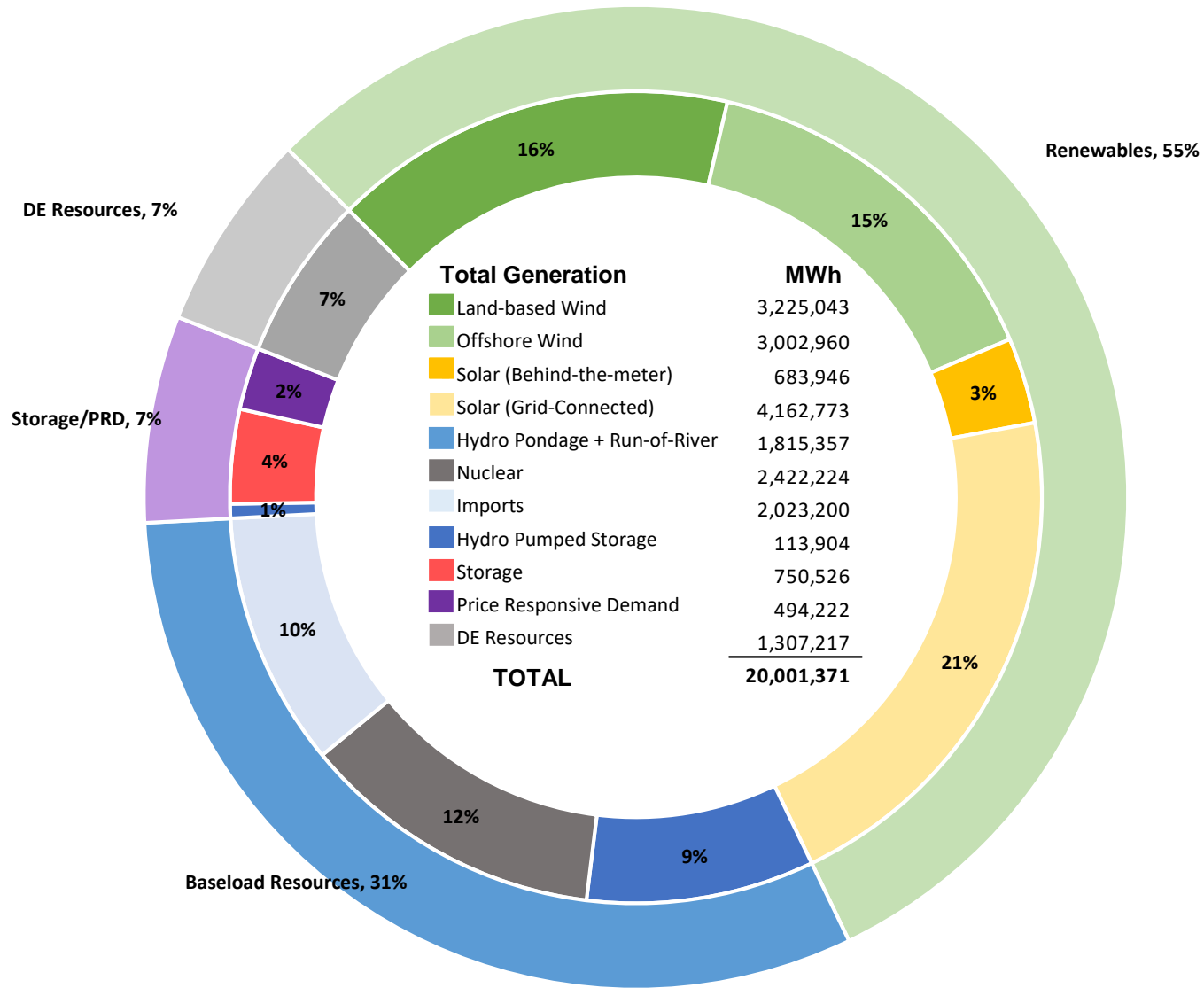


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

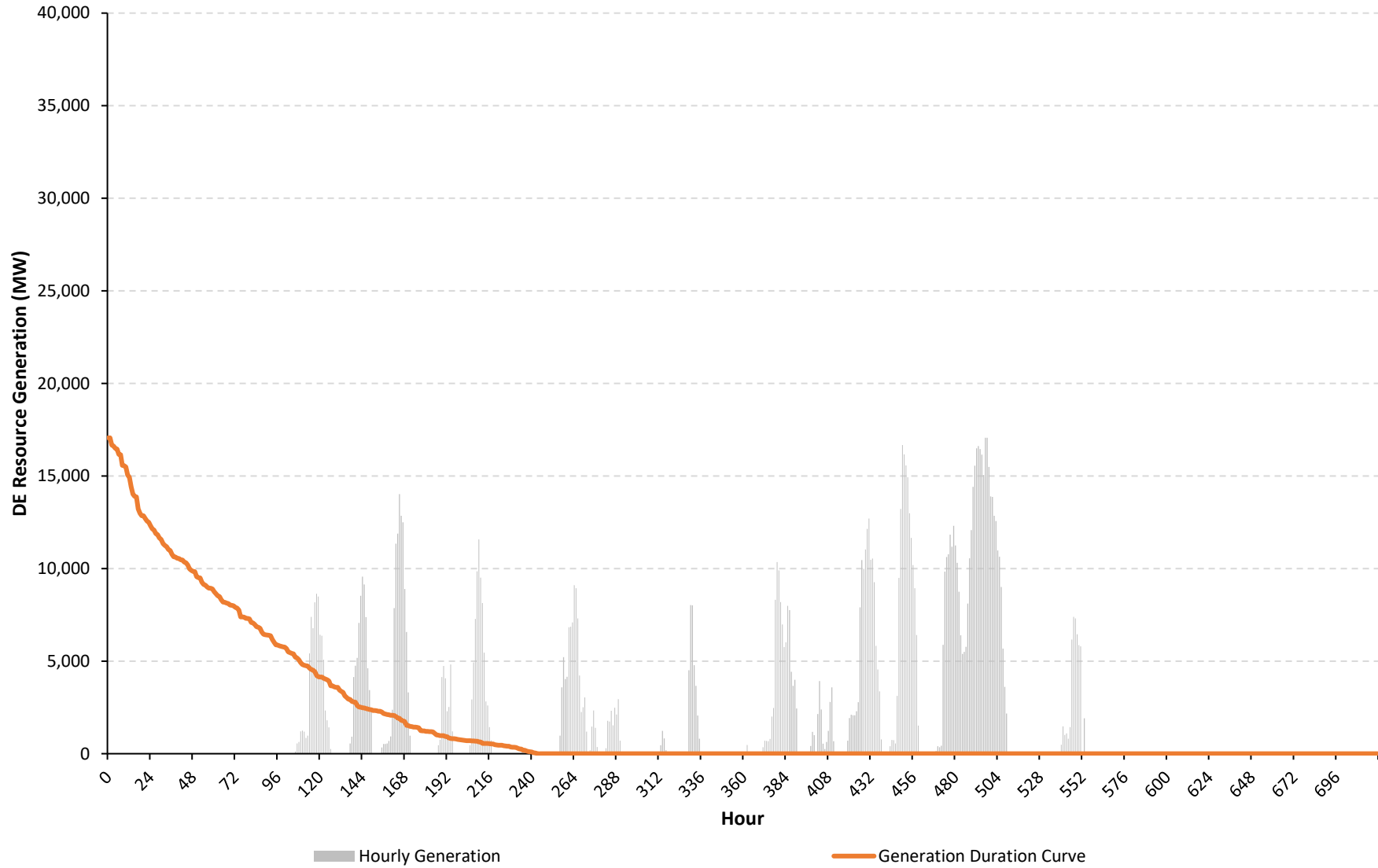
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



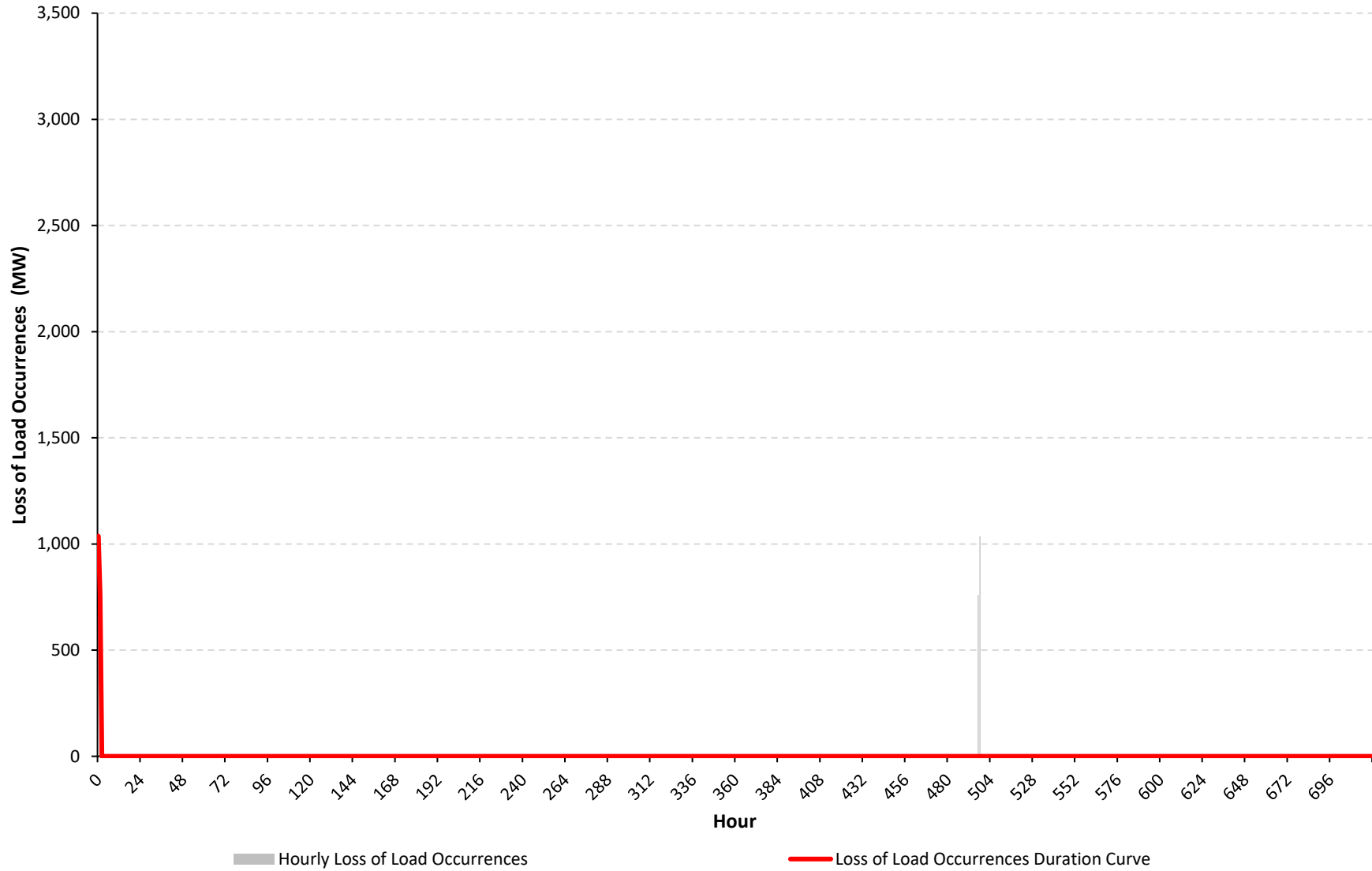
### NYCA DE Resource Generation (MW)

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Wind Lull - Off-Shore



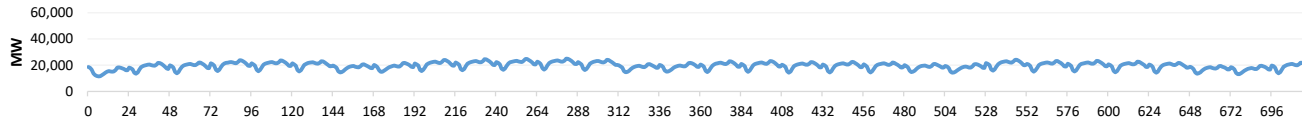
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 33 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore**

**Hourly Results Summary**

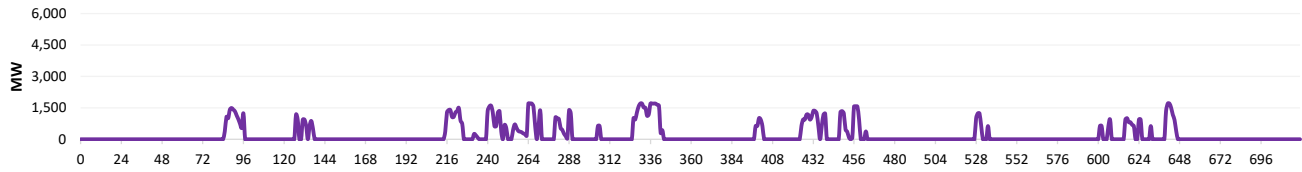
Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



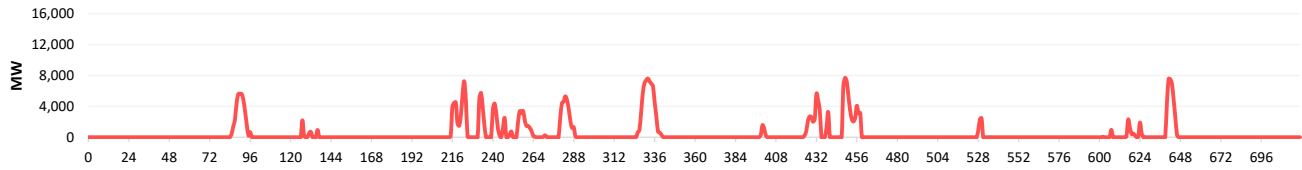
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



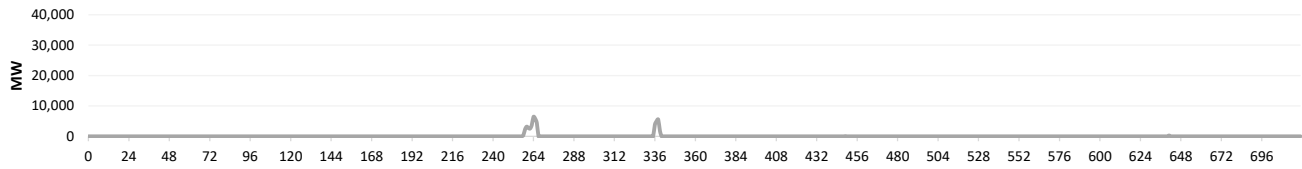
PRD Deployment	
Total Hrs.	147
Total MWh	141,917
Avg. MW	965.4

**Battery Energy Storage Deployed During Modeling Period**



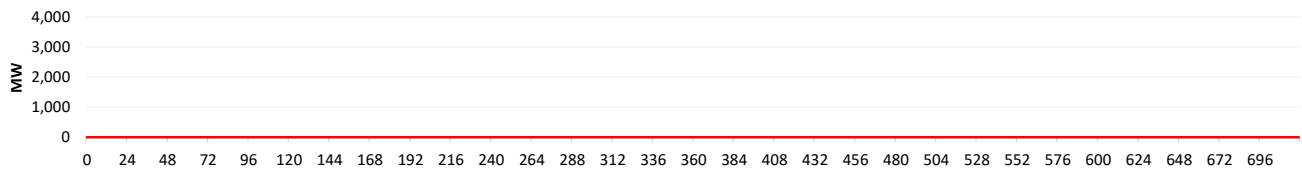
Battery Deployment	
Total Hrs.	129
Total MWh	352,537
Avg. MW	2,732.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	15
Total MWh	48,055
Avg. MW	3,203.7

**Loss of Load Occurrences During Modeling Period**



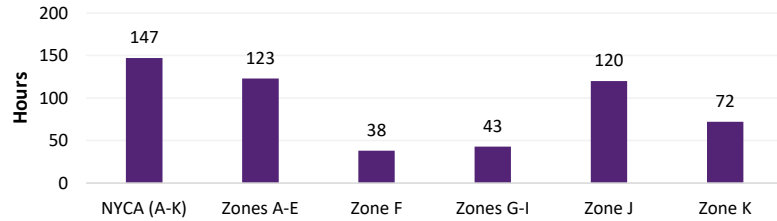
Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



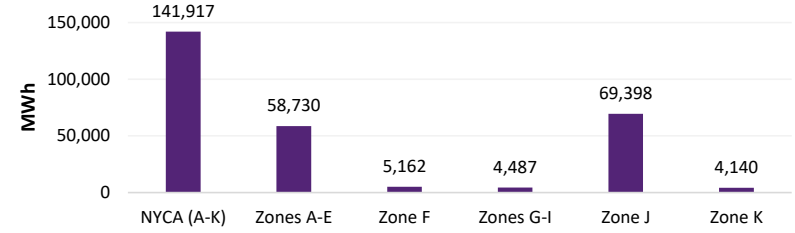
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

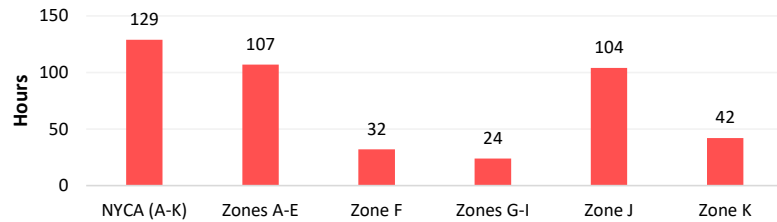
**Hours Price Responsive Demand Deployed**



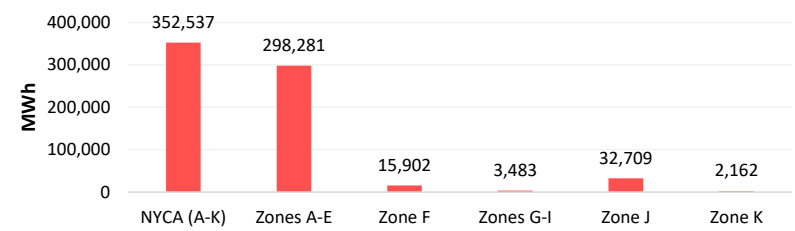
**Total MWh Price Responsive Demand Deployed**



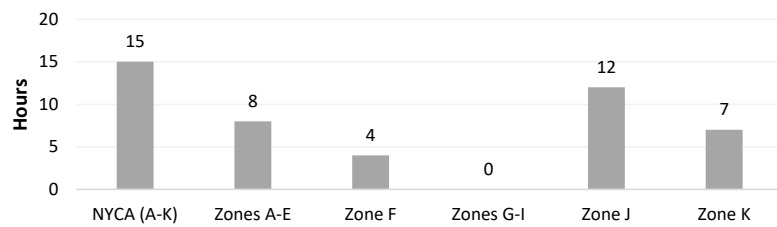
**Hours Battery Energy Storage Deployed**



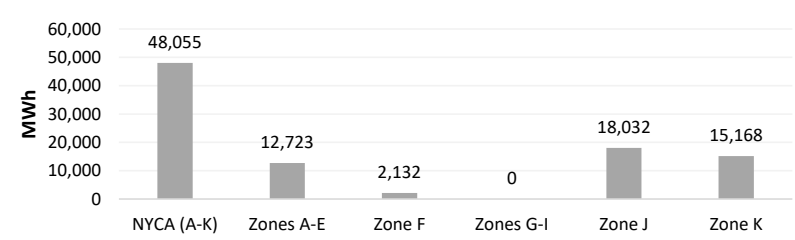
**Total MWh Battery Energy Storage Deployed**



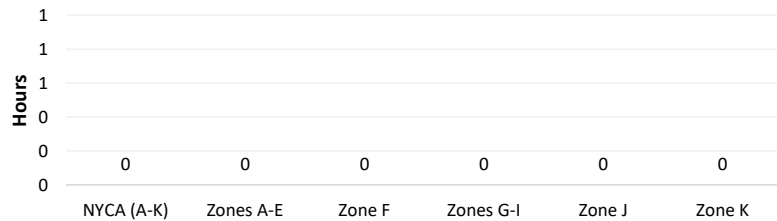
**Hours DE Resources Deployed**



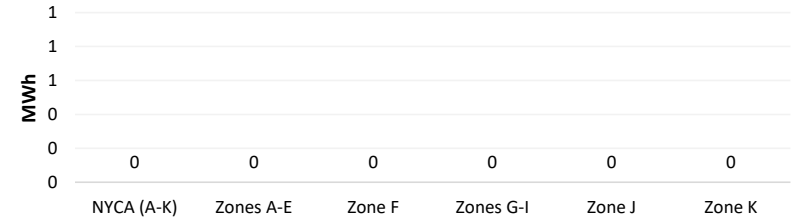
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

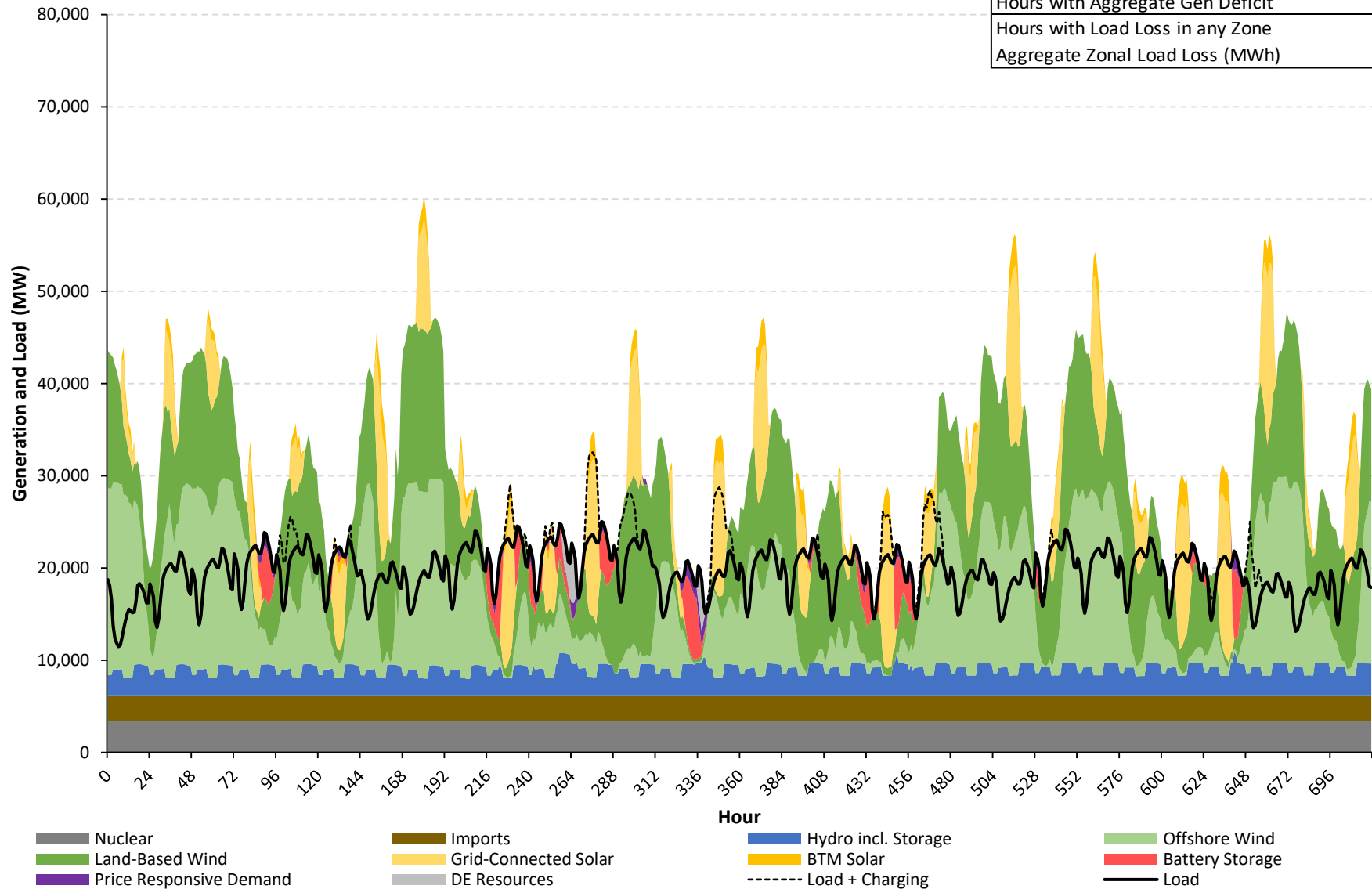


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	22,438,620
Gen Surplus/Deficit (MWh)	8,327,154
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

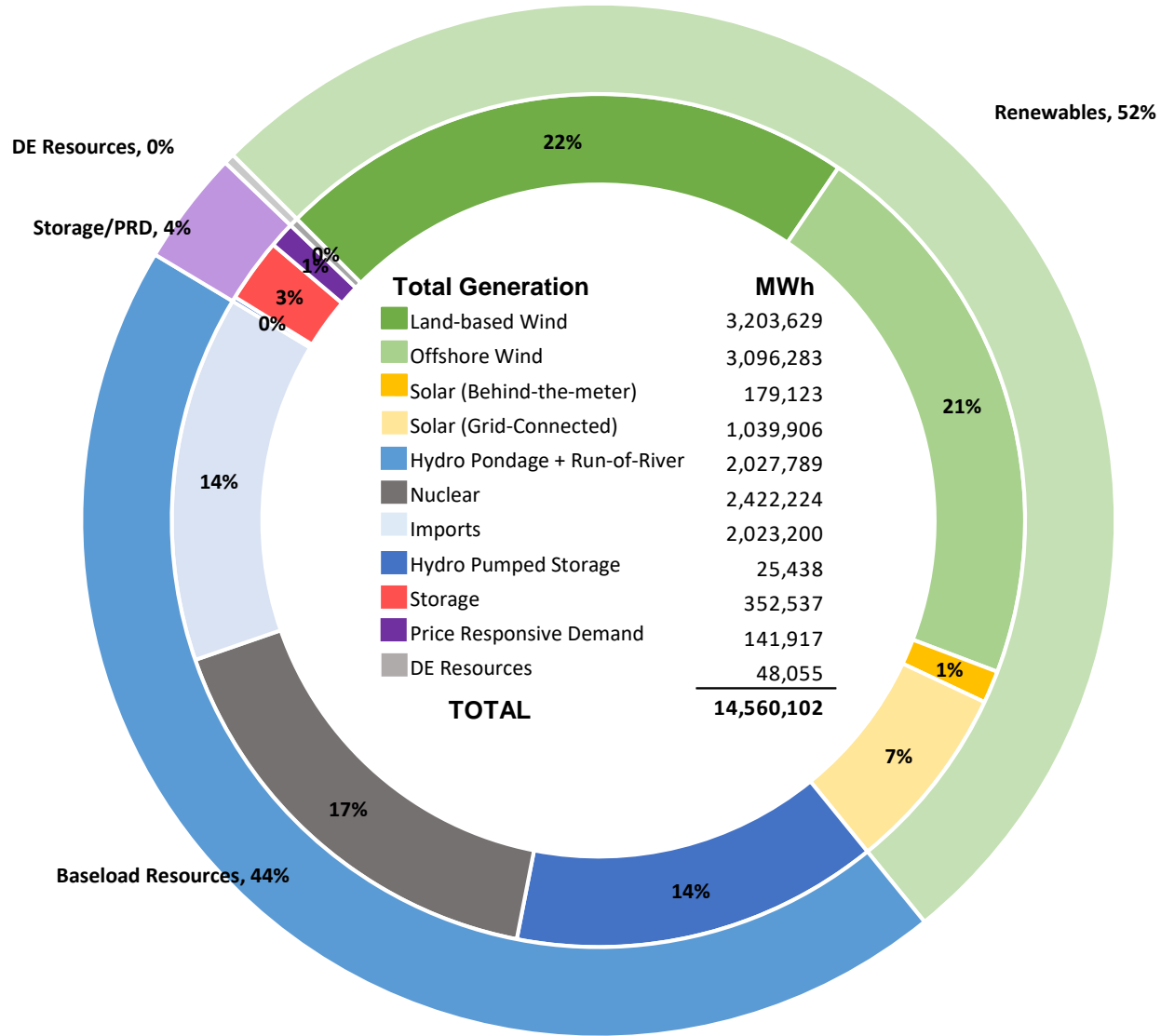


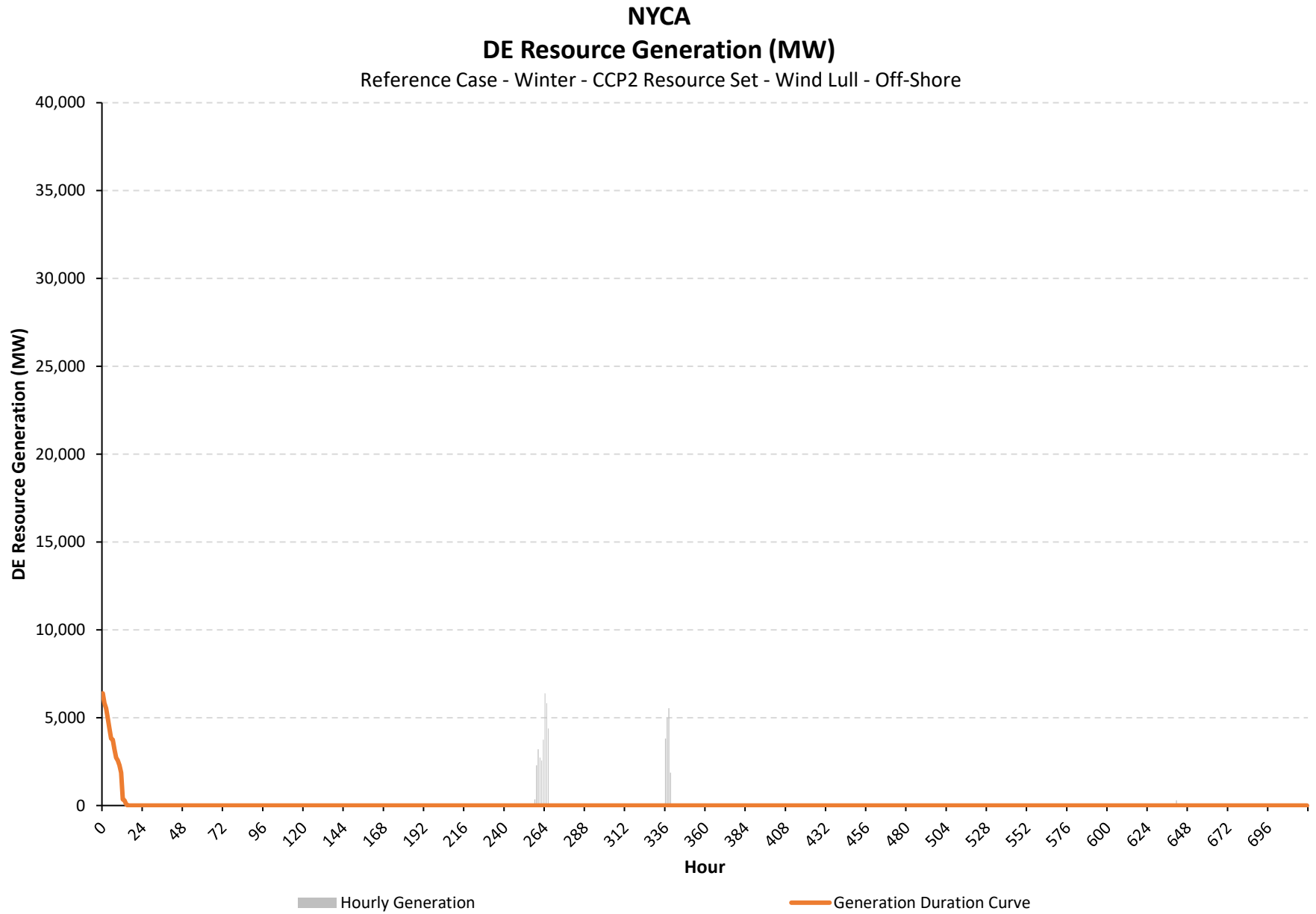
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

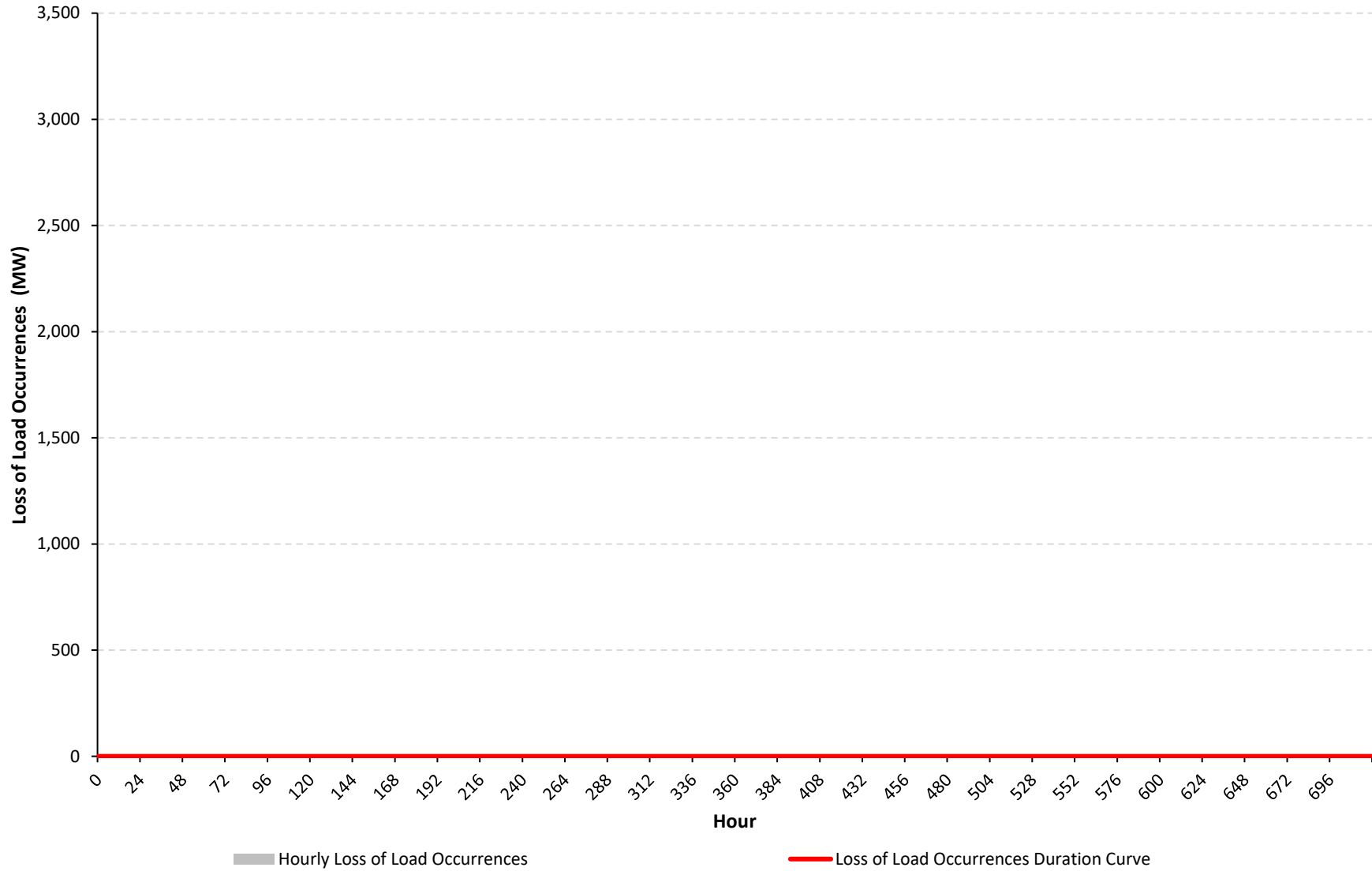
Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore





### NYCA Loss of Load Occurrences (MW)

Reference Case - Winter - CCP2 Resource Set - Wind Lull - Off-Shore



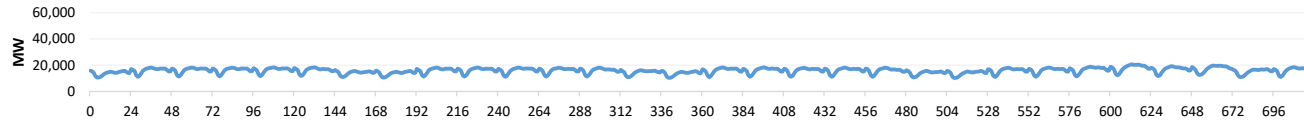
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 34 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore**

**Hourly Results Summary**

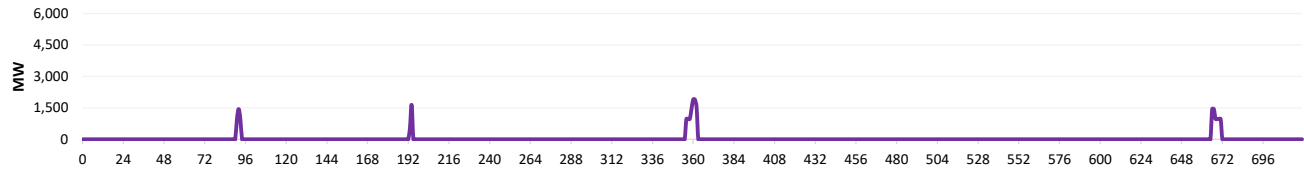
Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



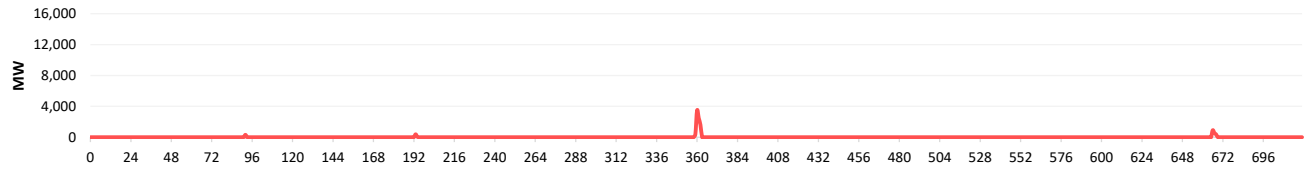
Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



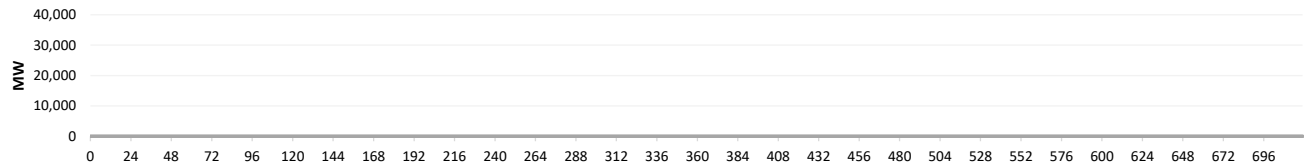
PRD Deployment	
Total Hrs.	18
Total MWh	22,027
Avg. MW	1,223.7

**Battery Energy Storage Deployed During Modeling Period**



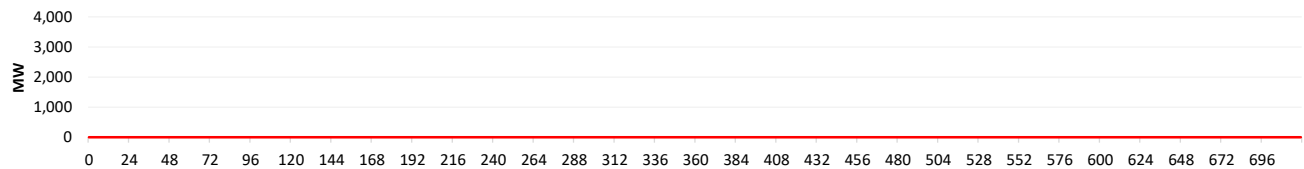
Battery Deployment	
Total Hrs.	10
Total MWh	10,495
Avg. MW	1,049.5

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

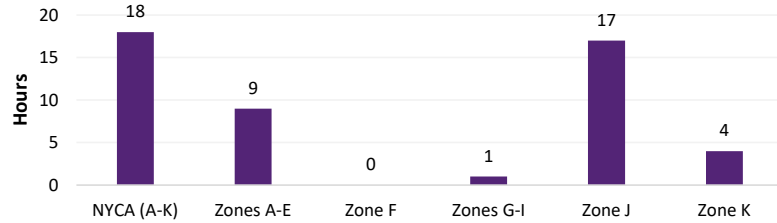


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

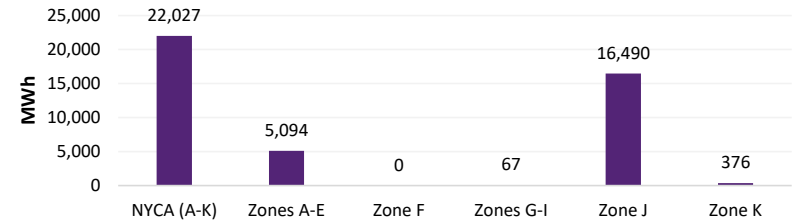
### Full Period Results Summary

Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

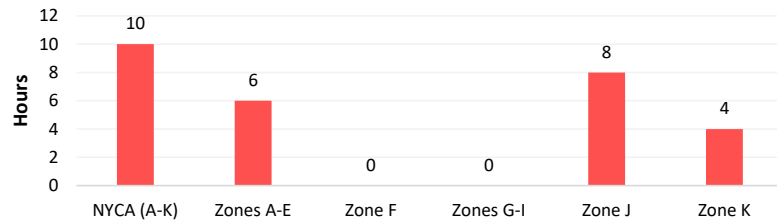
**Hours Price Responsive Demand Deployed**



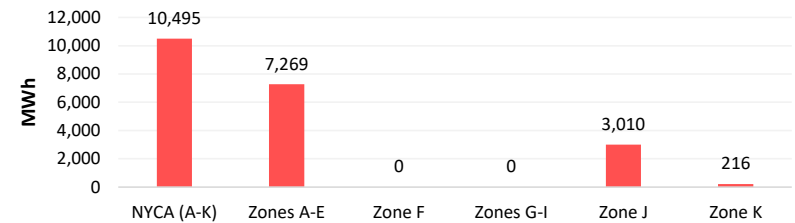
**Total MWh Price Responsive Demand Deployed**



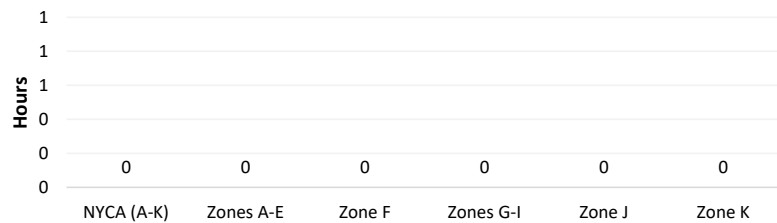
**Hours Battery Energy Storage Deployed**



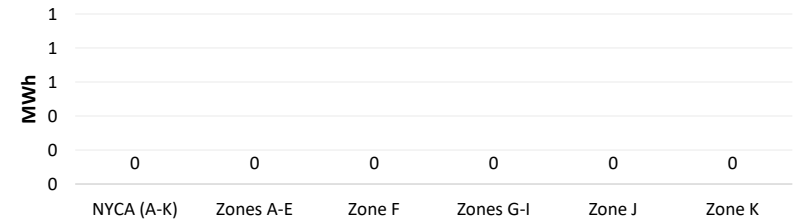
**Total MWh Battery Energy Storage Deployed**



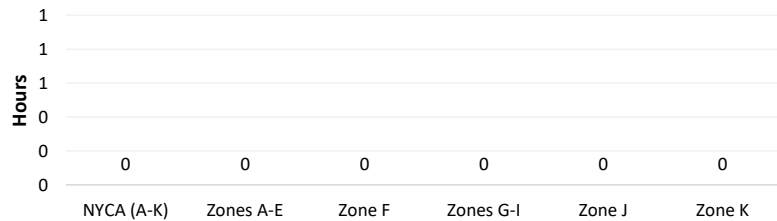
**Hours DE Resources Deployed**



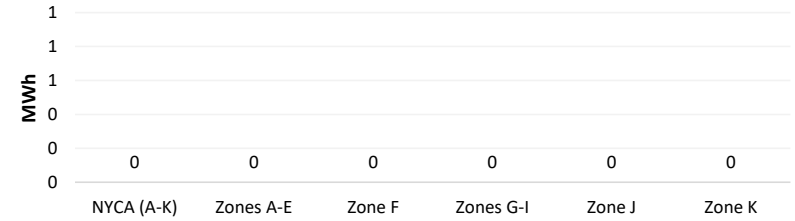
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**



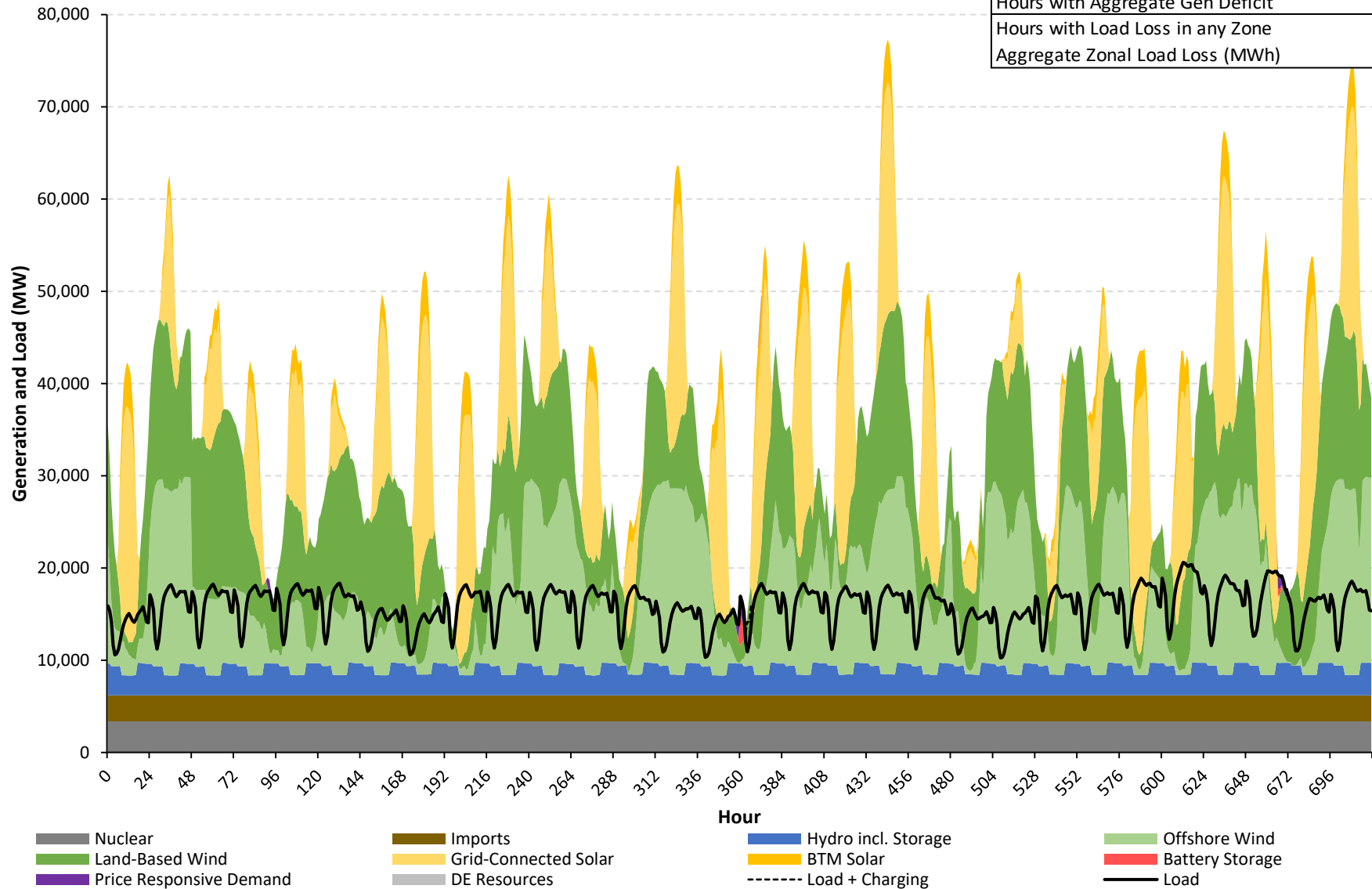


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	27,086,119
Gen Surplus/Deficit (MWh)	15,700,879
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

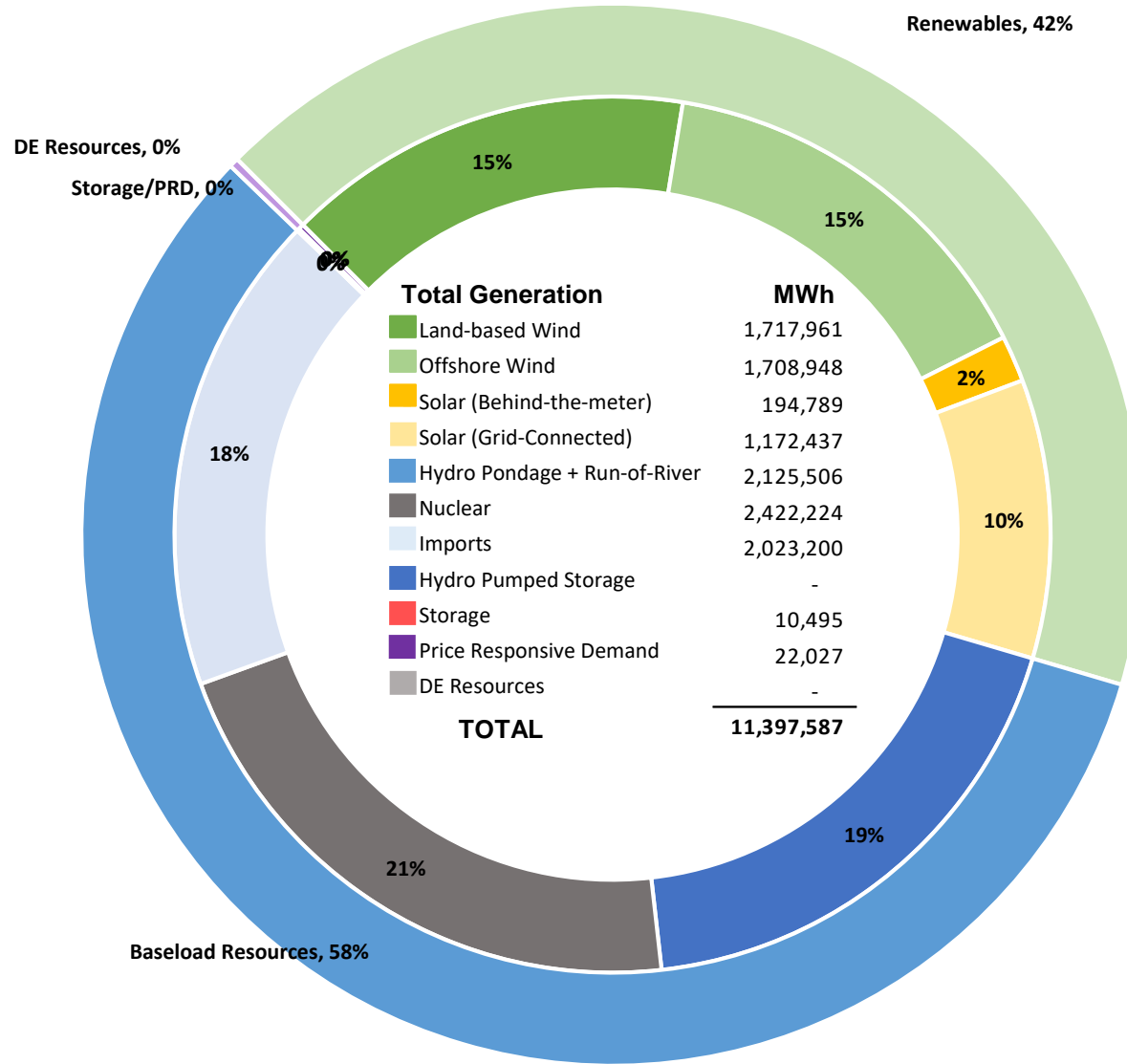


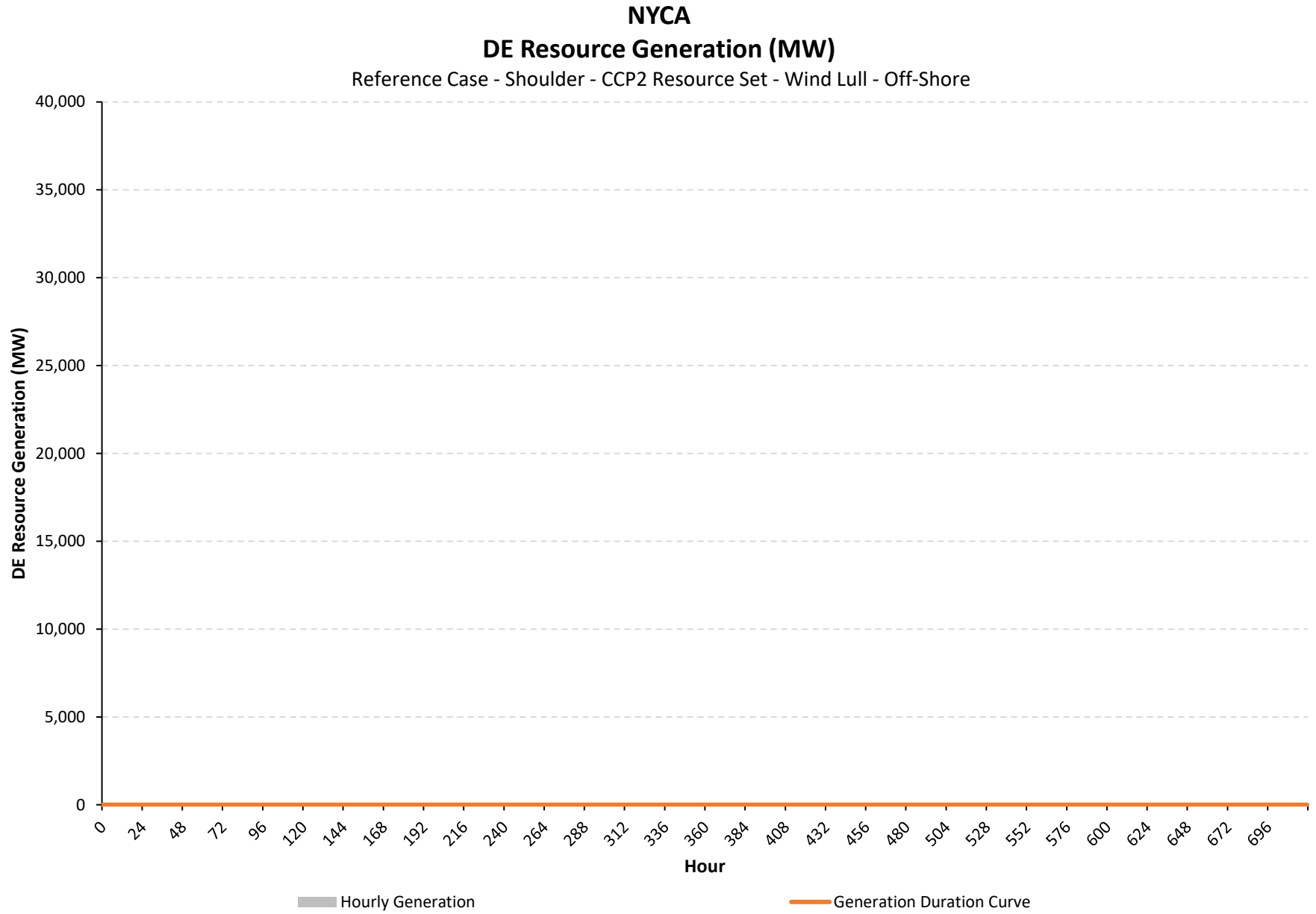
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

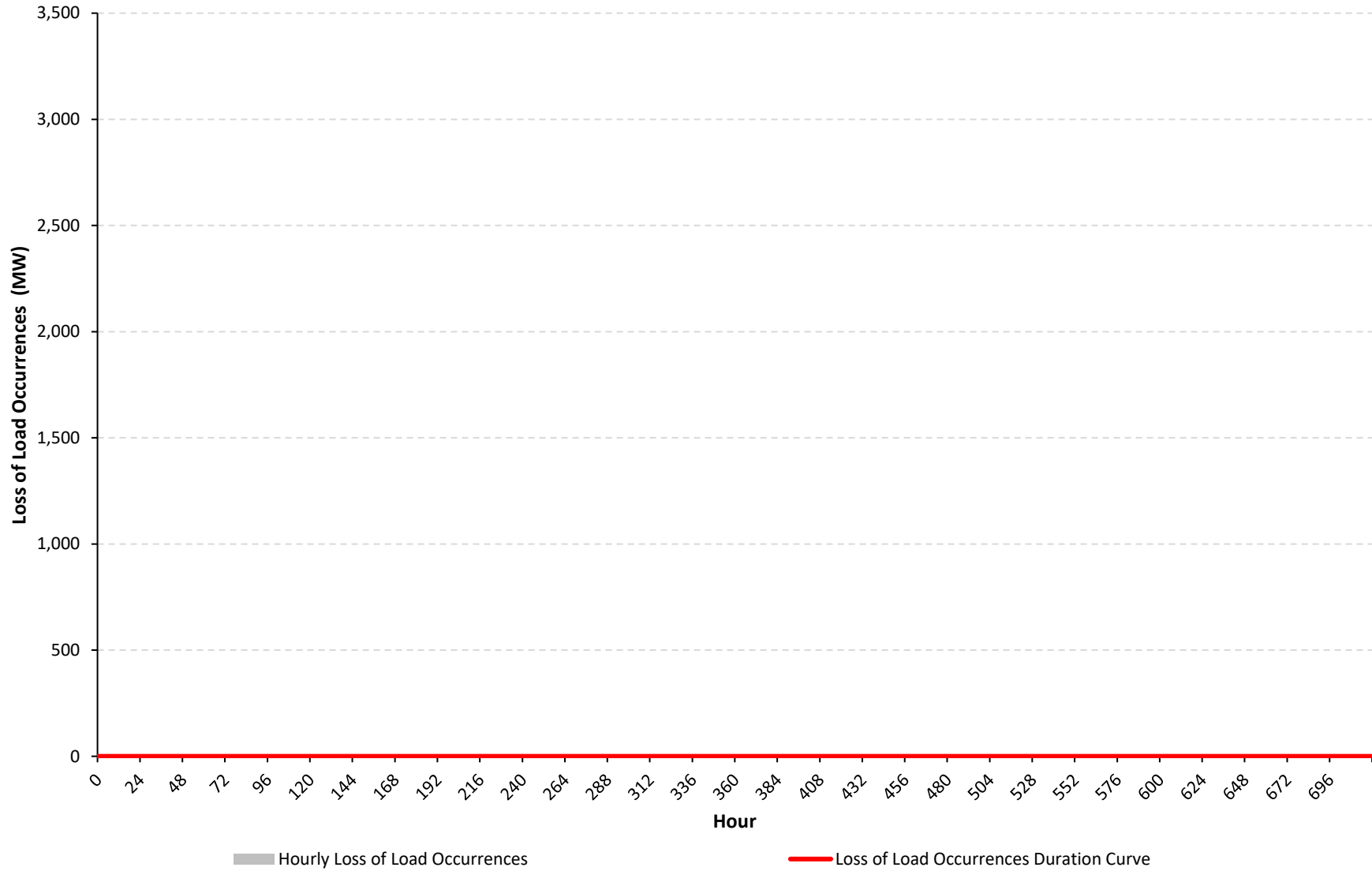
Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore





### NYCA Loss of Load Occurrences (MW)

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - Off-Shore



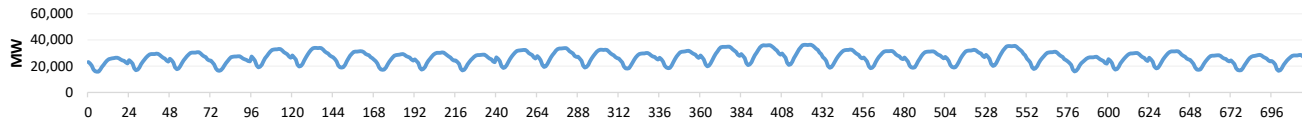
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 35 - Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide**

### Hourly Results Summary

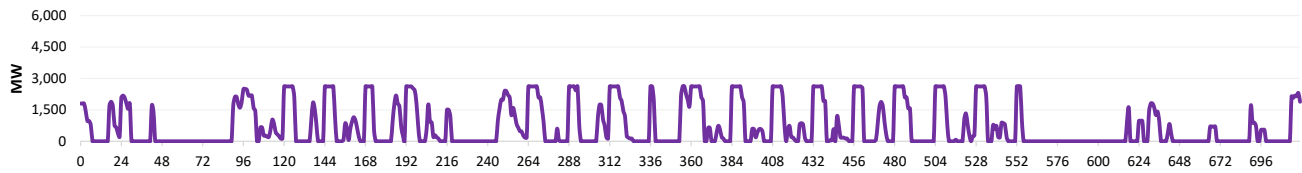
Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



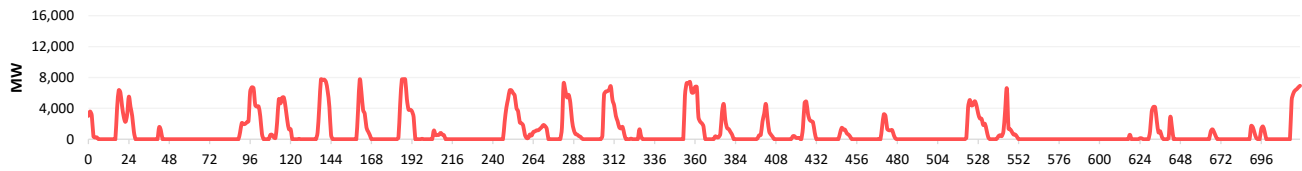
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



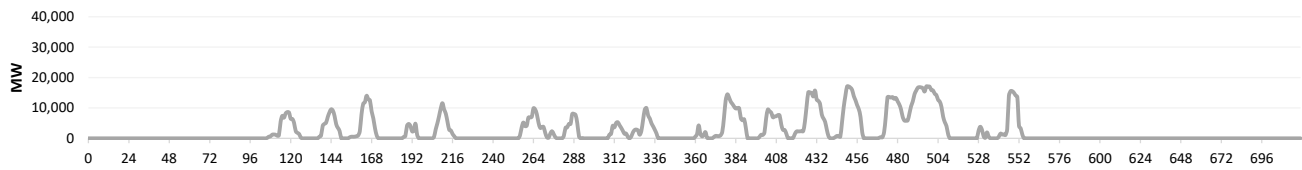
PRD Deployment	
Total Hrs.	332
Total MWh	505,755
Avg. MW	1,523.4

**Battery Energy Storage Deployed During Modeling Period**



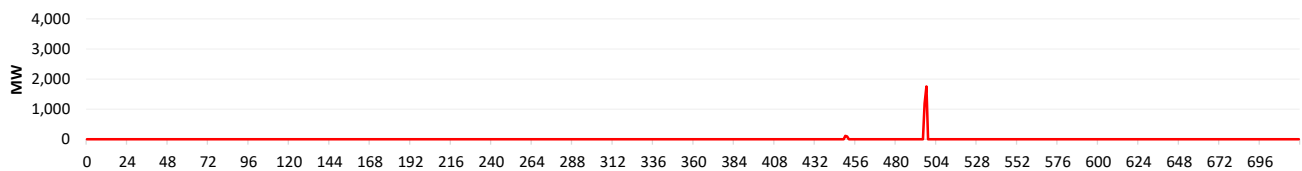
Battery Deployment	
Total Hrs.	260
Total MWh	685,881
Avg. MW	2,638.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	283
Total MWh	1,697,728
Avg. MW	5,999.0

**Loss of Load Occurrences During Modeling Period**

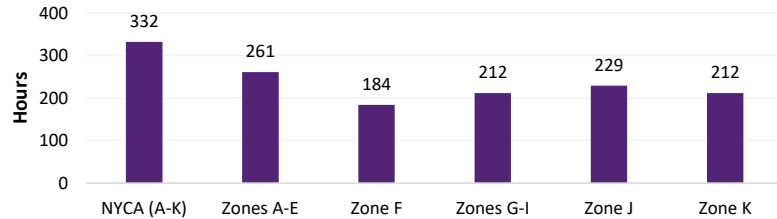


Loss of Load Occurrences	
Total Hrs.	4
Total MWh	3,149
Avg. MW	787.3

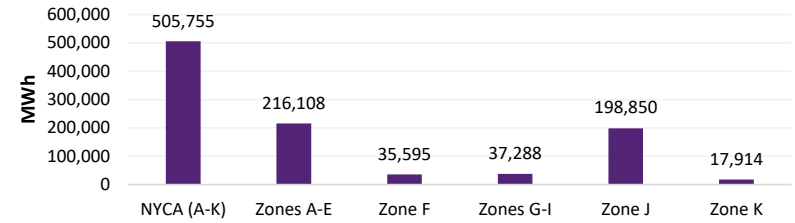
### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

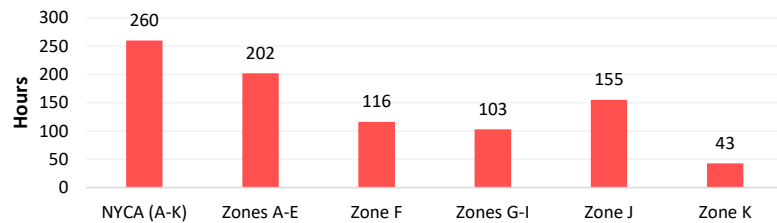
**Hours Price Responsive Demand Deployed**



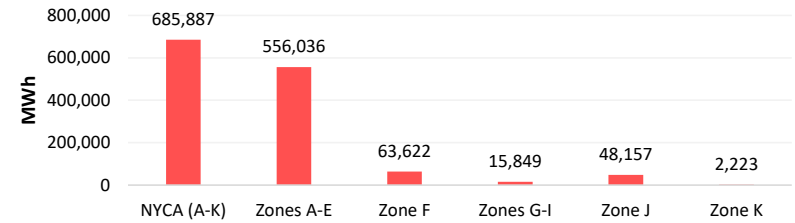
**Total MWh Price Responsive Demand Deployed**



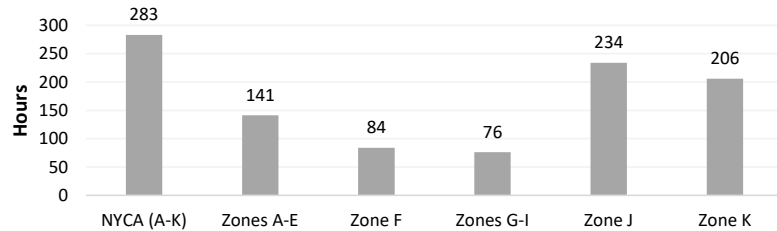
**Hours Battery Energy Storage Deployed**



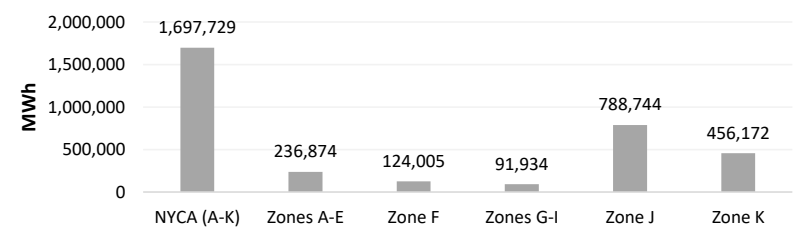
**Total MWh Battery Energy Storage Deployed**



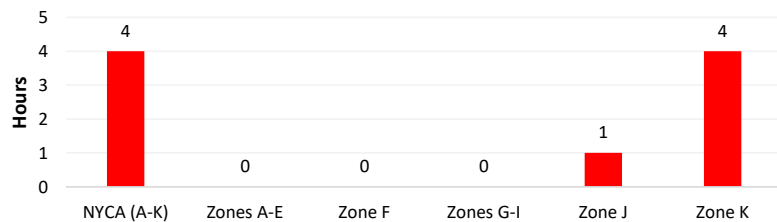
**Hours DE Resources Deployed**



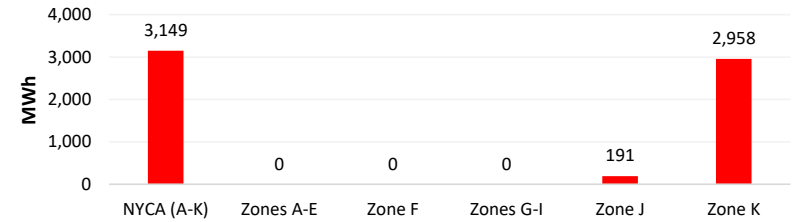
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

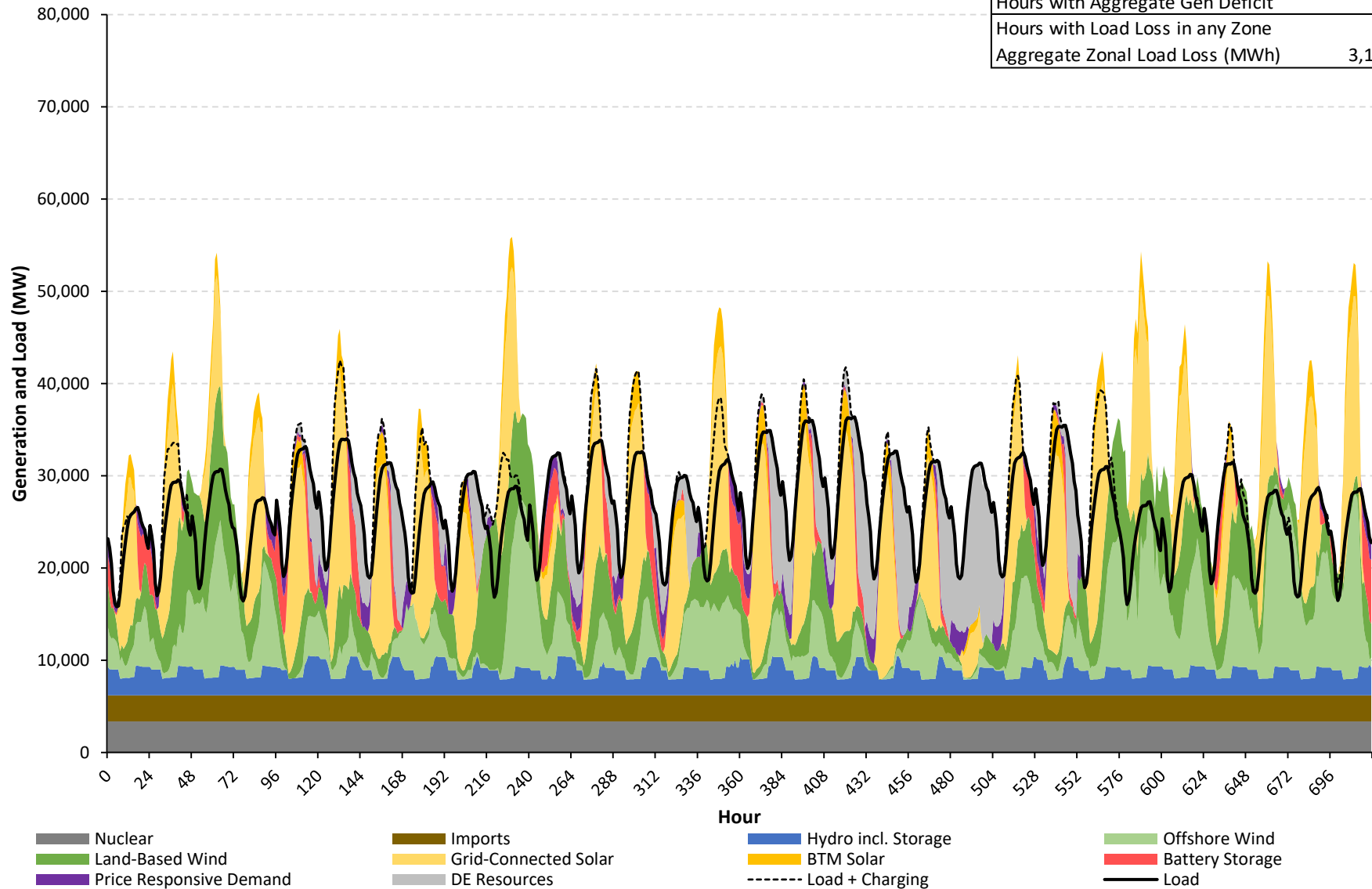


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	21,999,483
Gen Surplus/Deficit (MWh)	2,986,669
Hours with Aggregate Gen Deficit	4
Hours with Load Loss in any Zone	4
Aggregate Zonal Load Loss (MWh)	3,149



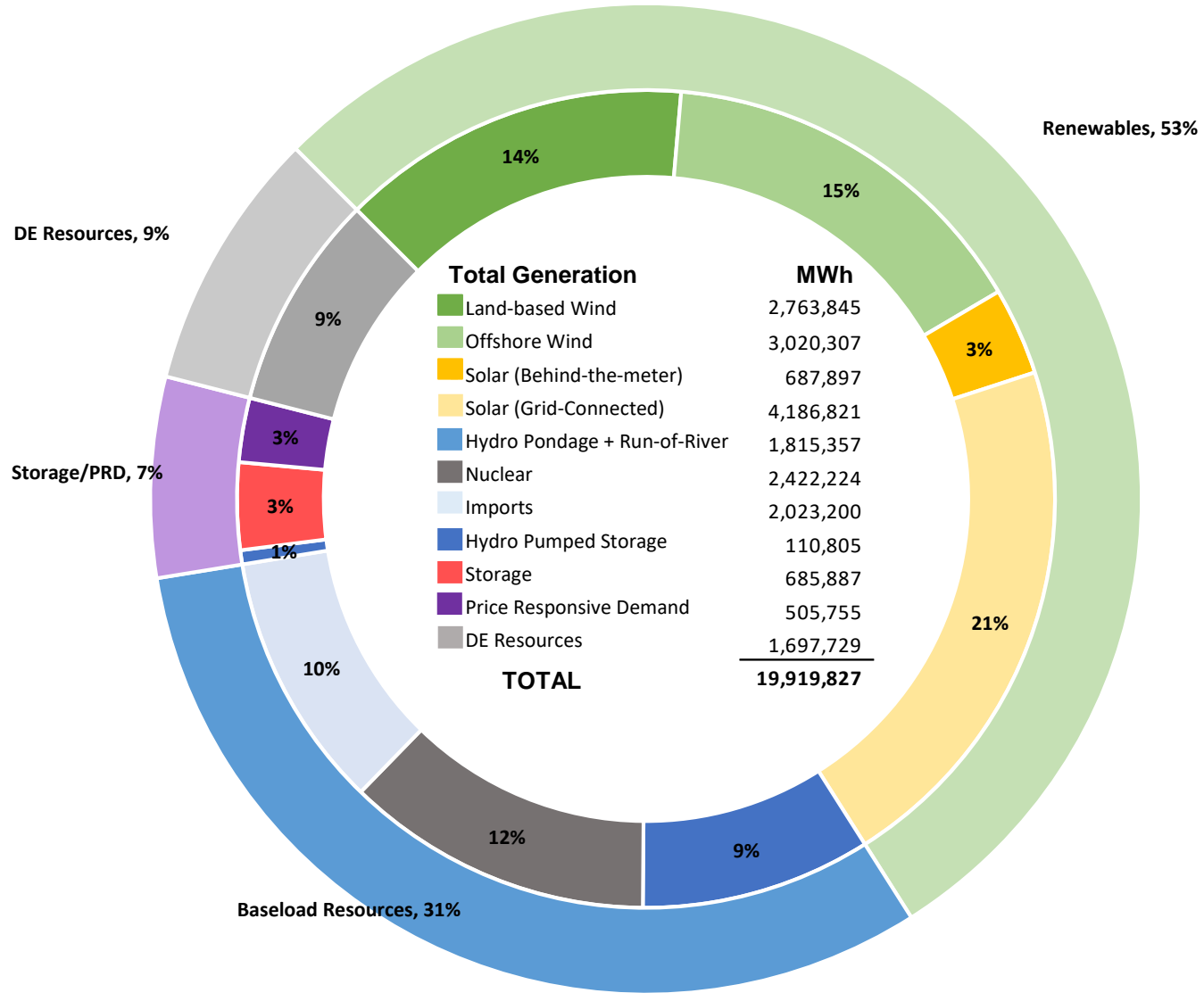
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



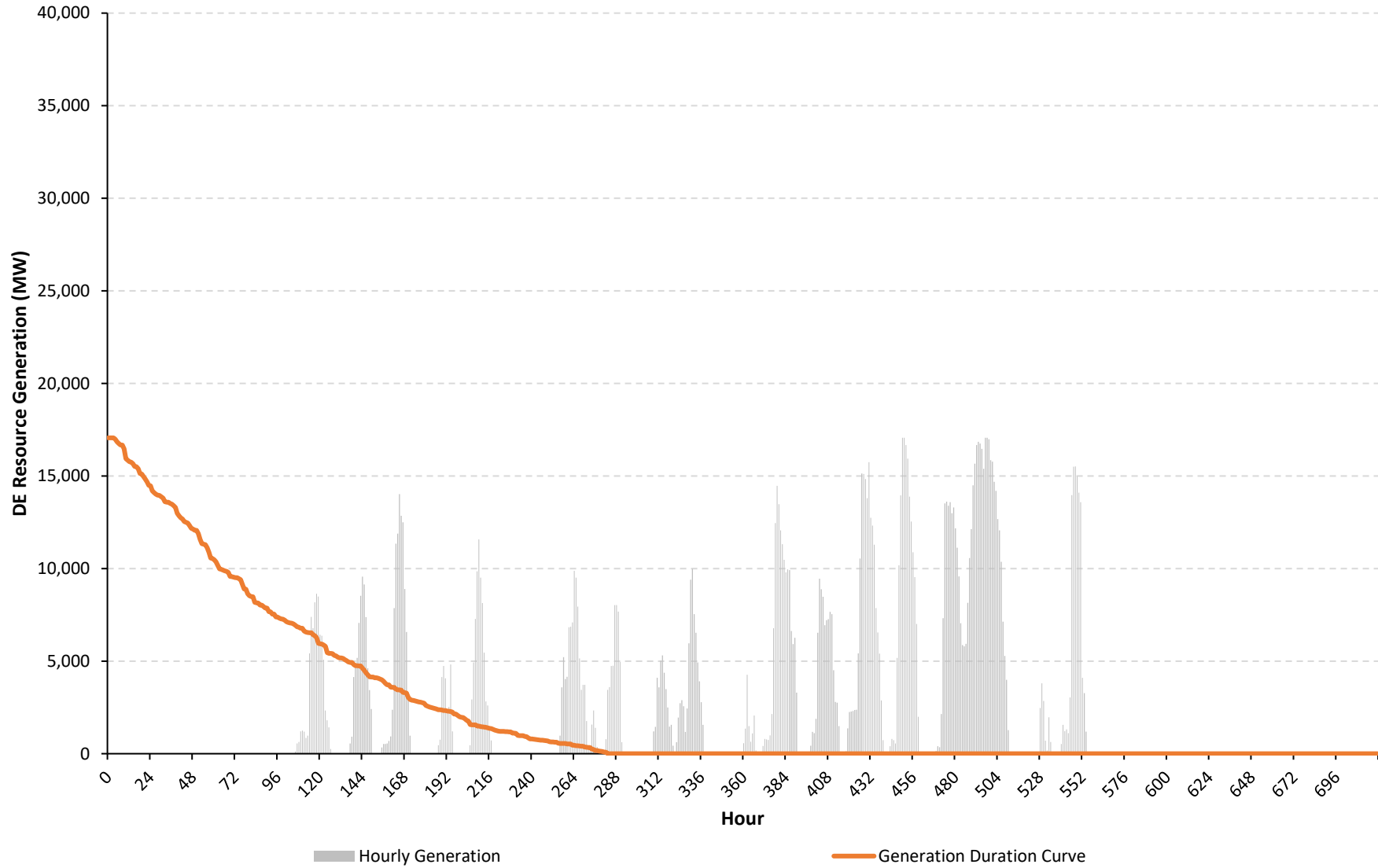
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



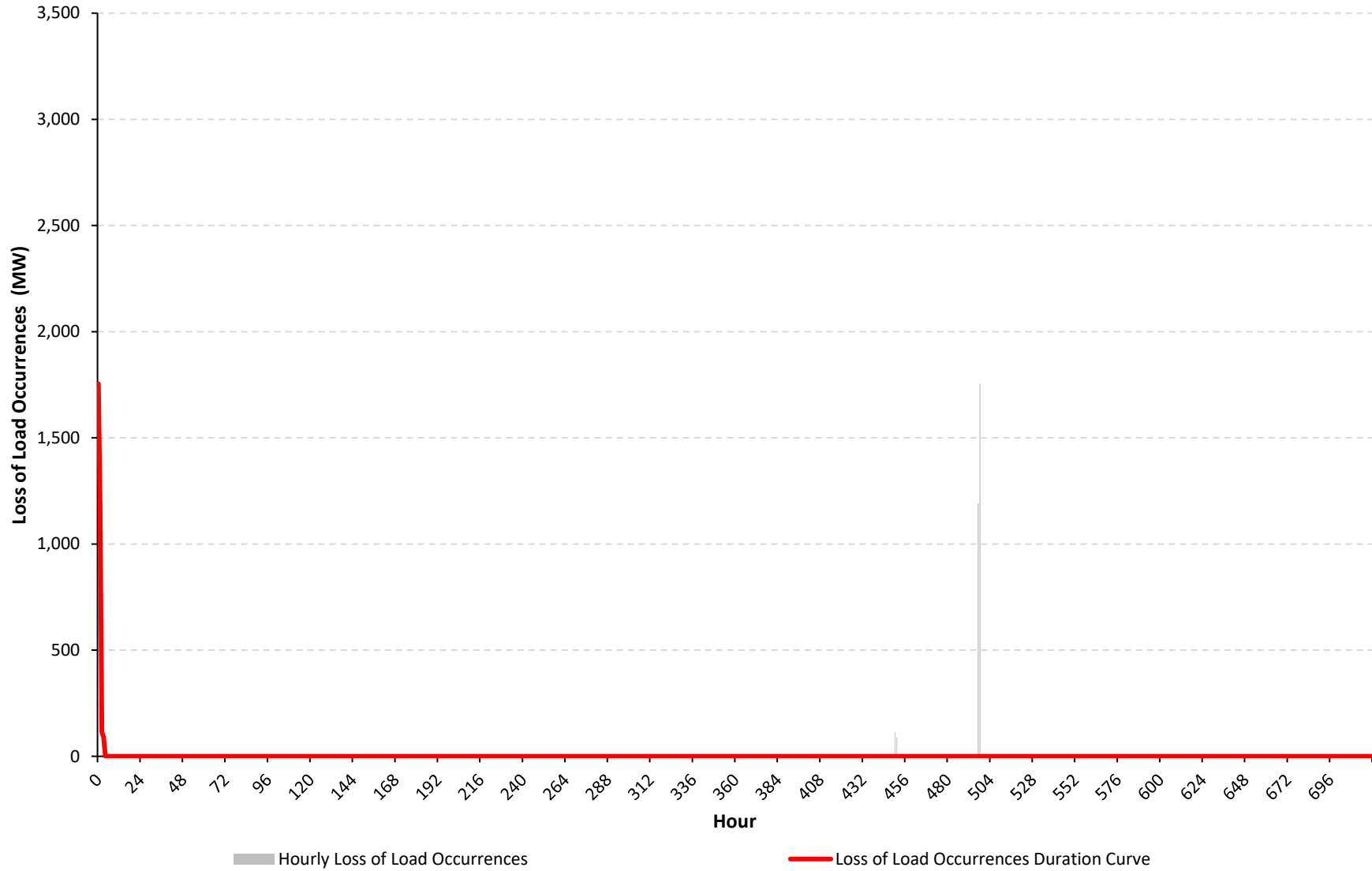
### NYCA DE Resource Generation (MW)

Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Wind Lull - State-wide



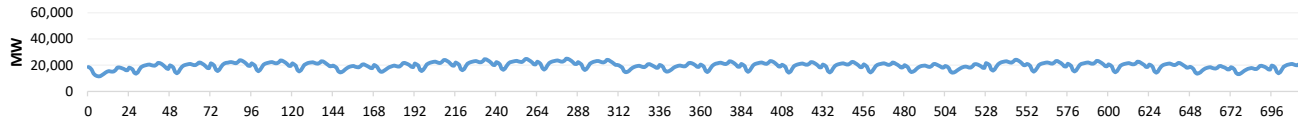
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 36 - Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

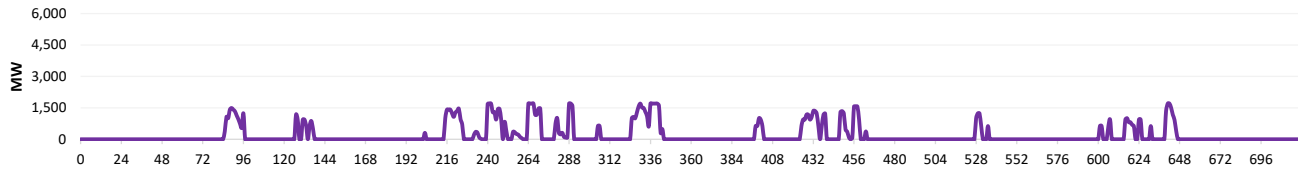
Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



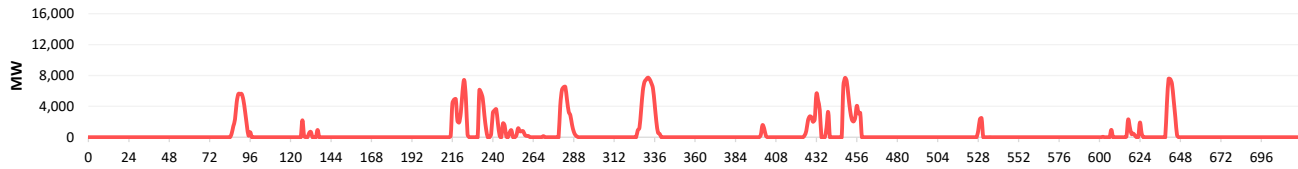
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



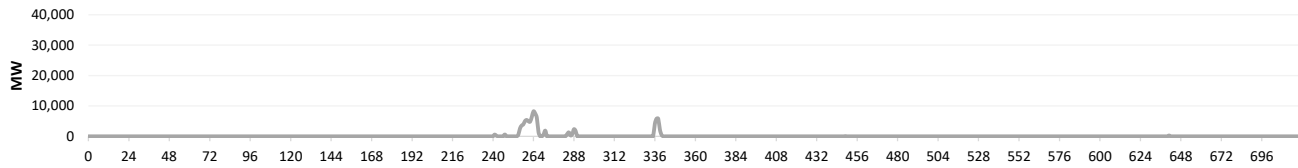
PRD Deployment	
Total Hrs.	150
Total MWh	147,726
Avg. MW	984.8

**Battery Energy Storage Deployed During Modeling Period**



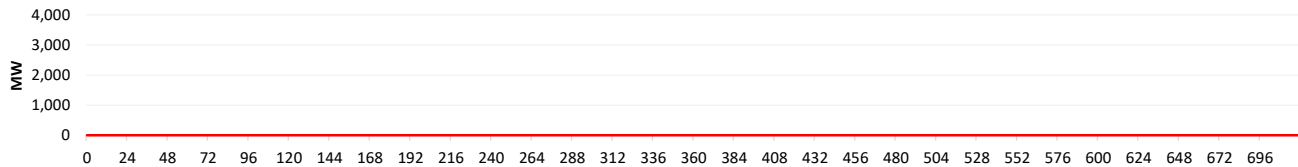
Battery Deployment	
Total Hrs.	128
Total MWh	353,002
Avg. MW	2,757.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	32
Total MWh	90,238
Avg. MW	2,819.9

**Loss of Load Occurrences During Modeling Period**

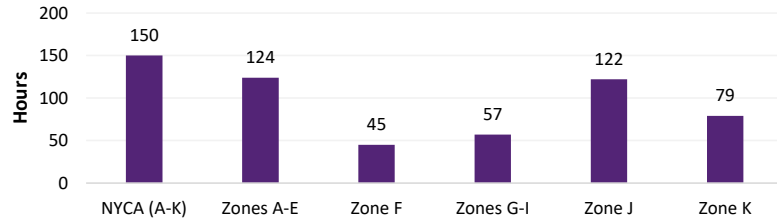


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

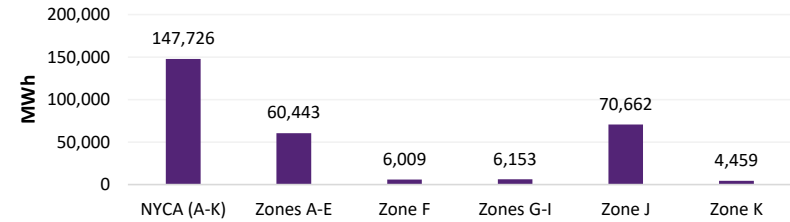
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

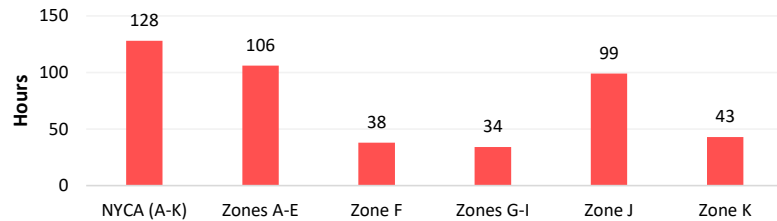
**Hours Price Responsive Demand Deployed**



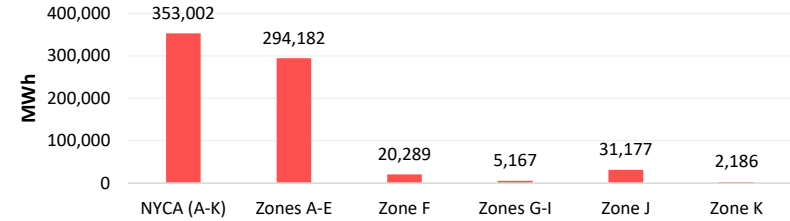
**Total MWh Price Responsive Demand Deployed**



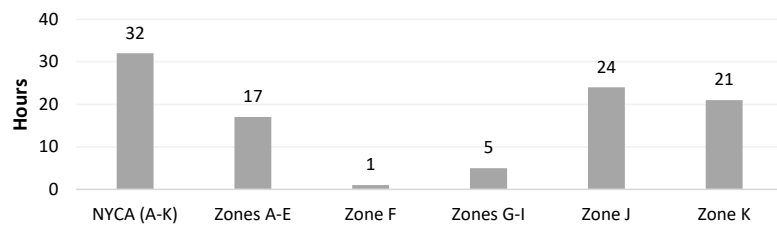
**Hours Battery Energy Storage Deployed**



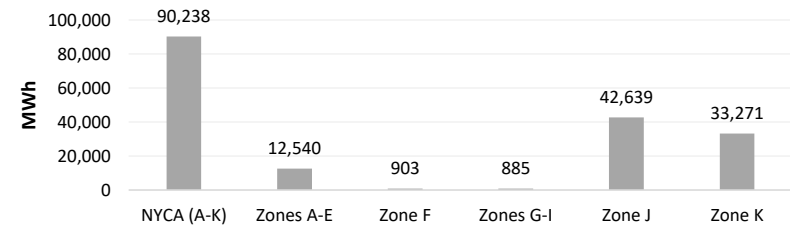
**Total MWh Battery Energy Storage Deployed**



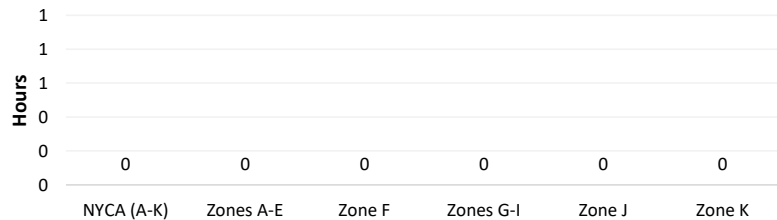
**Hours DE Resources Deployed**



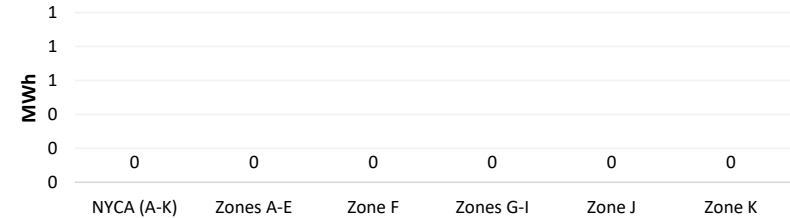
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

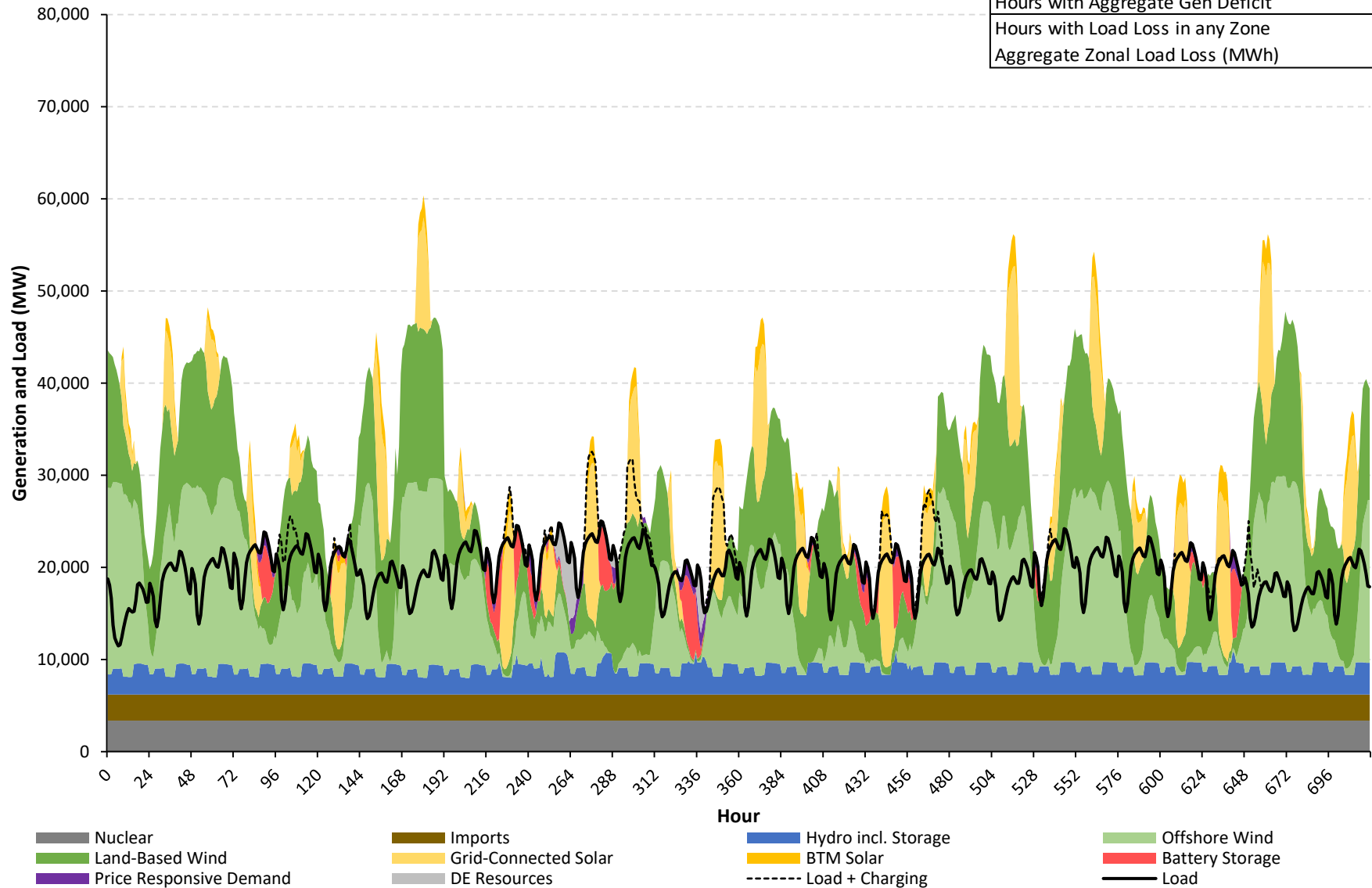


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	22,251,870
Gen Surplus/Deficit (MWh)	8,140,403
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

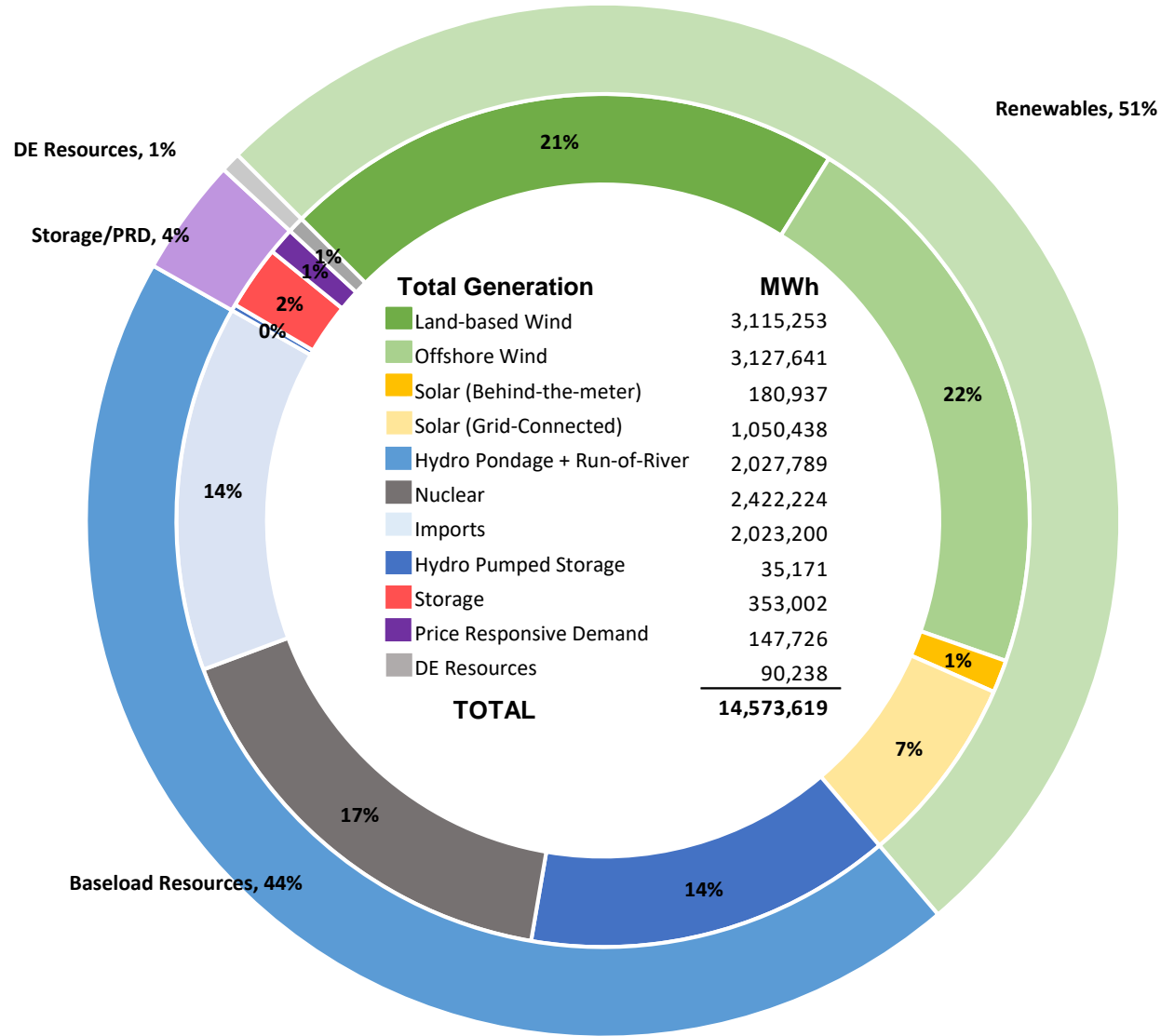


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

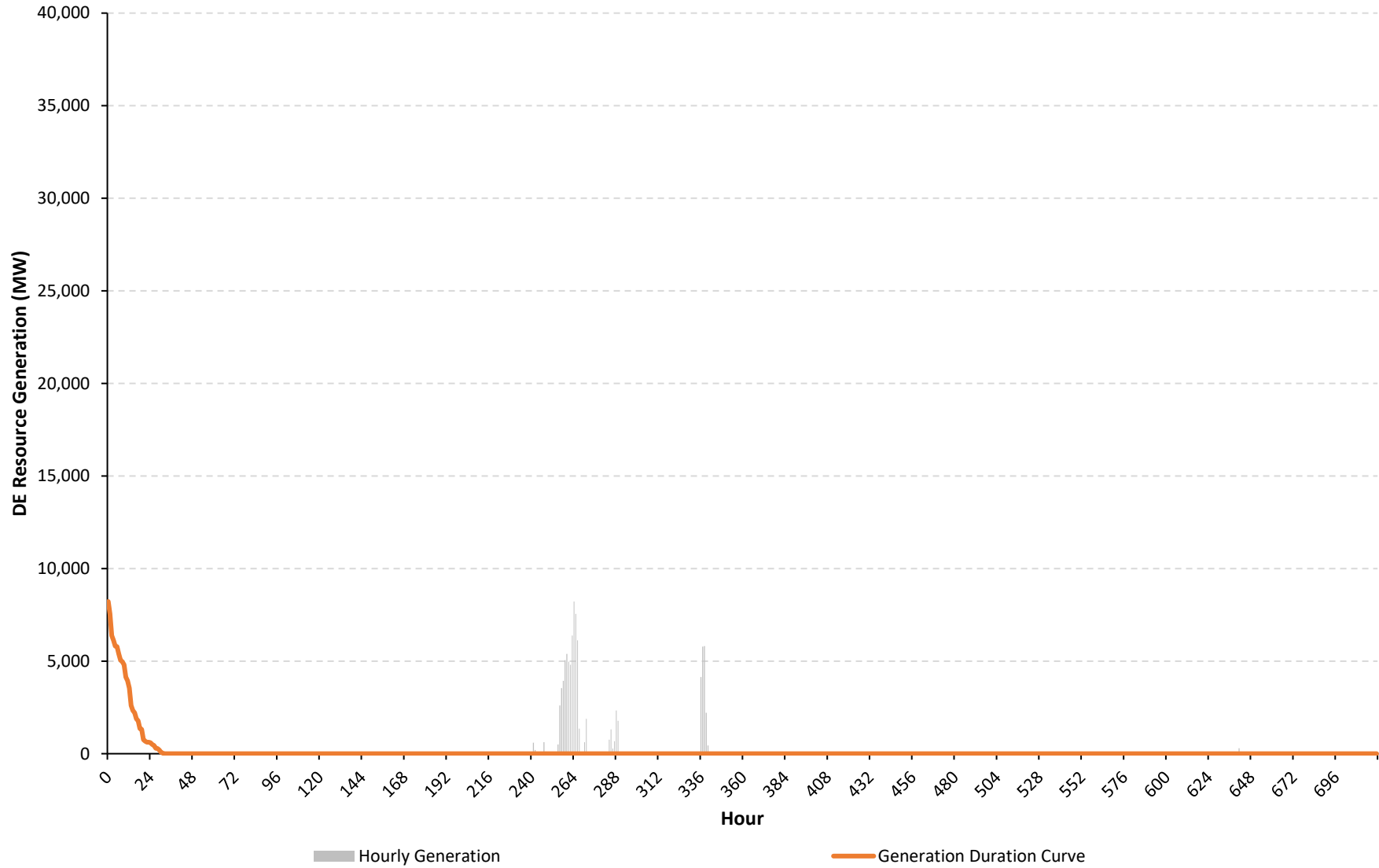
Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide





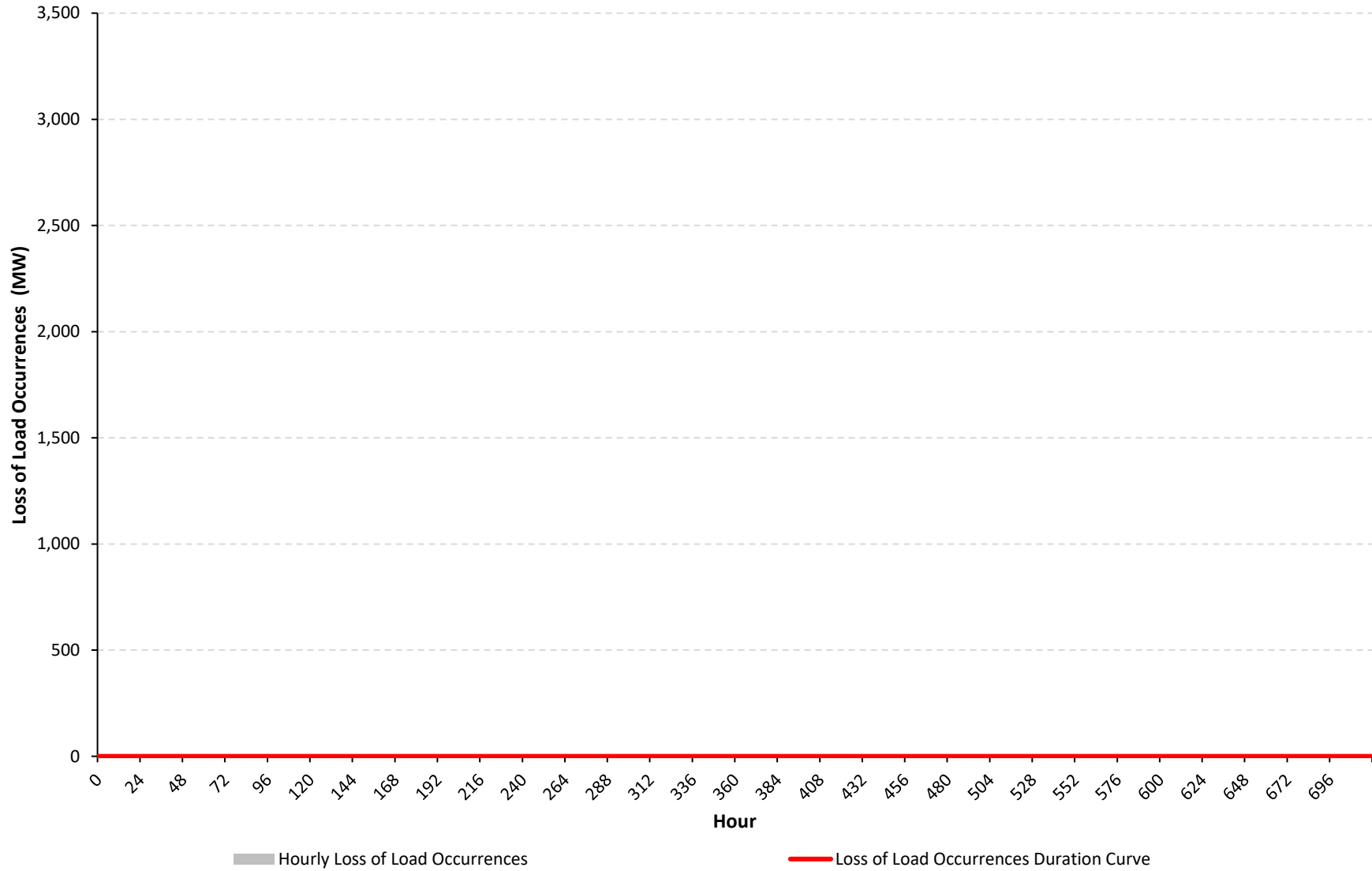
### NYCA DE Resource Generation (MW)

Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW)

Reference Case - Winter - CCP2 Resource Set - Wind Lull - State-wide



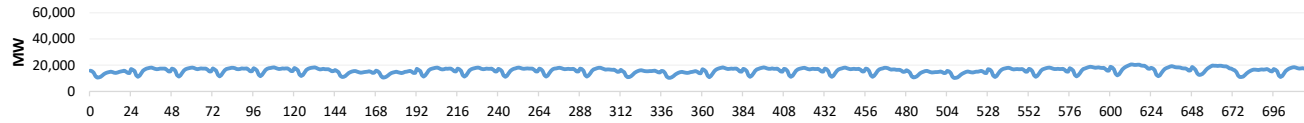
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 37 - Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

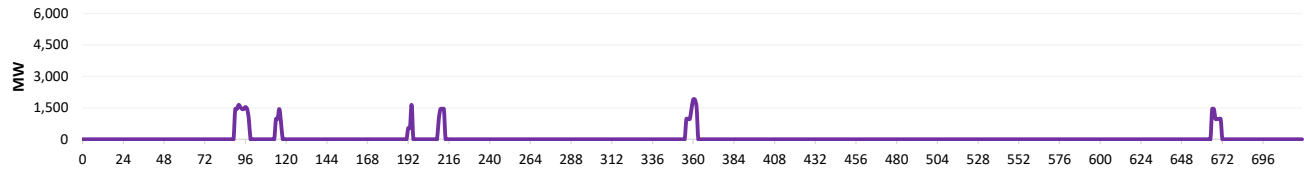
Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



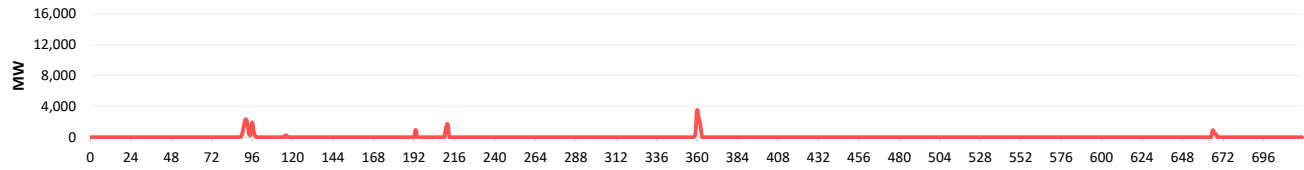
Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



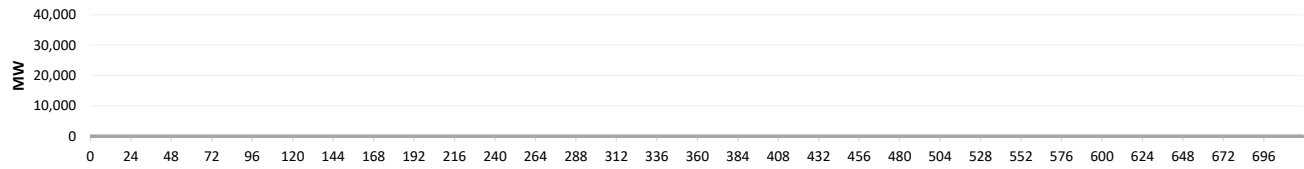
PRD Deployment	
Total Hrs.	33
Total MWh	41,565
Avg. MW	1,259.5

**Battery Energy Storage Deployed During Modeling Period**



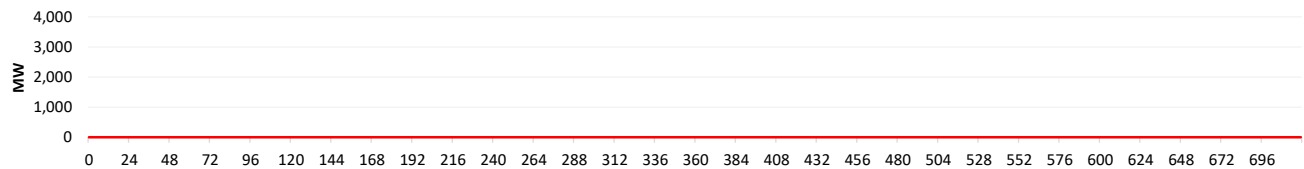
Battery Deployment	
Total Hrs.	22
Total MWh	23,561
Avg. MW	1,071.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

**Loss of Load Occurrences During Modeling Period**

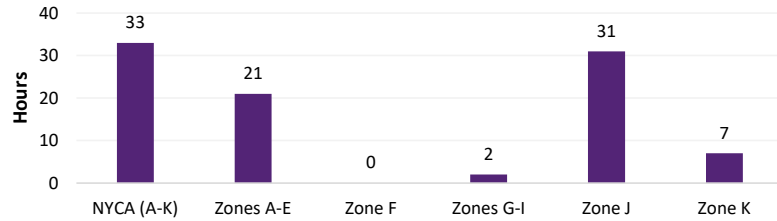


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

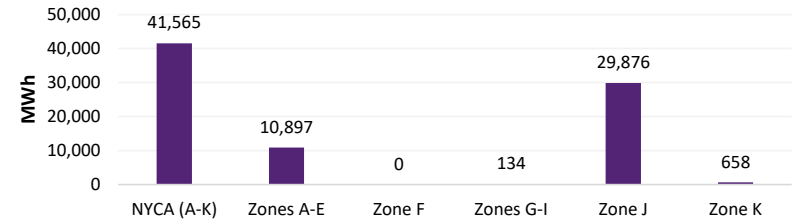
### Full Period Results Summary

Case Name: Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

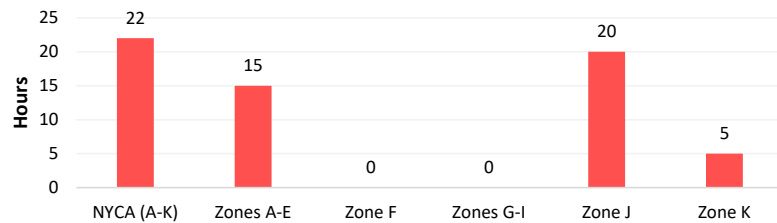
**Hours Price Responsive Demand Deployed**



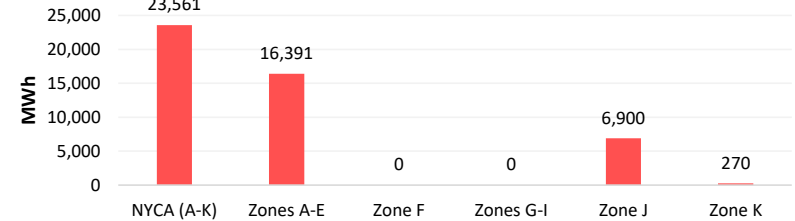
**Total MWh Price Responsive Demand Deployed**



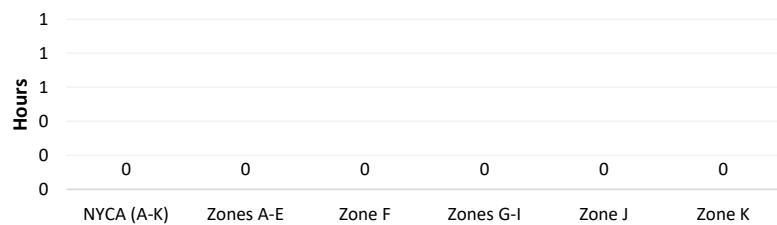
**Hours Battery Energy Storage Deployed**



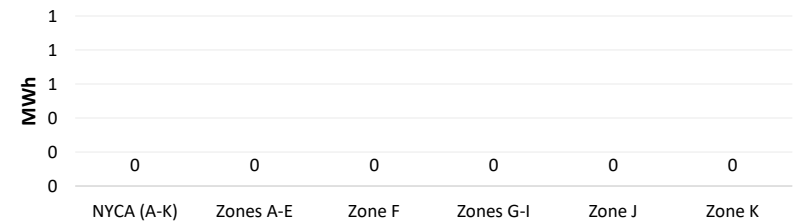
**Total MWh Battery Energy Storage Deployed**



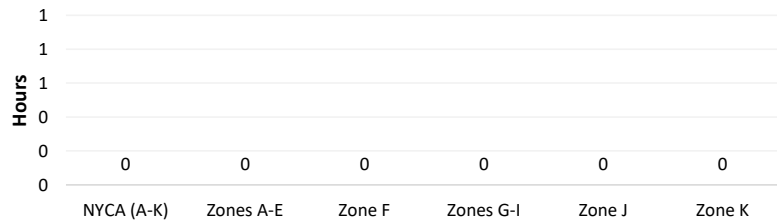
**Hours DE Resources Deployed**



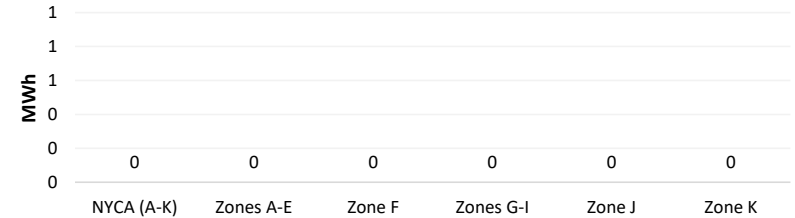
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

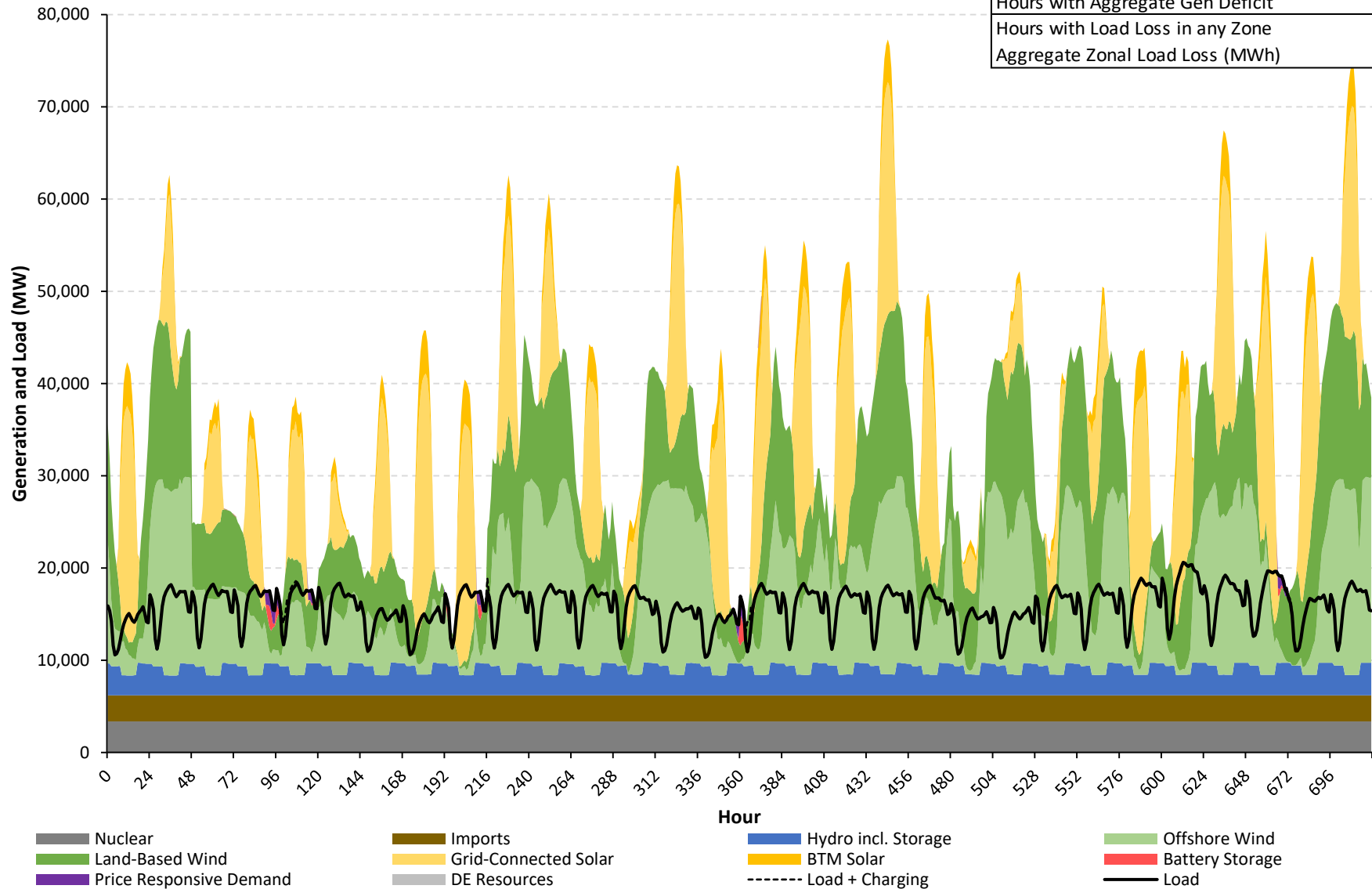


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	26,042,085
Gen Surplus/Deficit (MWh)	14,656,845
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

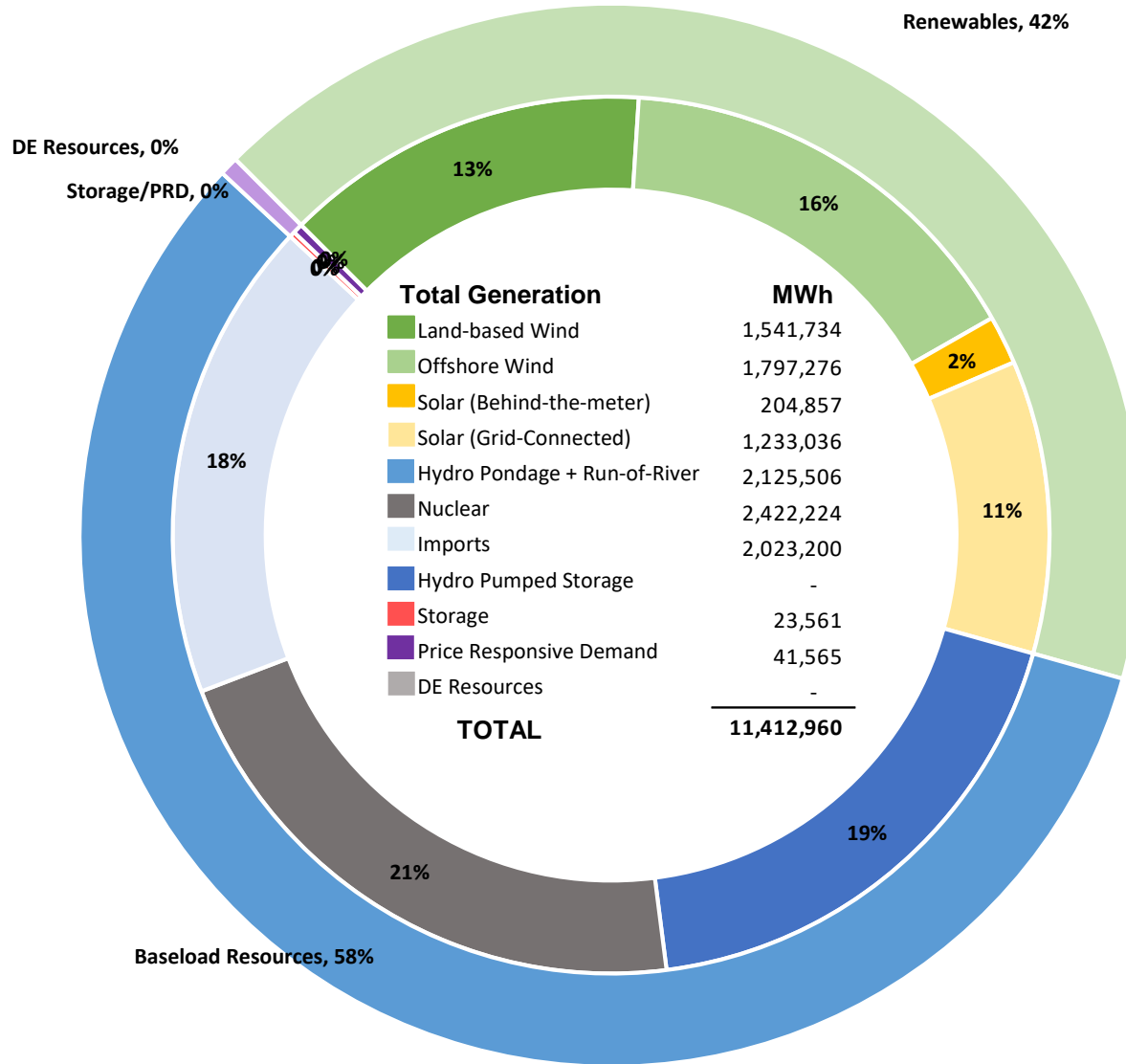


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide



### NYCA DE Resource Generation (MW)

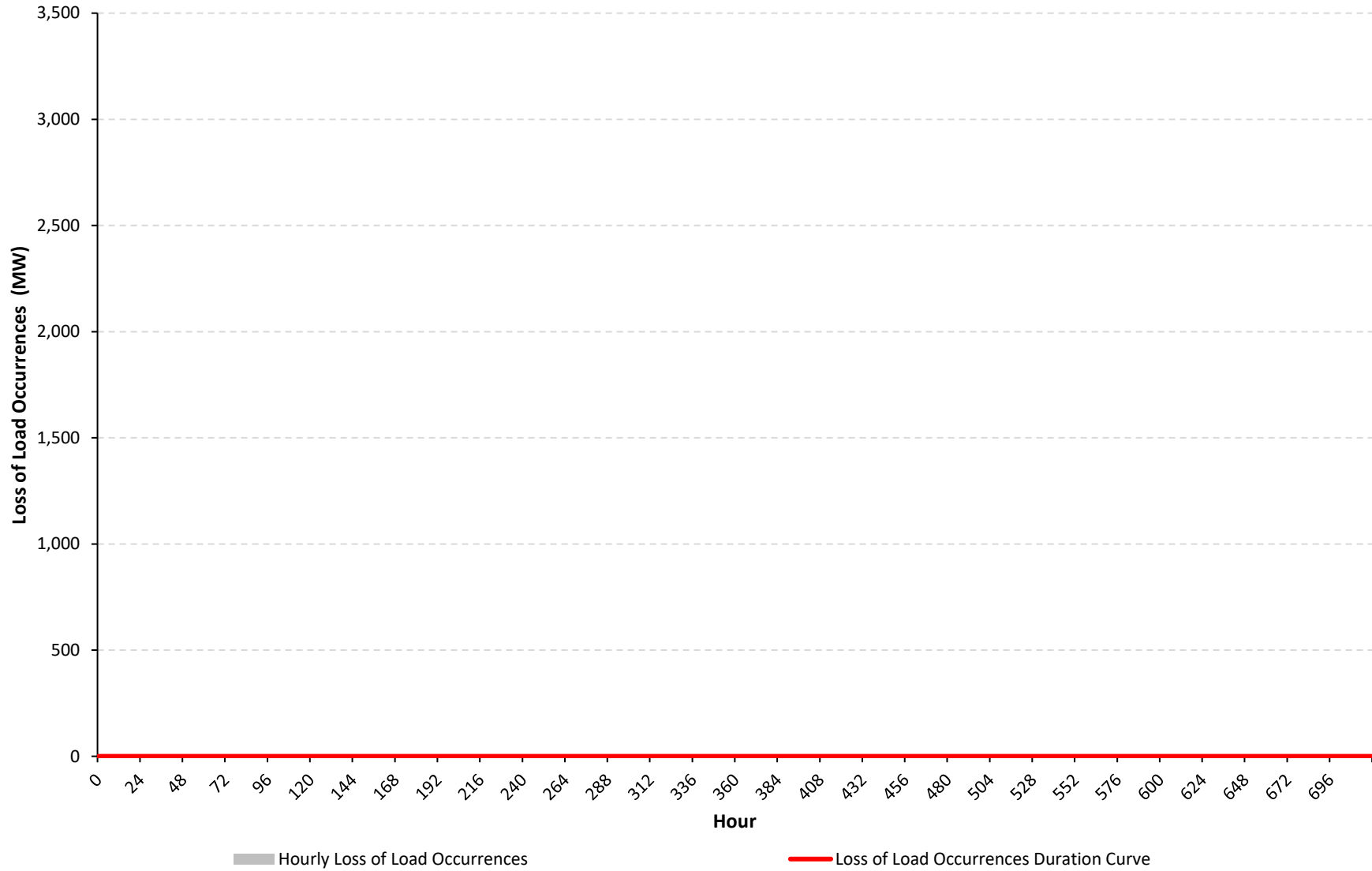
Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide





### NYCA Loss of Load Occurrences (MW)

Reference Case - Shoulder - CCP2 Resource Set - Wind Lull - State-wide



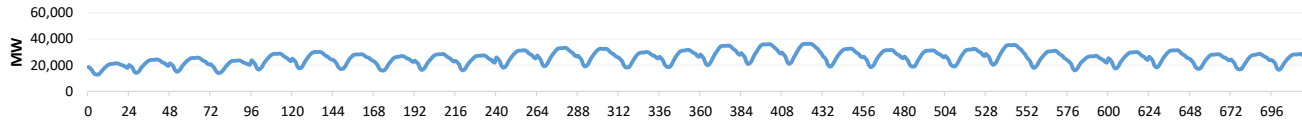
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 38 - Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm**

### Hourly Results Summary

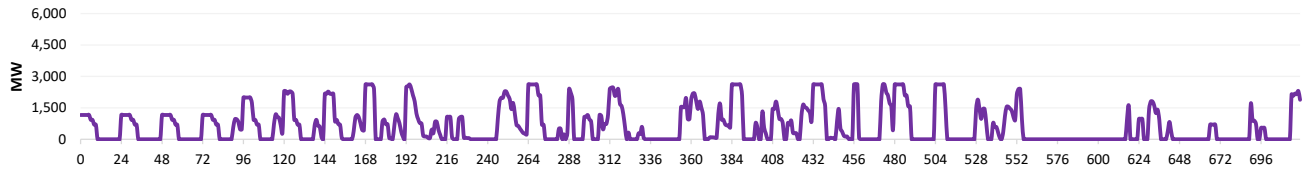
Case Name: Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

**Load During Modeling Period**



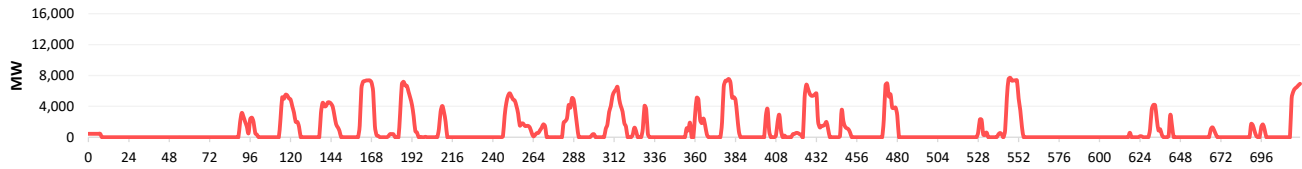
Loss of Load	
Total Hrs.	720
Total MWh	18,257,563
Avg. MW	25,357.7

**Price Responsive Demand Deployed During Modeling Period**



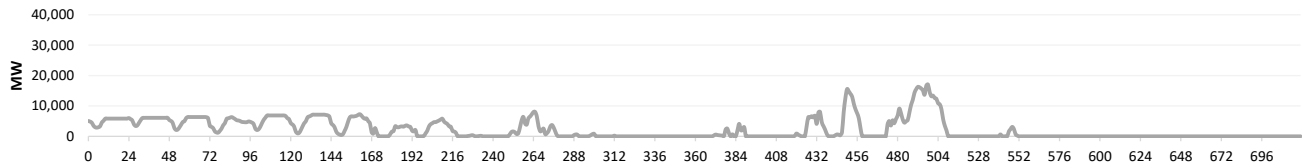
PRD Deployment	
Total Hrs.	368
Total MWh	467,529
Avg. MW	1,270.5

**Battery Energy Storage Deployed During Modeling Period**



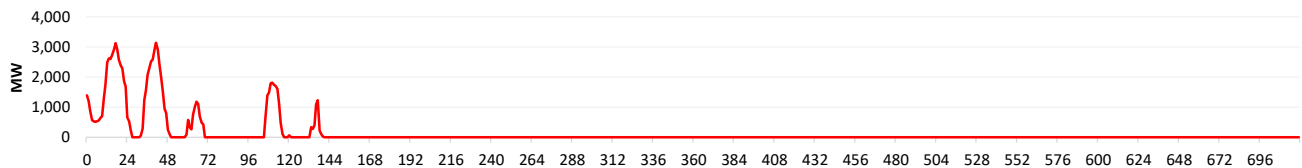
Battery Deployment	
Total Hrs.	257
Total MWh	726,867
Avg. MW	2,828.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	349
Total MWh	1,637,221
Avg. MW	4,691.2

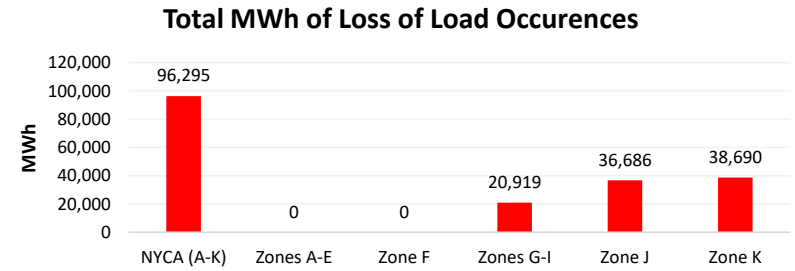
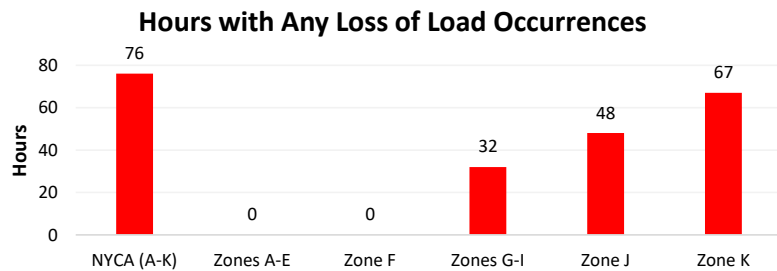
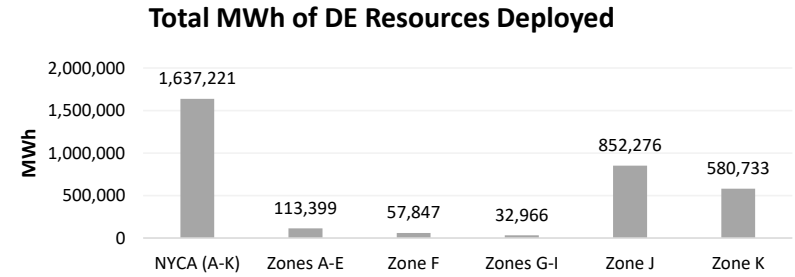
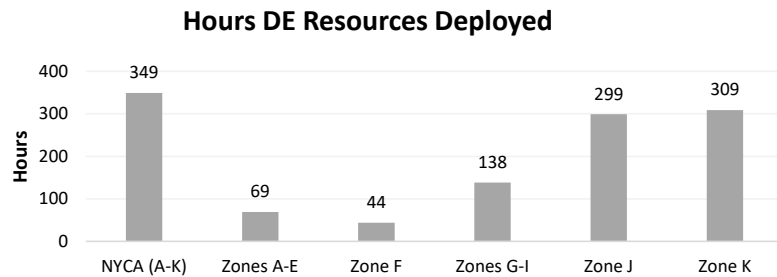
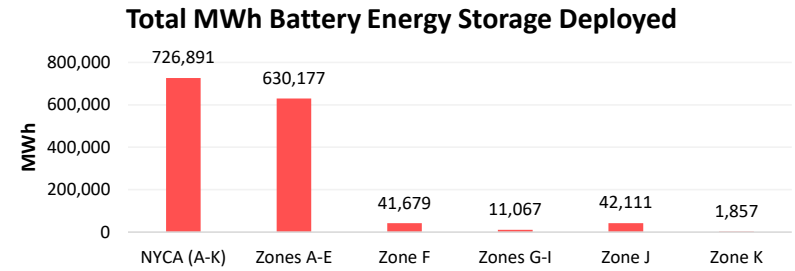
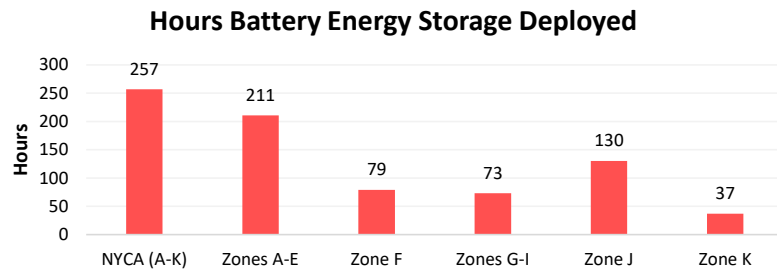
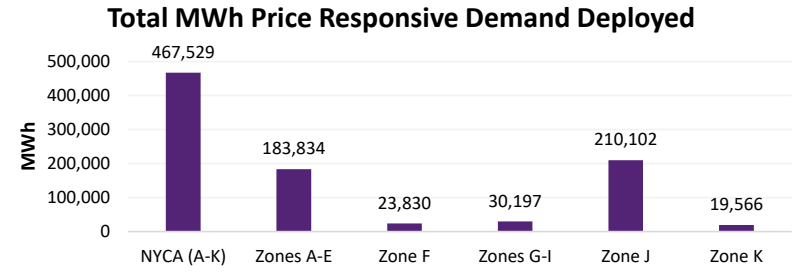
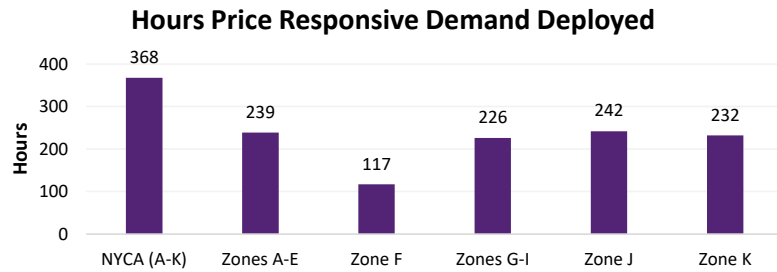
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	76
Total MWh	96,295
Avg. MW	1,267.0

### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

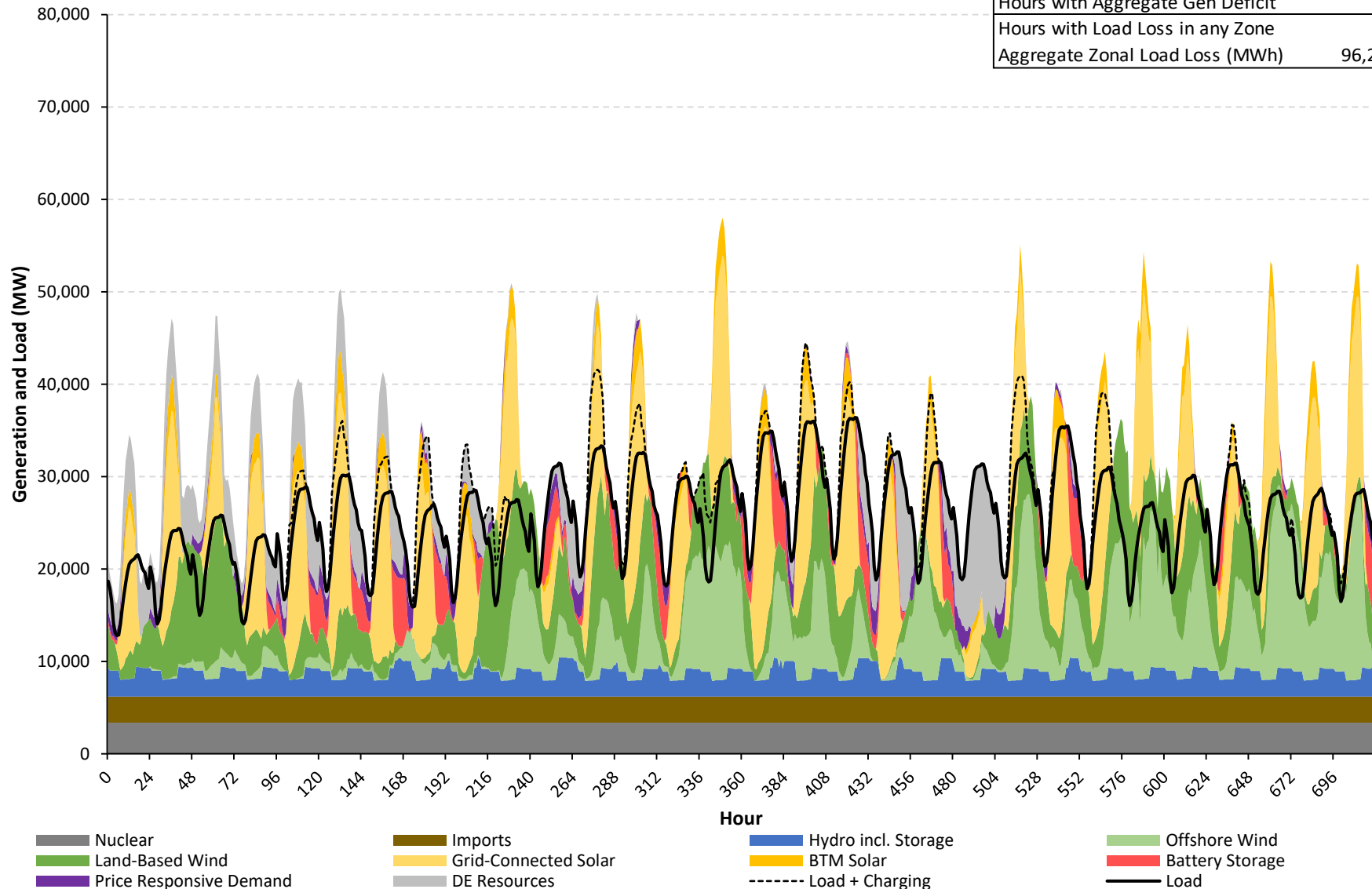


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm

Aggregate Load in Period (MWh)	18,257,563
Aggregate Gen in Period (MWh)	22,365,866
Gen Surplus/Deficit (MWh)	4,108,303
Hours with Aggregate Gen Deficit	10
Hours with Load Loss in any Zone	76
Aggregate Zonal Load Loss (MWh)	96,295

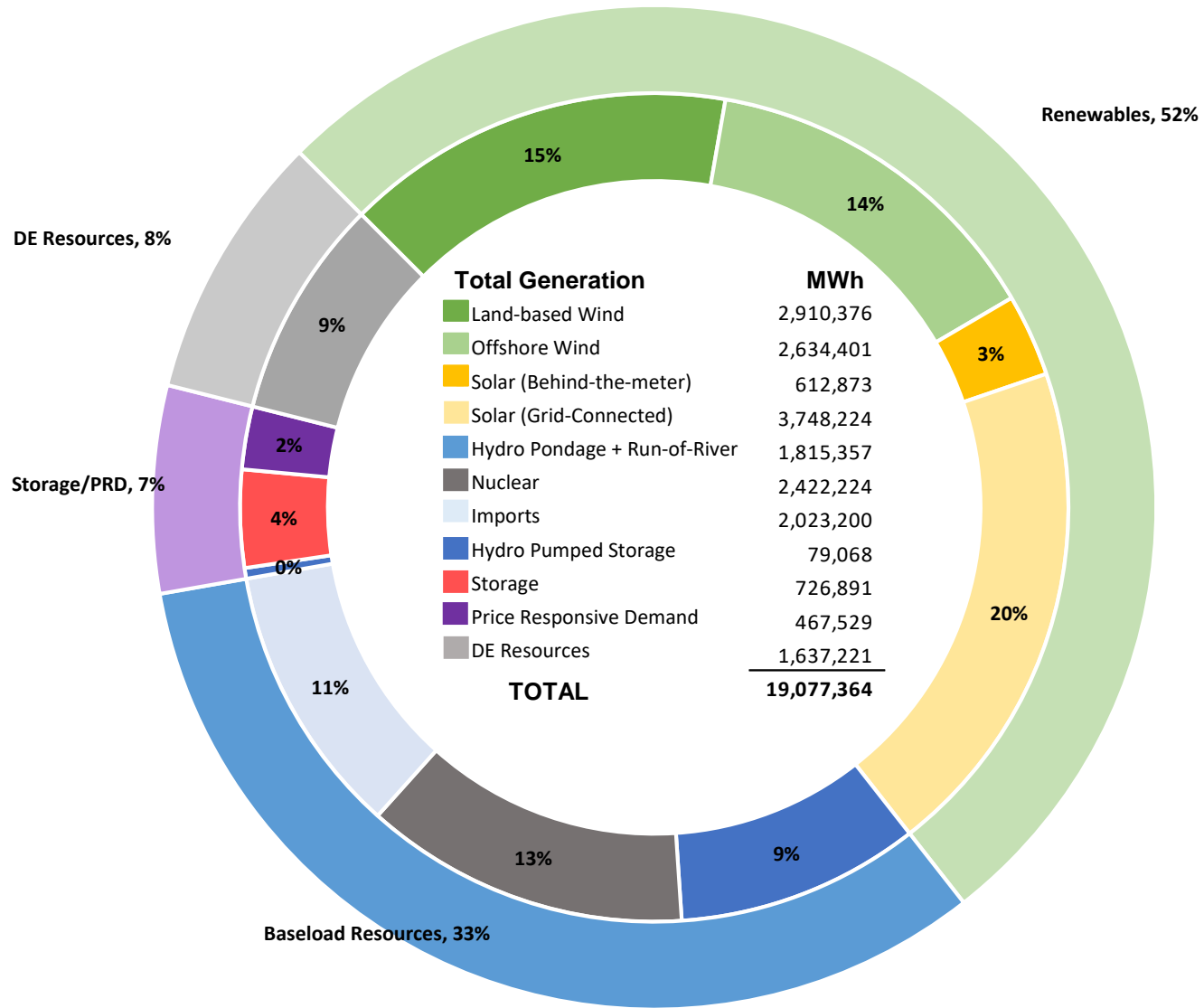


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

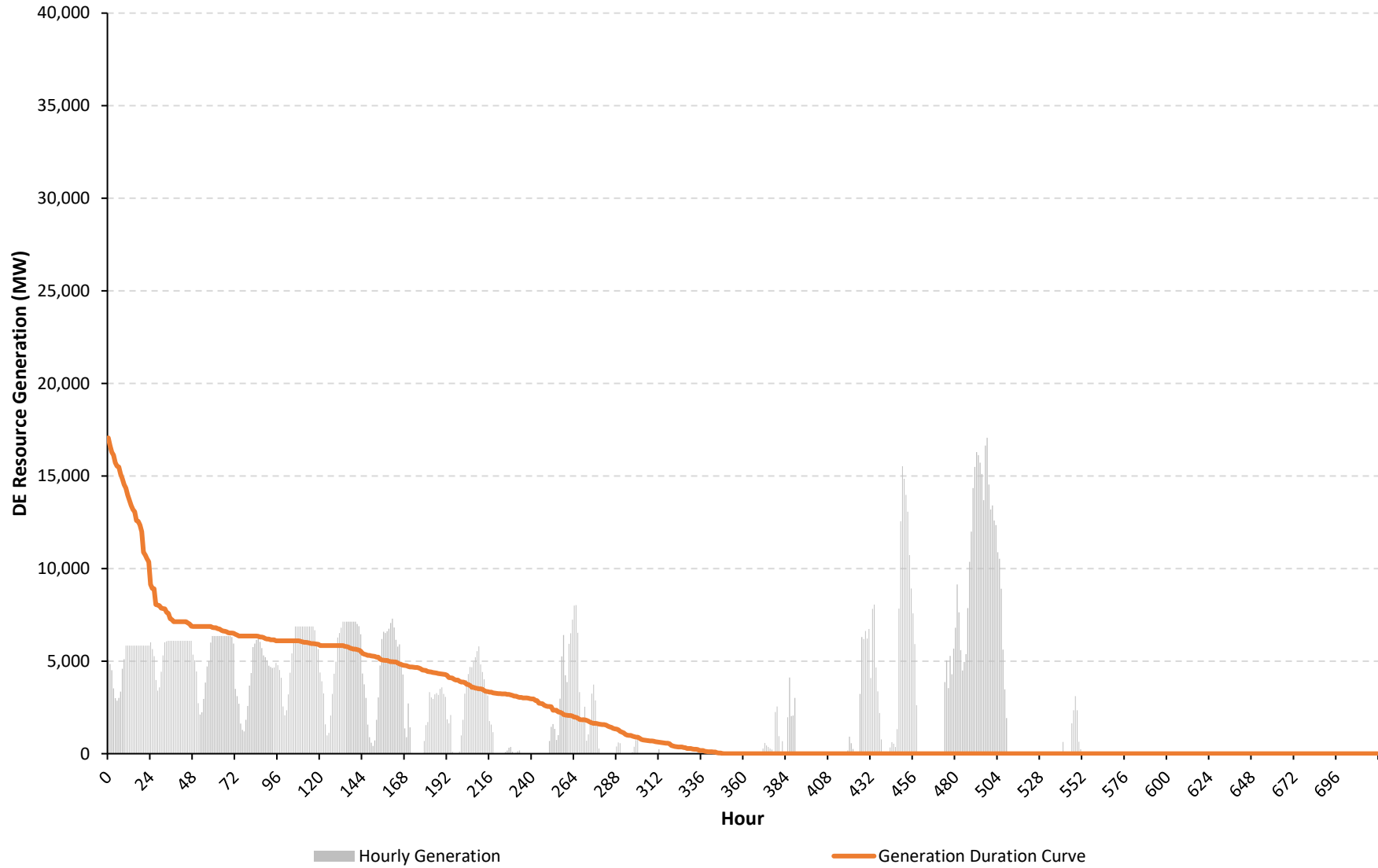
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm



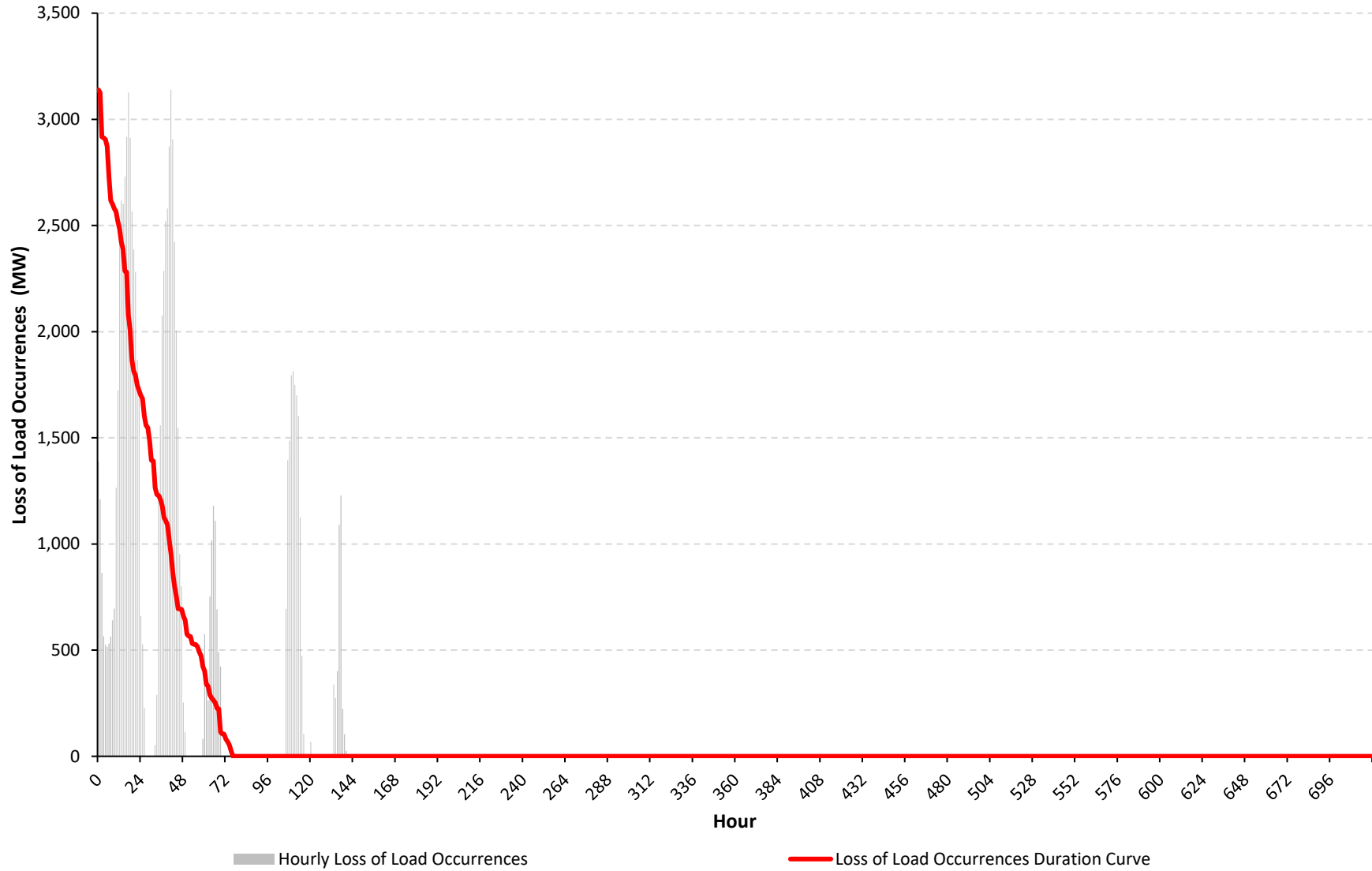
### NYCA DE Resource Generation (MW)

Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm



### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Hurricane - Coastal Wind Storm





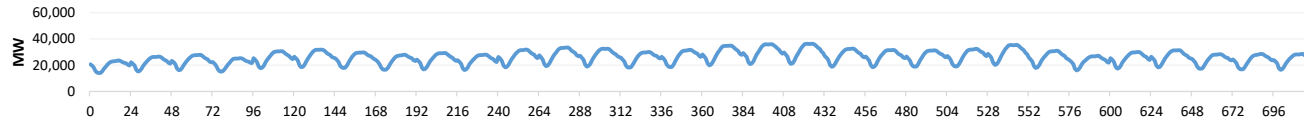
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 39 - Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate**

**Hourly Results Summary**

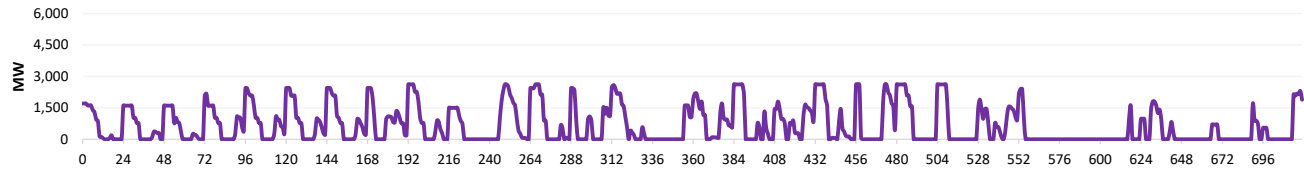
Case Name: Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



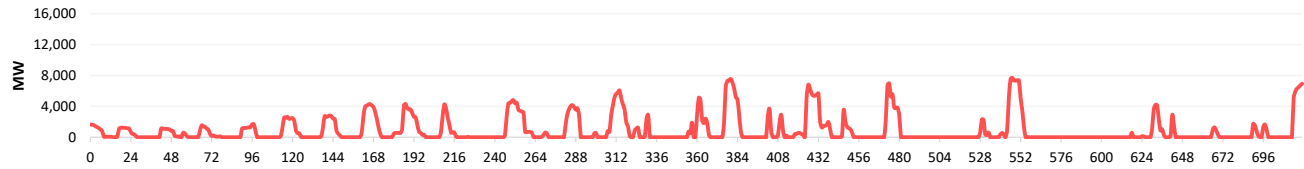
Loss of Load	
Total Hrs.	720
Total MWh	18,580,659
Avg. MW	25,806.5

**Price Responsive Demand Deployed During Modeling Period**



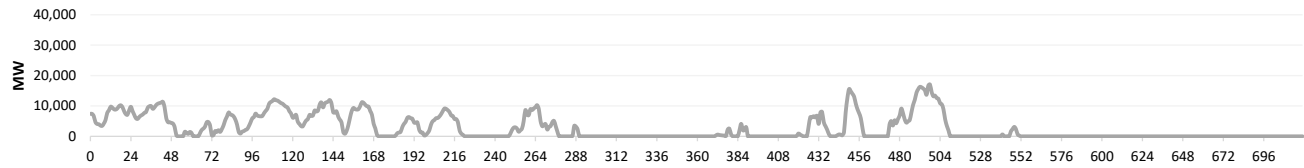
PRD Deployment	
Total Hrs.	372
Total MWh	490,434
Avg. MW	1,318.4

**Battery Energy Storage Deployed During Modeling Period**



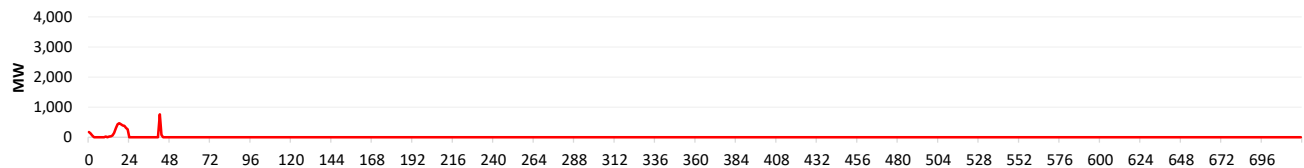
Battery Deployment	
Total Hrs.	304
Total MWh	662,032
Avg. MW	2,177.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	330
Total MWh	1,975,003
Avg. MW	5,984.9

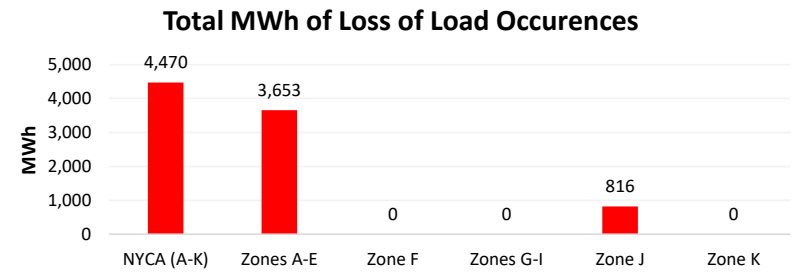
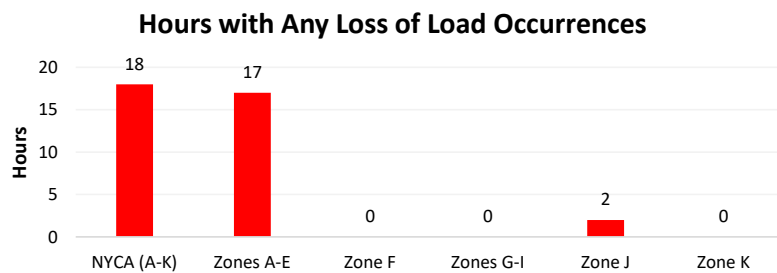
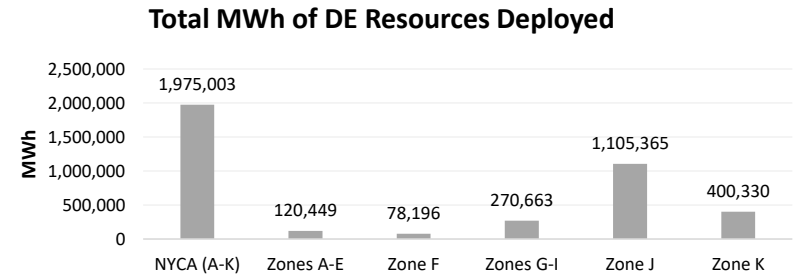
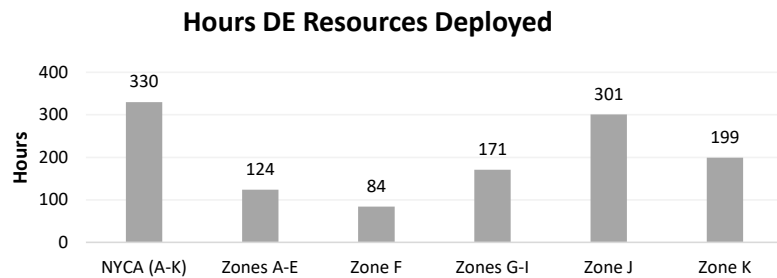
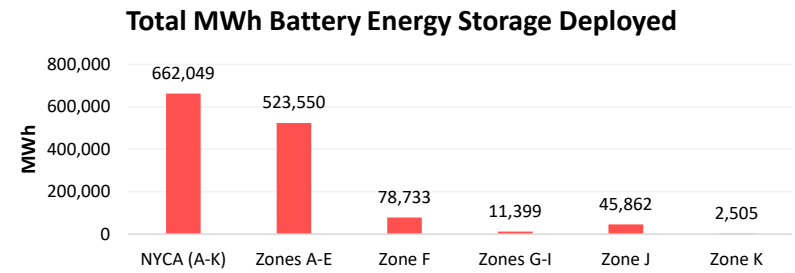
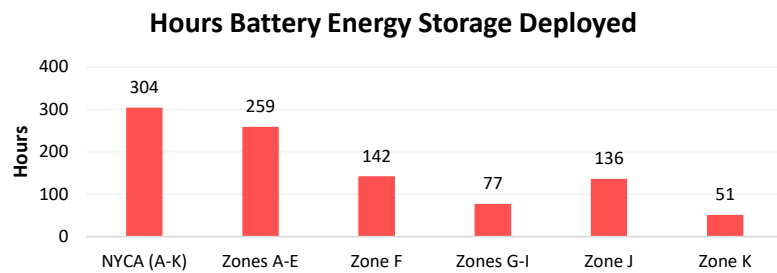
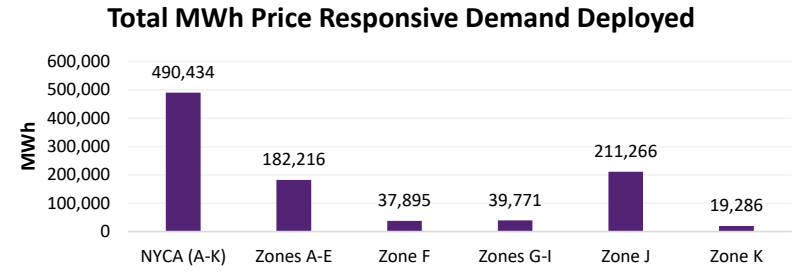
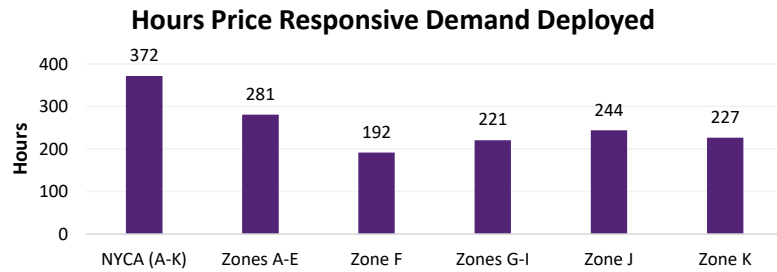
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	18
Total MWh	4,470
Avg. MW	248.3

### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

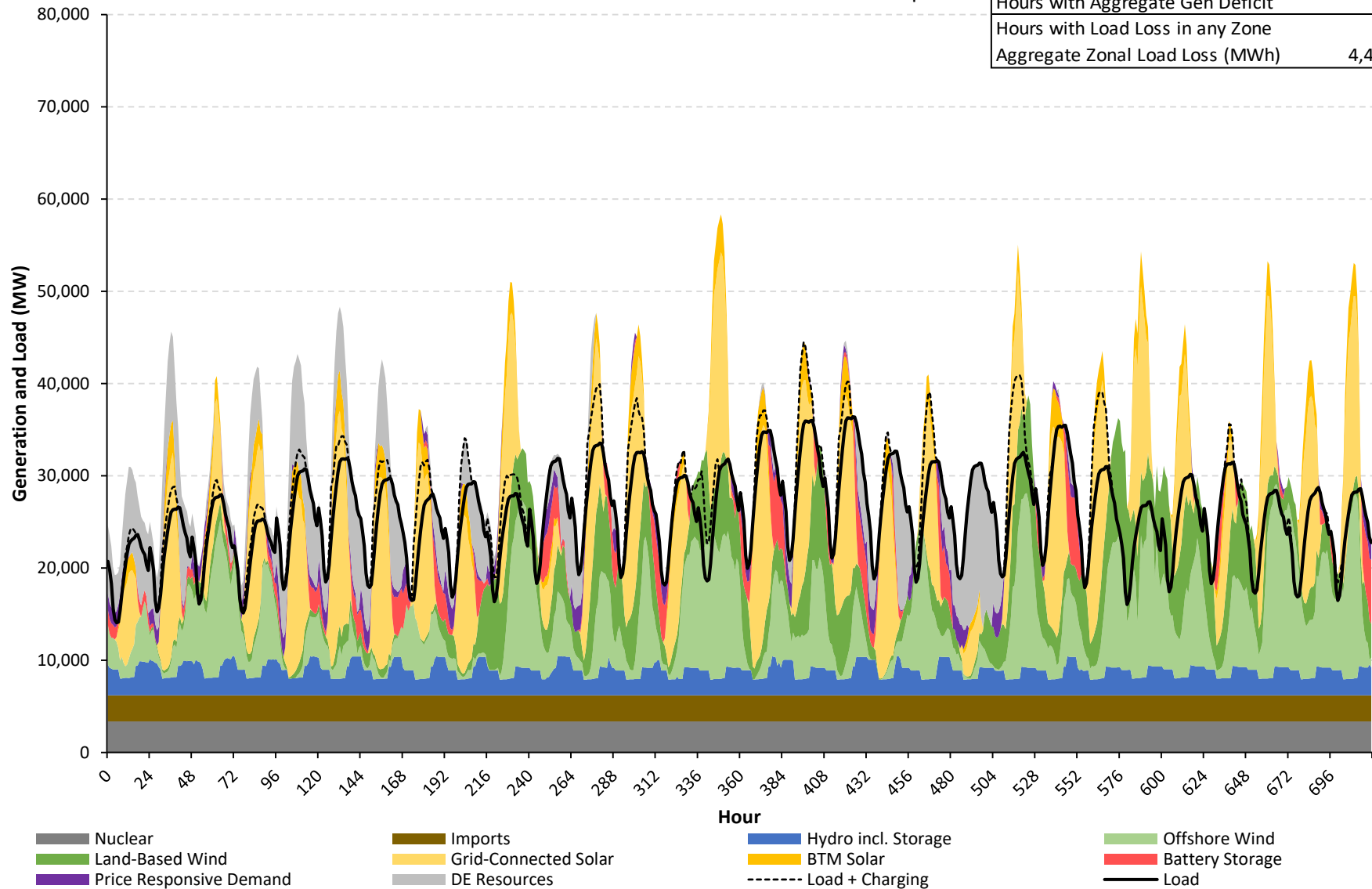


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	18,580,659
Aggregate Gen in Period (MWh)	22,479,103
Gen Surplus/Deficit (MWh)	3,898,443
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	18
Aggregate Zonal Load Loss (MWh)	4,470

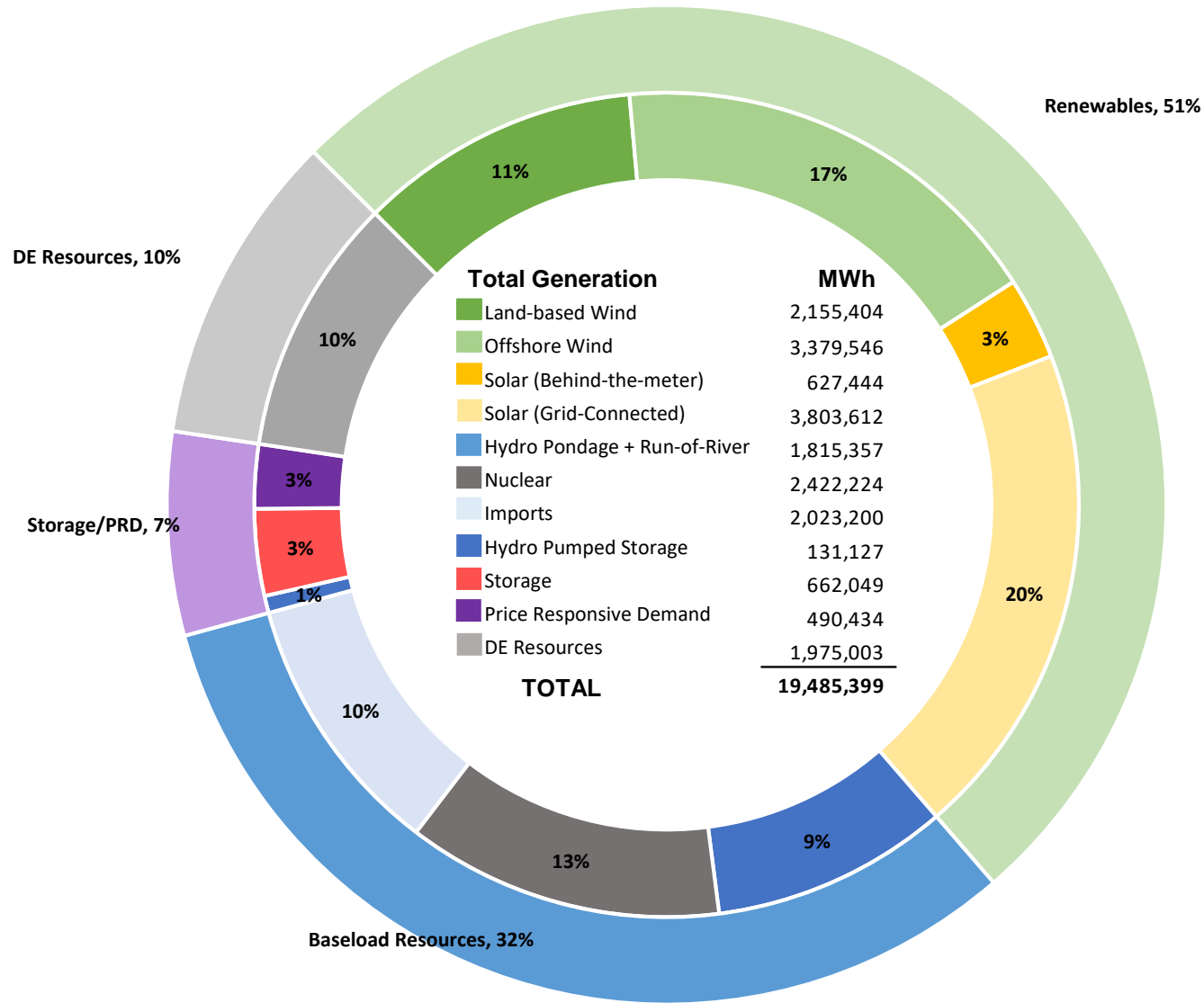


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

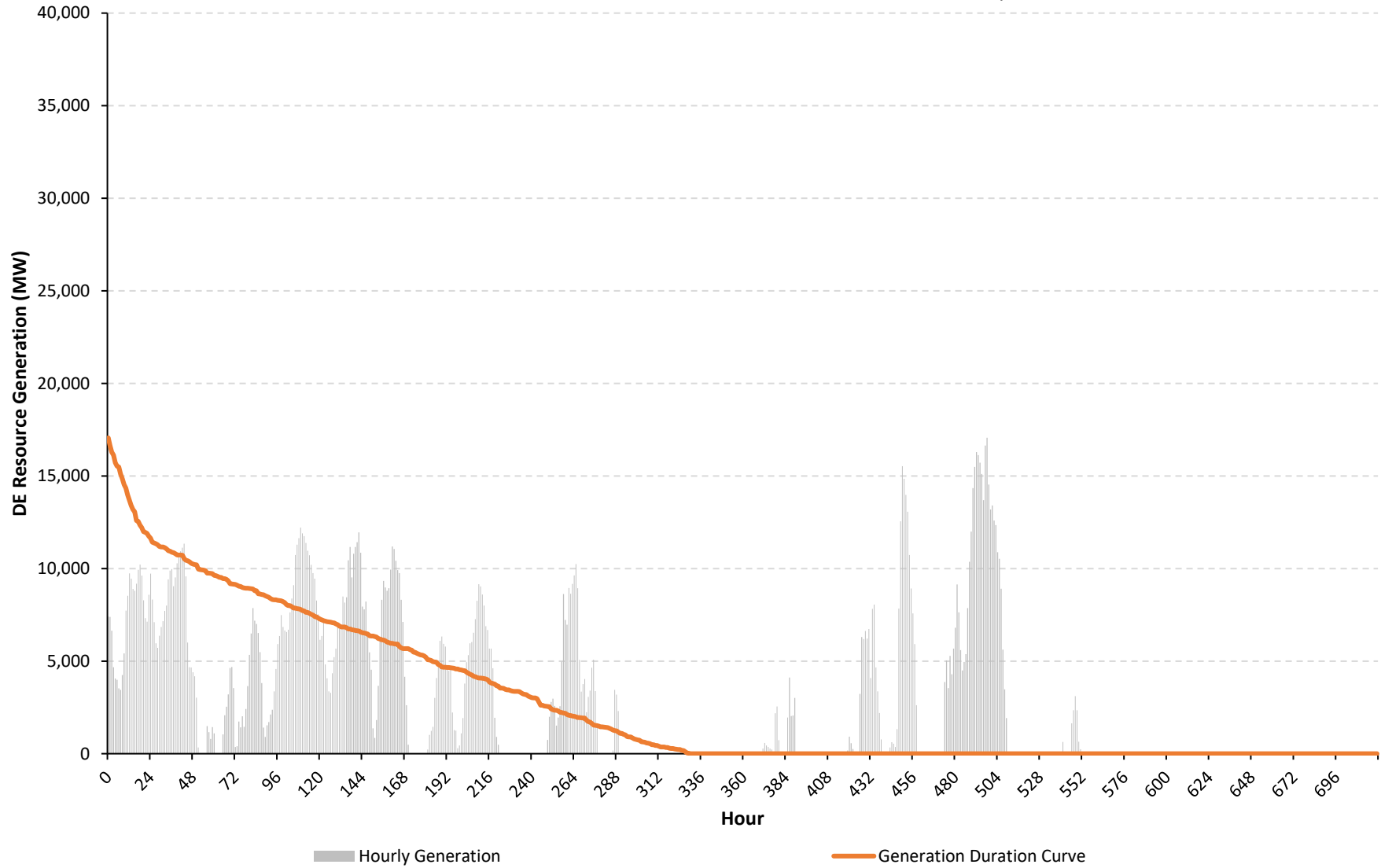
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



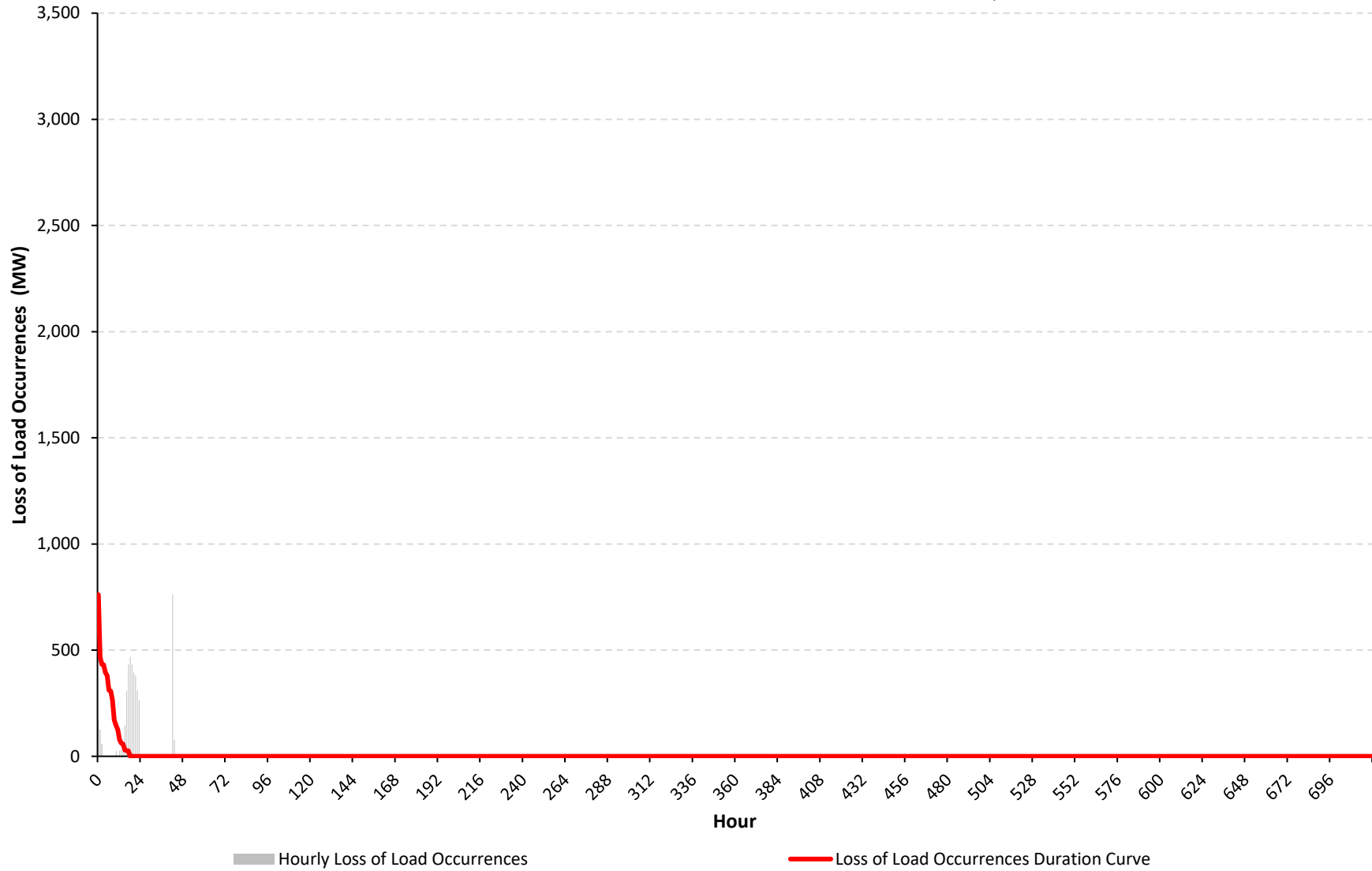
### NYCA DE Resource Generation (MW)

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm - Upstate



## **Appendix C. Diagnostic Charts for All Cases**

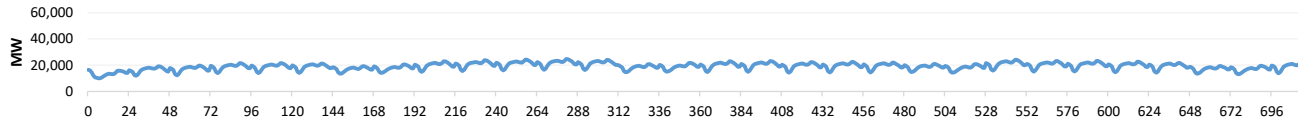
### **Case 40 - Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate**



### Hourly Results Summary

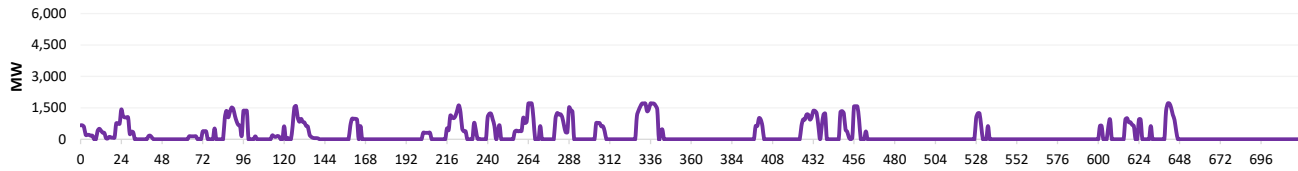
Case Name: Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	13,727,028
Avg. MW	19,065.3

**Price Responsive Demand Deployed During Modeling Period**



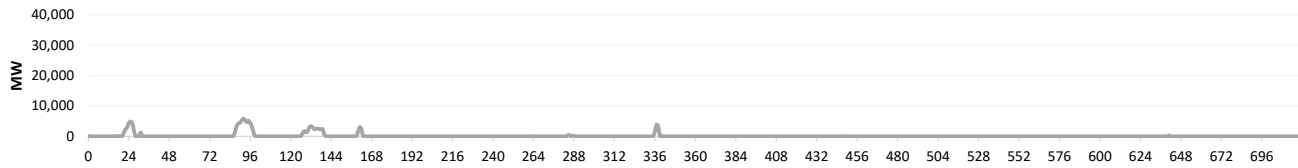
PRD Deployment	
Total Hrs.	215
Total MWh	168,851
Avg. MW	785.4

**Battery Energy Storage Deployed During Modeling Period**



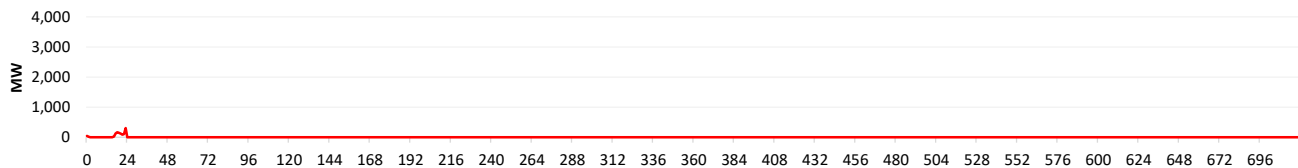
Battery Deployment	
Total Hrs.	188
Total MWh	358,707
Avg. MW	1,908.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	56
Total MWh	119,192
Avg. MW	2,128.4

**Loss of Load Occurrences During Modeling Period**

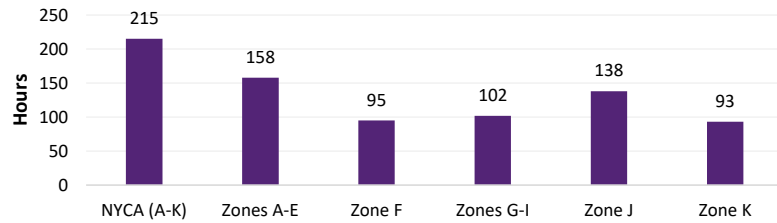


Loss of Load Occurrences	
Total Hrs.	10
Total MWh	1,146
Avg. MW	114.6

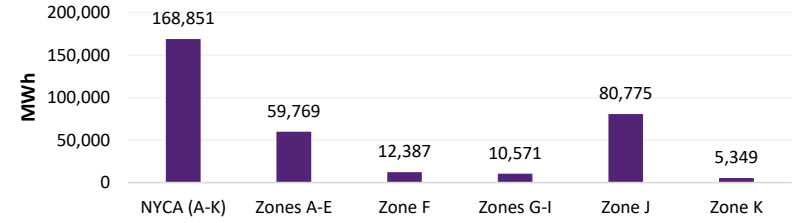
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

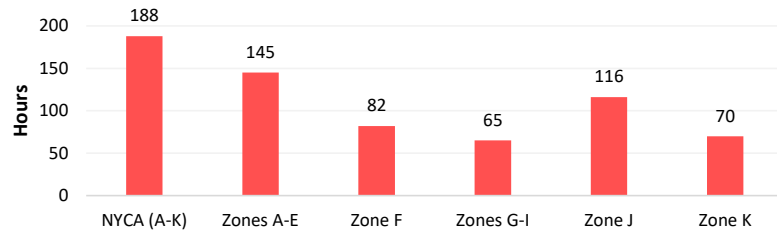
**Hours Price Responsive Demand Deployed**



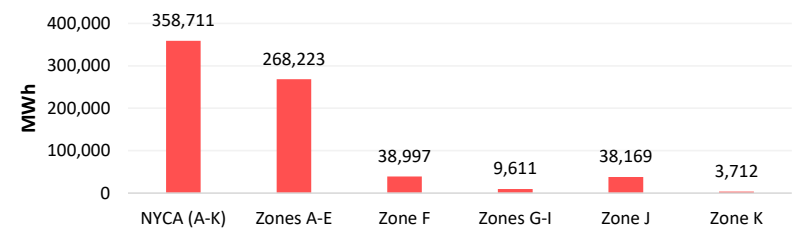
**Total MWh Price Responsive Demand Deployed**



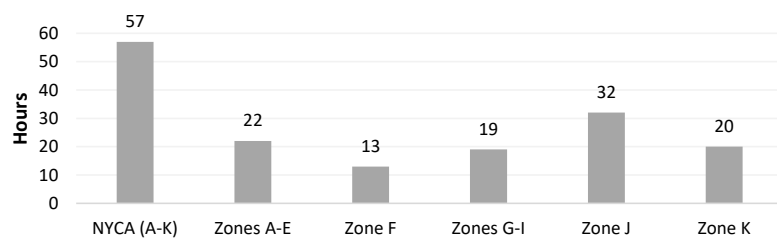
**Hours Battery Energy Storage Deployed**



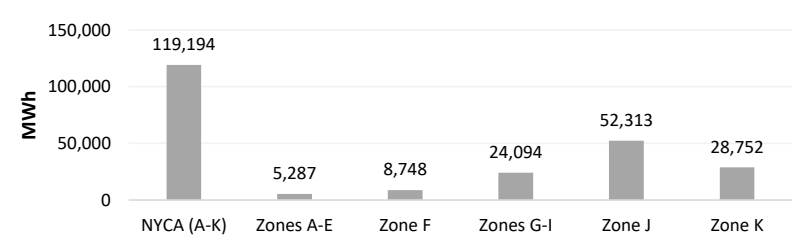
**Total MWh Battery Energy Storage Deployed**



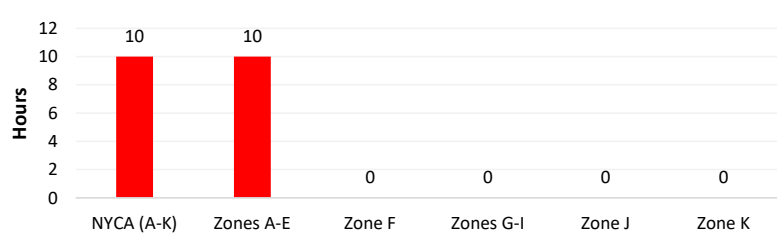
**Hours DE Resources Deployed**



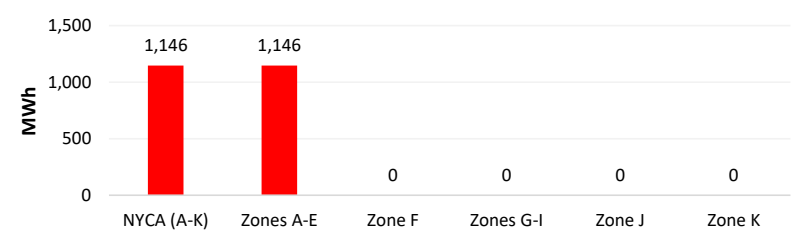
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**

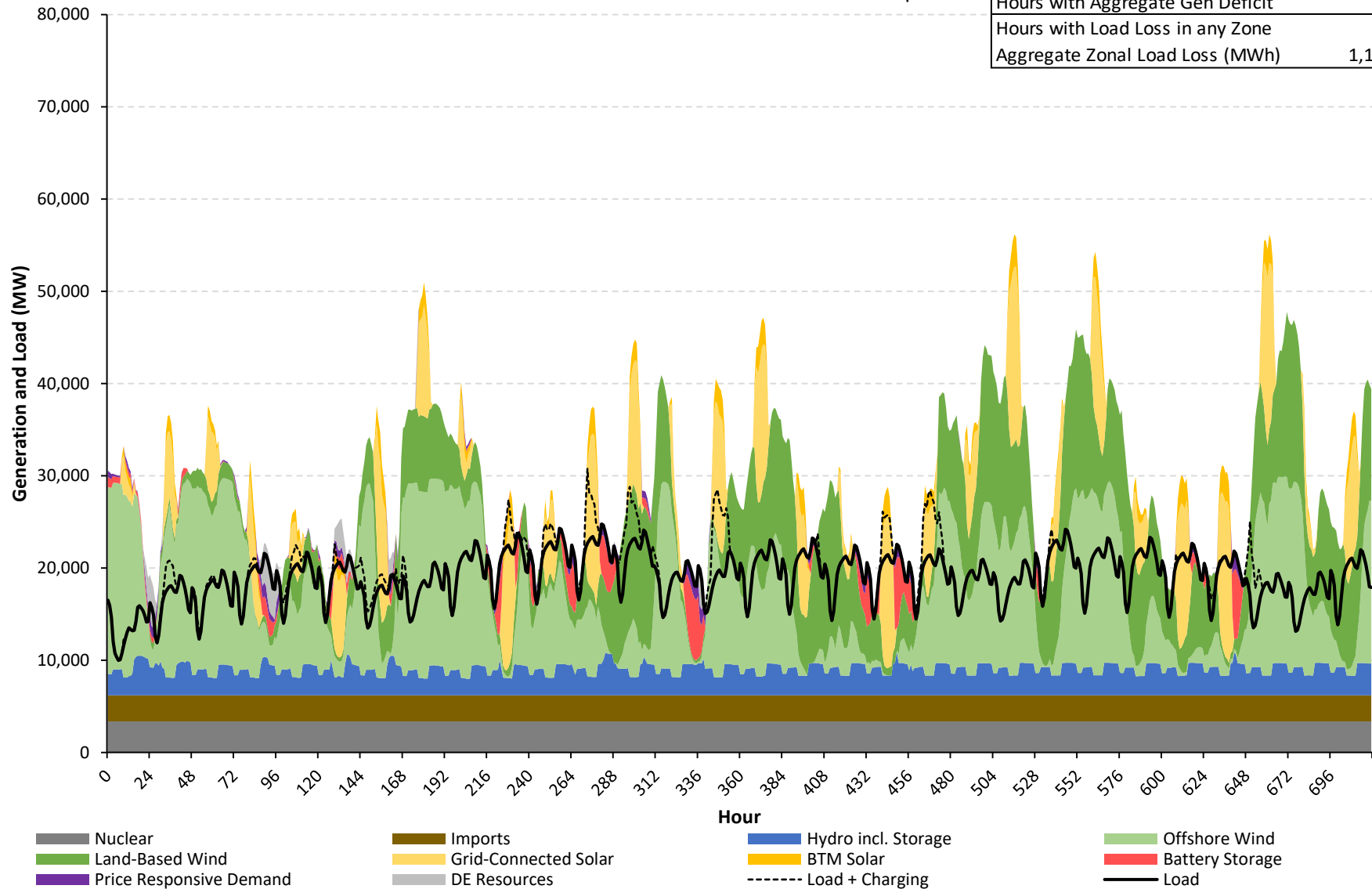


**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	13,727,028
Aggregate Gen in Period (MWh)	21,406,547
Gen Surplus/Deficit (MWh)	7,679,520
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	10
Aggregate Zonal Load Loss (MWh)	1,146

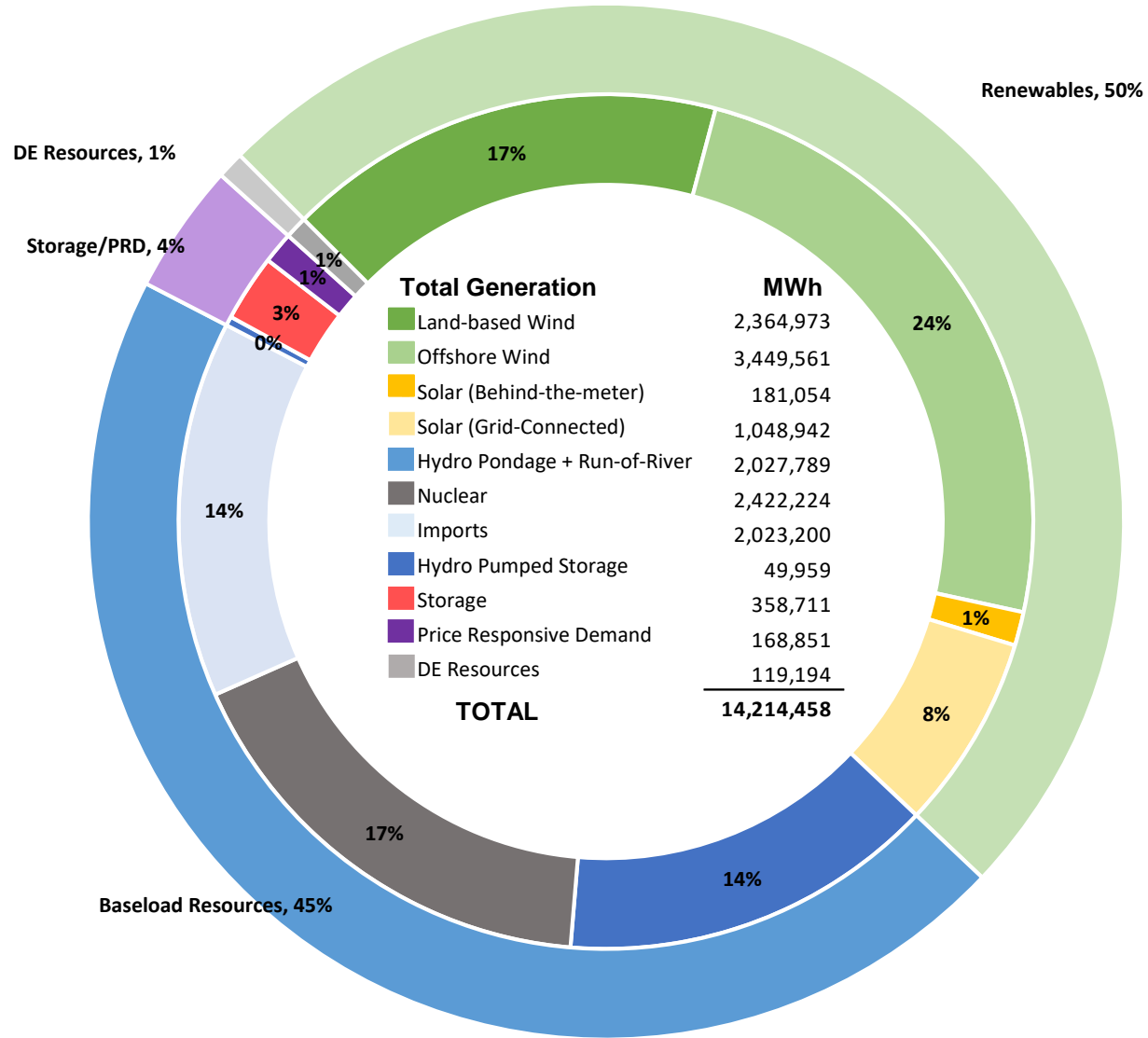


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

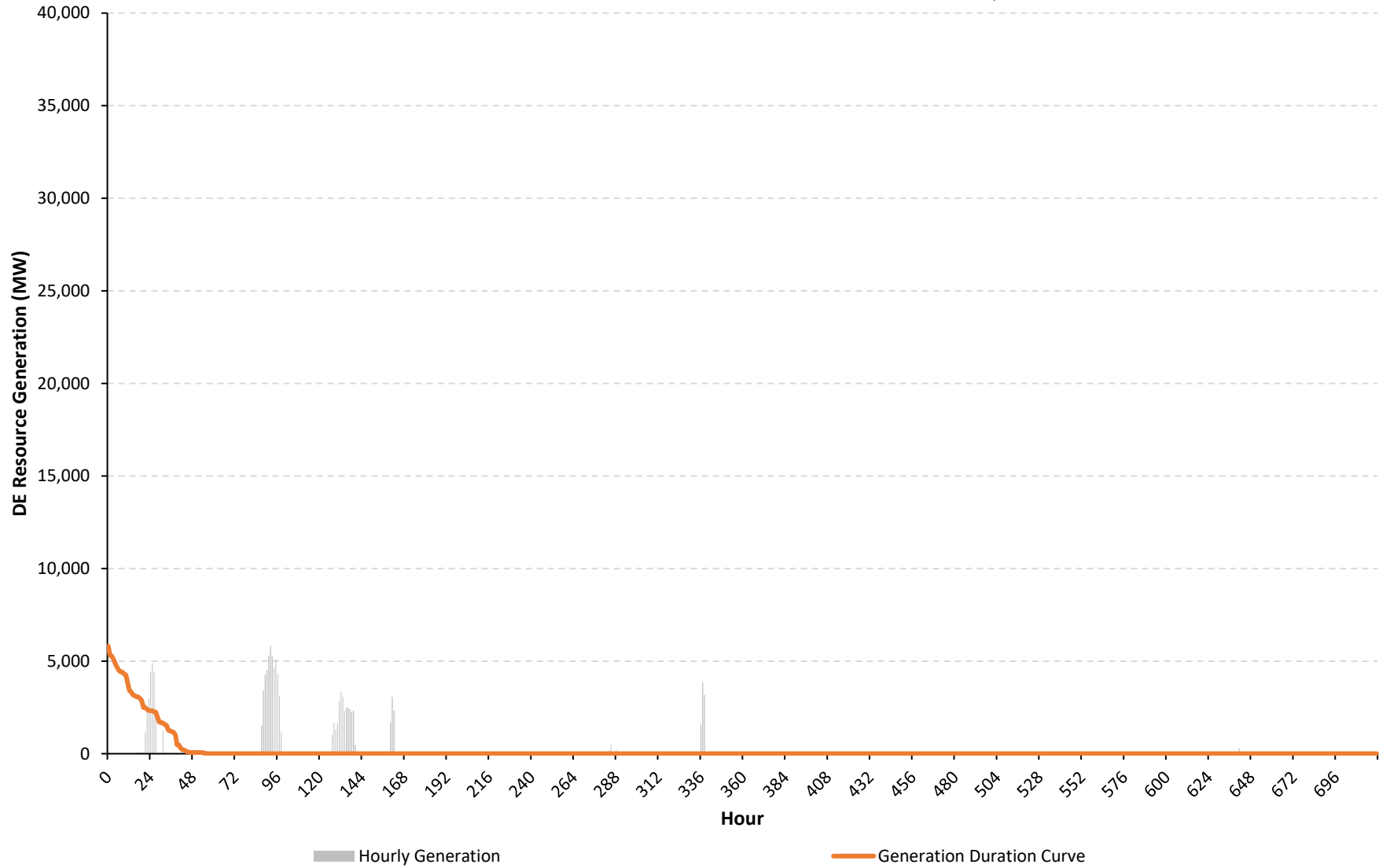
### Generation by Resource Type

Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate



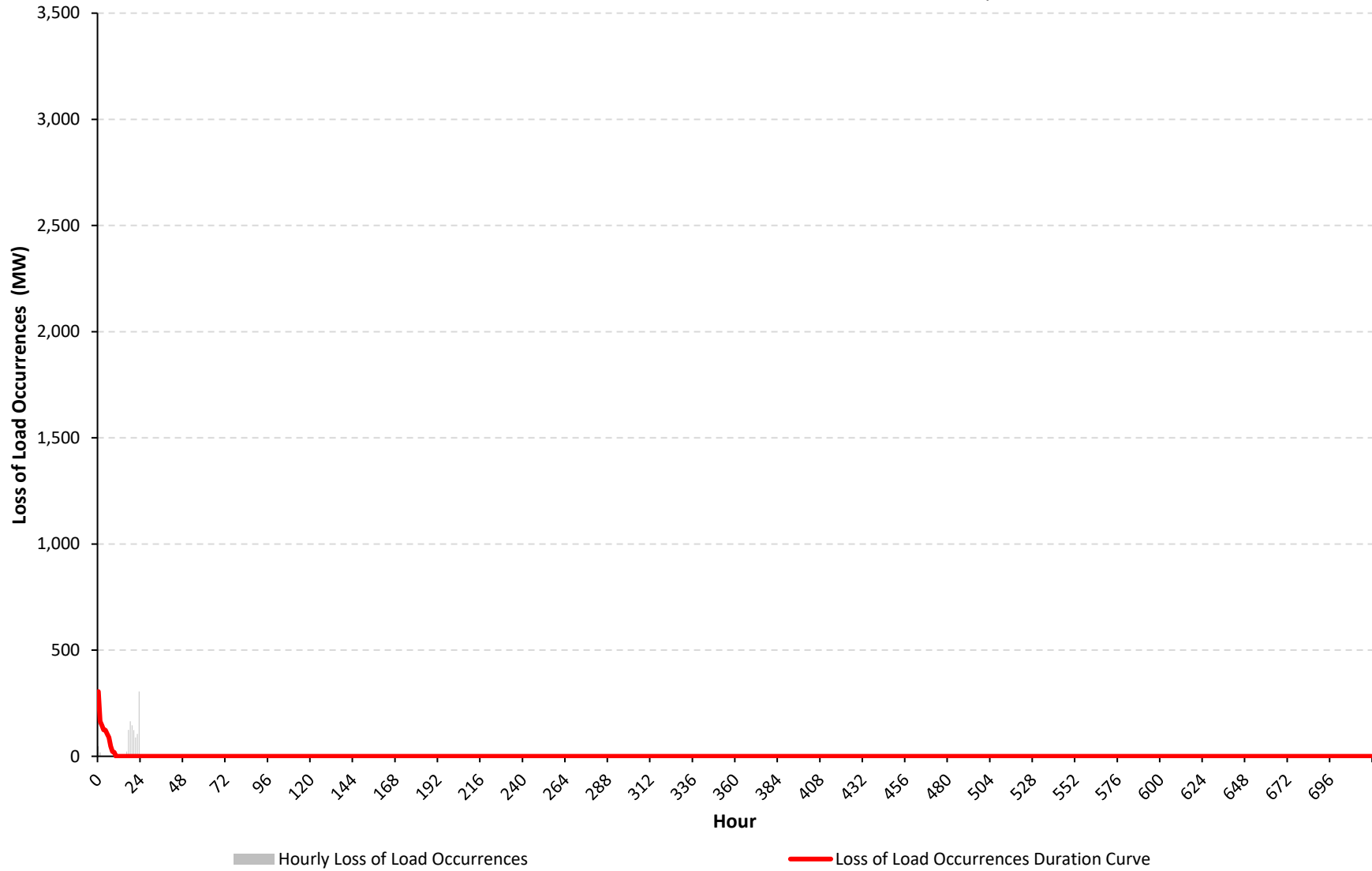
### NYCA DE Resource Generation (MW)

Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate



### NYCA Loss of Load Occurrences (MW)

Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm - Upstate



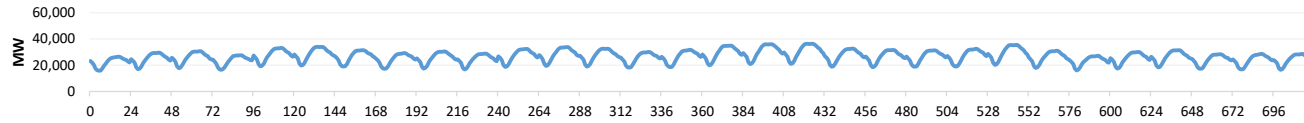
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 41 - Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

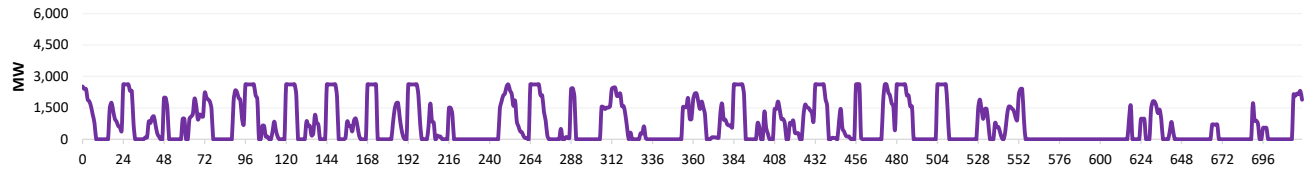
Case Name: Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



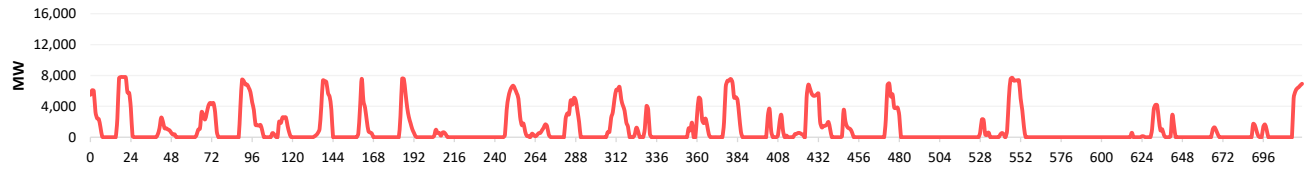
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



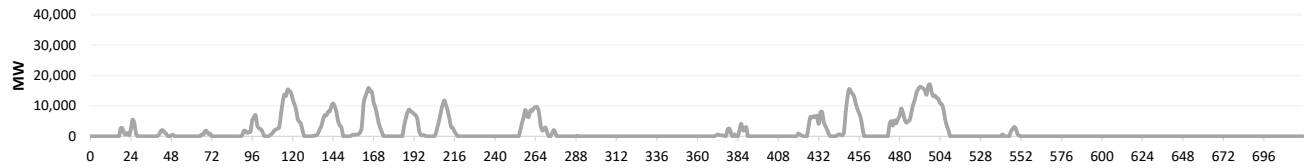
PRD Deployment	
Total Hrs.	354
Total MWh	511,874
Avg. MW	1,446.0

**Battery Energy Storage Deployed During Modeling Period**



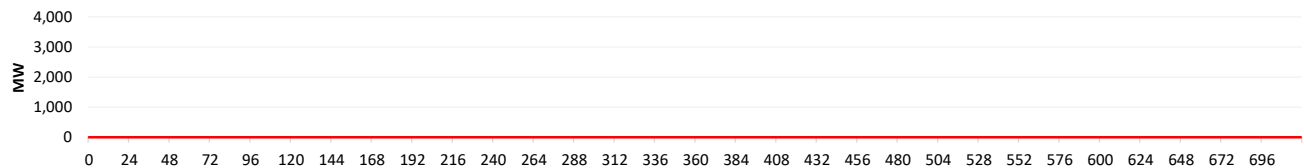
Battery Deployment	
Total Hrs.	283
Total MWh	804,969
Avg. MW	2,844.4

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	241
Total MWh	1,249,958
Avg. MW	5,186.5

**Loss of Load Occurrences During Modeling Period**

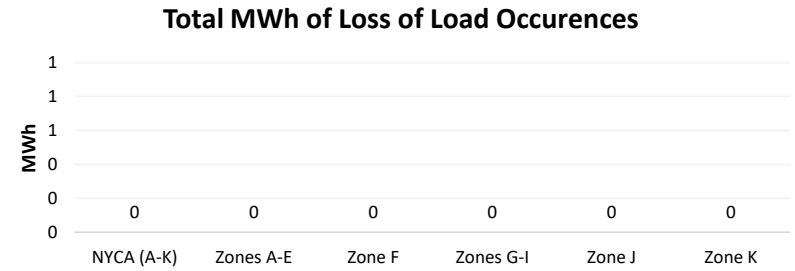
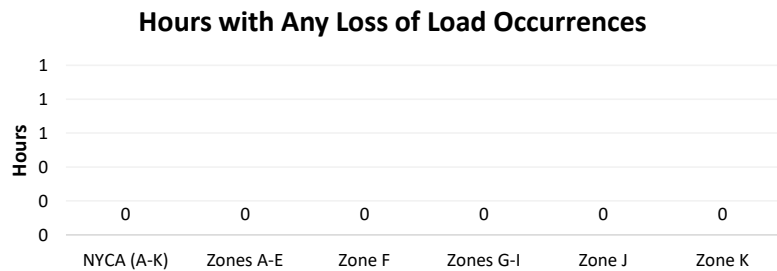
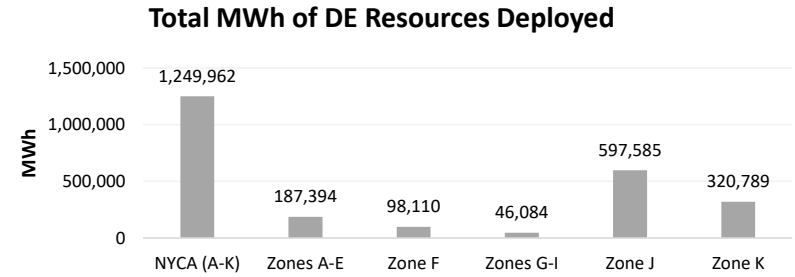
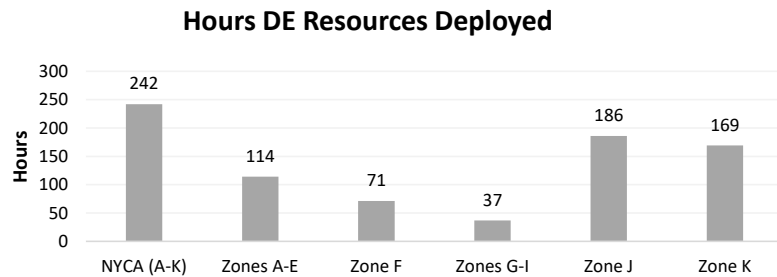
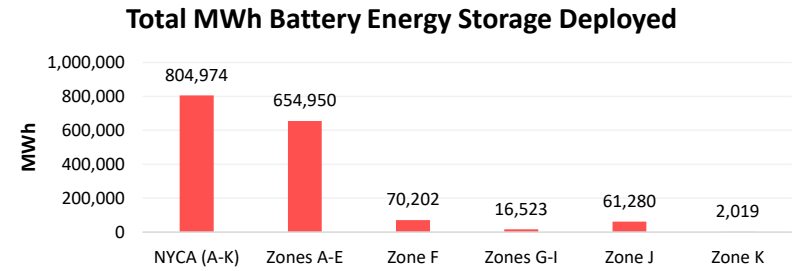
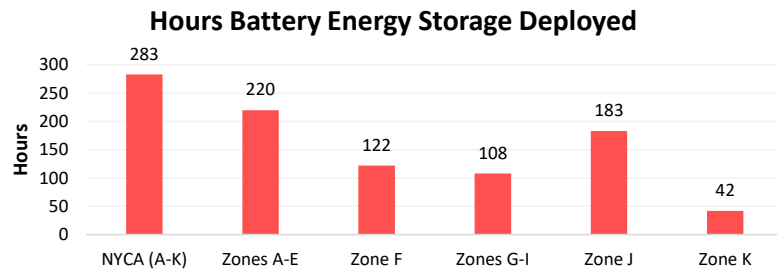
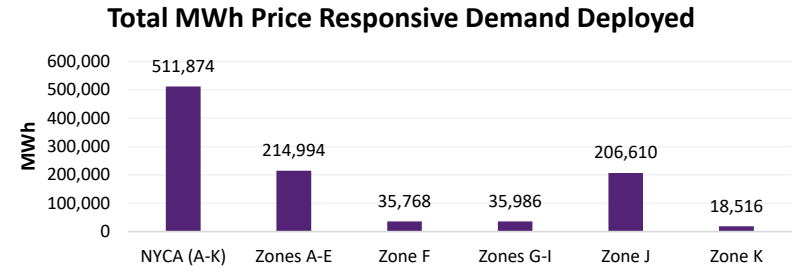
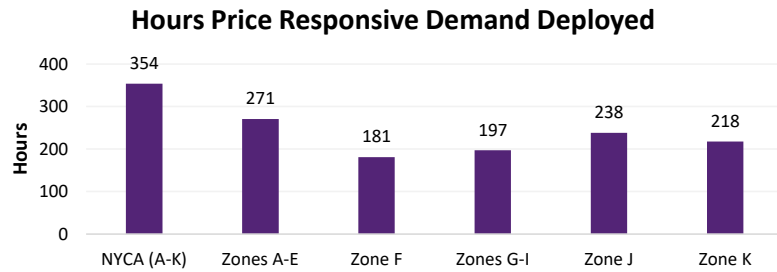


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore

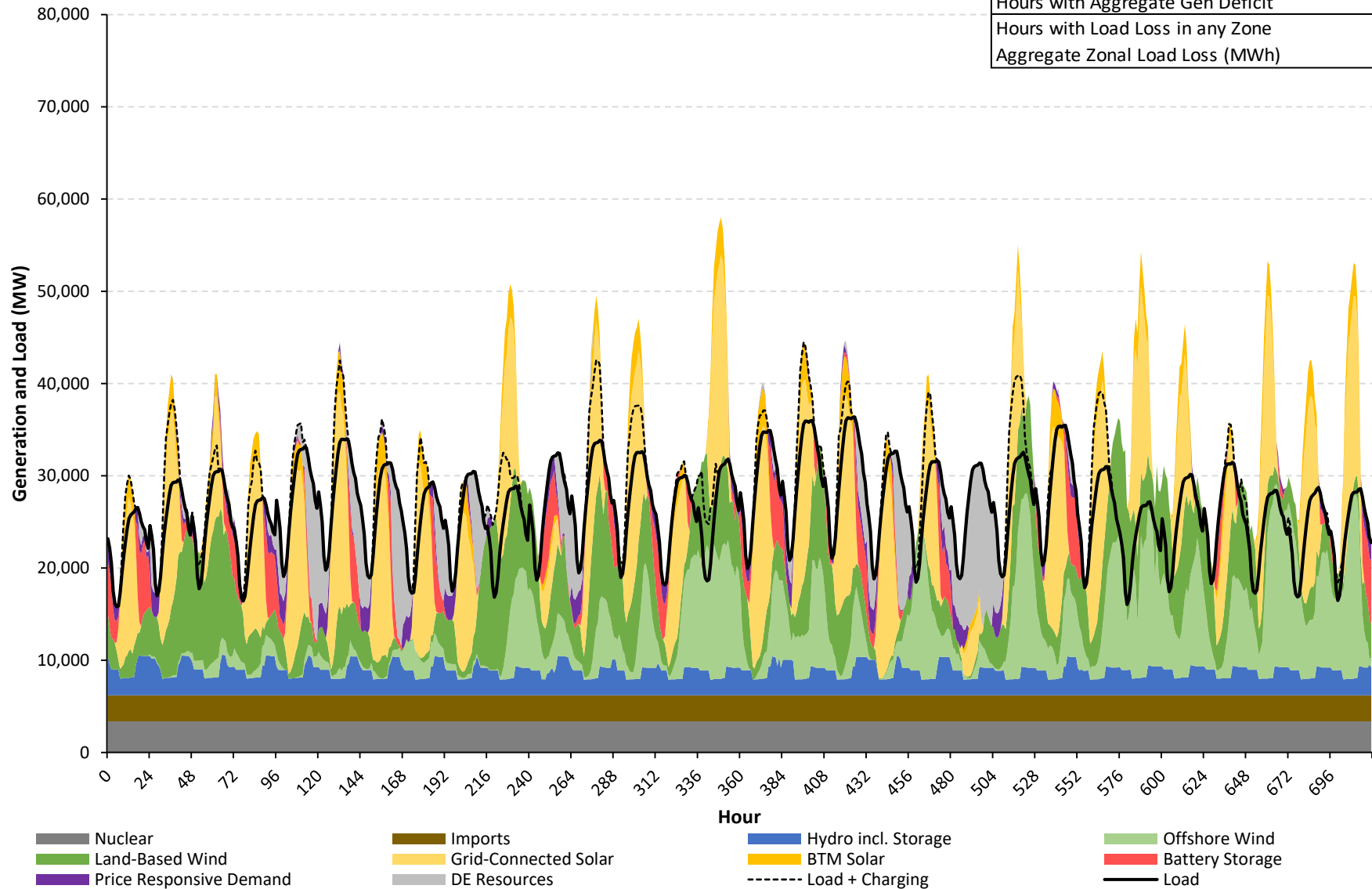


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	22,164,096
Gen Surplus/Deficit (MWh)	3,151,282
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

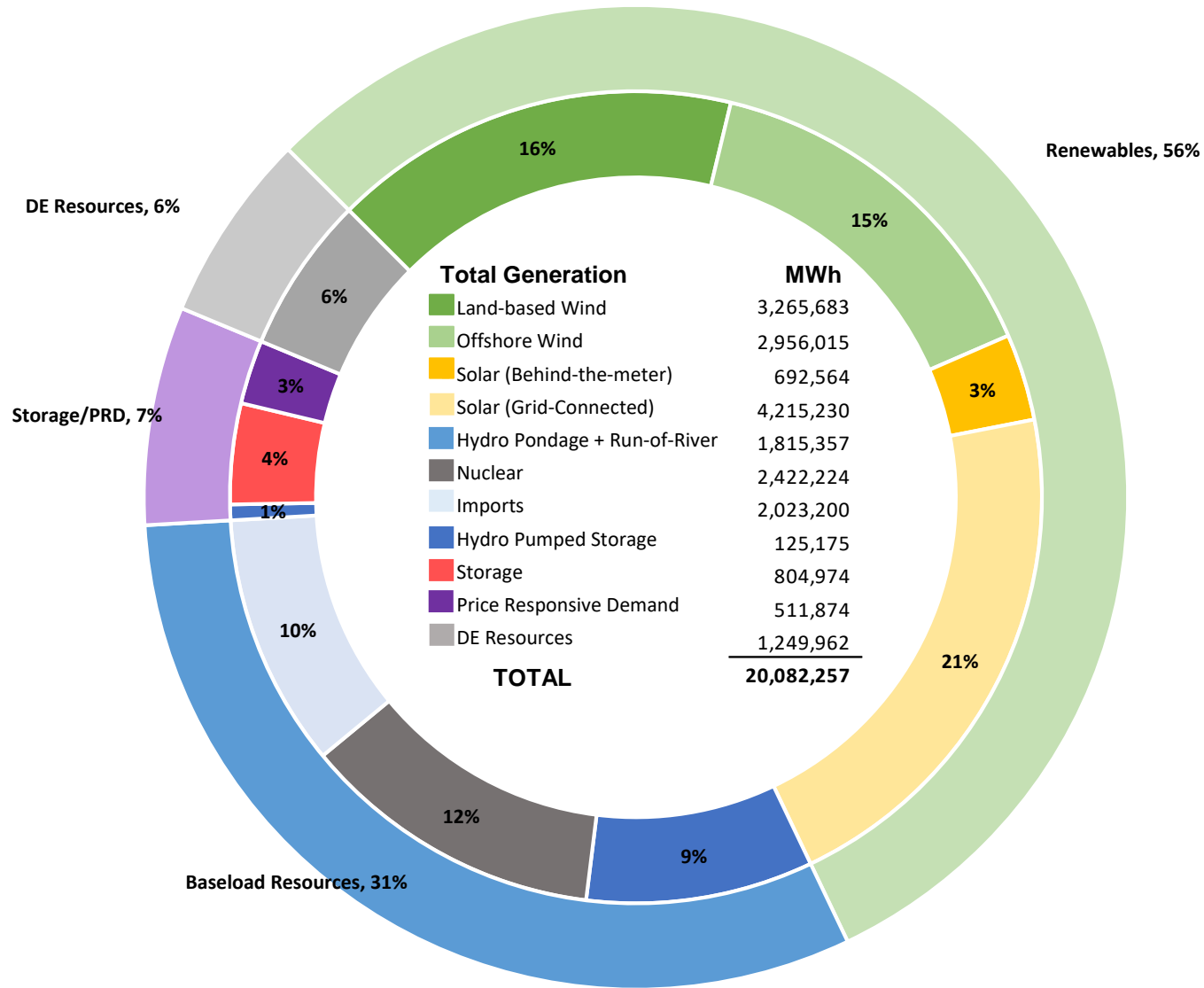


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

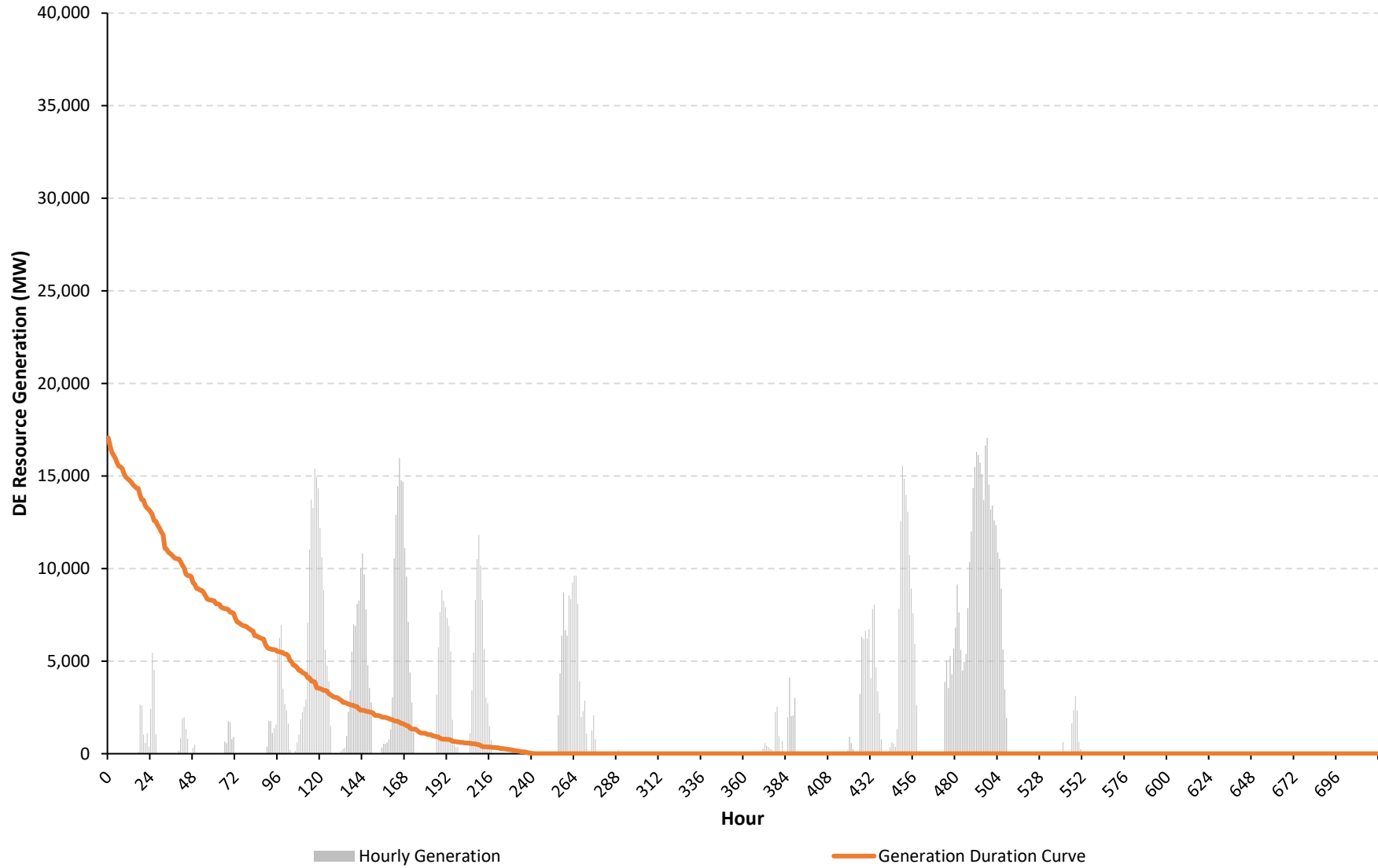
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore



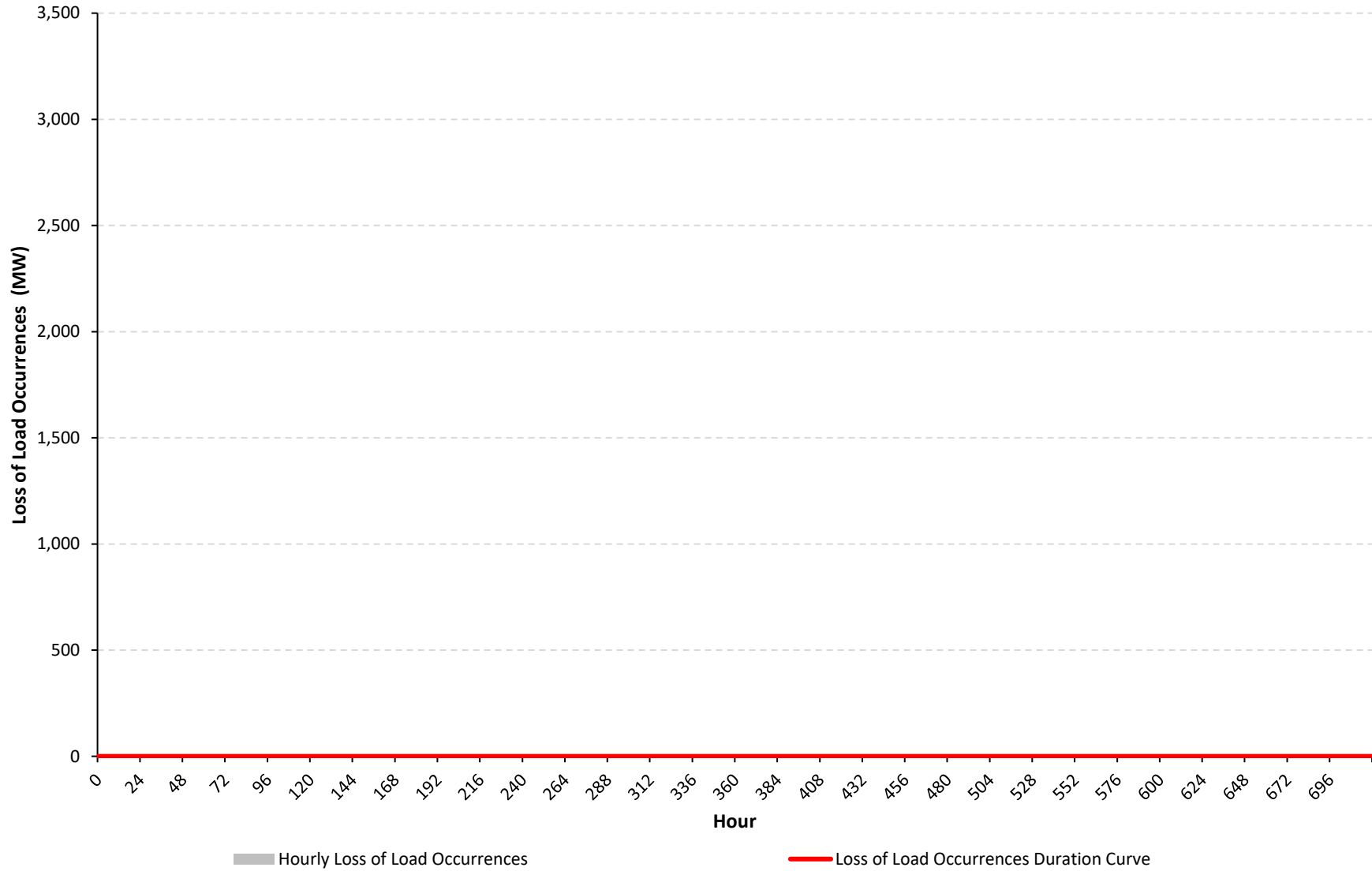
### NYCA DE Resource Generation (MW)

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore



### NYCA Loss of Load Occurrences (MW)

Reference Case - Summer - CCP2 Resource Set - Severe Wind Storm Offshore



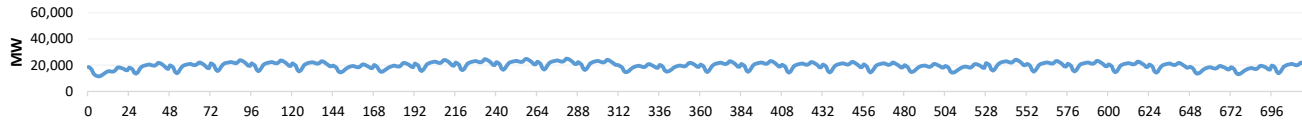
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 42 - Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

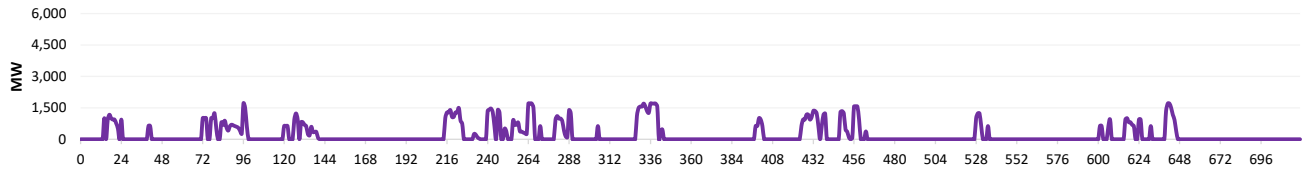
Case Name: Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



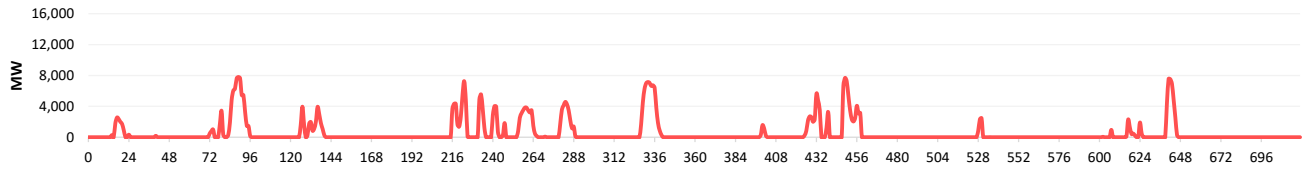
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



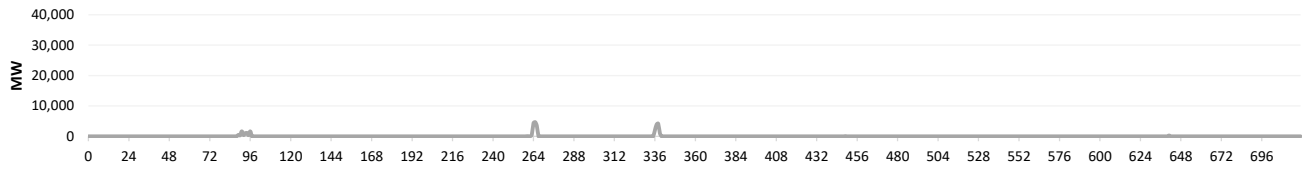
PRD Deployment	
Total Hrs.	171
Total MWh	155,556
Avg. MW	909.7

**Battery Energy Storage Deployed During Modeling Period**



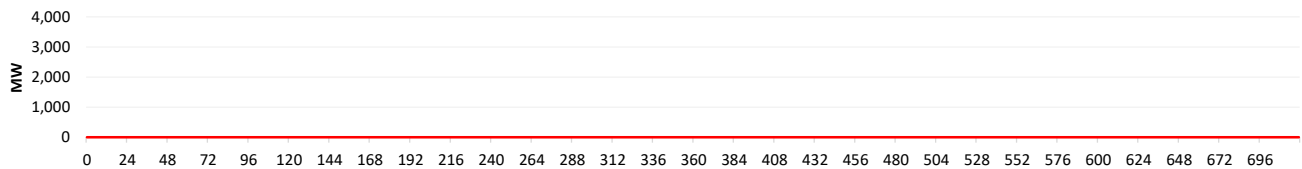
Battery Deployment	
Total Hrs.	148
Total MWh	415,711
Avg. MW	2,808.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	20
Total MWh	31,311
Avg. MW	1,565.6

**Loss of Load Occurrences During Modeling Period**

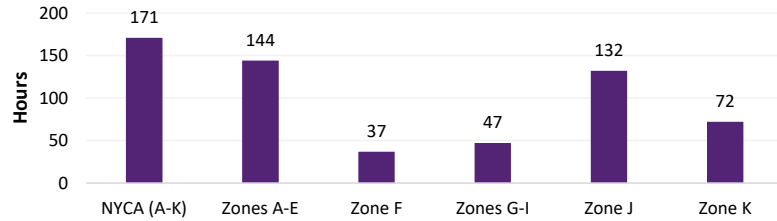


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

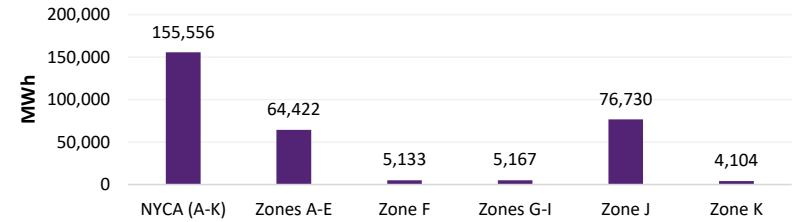
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

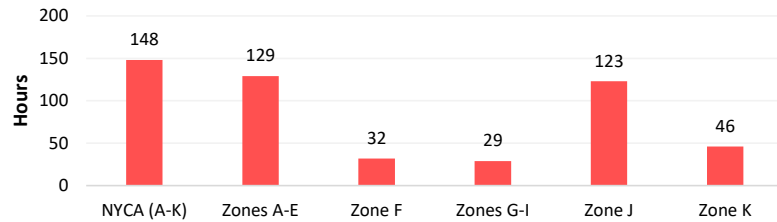
Hours Price Responsive Demand Deployed



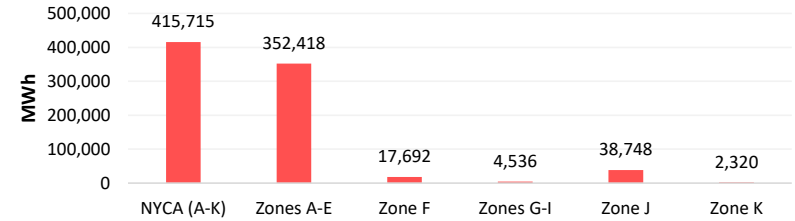
Total MWh Price Responsive Demand Deployed



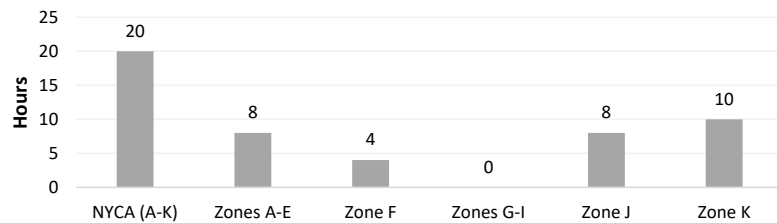
Hours Battery Energy Storage Deployed



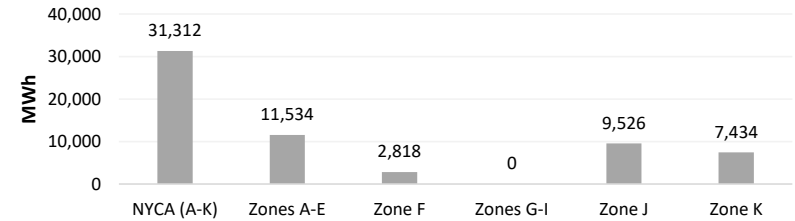
Total MWh Battery Energy Storage Deployed



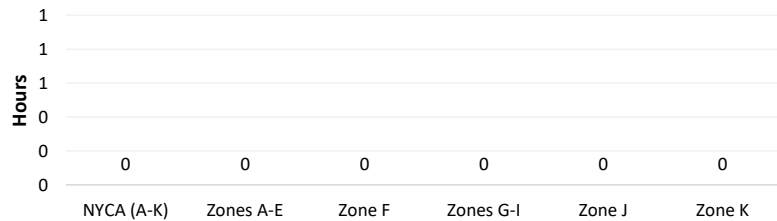
Hours DE Resources Deployed



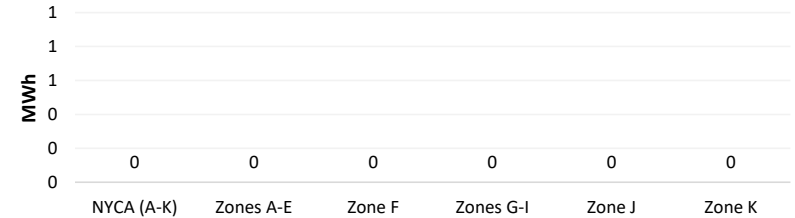
Total MWh of DE Resources Deployed



Hours with Any Loss of Load Occurrences



Total MWh of Loss of Load Occurrences



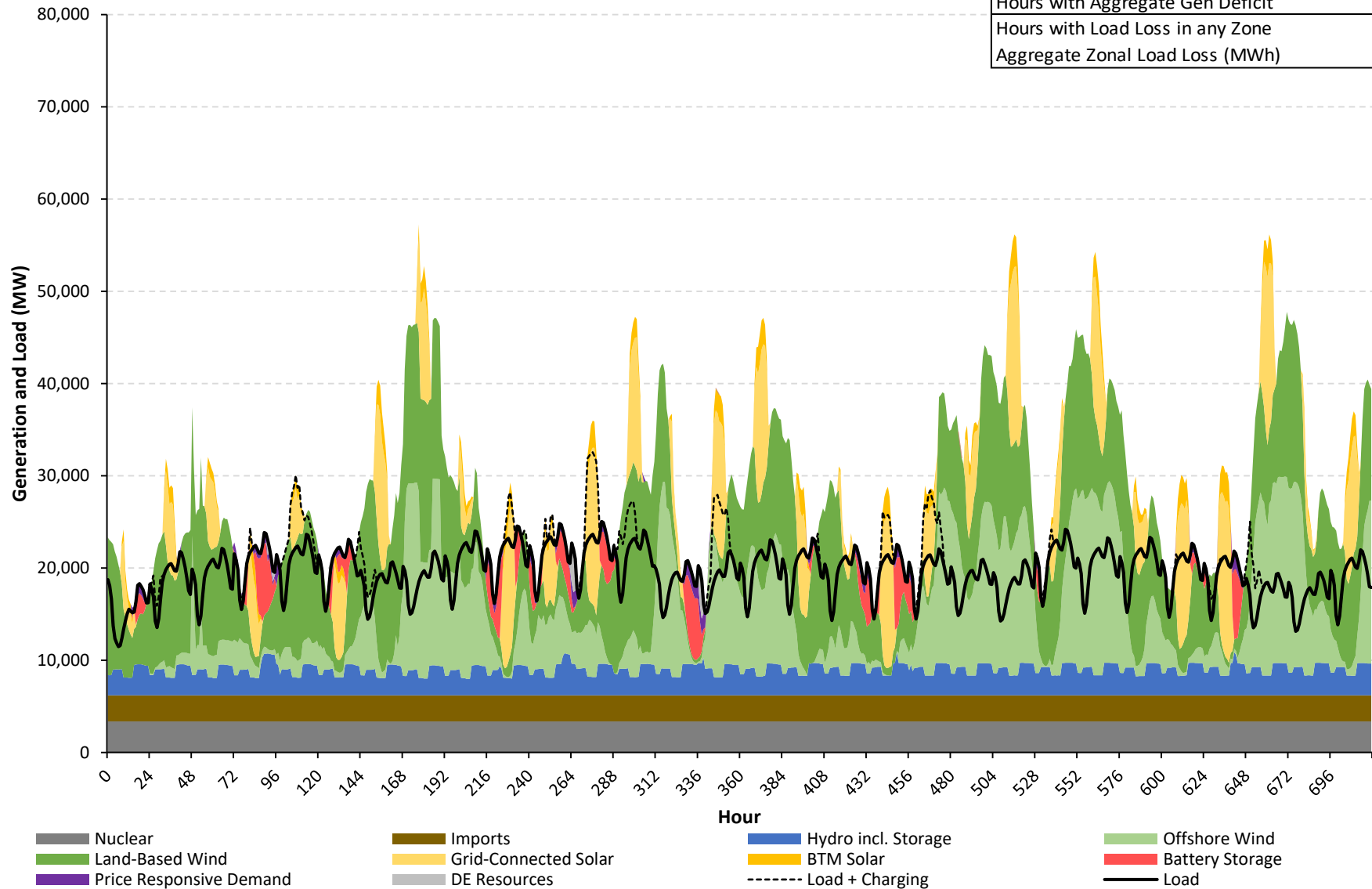


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	20,995,064
Gen Surplus/Deficit (MWh)	6,883,598
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

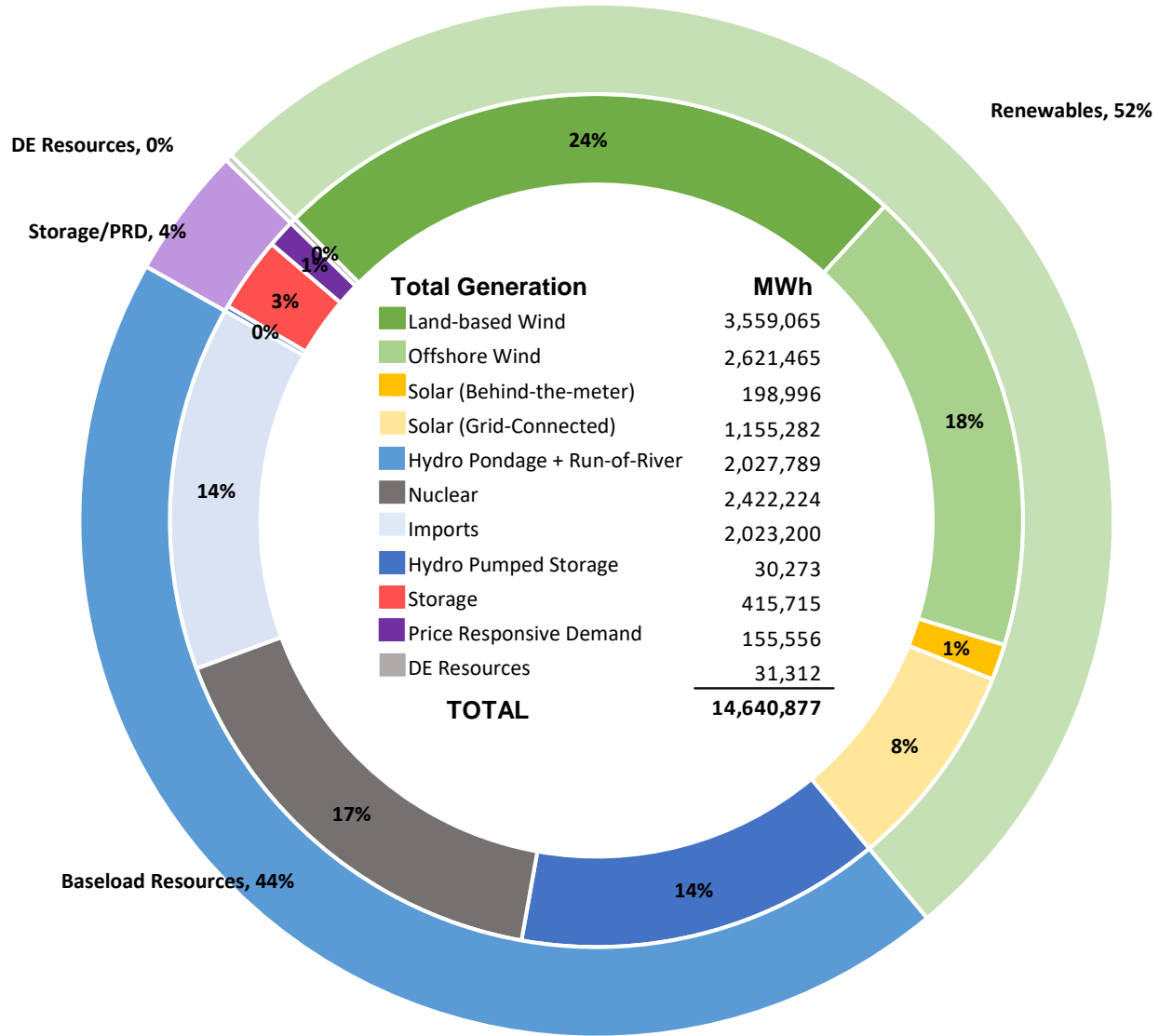


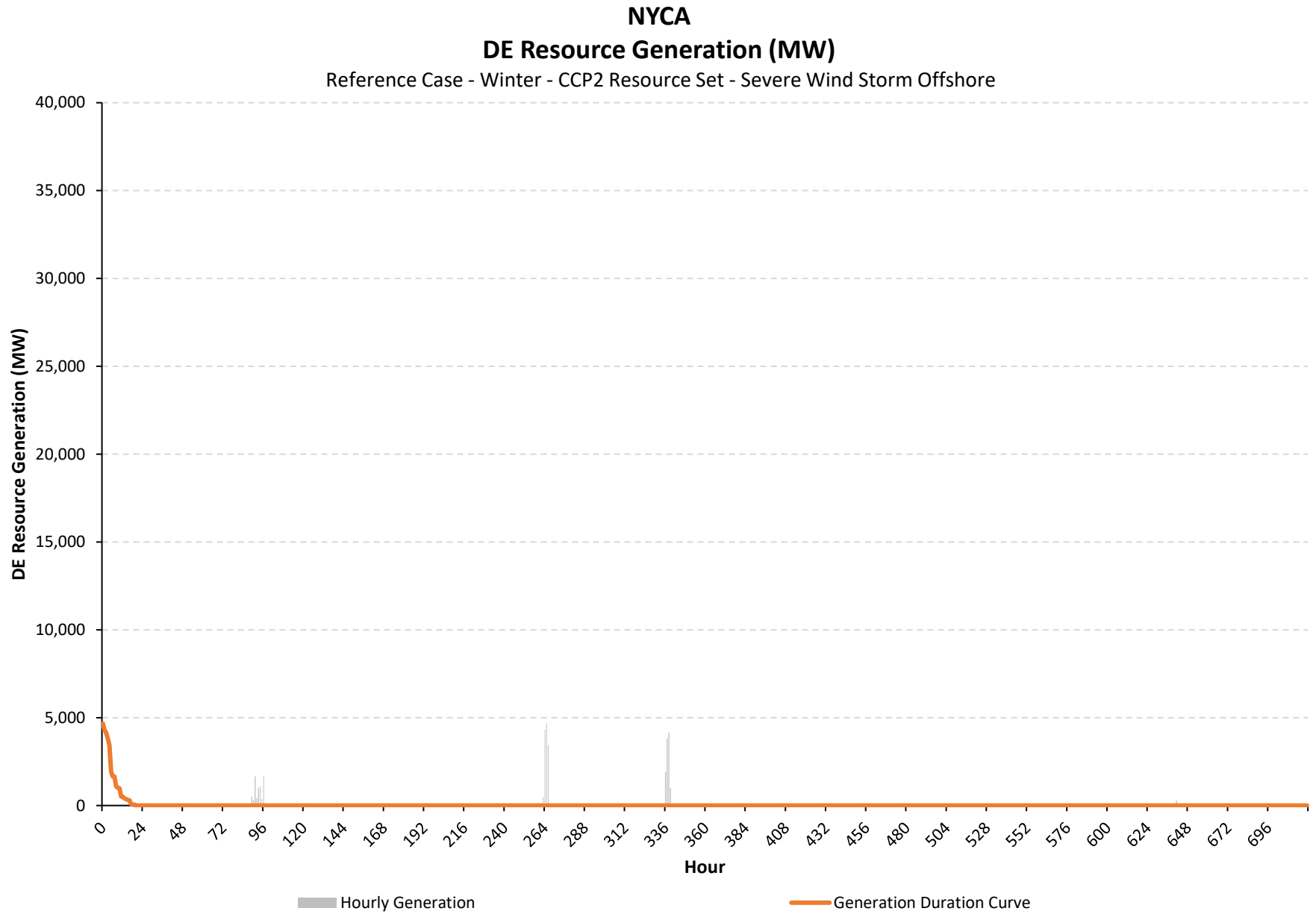
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

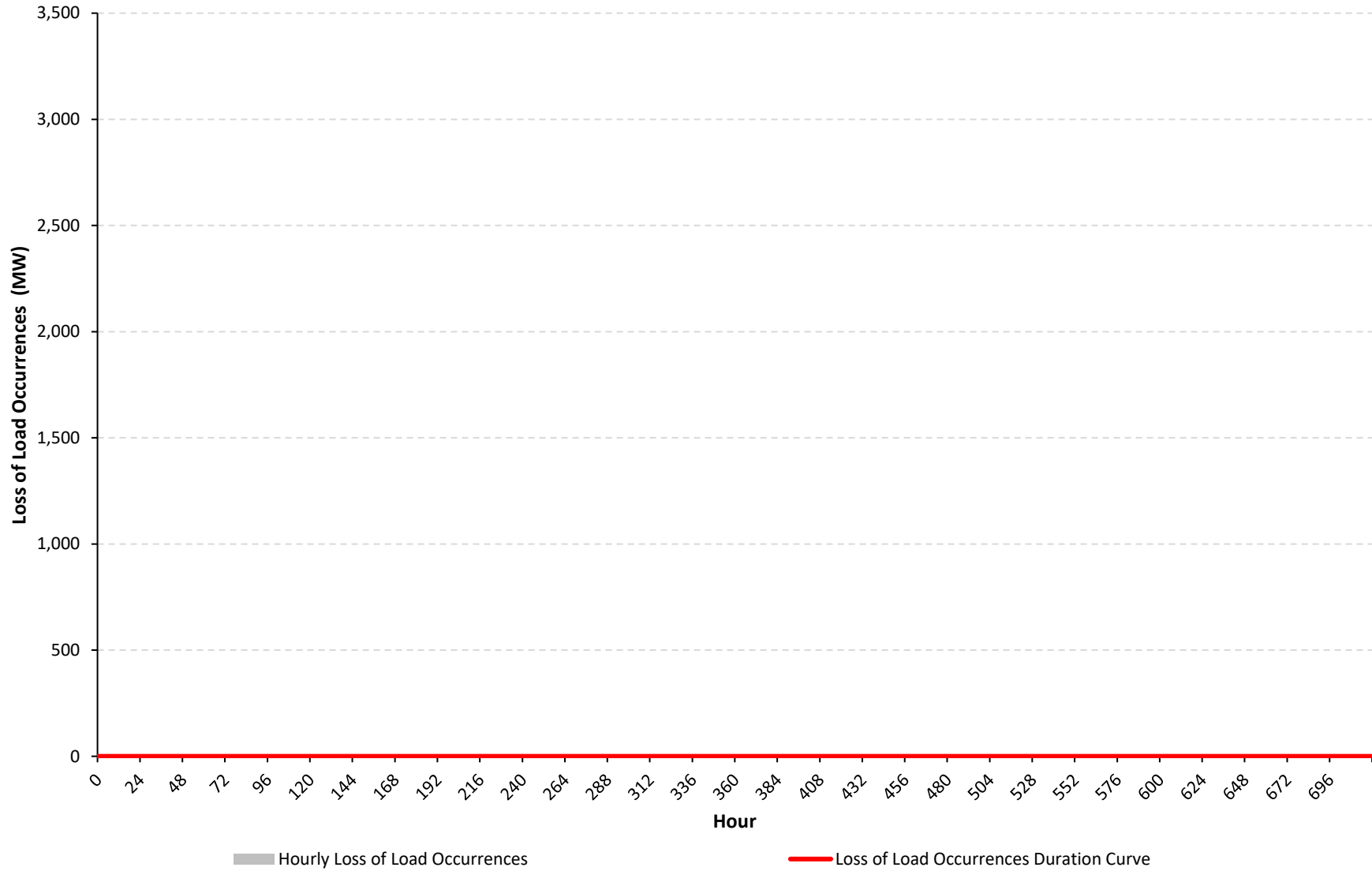
Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore





### NYCA Loss of Load Occurrences (MW)

Reference Case - Winter - CCP2 Resource Set - Severe Wind Storm Offshore



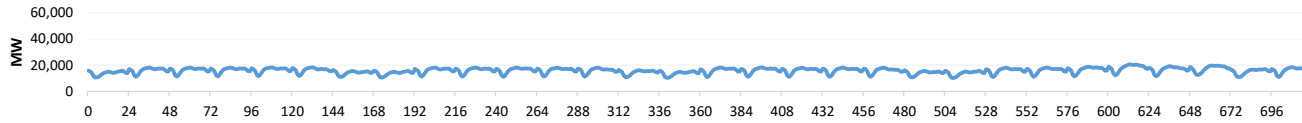
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 43 - Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

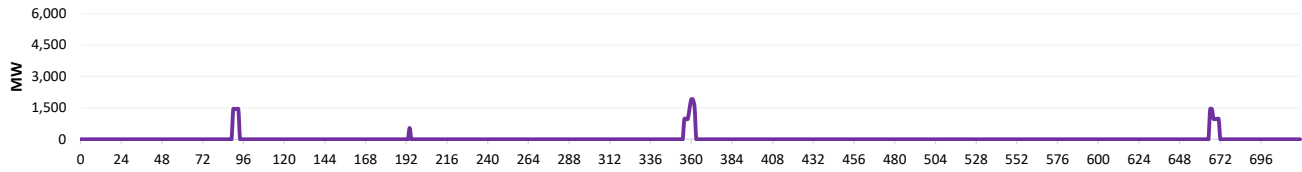
Case Name: Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



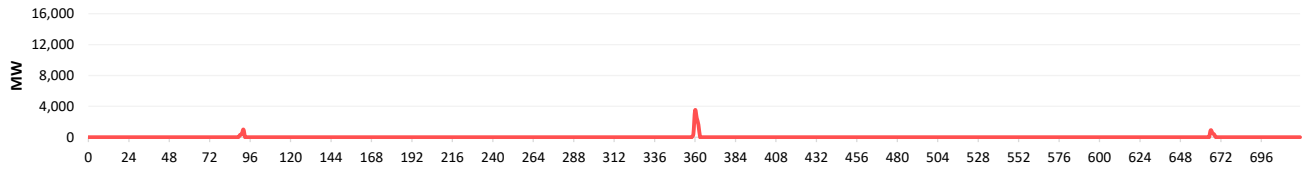
Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



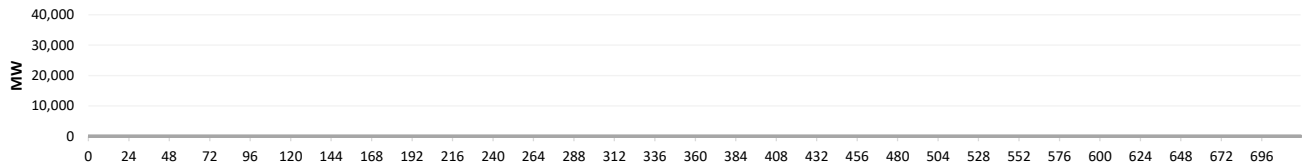
PRD Deployment	
Total Hrs.	18
Total MWh	22,780
Avg. MW	1,265.6

**Battery Energy Storage Deployed During Modeling Period**



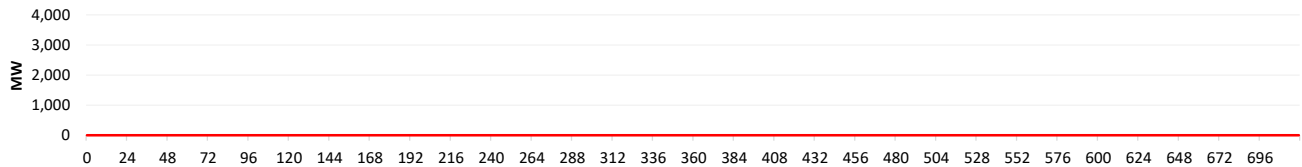
Battery Deployment	
Total Hrs.	10
Total MWh	11,446
Avg. MW	1,144.6

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

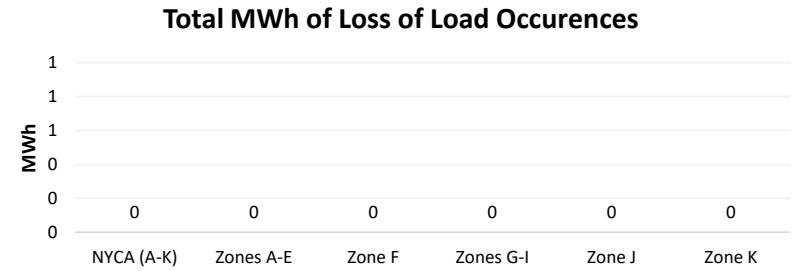
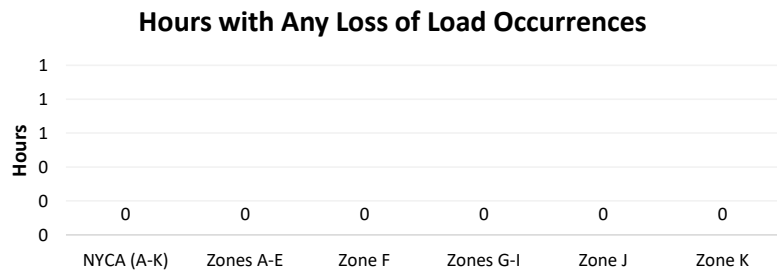
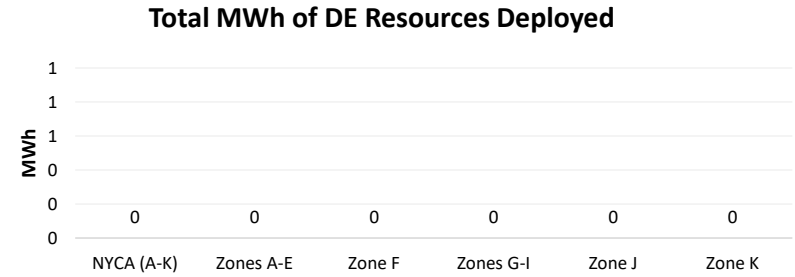
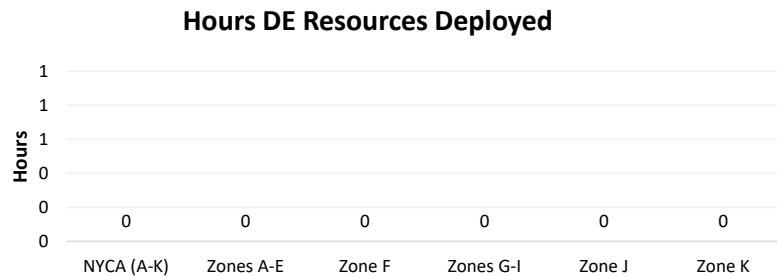
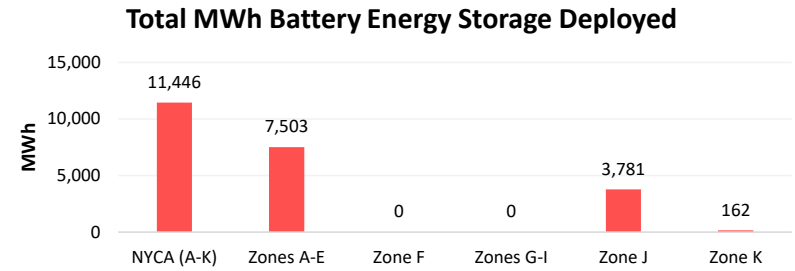
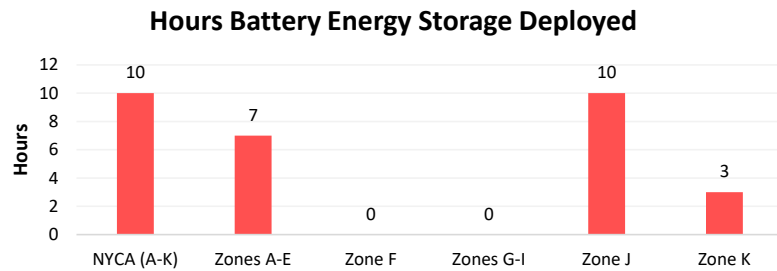
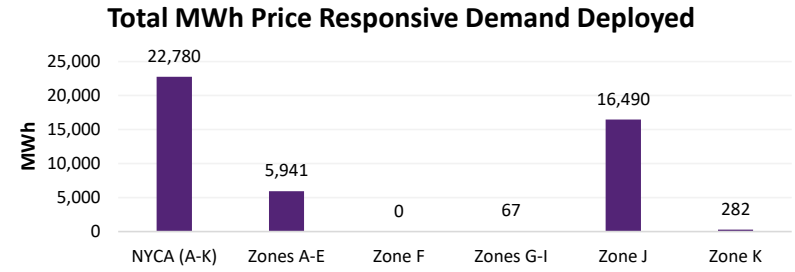
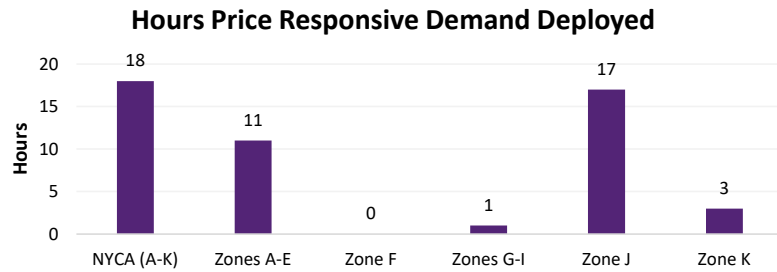
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

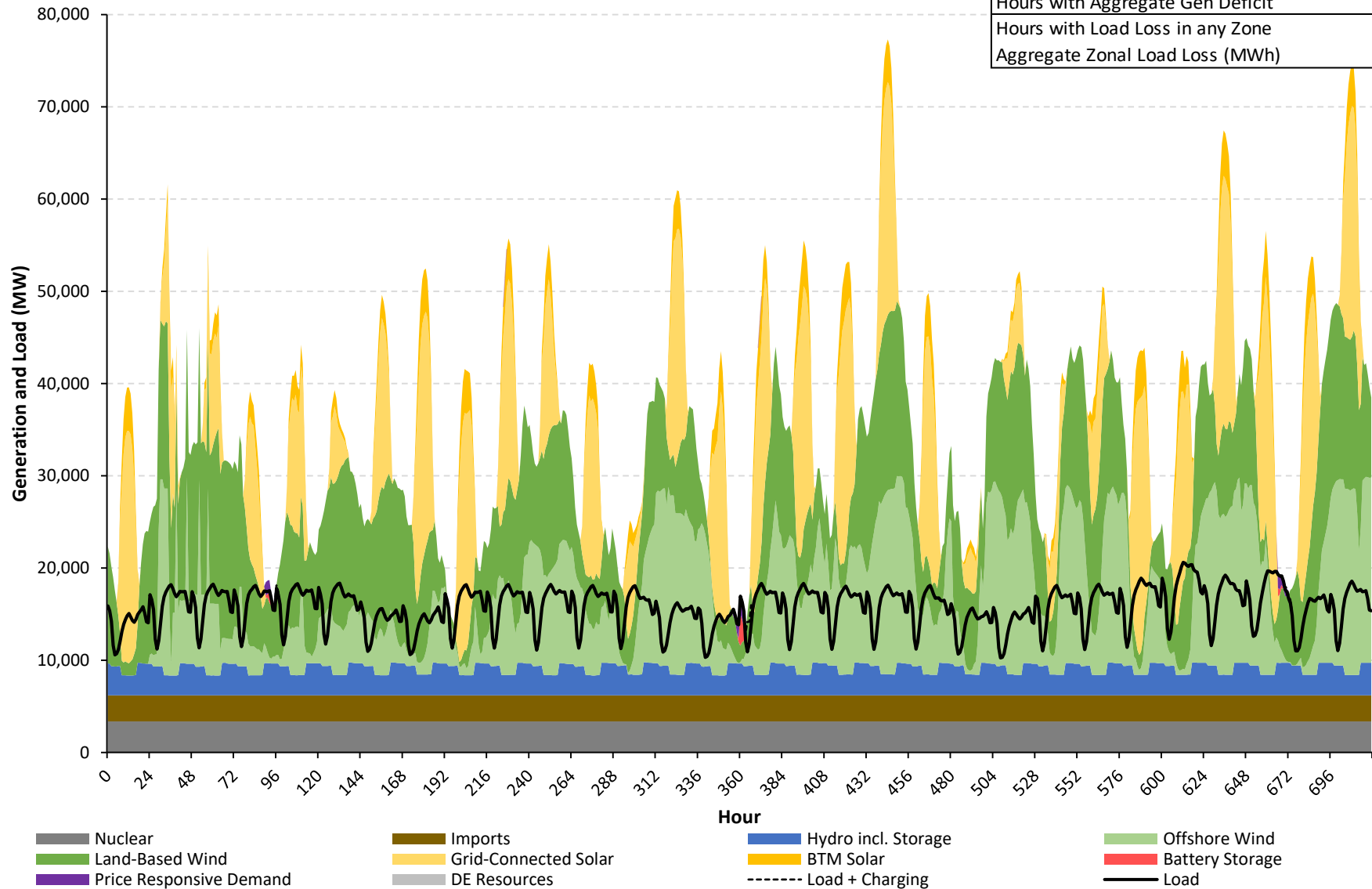


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	26,191,966
Gen Surplus/Deficit (MWh)	14,806,726
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



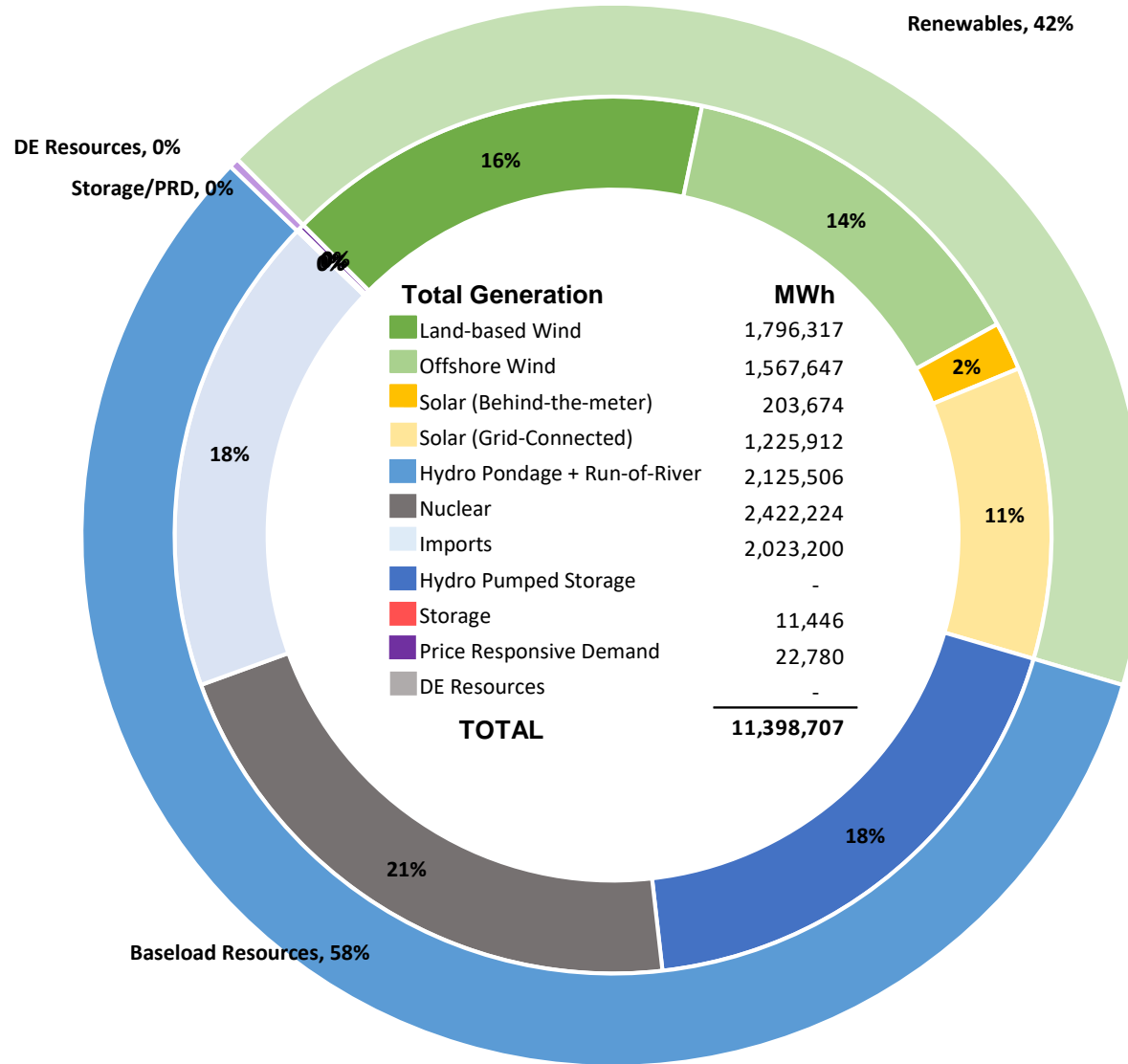
**Note:**

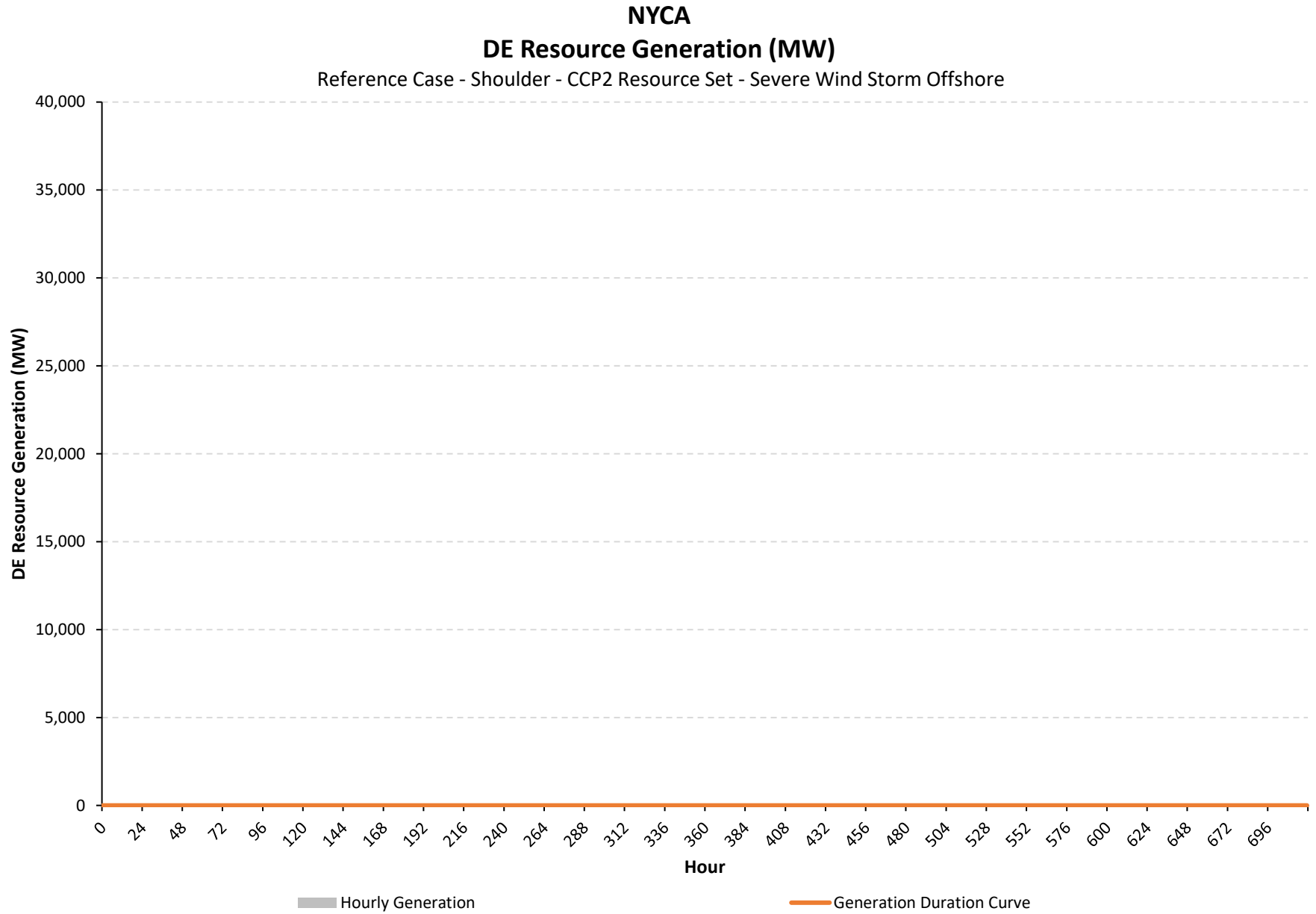
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



### Generation by Resource Type

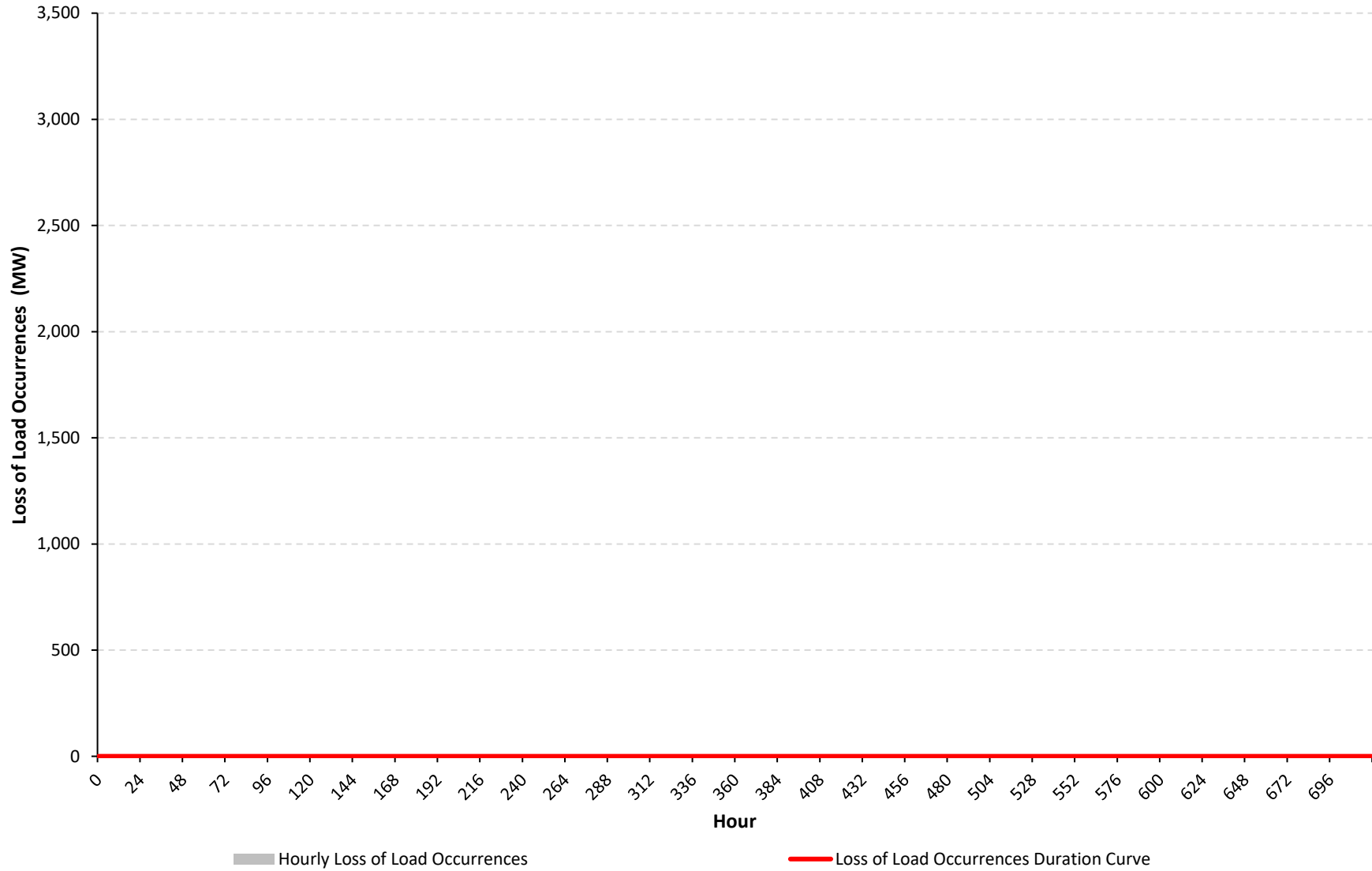
Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore





### NYCA Loss of Load Occurrences (MW)

Reference Case - Shoulder - CCP2 Resource Set - Severe Wind Storm Offshore



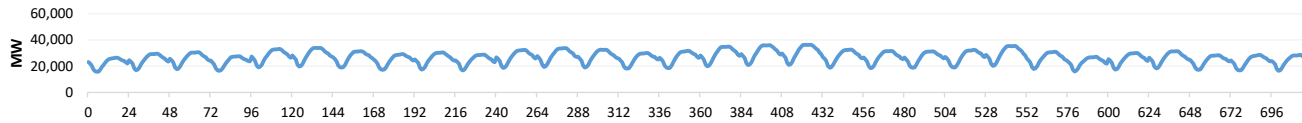
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 44 - Reference Case - Summer - CCP2 Resource Set - Drought**

**Hourly Results Summary**

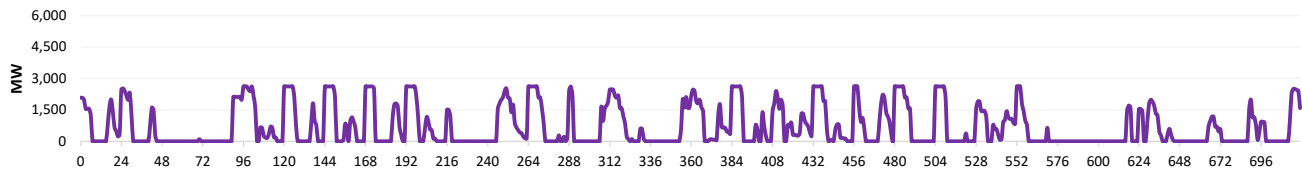
Case Name: Reference Case - Summer - CCP2 Resource Set - Drought

**Load During Modeling Period**



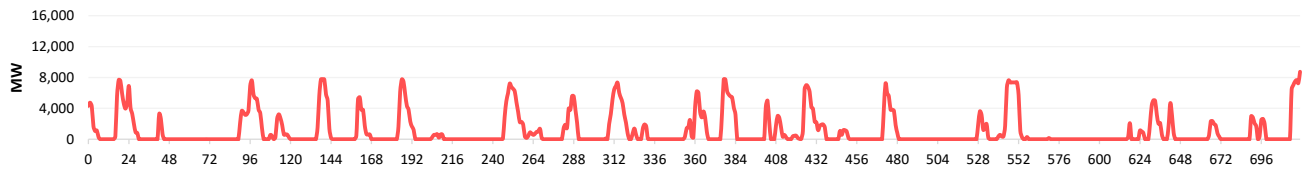
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



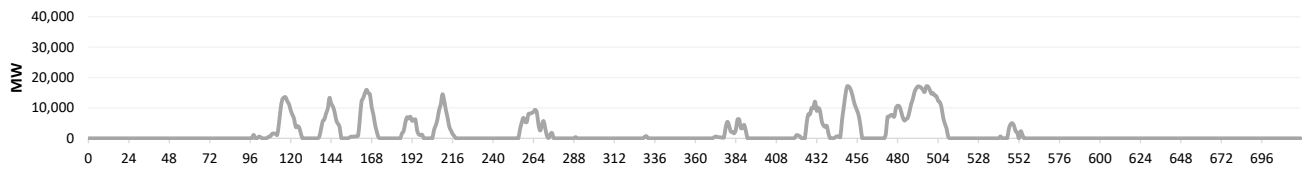
PRD Deployment	
Total Hrs.	347
Total MWh	504,521
Avg. MW	1,454.0

**Battery Energy Storage Deployed During Modeling Period**



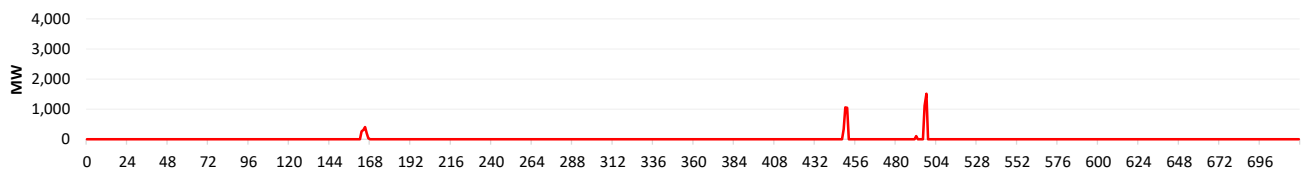
Battery Deployment	
Total Hrs.	271
Total MWh	804,894
Avg. MW	2,970.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	209
Total MWh	1,305,698
Avg. MW	6,247.4

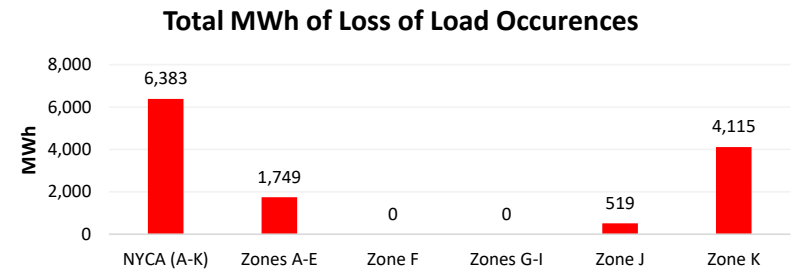
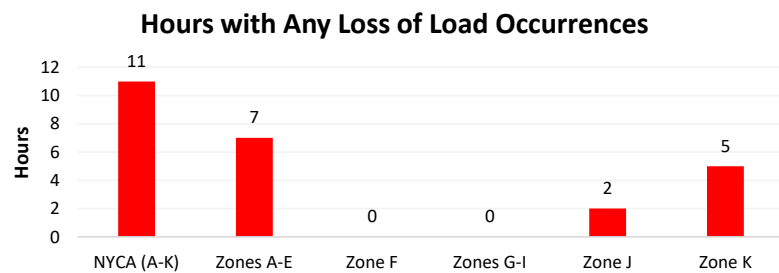
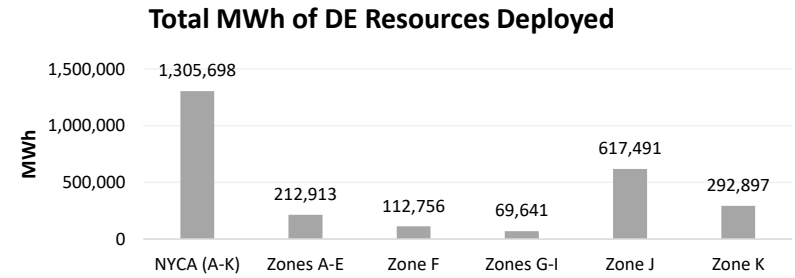
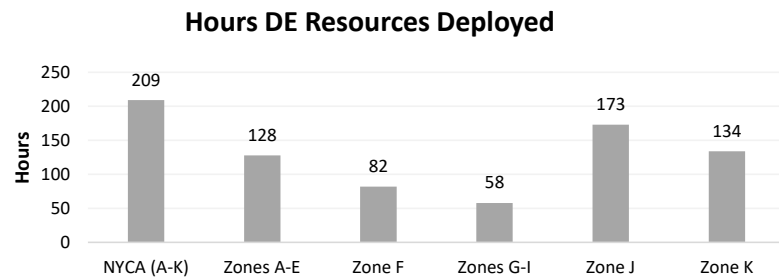
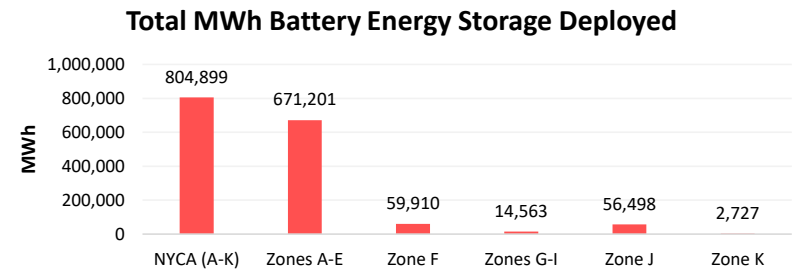
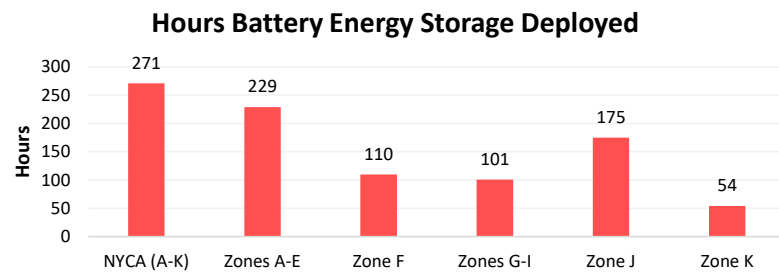
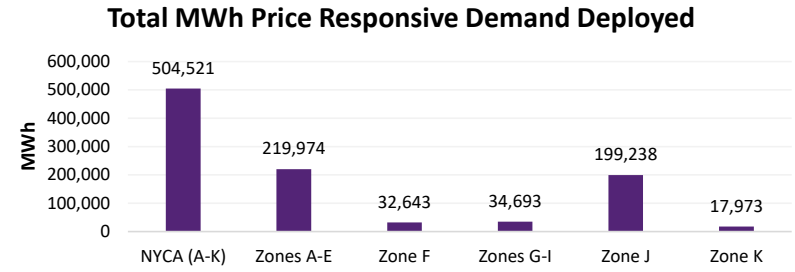
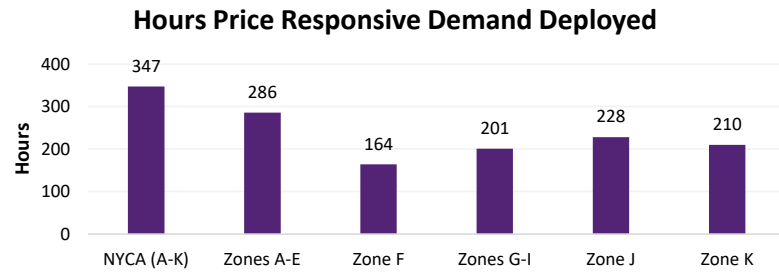
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	11
Total MWh	6,383
Avg. MW	580.3

### Full Period Results Summary

Case Name: Reference Case - Summer - CCP2 Resource Set - Drought

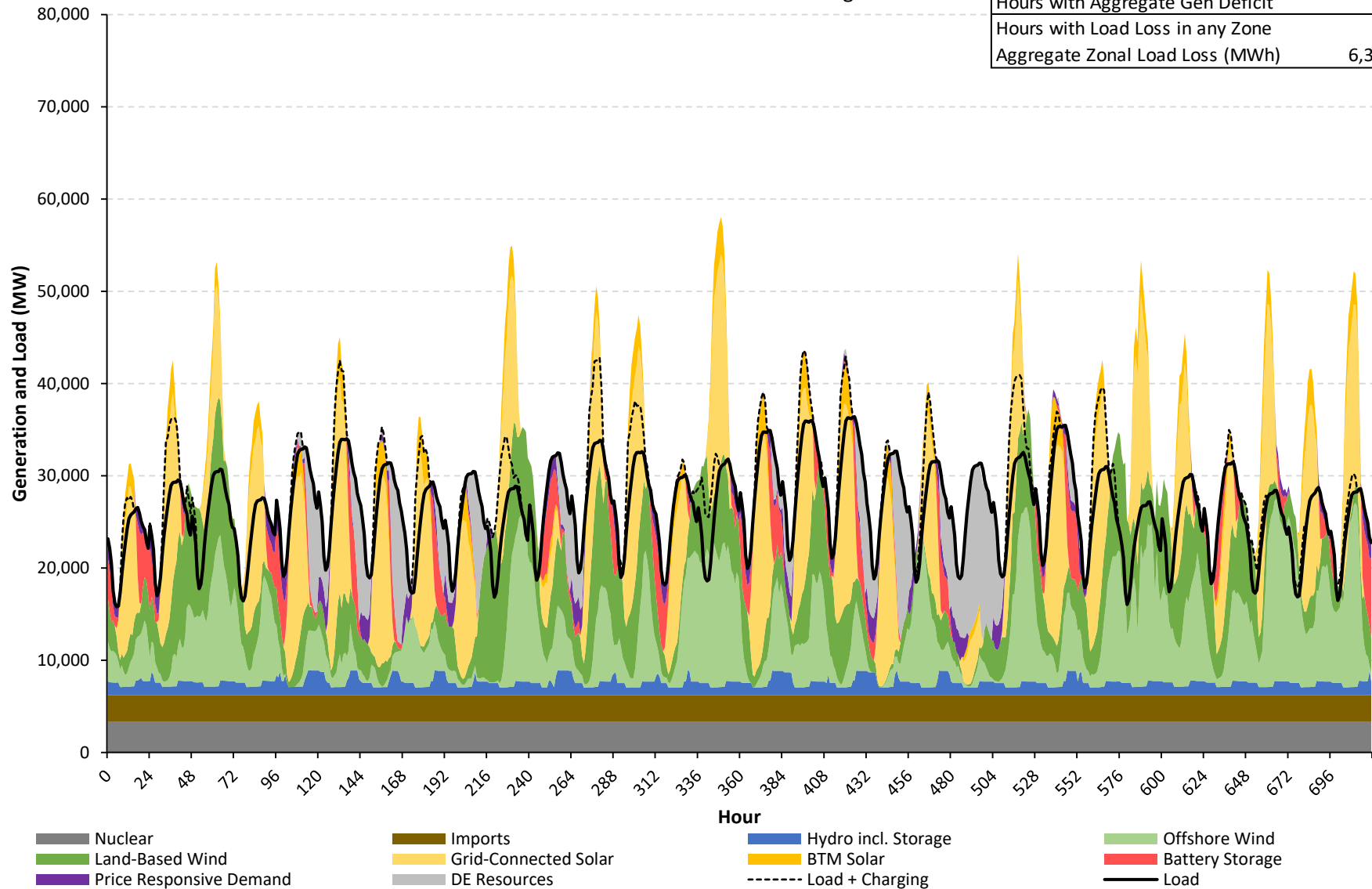


### NYCA

## Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - CCP2 Resource Set - Drought

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	22,177,057
Gen Surplus/Deficit (MWh)	3,164,243
Hours with Aggregate Gen Deficit	11
Hours with Load Loss in any Zone	11
Aggregate Zonal Load Loss (MWh)	6,383

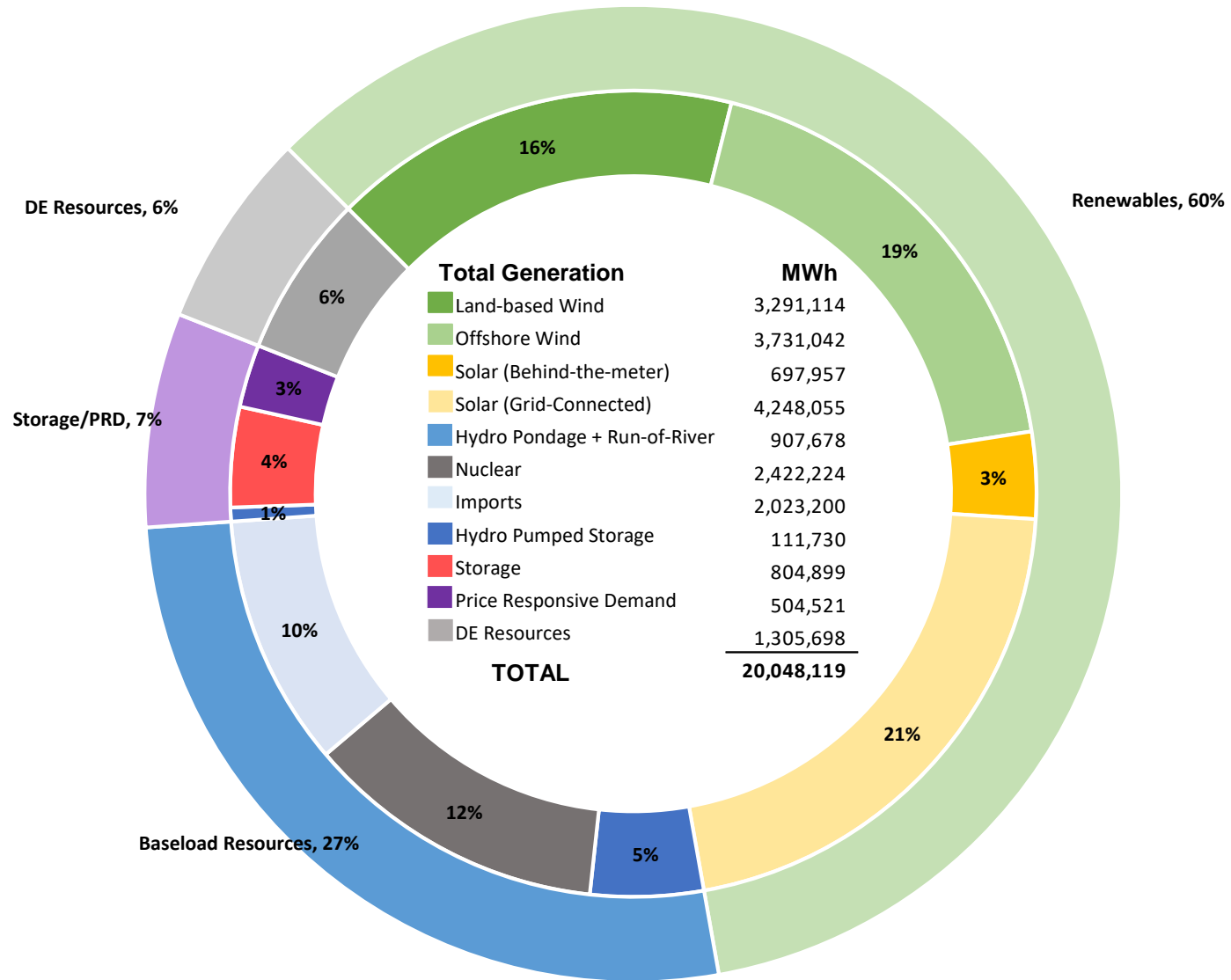


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

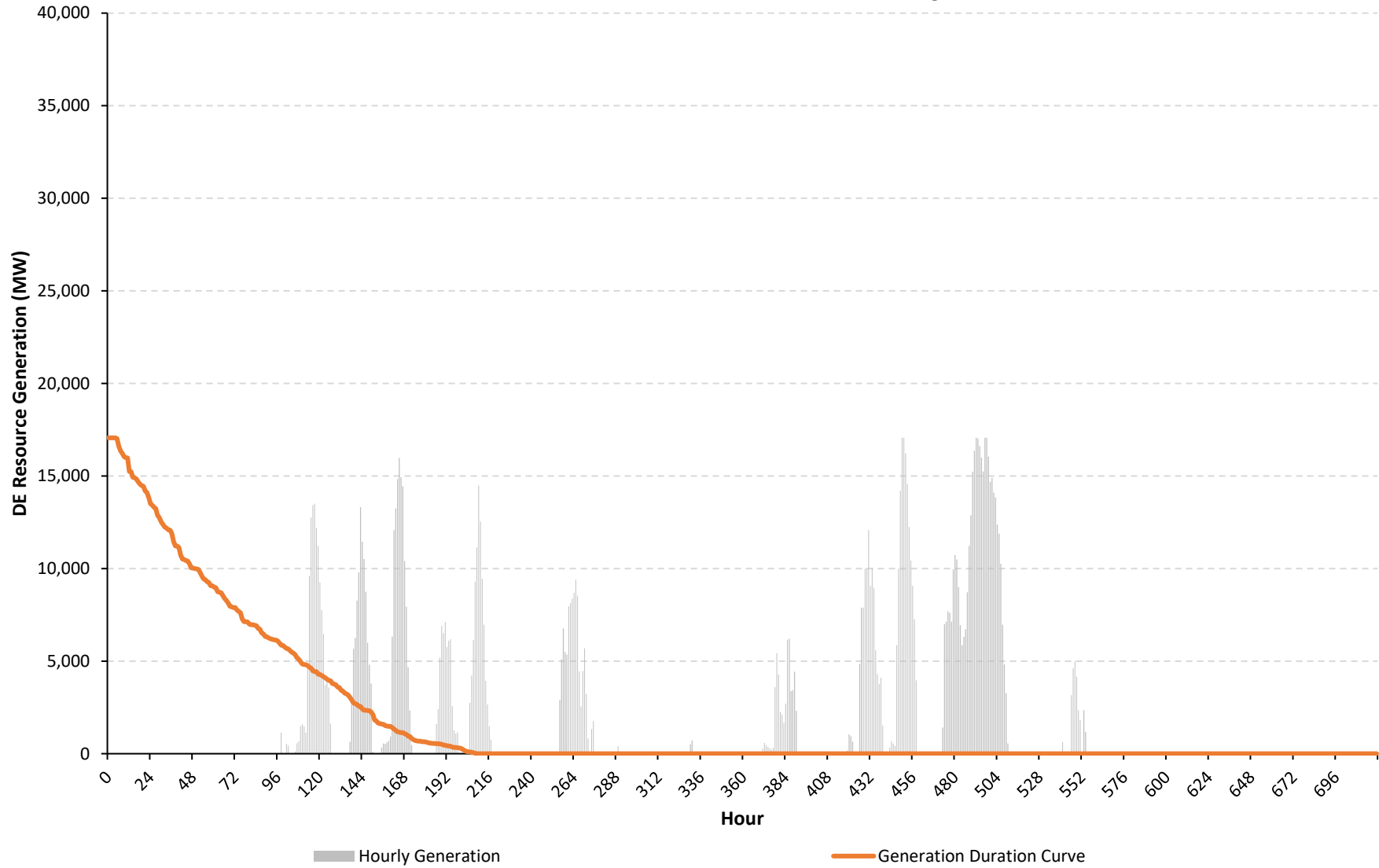
### Generation by Resource Type

Reference Case - Summer - CCP2 Resource Set - Drought

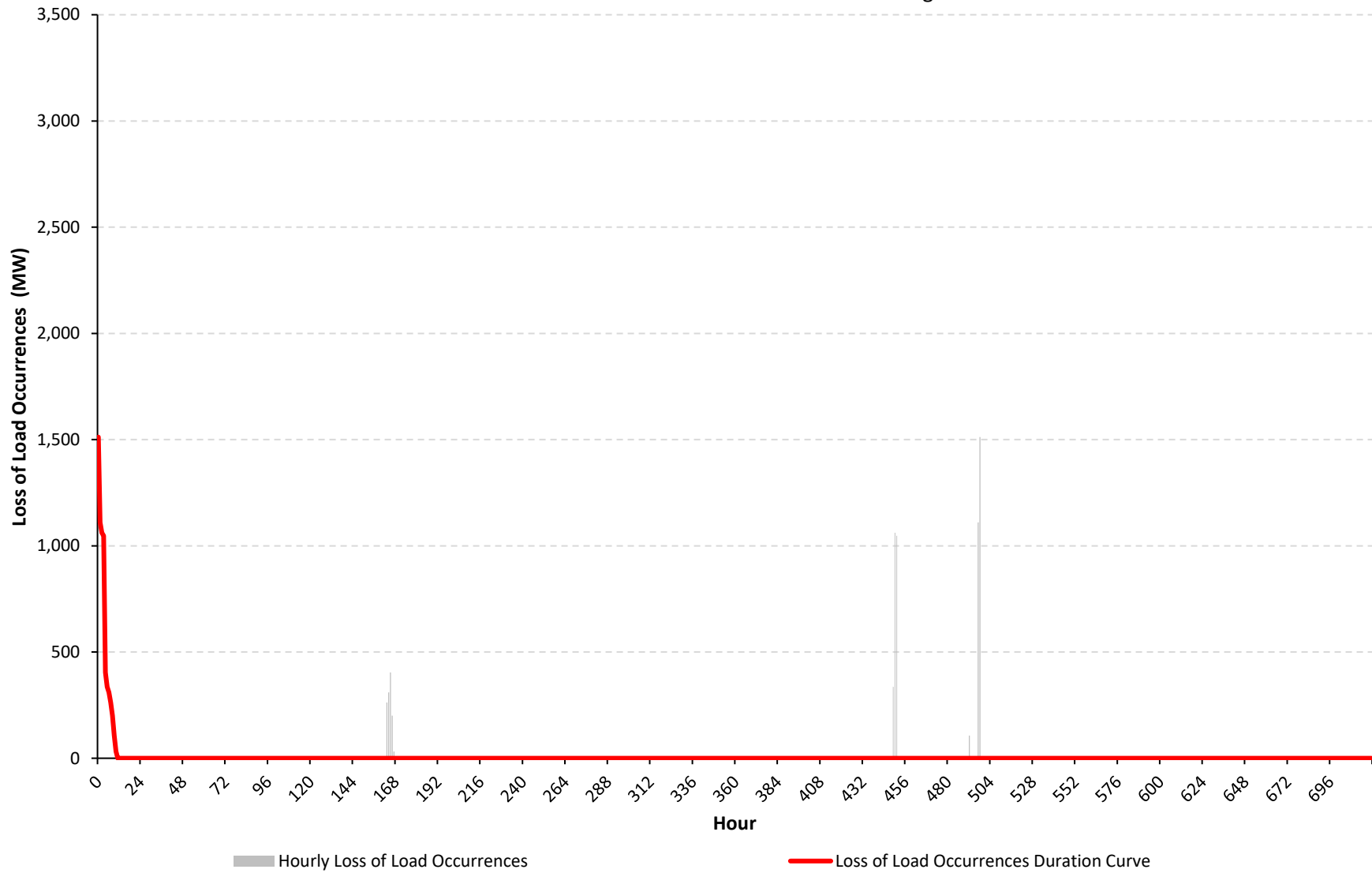




### NYCA DE Resource Generation (MW) Reference Case - Summer - CCP2 Resource Set - Drought



### NYCA Loss of Load Occurrences (MW) Reference Case - Summer - CCP2 Resource Set - Drought



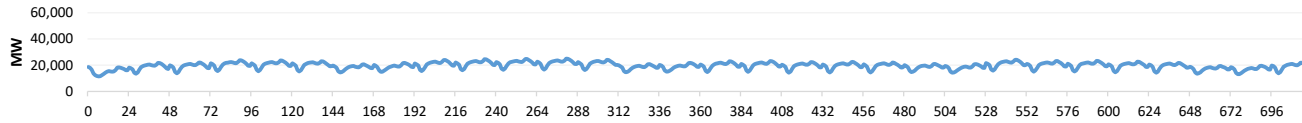
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 45 - Reference Case - Winter - CCP2 Resource Set - Drought**

### Hourly Results Summary

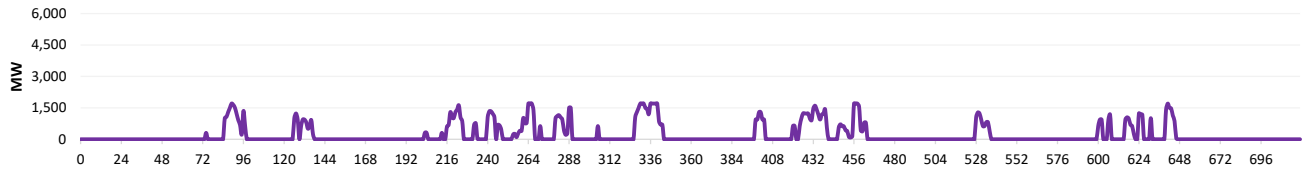
Case Name: Reference Case - Winter - CCP2 Resource Set - Drought

**Load During Modeling Period**



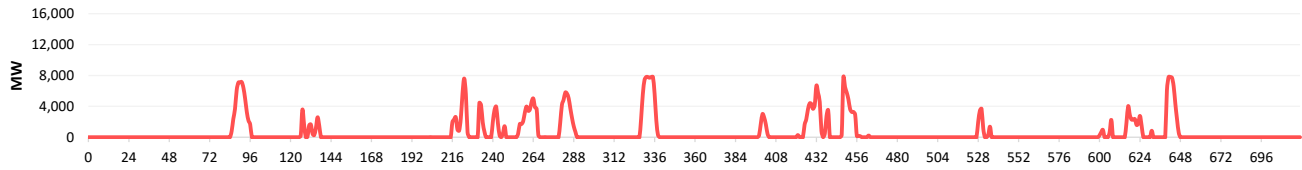
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



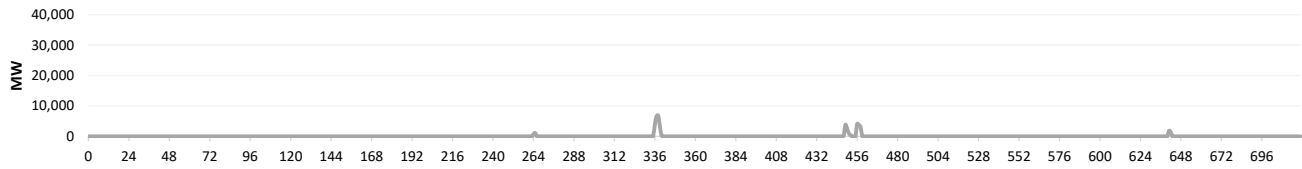
PRD Deployment	
Total Hrs.	164
Total MWh	159,551
Avg. MW	972.9

**Battery Energy Storage Deployed During Modeling Period**



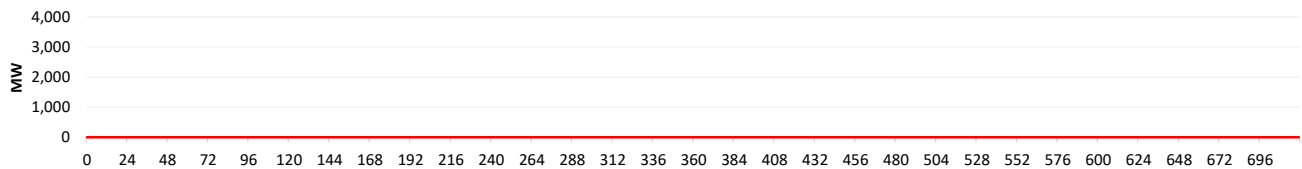
Battery Deployment	
Total Hrs.	145
Total MWh	440,040
Avg. MW	3,034.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	17
Total MWh	44,772
Avg. MW	2,633.6

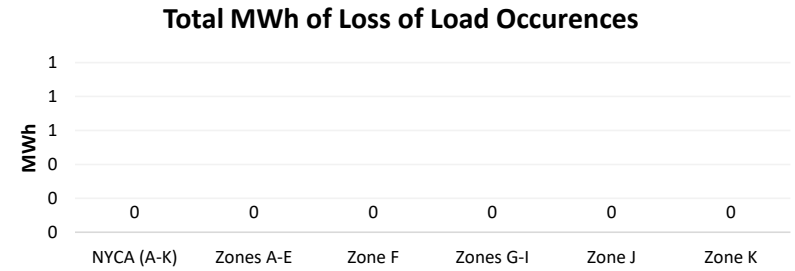
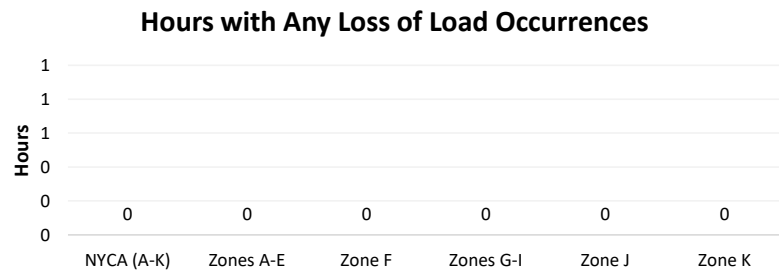
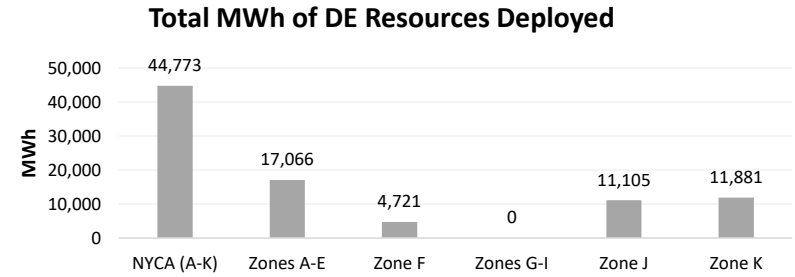
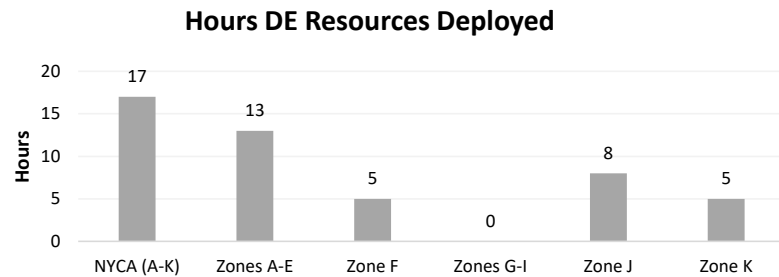
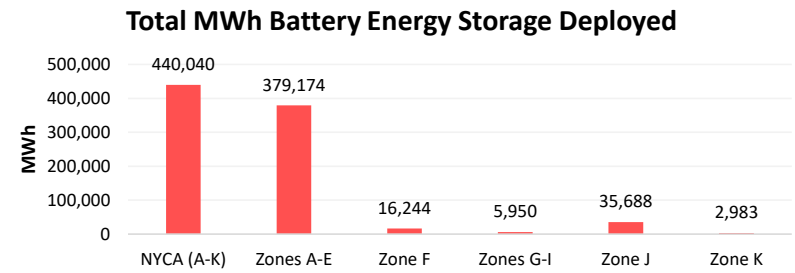
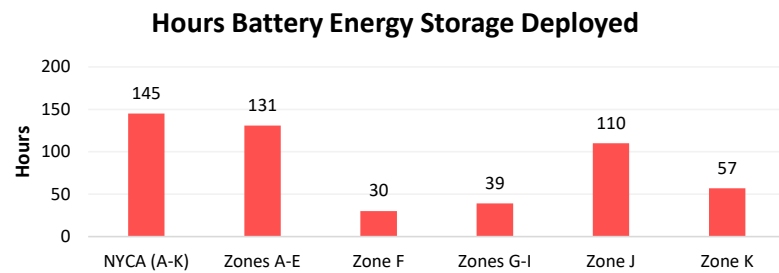
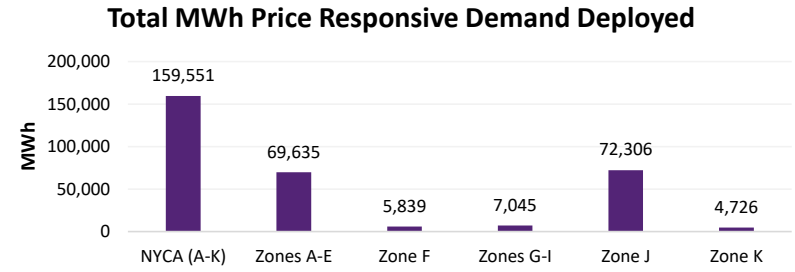
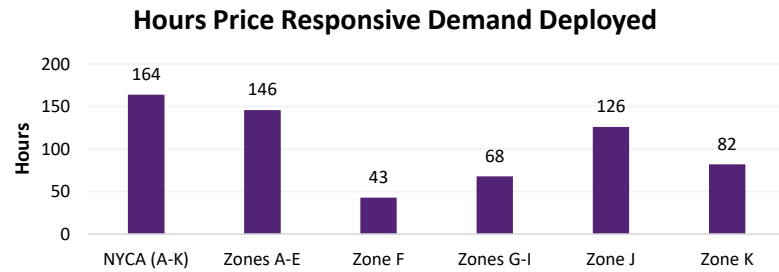
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

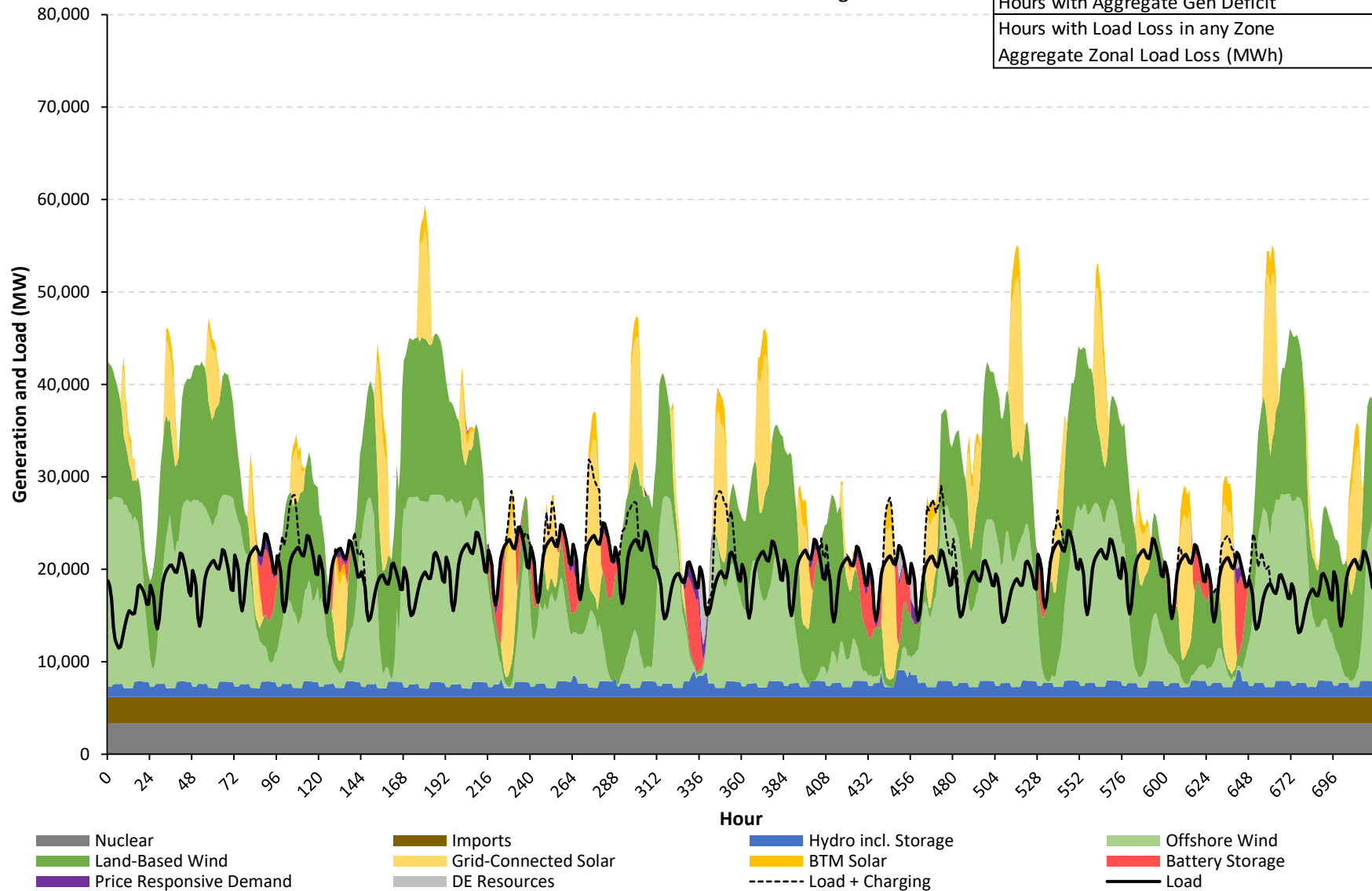
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Drought



### NYCA Hourly Load/Generation Balance by Resource Type Reference Case - Winter - CCP2 Resource Set - Drought

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	22,163,321
Gen Surplus/Deficit (MWh)	8,051,854
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

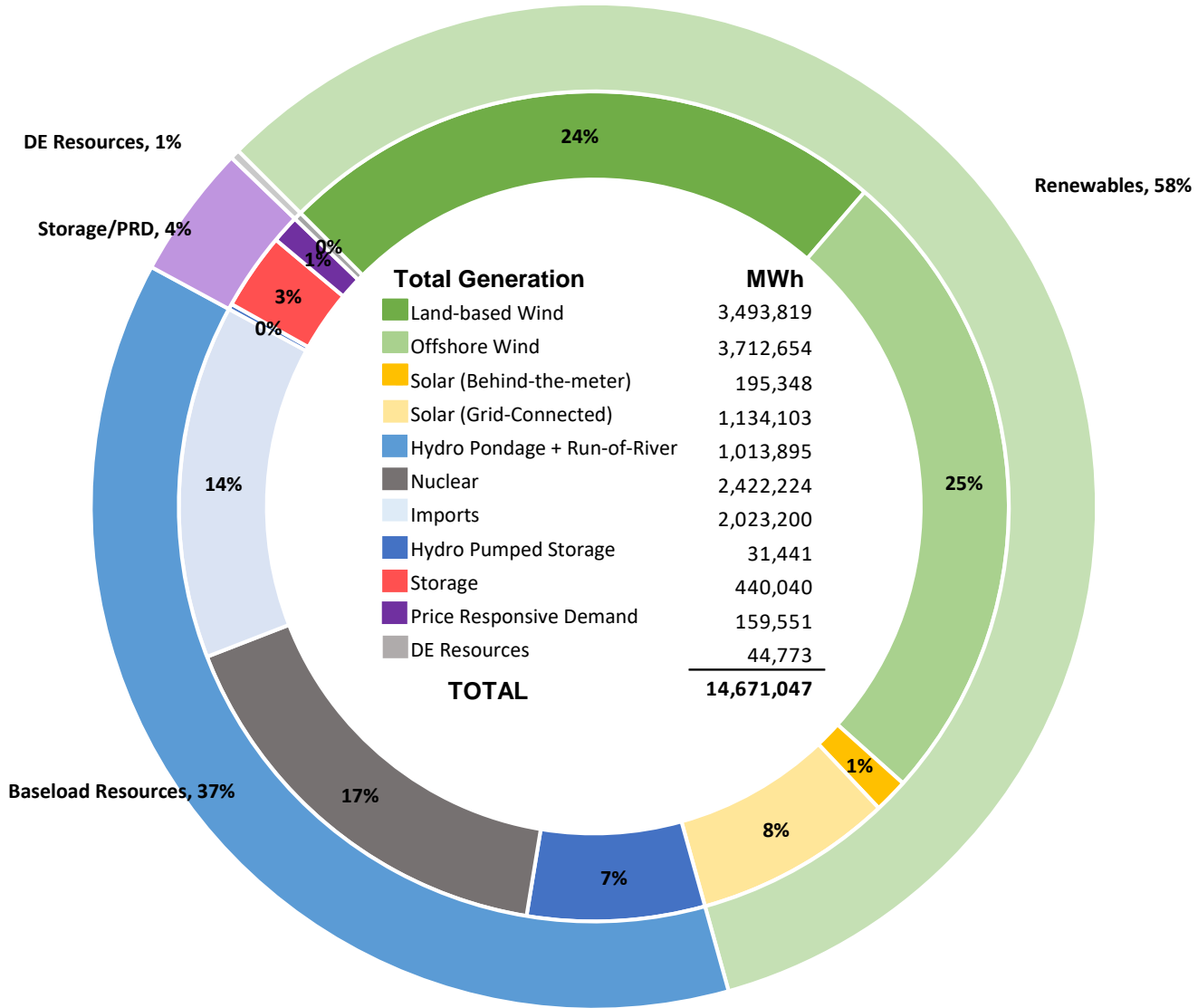


**Note:**

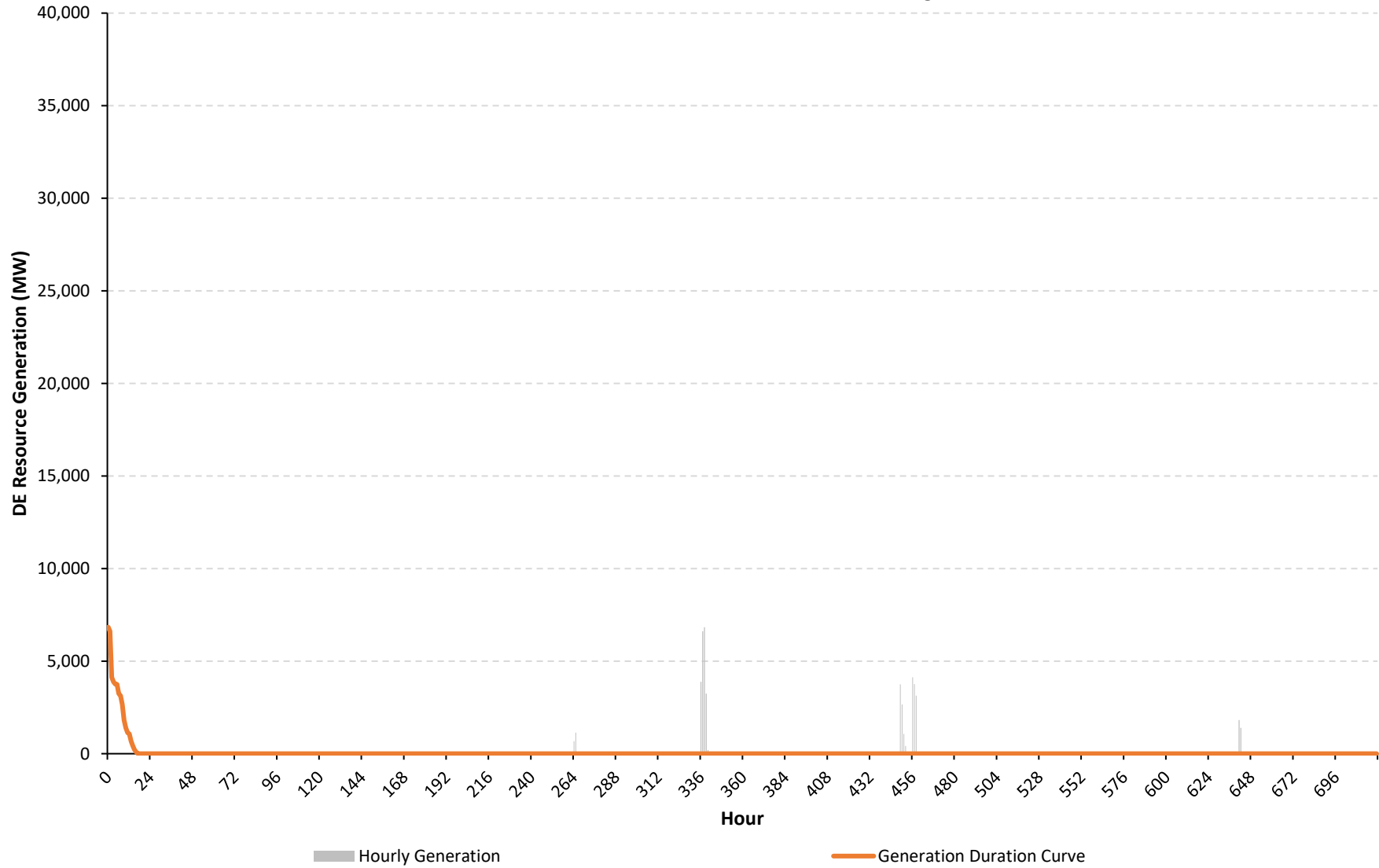
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

Reference Case - Winter - CCP2 Resource Set - Drought

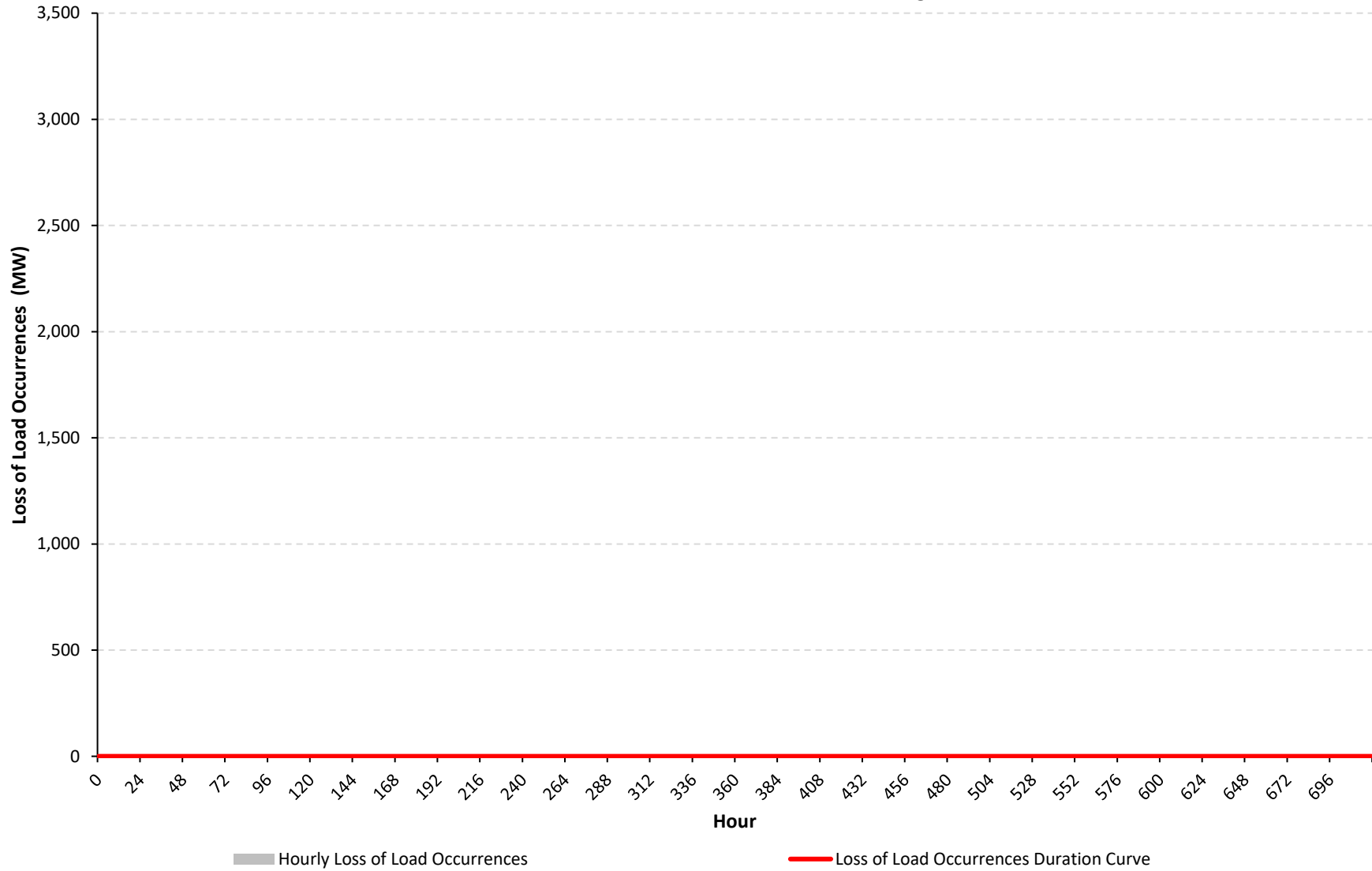


### NYCA DE Resource Generation (MW) Reference Case - Winter - CCP2 Resource Set - Drought





### NYCA Loss of Load Occurrences (MW) Reference Case - Winter - CCP2 Resource Set - Drought



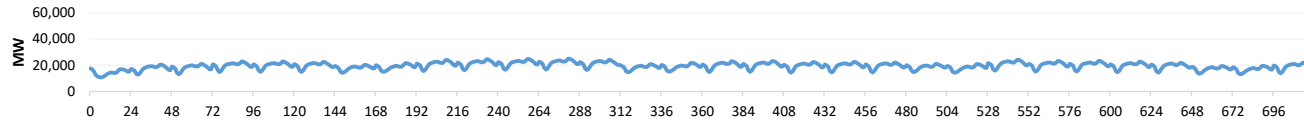
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 46 - Reference Case - Winter - CCP2 Resource Set - Icing**

### Hourly Results Summary

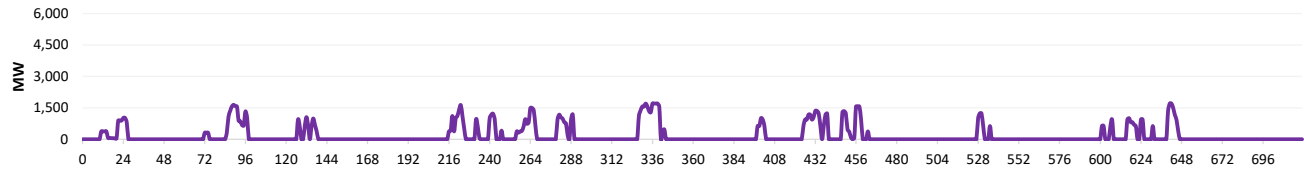
Case Name: Reference Case - Winter - CCP2 Resource Set - Icing

**Load During Modeling Period**



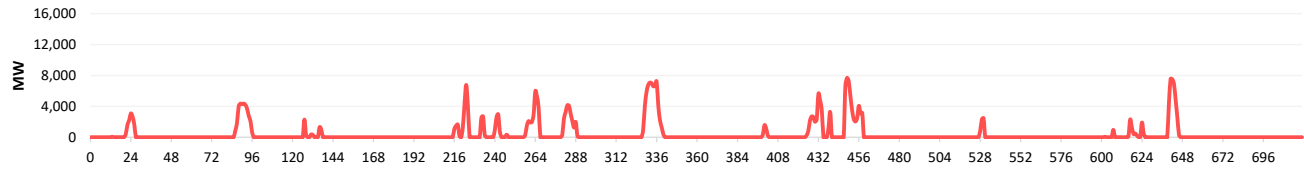
Loss of Load	
Total Hrs.	720
Total MWh	13,974,142
Avg. MW	19,408.5

**Price Responsive Demand Deployed During Modeling Period**



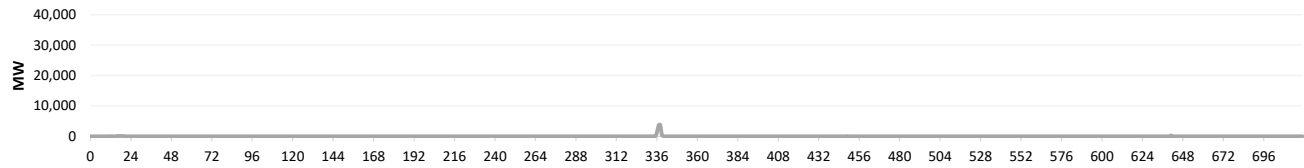
PRD Deployment	
Total Hrs.	151
Total MWh	135,983
Avg. MW	900.5

**Battery Energy Storage Deployed During Modeling Period**



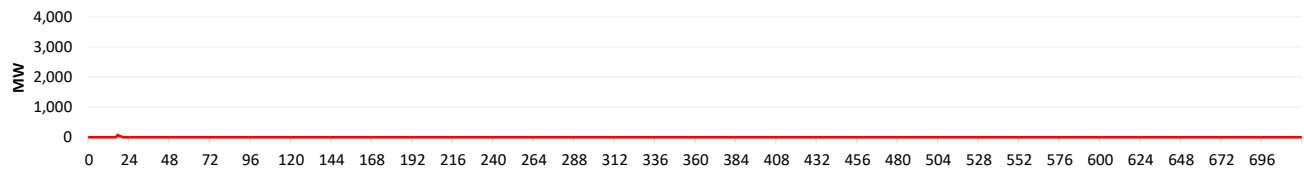
Battery Deployment	
Total Hrs.	130
Total MWh	322,260
Avg. MW	2,478.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	14
Total MWh	9,886
Avg. MW	706.1

**Loss of Load Occurrences During Modeling Period**

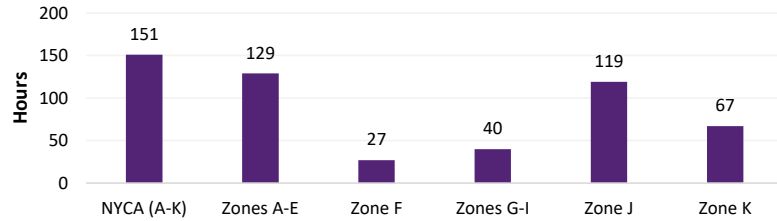


Loss of Load Occurrences	
Total Hrs.	3
Total MWh	157
Avg. MW	52.3

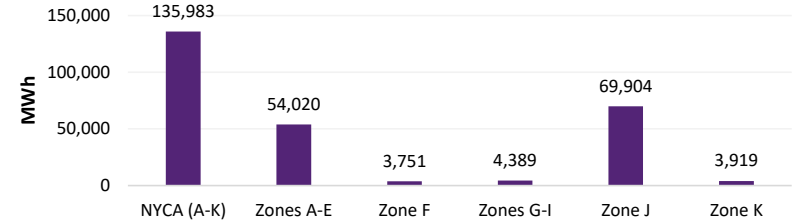
### Full Period Results Summary

Case Name: Reference Case - Winter - CCP2 Resource Set - Icing

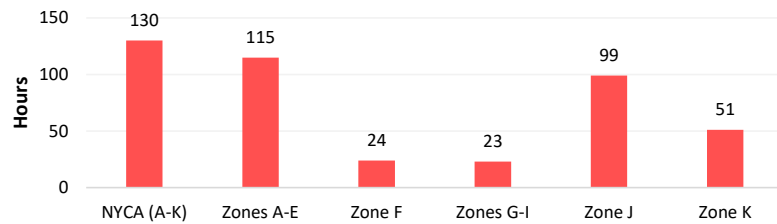
#### Hours Price Responsive Demand Deployed



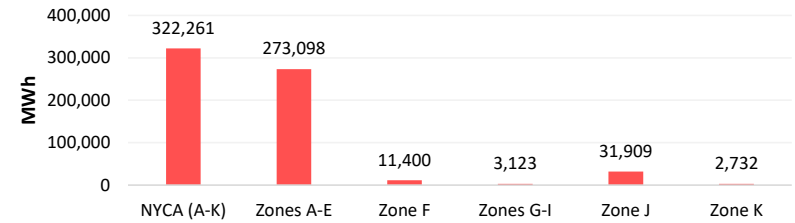
#### Total MWh Price Responsive Demand Deployed



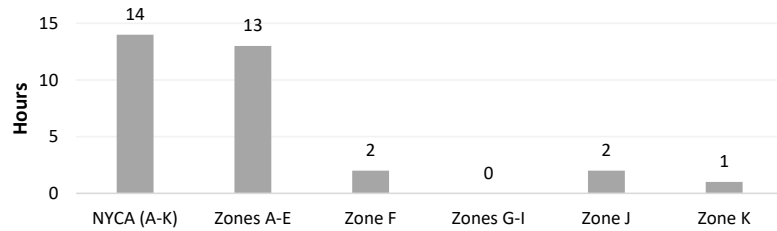
#### Hours Battery Energy Storage Deployed



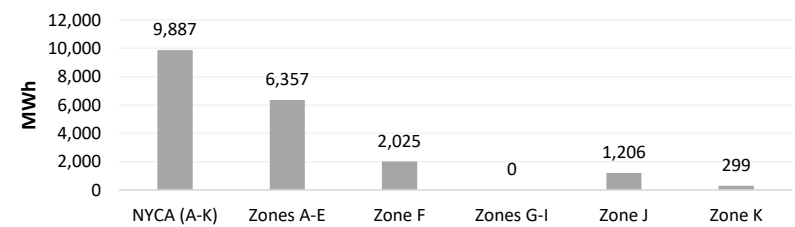
#### Total MWh Battery Energy Storage Deployed



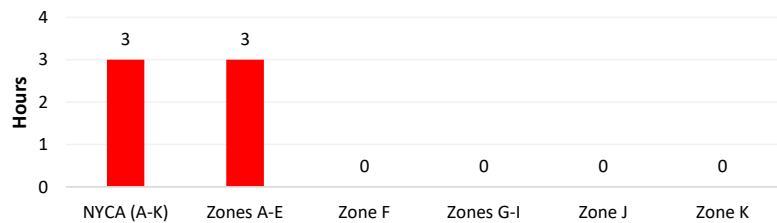
#### Hours DE Resources Deployed



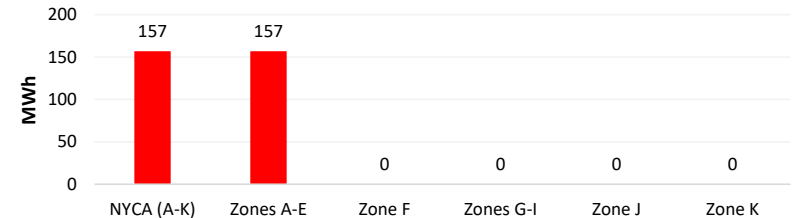
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



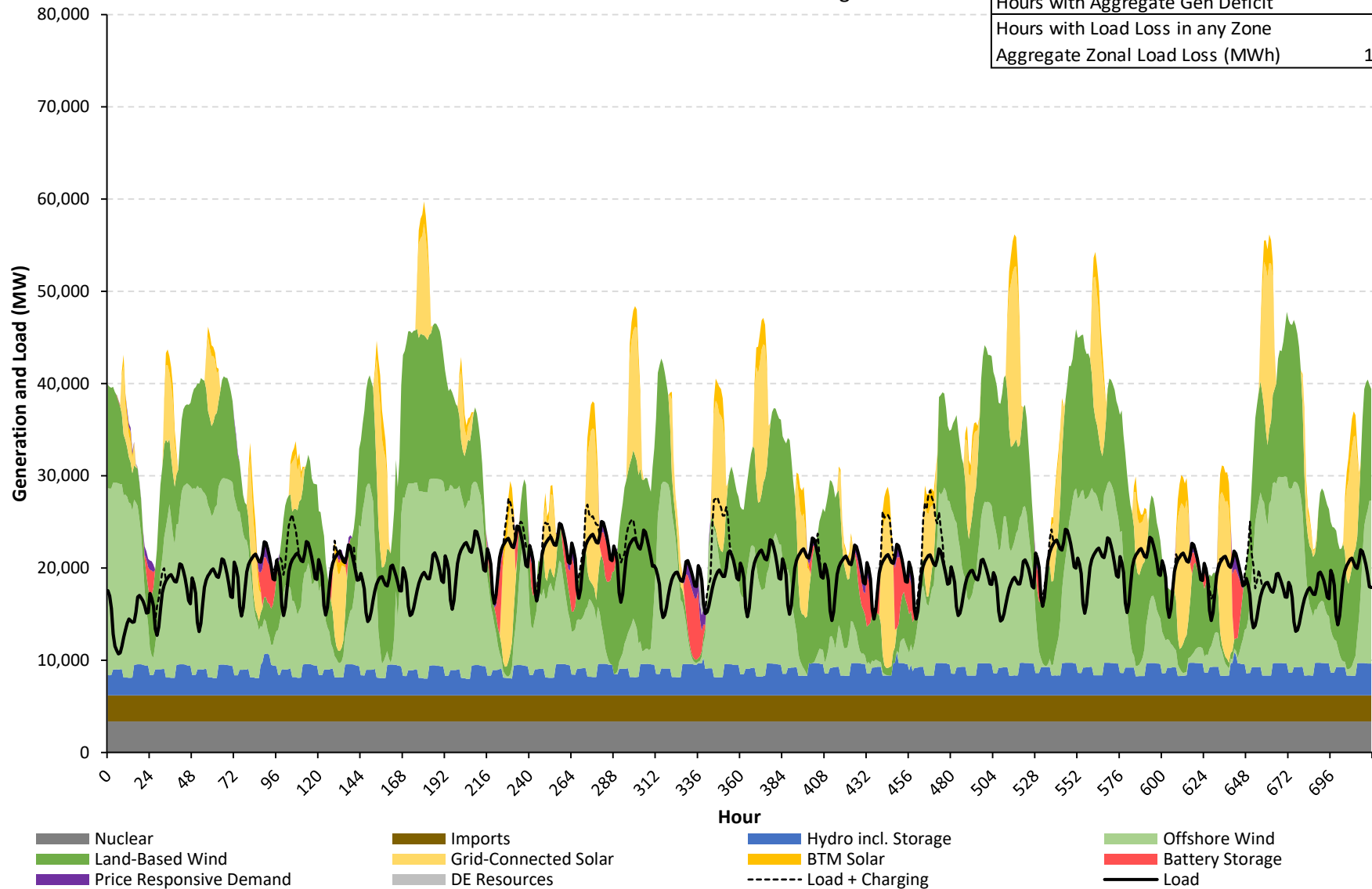
#### Total MWh of Loss of Load Occurrences



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - CCP2 Resource Set - Icing

Aggregate Load in Period (MWh)	13,974,142
Aggregate Gen in Period (MWh)	22,681,833
Gen Surplus/Deficit (MWh)	8,707,690
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	3
Aggregate Zonal Load Loss (MWh)	157

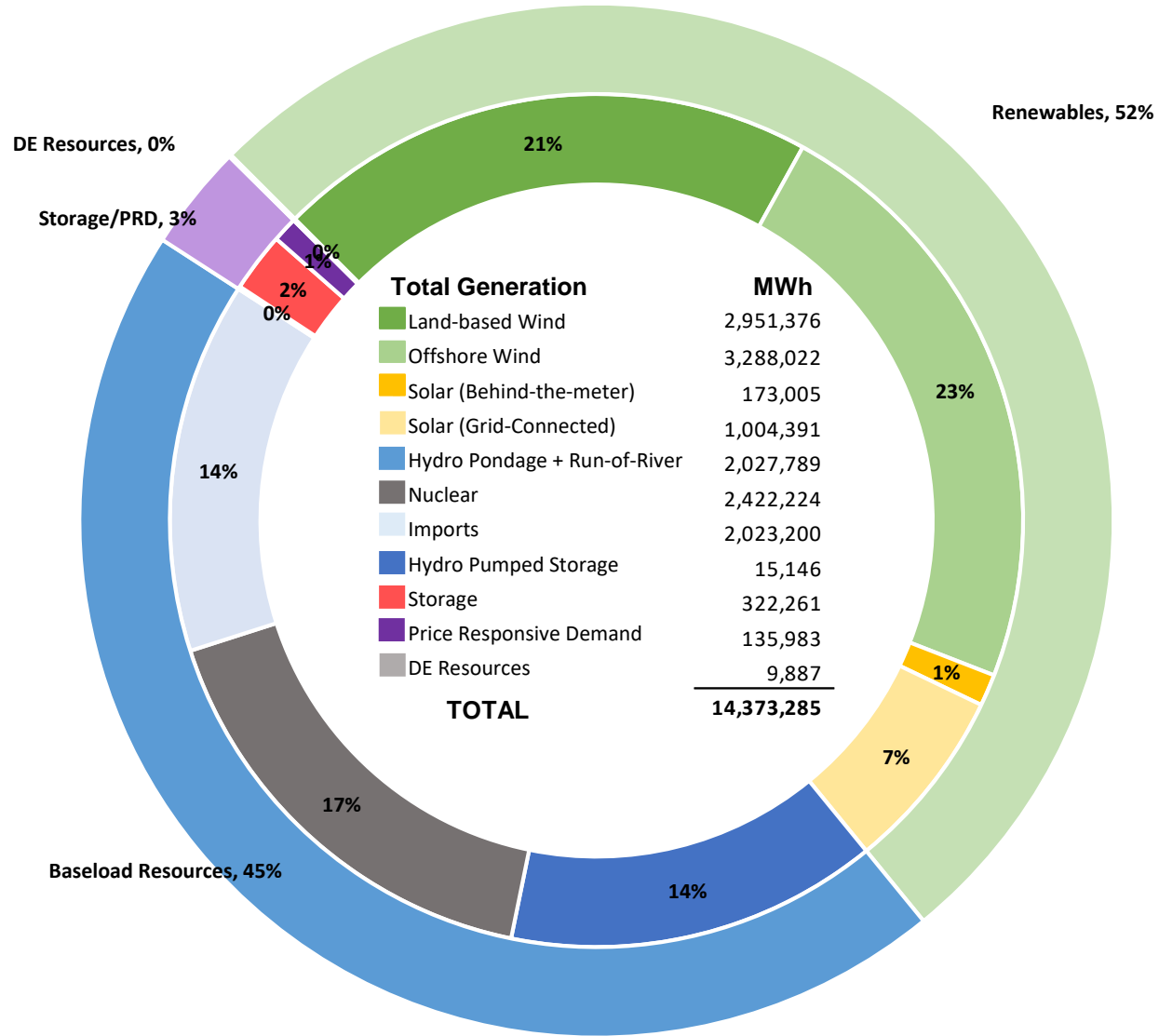


**Note:**

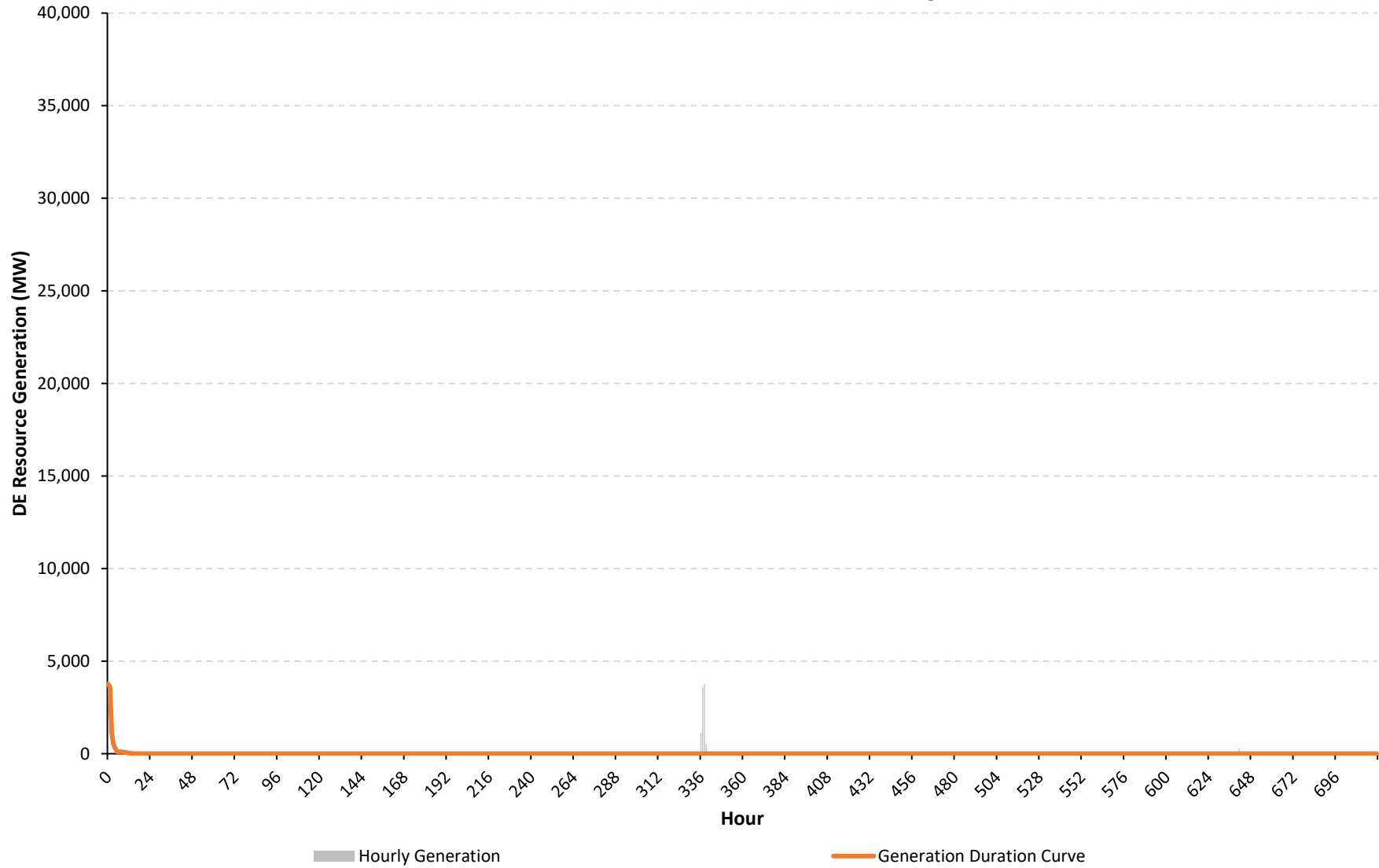
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

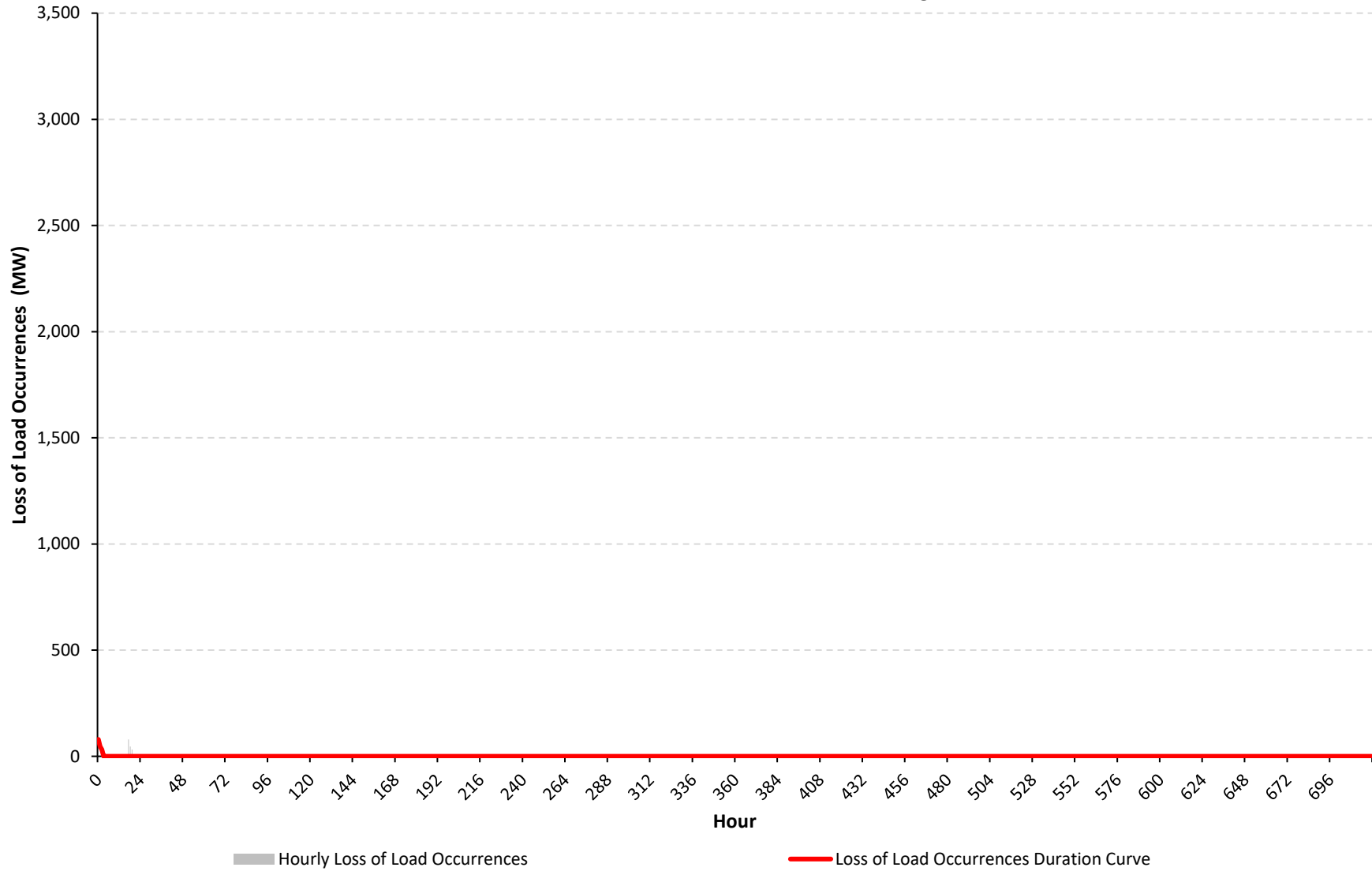
Reference Case - Winter - CCP2 Resource Set - Icing



### NYCA DE Resource Generation (MW) Reference Case - Winter - CCP2 Resource Set - Icing



### NYCA Loss of Load Occurrences (MW) Reference Case - Winter - CCP2 Resource Set - Icing





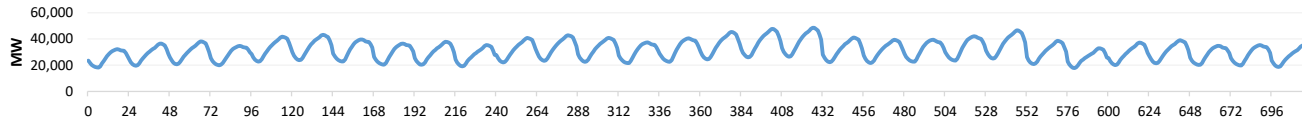
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 47 - CLCPA Case - Summer - GIT Resource Set**

**Hourly Results Summary**

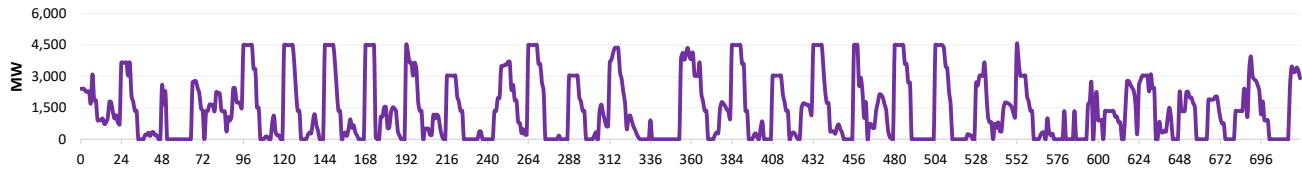
Case Name: CLCPA Case - Summer - GIT Resource Set

**Load During Modeling Period**



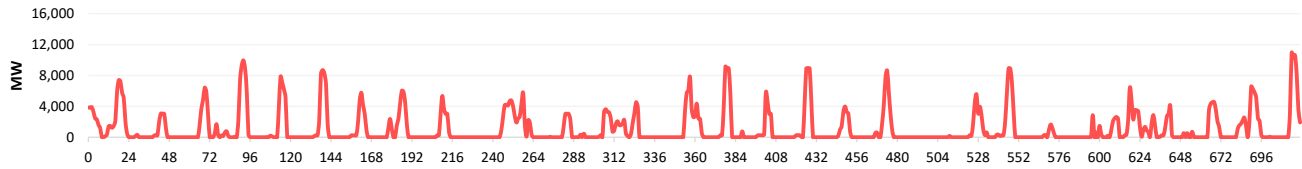
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



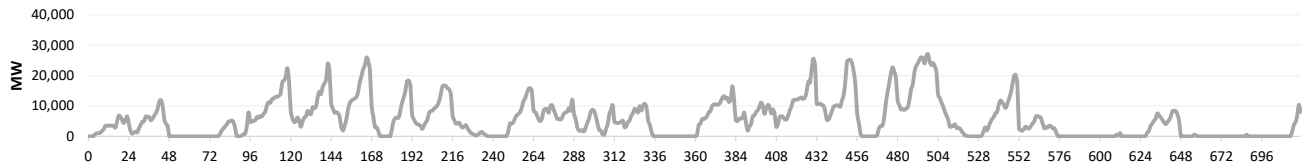
PRD Deployment	
Total Hrs.	505
Total MWh	1,030,945
Avg. MW	2,041.5

**Battery Energy Storage Deployed During Modeling Period**



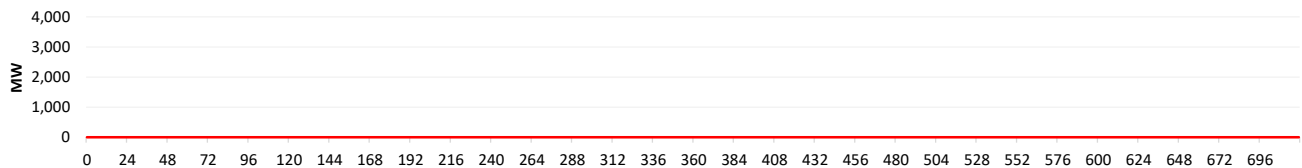
Battery Deployment	
Total Hrs.	305
Total MWh	834,078
Avg. MW	2,734.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	512
Total MWh	4,181,951
Avg. MW	8,167.9

**Loss of Load Occurrences During Modeling Period**

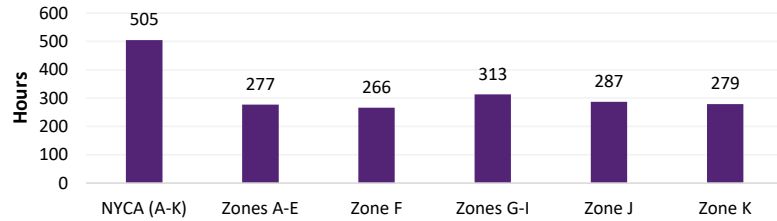


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

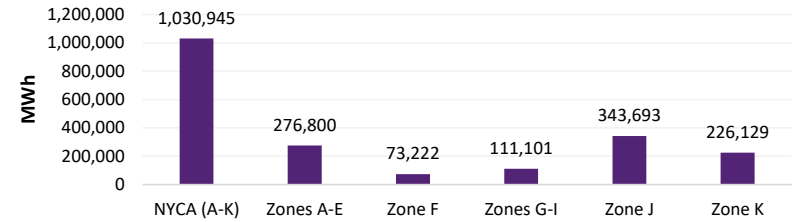
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set

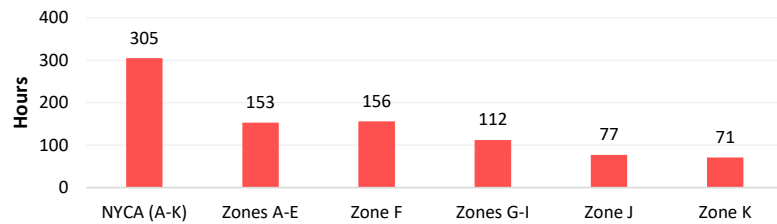
**Hours Price Responsive Demand Deployed**



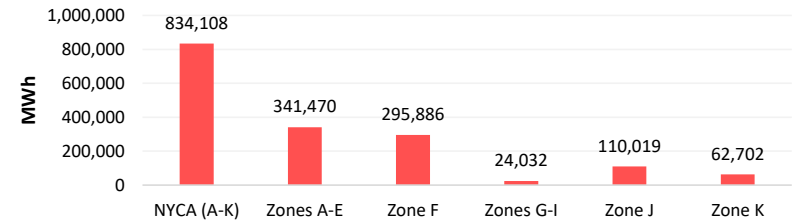
**Total MWh Price Responsive Demand Deployed**



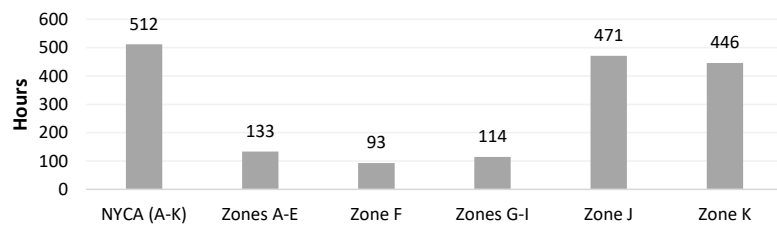
**Hours Battery Energy Storage Deployed**



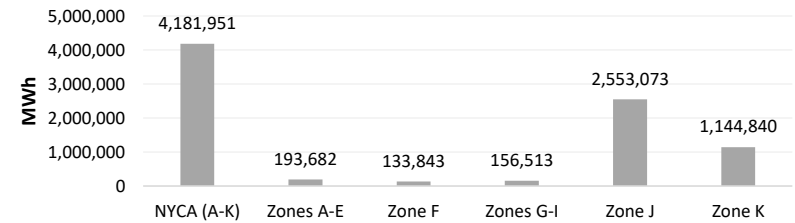
**Total MWh Battery Energy Storage Deployed**



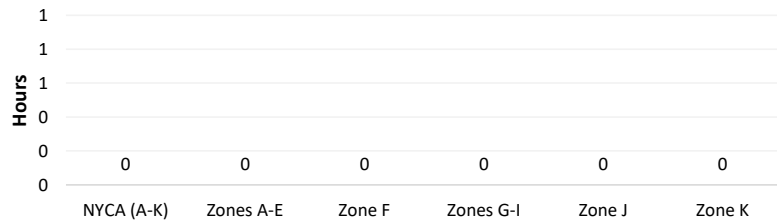
**Hours DE Resources Deployed**



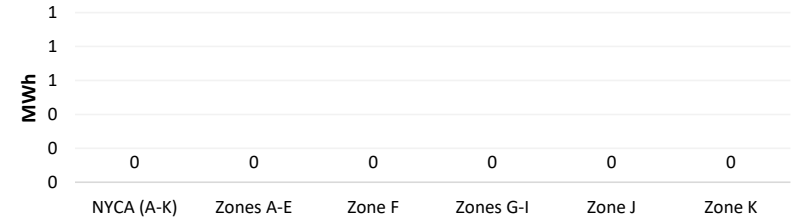
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



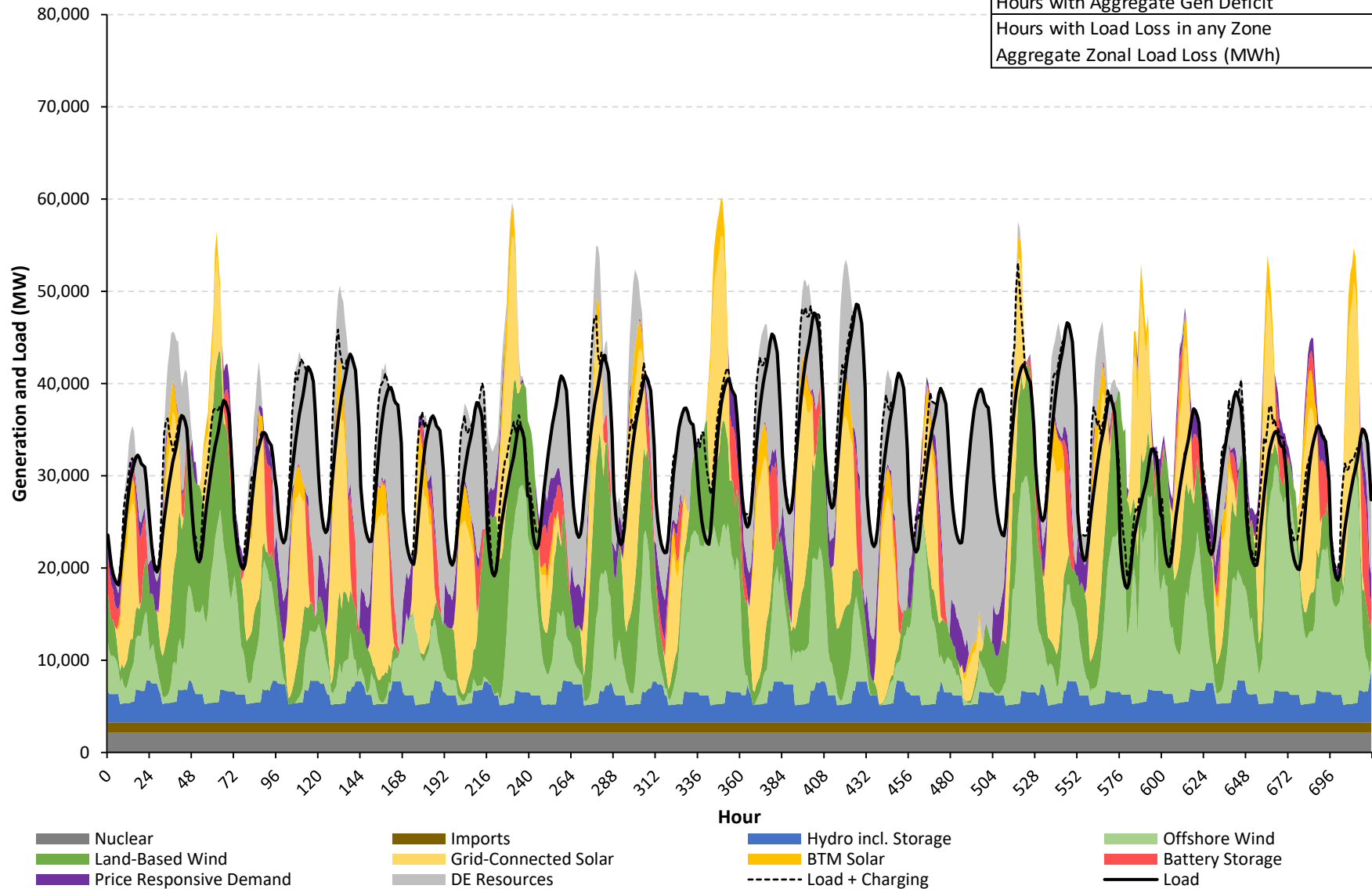
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	26,003,140
Gen Surplus/Deficit (MWh)	3,527,185
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

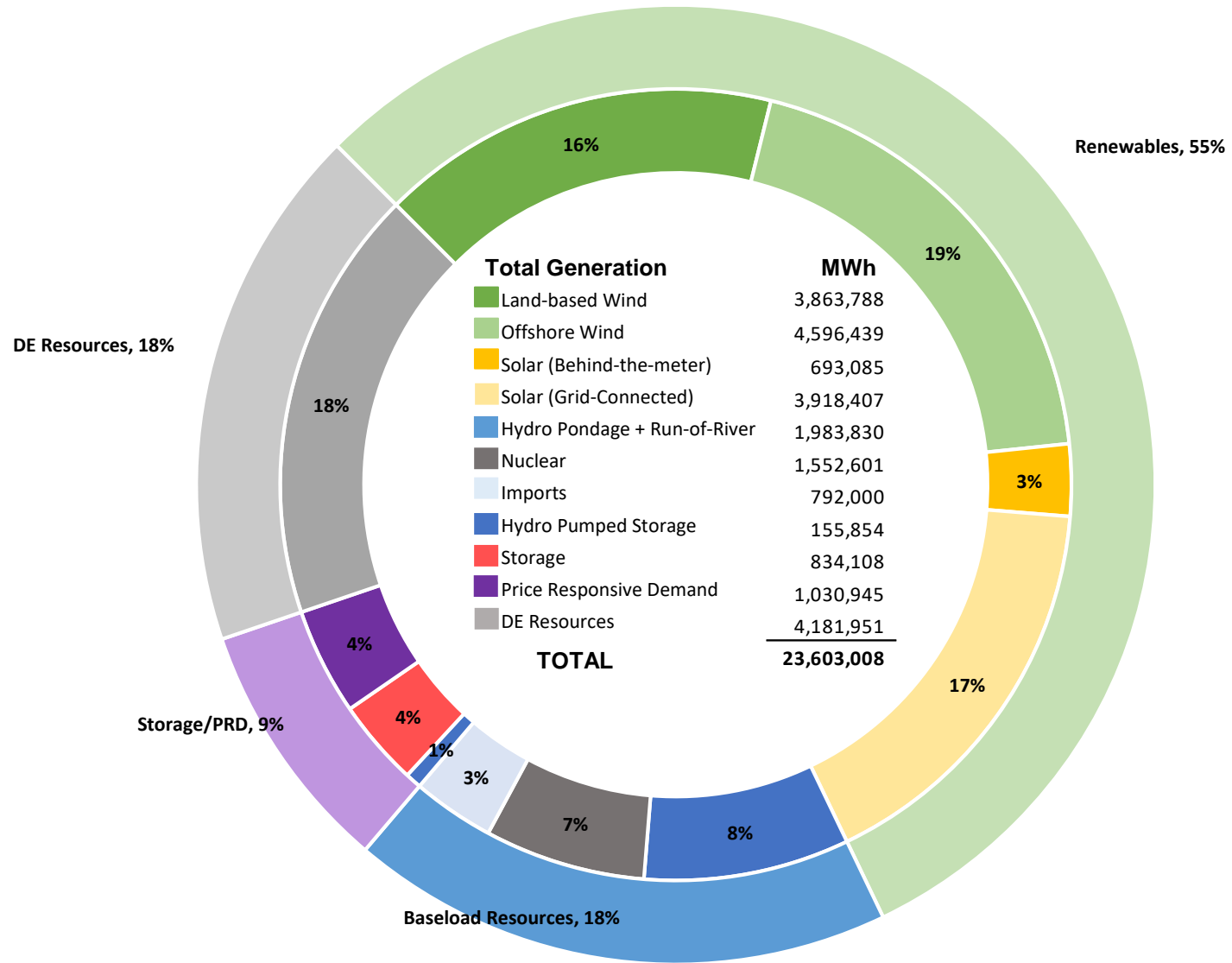


**Note:**

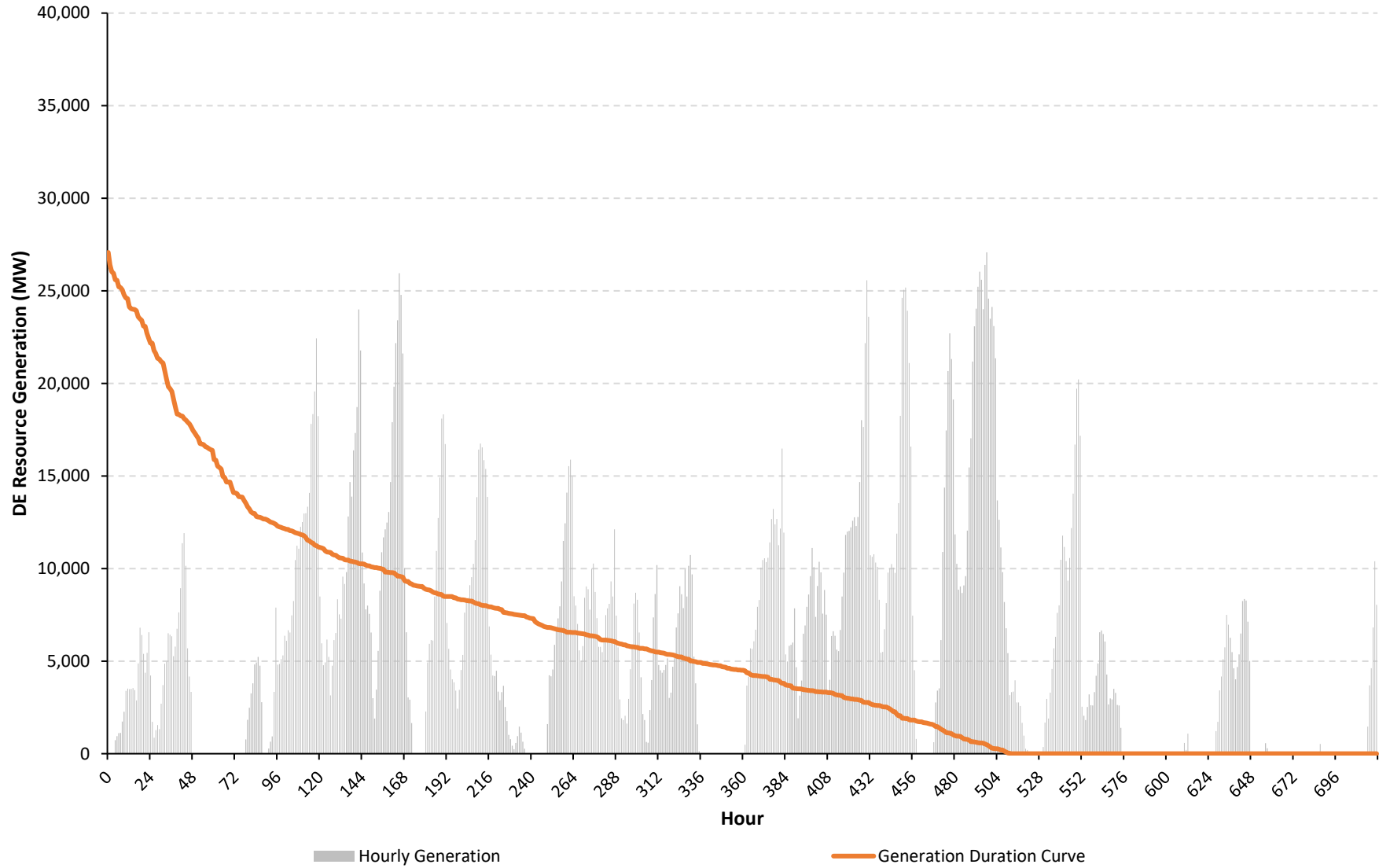
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

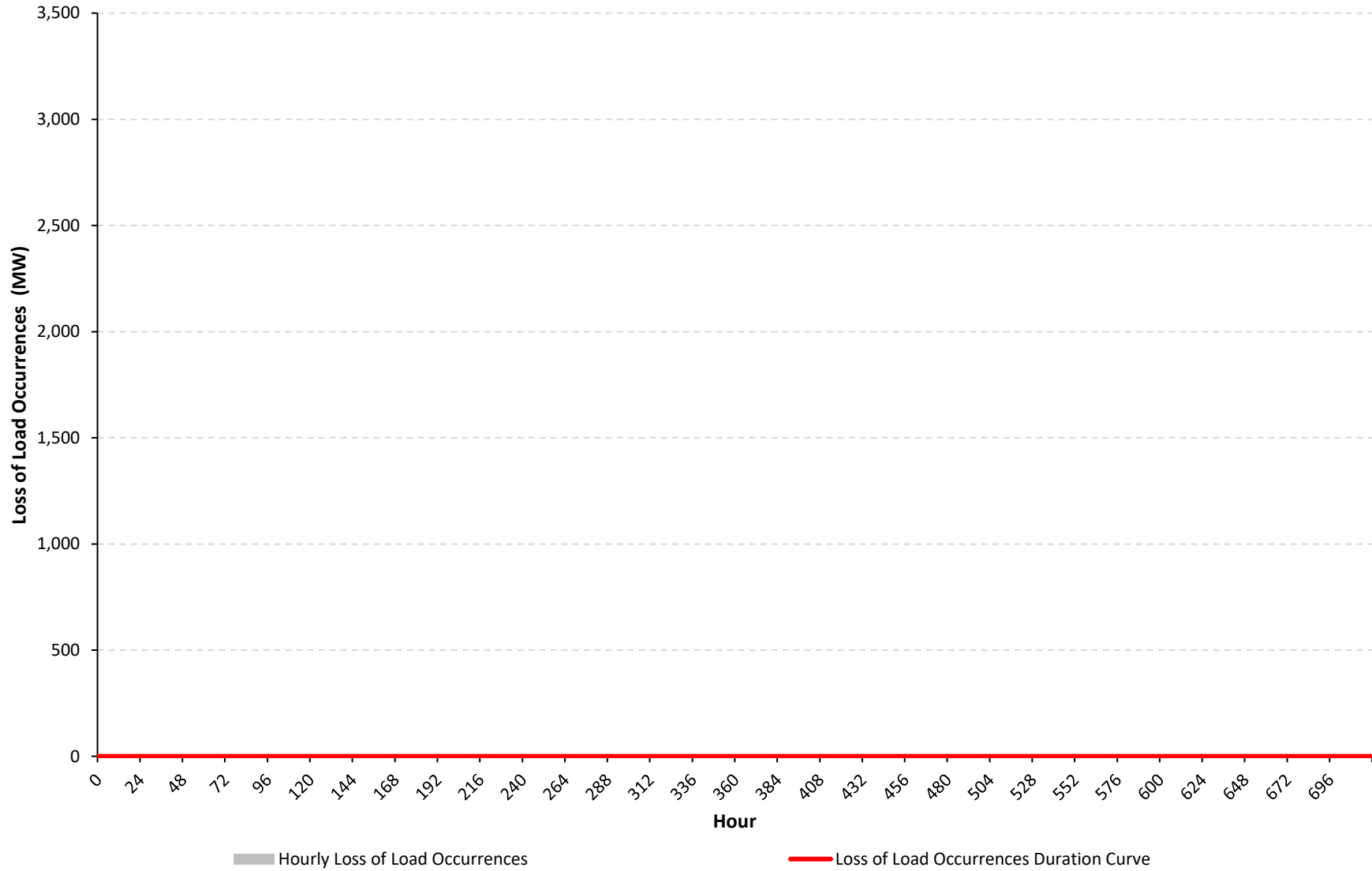
CLCPA Case - Summer - GIT Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set



## **Appendix C. Diagnostic Charts for All Cases**

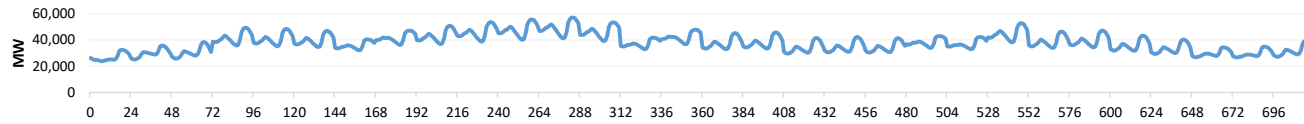
### **Case 48 - CLCPA Case - Winter - GIT Resource Set**



**Hourly Results Summary**

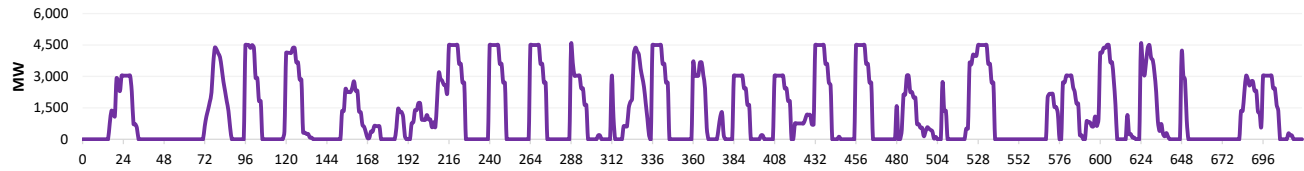
Case Name: CLCPA Case - Winter - GIT Resource Set

**Load During Modeling Period**



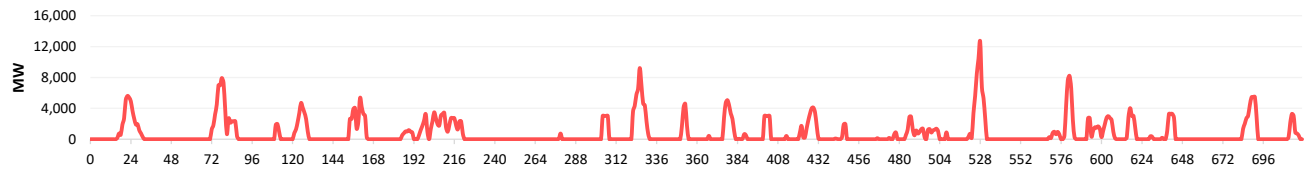
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



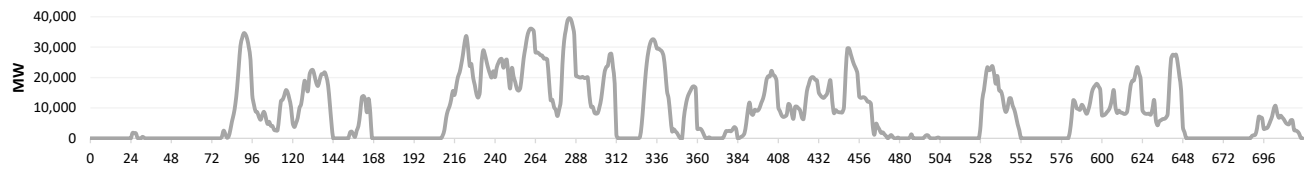
PRD Deployment	
Total Hrs.	380
Total MWh	898,730
Avg. MW	2,365.1

**Battery Energy Storage Deployed During Modeling Period**



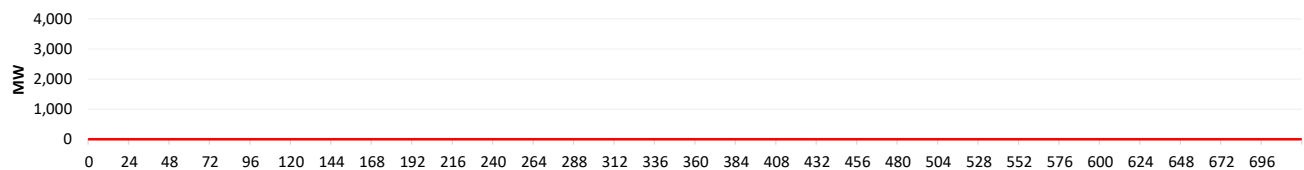
Battery Deployment	
Total Hrs.	239
Total MWh	575,834
Avg. MW	2,409.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	460
Total MWh	6,155,321
Avg. MW	13,381.1

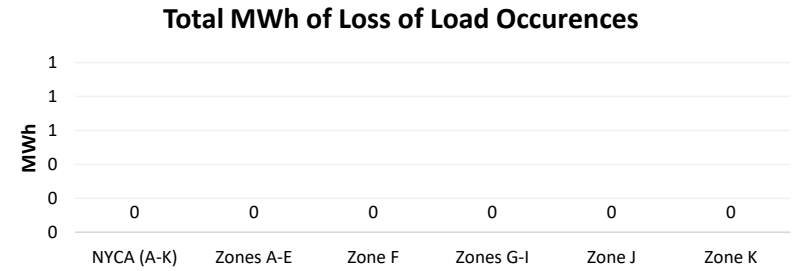
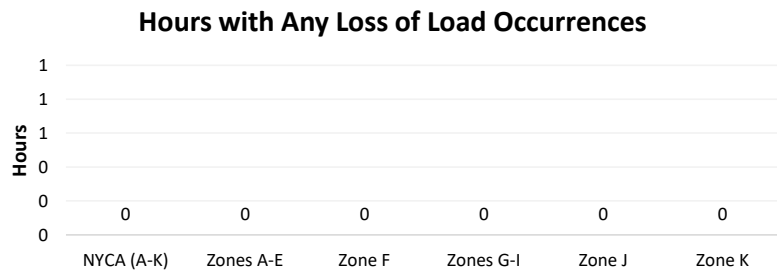
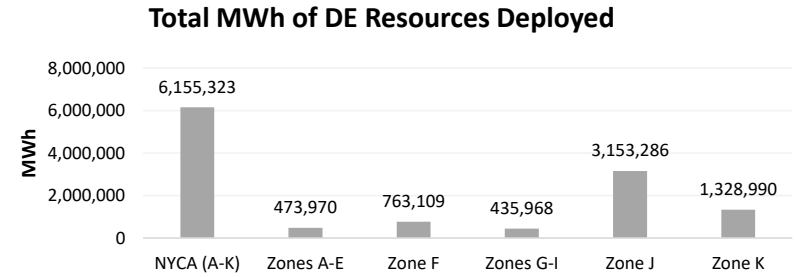
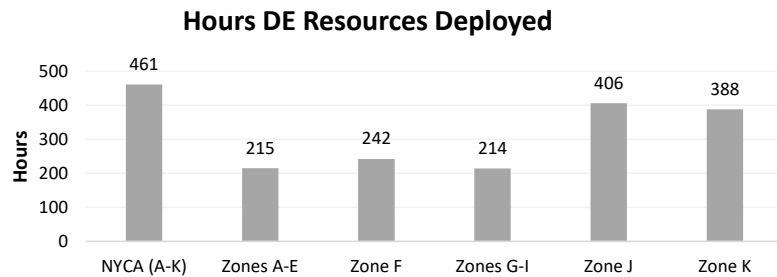
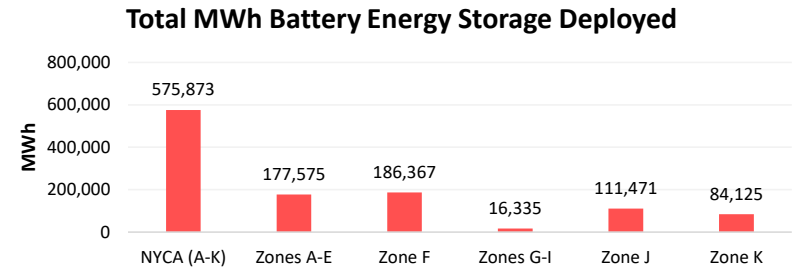
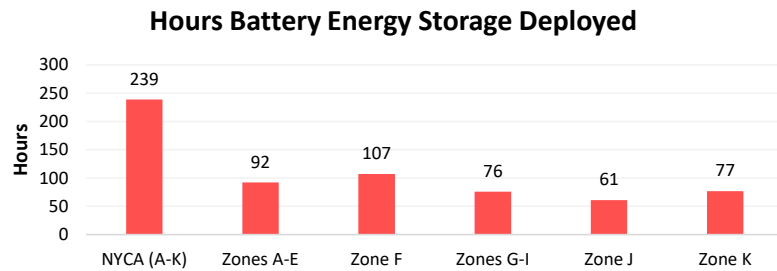
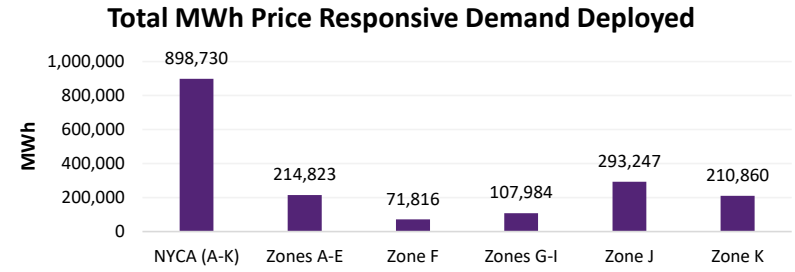
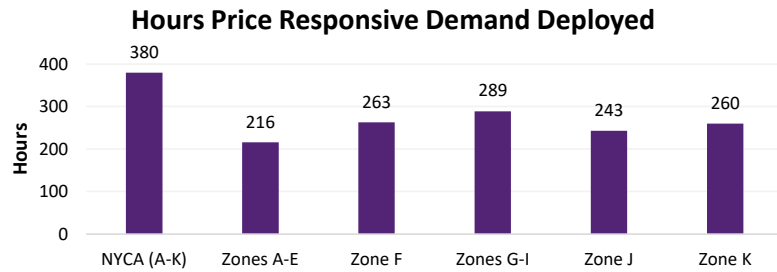
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

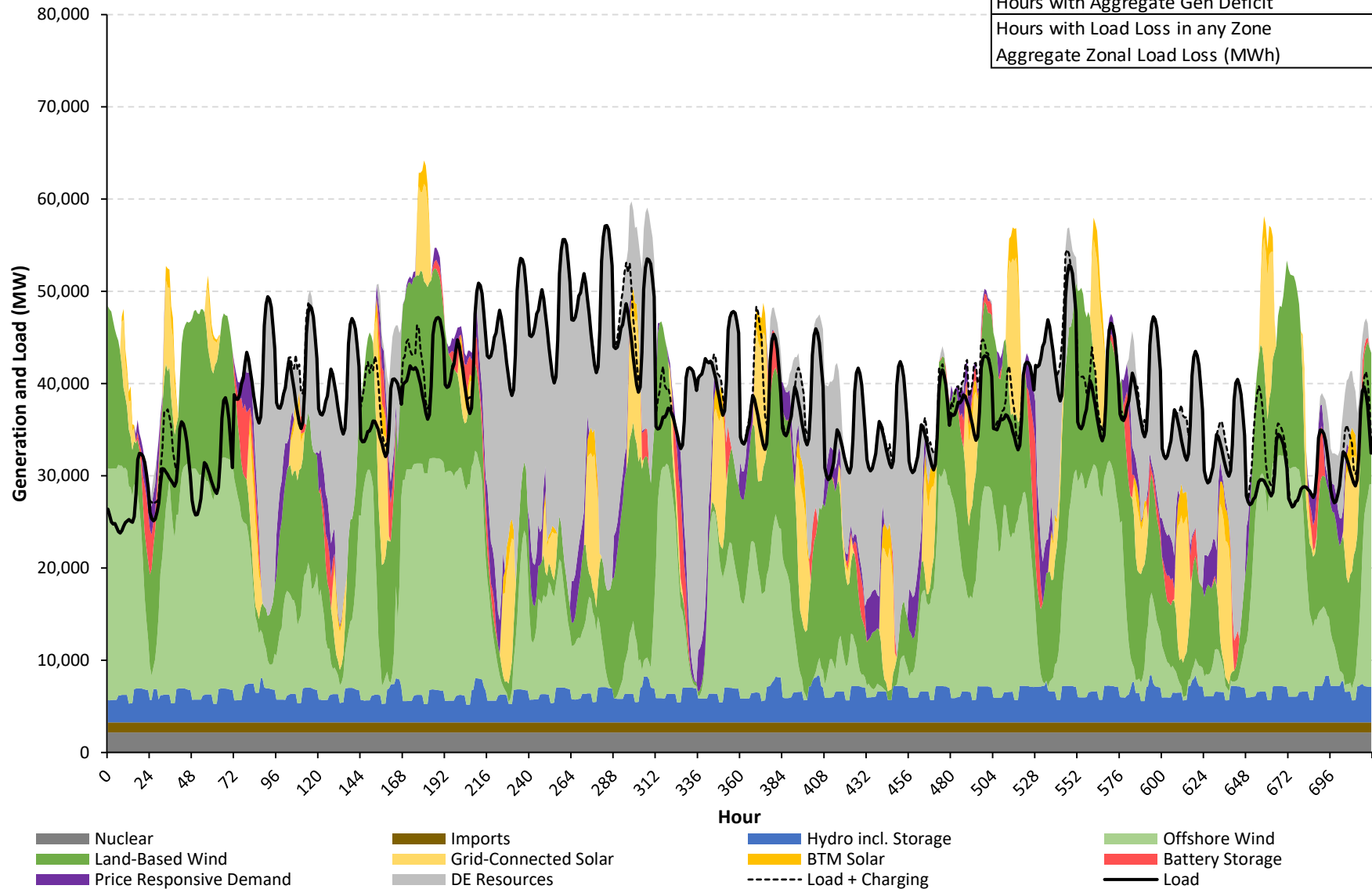
Case Name: CLCPA Case - Winter - GIT Resource Set



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	31,097,851
Gen Surplus/Deficit (MWh)	3,775,814
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

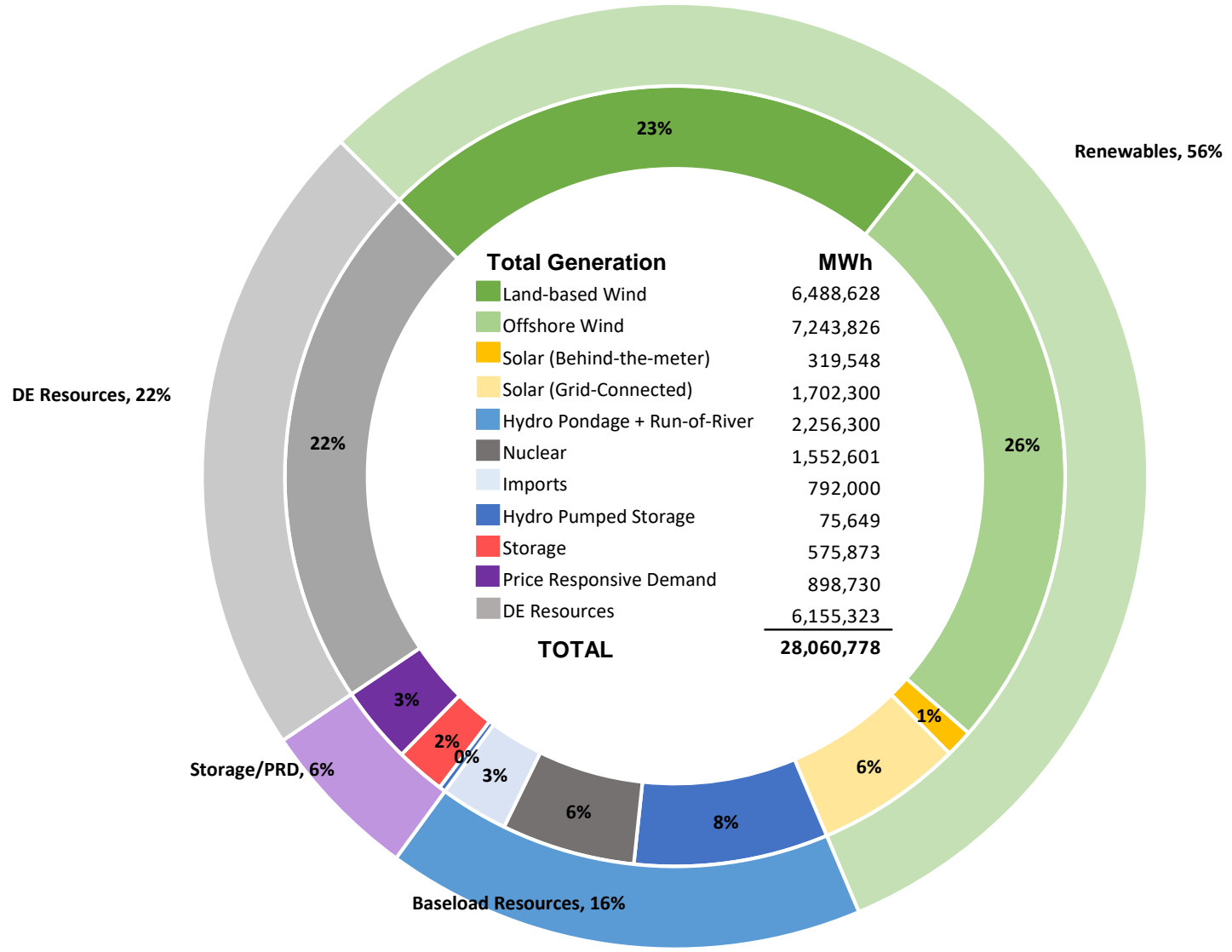


**Note:**

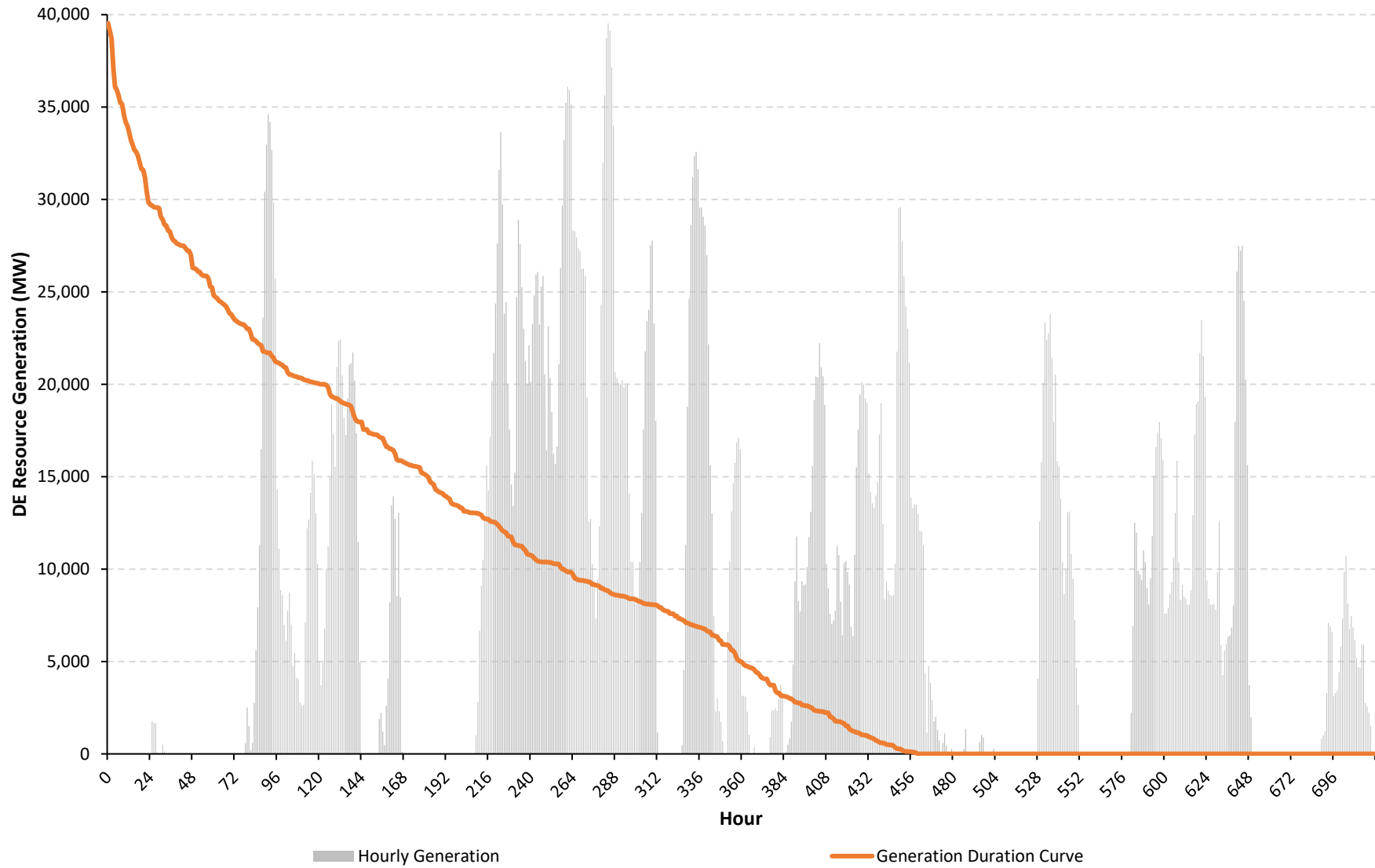
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

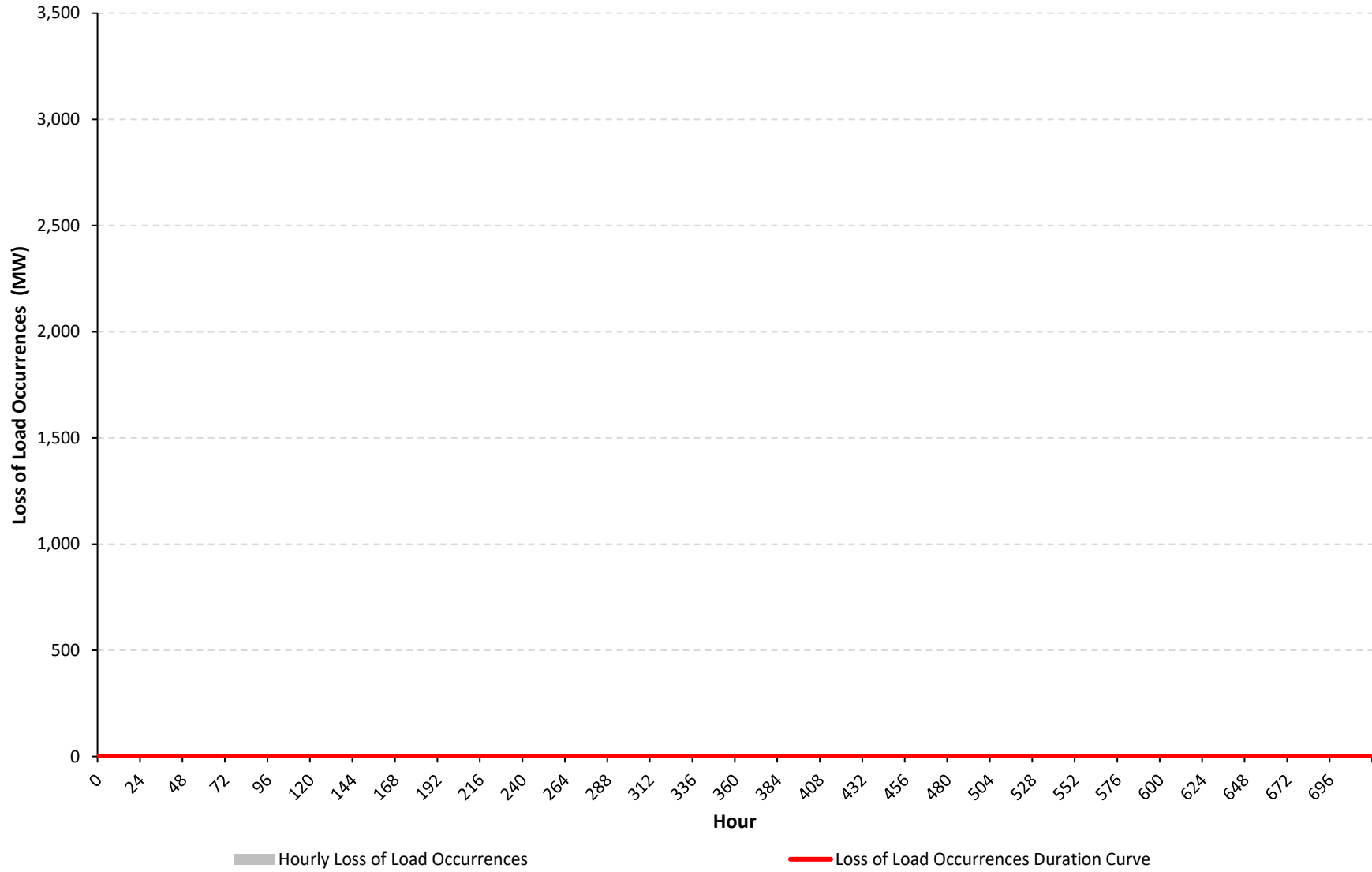
CLCPA Case - Winter - GIT Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set



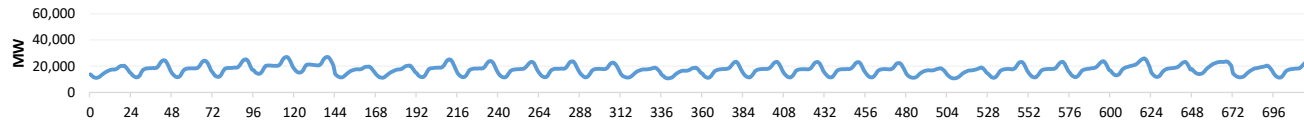
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 49 - CLCPA Case - Shoulder - GIT Resource Set**

### Hourly Results Summary

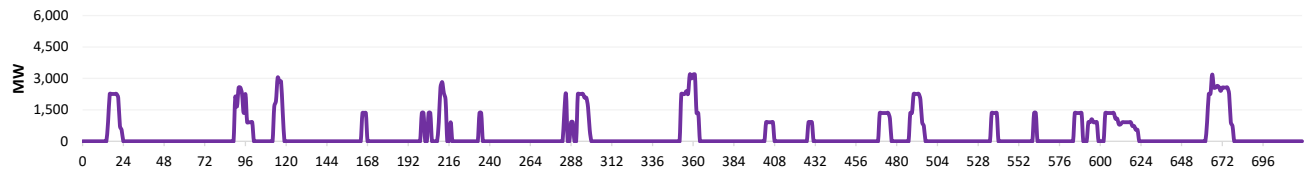
Case Name: CLCPA Case - Shoulder - GIT Resource Set

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



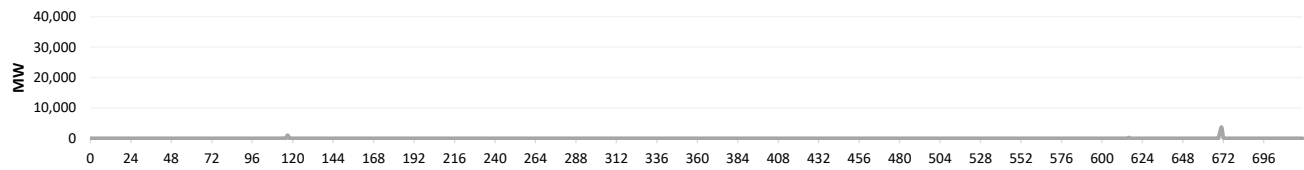
PRD Deployment	
Total Hrs.	141
Total MWh	226,363
Avg. MW	1,605.4

**Battery Energy Storage Deployed During Modeling Period**



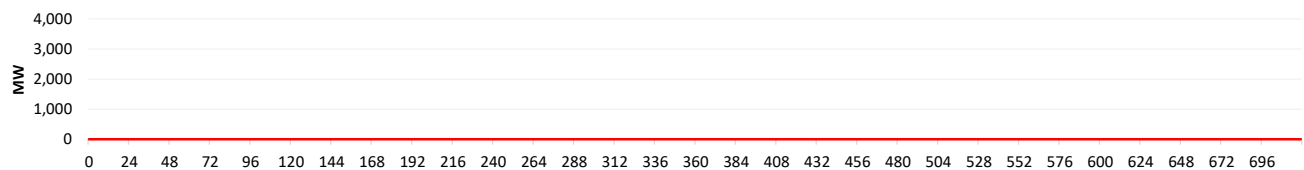
Battery Deployment	
Total Hrs.	77
Total MWh	140,027
Avg. MW	1,818.5

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	6
Total MWh	7,233
Avg. MW	1,205.5

**Loss of Load Occurrences During Modeling Period**

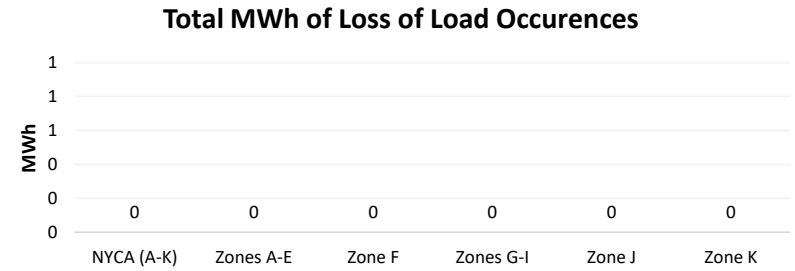
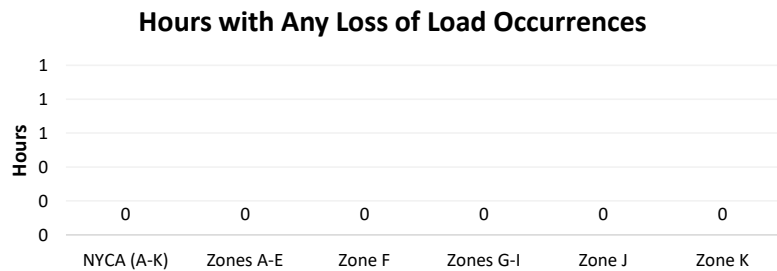
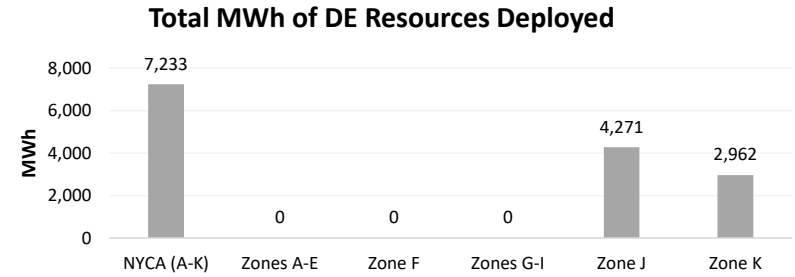
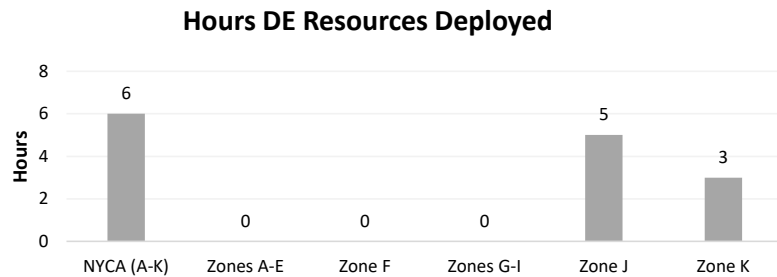
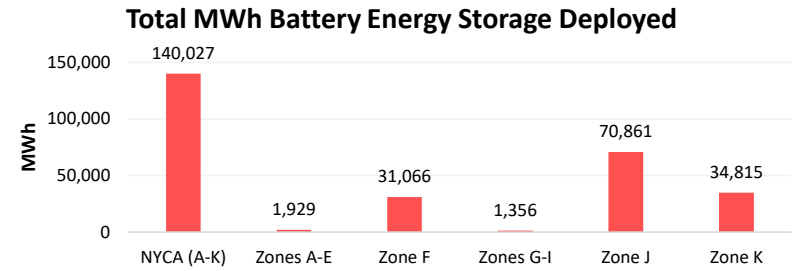
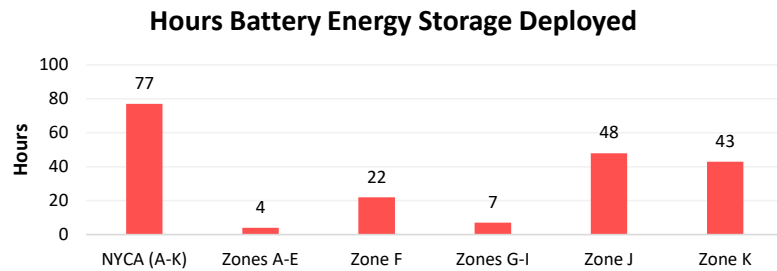
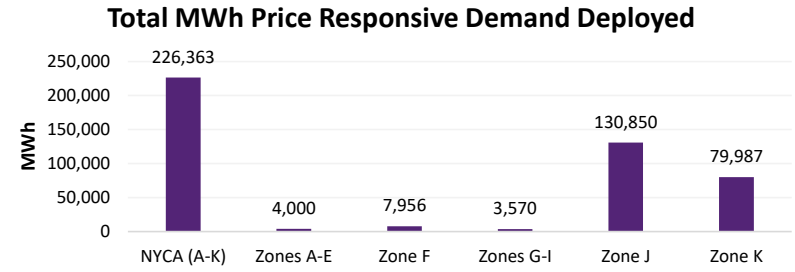
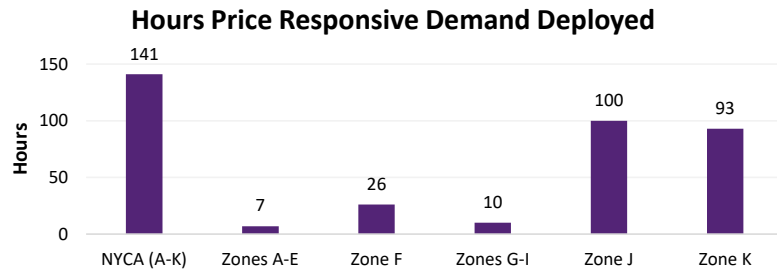


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



### Full Period Results Summary

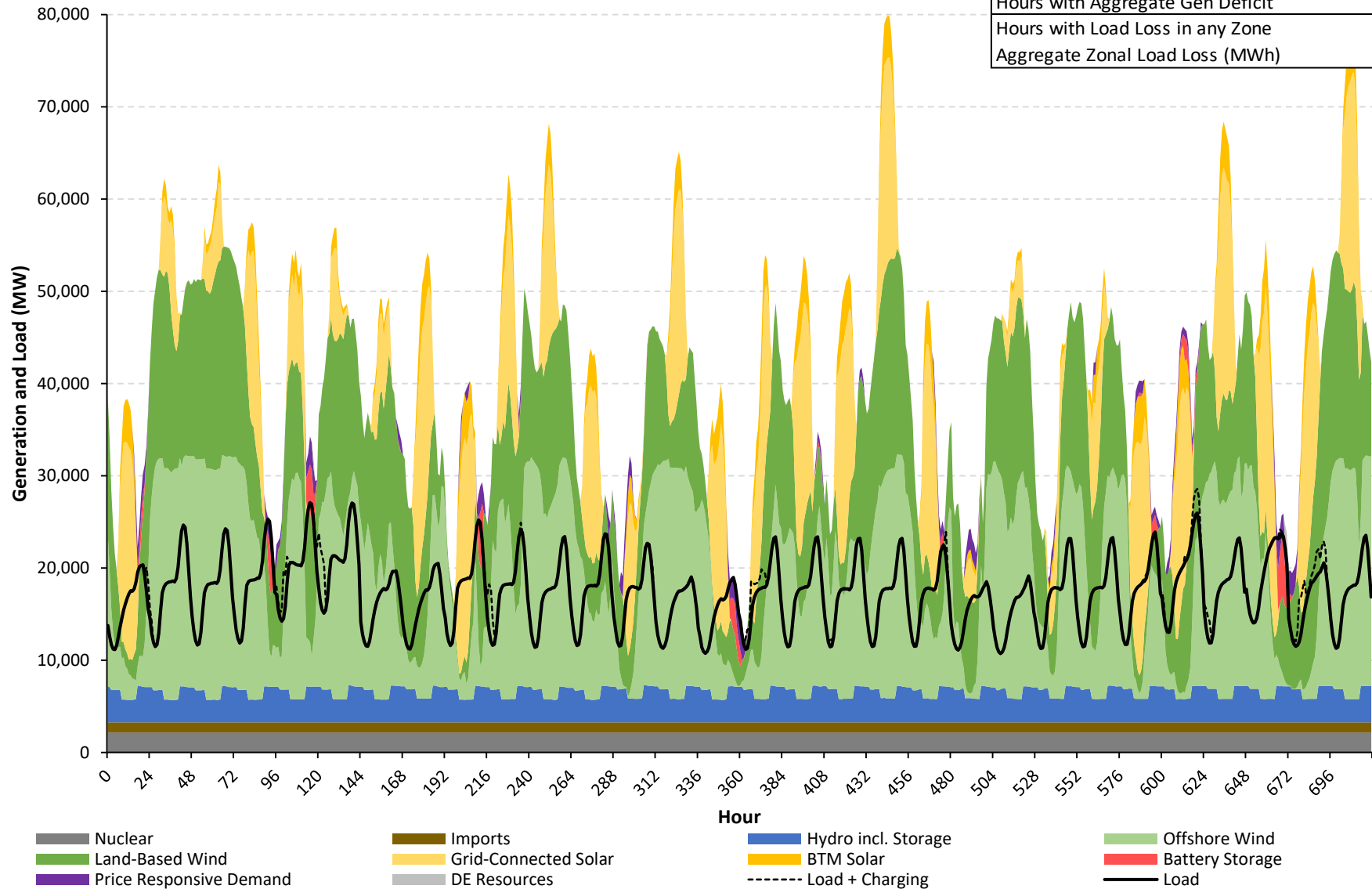
Case Name: CLCPA Case - Shoulder - GIT Resource Set



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - GIT Resource Set

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	29,814,095
Gen Surplus/Deficit (MWh)	17,317,334
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

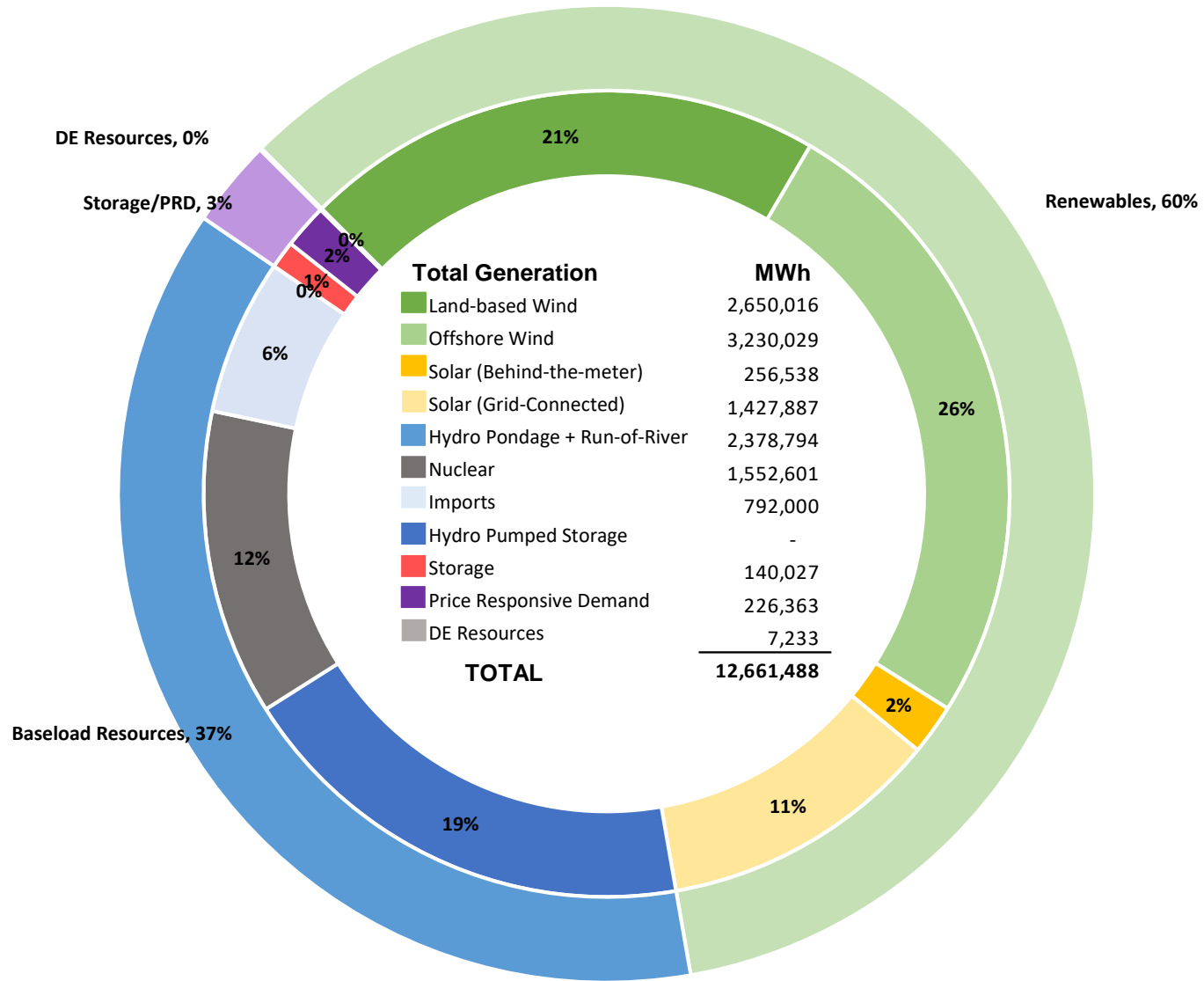


**Note:**

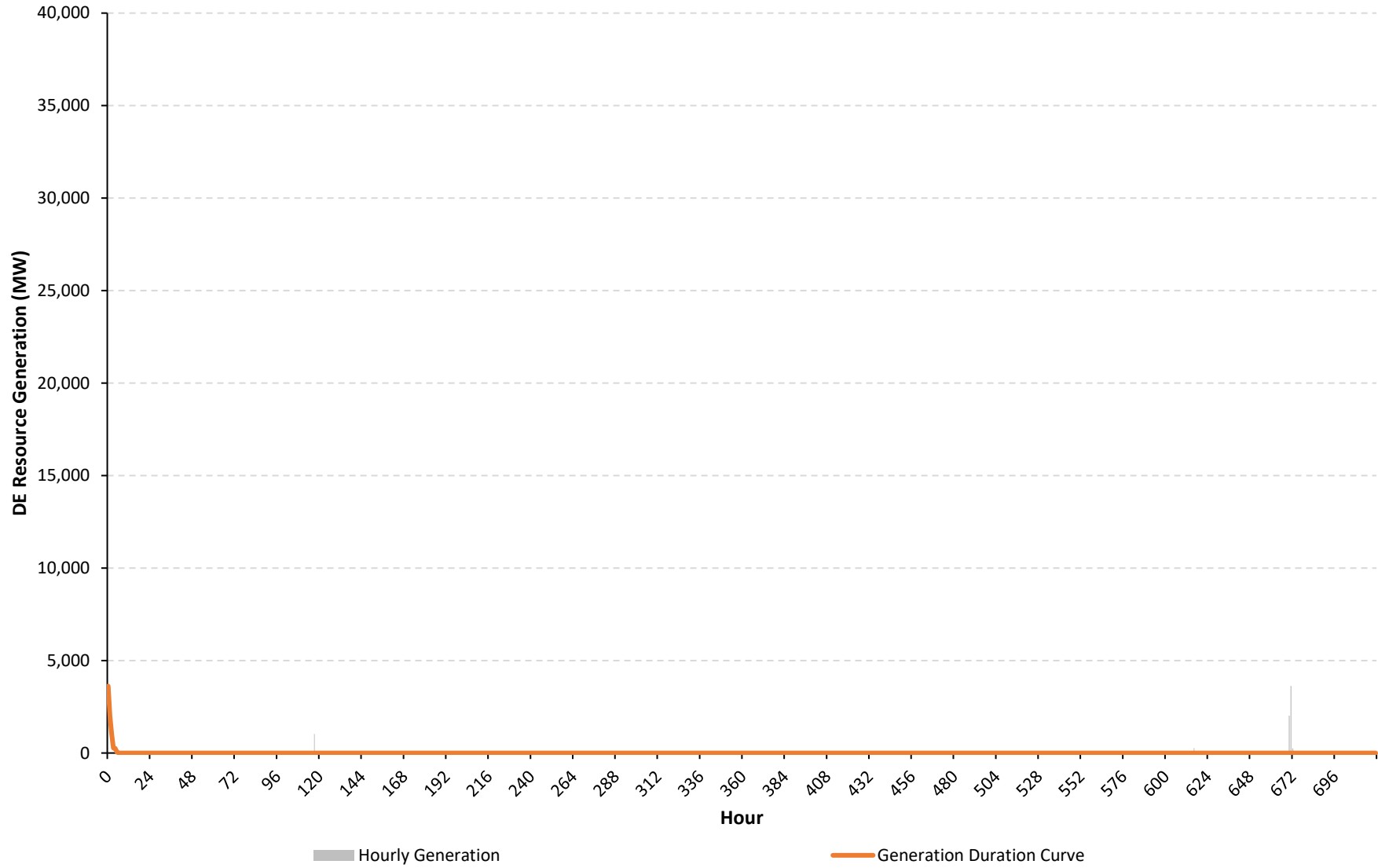
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

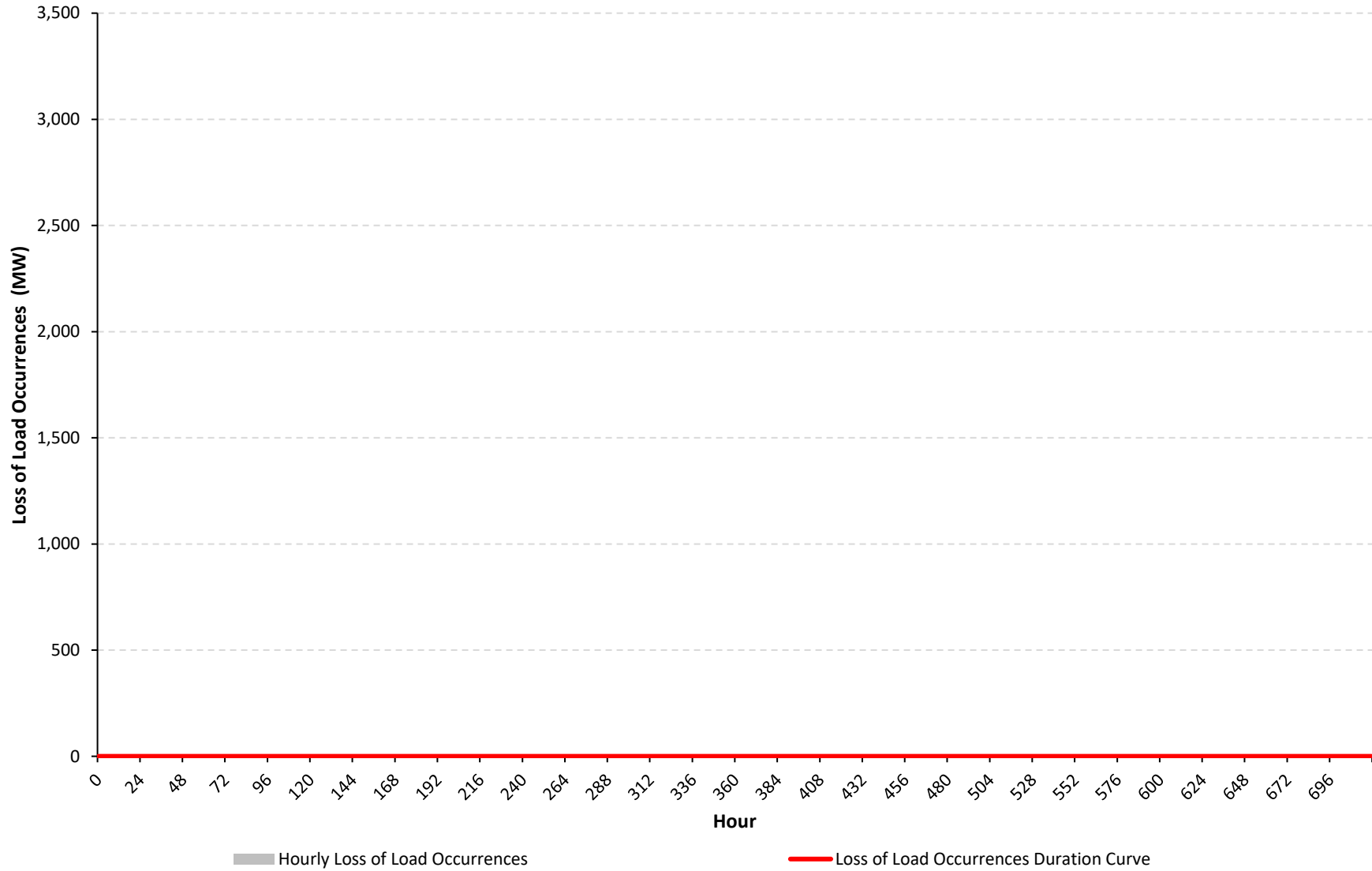
CLCPA Case - Shoulder - GIT Resource Set



### NYCA DE Resource Generation (MW) CLCPA Case - Shoulder - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Shoulder - GIT Resource Set



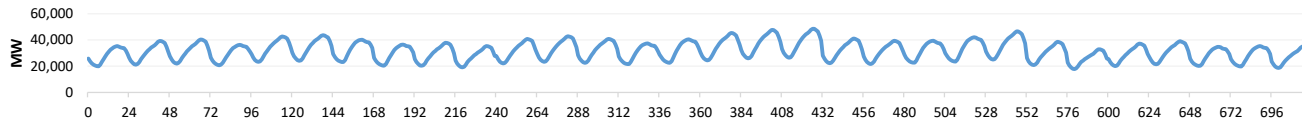
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 50 - CLCPA Case - Summer - GIT Resource Set - Heatwave**

**Hourly Results Summary**

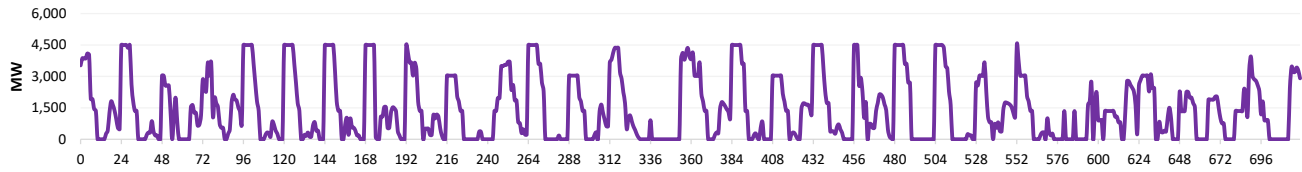
Case Name: CLCPA Case - Summer - GIT Resource Set - Heatwave

**Load During Modeling Period**



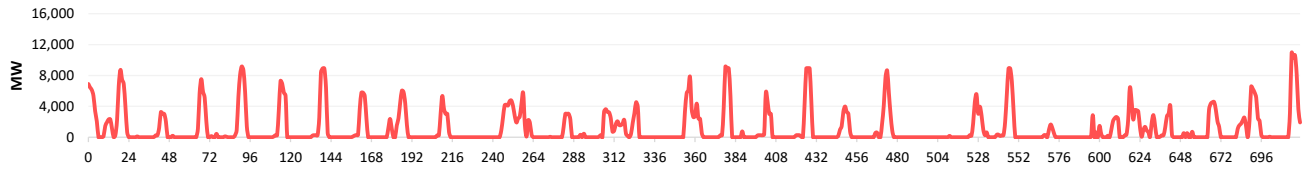
Loss of Load	
Total Hrs.	720
Total MWh	22,707,507
Avg. MW	31,538.2

**Price Responsive Demand Deployed During Modeling Period**



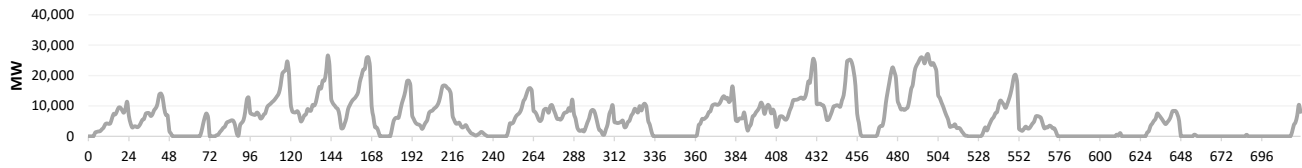
PRD Deployment	
Total Hrs.	508
Total MWh	1,047,074
Avg. MW	2,061.2

**Battery Energy Storage Deployed During Modeling Period**



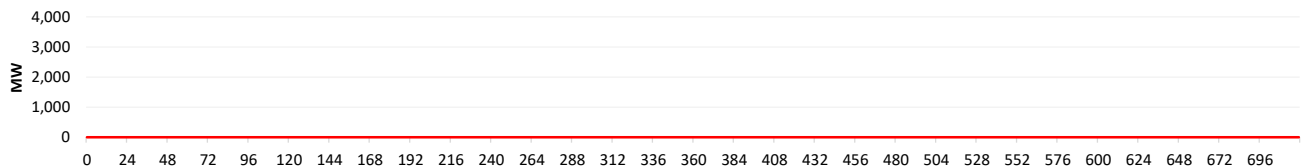
Battery Deployment	
Total Hrs.	299
Total MWh	841,041
Avg. MW	2,812.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	523
Total MWh	4,404,209
Avg. MW	8,421.0

**Loss of Load Occurrences During Modeling Period**

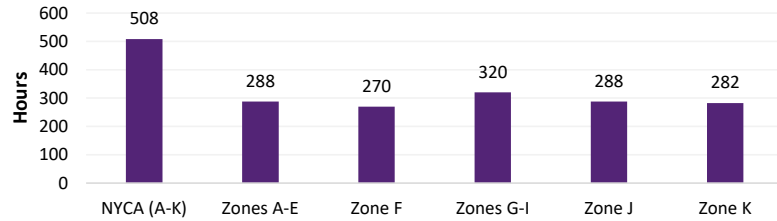


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

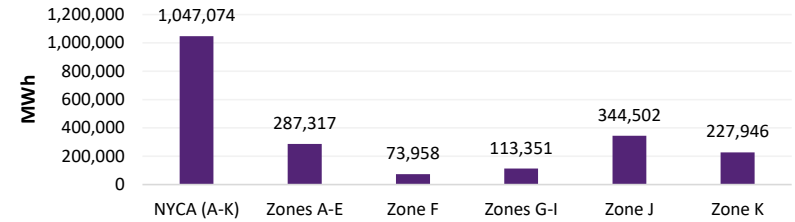
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Heatwave

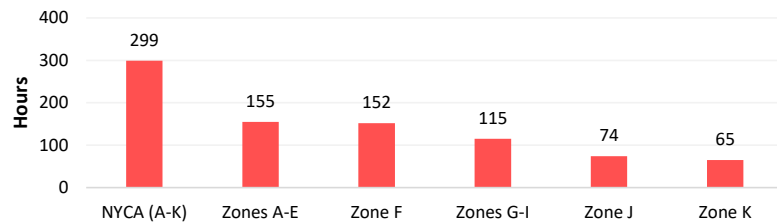
#### Hours Price Responsive Demand Deployed



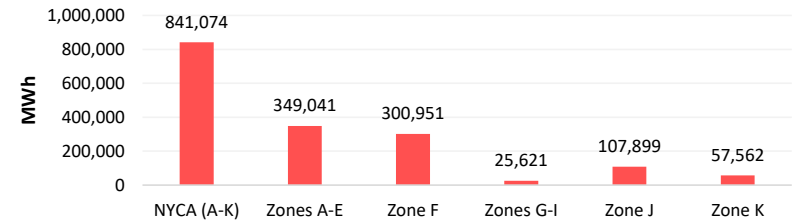
#### Total MWh Price Responsive Demand Deployed



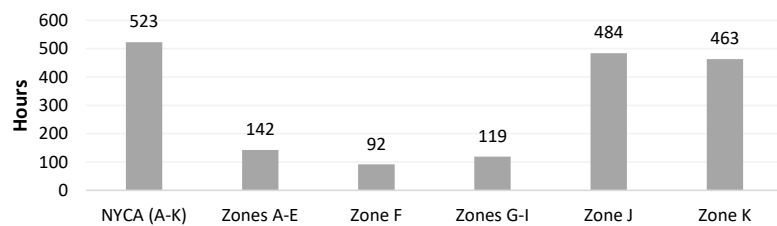
#### Hours Battery Energy Storage Deployed



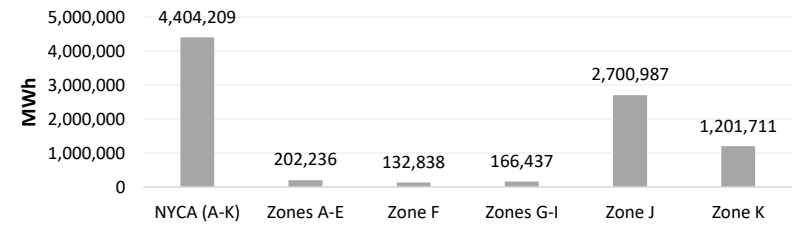
#### Total MWh Battery Energy Storage Deployed



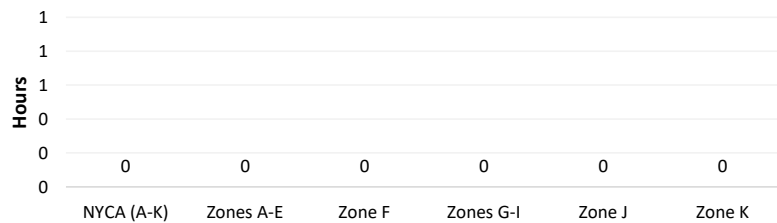
#### Hours DE Resources Deployed



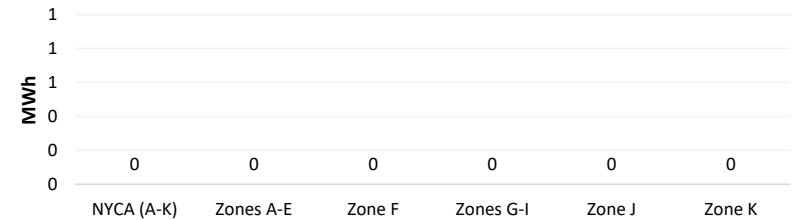
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



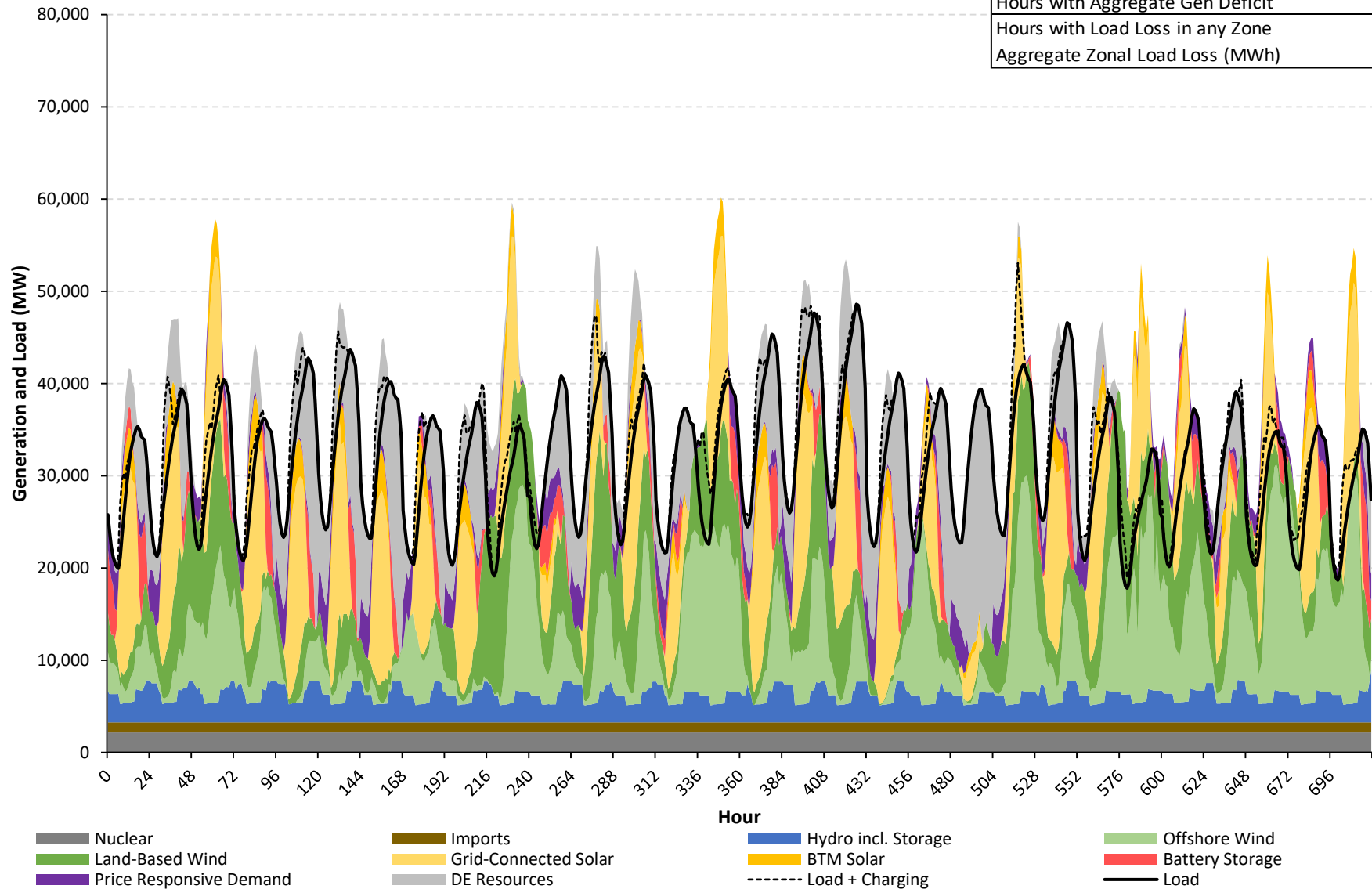
#### Total MWh of Loss of Load Occurrences





### NYCA Hourly Load/Generation Balance by Resource Type CLCPA Case - Summer - GIT Resource Set - Heatwave

Aggregate Load in Period (MWh)	22,707,507
Aggregate Gen in Period (MWh)	26,286,216
Gen Surplus/Deficit (MWh)	3,578,709
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

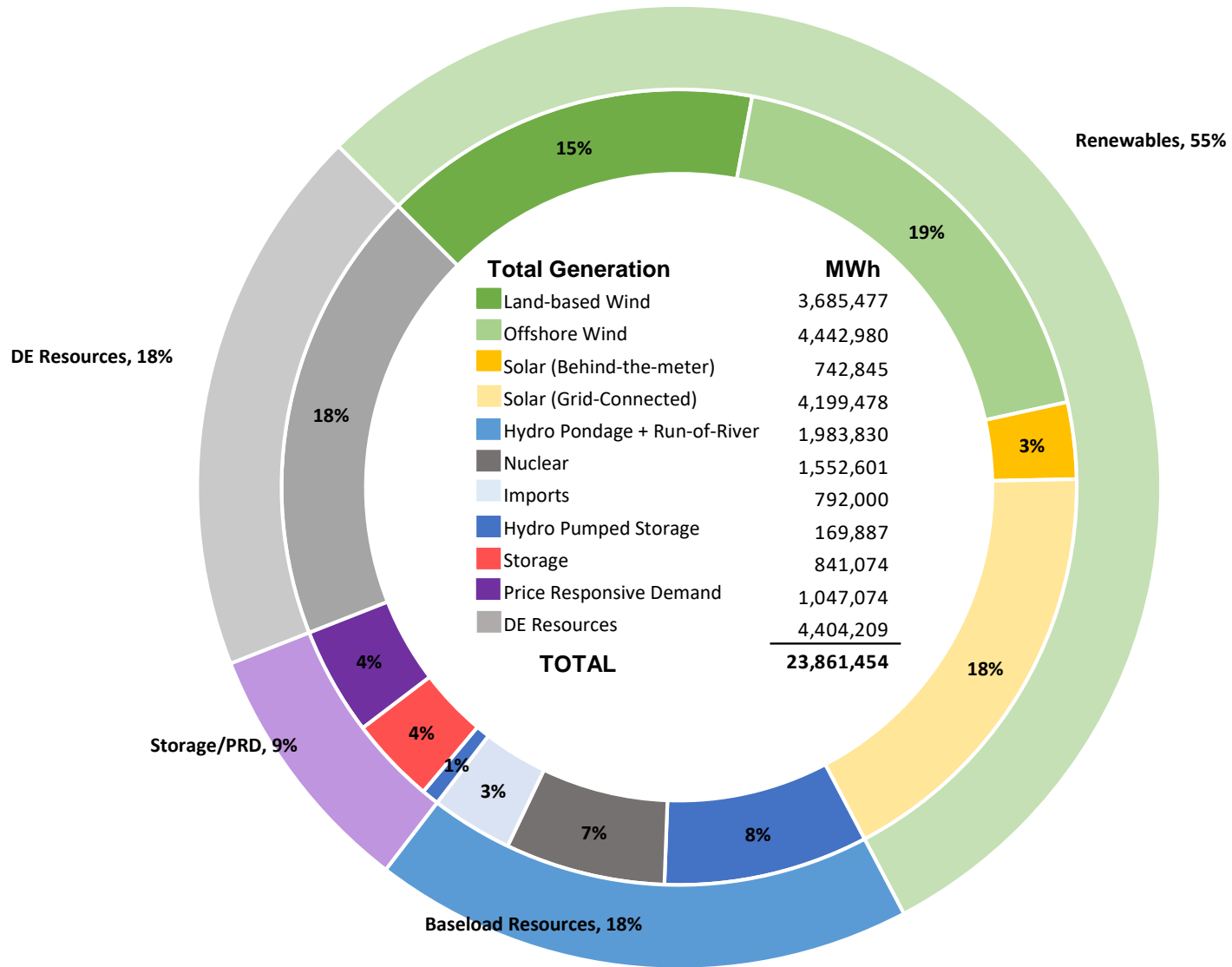


**Note:**

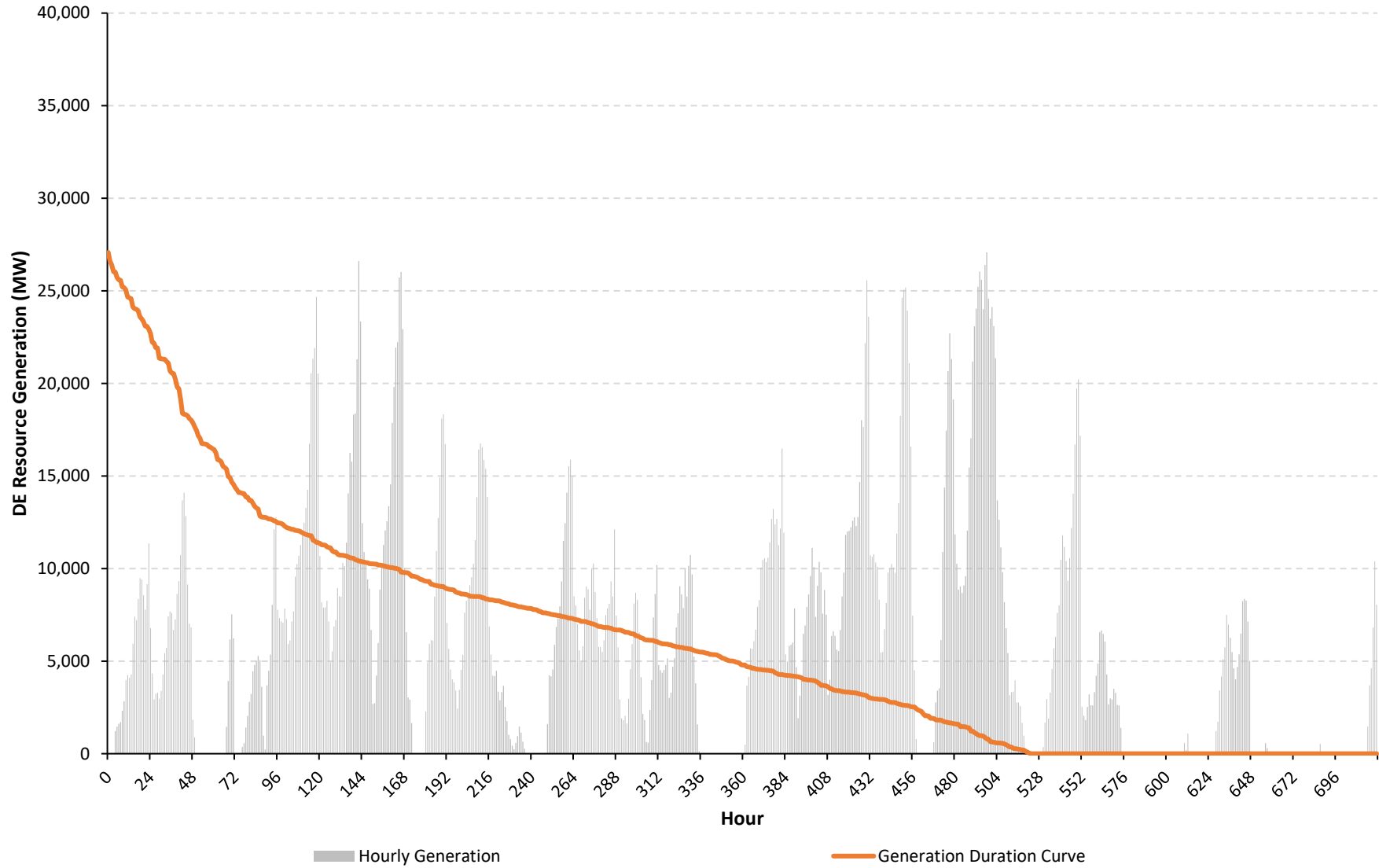
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

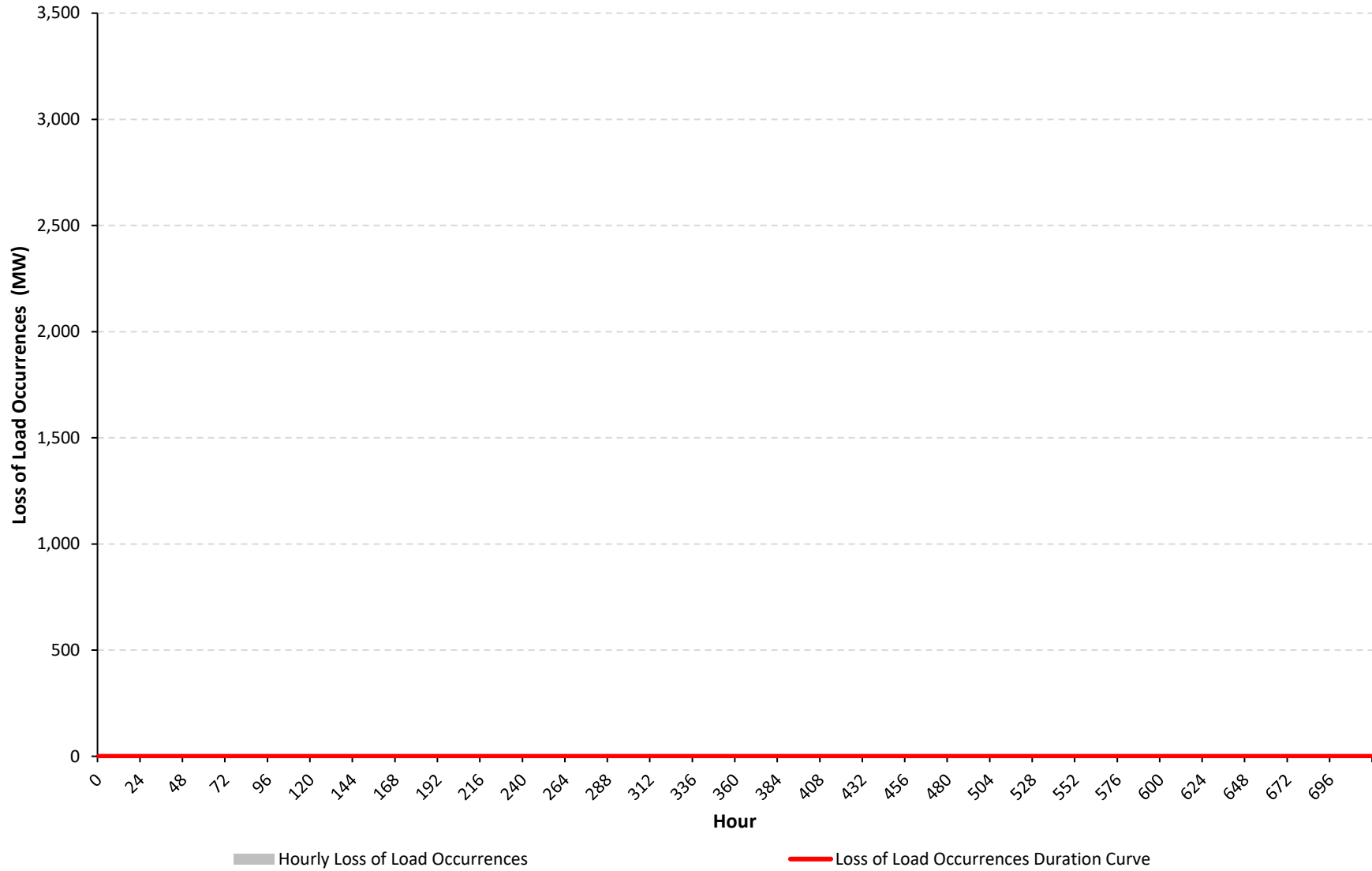
CLCPA Case - Summer - GIT Resource Set - Heatwave



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set - Heatwave



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set - Heatwave



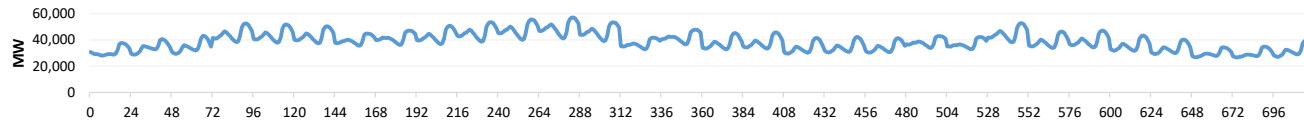
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 51 - CLCPA Case - Winter - GIT Resource Set - Cold Snap**

### Hourly Results Summary

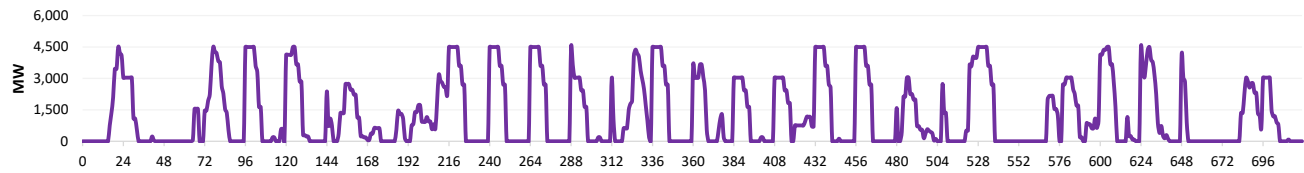
Case Name: CLCPA Case - Winter - GIT Resource Set - Cold Snap

**Load During Modeling Period**



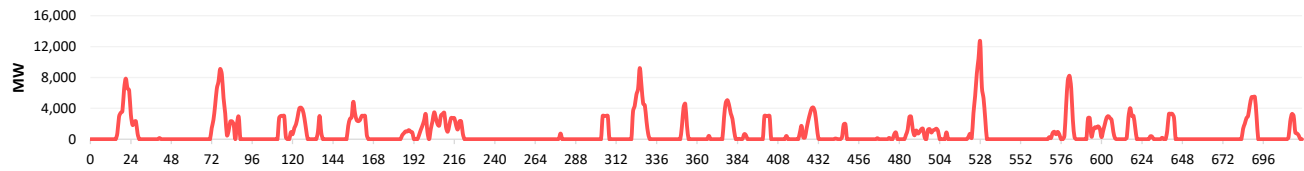
Loss of Load	
Total Hrs.	720
Total MWh	27,957,446
Avg. MW	38,829.8

**Price Responsive Demand Deployed During Modeling Period**



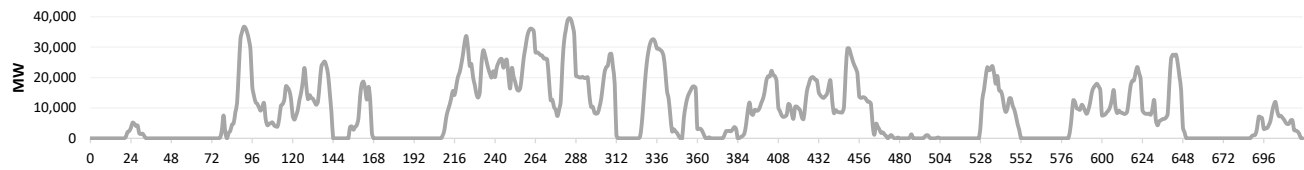
PRD Deployment	
Total Hrs.	390
Total MWh	914,056
Avg. MW	2,343.7

**Battery Energy Storage Deployed During Modeling Period**



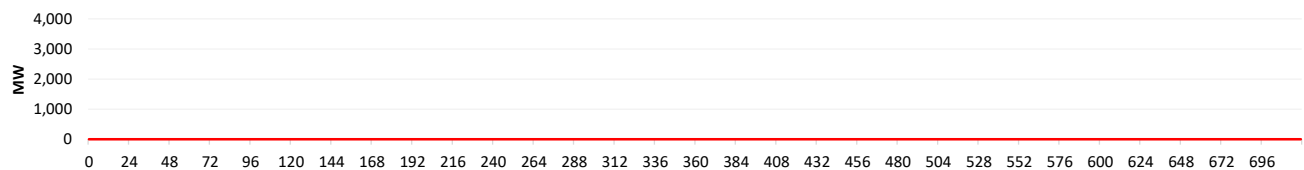
Battery Deployment	
Total Hrs.	244
Total MWh	601,520
Avg. MW	2,465.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	466
Total MWh	6,272,961
Avg. MW	13,461.3

**Loss of Load Occurrences During Modeling Period**

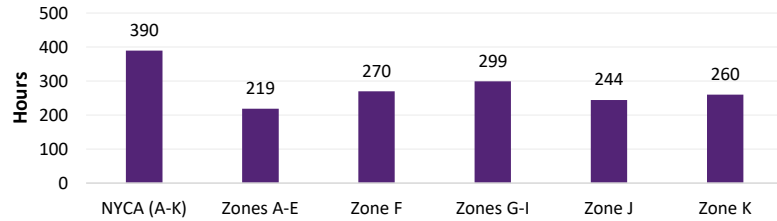


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

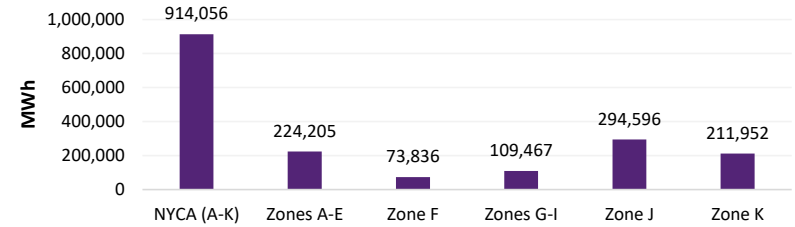
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Cold Snap

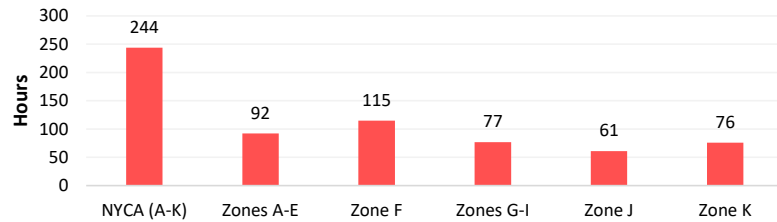
**Hours Price Responsive Demand Deployed**



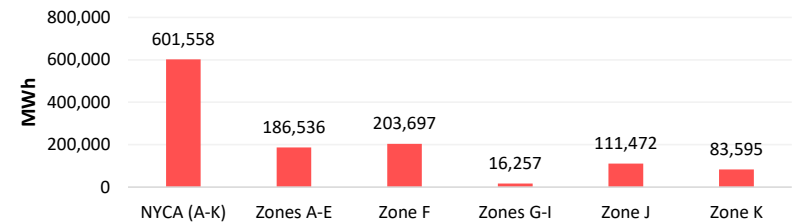
**Total MWh Price Responsive Demand Deployed**



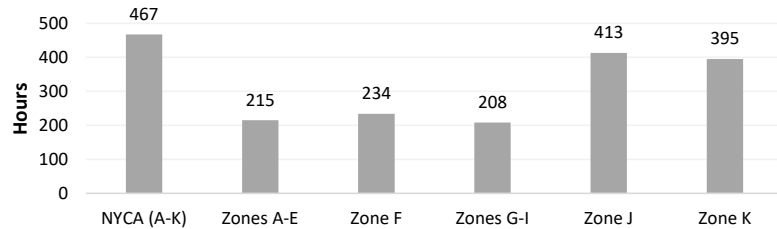
**Hours Battery Energy Storage Deployed**



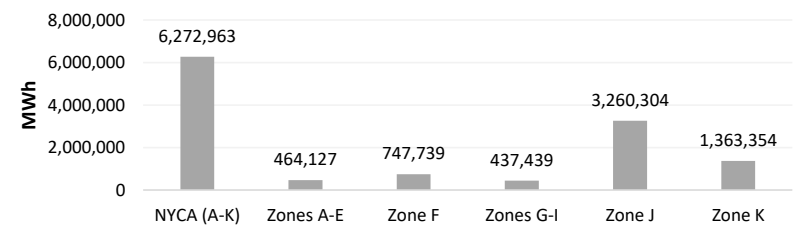
**Total MWh Battery Energy Storage Deployed**



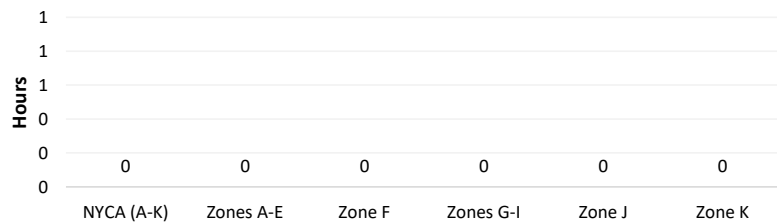
**Hours DE Resources Deployed**



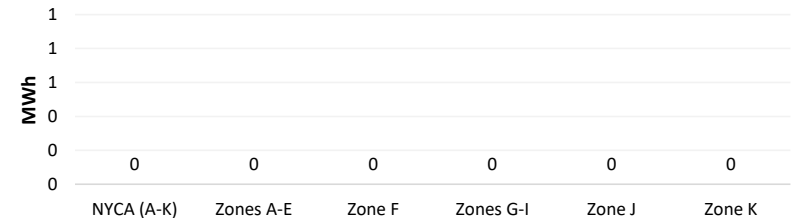
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



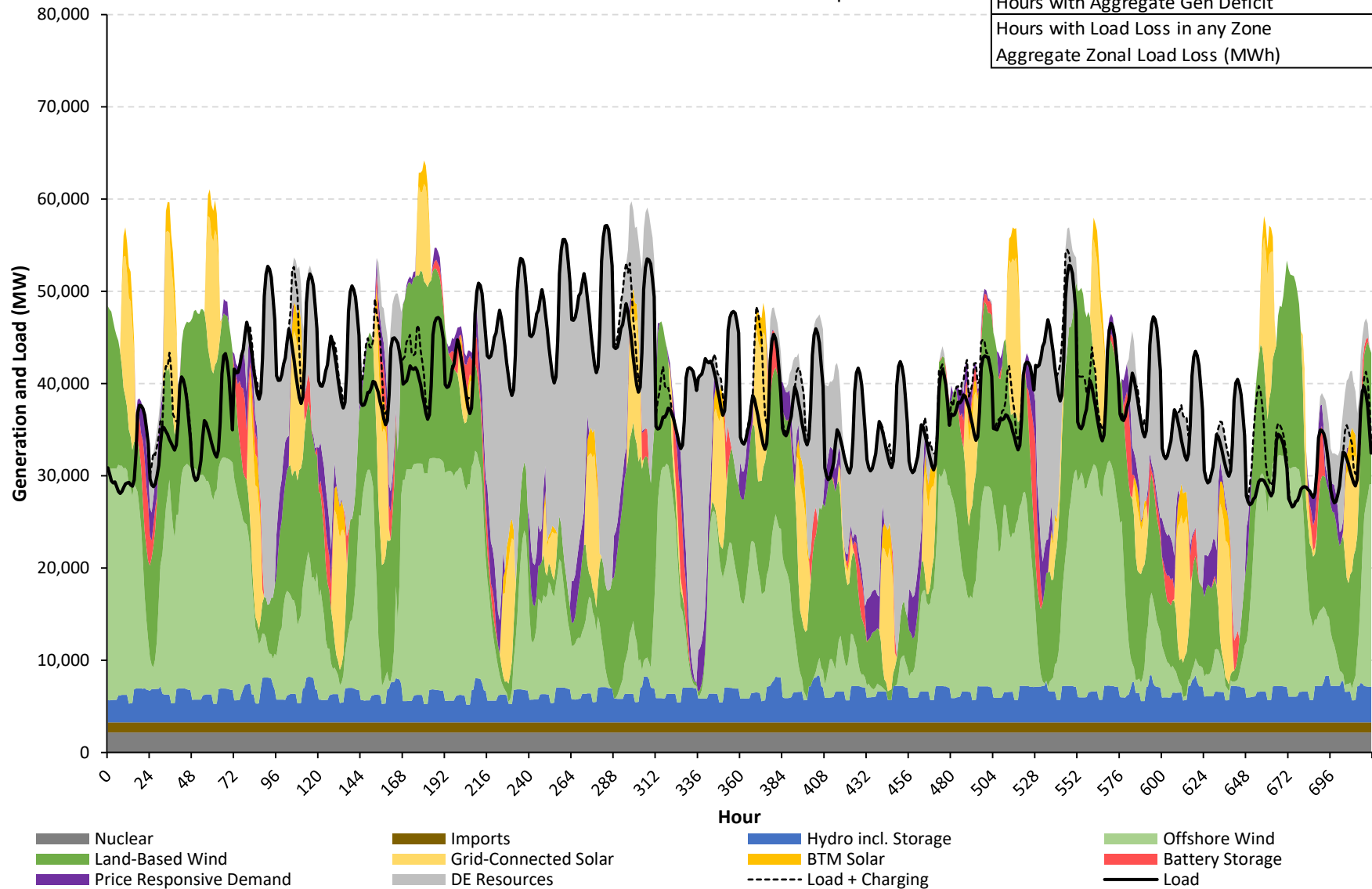
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Cold Snap

Aggregate Load in Period (MWh)	27,957,446
Aggregate Gen in Period (MWh)	31,724,464
Gen Surplus/Deficit (MWh)	3,767,017
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



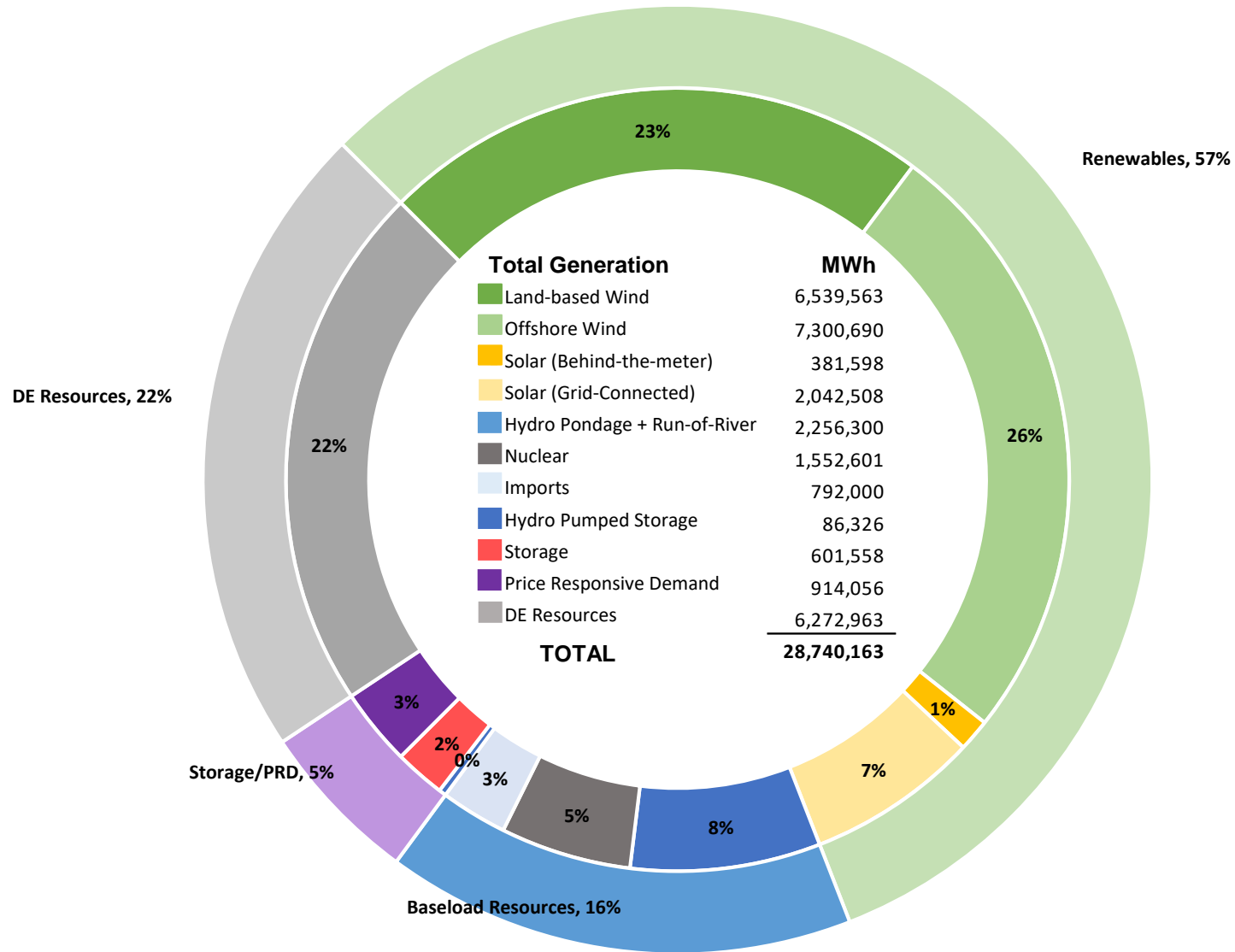
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

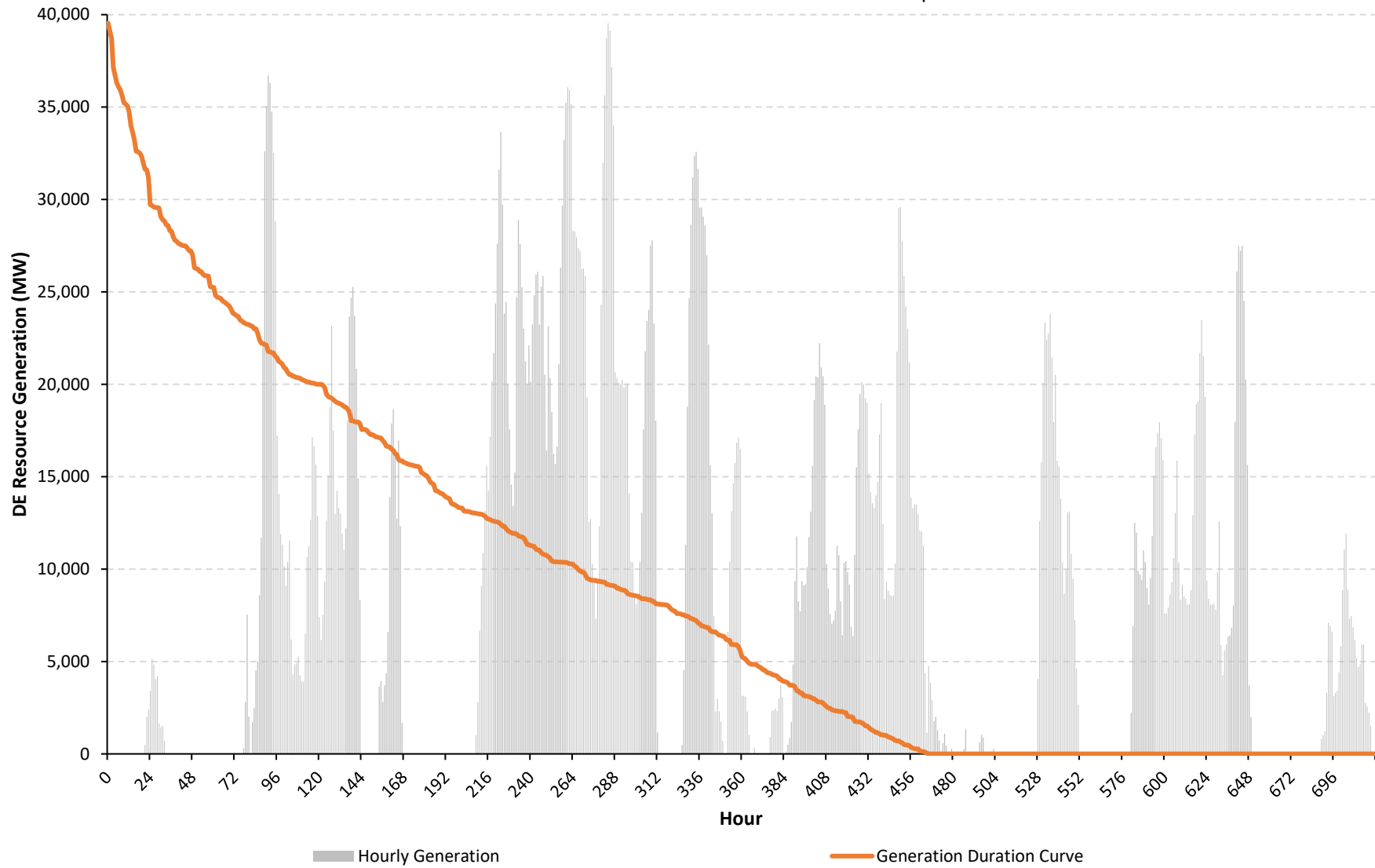


### Generation by Resource Type

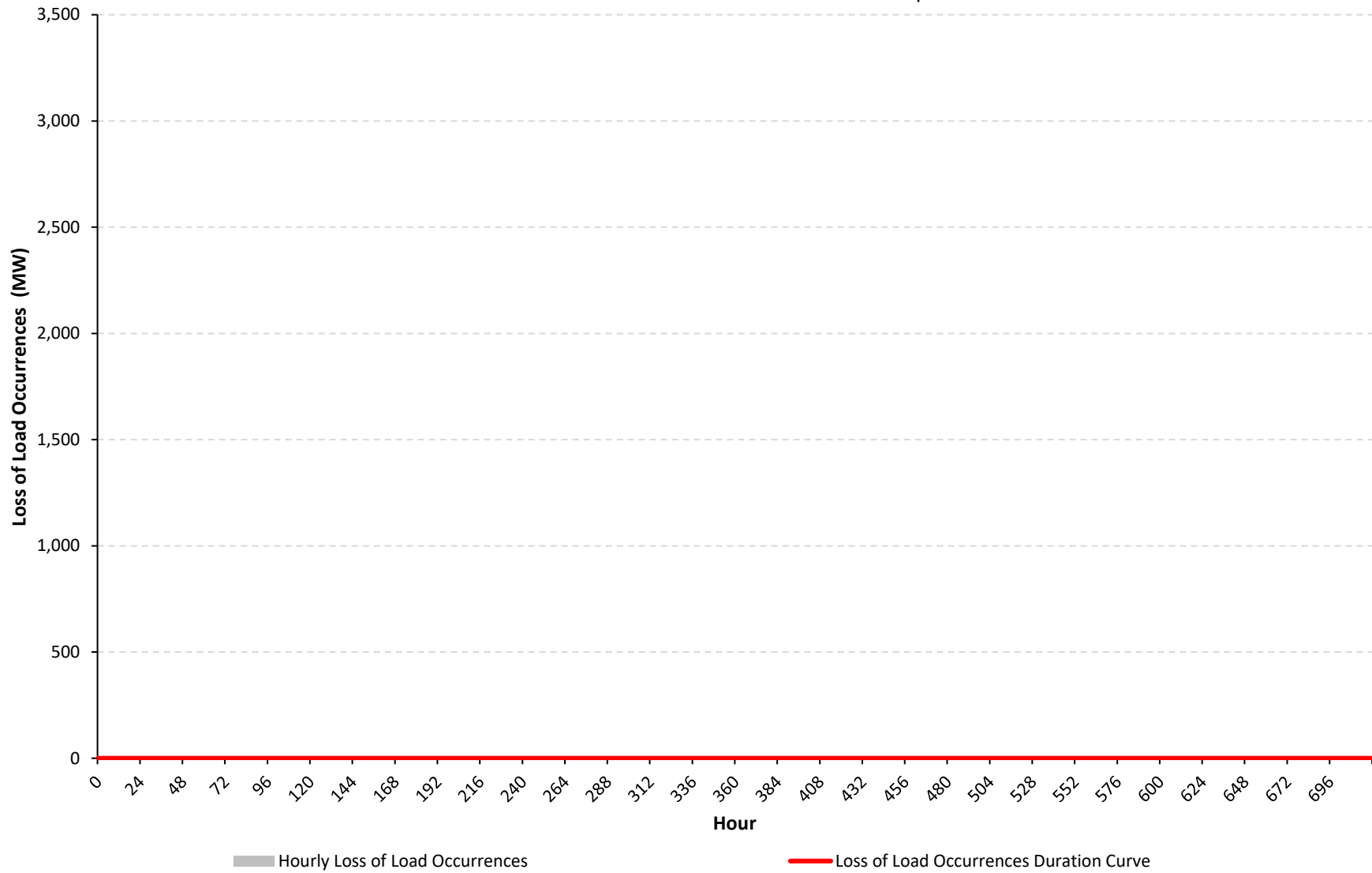
CLCPA Case - Winter - GIT Resource Set - Cold Snap



### NYCA DE Resource Generation (MW) CLCPA Case - Winter - GIT Resource Set - Cold Snap



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Cold Snap



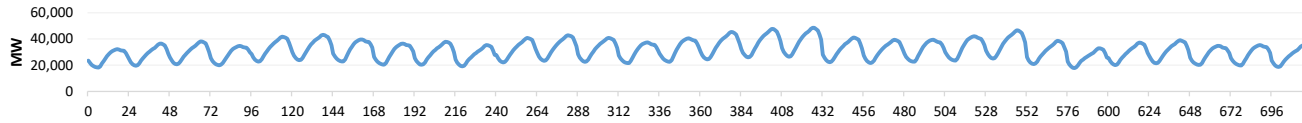
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 52 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

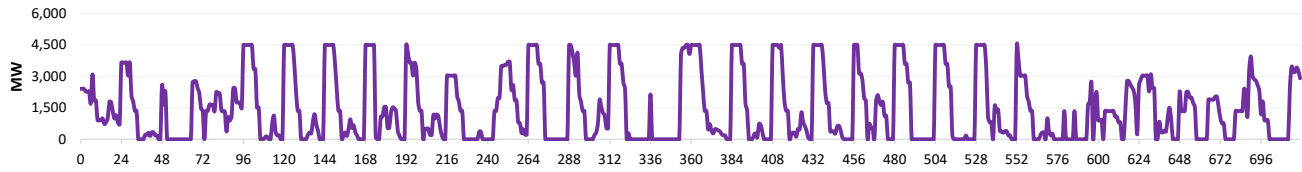
Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



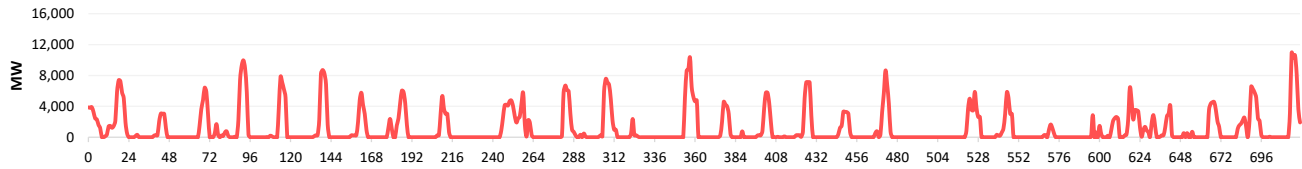
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



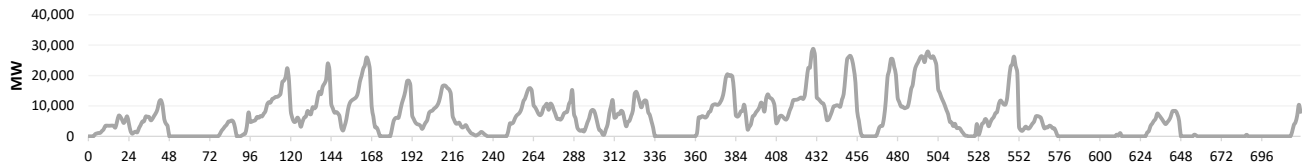
PRD Deployment	
Total Hrs.	492
Total MWh	1,048,935
Avg. MW	2,132.0

**Battery Energy Storage Deployed During Modeling Period**



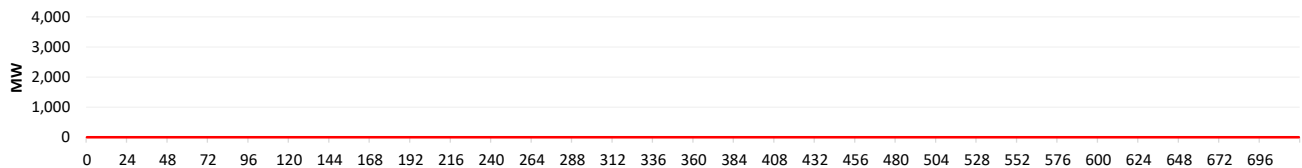
Battery Deployment	
Total Hrs.	299
Total MWh	832,366
Avg. MW	2,783.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	516
Total MWh	4,501,251
Avg. MW	8,723.4

**Loss of Load Occurrences During Modeling Period**

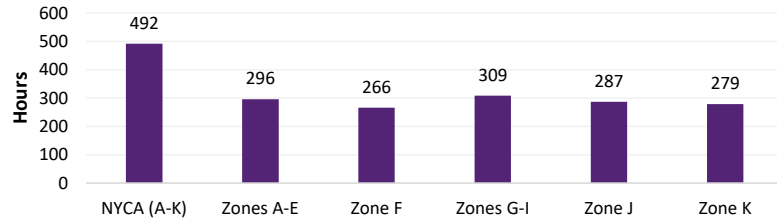


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

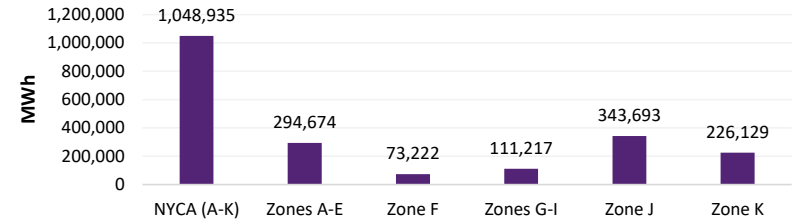
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate

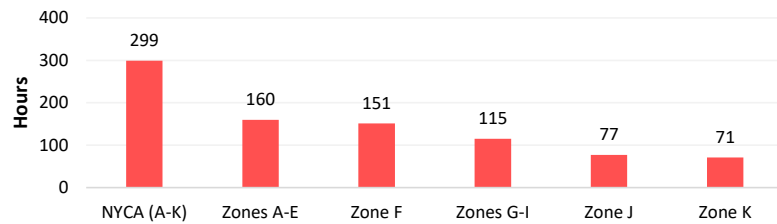
**Hours Price Responsive Demand Deployed**



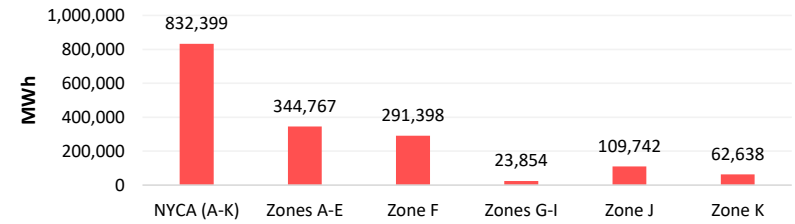
**Total MWh Price Responsive Demand Deployed**



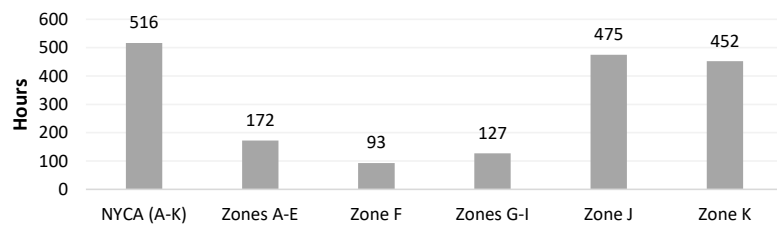
**Hours Battery Energy Storage Deployed**



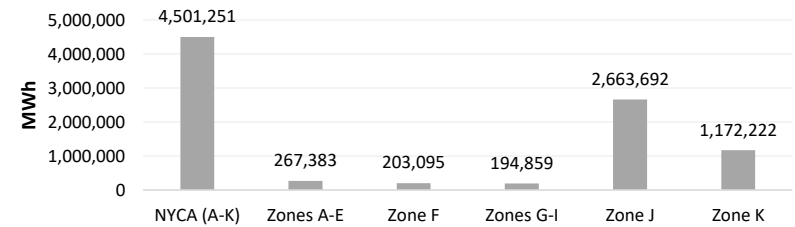
**Total MWh Battery Energy Storage Deployed**



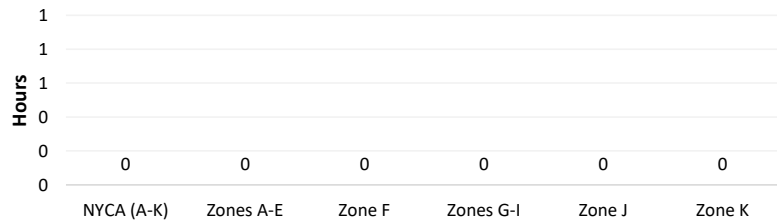
**Hours DE Resources Deployed**



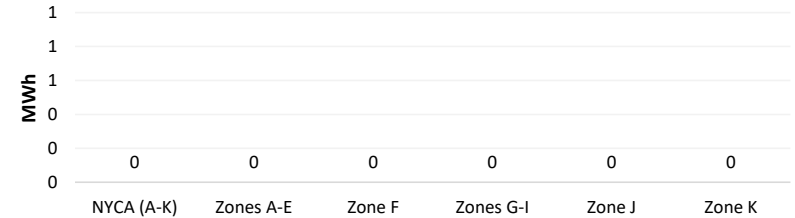
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



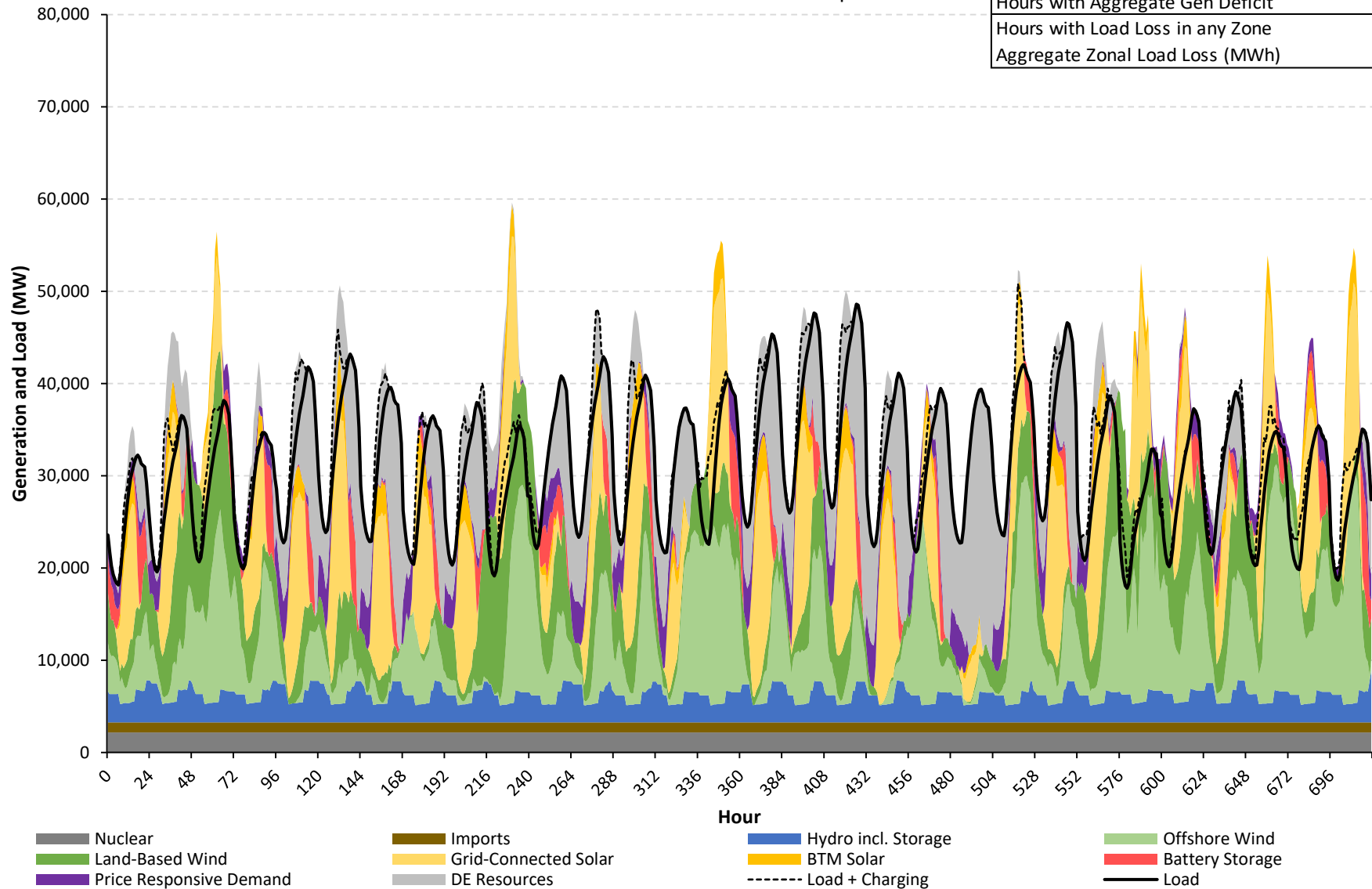
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	25,655,850
Gen Surplus/Deficit (MWh)	3,179,894
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

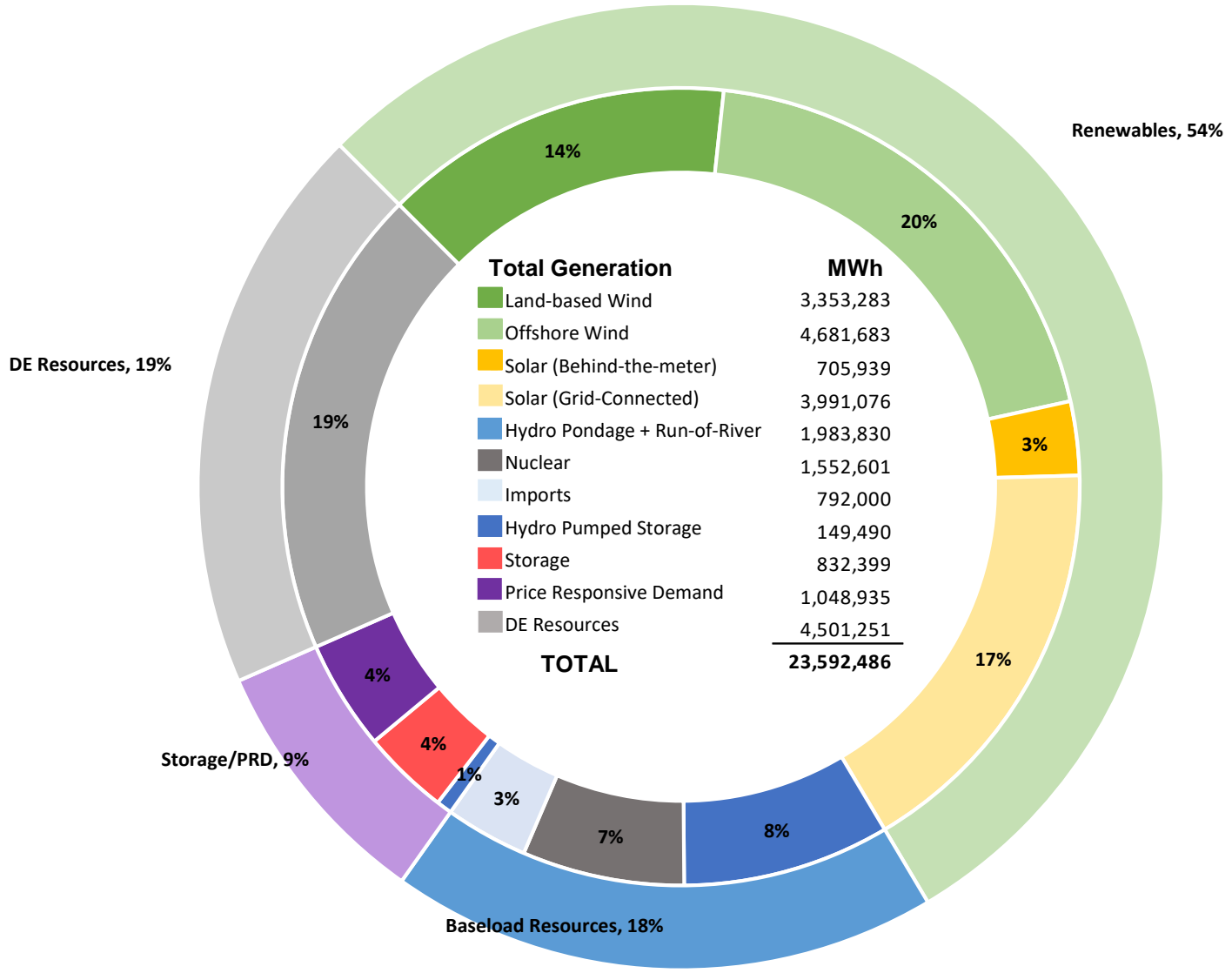


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

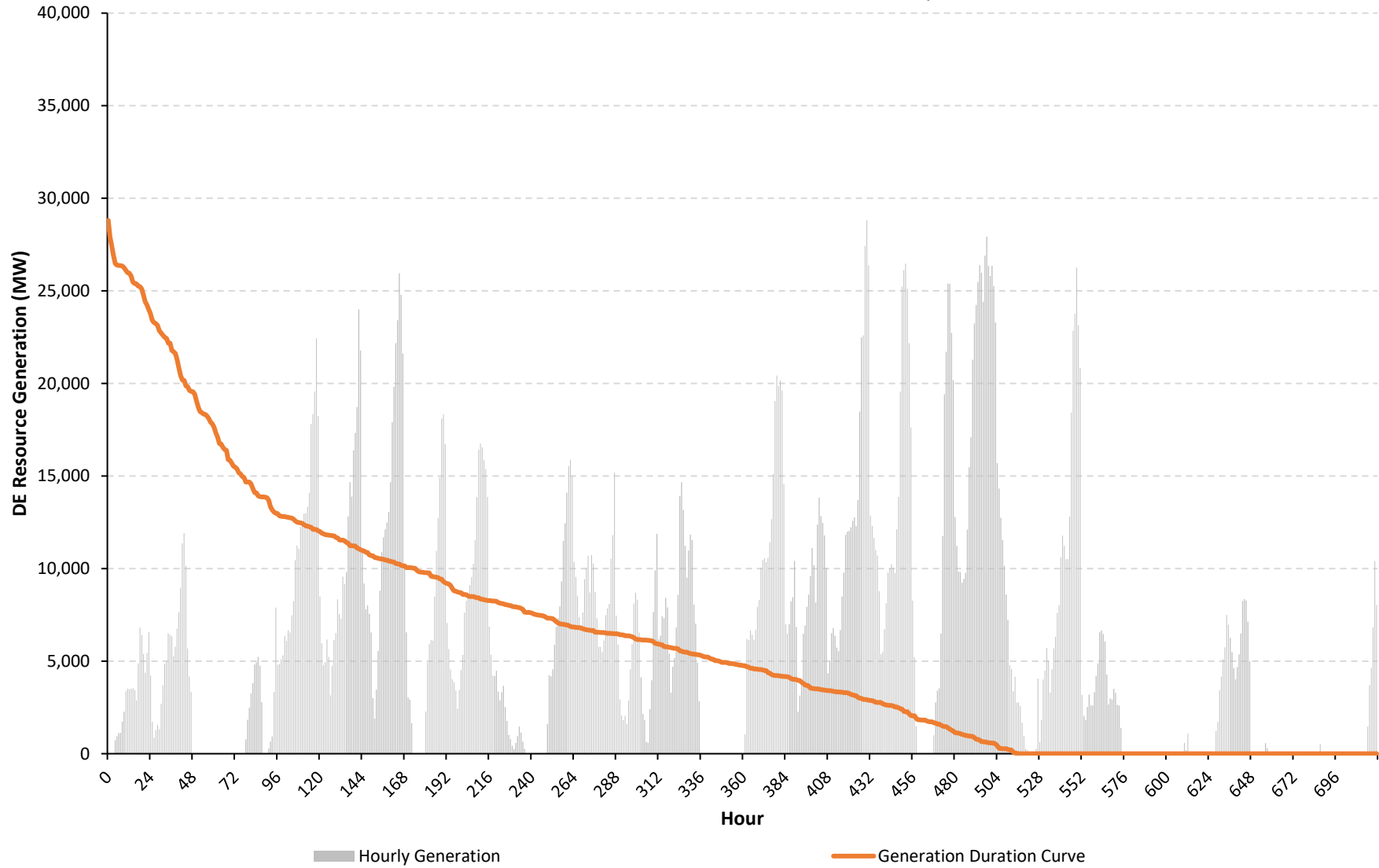
### Generation by Resource Type

CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate

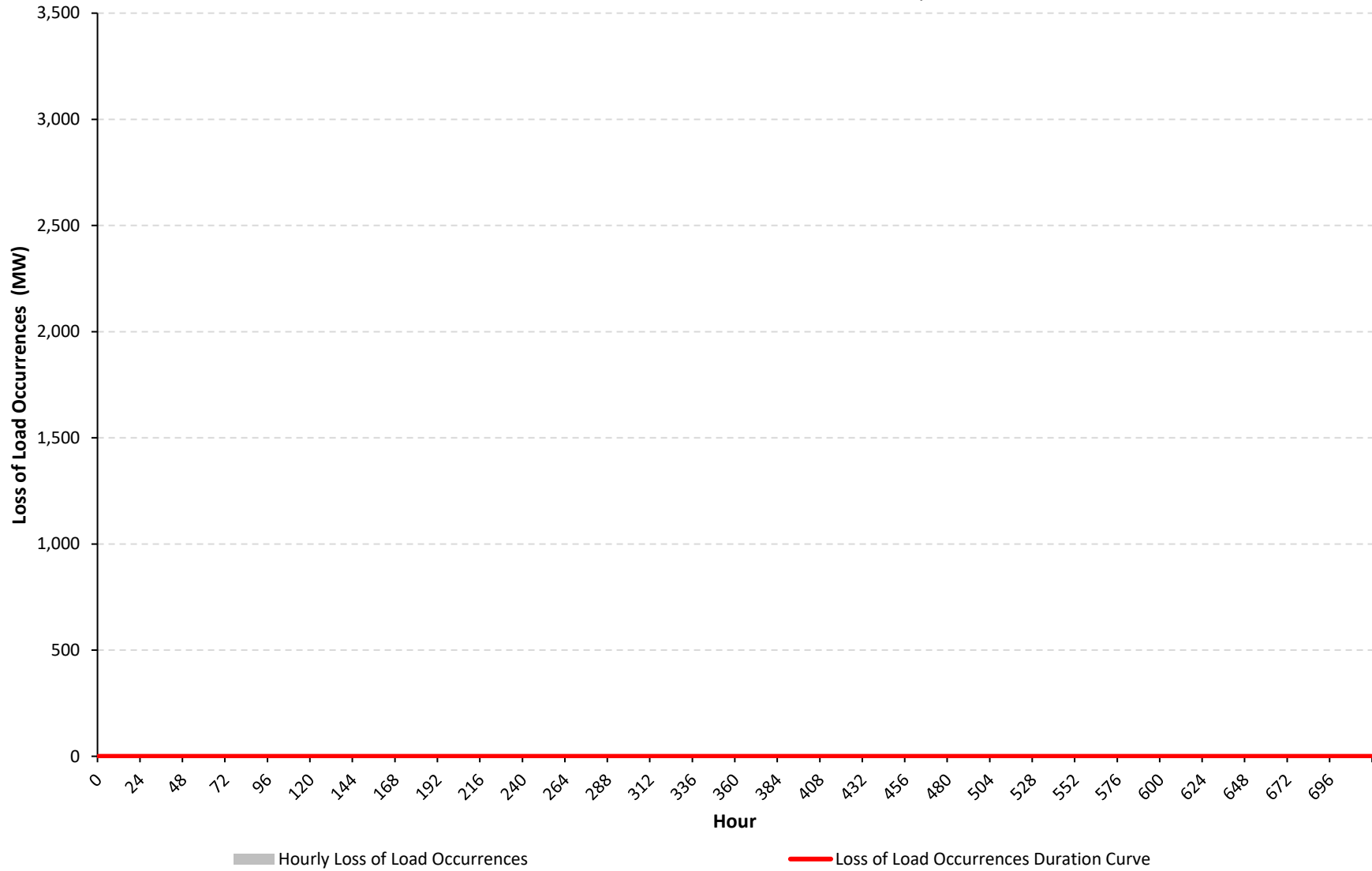




### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - Upstate



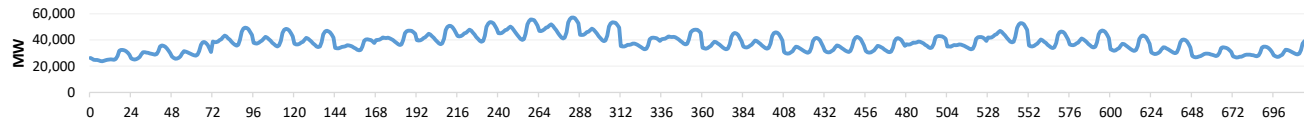
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 53 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate**

### Hourly Results Summary

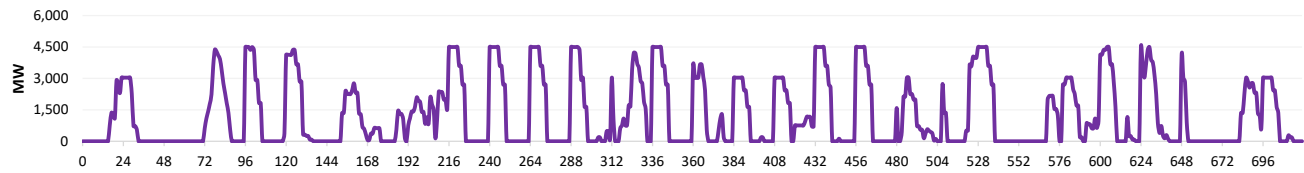
Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



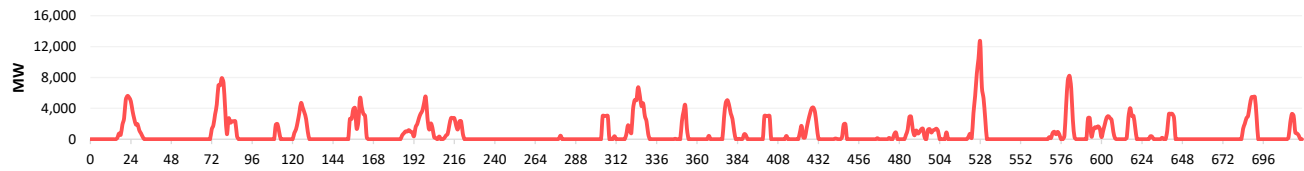
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



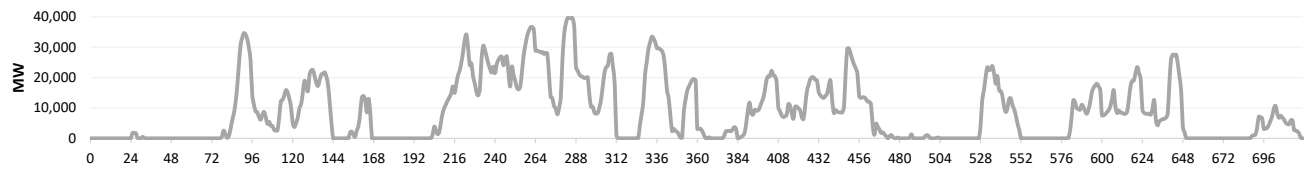
PRD Deployment	
Total Hrs.	385
Total MWh	910,657
Avg. MW	2,365.3

**Battery Energy Storage Deployed During Modeling Period**



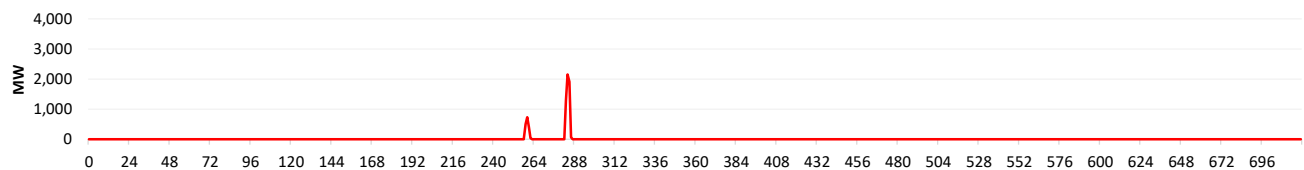
Battery Deployment	
Total Hrs.	247
Total MWh	570,499
Avg. MW	2,309.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	469
Total MWh	6,309,711
Avg. MW	13,453.5

**Loss of Load Occurrences During Modeling Period**

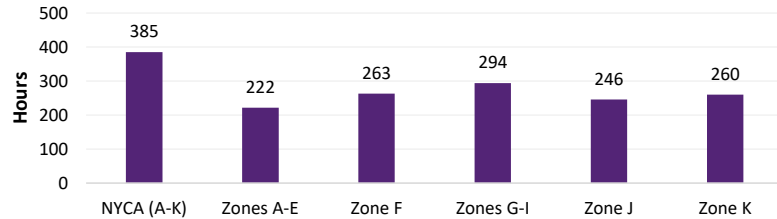


Loss of Load Occurrences	
Total Hrs.	8
Total MWh	7,090
Avg. MW	886.2

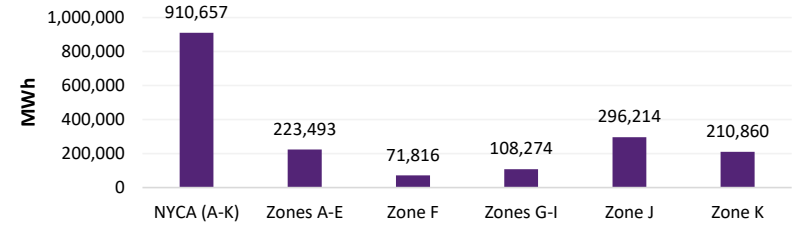
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate

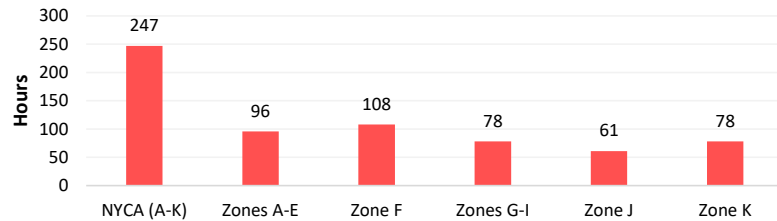
**Hours Price Responsive Demand Deployed**



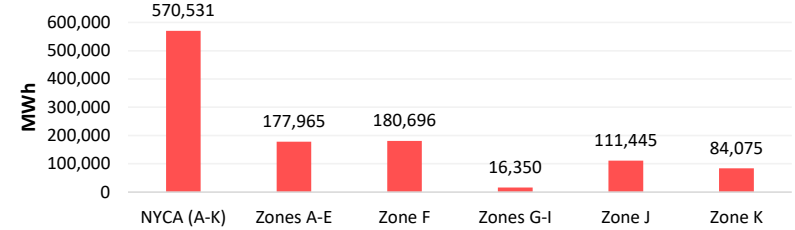
**Total MWh Price Responsive Demand Deployed**



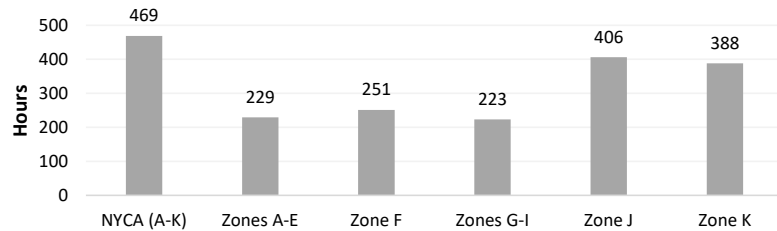
**Hours Battery Energy Storage Deployed**



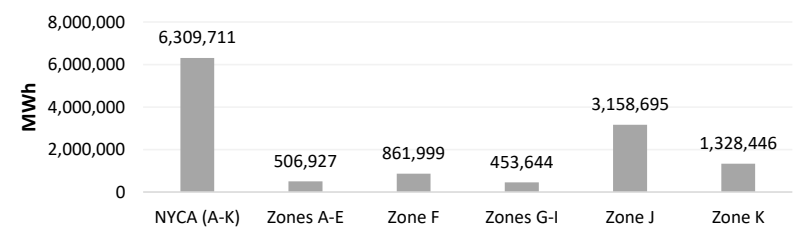
**Total MWh Battery Energy Storage Deployed**



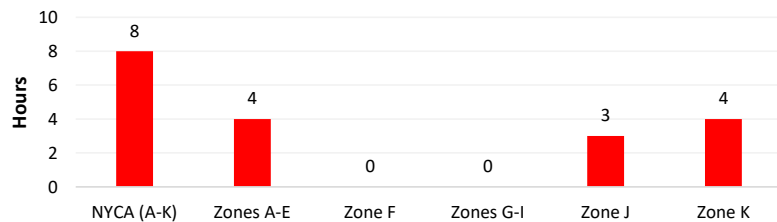
**Hours DE Resources Deployed**



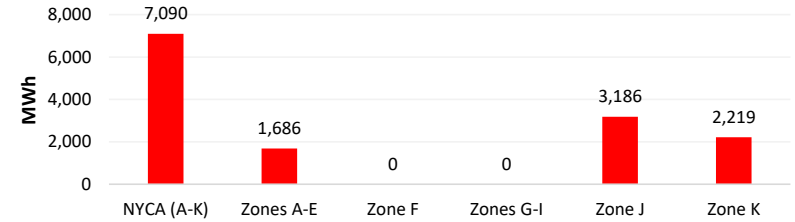
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



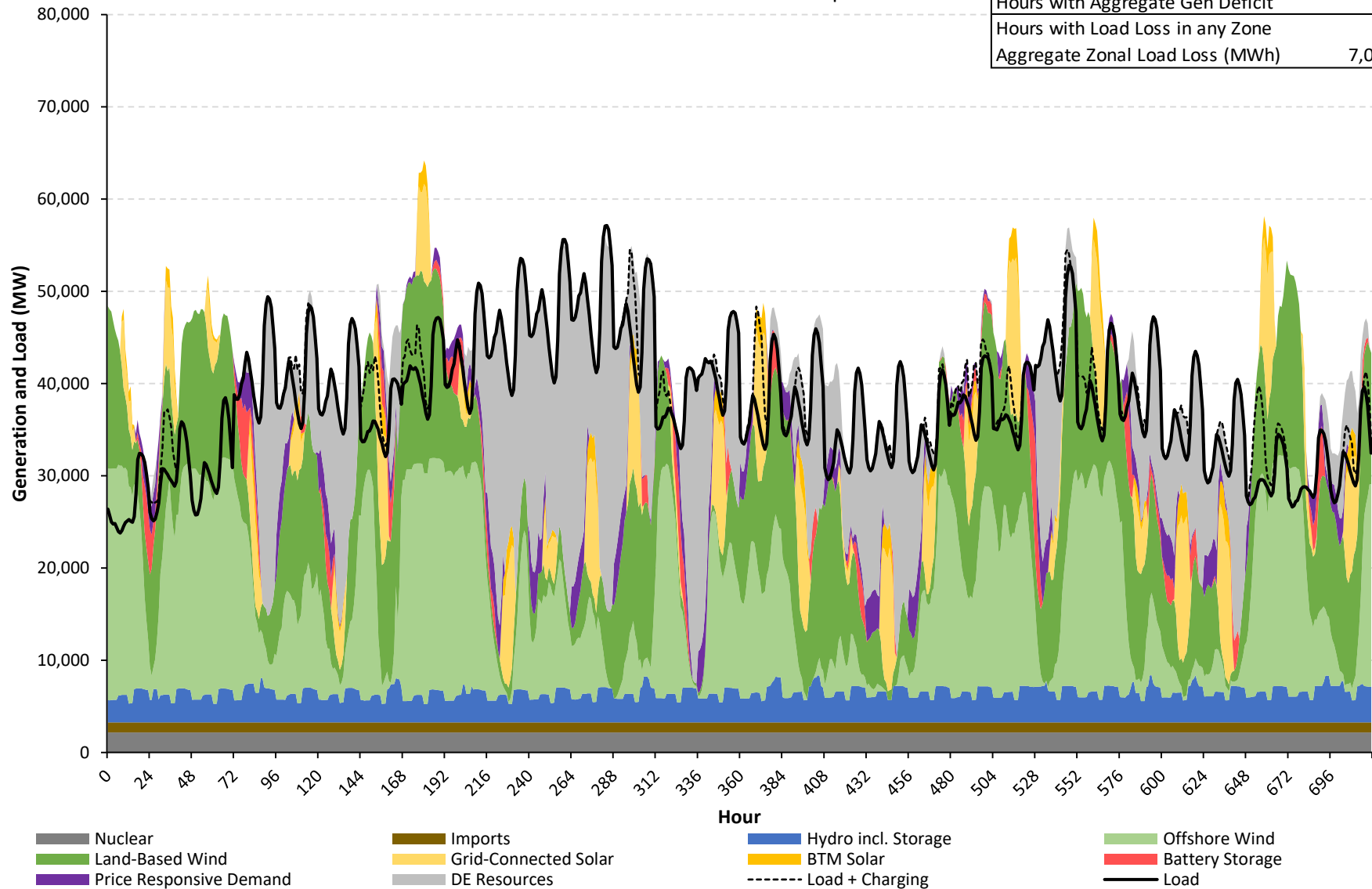
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	30,969,865
Gen Surplus/Deficit (MWh)	3,647,828
Hours with Aggregate Gen Deficit	8
Hours with Load Loss in any Zone	8
Aggregate Zonal Load Loss (MWh)	7,090

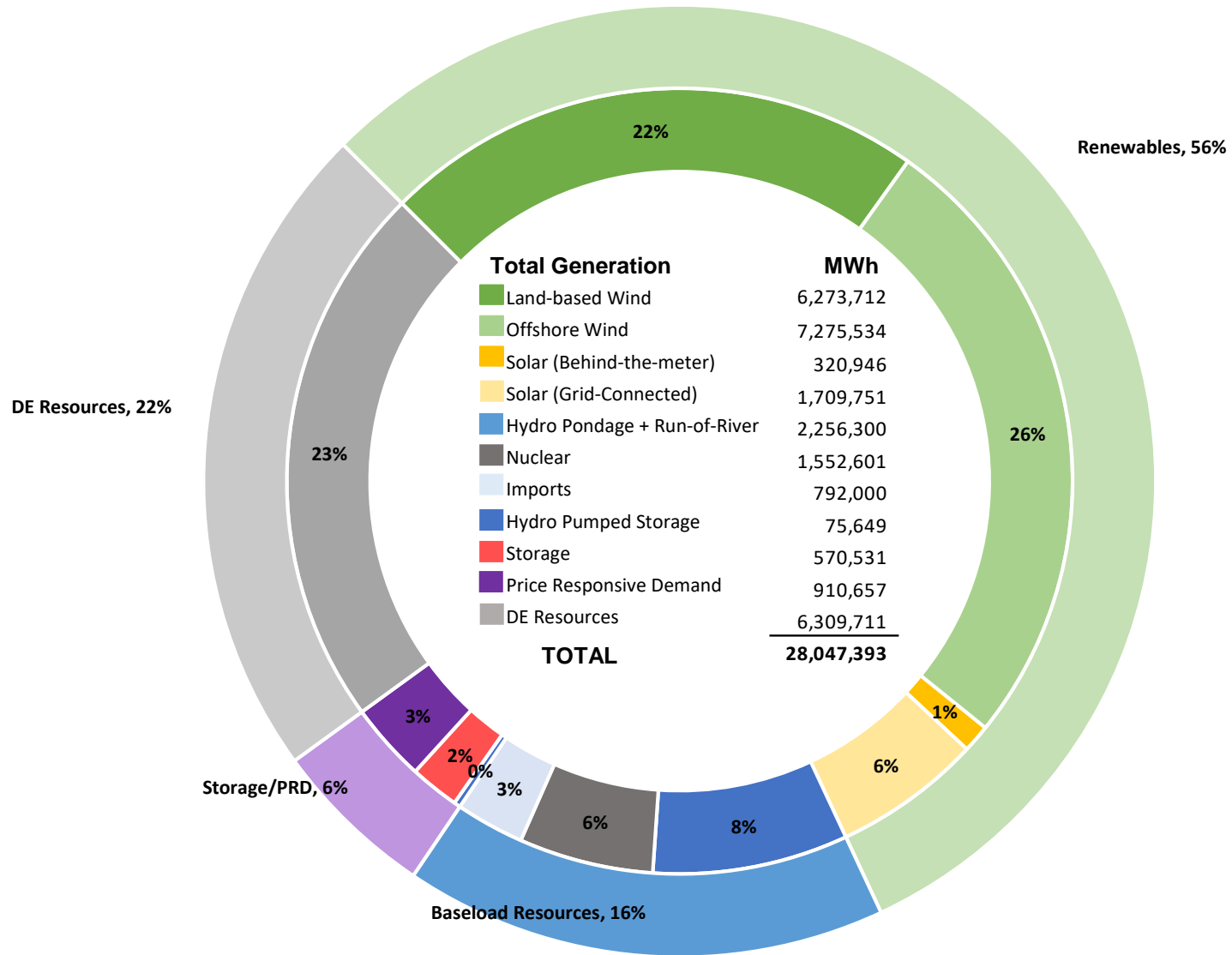


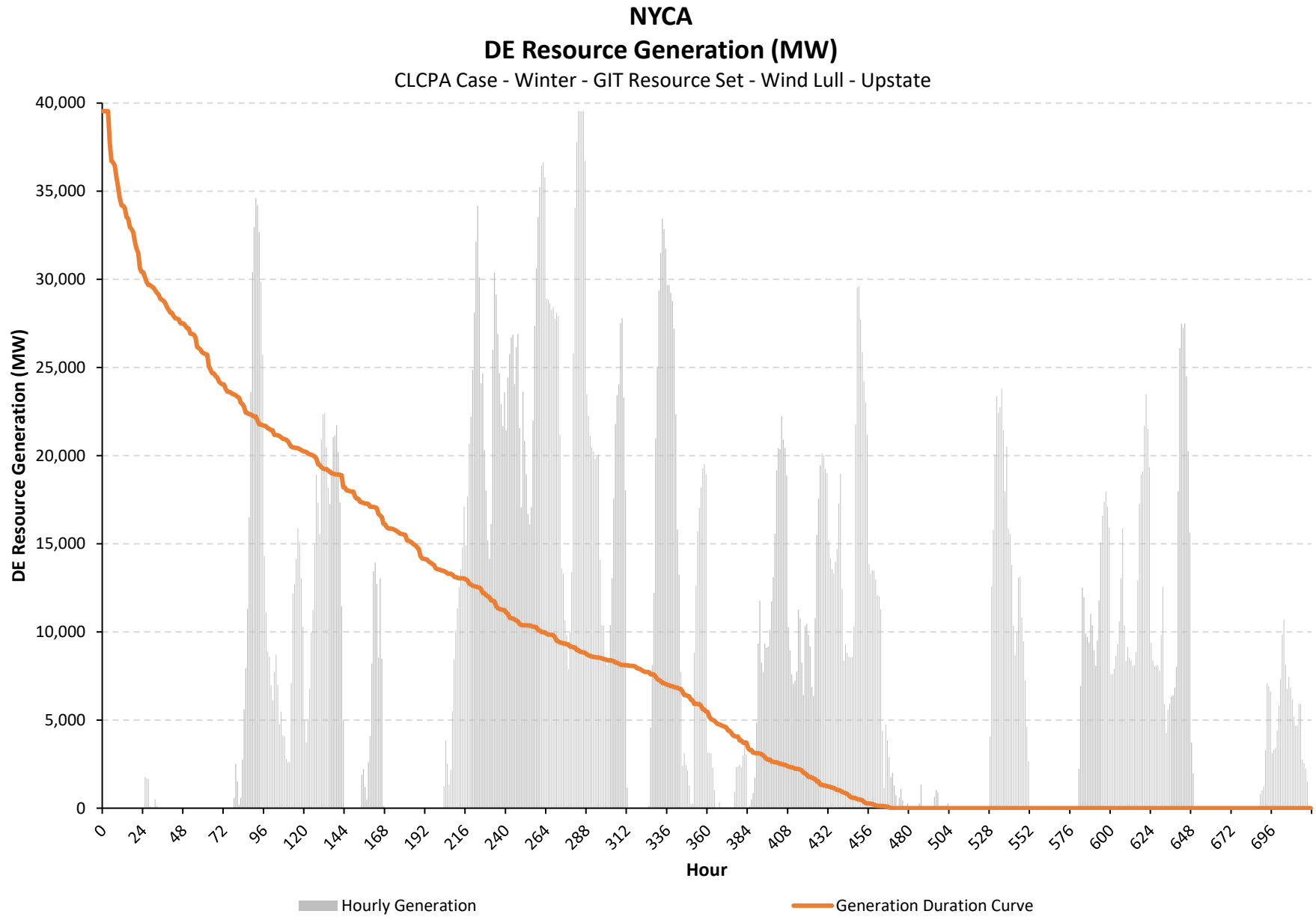
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

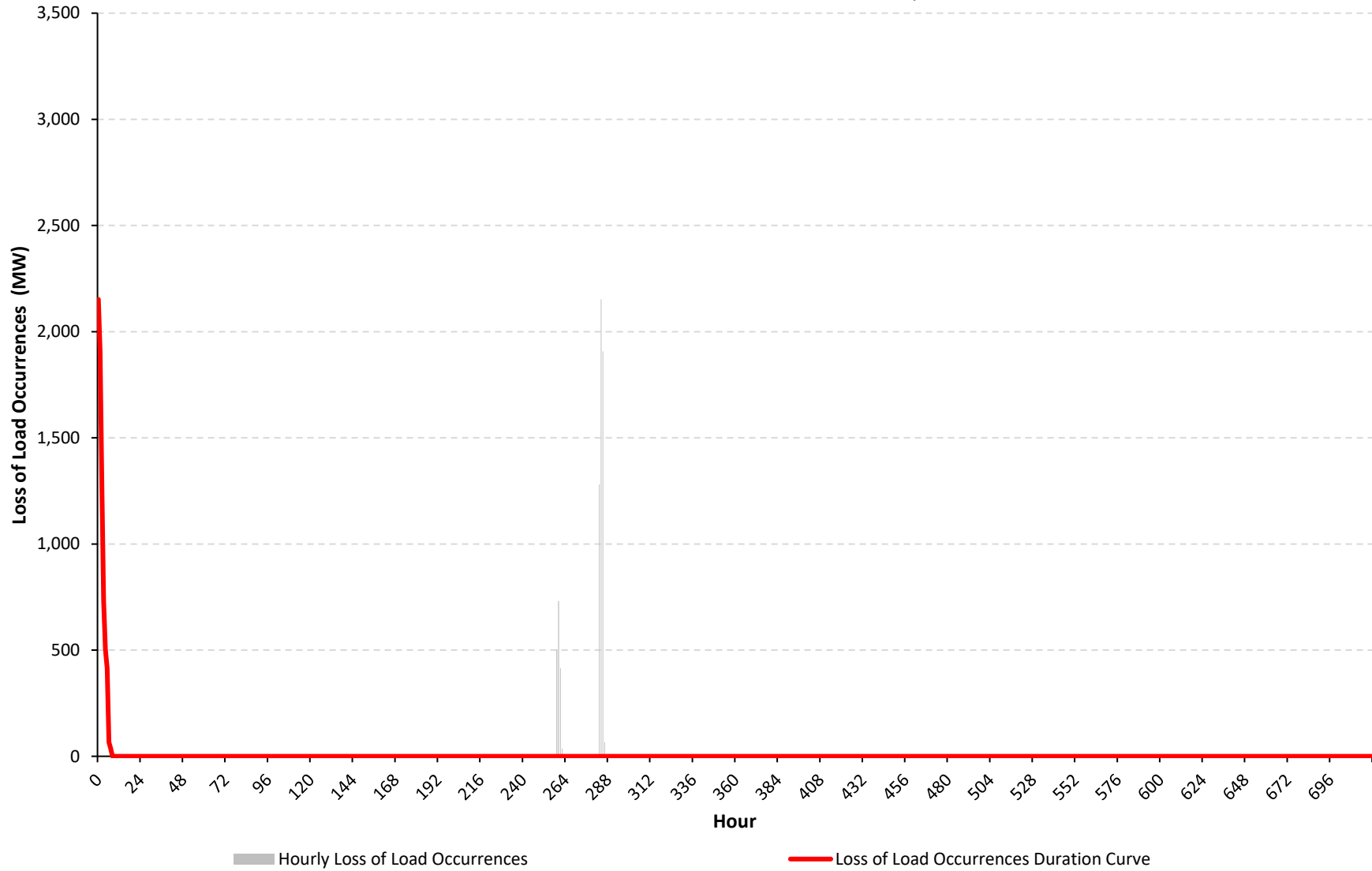
CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate







### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Wind Lull - Upstate



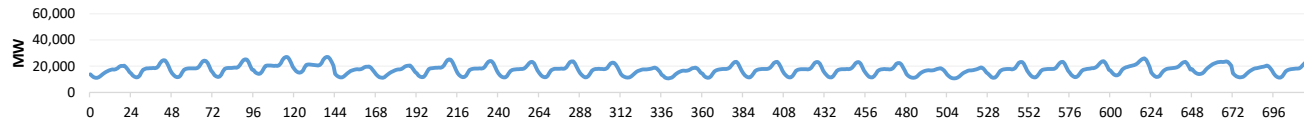
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 54 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate**

**Hourly Results Summary**

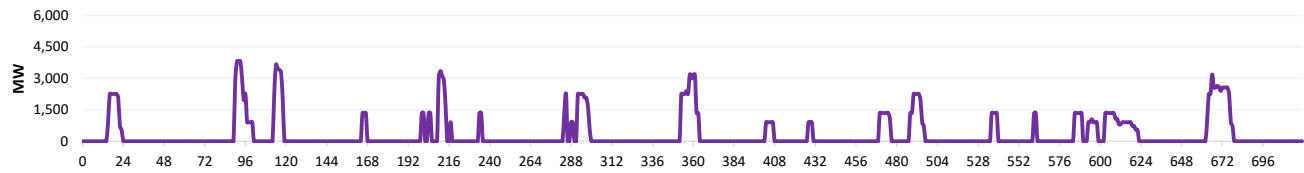
Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



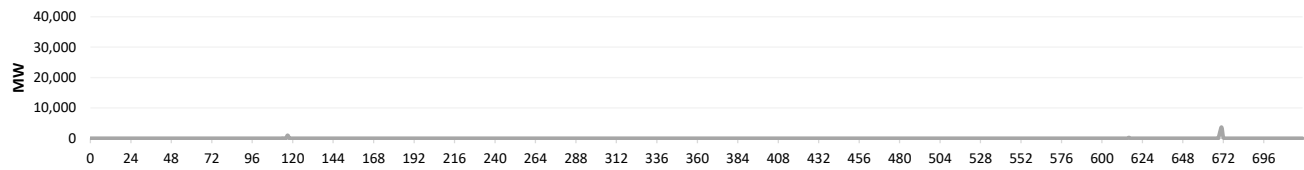
PRD Deployment	
Total Hrs.	141
Total MWh	241,276
Avg. MW	1,711.2

**Battery Energy Storage Deployed During Modeling Period**



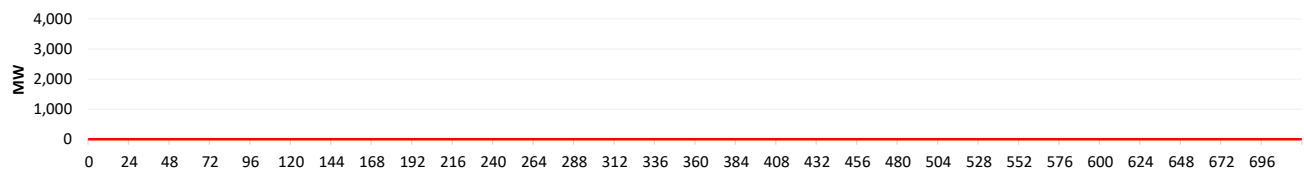
Battery Deployment	
Total Hrs.	78
Total MWh	156,531
Avg. MW	2,006.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	6
Total MWh	7,201
Avg. MW	1,200.2

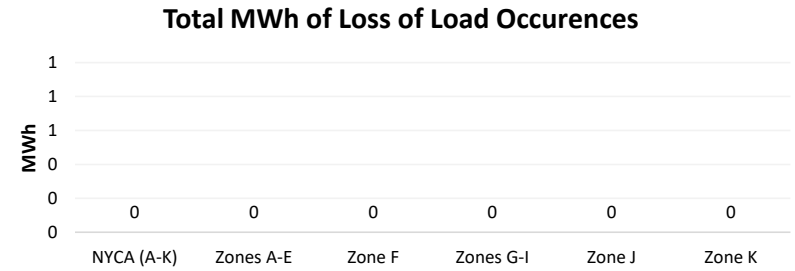
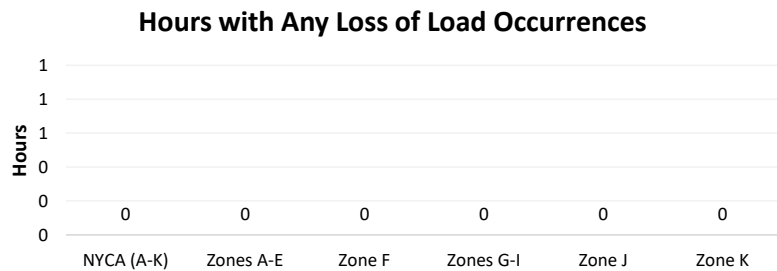
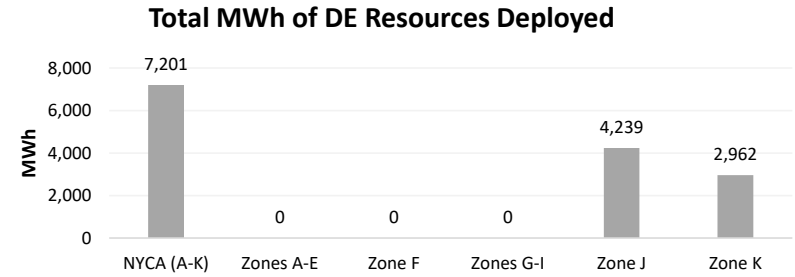
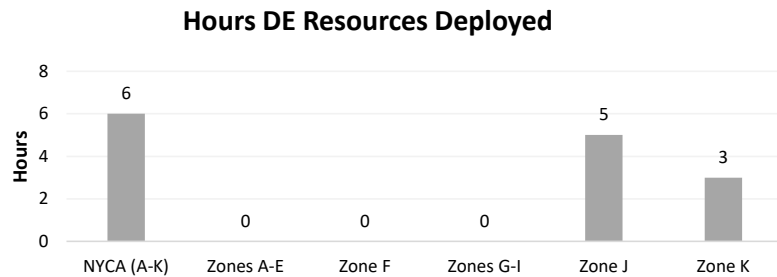
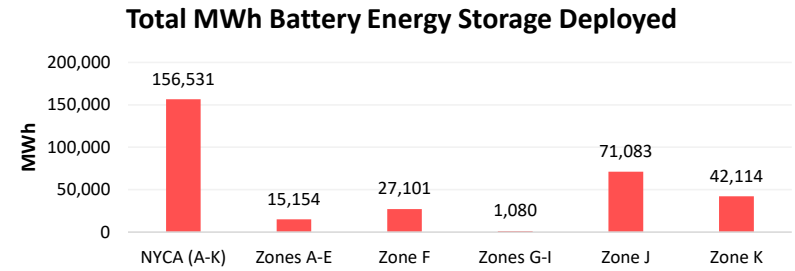
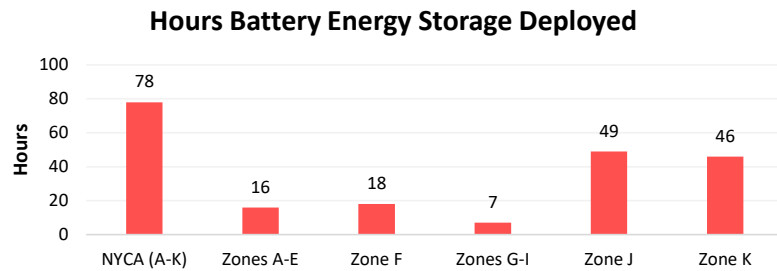
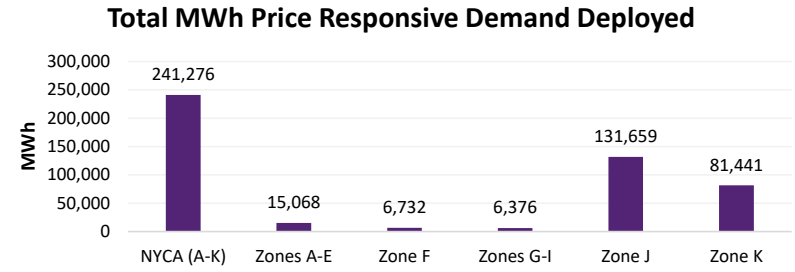
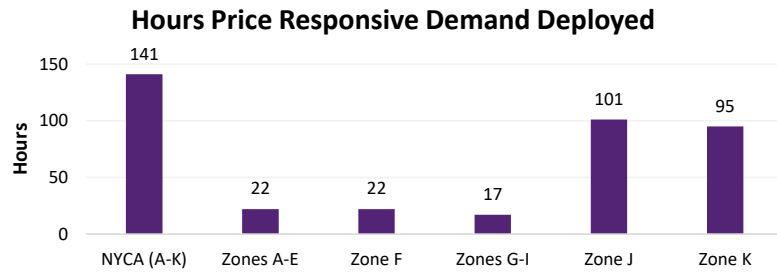
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

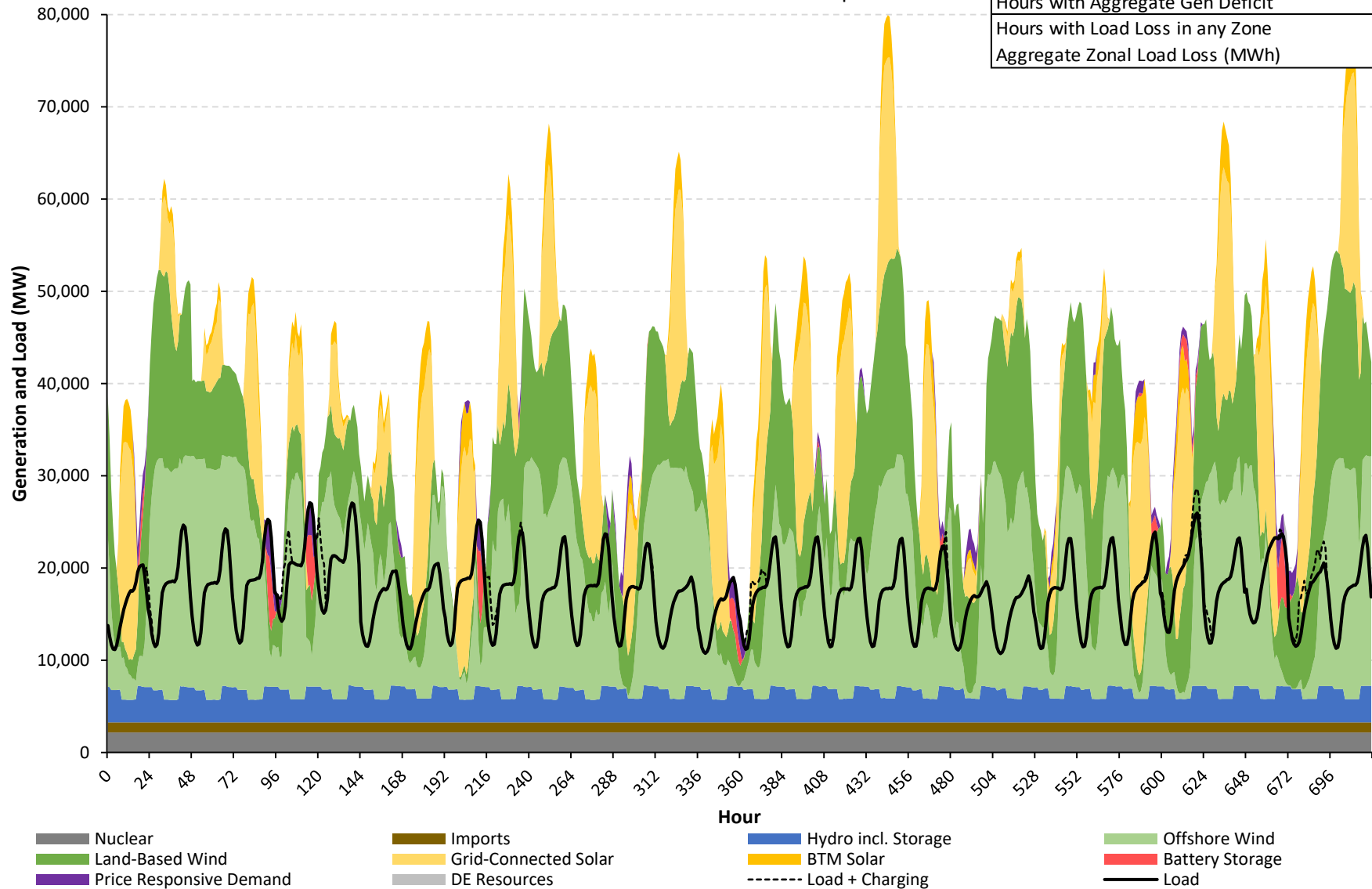
Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	28,575,352
Gen Surplus/Deficit (MWh)	16,078,591
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

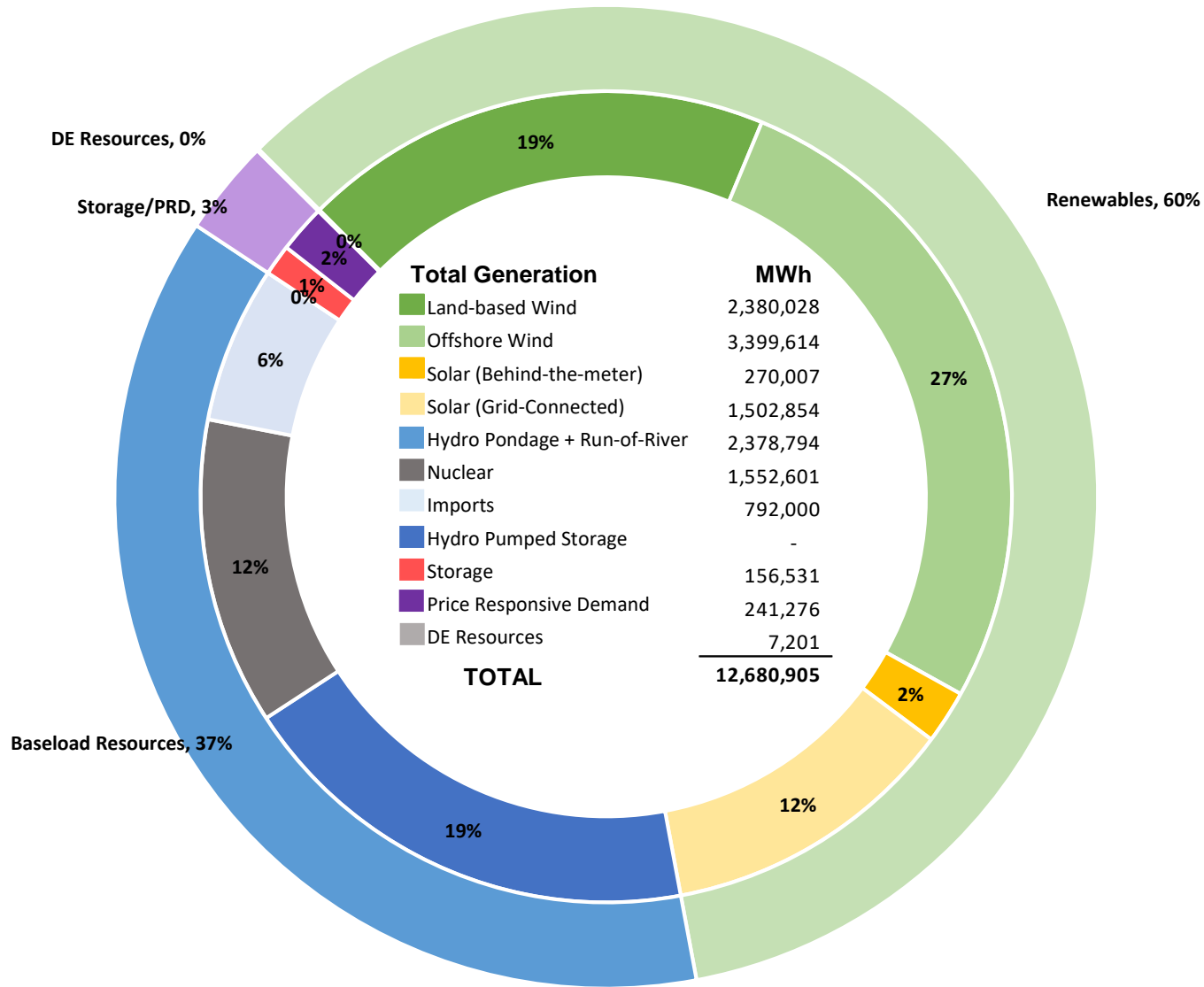


**Note:**

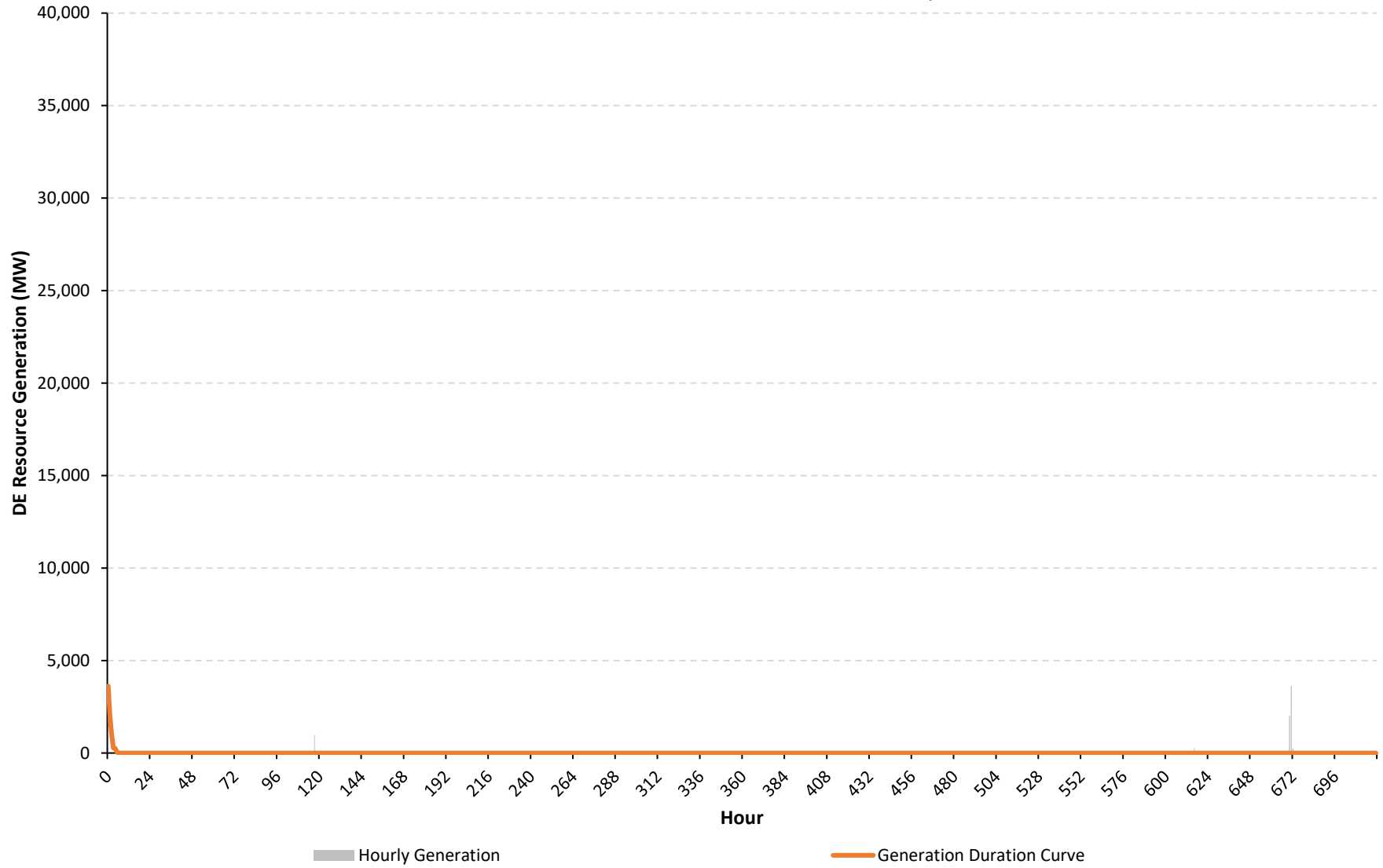
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

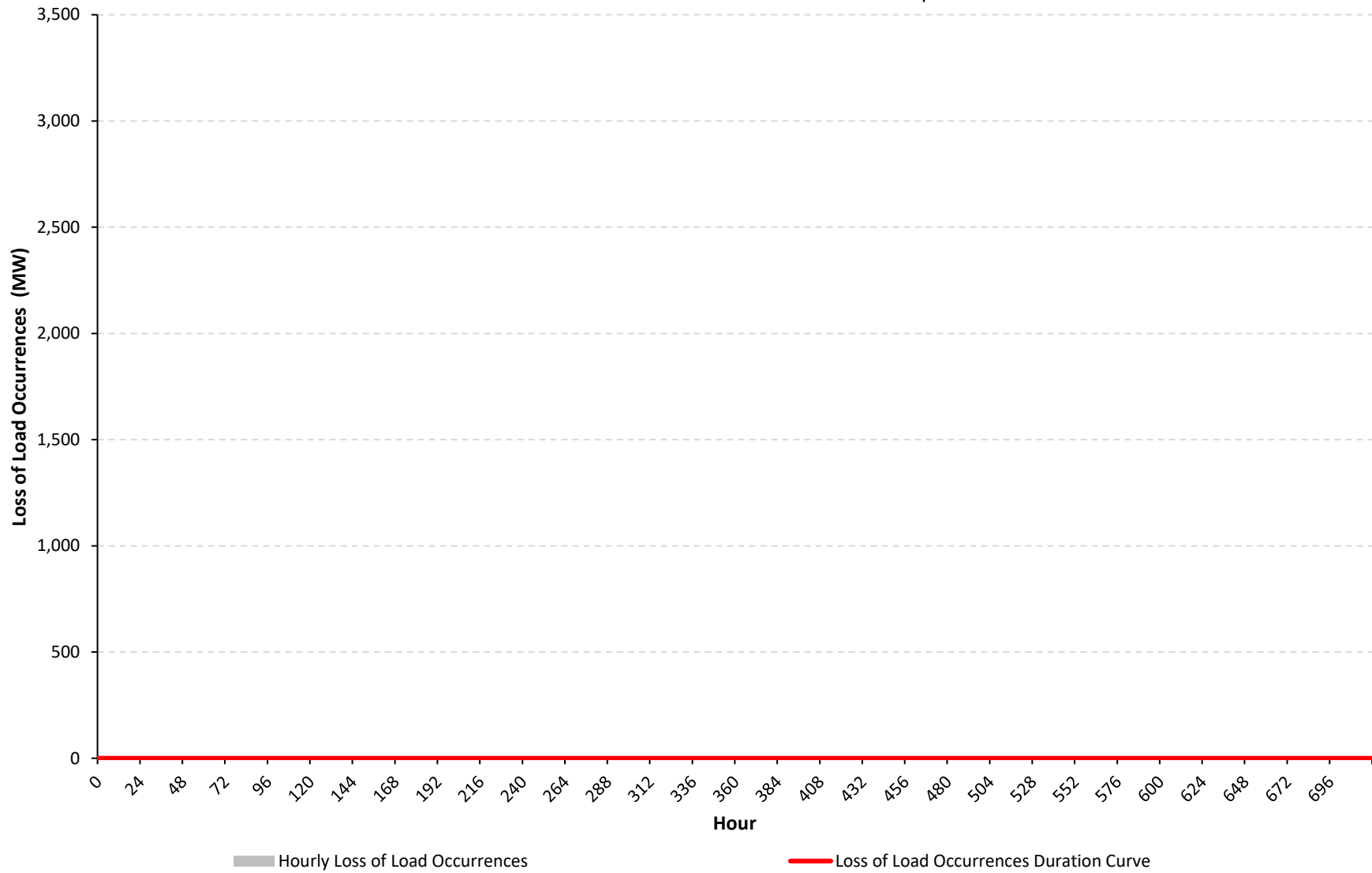
CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate



**NYCA**  
**DE Resource Generation (MW)**  
CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Upstate





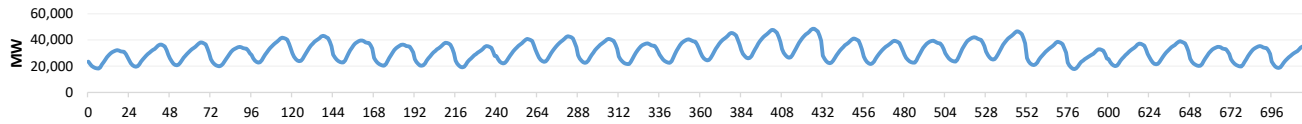
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 55 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore**

**Hourly Results Summary**

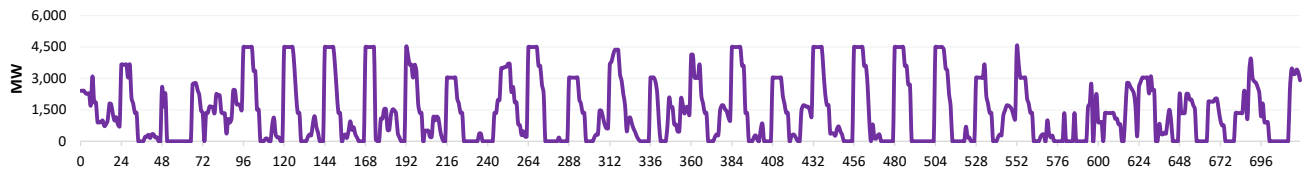
Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



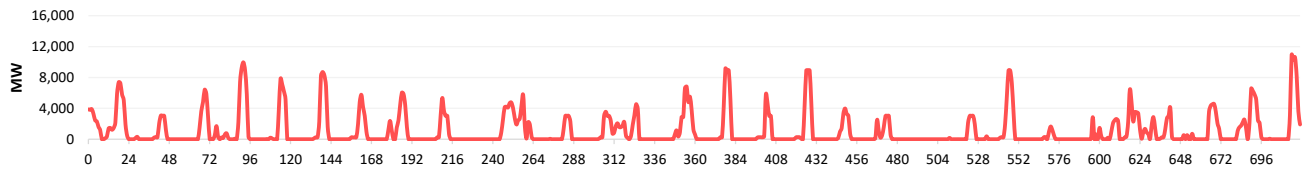
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



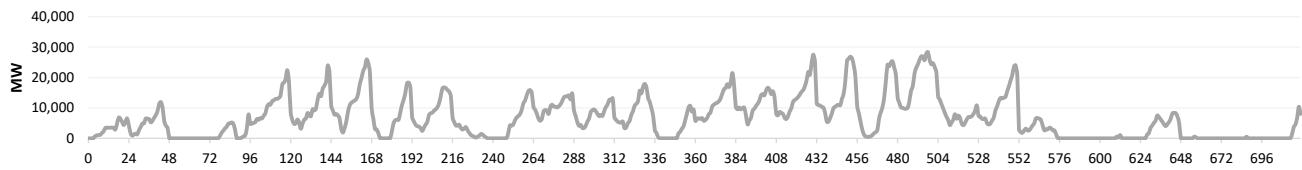
PRD Deployment	
Total Hrs.	510
Total MWh	1,039,714
Avg. MW	2,038.7

**Battery Energy Storage Deployed During Modeling Period**



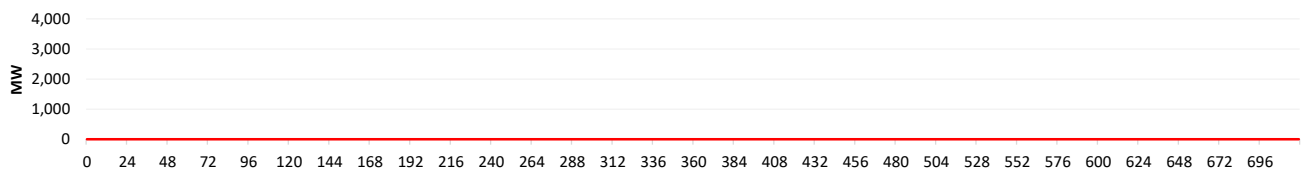
Battery Deployment	
Total Hrs.	298
Total MWh	799,691
Avg. MW	2,683.5

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	543
Total MWh	4,983,818
Avg. MW	9,178.3

**Loss of Load Occurrences During Modeling Period**

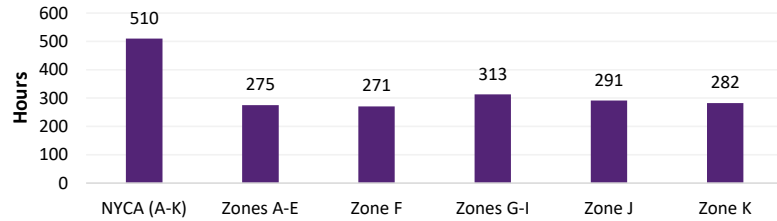


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

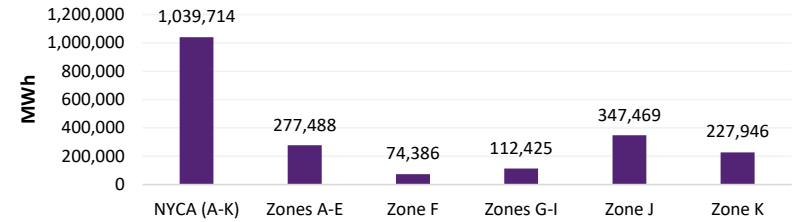
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore

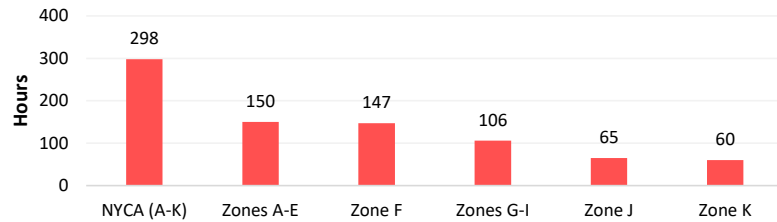
**Hours Price Responsive Demand Deployed**



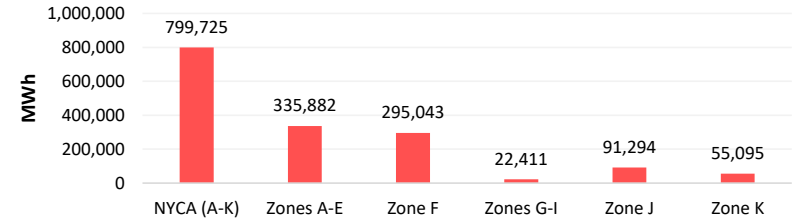
**Total MWh Price Responsive Demand Deployed**



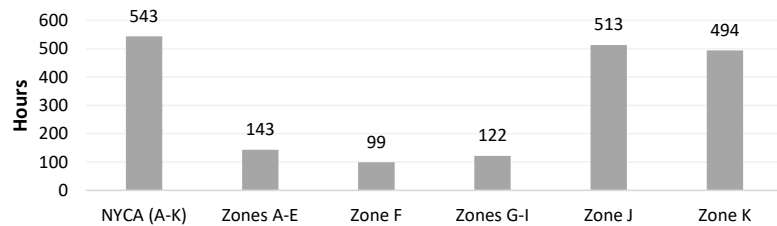
**Hours Battery Energy Storage Deployed**



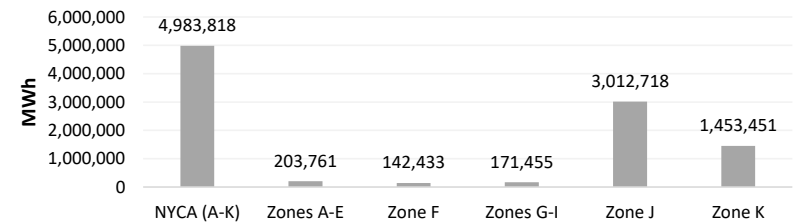
**Total MWh Battery Energy Storage Deployed**



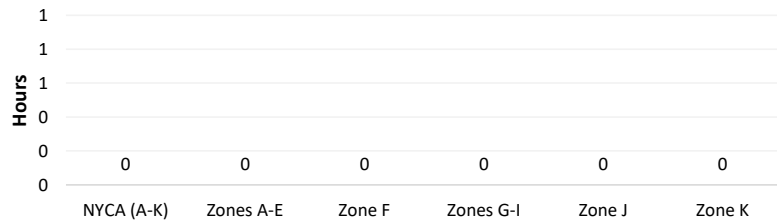
**Hours DE Resources Deployed**



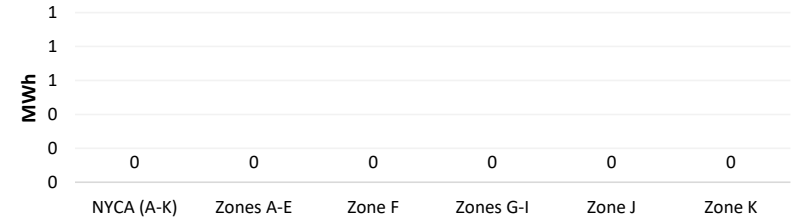
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

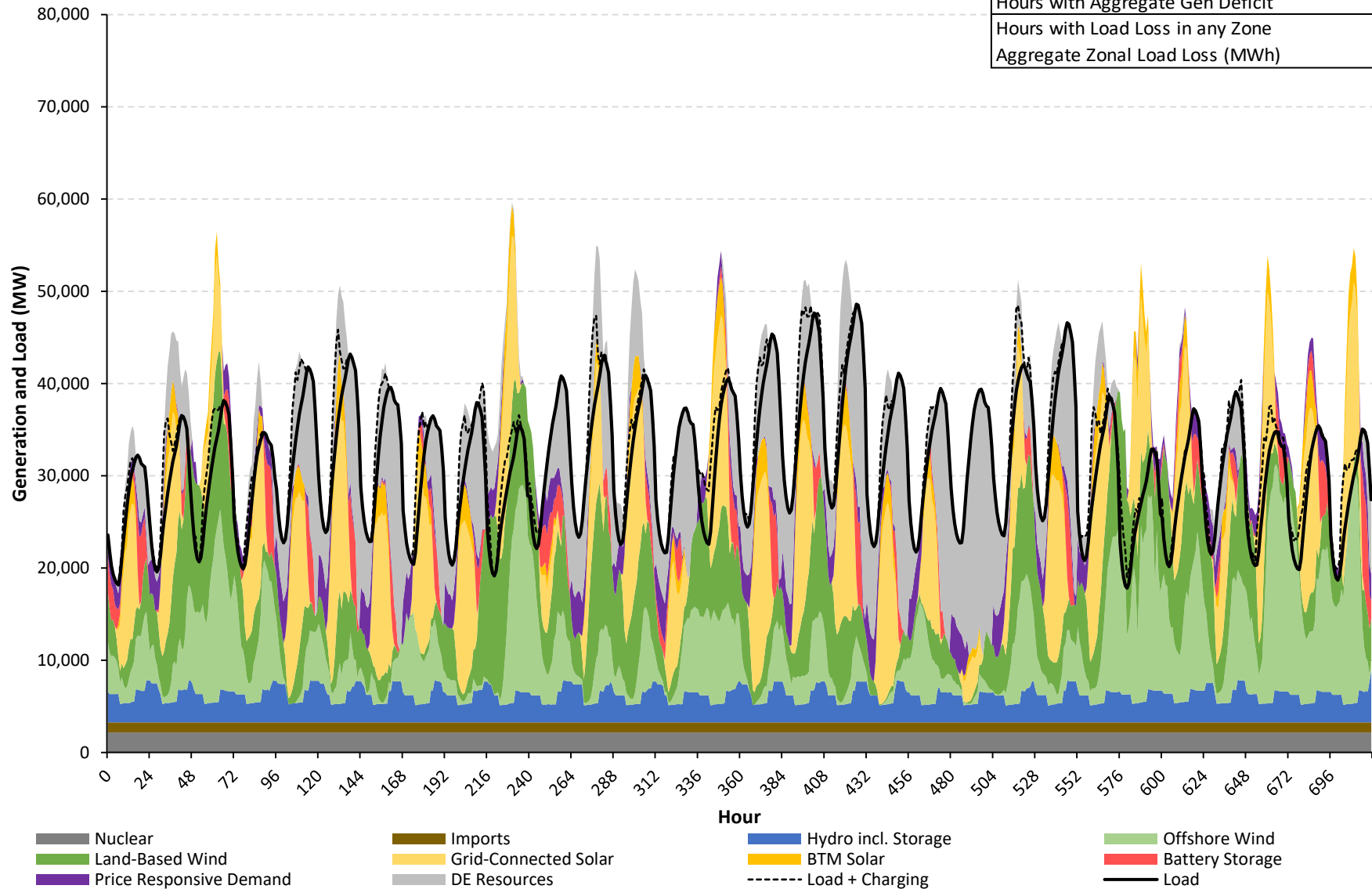


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	25,808,033
Gen Surplus/Deficit (MWh)	3,332,077
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

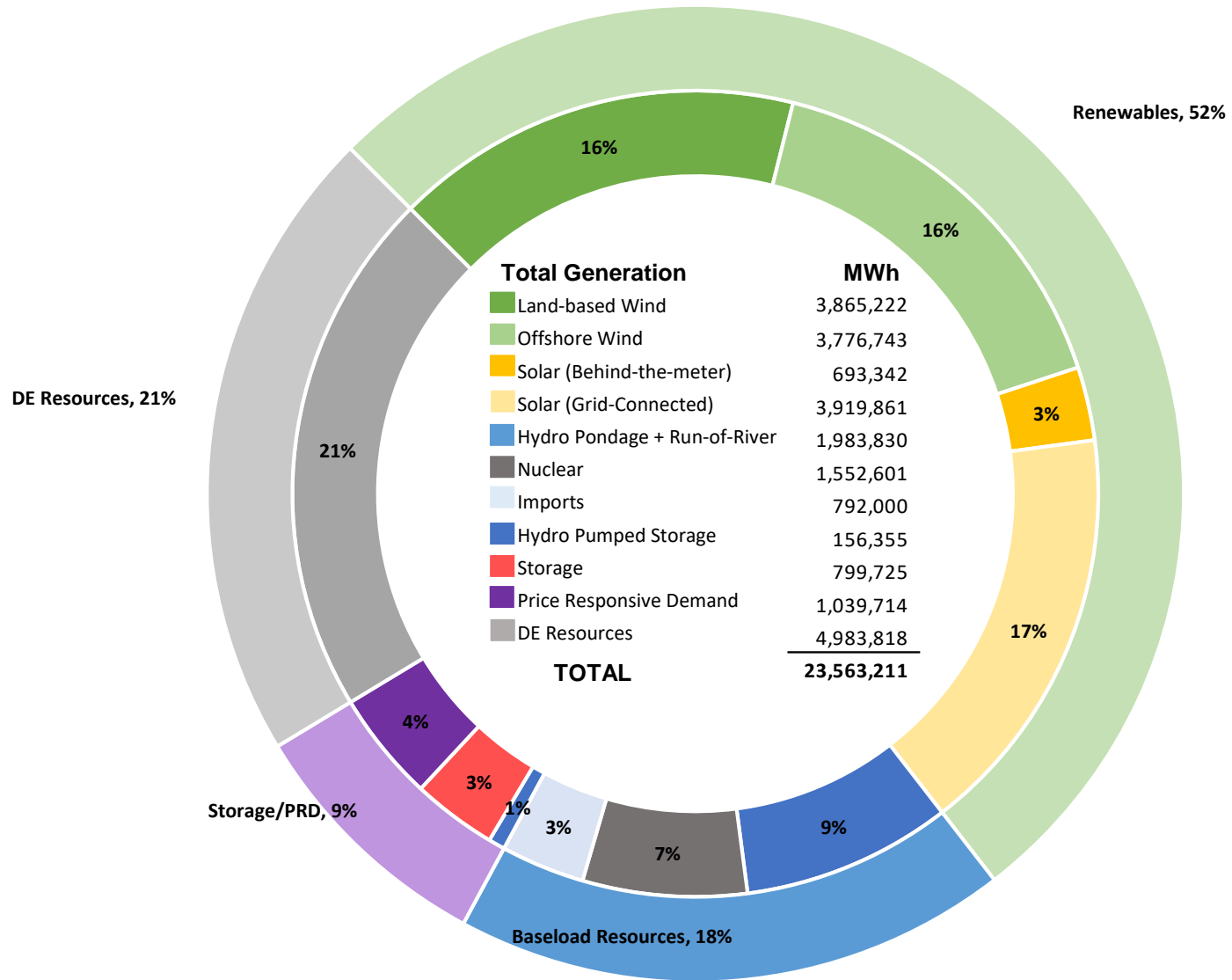


**Note:**

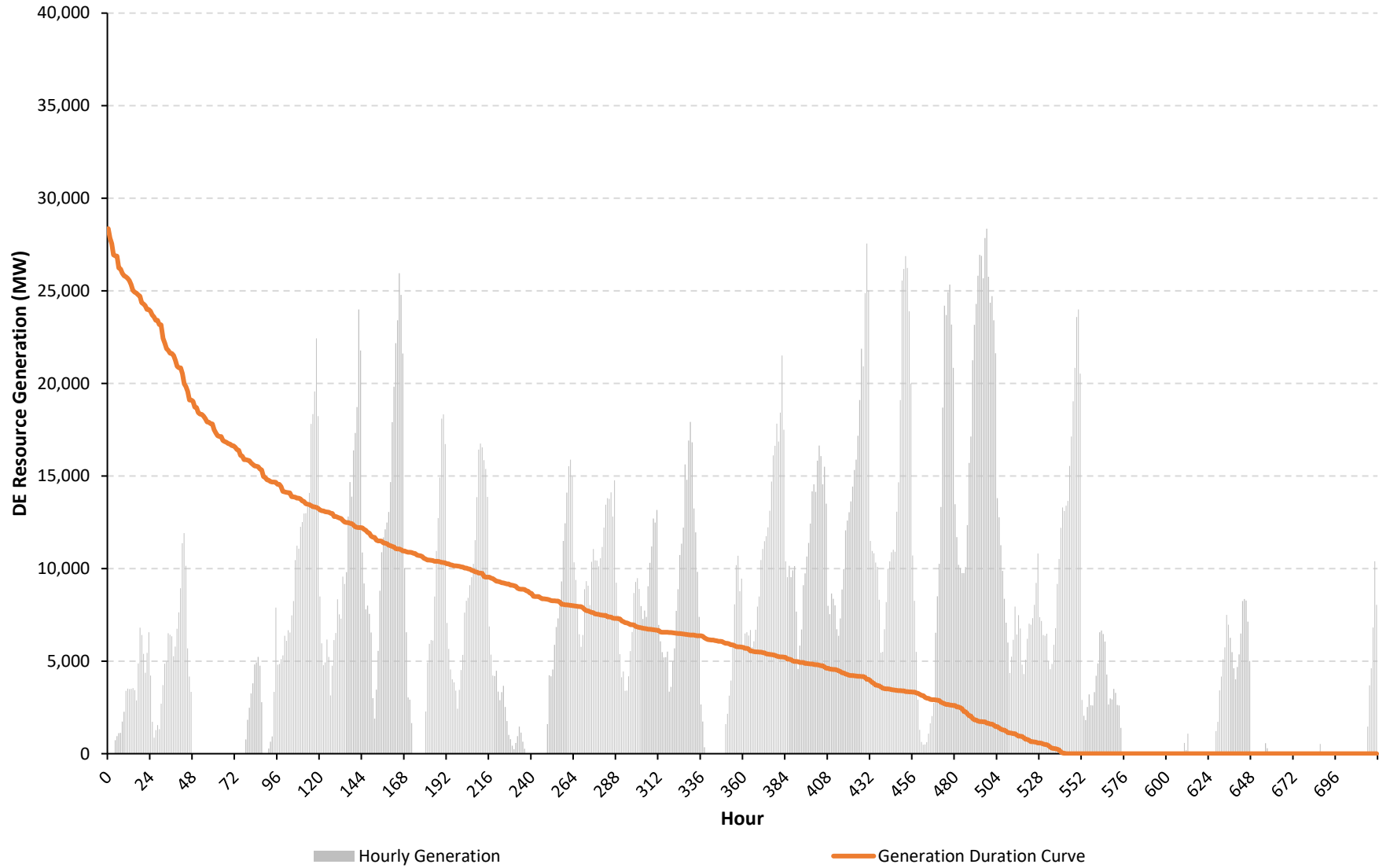
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

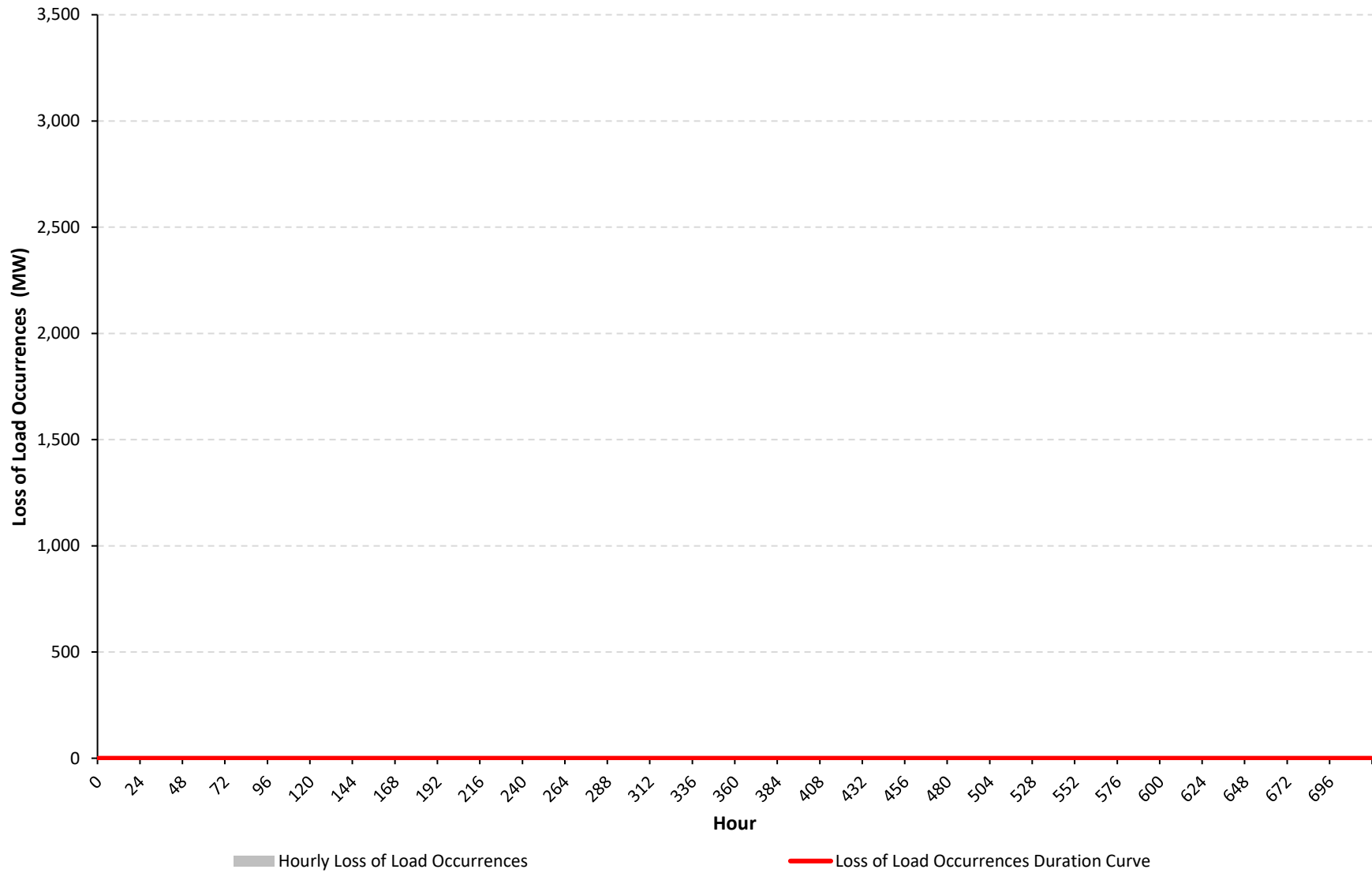
CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - Off-Shore



## **Appendix C. Diagnostic Charts for All Cases**

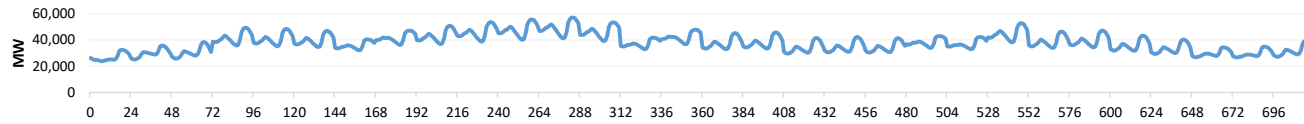
### **Case 56 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore**



### Hourly Results Summary

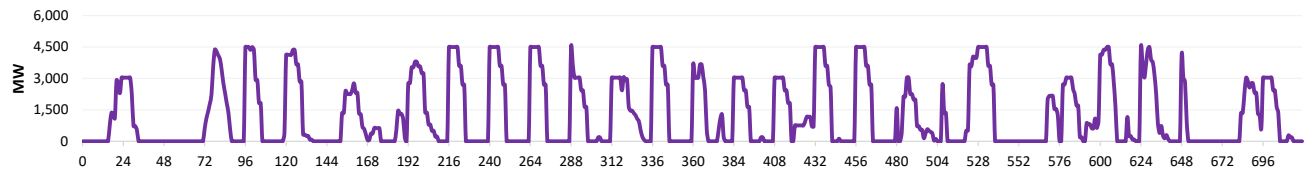
Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



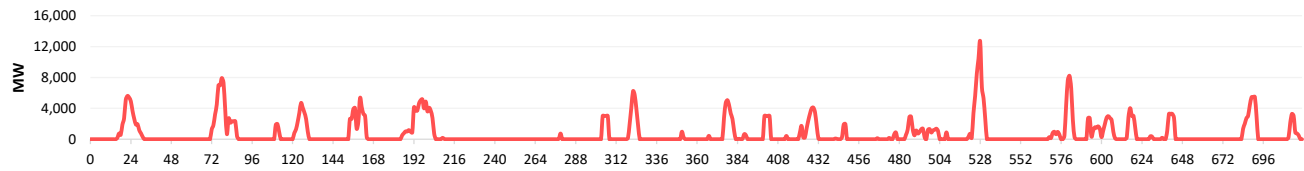
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



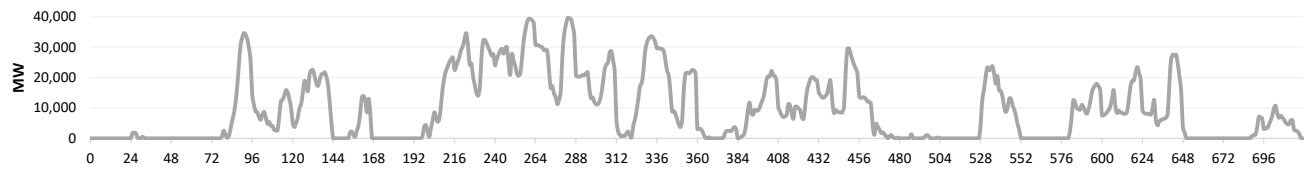
PRD Deployment	
Total Hrs.	378
Total MWh	904,613
Avg. MW	2,393.2

**Battery Energy Storage Deployed During Modeling Period**



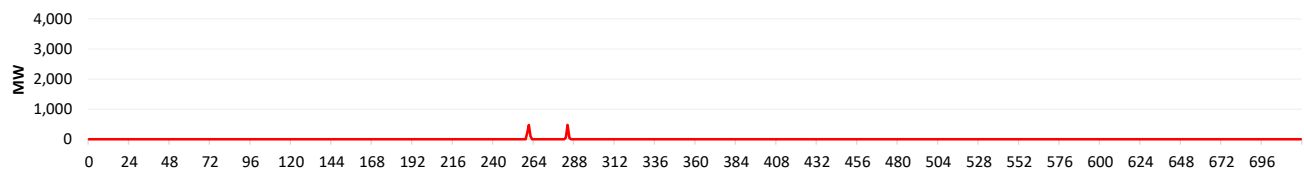
Battery Deployment	
Total Hrs.	223
Total MWh	536,266
Avg. MW	2,404.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	487
Total MWh	6,836,558
Avg. MW	14,038.1

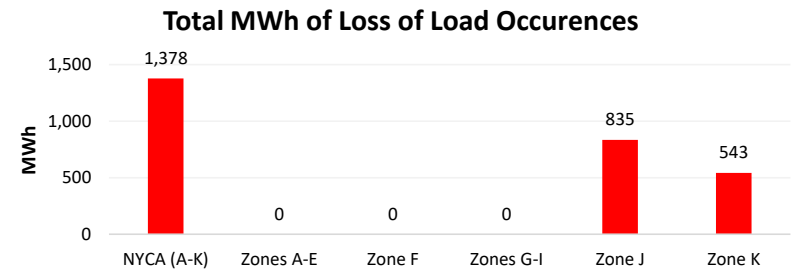
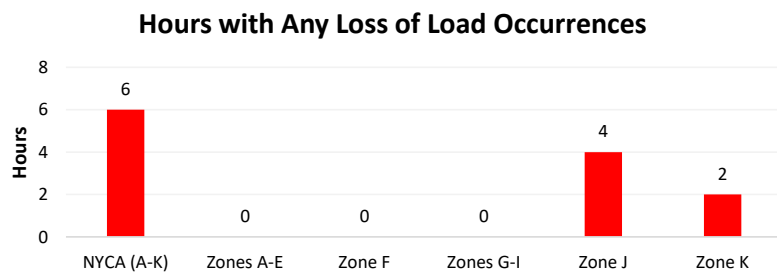
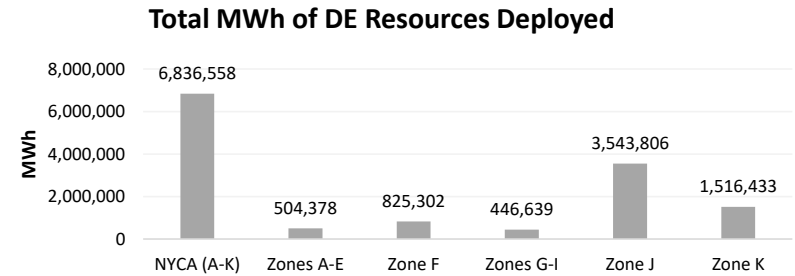
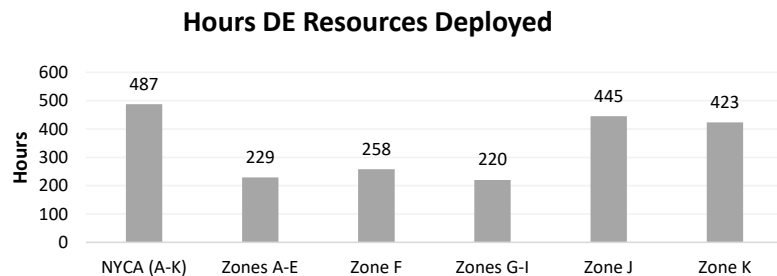
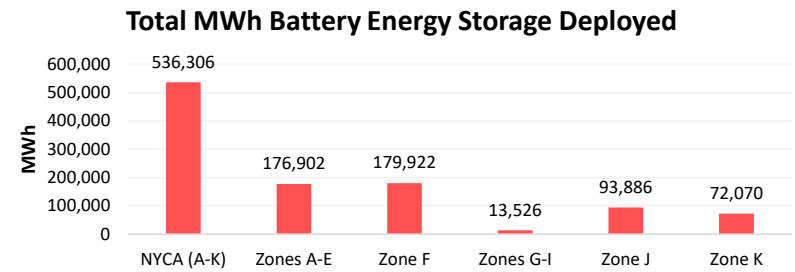
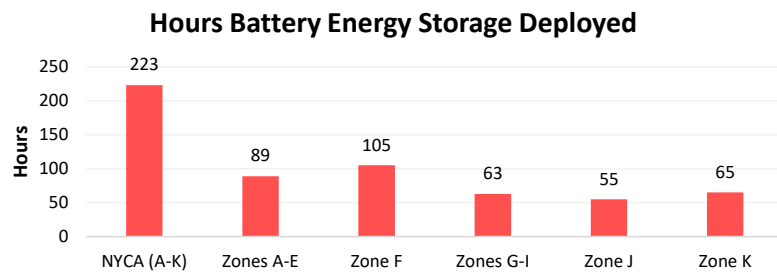
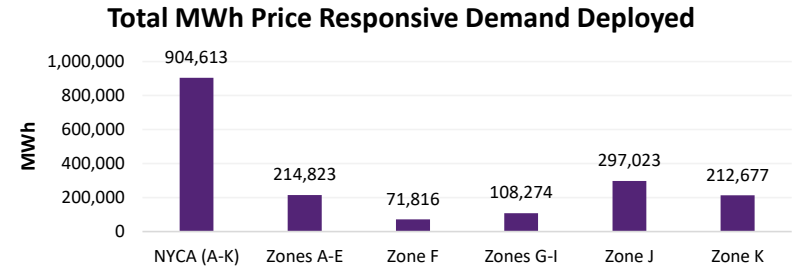
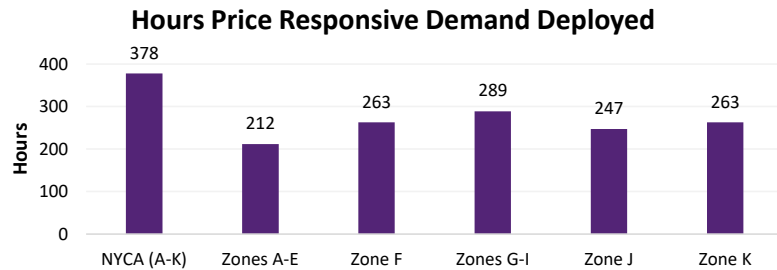
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	6
Total MWh	1,378
Avg. MW	229.7

### Full Period Results Summary

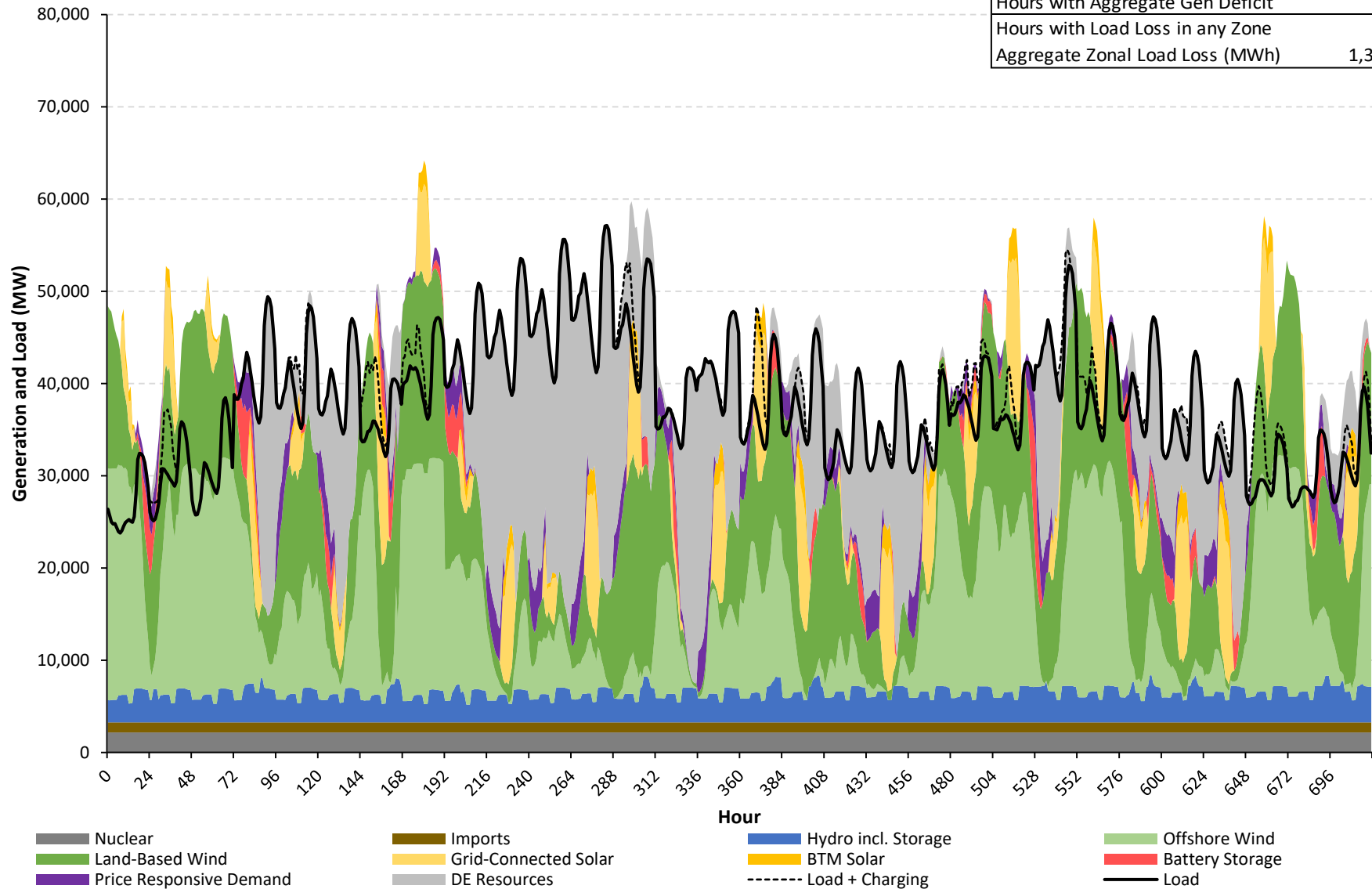
Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	30,964,003
Gen Surplus/Deficit (MWh)	3,641,966
Hours with Aggregate Gen Deficit	6
Hours with Load Loss in any Zone	6
Aggregate Zonal Load Loss (MWh)	1,378

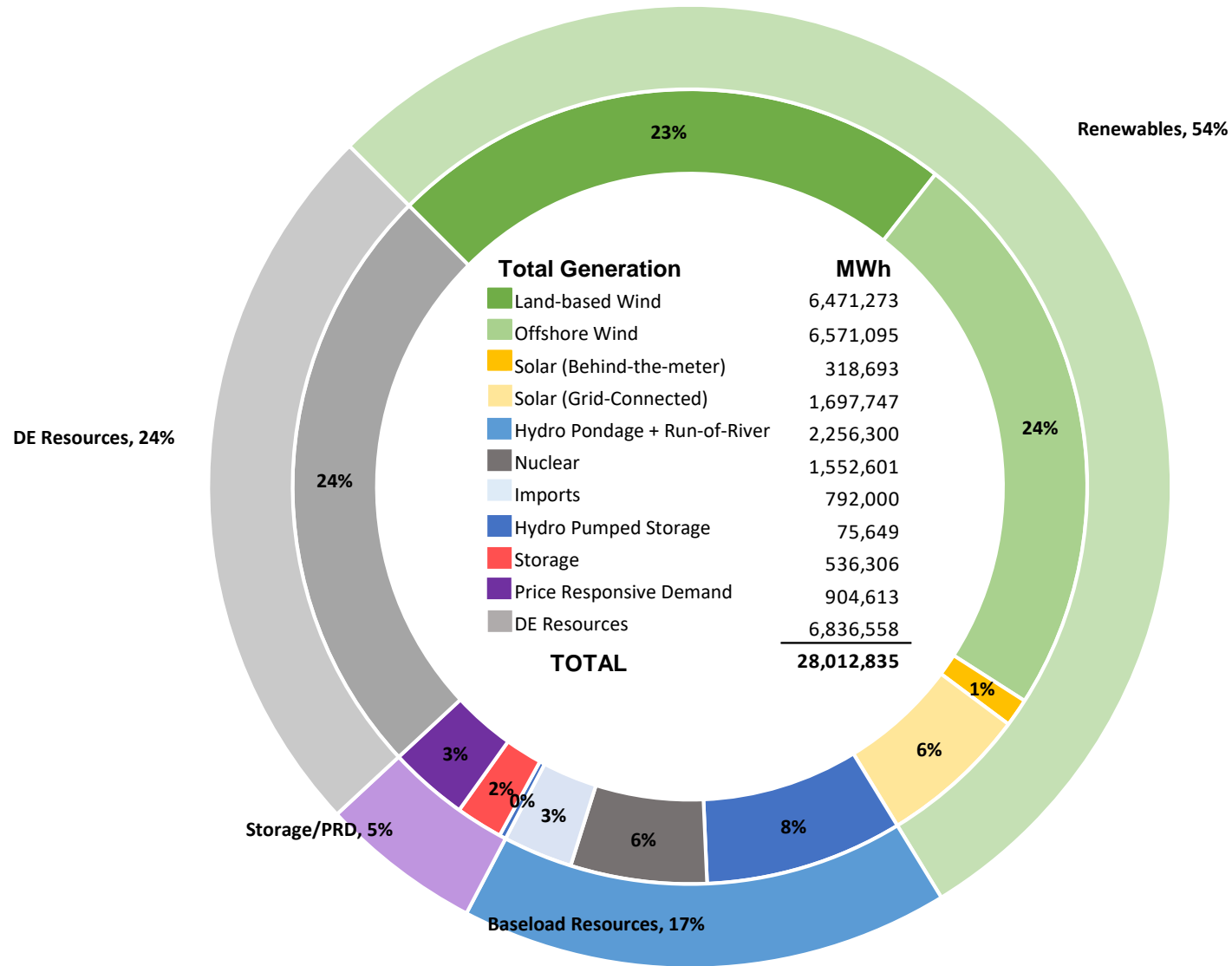


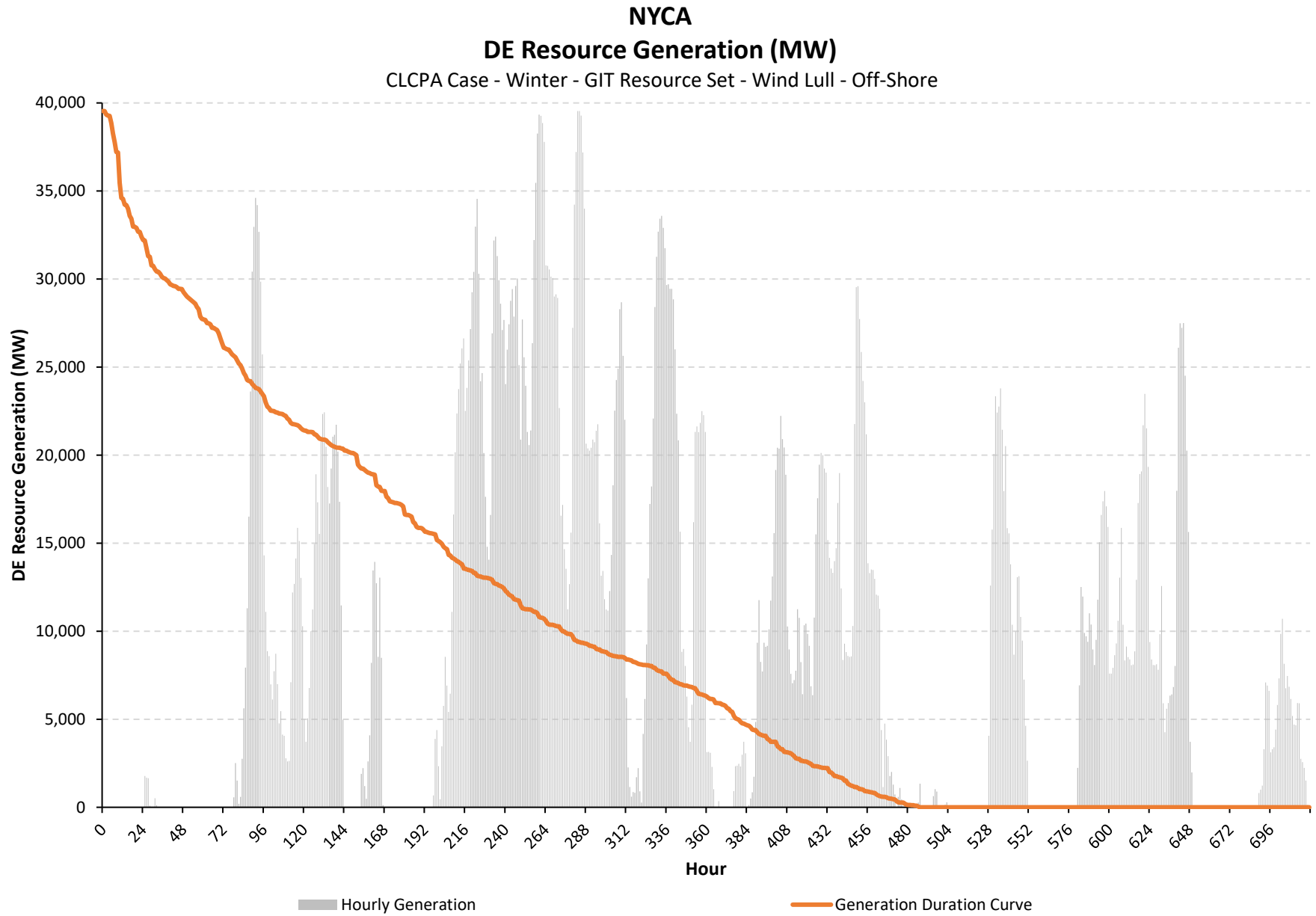
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

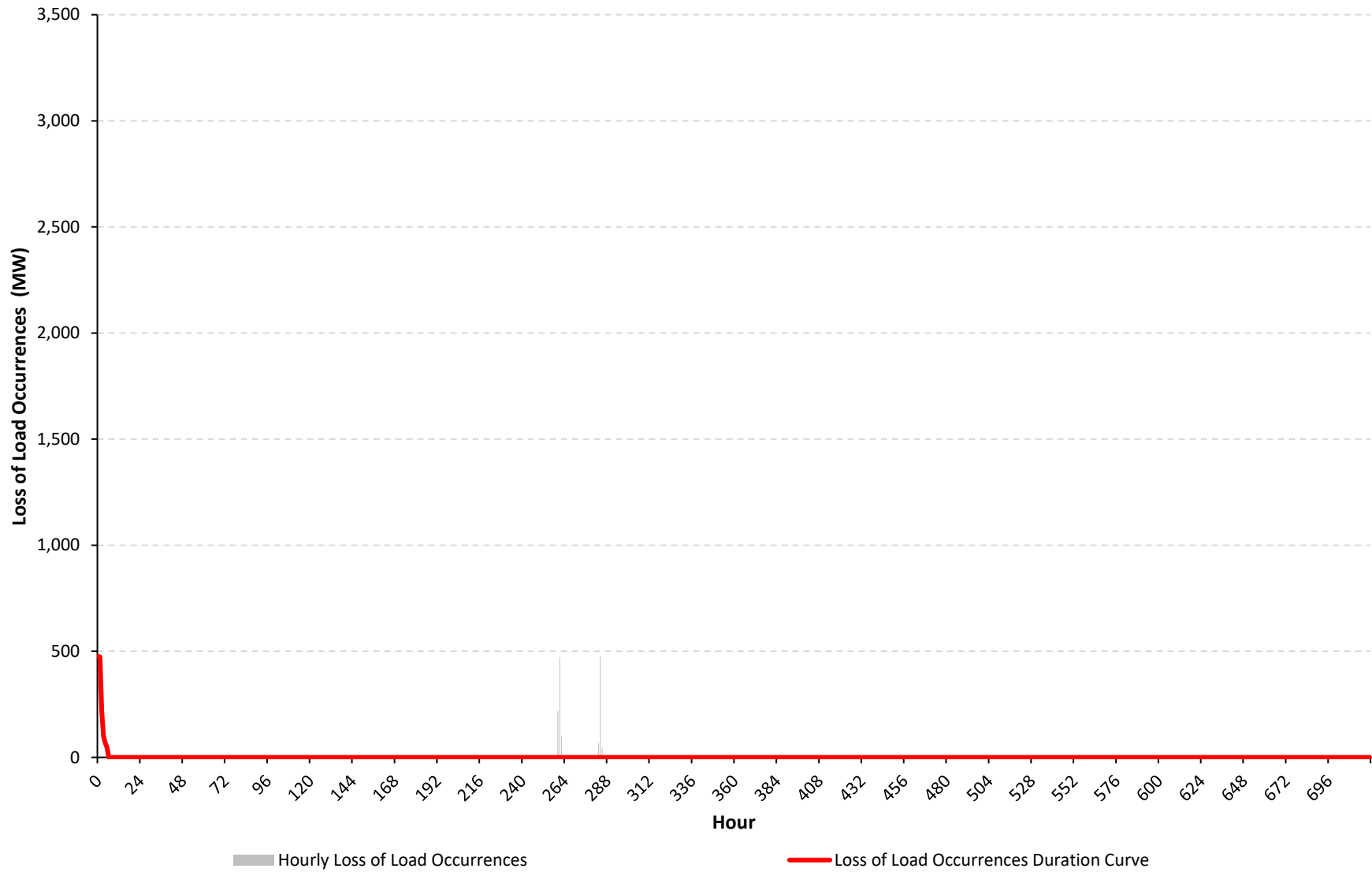
### Generation by Resource Type

CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Wind Lull - Off-Shore



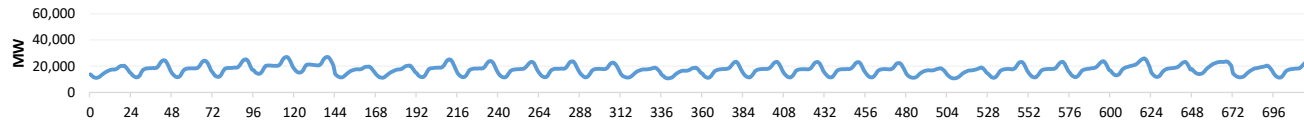
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 57 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore**

### Hourly Results Summary

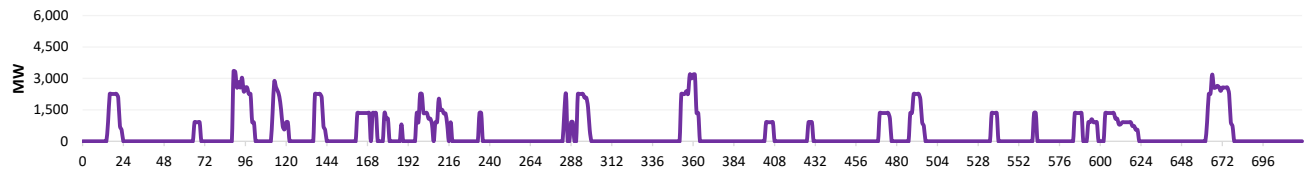
Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



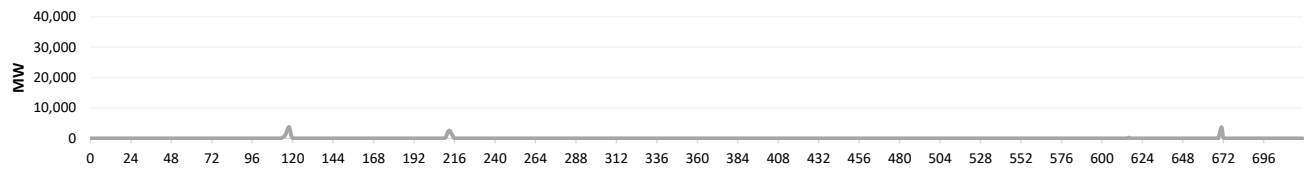
PRD Deployment	
Total Hrs.	179
Total MWh	280,931
Avg. MW	1,569.4

**Battery Energy Storage Deployed During Modeling Period**



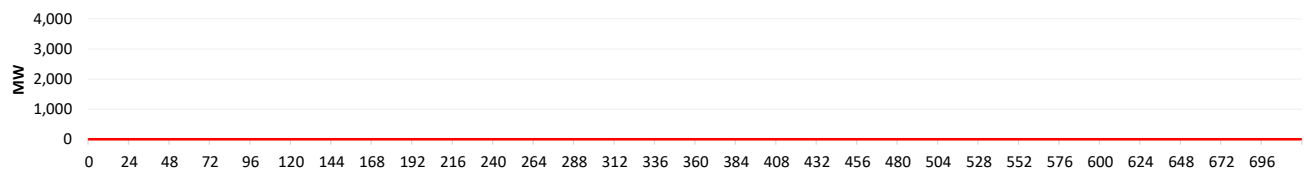
Battery Deployment	
Total Hrs.	97
Total MWh	191,008
Avg. MW	1,969.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	15
Total MWh	24,332
Avg. MW	1,622.1

**Loss of Load Occurrences During Modeling Period**

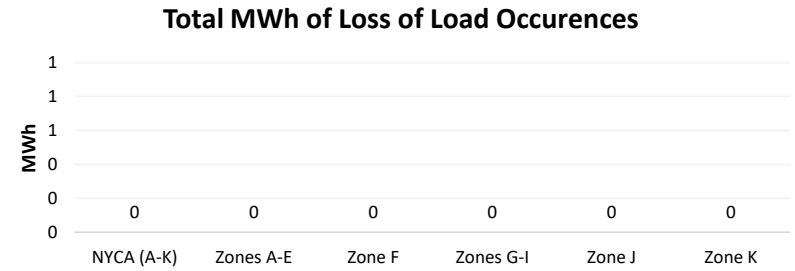
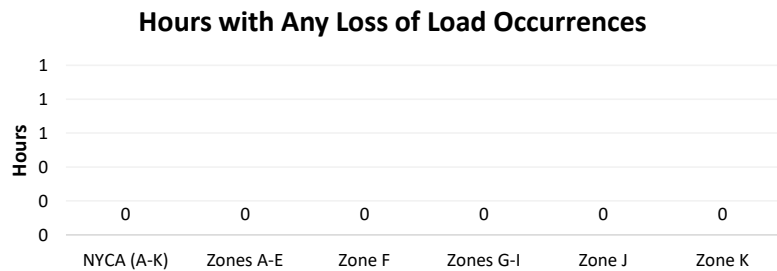
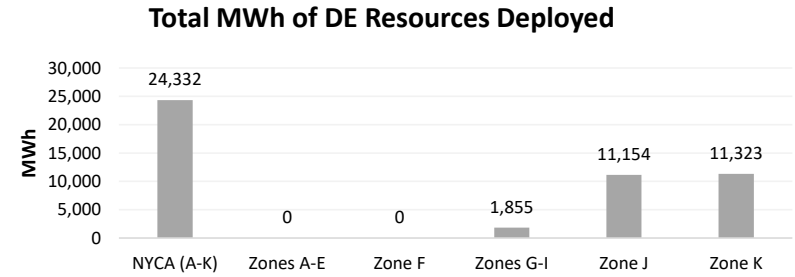
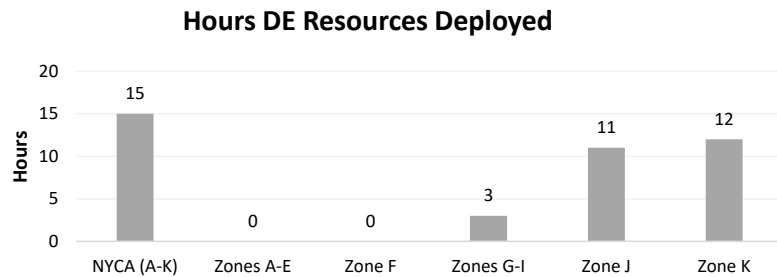
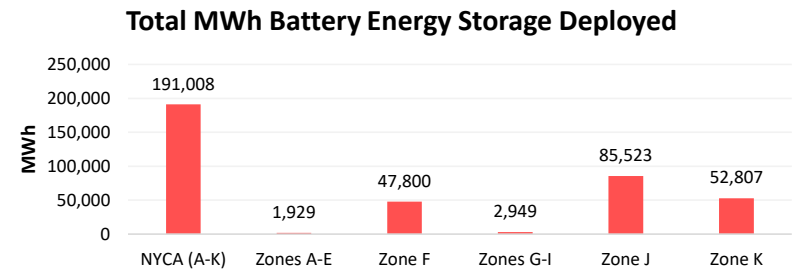
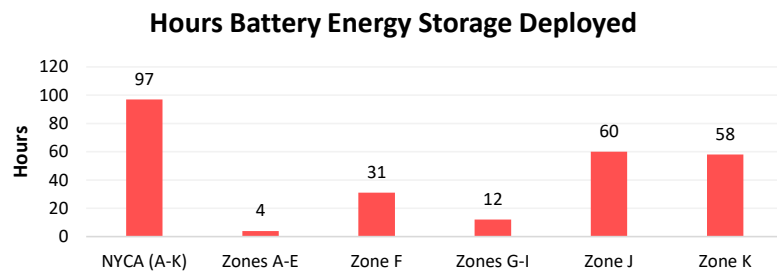
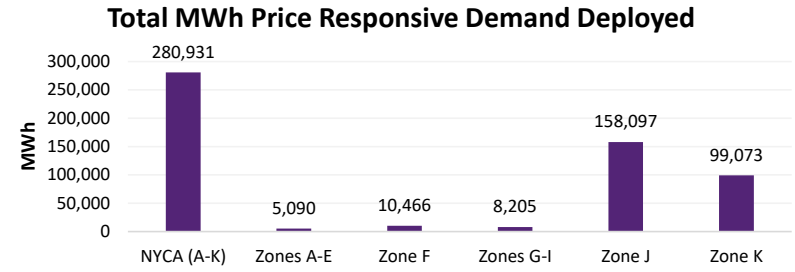
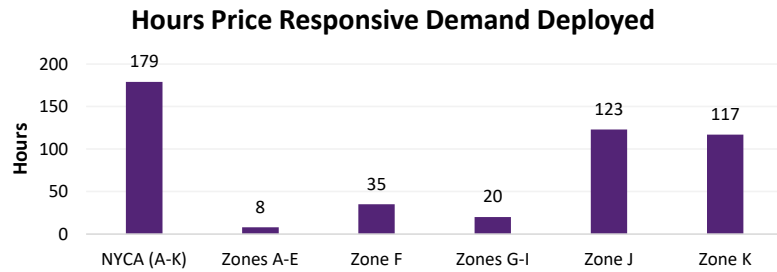


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0



### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore

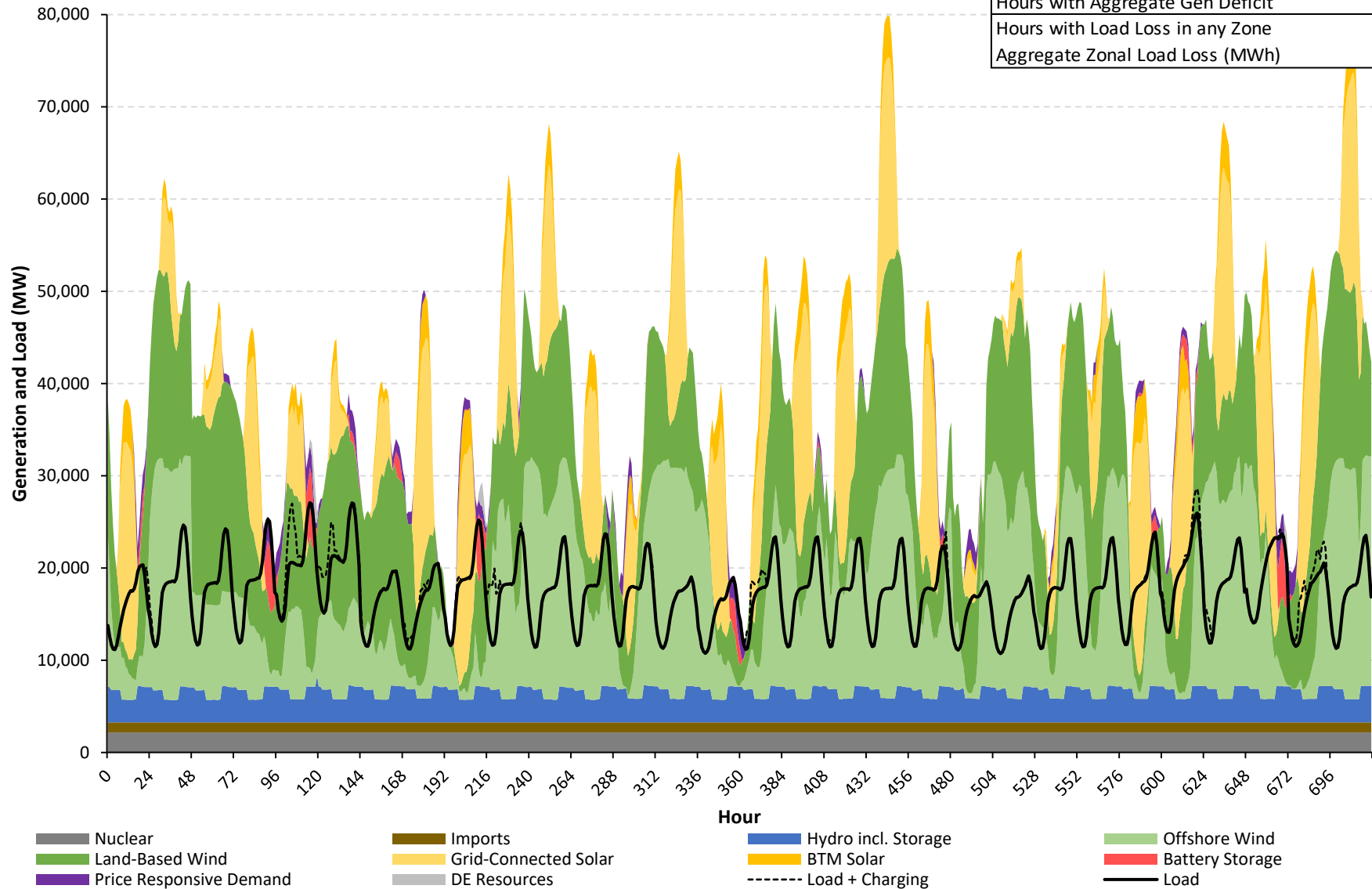


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	28,430,491
Gen Surplus/Deficit (MWh)	15,933,731
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

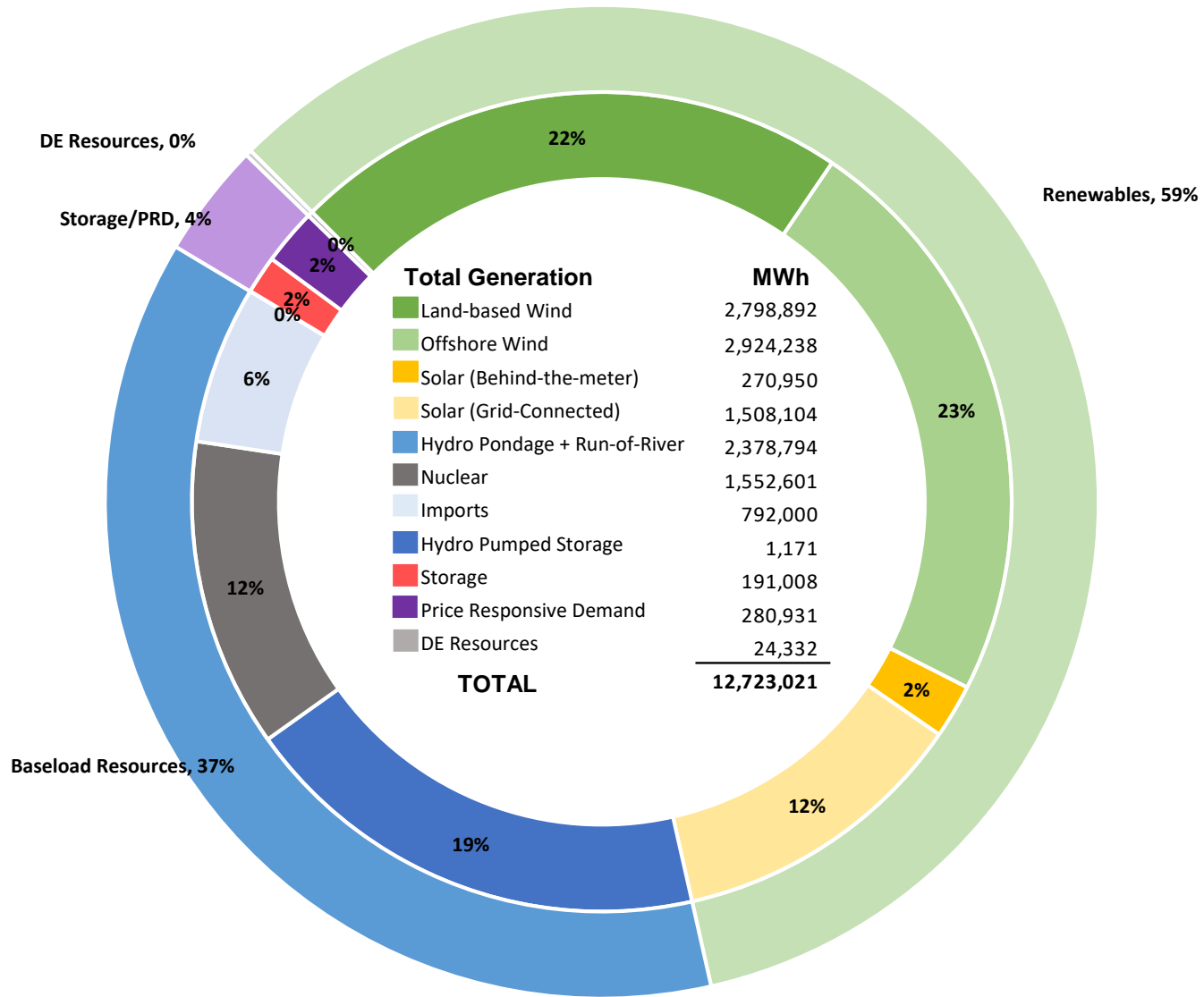


**Note:**

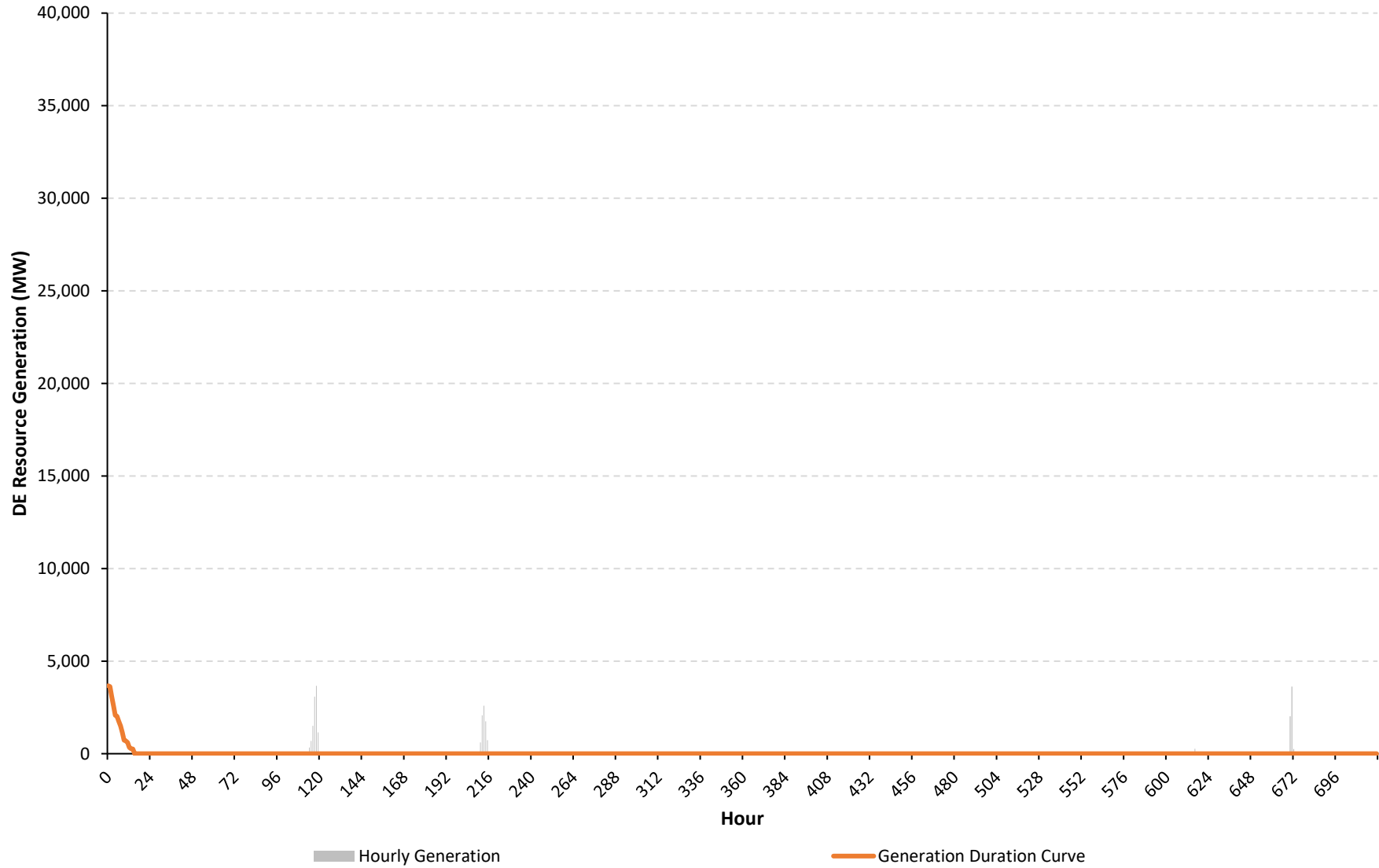
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

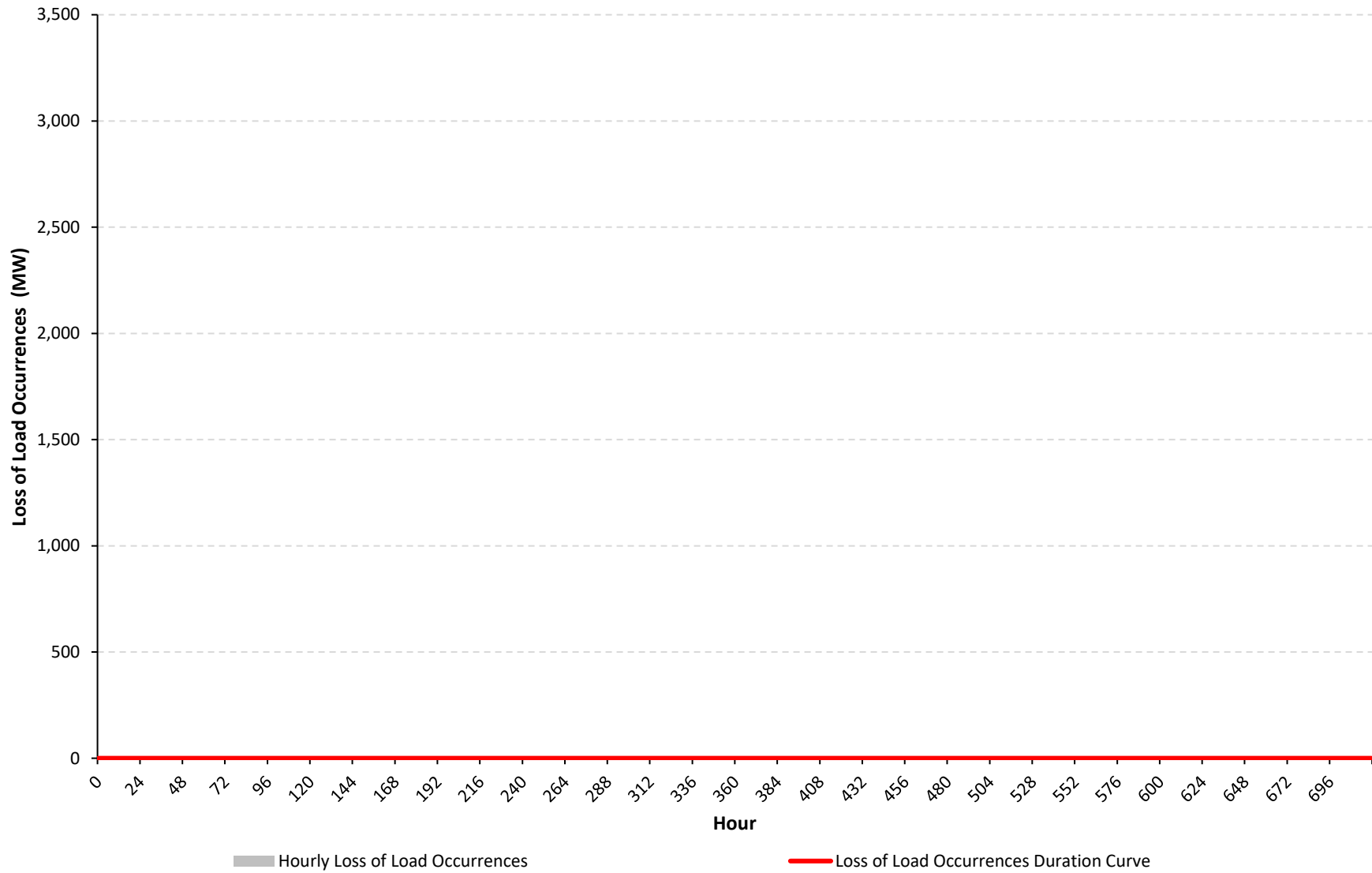
CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore



### NYCA DE Resource Generation (MW) CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - Off-Shore



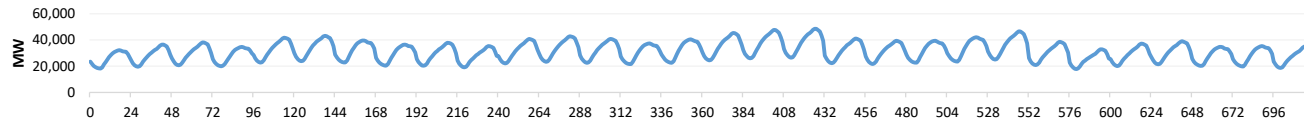
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 58 - CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

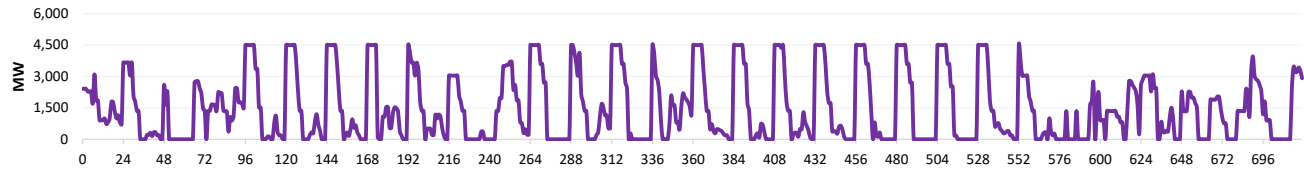
Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



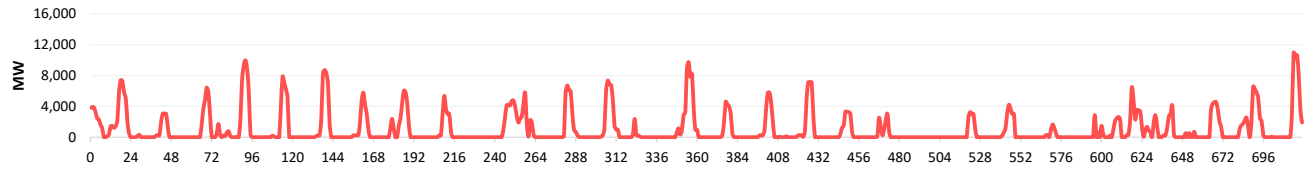
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



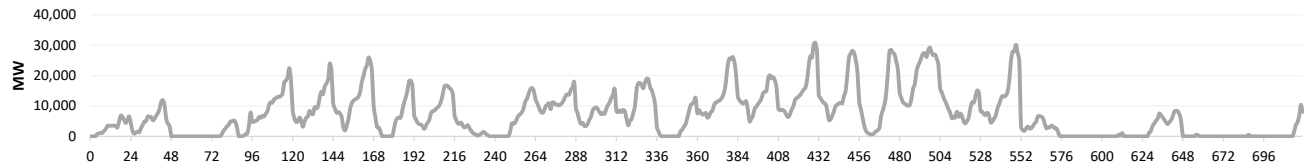
PRD Deployment	
Total Hrs.	502
Total MWh	1,058,890
Avg. MW	2,109.3

**Battery Energy Storage Deployed During Modeling Period**



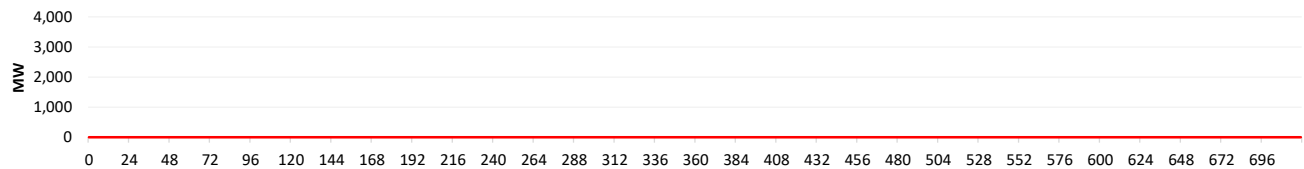
Battery Deployment	
Total Hrs.	292
Total MWh	784,055
Avg. MW	2,685.1

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	543
Total MWh	5,322,997
Avg. MW	9,802.9

**Loss of Load Occurrences During Modeling Period**

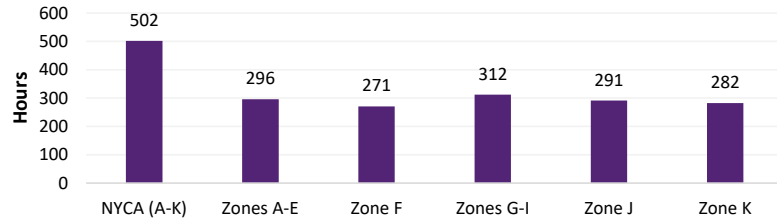


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

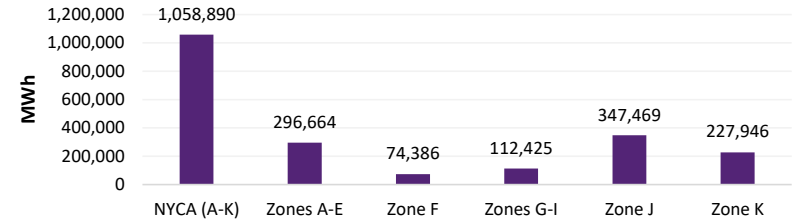
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide

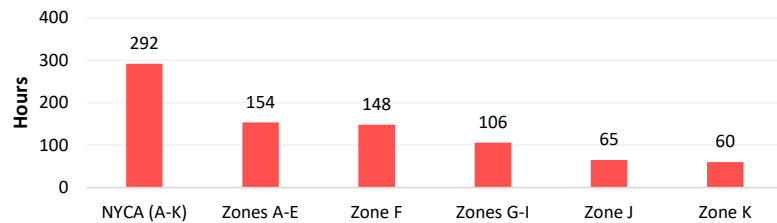
**Hours Price Responsive Demand Deployed**



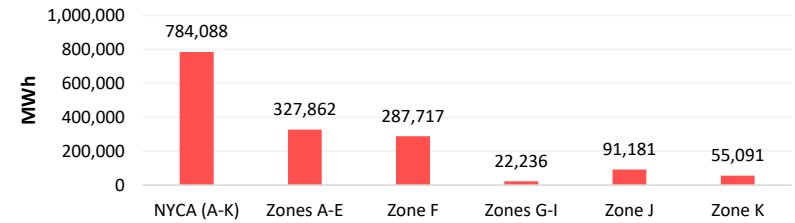
**Total MWh Price Responsive Demand Deployed**



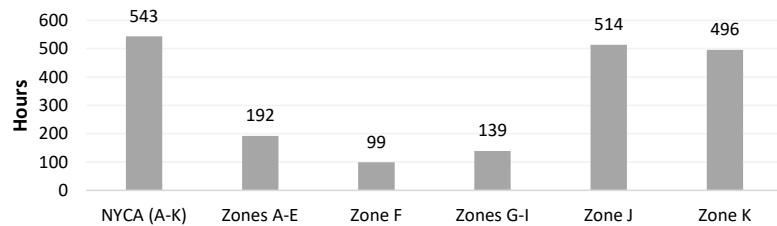
**Hours Battery Energy Storage Deployed**



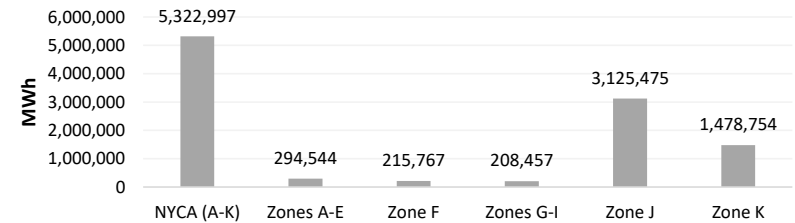
**Total MWh Battery Energy Storage Deployed**



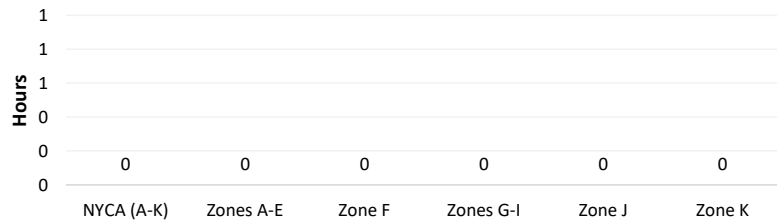
**Hours DE Resources Deployed**



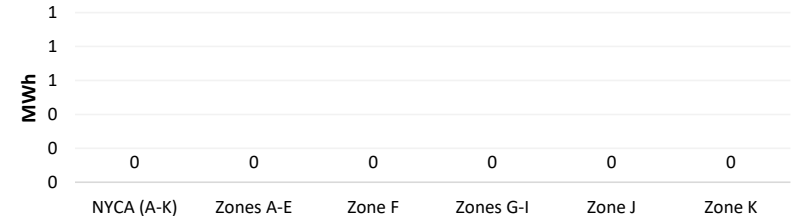
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**



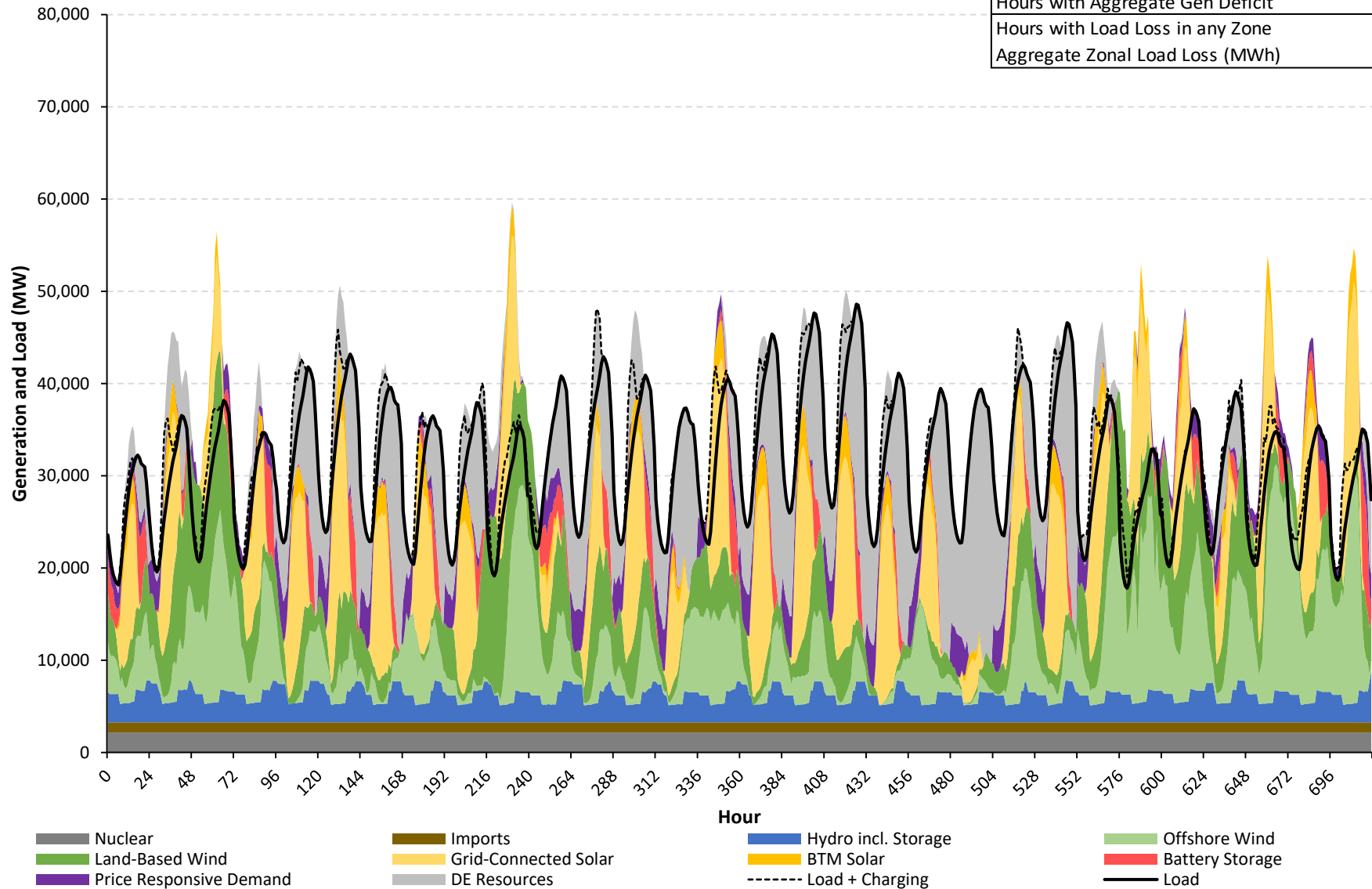


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	25,466,508
Gen Surplus/Deficit (MWh)	2,990,552
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

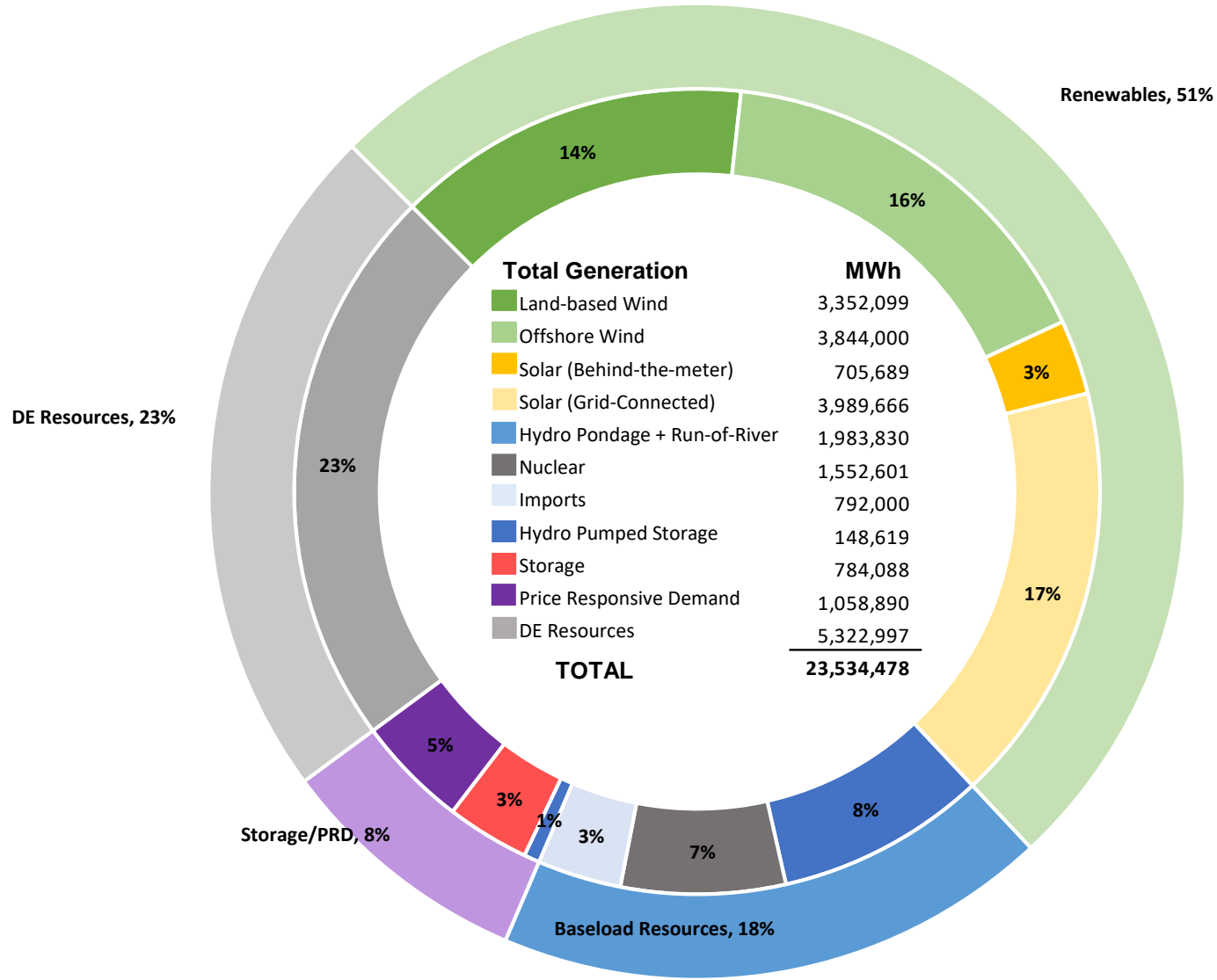


**Note:**

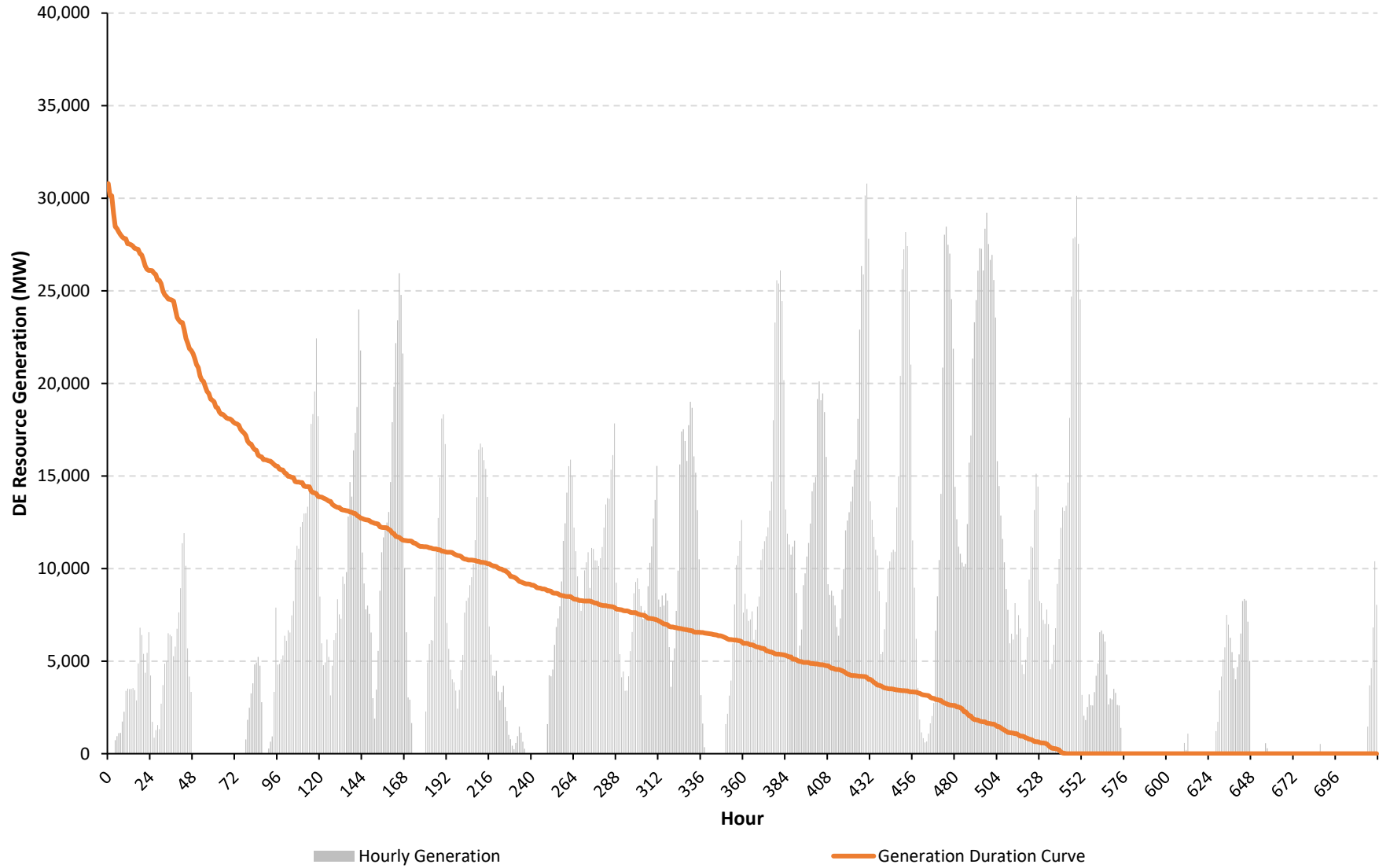
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

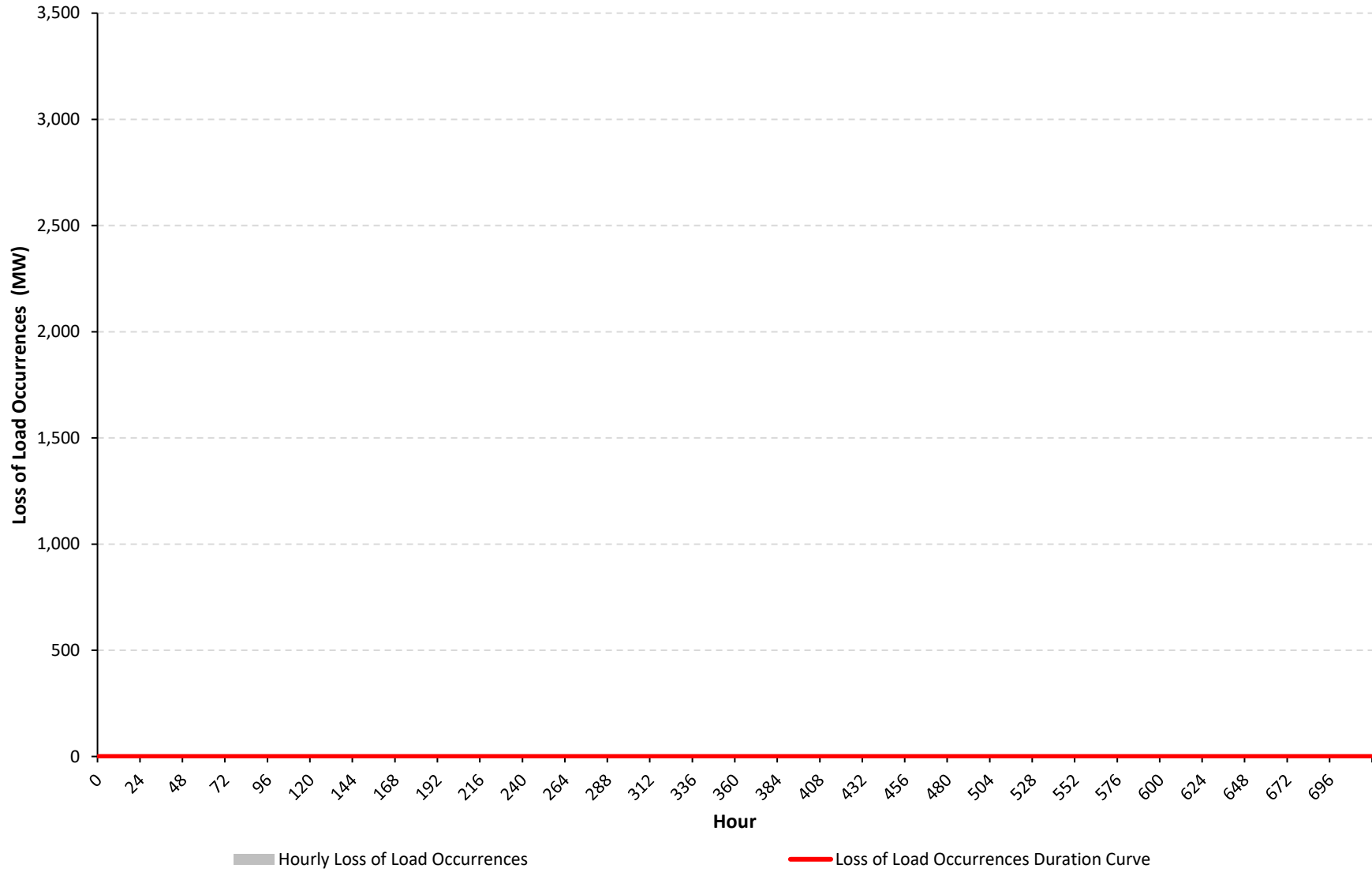
CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set - Wind Lull - State-wide



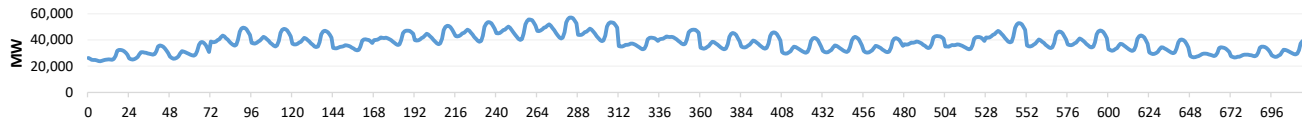
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 59 - CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide**

### Hourly Results Summary

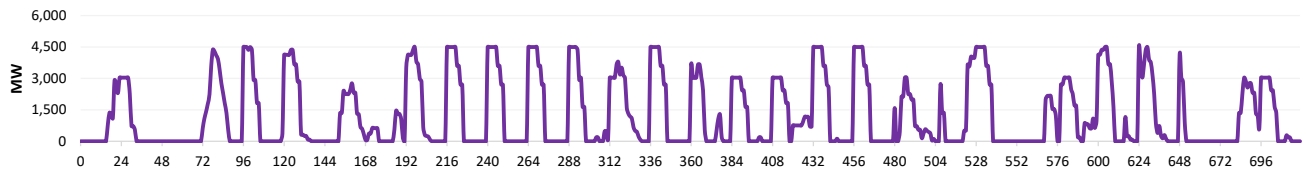
Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



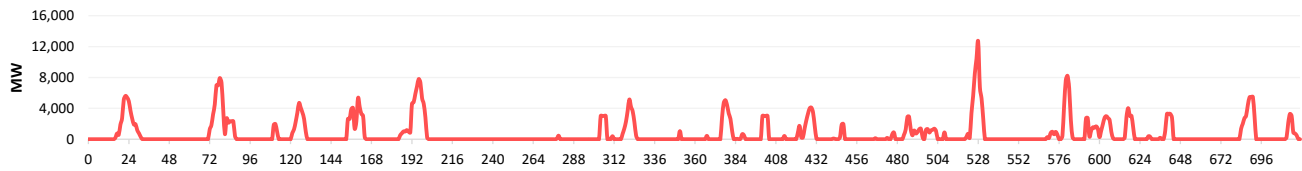
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



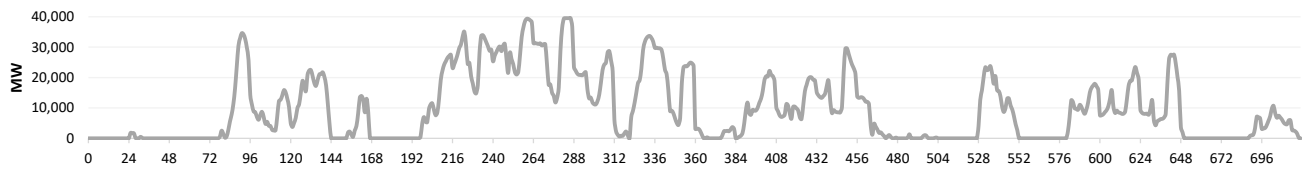
PRD Deployment	
Total Hrs.	377
Total MWh	913,283
Avg. MW	2,422.5

**Battery Energy Storage Deployed During Modeling Period**



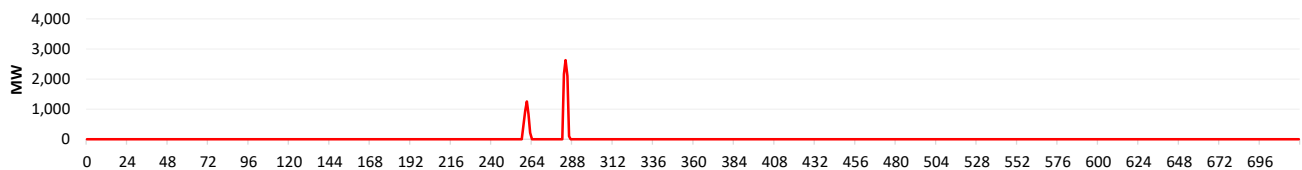
Battery Deployment	
Total Hrs.	221
Total MWh	535,852
Avg. MW	2,424.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	486
Total MWh	6,988,838
Avg. MW	14,380.3

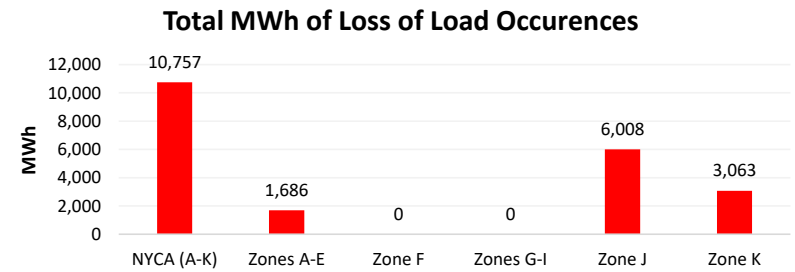
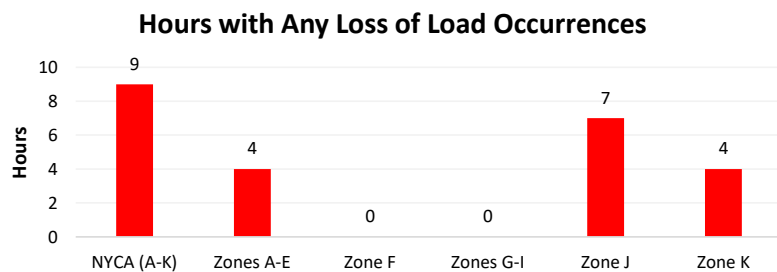
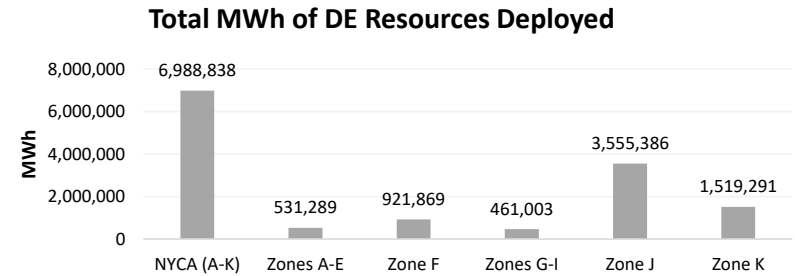
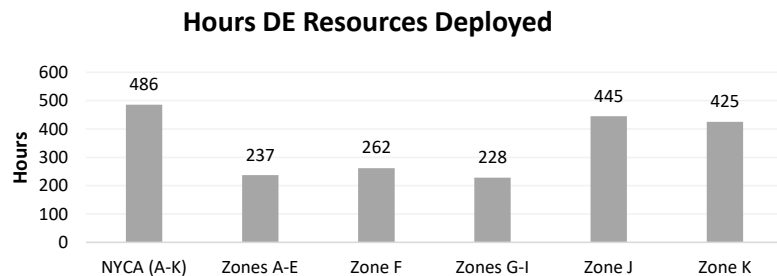
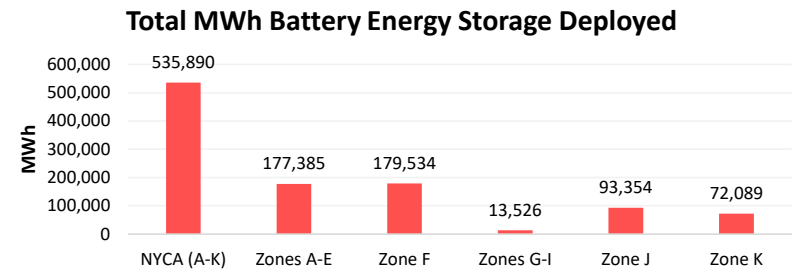
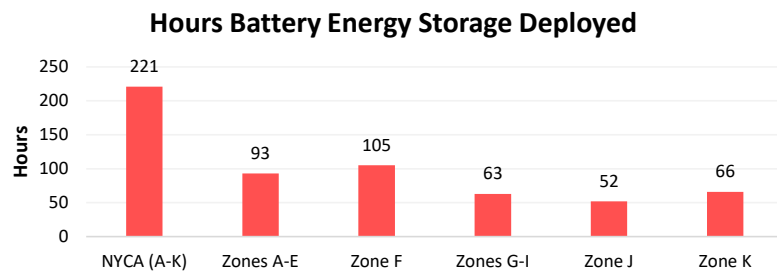
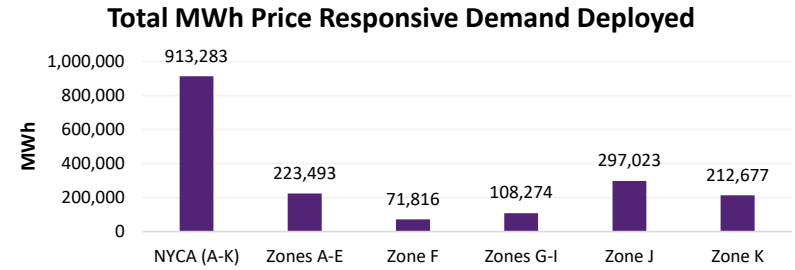
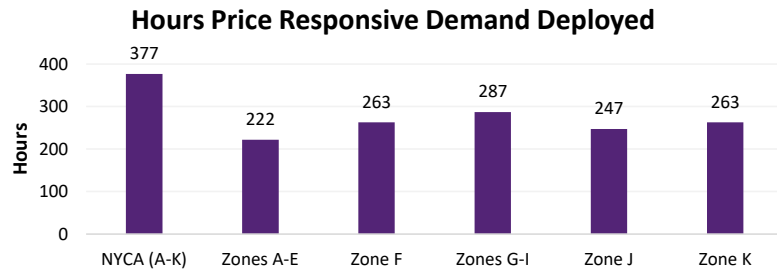
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	9
Total MWh	10,757
Avg. MW	1,195.2

### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide

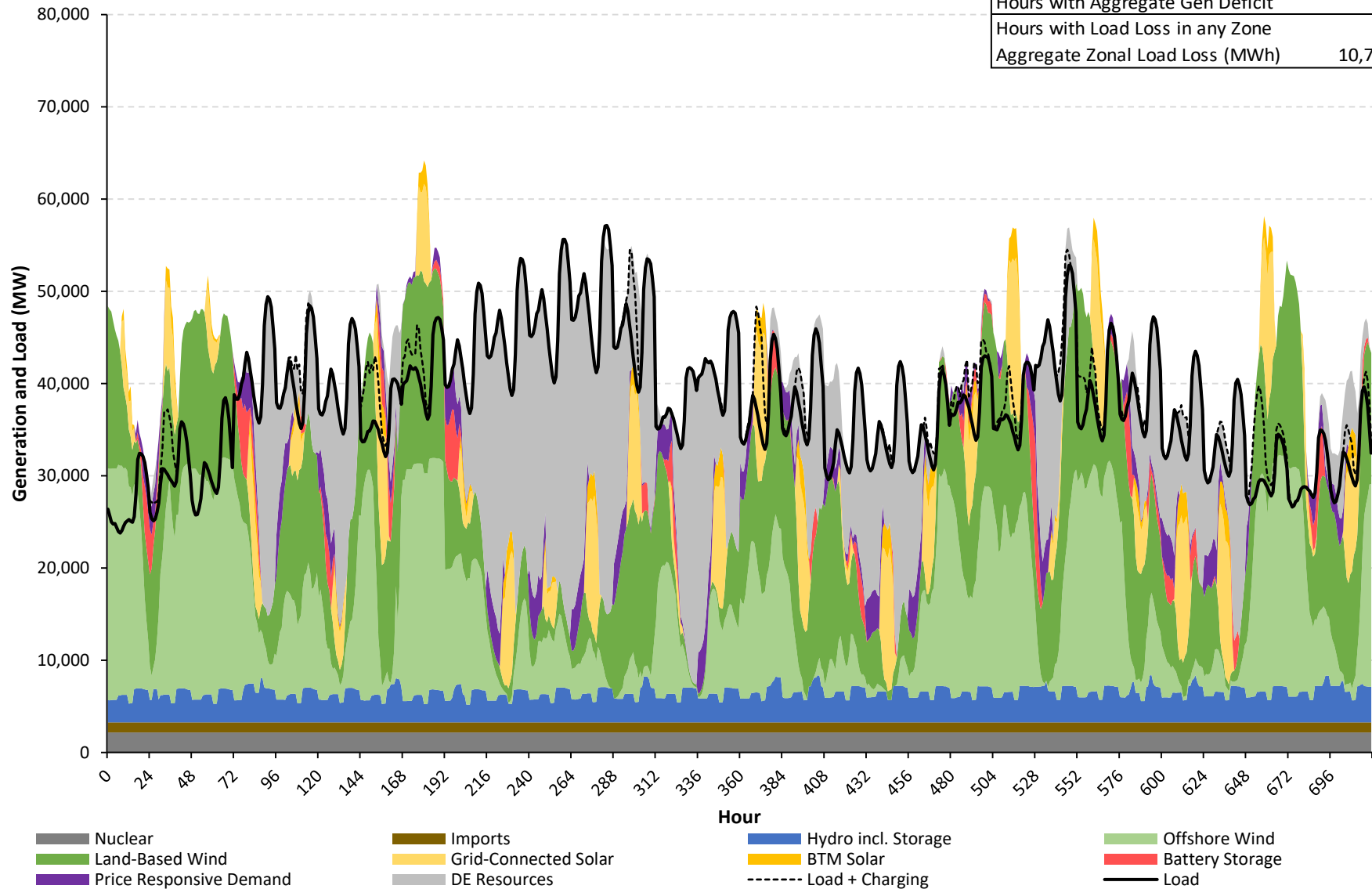


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	30,835,577
Gen Surplus/Deficit (MWh)	3,513,540
Hours with Aggregate Gen Deficit	9
Hours with Load Loss in any Zone	9
Aggregate Zonal Load Loss (MWh)	10,757



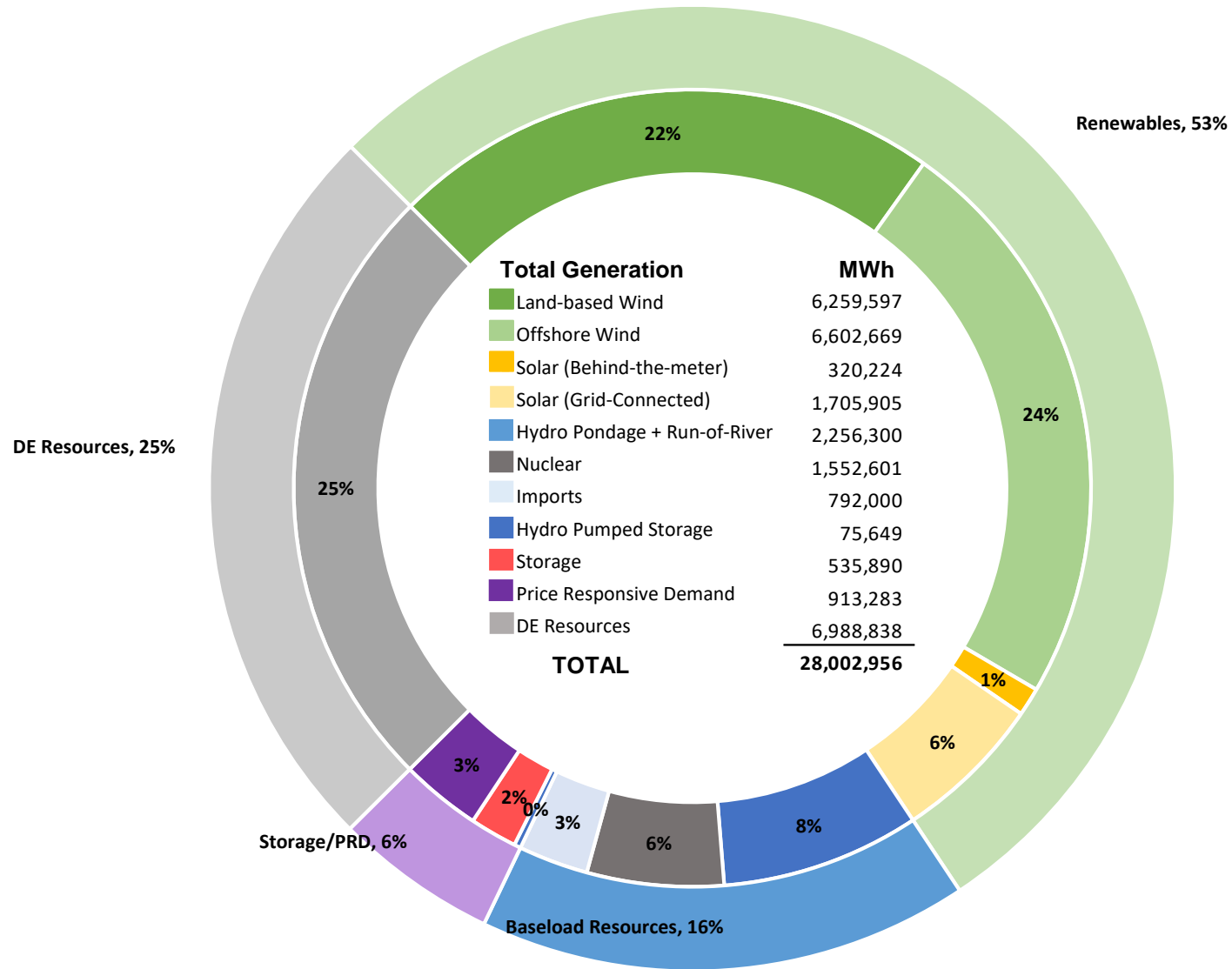
**Note:**

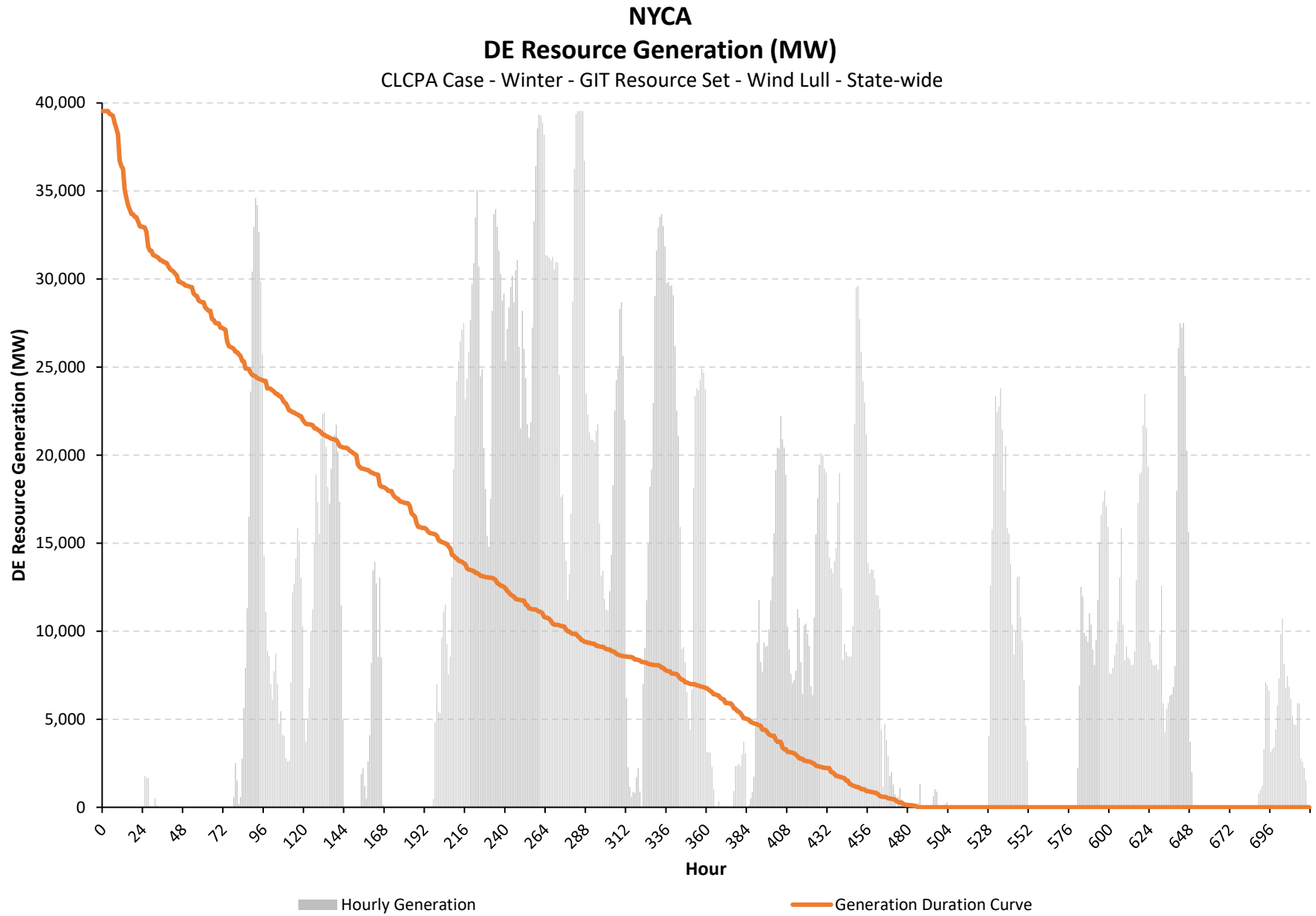
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.



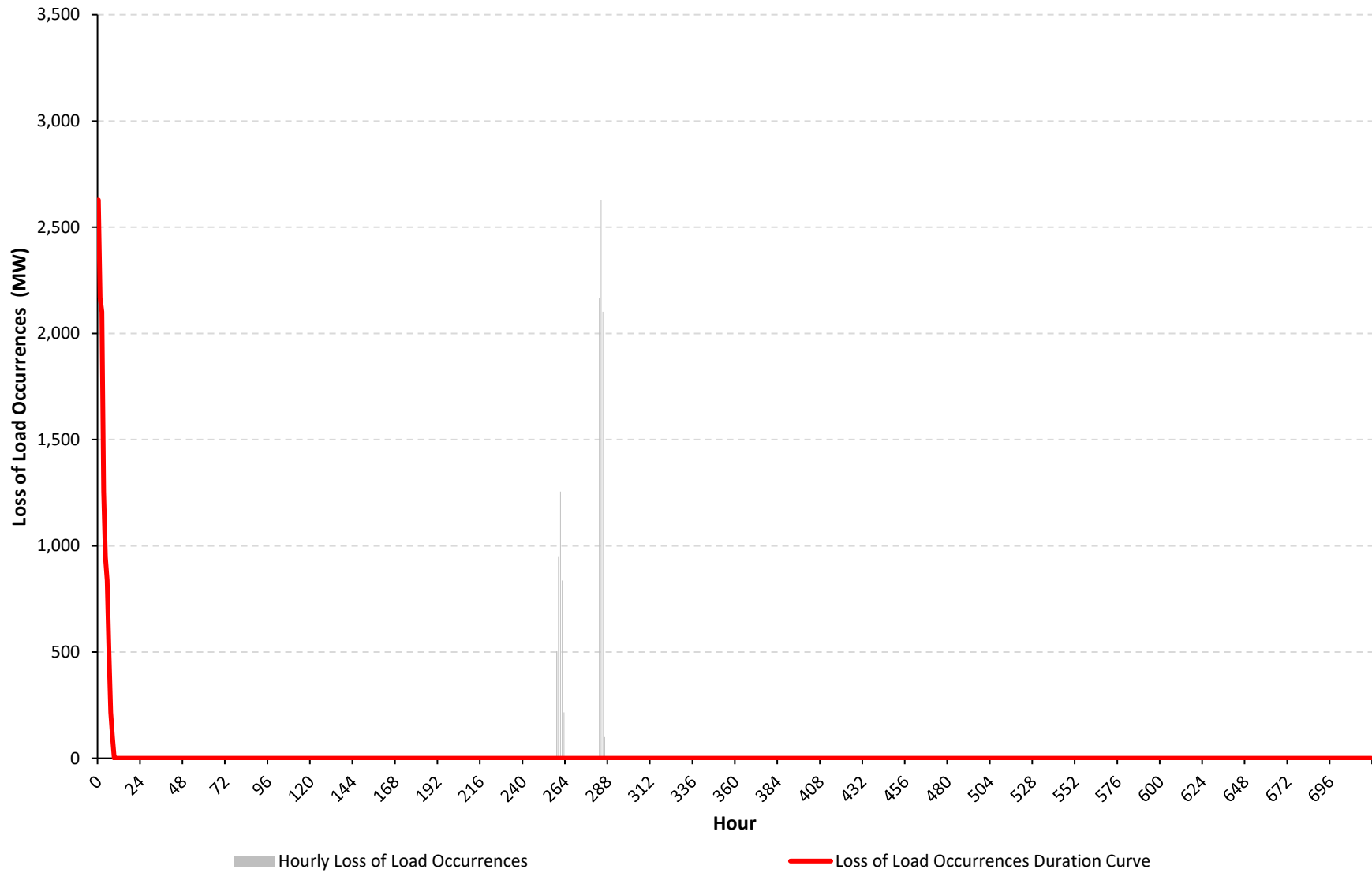
### Generation by Resource Type

CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Wind Lull - State-wide



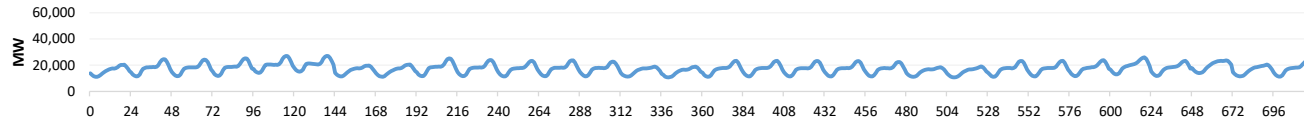
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 60 - CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide**

**Hourly Results Summary**

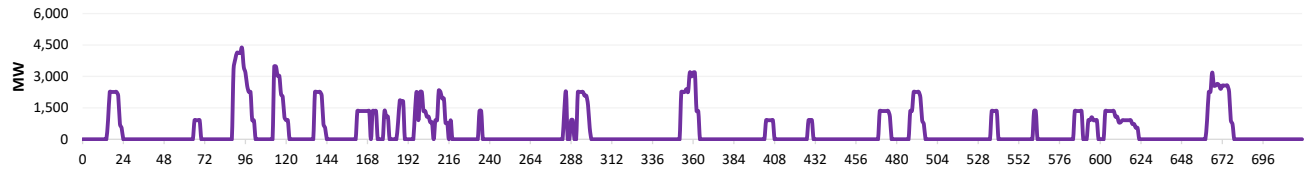
Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



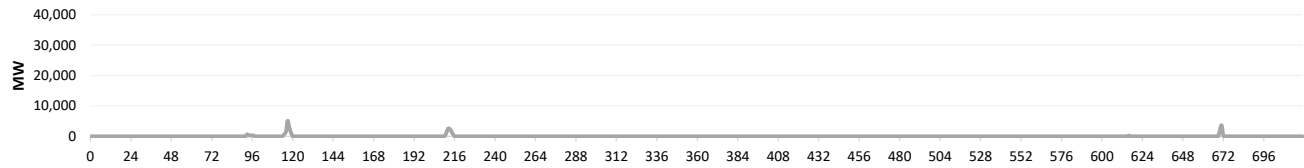
PRD Deployment	
Total Hrs.	182
Total MWh	301,759
Avg. MW	1,658.0

**Battery Energy Storage Deployed During Modeling Period**



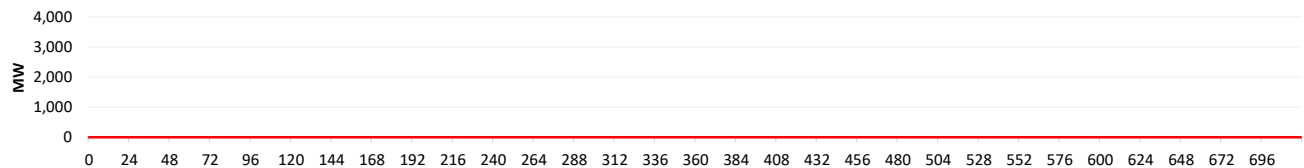
Battery Deployment	
Total Hrs.	99
Total MWh	212,095
Avg. MW	2,142.4

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	20
Total MWh	27,775
Avg. MW	1,388.8

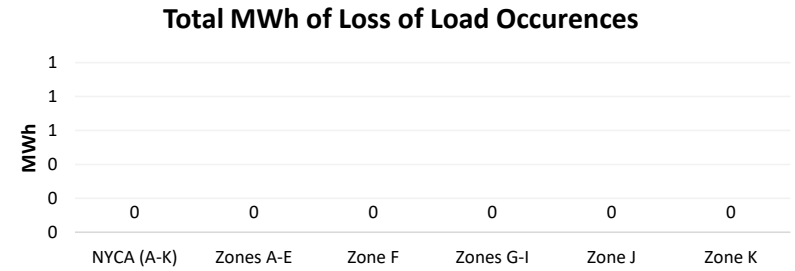
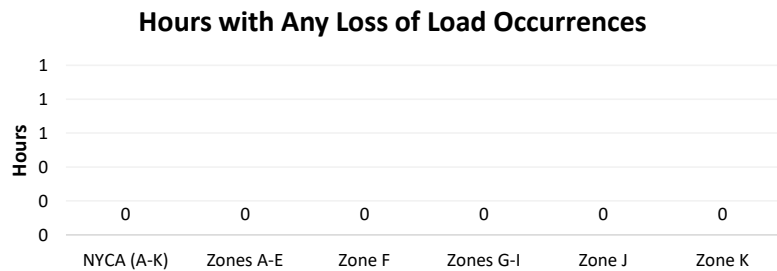
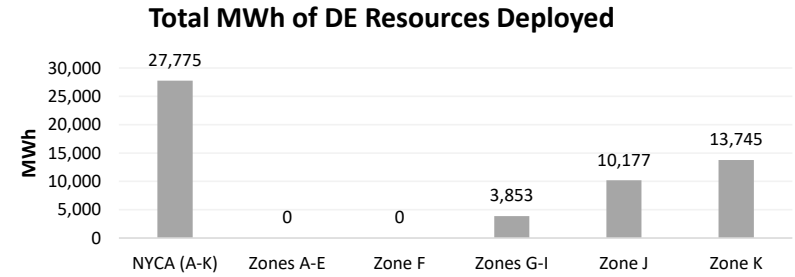
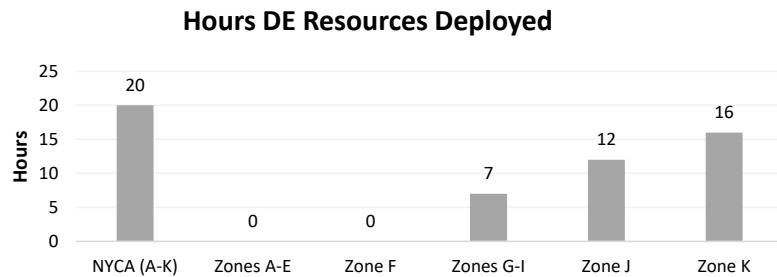
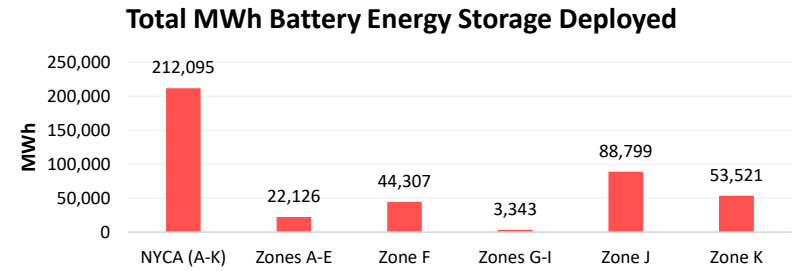
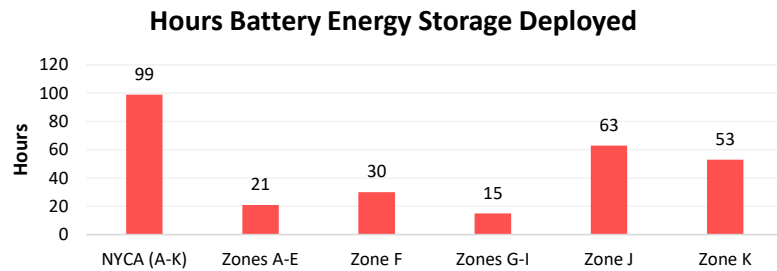
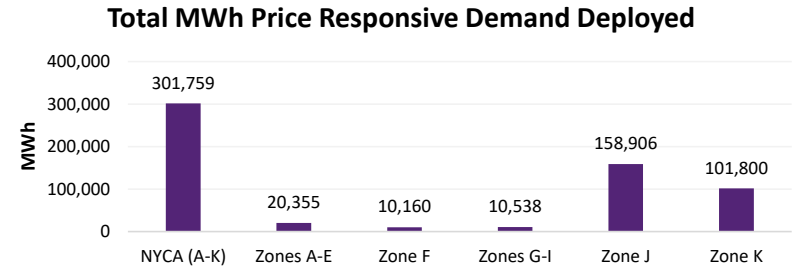
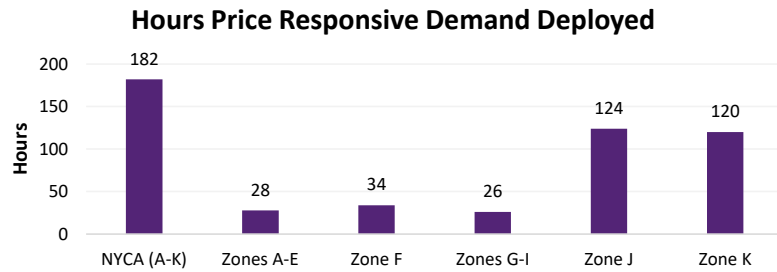
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide

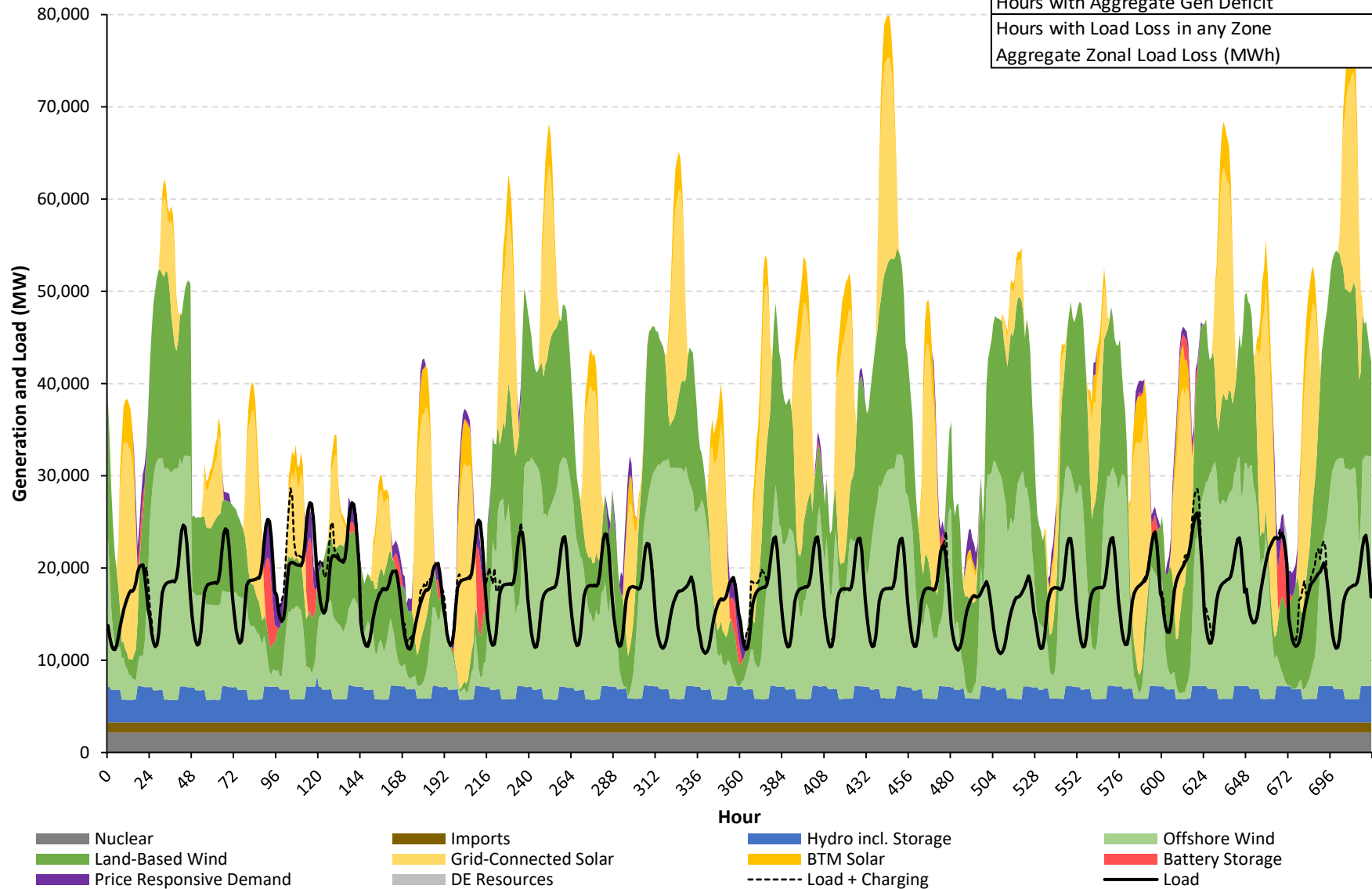


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	27,205,722
Gen Surplus/Deficit (MWh)	14,708,961
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

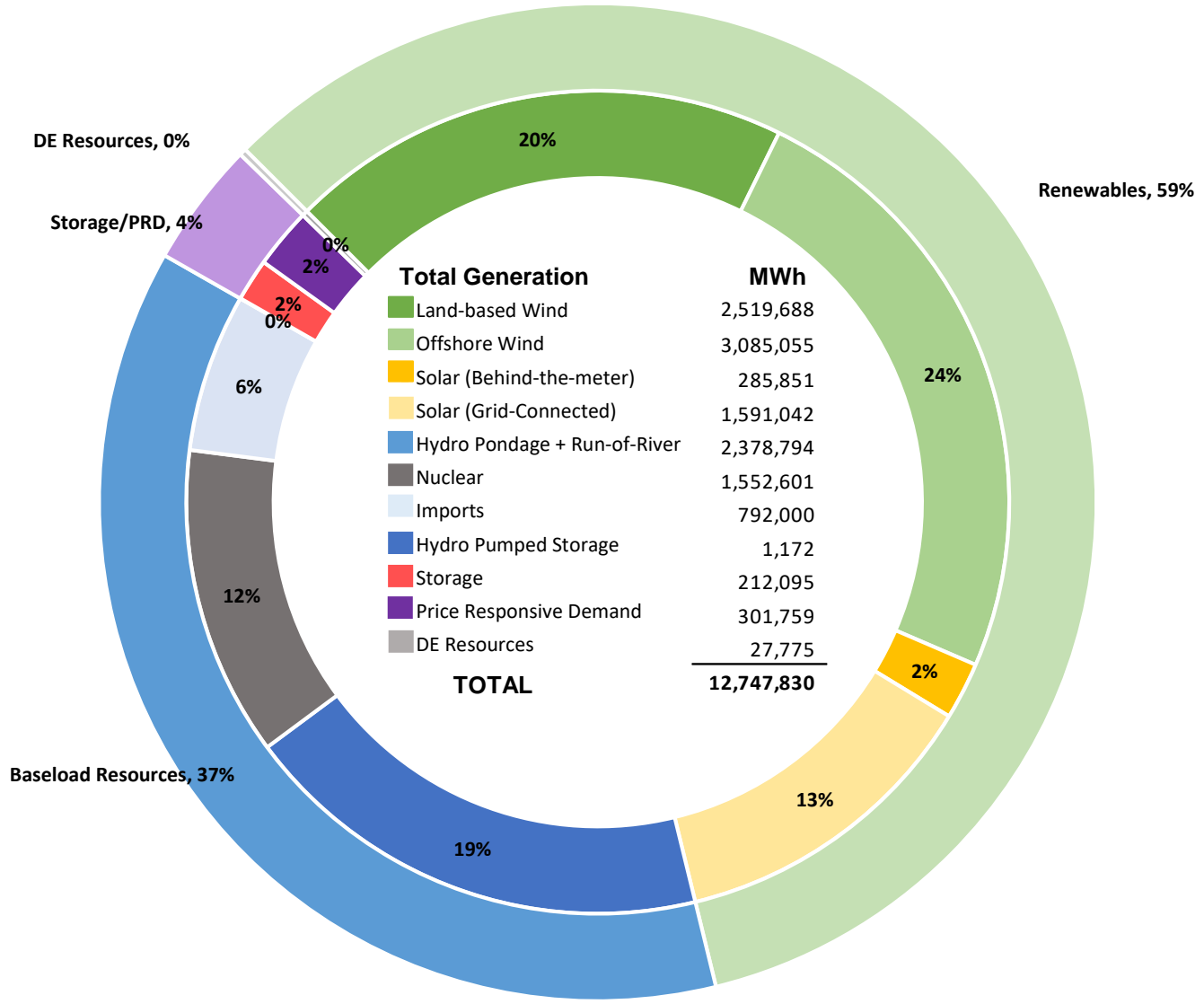


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

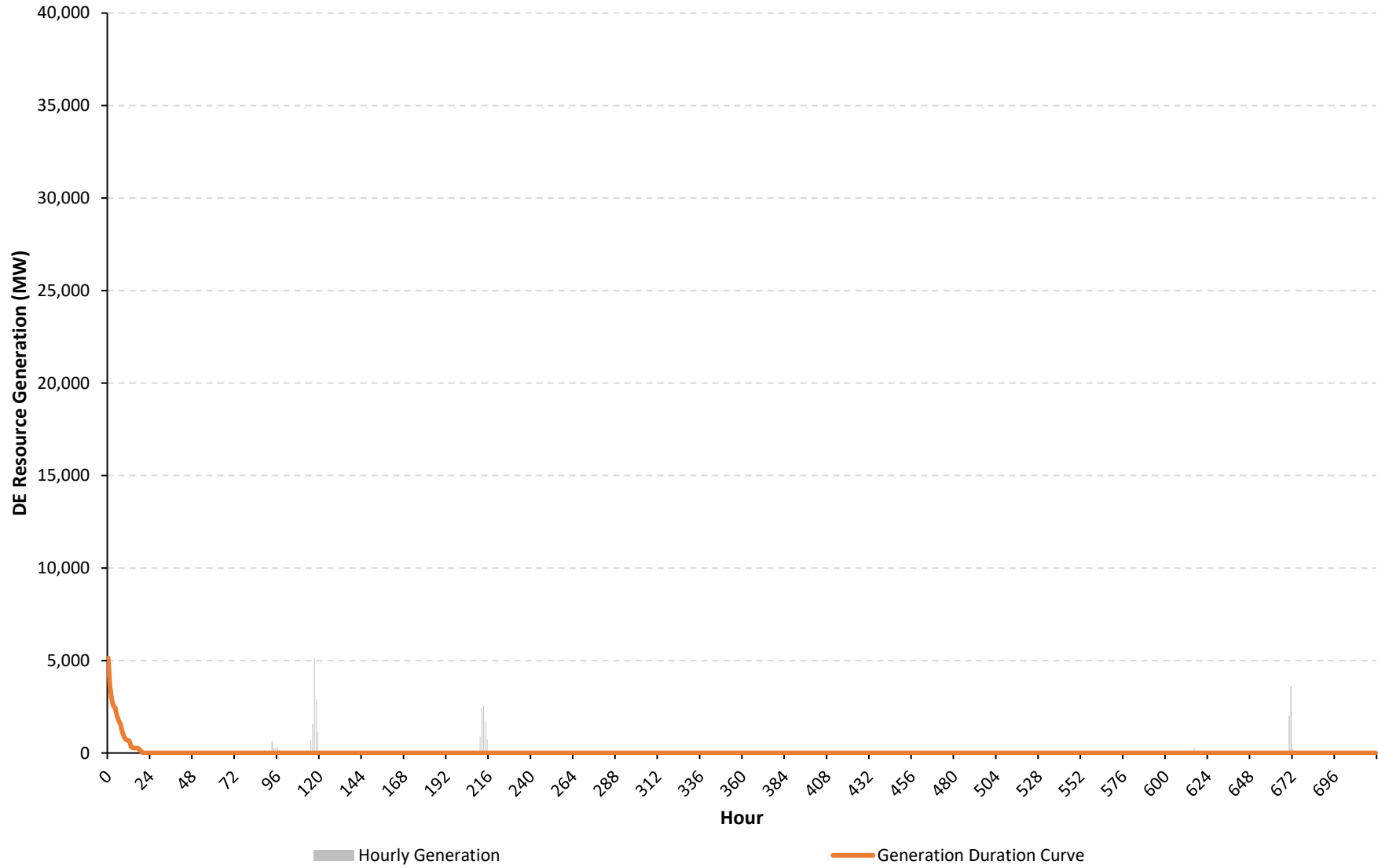
### Generation by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide

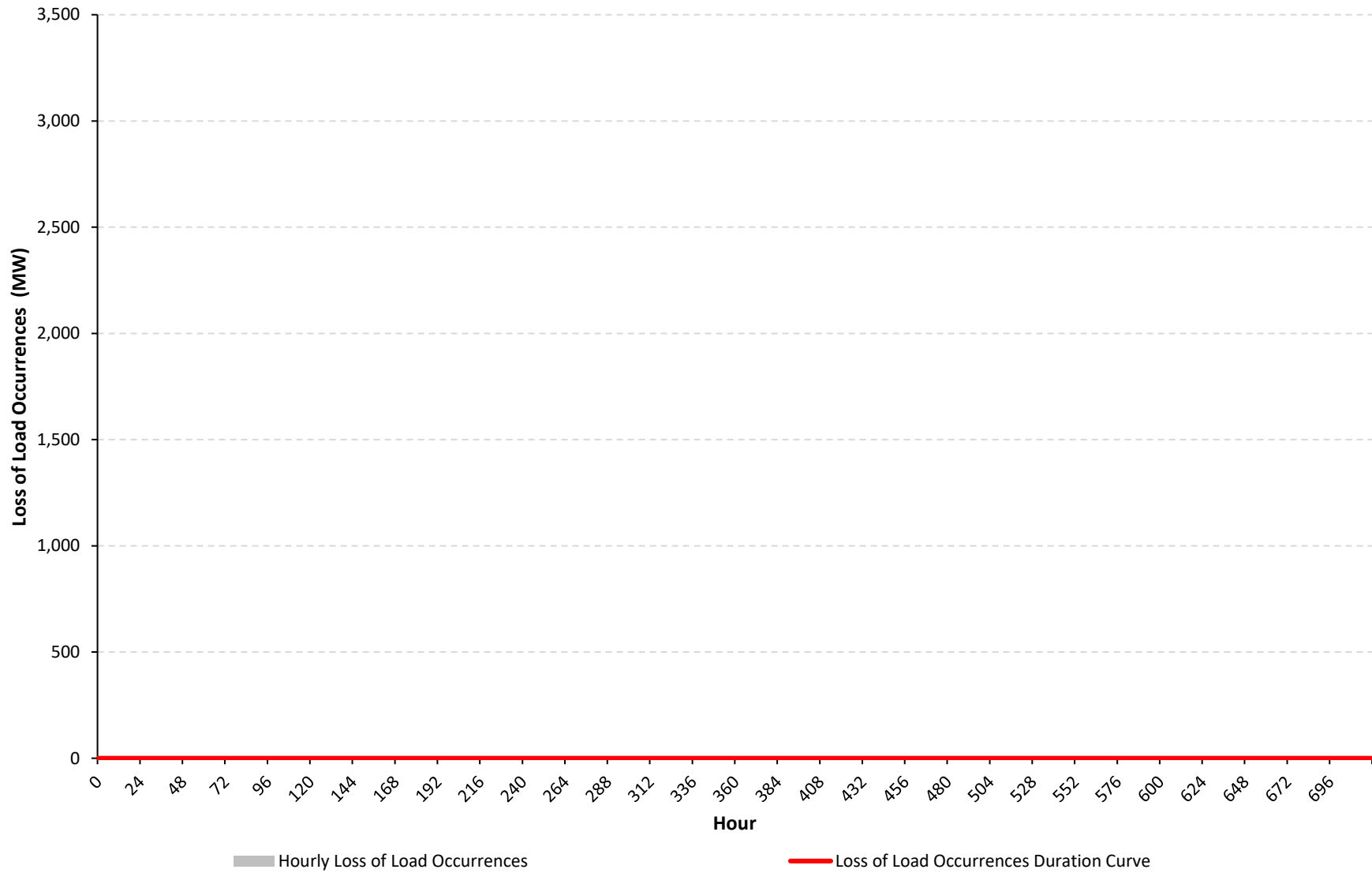




### NYCA DE Resource Generation (MW) CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Shoulder - GIT Resource Set - Wind Lull - State-wide



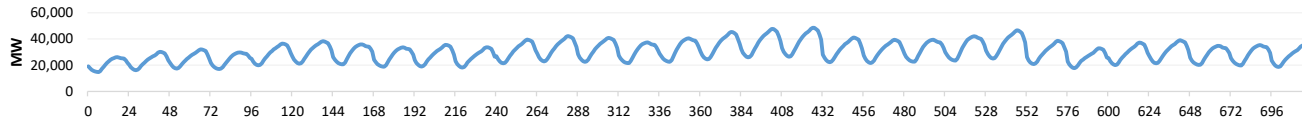
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 61 - CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm**

**Hourly Results Summary**

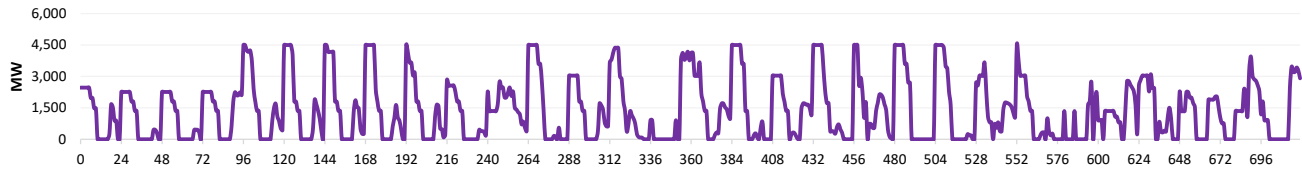
Case Name: CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm

**Load During Modeling Period**



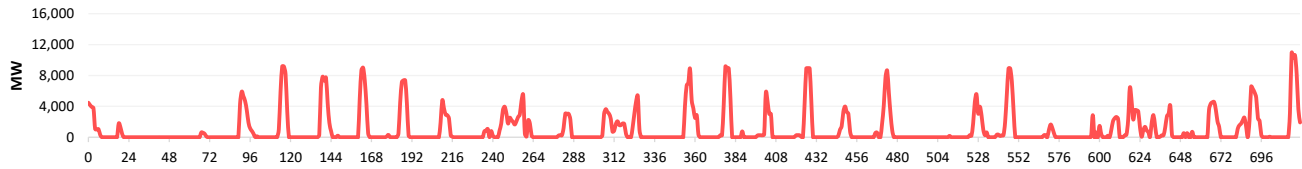
Loss of Load	
Total Hrs.	720
Total MWh	21,600,566
Avg. MW	30,000.8

**Price Responsive Demand Deployed During Modeling Period**



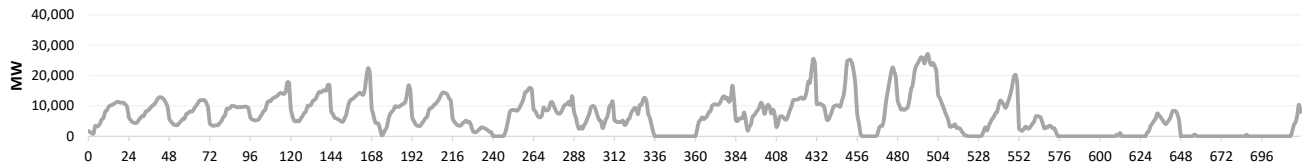
PRD Deployment	
Total Hrs.	492
Total MWh	1,003,981
Avg. MW	2,040.6

**Battery Energy Storage Deployed During Modeling Period**



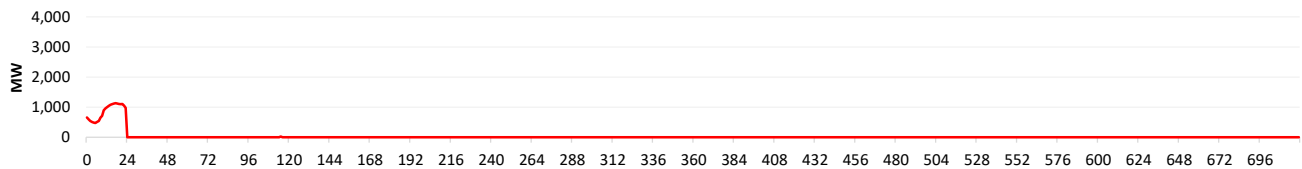
Battery Deployment	
Total Hrs.	272
Total MWh	749,633
Avg. MW	2,756.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	559
Total MWh	4,832,633
Avg. MW	8,645.1

**Loss of Load Occurrences During Modeling Period**

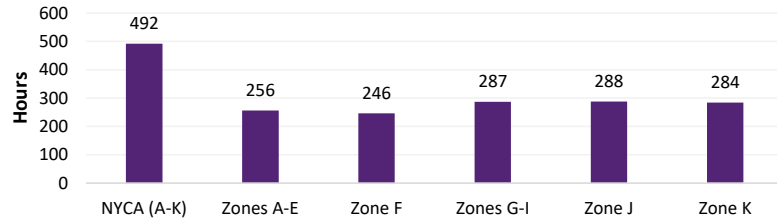


Loss of Load Occurrences	
Total Hrs.	25
Total MWh	20,488
Avg. MW	819.5

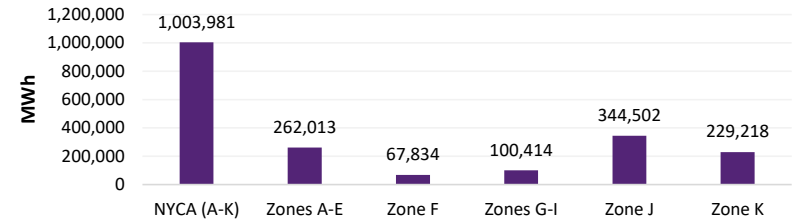
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm

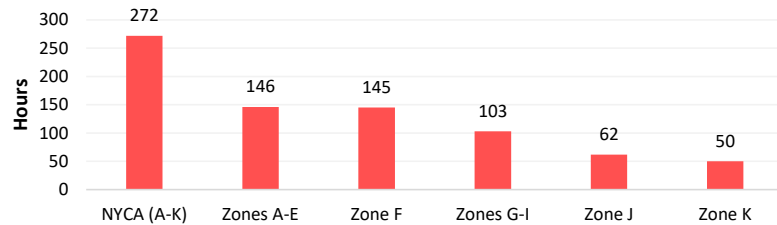
#### Hours Price Responsive Demand Deployed



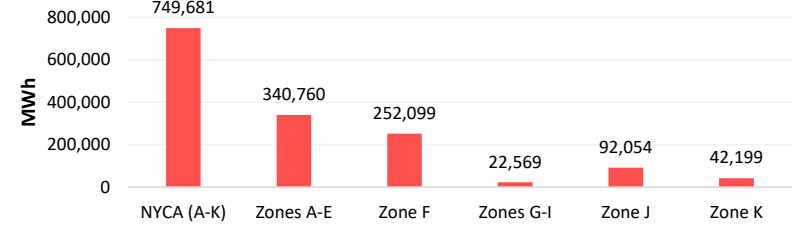
#### Total MWh Price Responsive Demand Deployed



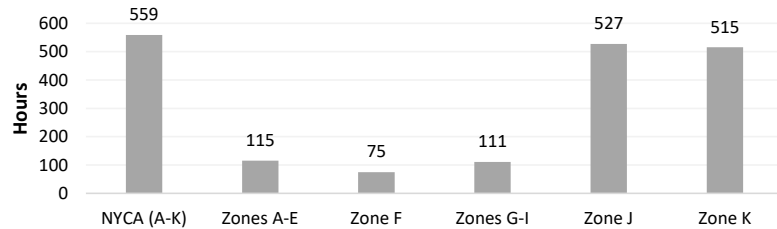
#### Hours Battery Energy Storage Deployed



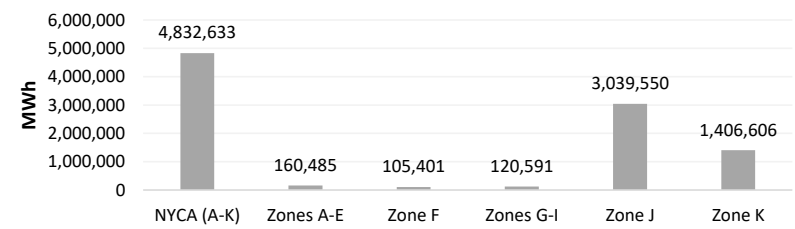
#### Total MWh Battery Energy Storage Deployed



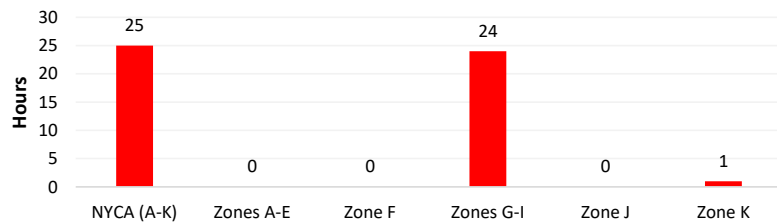
#### Hours DE Resources Deployed



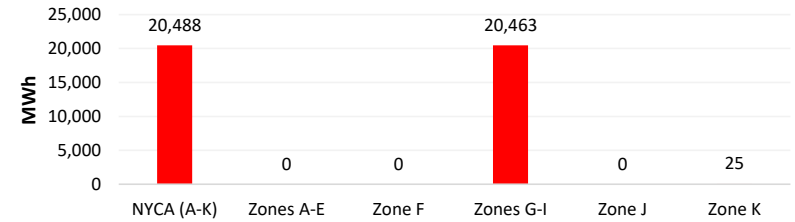
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



#### Total MWh of Loss of Load Occurrences

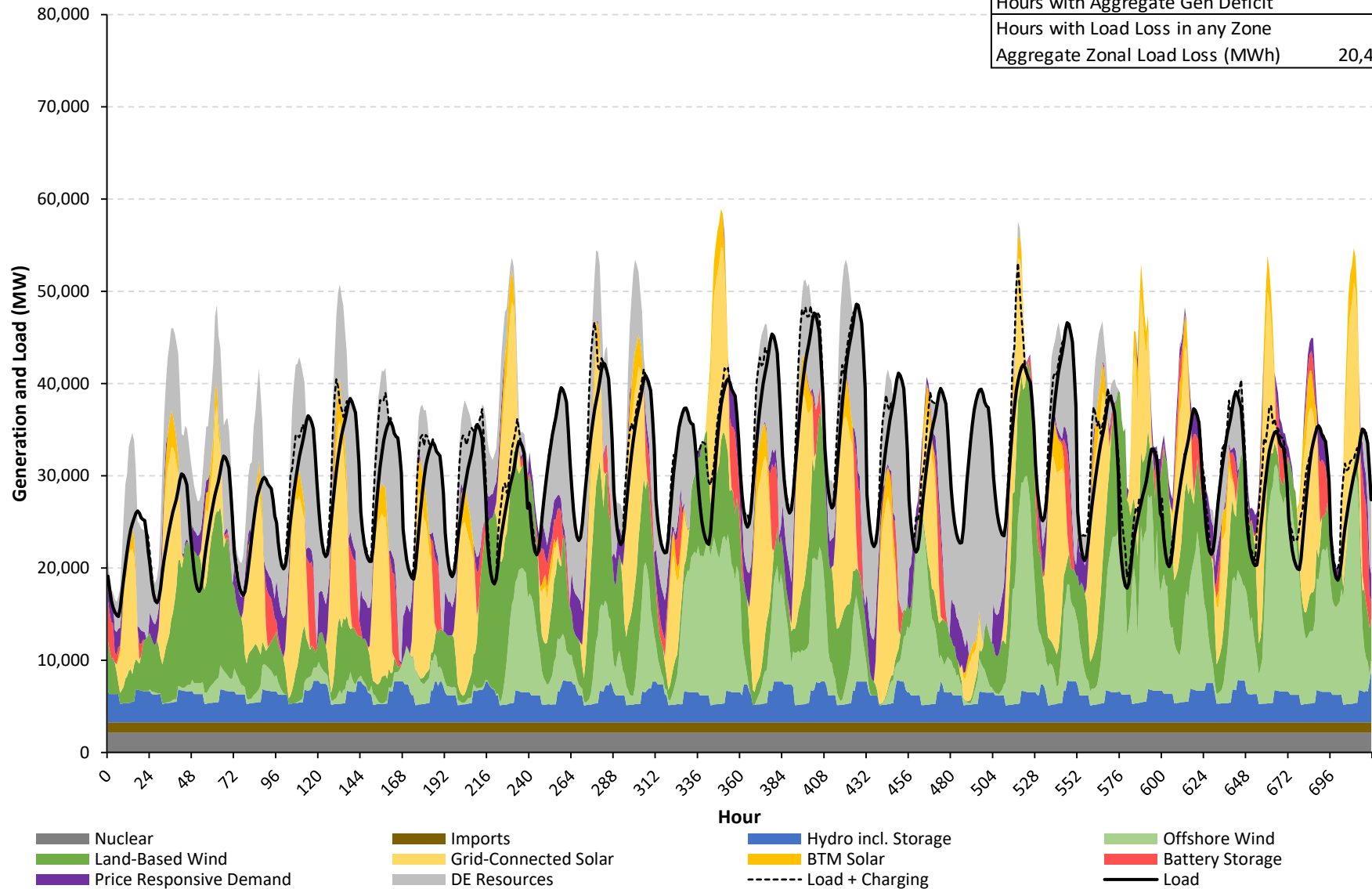


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm

Aggregate Load in Period (MWh)	21,600,566
Aggregate Gen in Period (MWh)	25,405,539
Gen Surplus/Deficit (MWh)	3,804,973
Hours with Aggregate Gen Deficit	8
Hours with Load Loss in any Zone	25
Aggregate Zonal Load Loss (MWh)	20,488

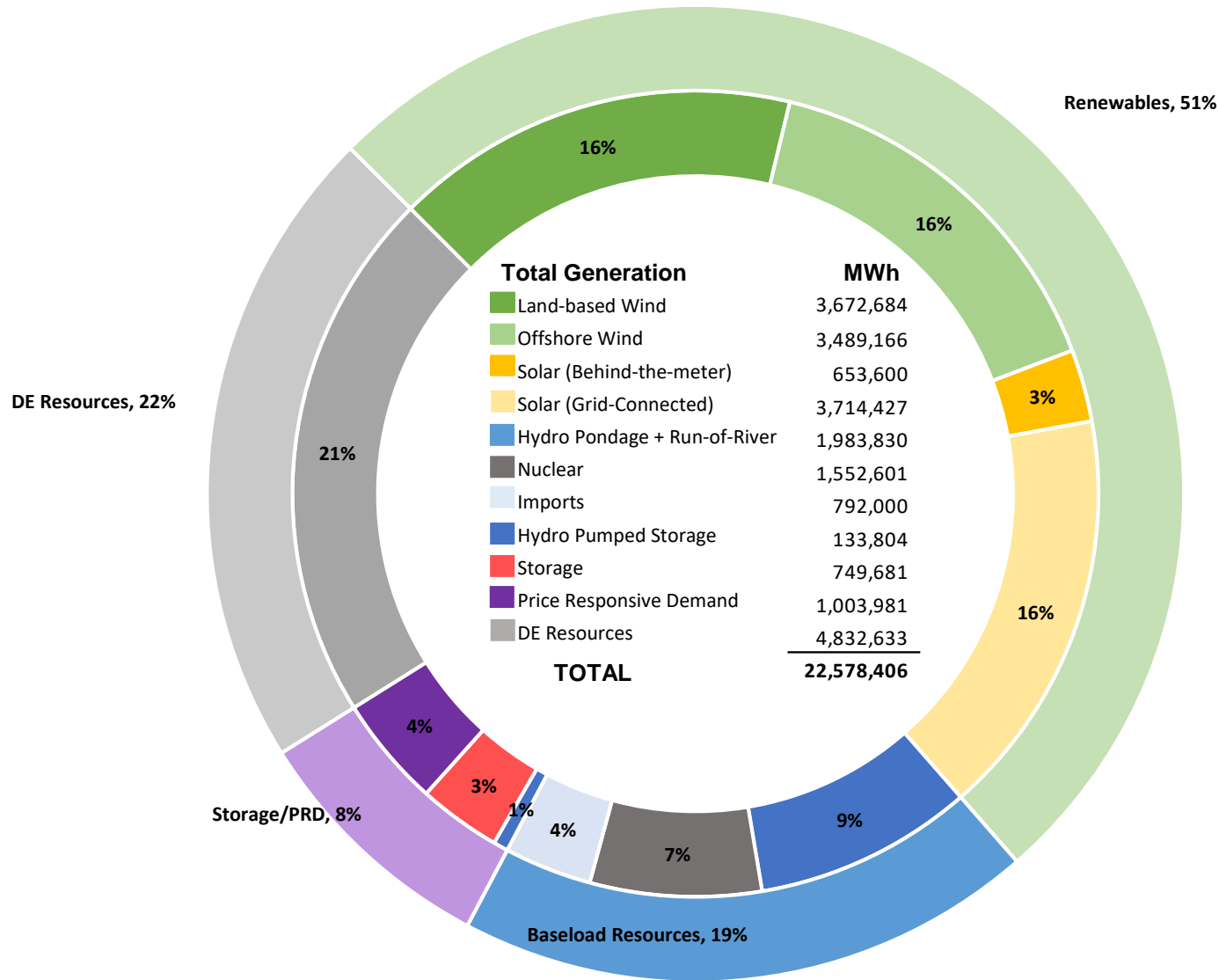


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

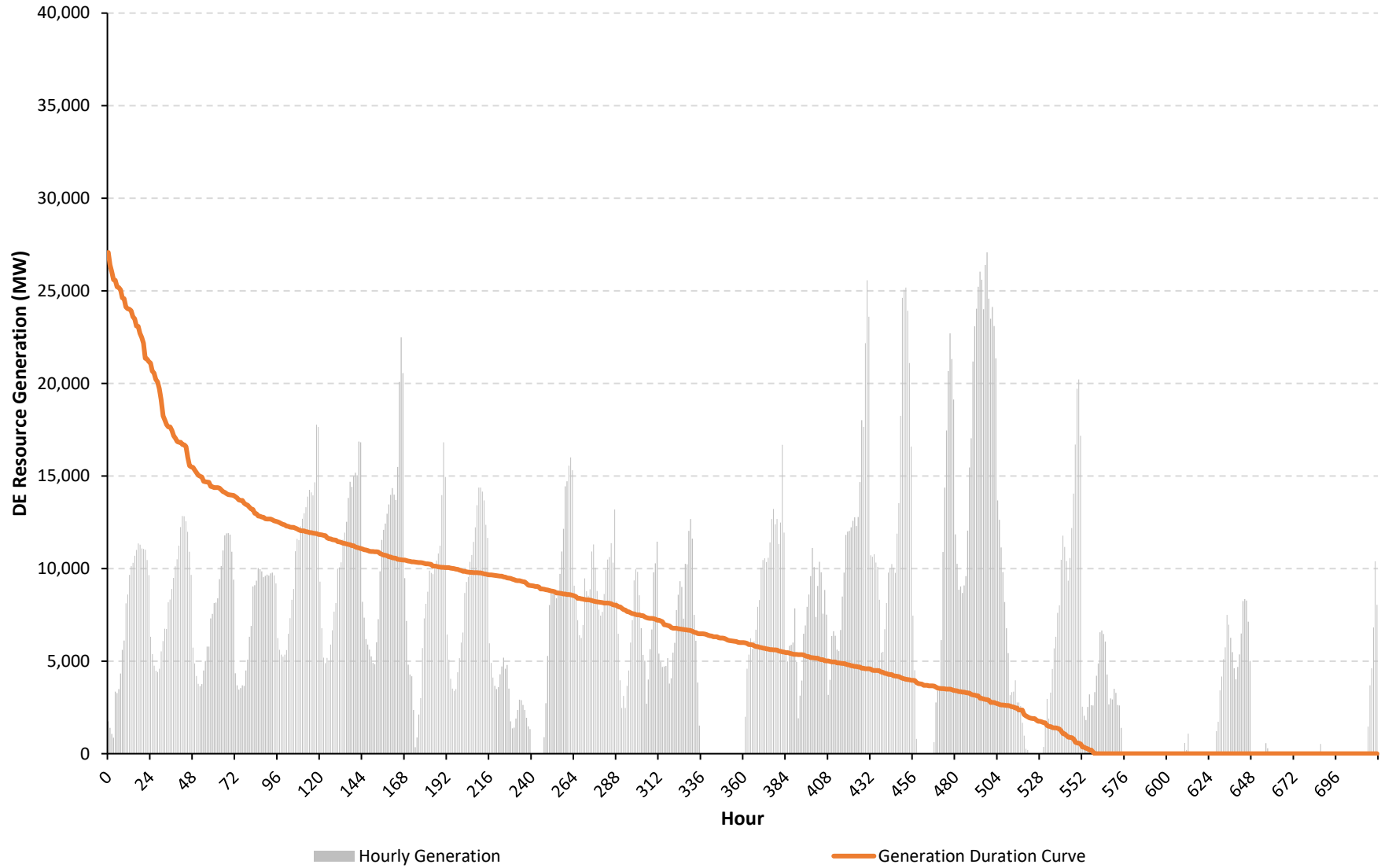
### Generation by Resource Type

CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm



### NYCA DE Resource Generation (MW)

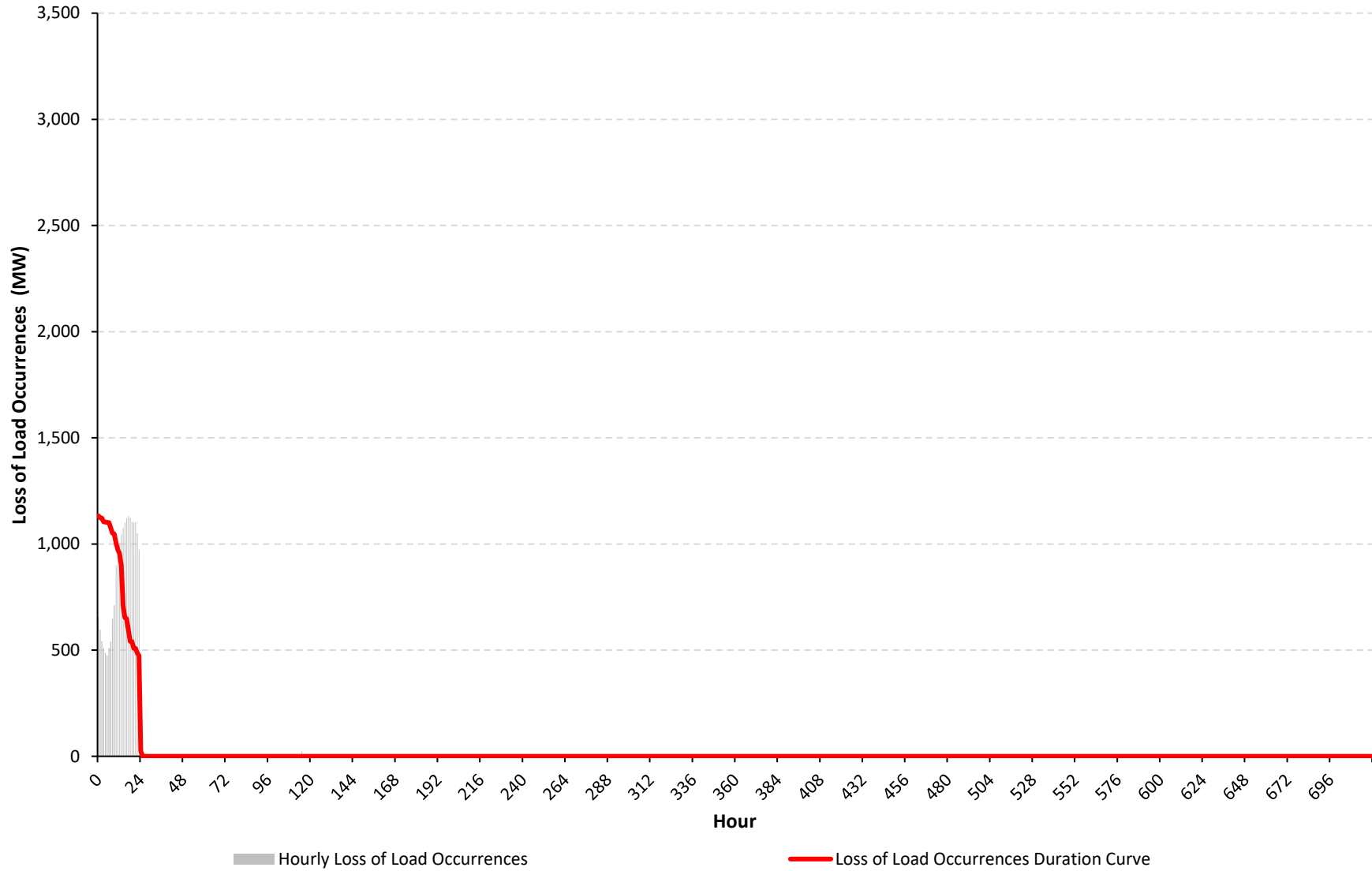
CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - GIT Resource Set - Hurricane - Coastal Wind Storm



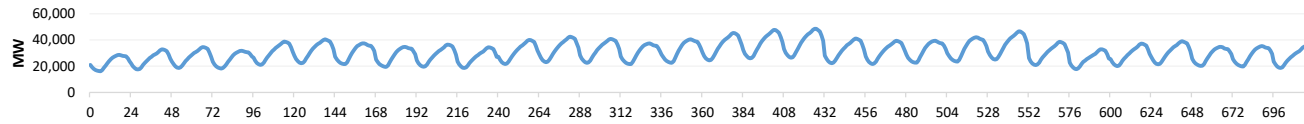
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 62 - CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate**

**Hourly Results Summary**

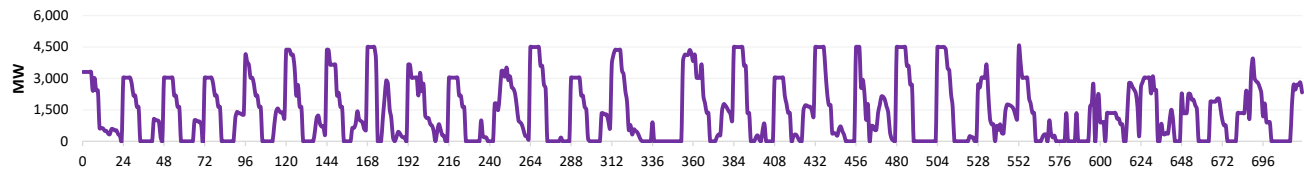
Case Name: CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



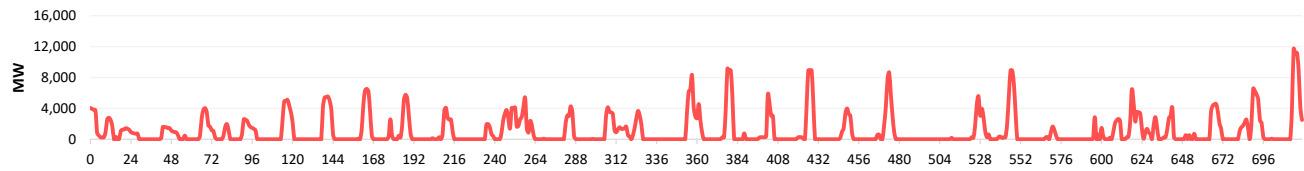
Loss of Load	
Total Hrs.	720
Total MWh	21,960,256
Avg. MW	30,500.4

**Price Responsive Demand Deployed During Modeling Period**



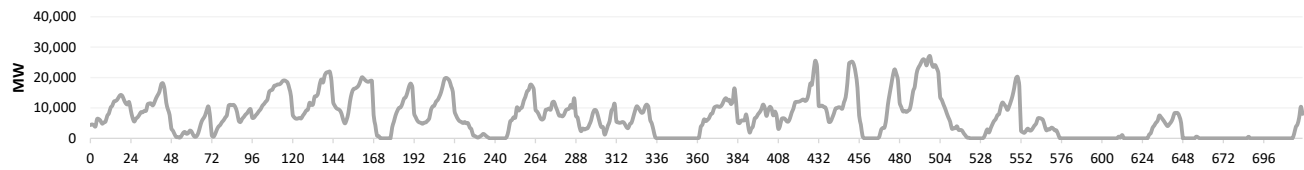
PRD Deployment	
Total Hrs.	502
Total MWh	1,031,629
Avg. MW	2,055.0

**Battery Energy Storage Deployed During Modeling Period**



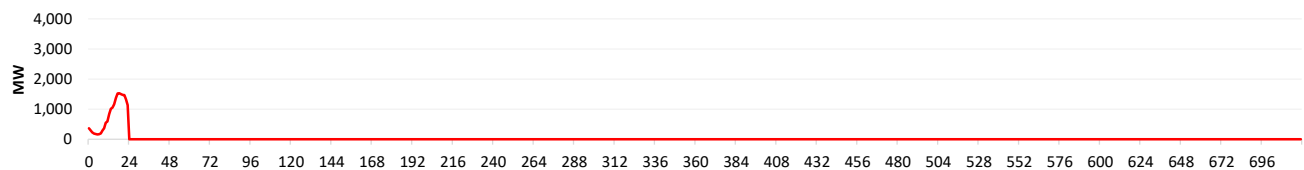
Battery Deployment	
Total Hrs.	313
Total MWh	776,778
Avg. MW	2,481.7

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	549
Total MWh	4,998,149
Avg. MW	9,104.1

**Loss of Load Occurrences During Modeling Period**

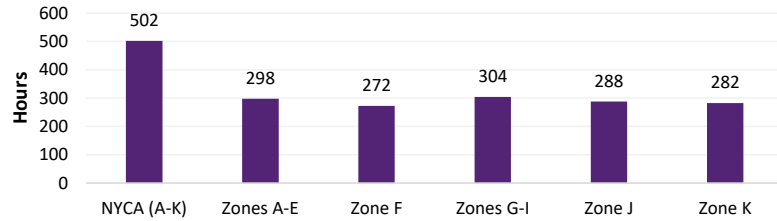


Loss of Load Occurrences	
Total Hrs.	24
Total MWh	18,963
Avg. MW	790.1

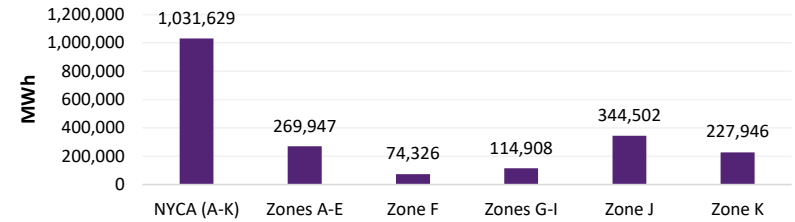
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate

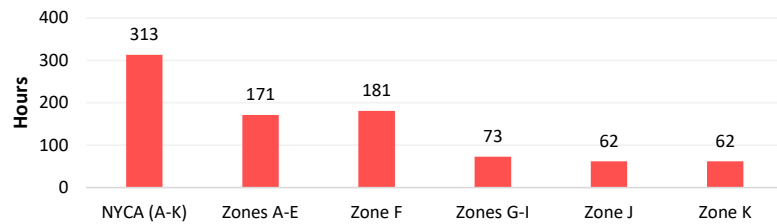
**Hours Price Responsive Demand Deployed**



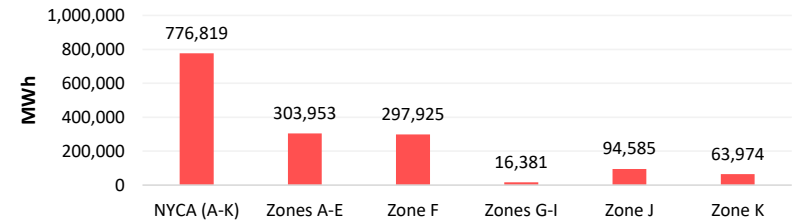
**Total MWh Price Responsive Demand Deployed**



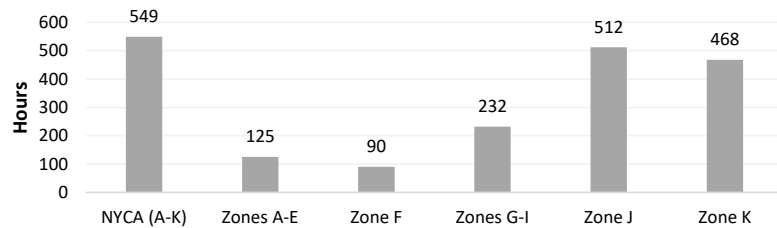
**Hours Battery Energy Storage Deployed**



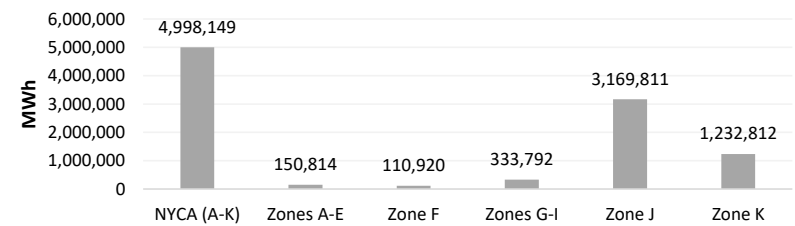
**Total MWh Battery Energy Storage Deployed**



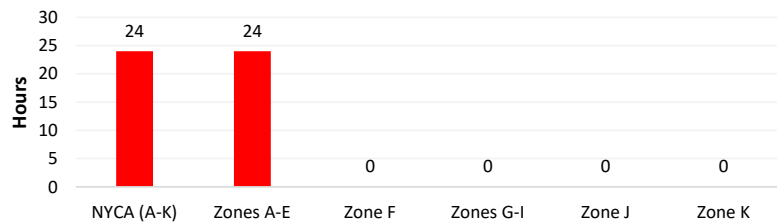
**Hours DE Resources Deployed**



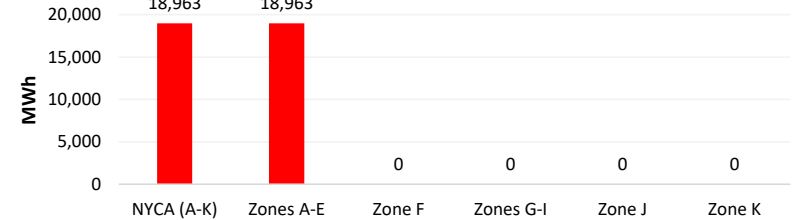
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

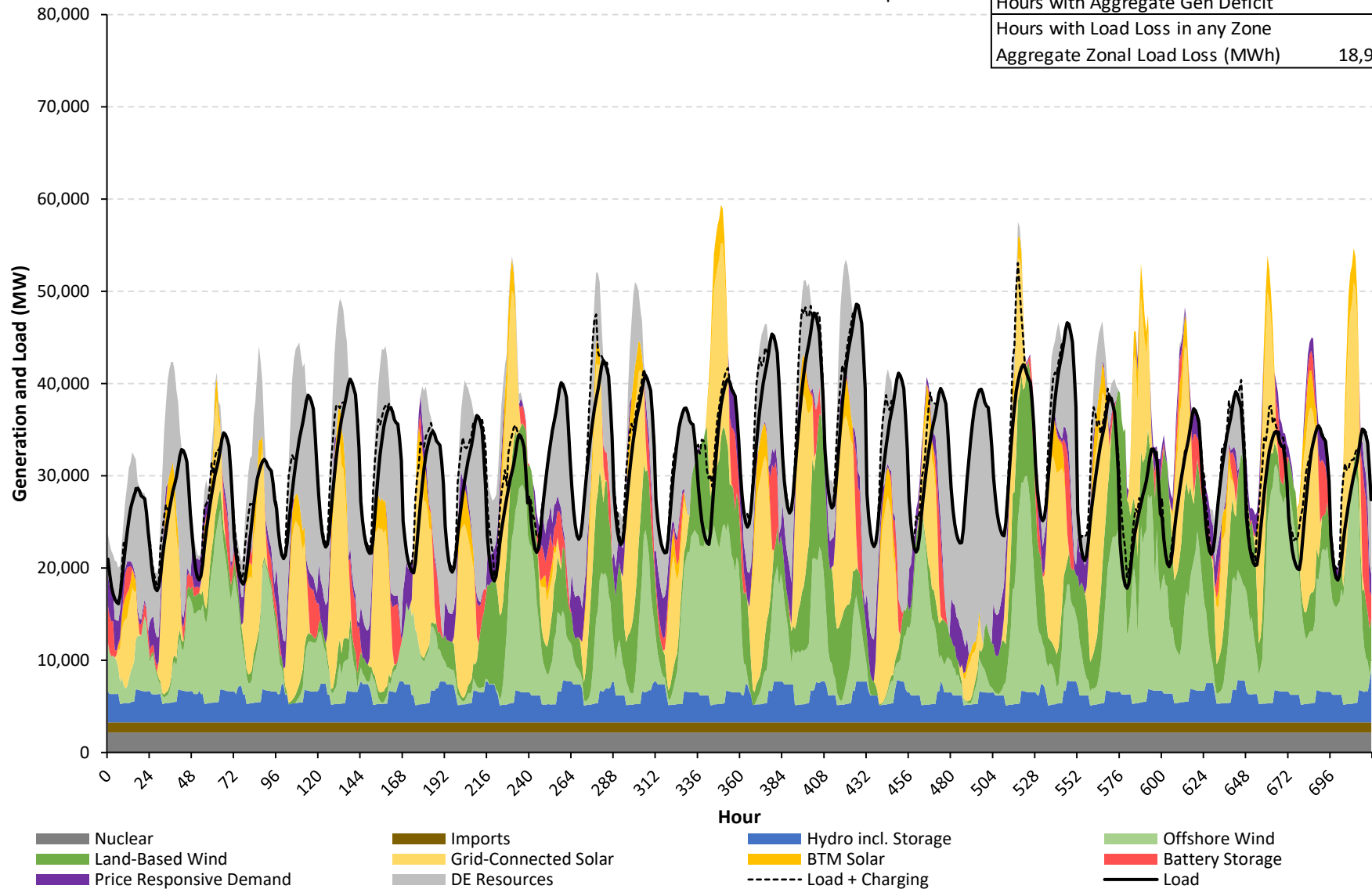


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	21,960,256
Aggregate Gen in Period (MWh)	25,427,435
Gen Surplus/Deficit (MWh)	3,467,179
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	24
Aggregate Zonal Load Loss (MWh)	18,963

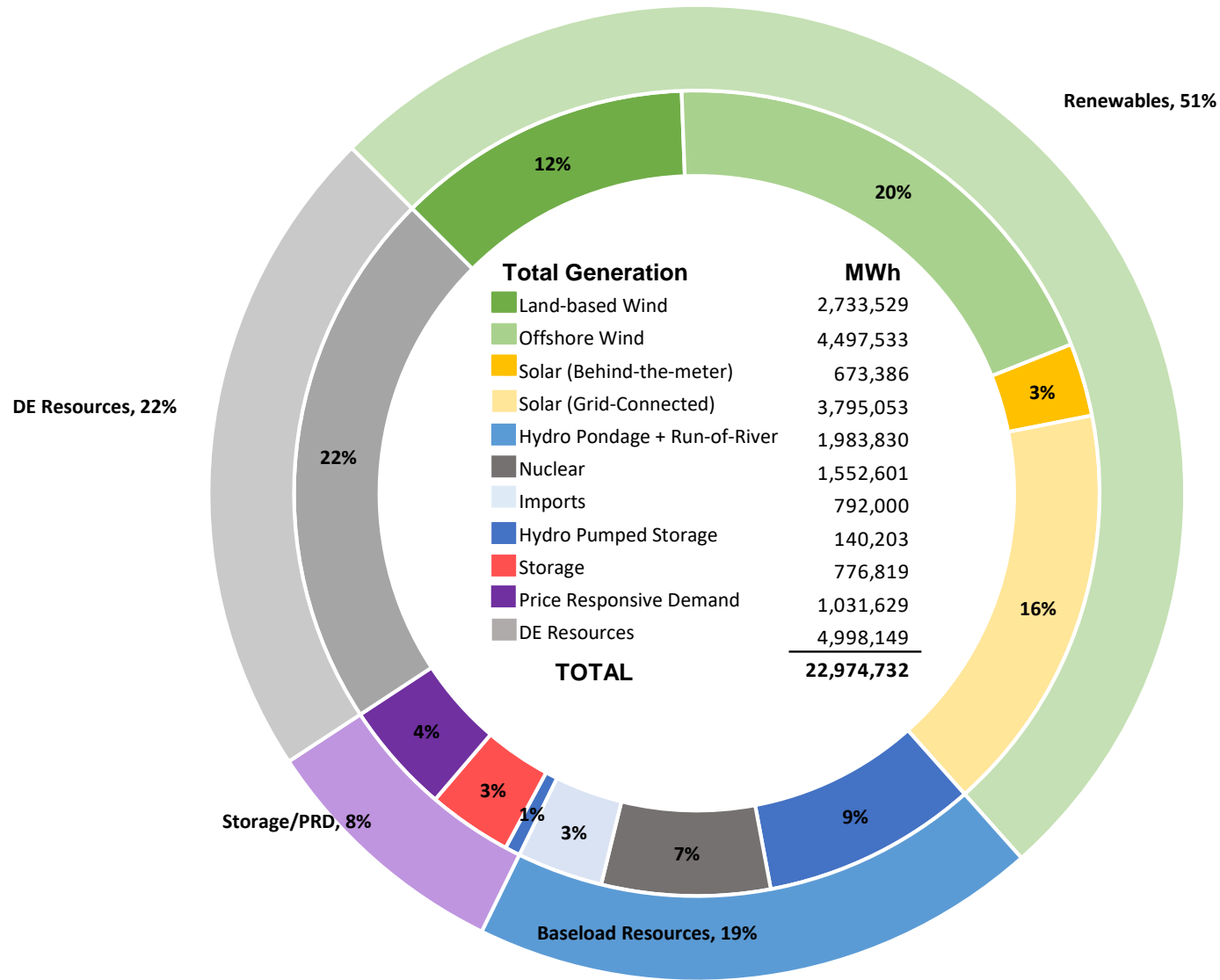


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

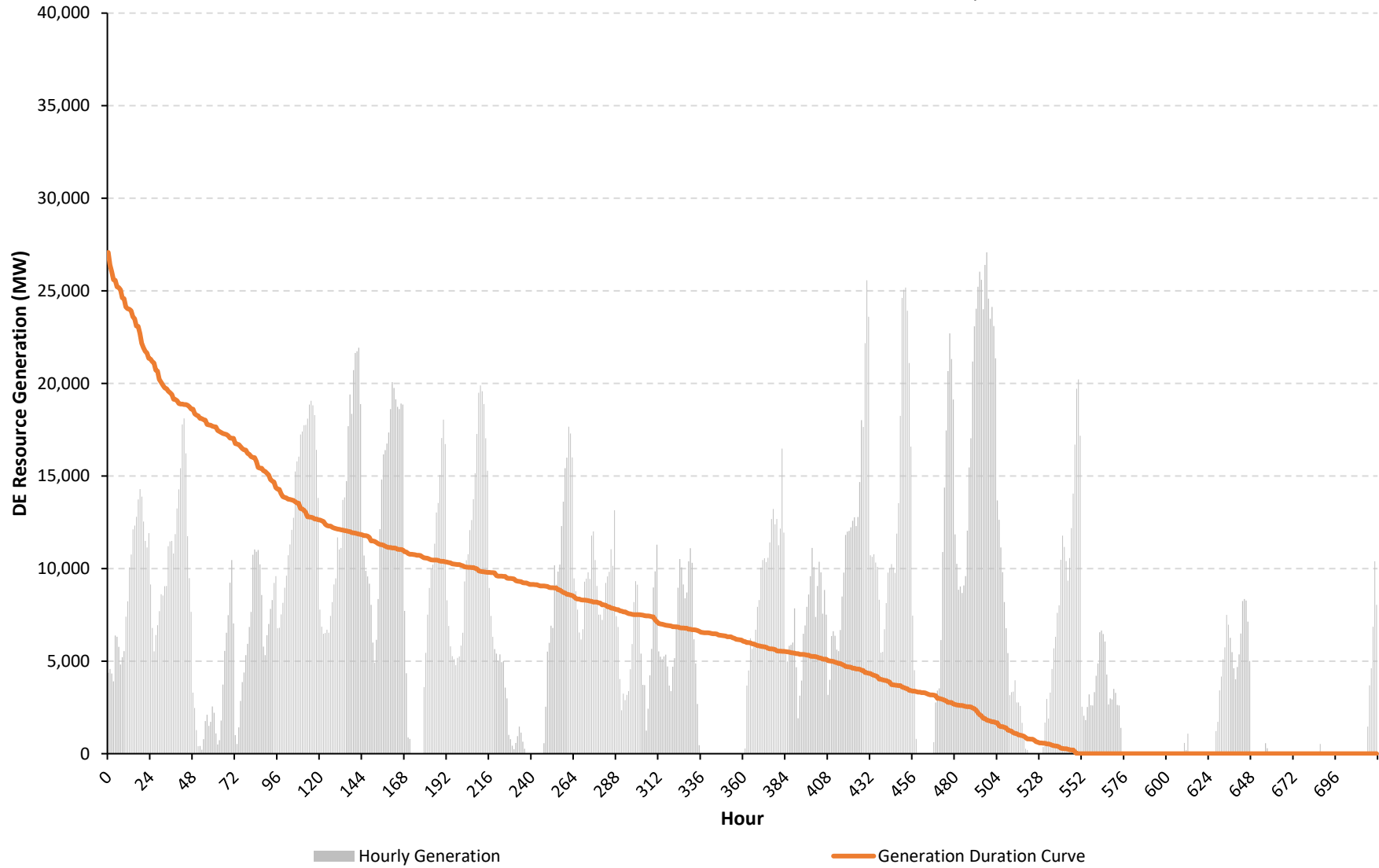
### Generation by Resource Type

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate



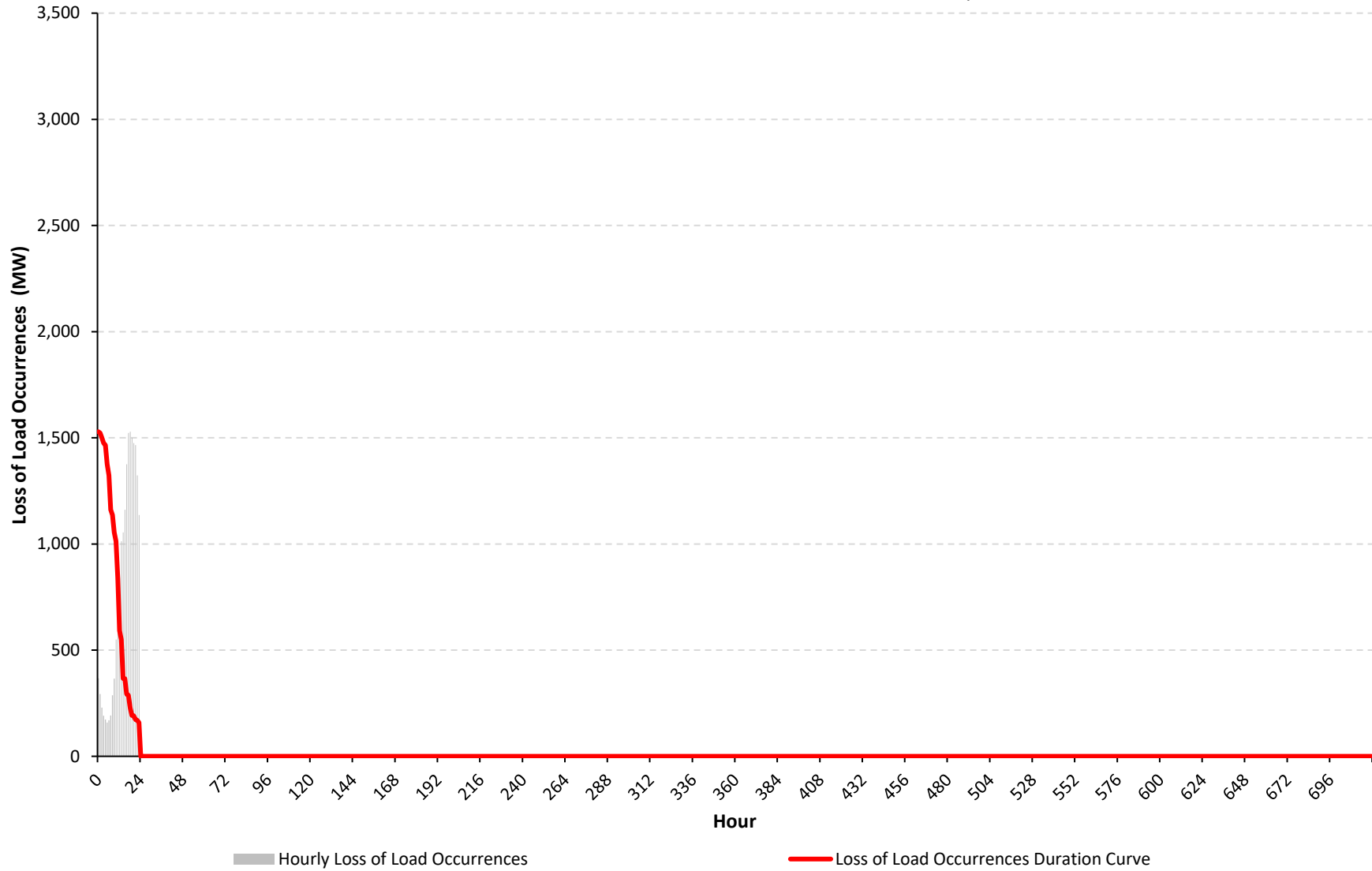
### NYCA DE Resource Generation (MW)

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm - Upstate





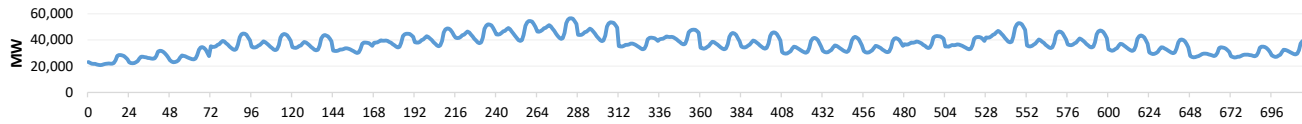
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 63 - CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate**

**Hourly Results Summary**

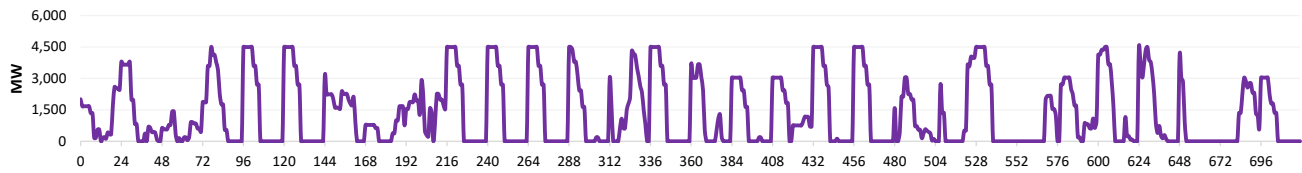
Case Name: CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate

**Load During Modeling Period**



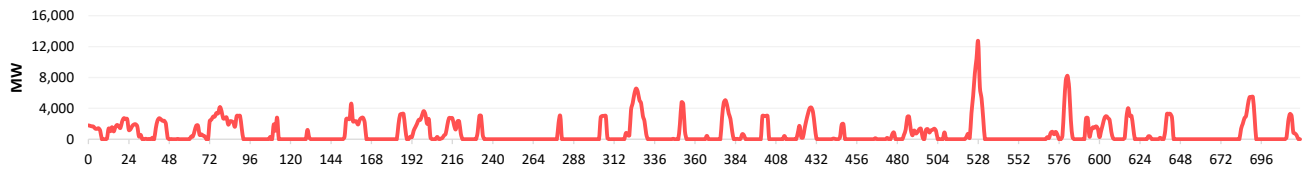
Loss of Load	
Total Hrs.	720
Total MWh	26,633,154
Avg. MW	36,990.5

**Price Responsive Demand Deployed During Modeling Period**



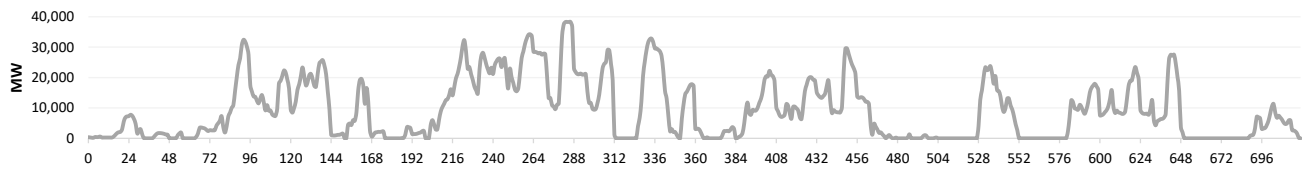
PRD Deployment	
Total Hrs.	420
Total MWh	961,052
Avg. MW	2,288.2

**Battery Energy Storage Deployed During Modeling Period**



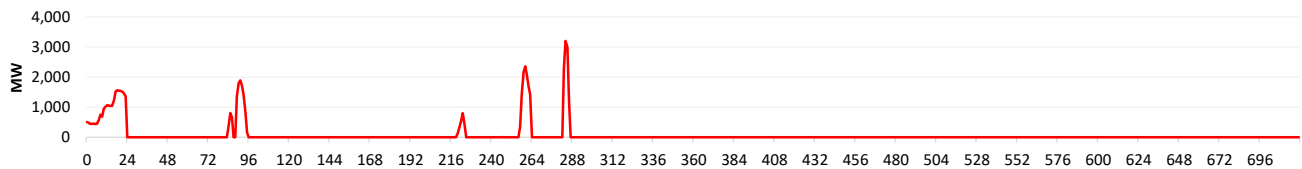
Battery Deployment	
Total Hrs.	283
Total MWh	586,472
Avg. MW	2,072.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	551
Total MWh	6,707,765
Avg. MW	12,173.8

**Loss of Load Occurrences During Modeling Period**

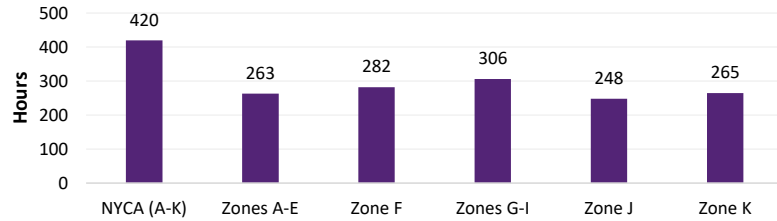


Loss of Load Occurrences	
Total Hrs.	51
Total MWh	57,457
Avg. MW	1,126.6

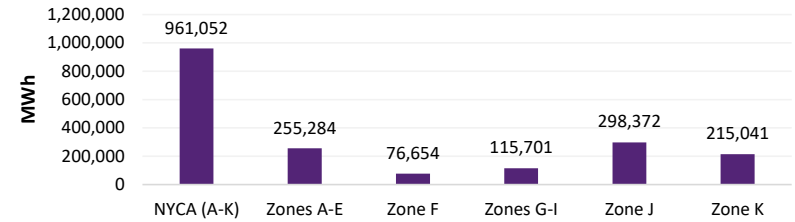
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate

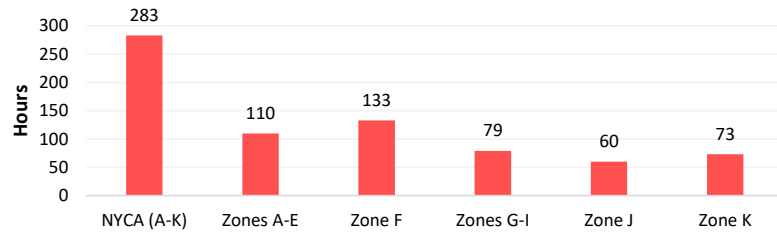
**Hours Price Responsive Demand Deployed**



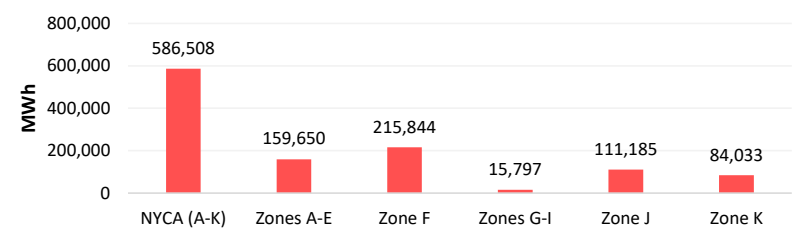
**Total MWh Price Responsive Demand Deployed**



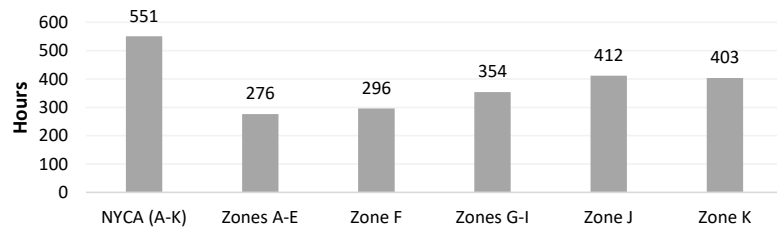
**Hours Battery Energy Storage Deployed**



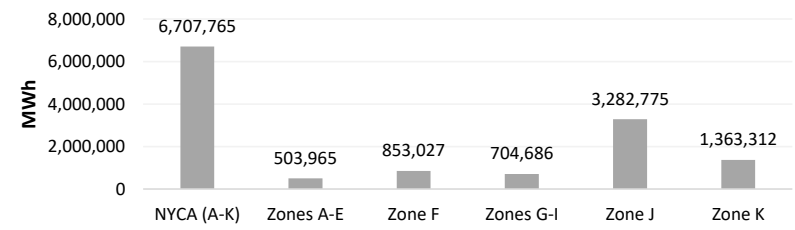
**Total MWh Battery Energy Storage Deployed**



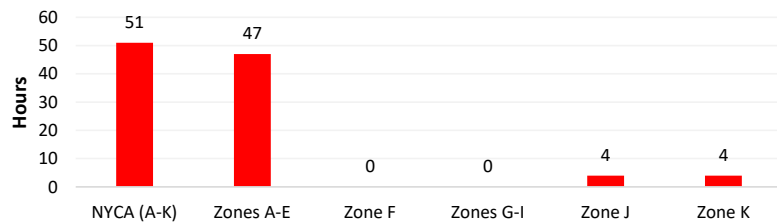
**Hours DE Resources Deployed**



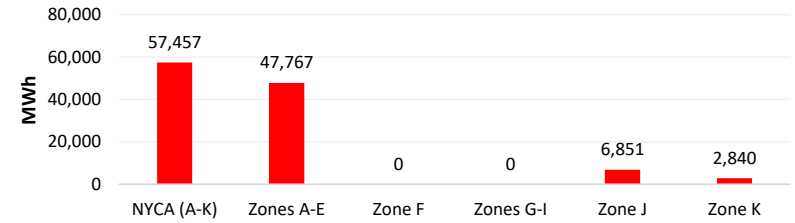
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

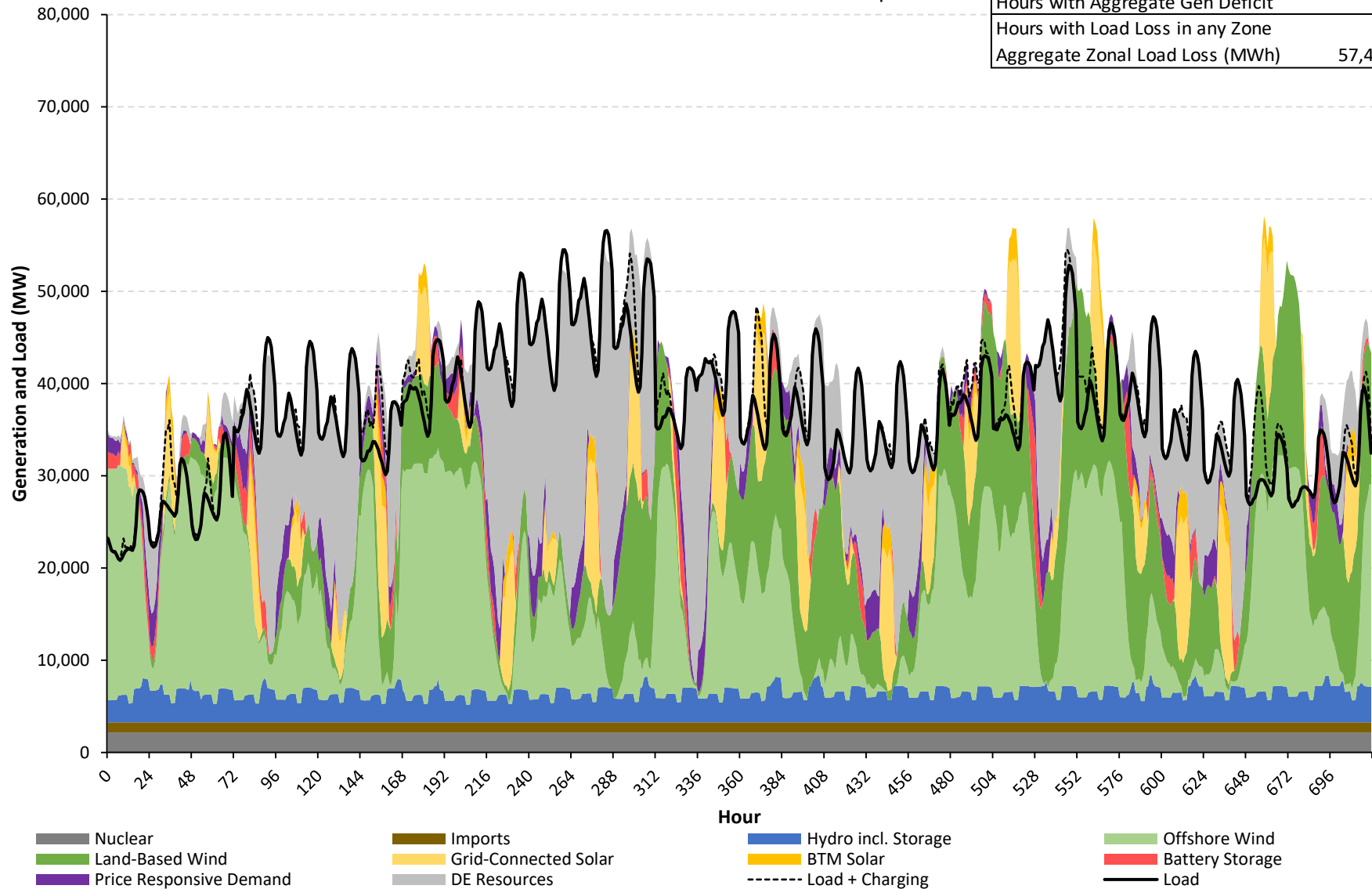


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate

Aggregate Load in Period (MWh)	26,633,154
Aggregate Gen in Period (MWh)	29,610,912
Gen Surplus/Deficit (MWh)	2,977,758
Hours with Aggregate Gen Deficit	27
Hours with Load Loss in any Zone	51
Aggregate Zonal Load Loss (MWh)	57,457

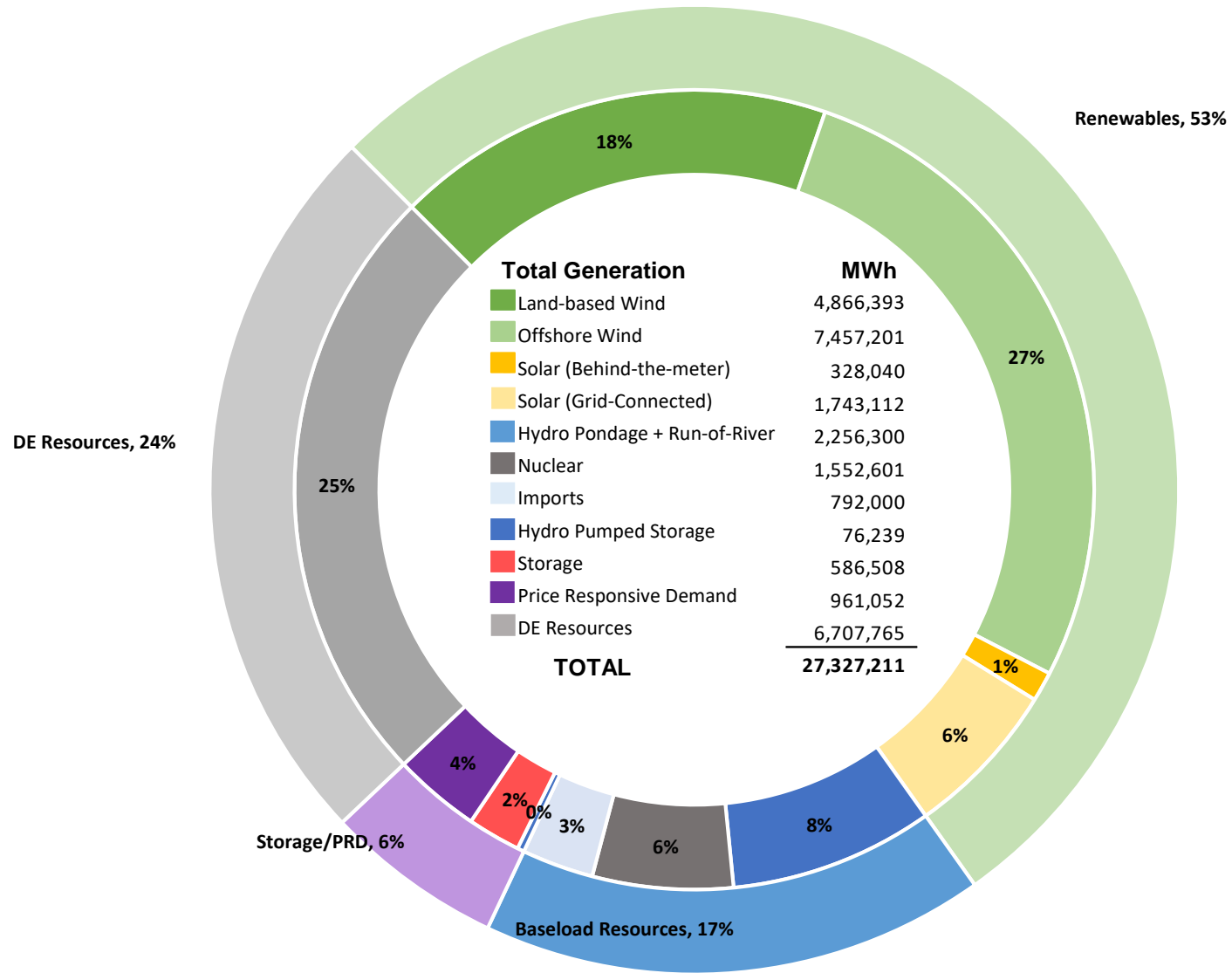


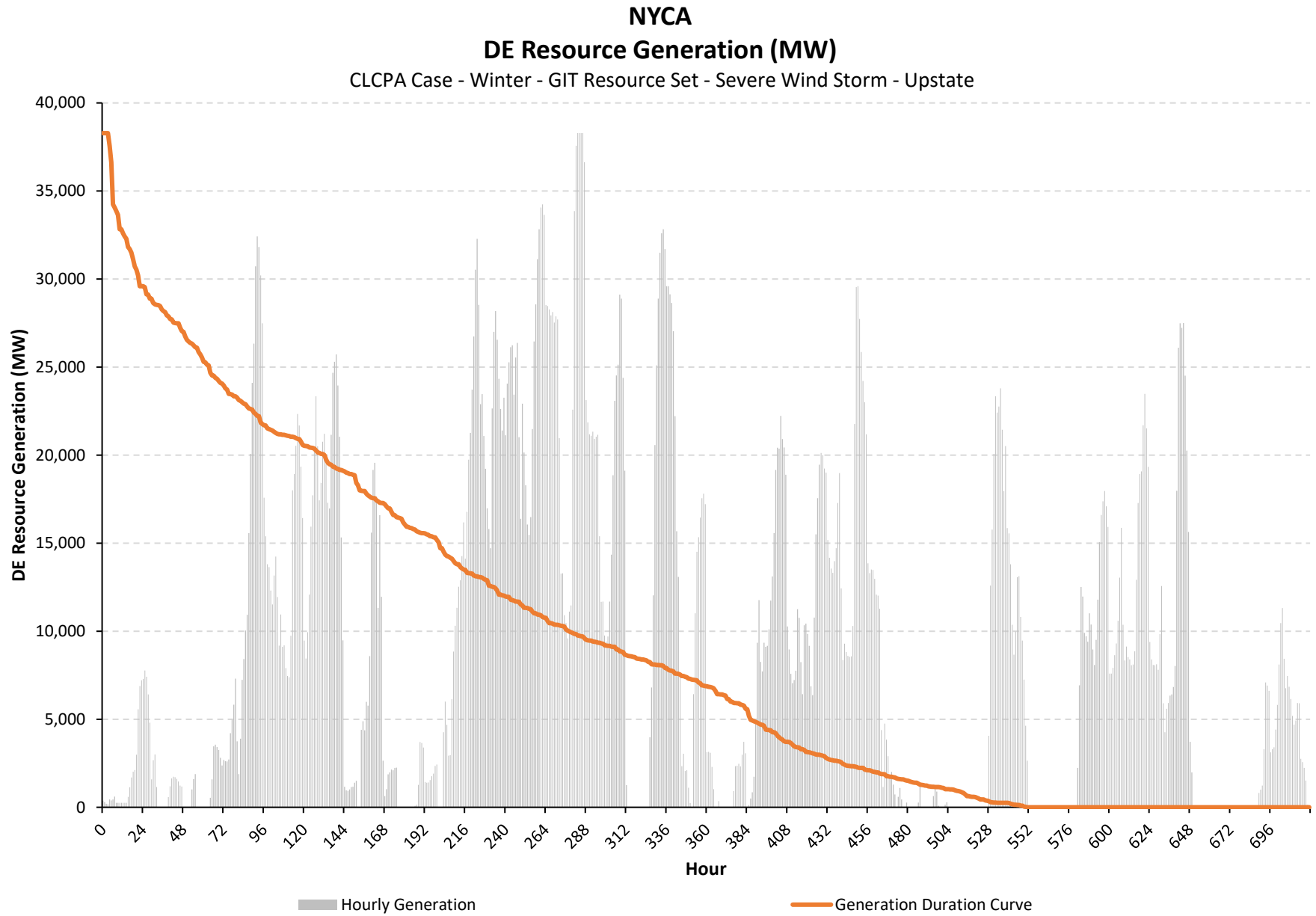
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

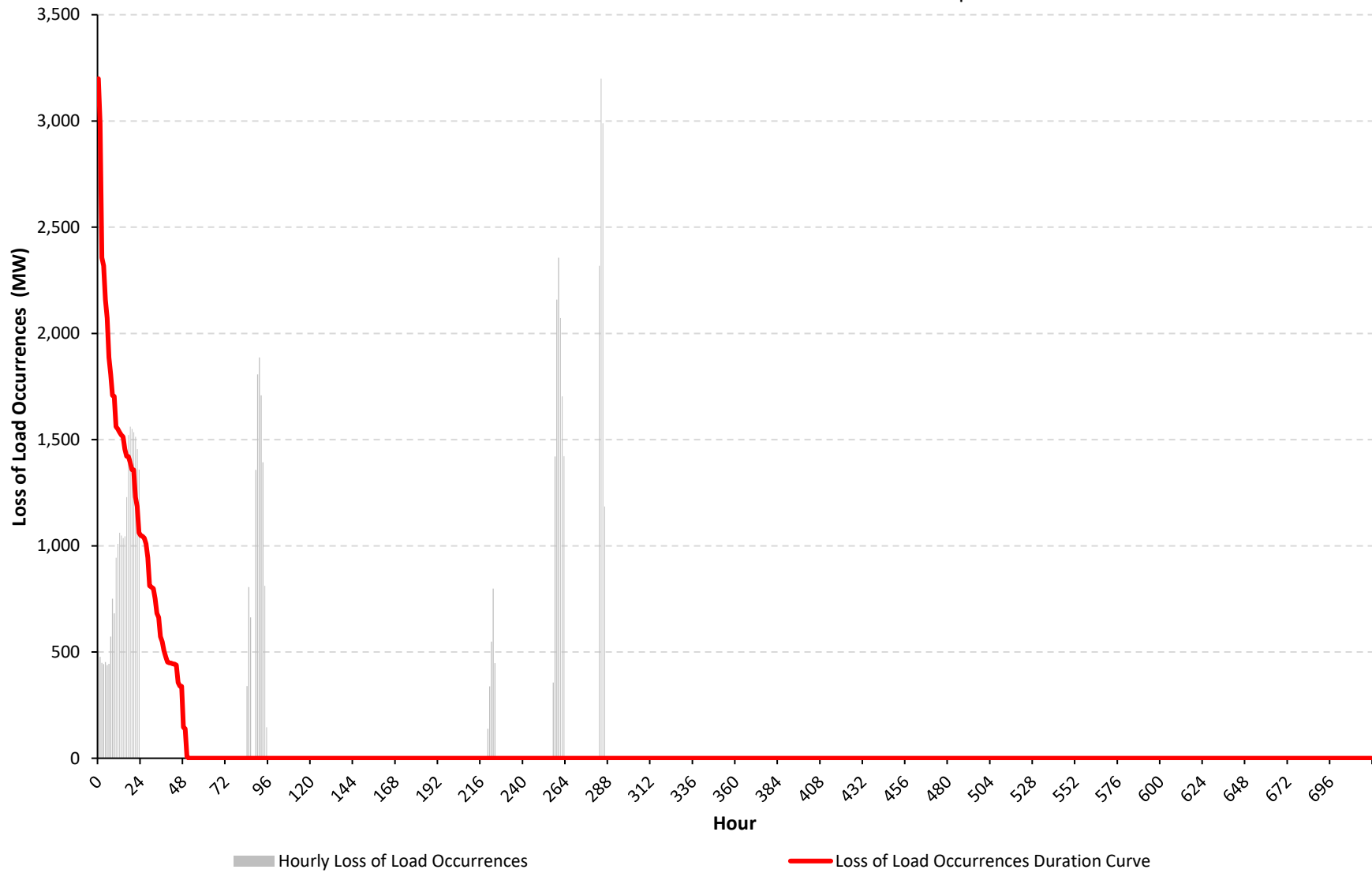
CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm - Upstate



## **Appendix C. Diagnostic Charts for All Cases**

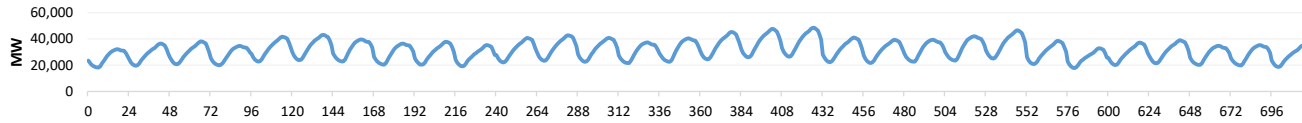
### **Case 64 - CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore**



**Hourly Results Summary**

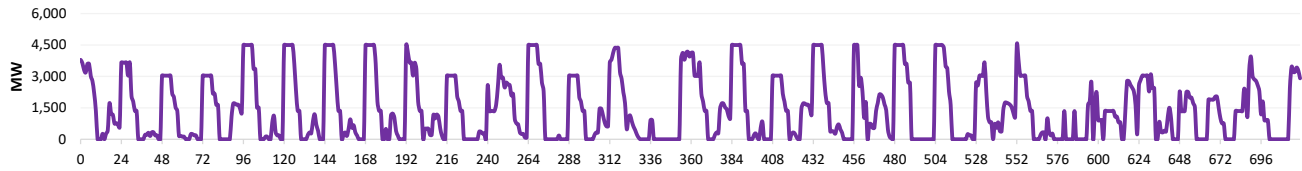
Case Name: CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



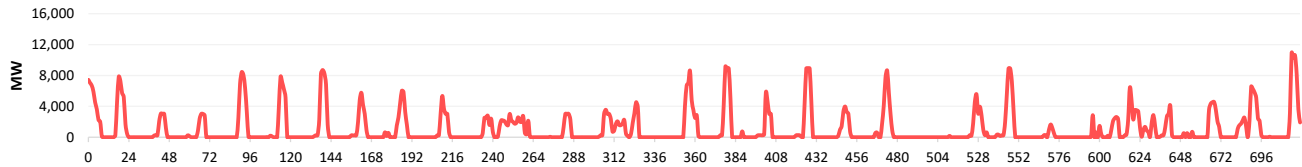
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



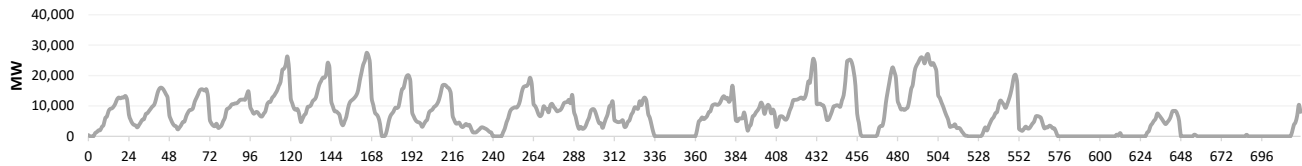
PRD Deployment	
Total Hrs.	509
Total MWh	1,039,416
Avg. MW	2,042.1

**Battery Energy Storage Deployed During Modeling Period**



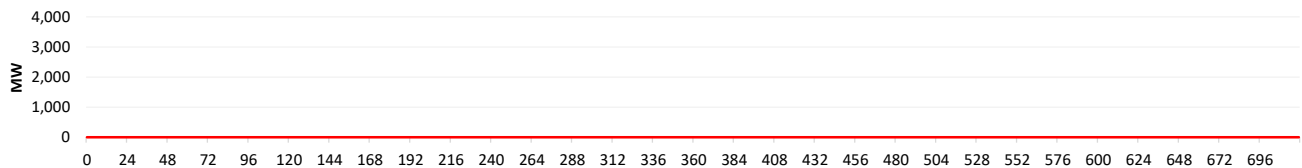
Battery Deployment	
Total Hrs.	294
Total MWh	801,322
Avg. MW	2,725.6

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	556
Total MWh	5,126,163
Avg. MW	9,219.7

**Loss of Load Occurrences During Modeling Period**

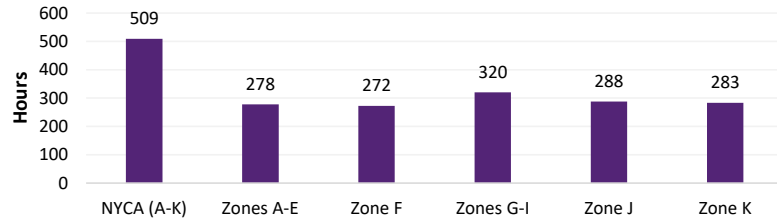


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

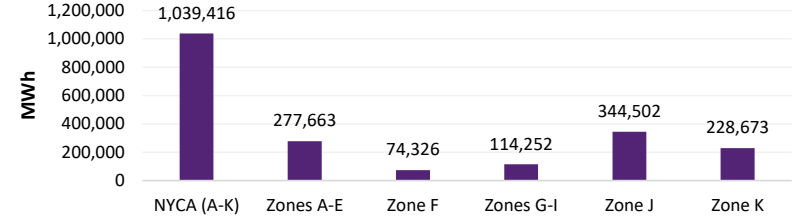
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore

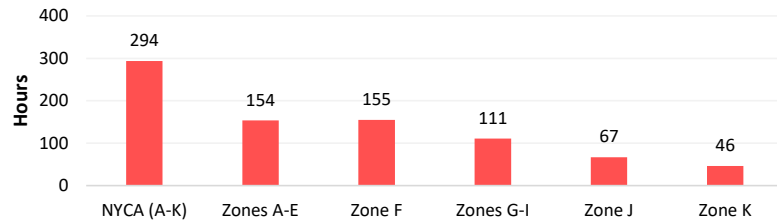
**Hours Price Responsive Demand Deployed**



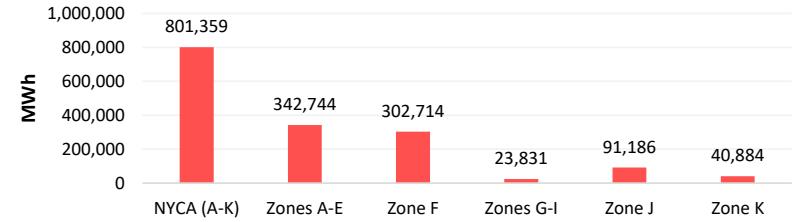
**Total MWh Price Responsive Demand Deployed**



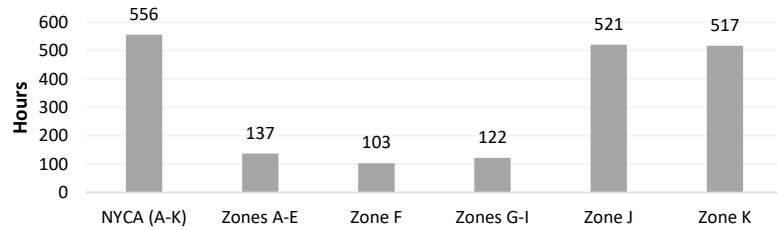
**Hours Battery Energy Storage Deployed**



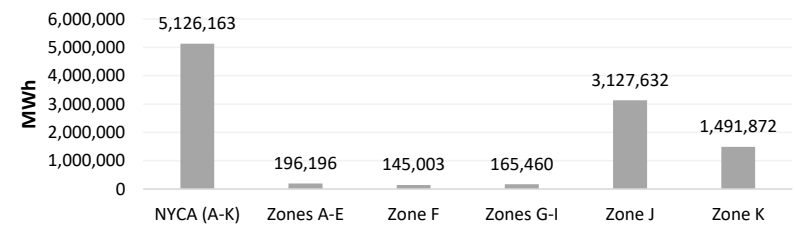
**Total MWh Battery Energy Storage Deployed**



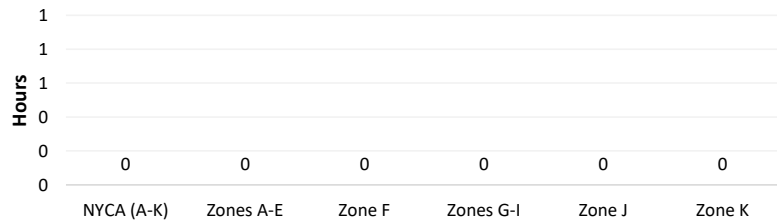
**Hours DE Resources Deployed**



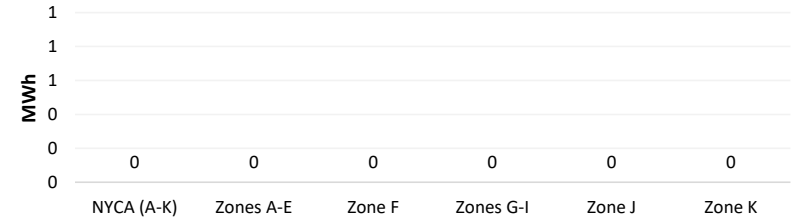
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

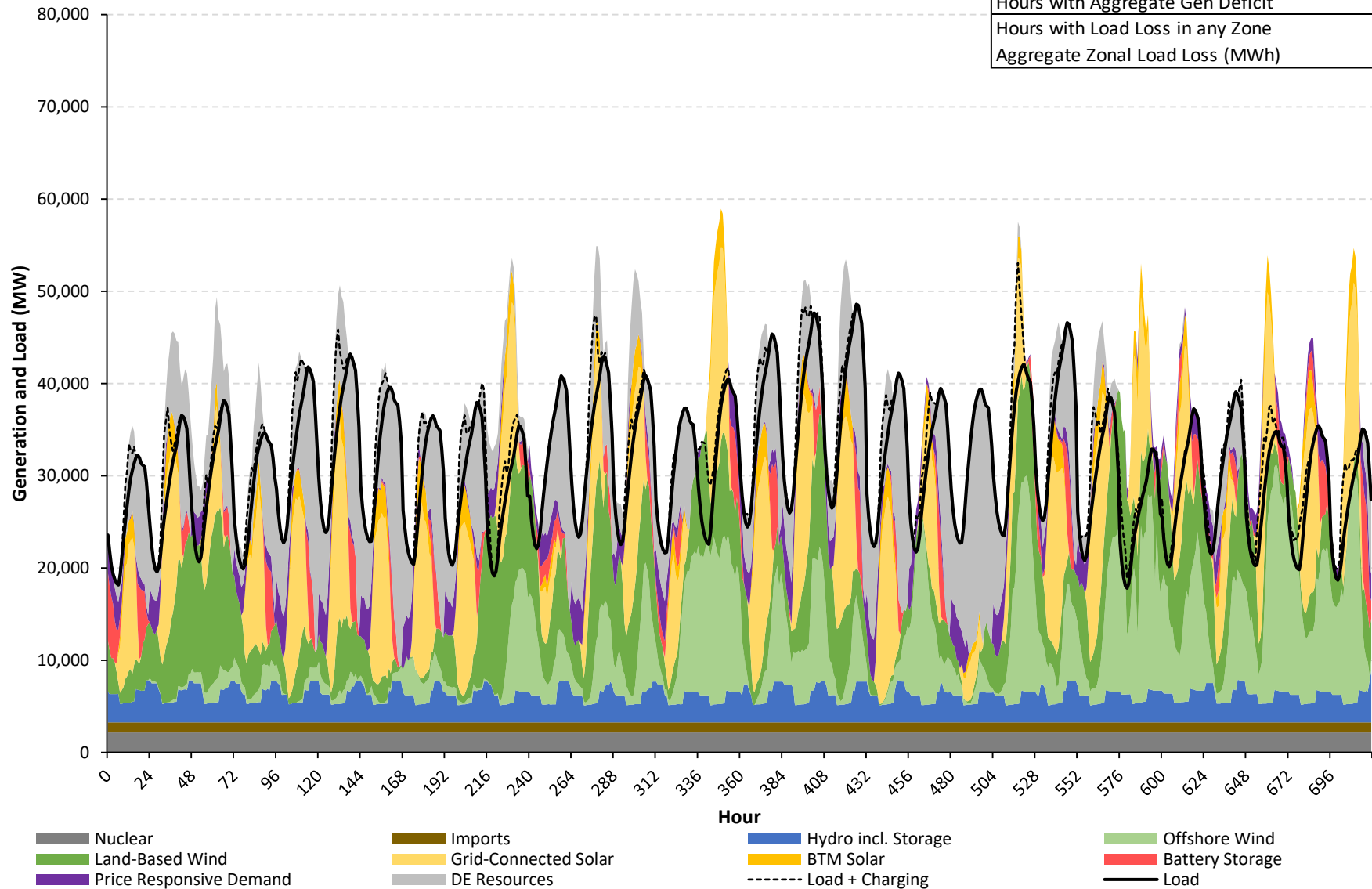


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	25,831,351
Gen Surplus/Deficit (MWh)	3,355,395
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

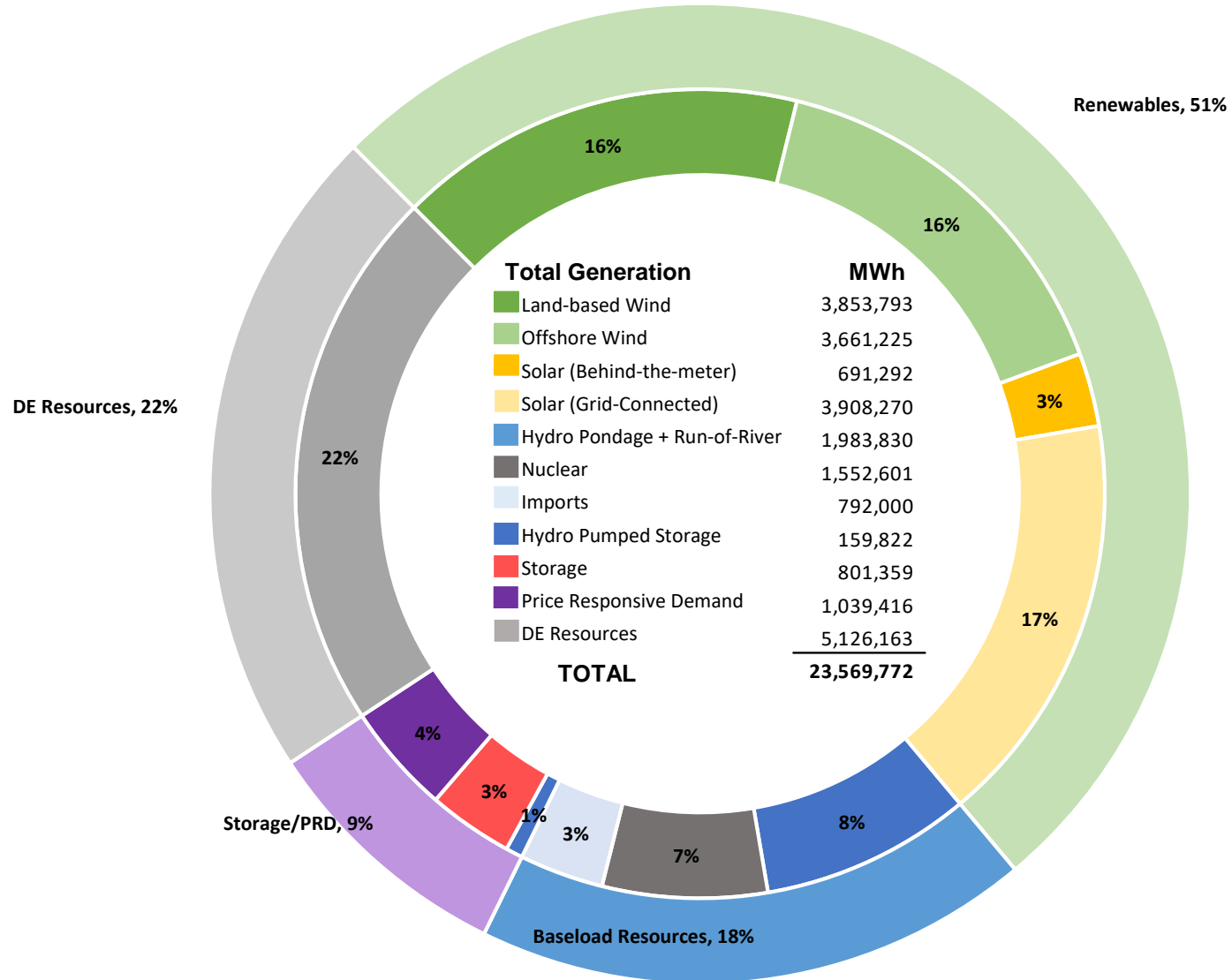


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

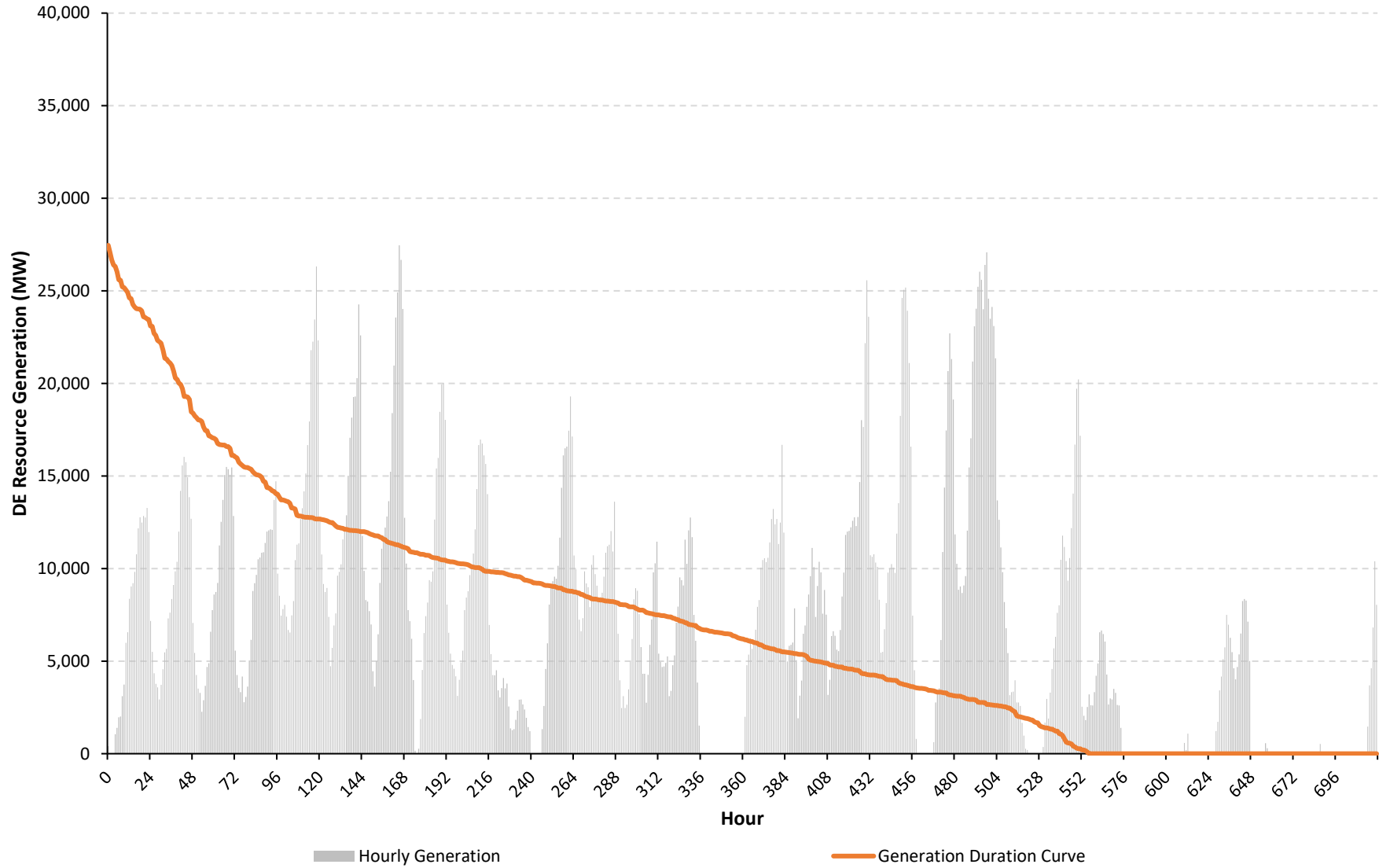
### Generation by Resource Type

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore



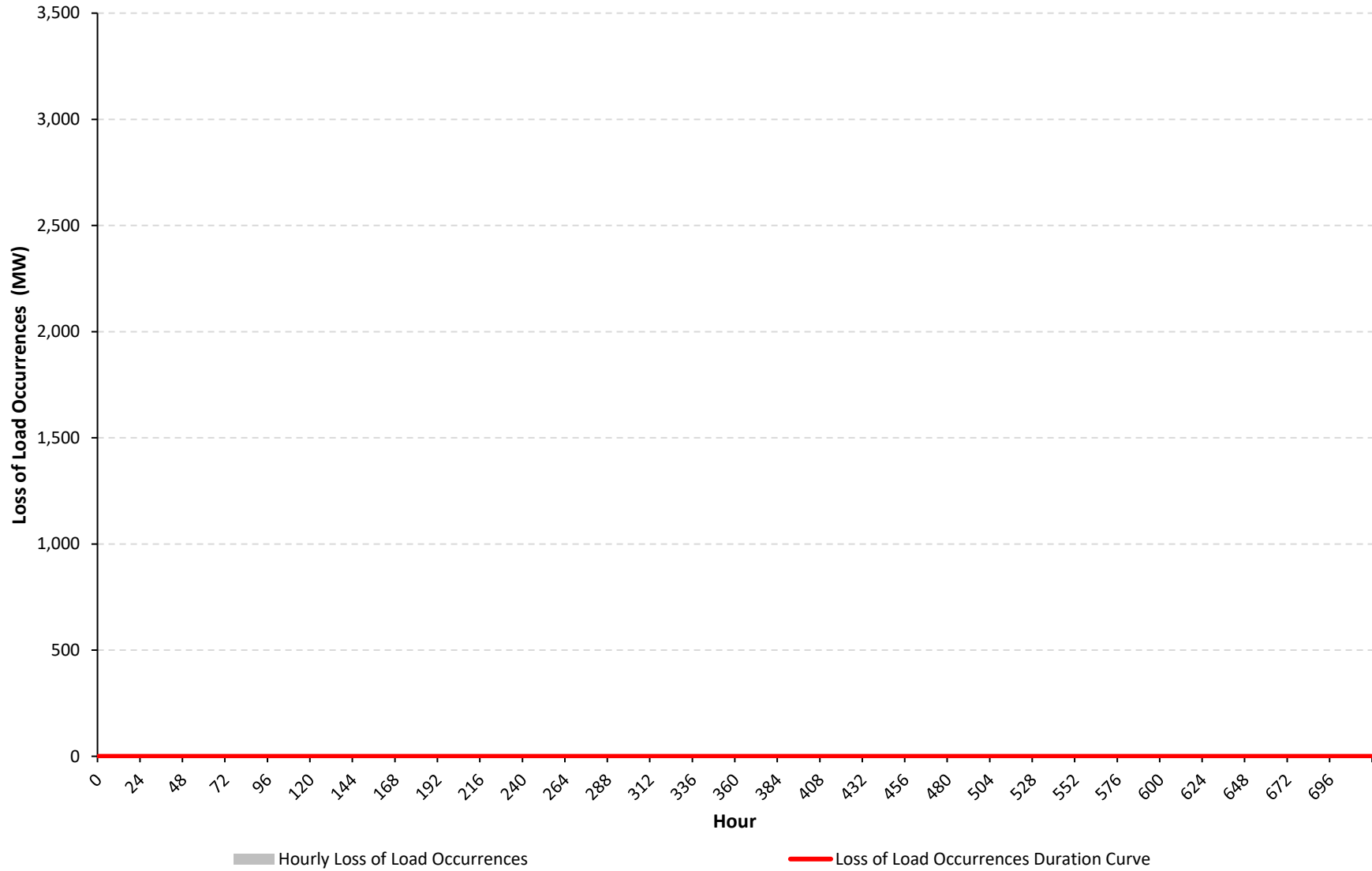
### NYCA DE Resource Generation (MW)

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Summer - GIT Resource Set - Severe Wind Storm Offshore



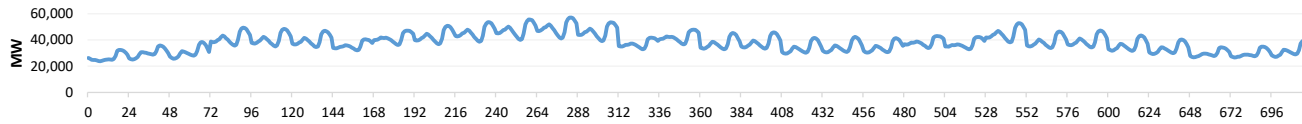
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 65 - CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

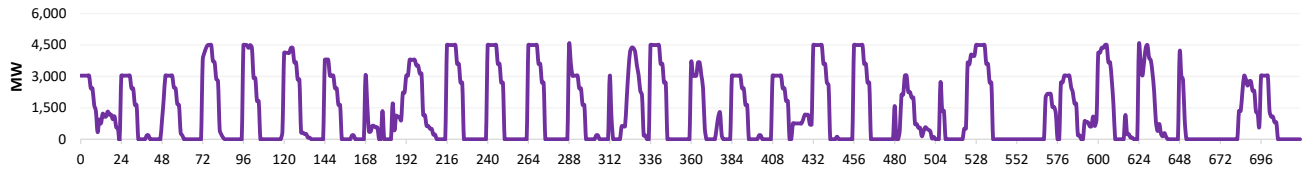
Case Name: CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



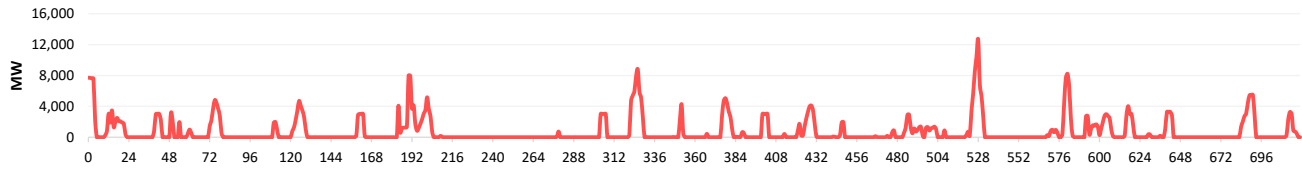
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



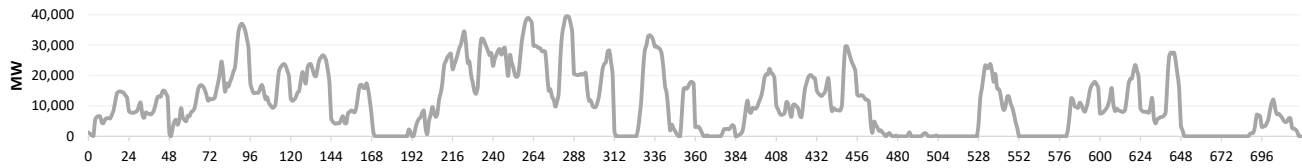
PRD Deployment	
Total Hrs.	400
Total MWh	968,876
Avg. MW	2,422.2

**Battery Energy Storage Deployed During Modeling Period**



Battery Deployment	
Total Hrs.	228
Total MWh	552,950
Avg. MW	2,425.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	561
Total MWh	7,916,575
Avg. MW	14,111.5

**Loss of Load Occurrences During Modeling Period**



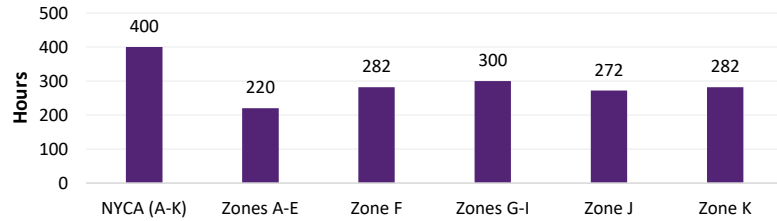
Loss of Load Occurrences	
Total Hrs.	2
Total MWh	327
Avg. MW	163.3



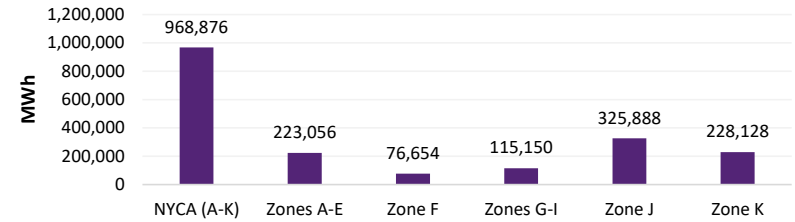
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore

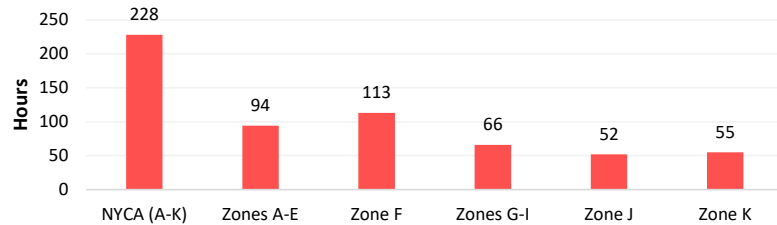
**Hours Price Responsive Demand Deployed**



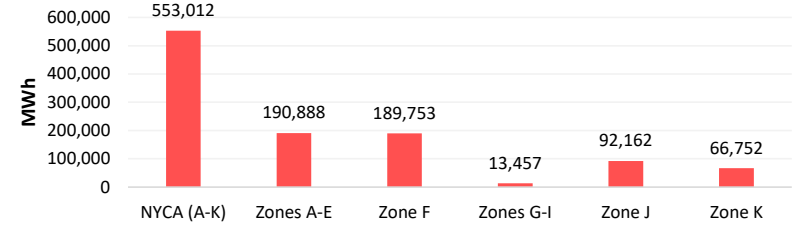
**Total MWh Price Responsive Demand Deployed**



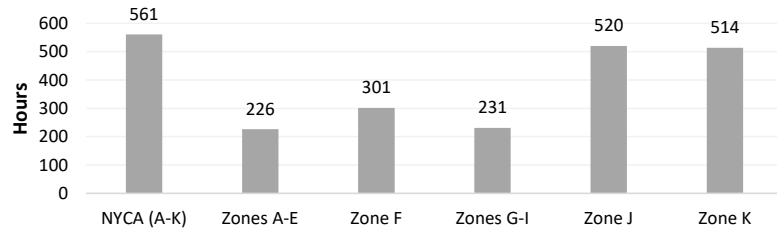
**Hours Battery Energy Storage Deployed**



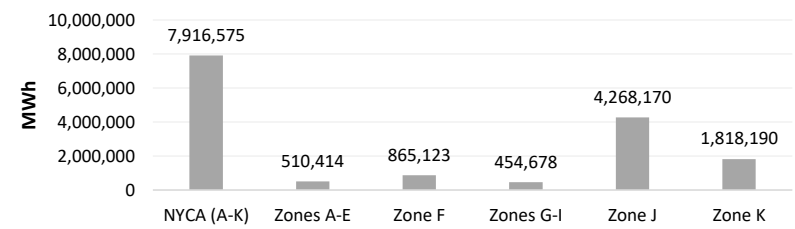
**Total MWh Battery Energy Storage Deployed**



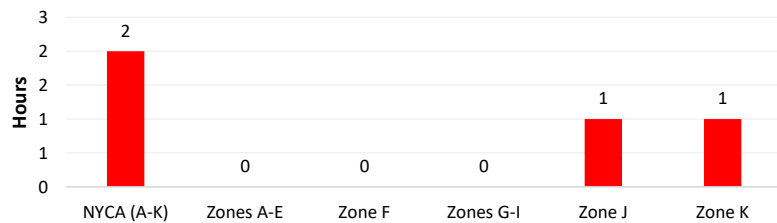
**Hours DE Resources Deployed**



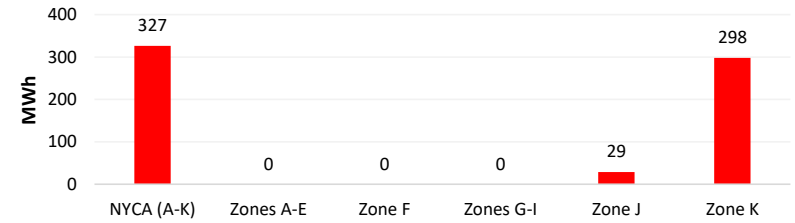
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**

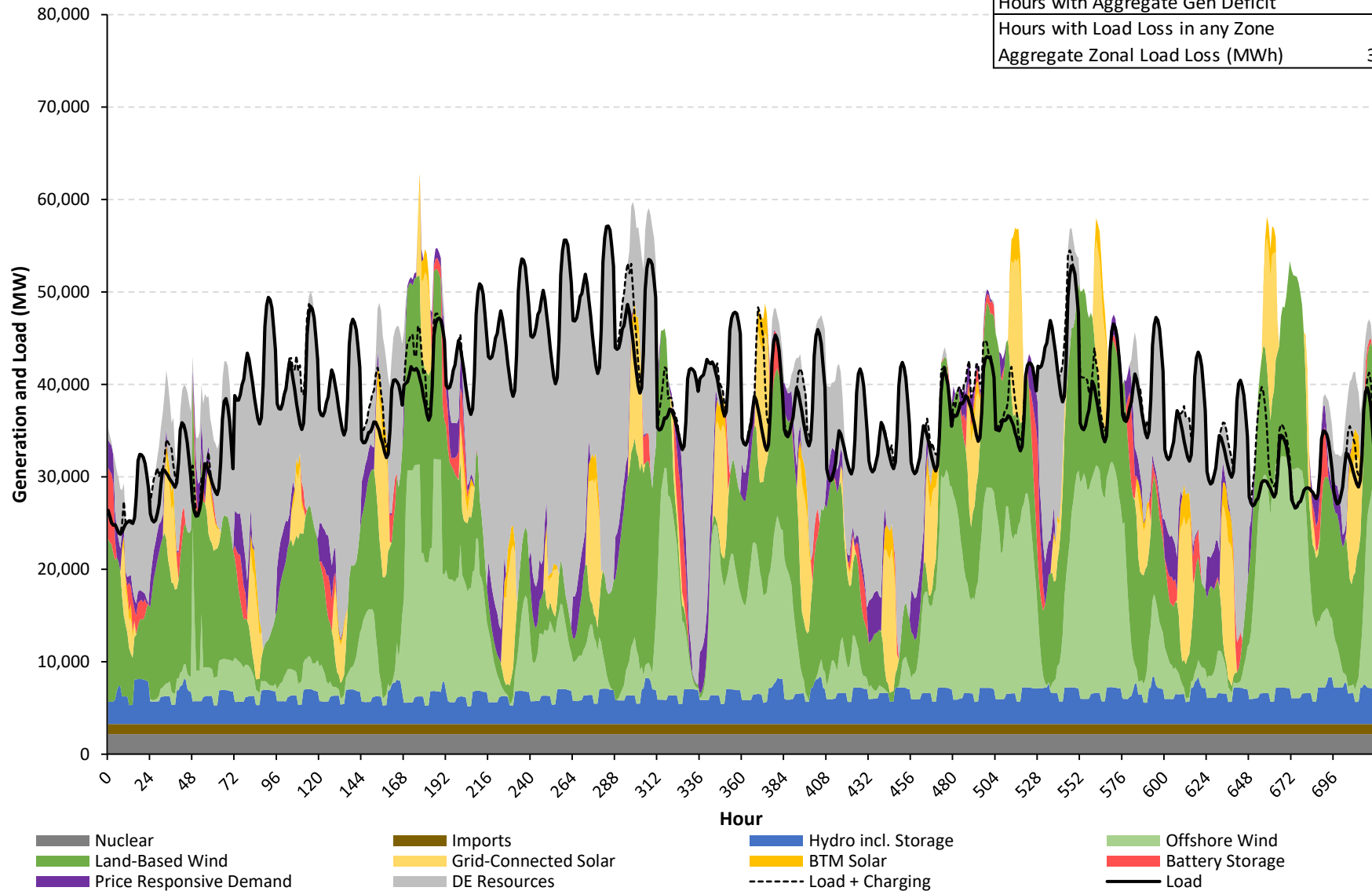


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	30,252,911
Gen Surplus/Deficit (MWh)	2,930,874
Hours with Aggregate Gen Deficit	2
Hours with Load Loss in any Zone	2
Aggregate Zonal Load Loss (MWh)	327

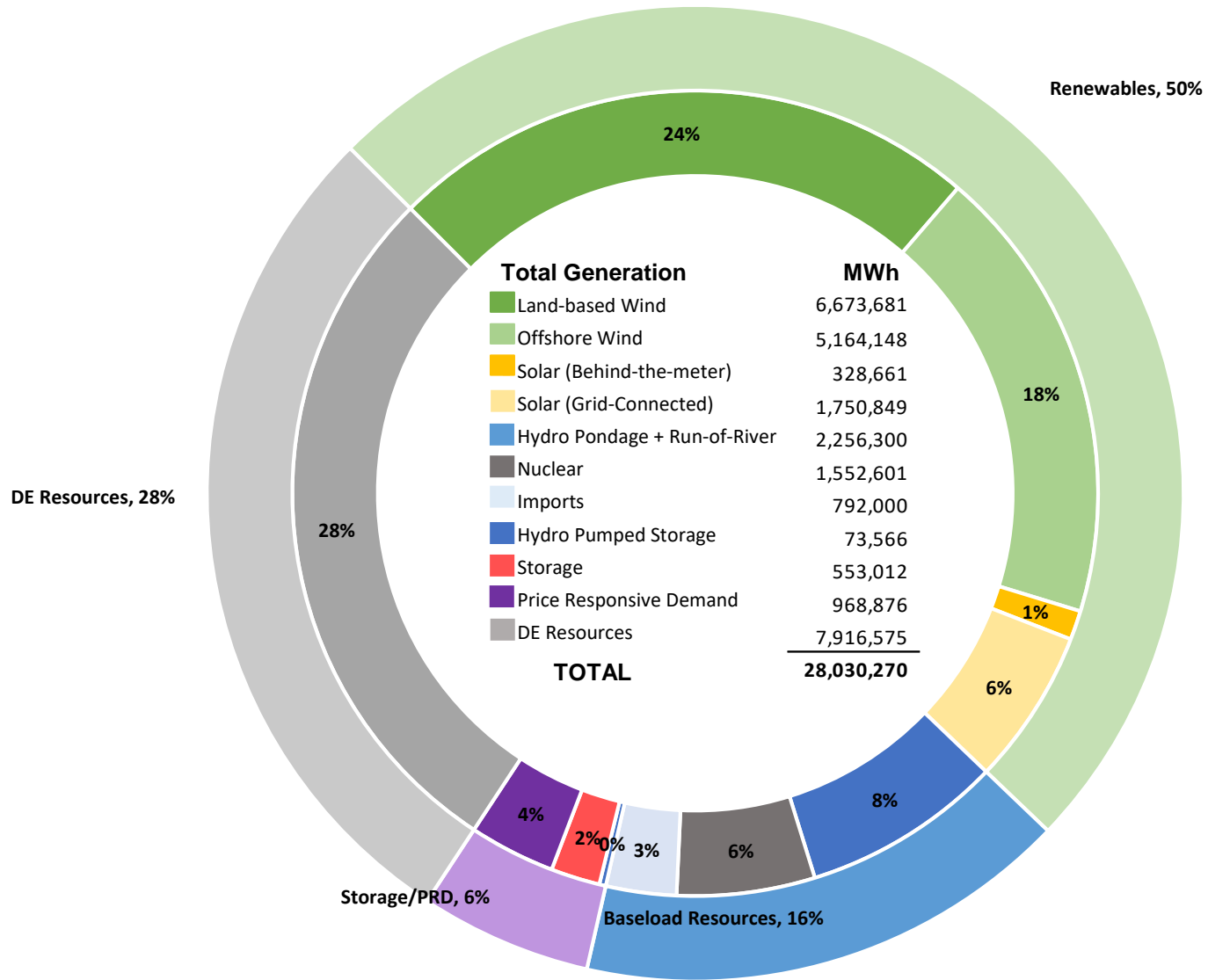


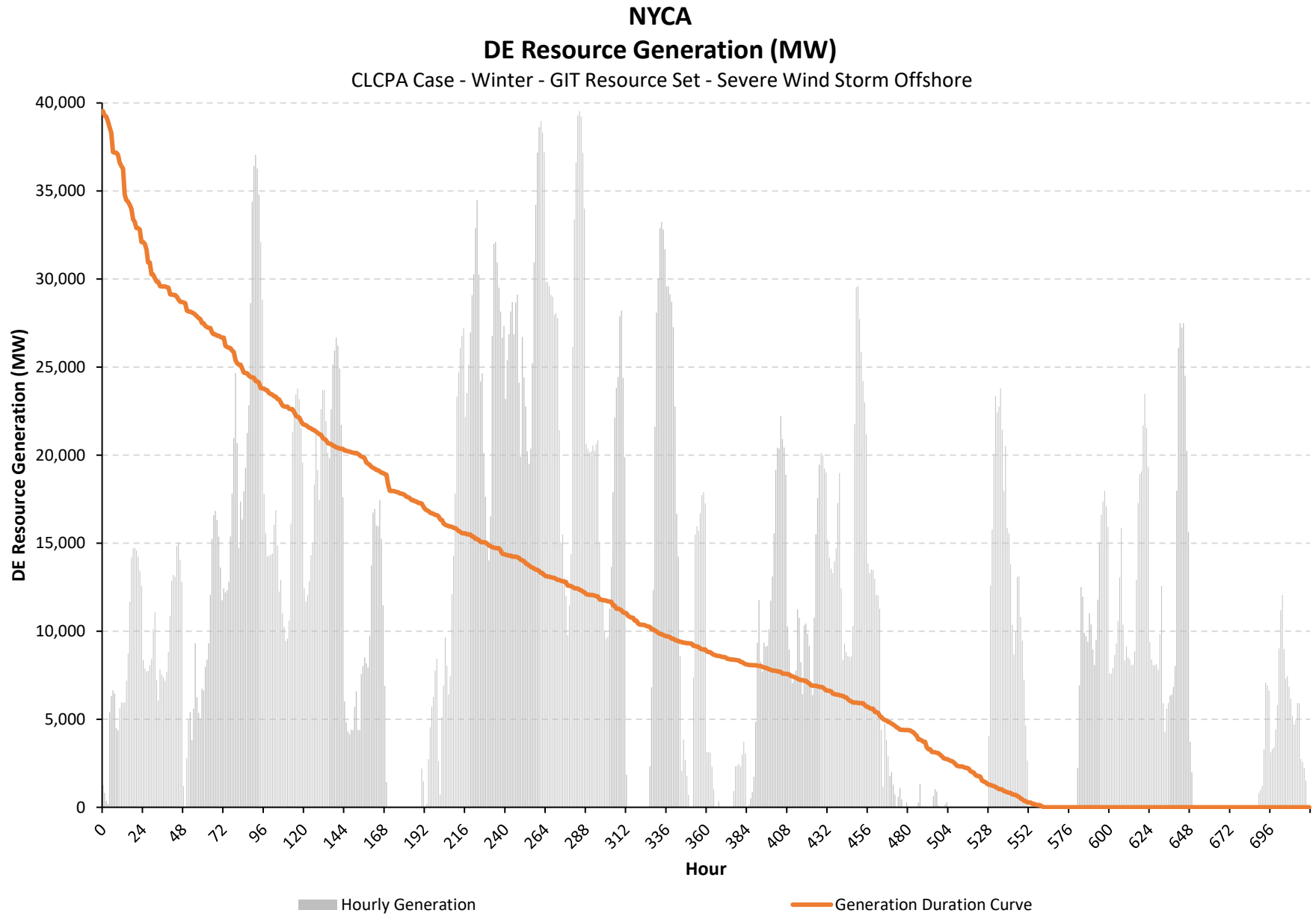
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

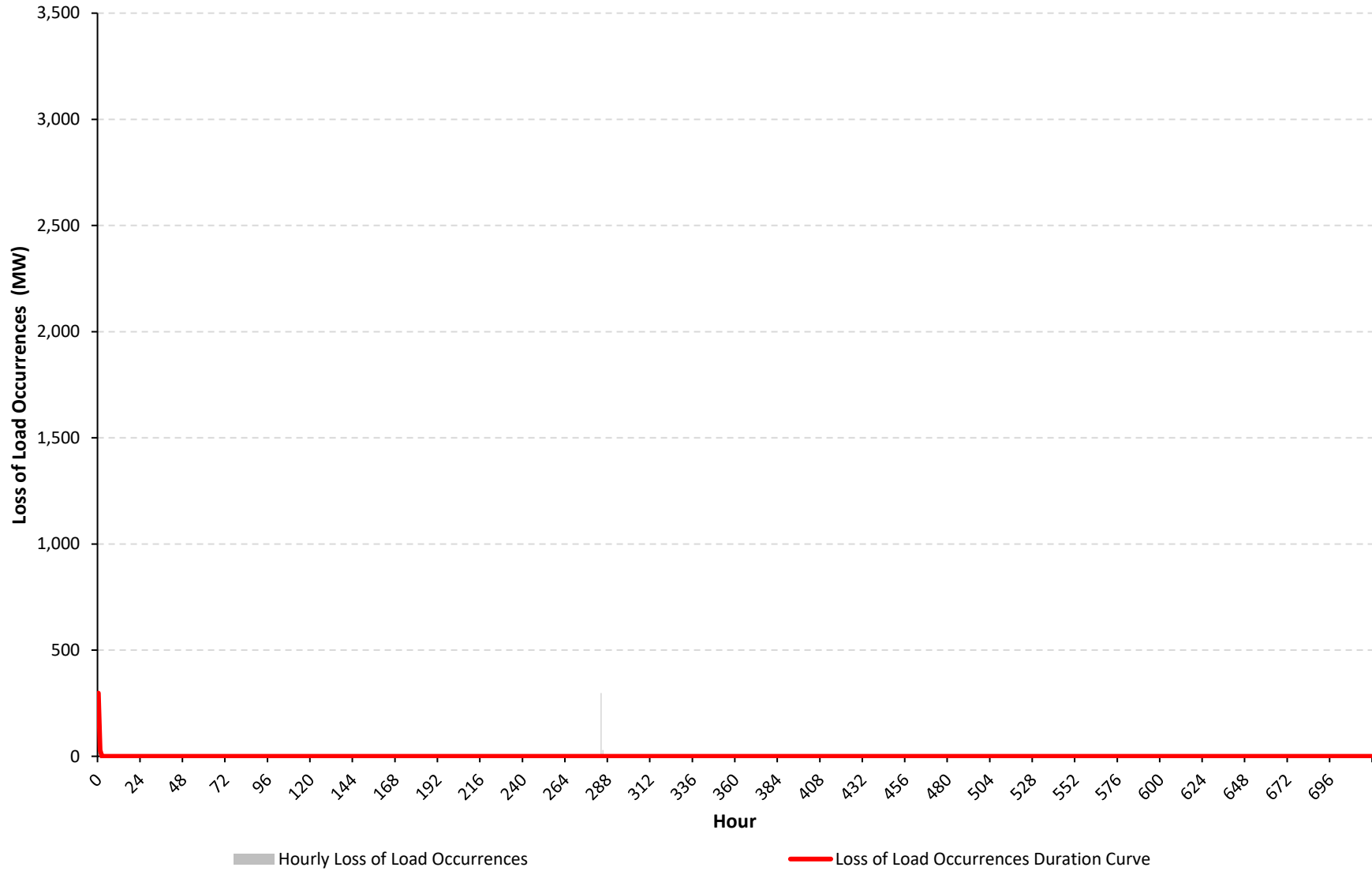
CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore





### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Winter - GIT Resource Set - Severe Wind Storm Offshore



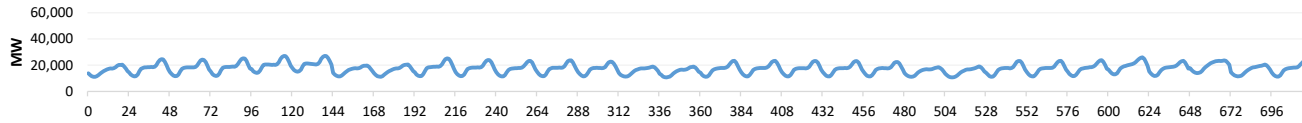
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 66 - CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore**

**Hourly Results Summary**

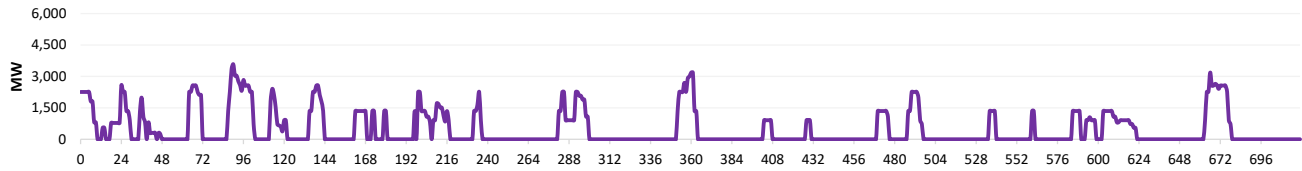
Case Name: CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	12,496,761
Avg. MW	17,356.6

**Price Responsive Demand Deployed During Modeling Period**



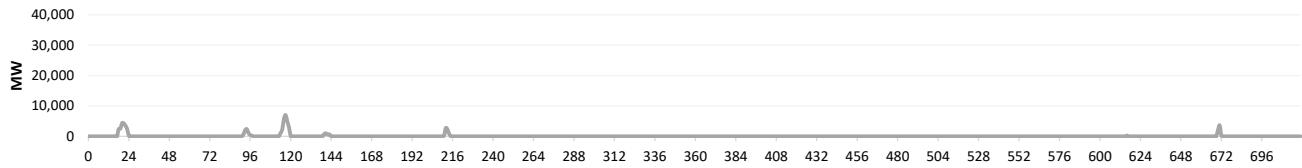
PRD Deployment	
Total Hrs.	220
Total MWh	342,105
Avg. MW	1,555.0

**Battery Energy Storage Deployed During Modeling Period**



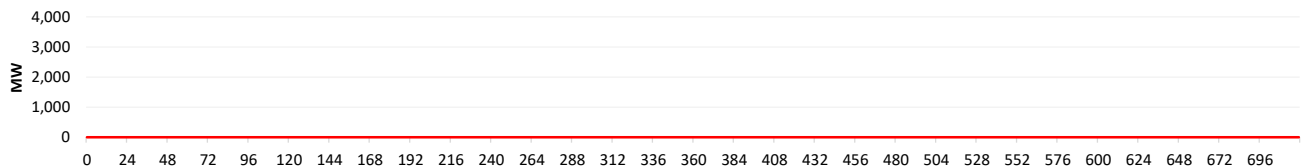
Battery Deployment	
Total Hrs.	134
Total MWh	270,054
Avg. MW	2,015.3

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	32
Total MWh	65,667
Avg. MW	2,052.1

**Loss of Load Occurrences During Modeling Period**

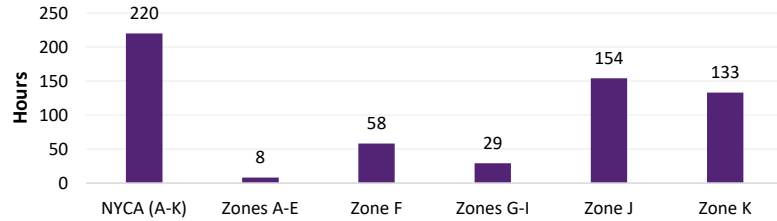


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

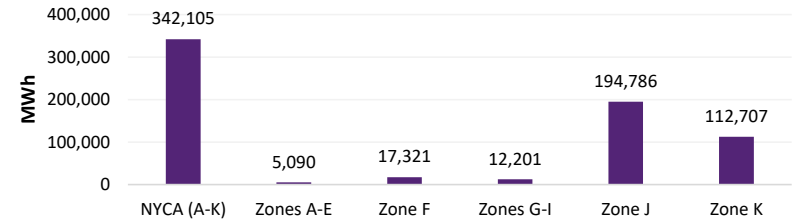
### Full Period Results Summary

Case Name: CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore

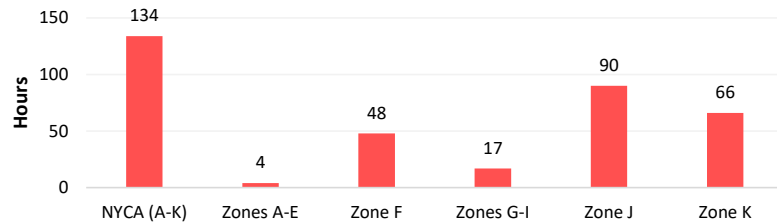
**Hours Price Responsive Demand Deployed**



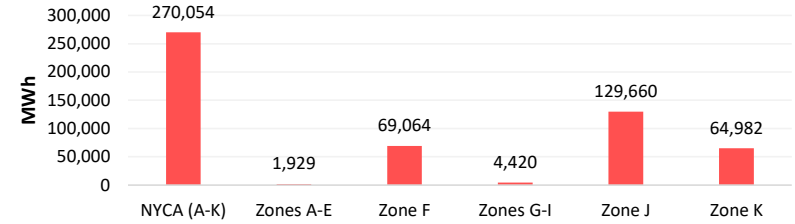
**Total MWh Price Responsive Demand Deployed**



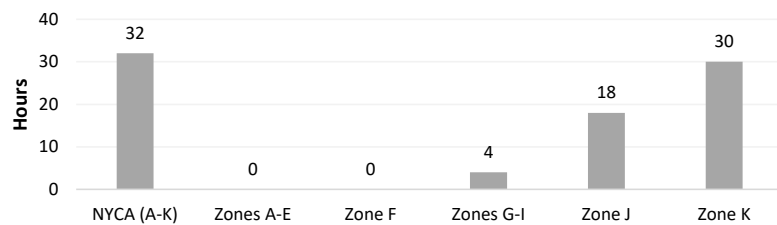
**Hours Battery Energy Storage Deployed**



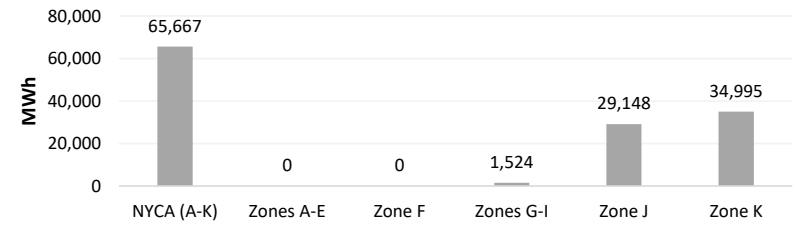
**Total MWh Battery Energy Storage Deployed**



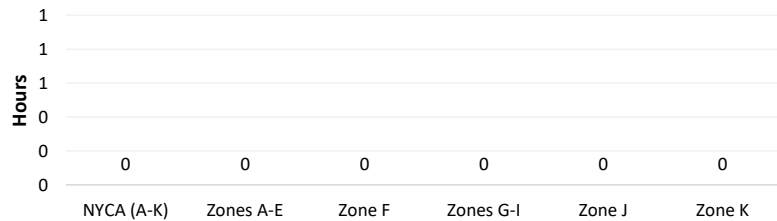
**Hours DE Resources Deployed**



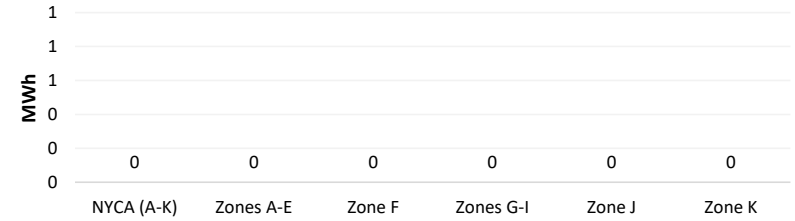
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



**Total MWh of Loss of Load Occurrences**



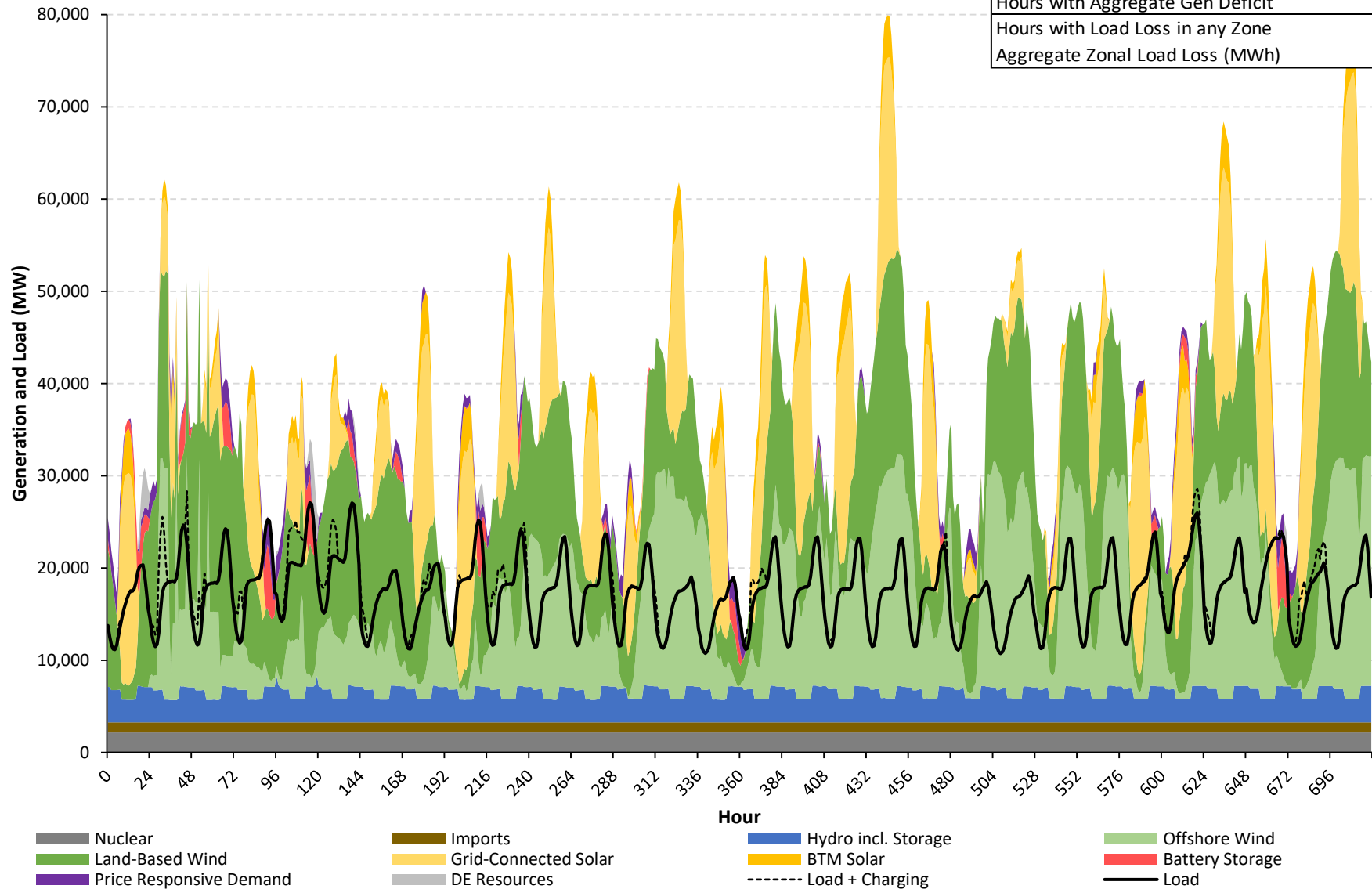


### NYCA

## Hourly Load/Generation Balance by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore

Aggregate Load in Period (MWh)	12,496,761
Aggregate Gen in Period (MWh)	27,501,653
Gen Surplus/Deficit (MWh)	15,004,893
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

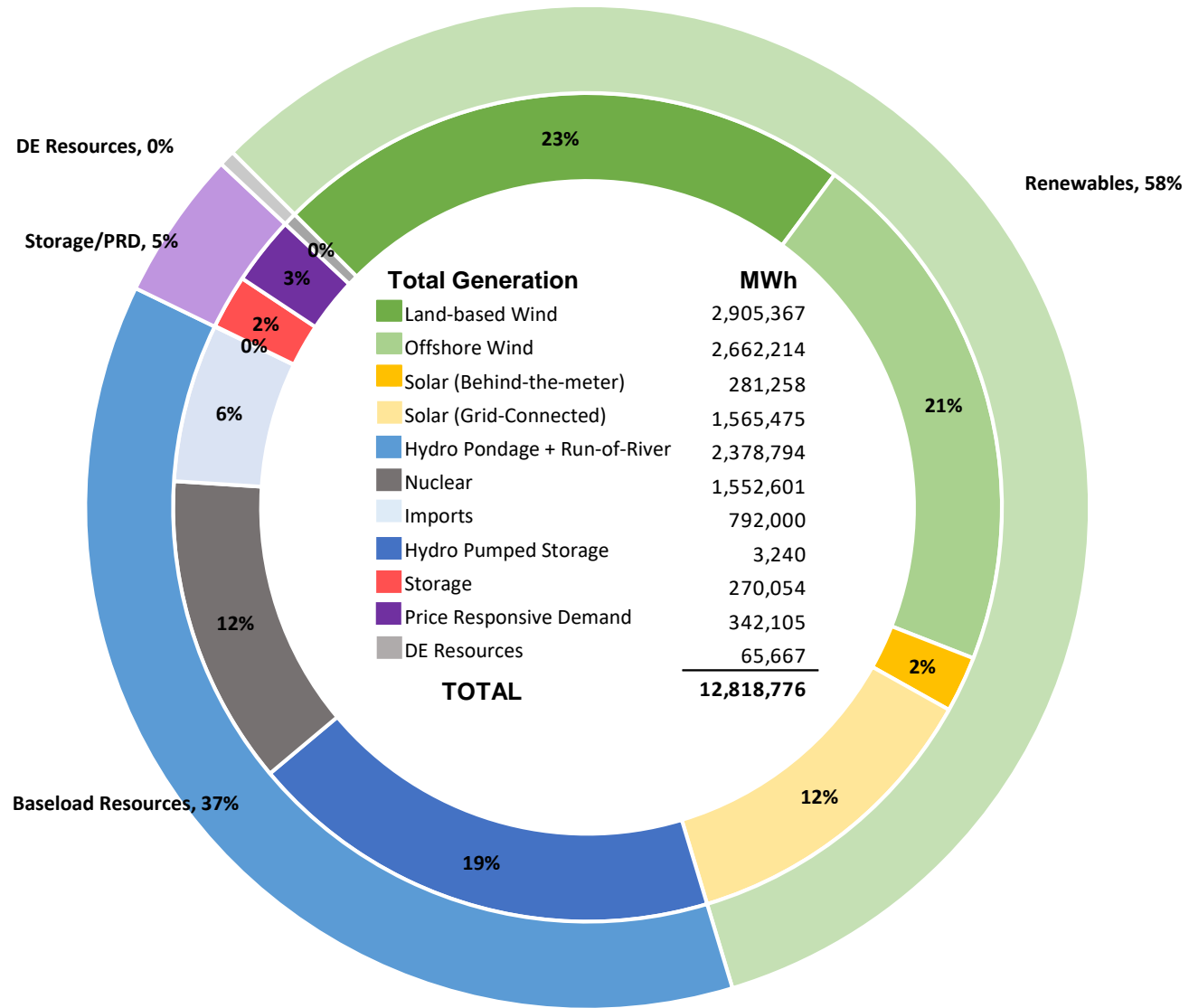


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

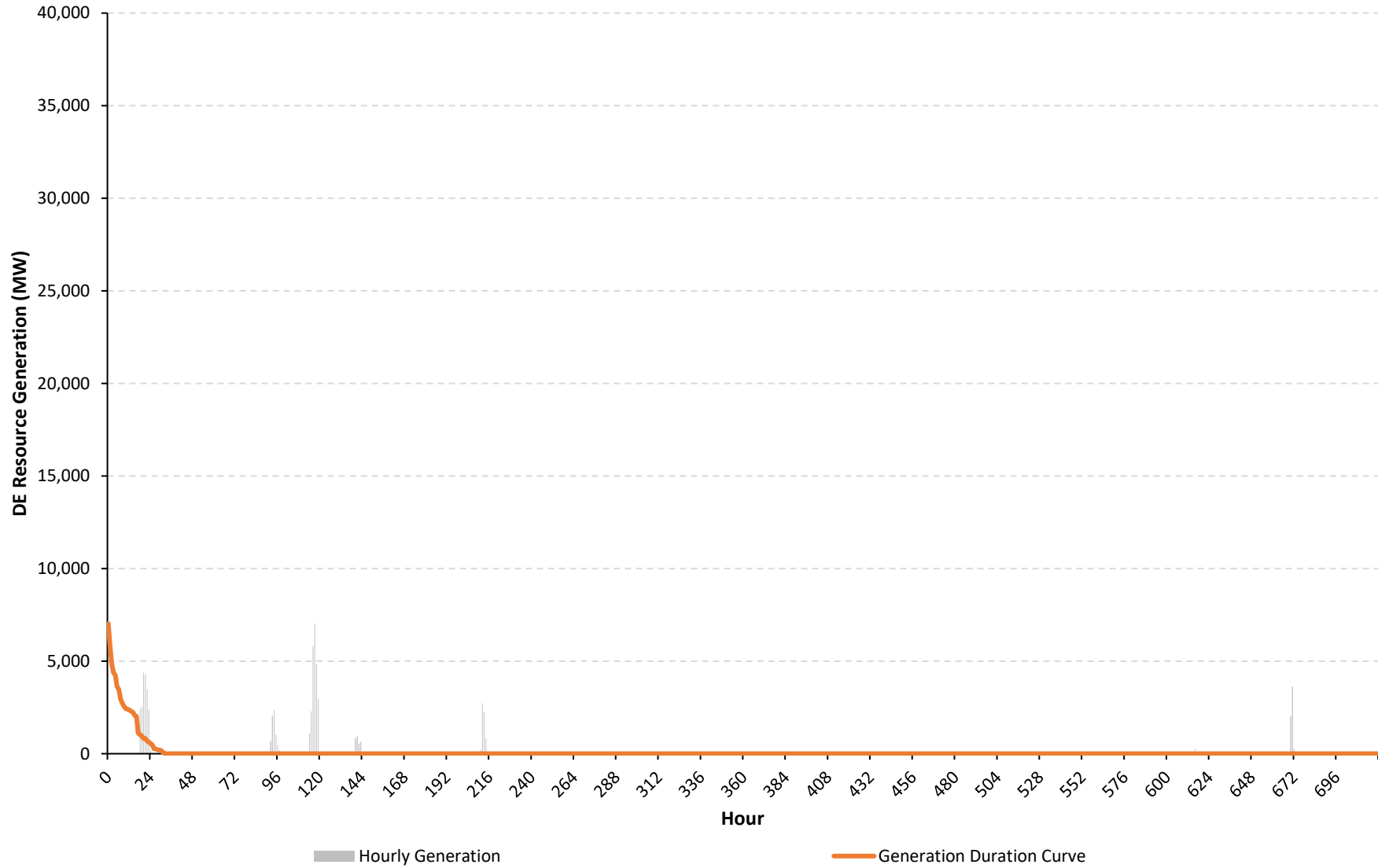
### Generation by Resource Type

CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore



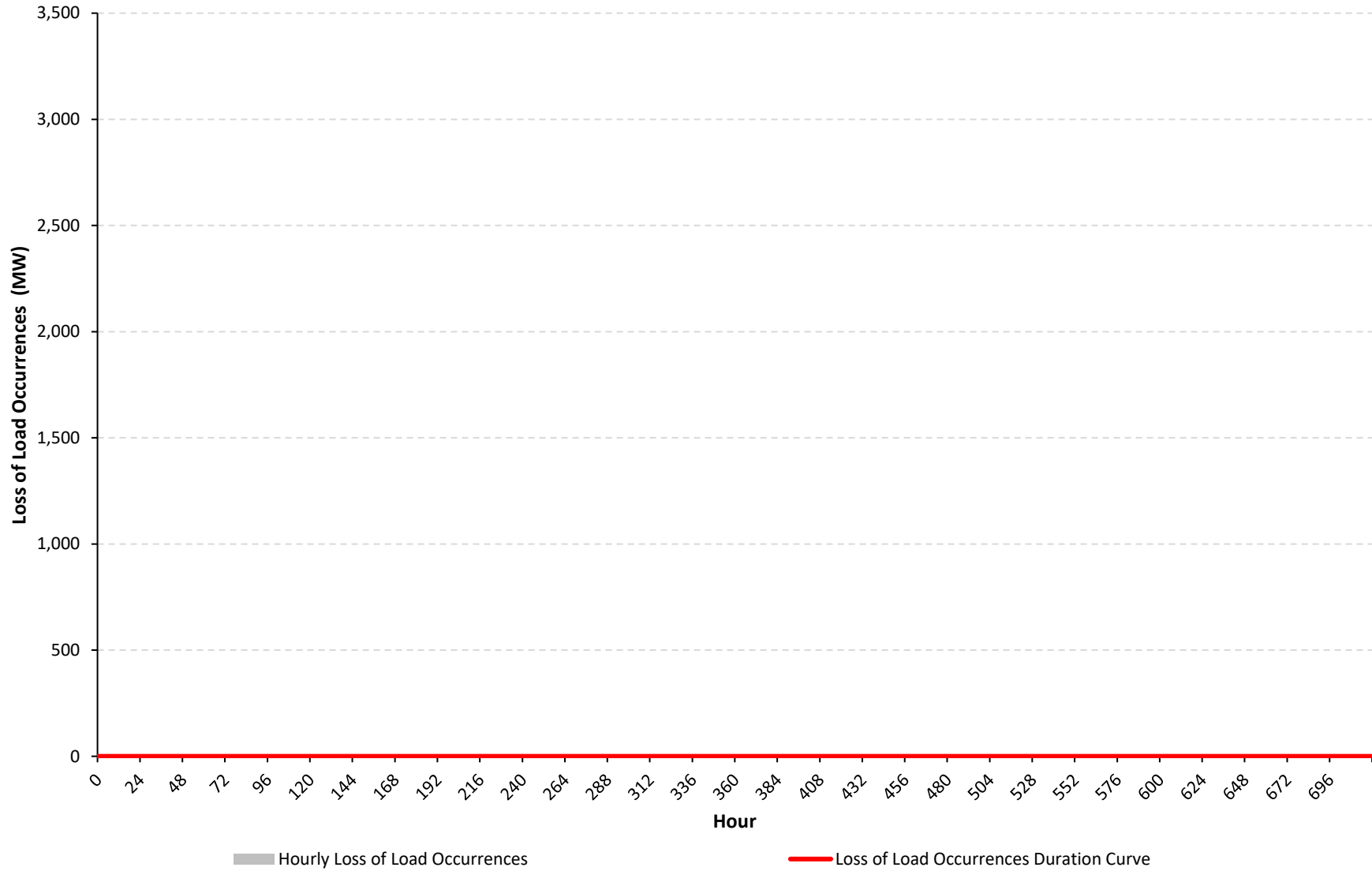
### NYCA DE Resource Generation (MW)

CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore



### NYCA Loss of Load Occurrences (MW)

CLCPA Case - Shoulder - GIT Resource Set - Severe Wind Storm Offshore



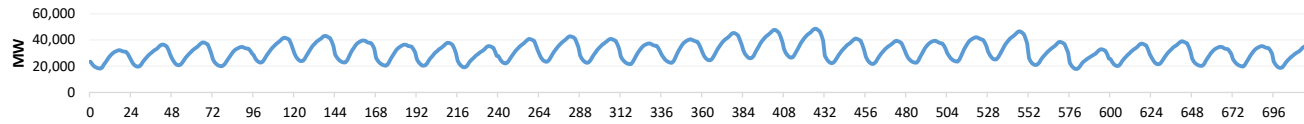
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 67 - CLCPA Case - Summer - GIT Resource Set - Drought**

### Hourly Results Summary

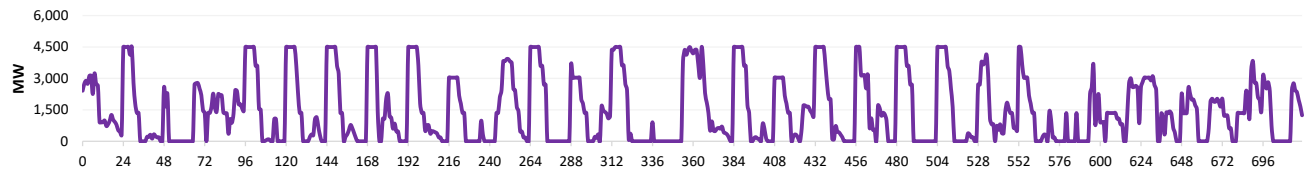
Case Name: CLCPA Case - Summer - GIT Resource Set - Drought

**Load During Modeling Period**



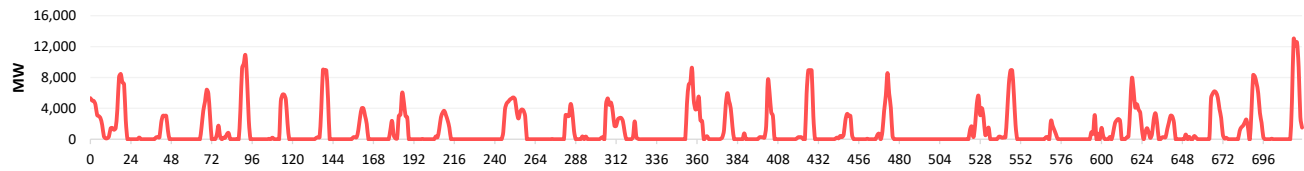
Loss of Load	
Total Hrs.	720
Total MWh	22,475,955
Avg. MW	31,216.6

**Price Responsive Demand Deployed During Modeling Period**



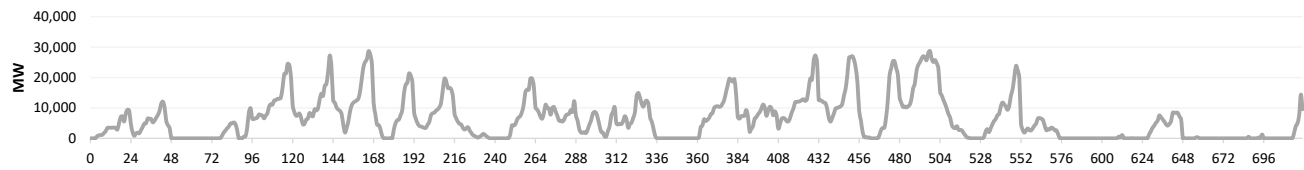
PRD Deployment	
Total Hrs.	498
Total MWh	1,066,878
Avg. MW	2,142.3

**Battery Energy Storage Deployed During Modeling Period**



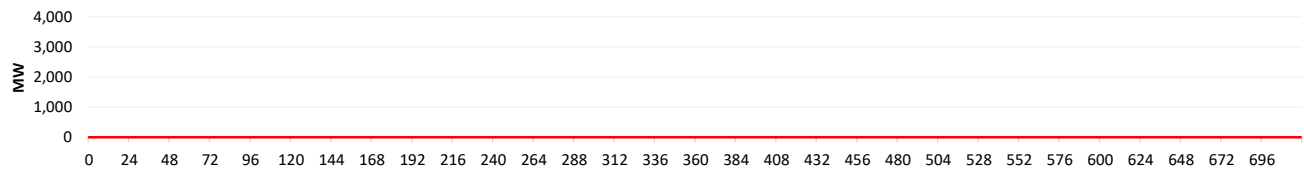
Battery Deployment	
Total Hrs.	307
Total MWh	874,767
Avg. MW	2,849.4

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	520
Total MWh	4,616,646
Avg. MW	8,878.2

**Loss of Load Occurrences During Modeling Period**

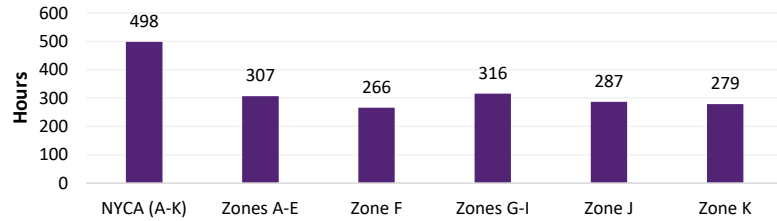


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

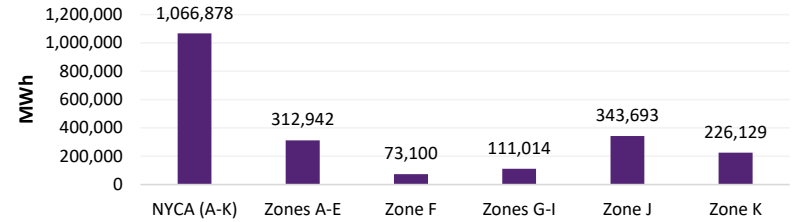
### Full Period Results Summary

Case Name: CLCPA Case - Summer - GIT Resource Set - Drought

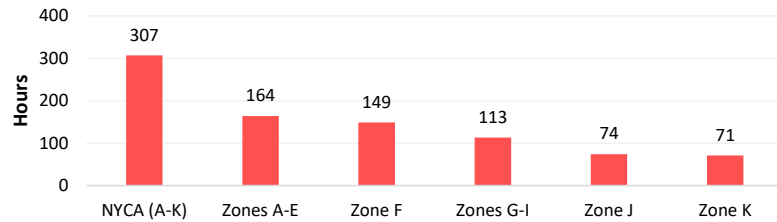
#### Hours Price Responsive Demand Deployed



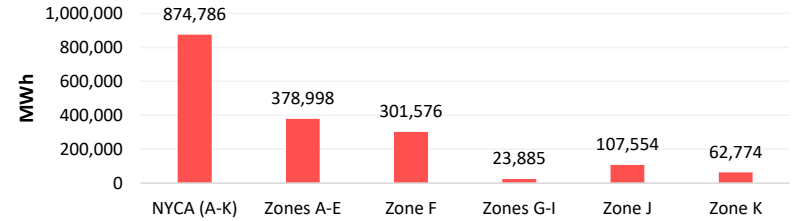
#### Total MWh Price Responsive Demand Deployed



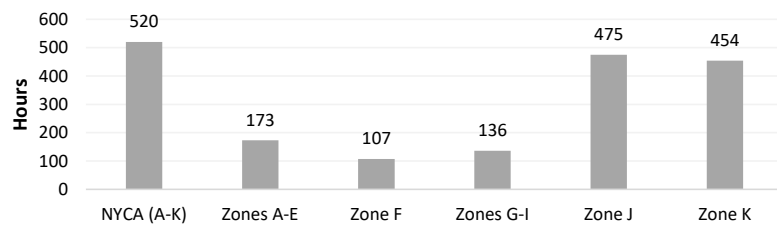
#### Hours Battery Energy Storage Deployed



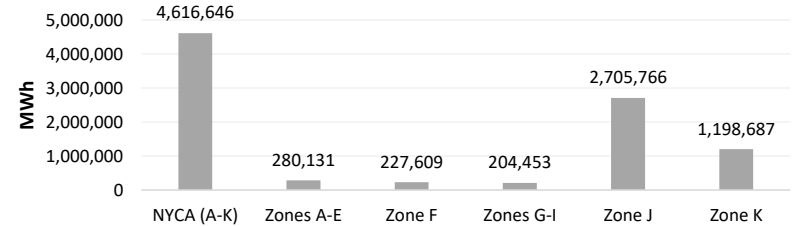
#### Total MWh Battery Energy Storage Deployed



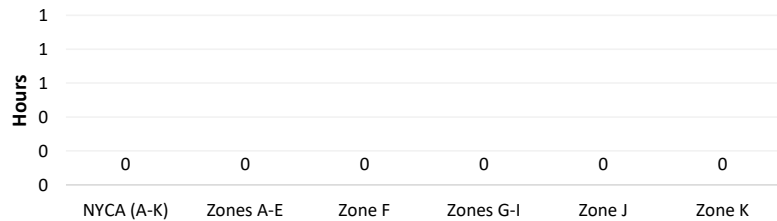
#### Hours DE Resources Deployed



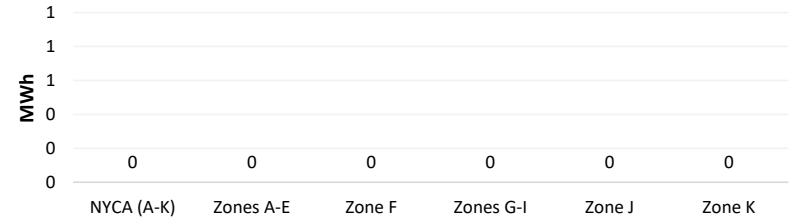
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences

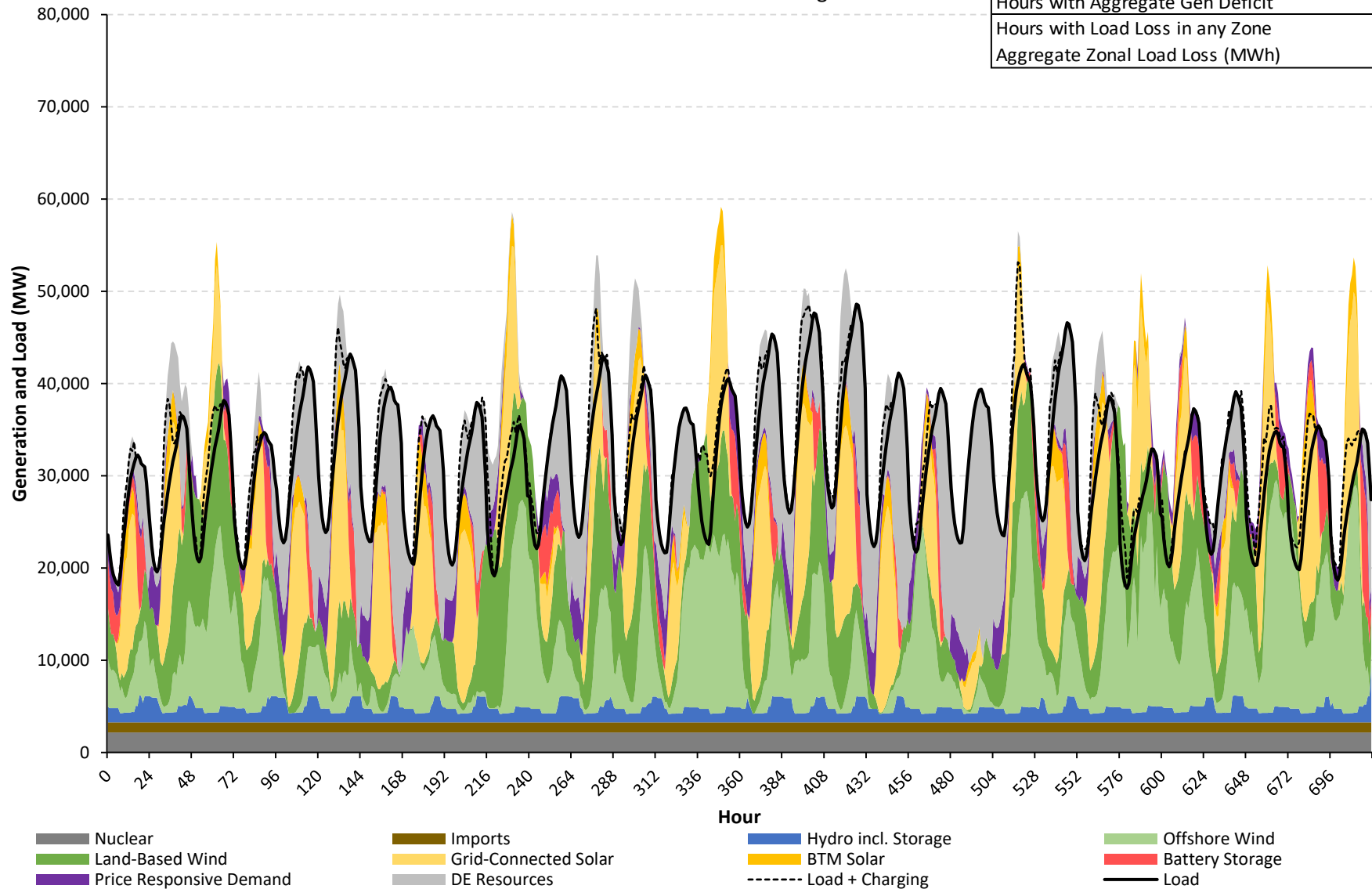


#### Total MWh of Loss of Load Occurrences



### NYCA Hourly Load/Generation Balance by Resource Type CLCPA Case - Summer - GIT Resource Set - Drought

Aggregate Load in Period (MWh)	22,475,955
Aggregate Gen in Period (MWh)	25,529,515
Gen Surplus/Deficit (MWh)	3,053,560
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0



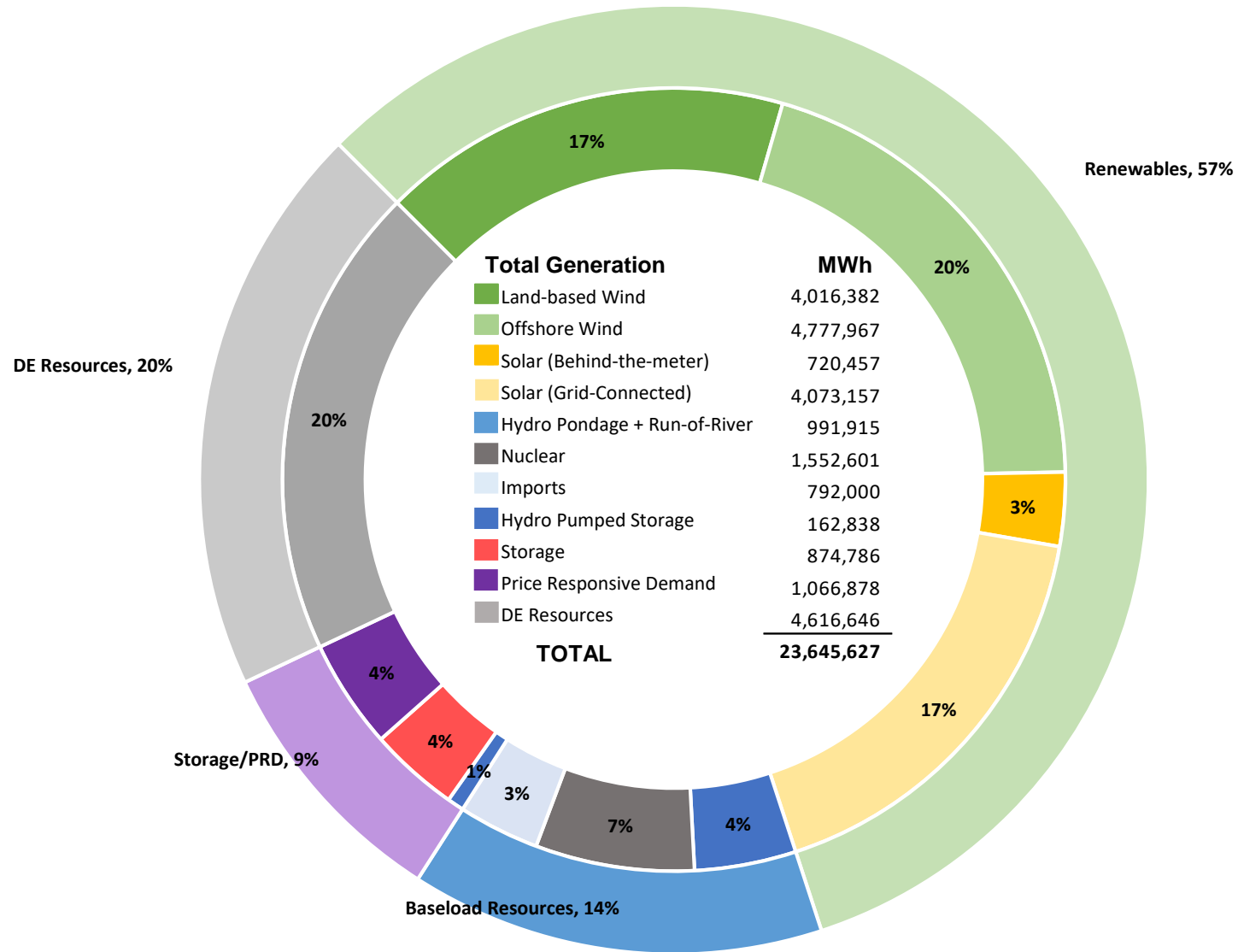
**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

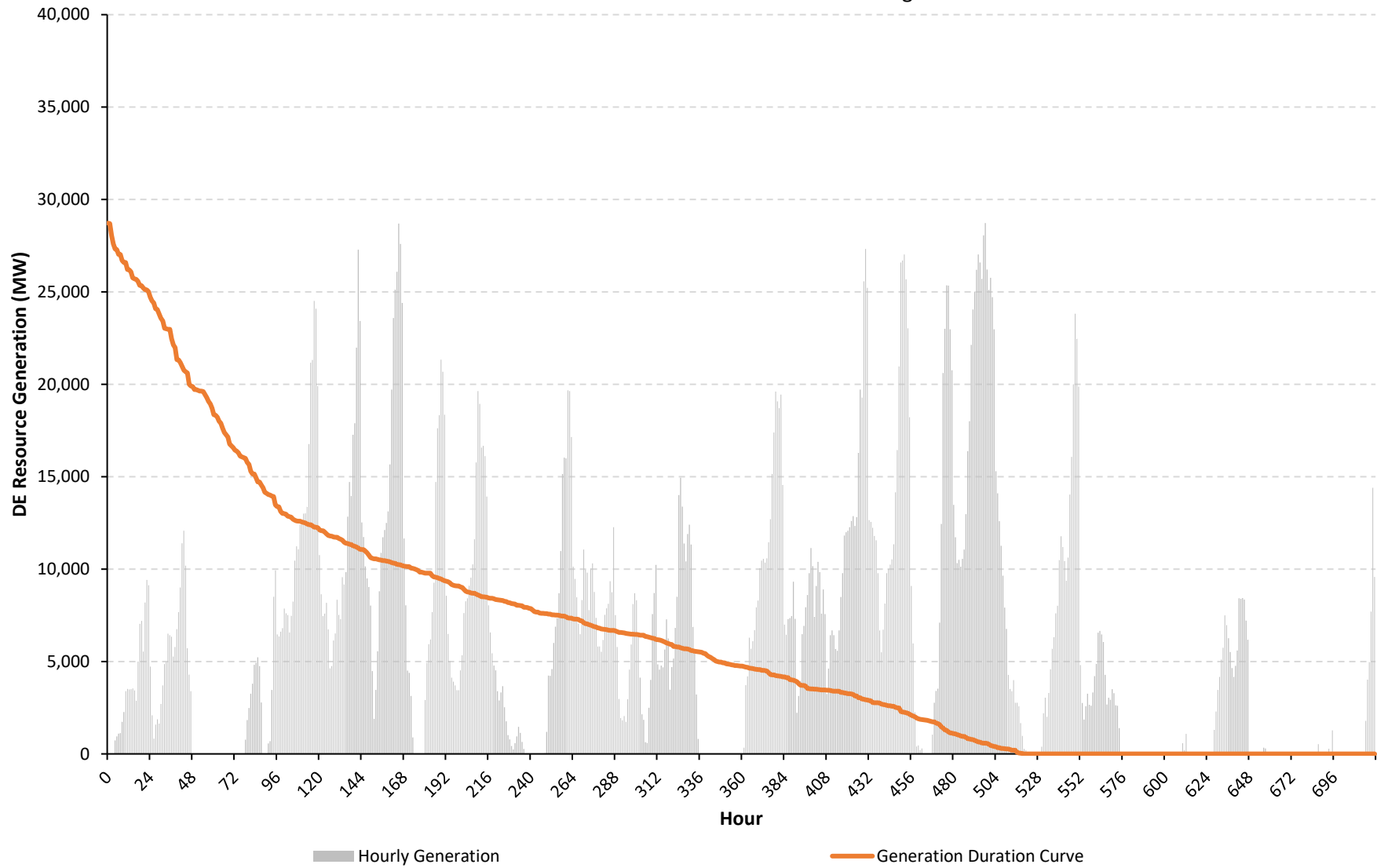


### Generation by Resource Type

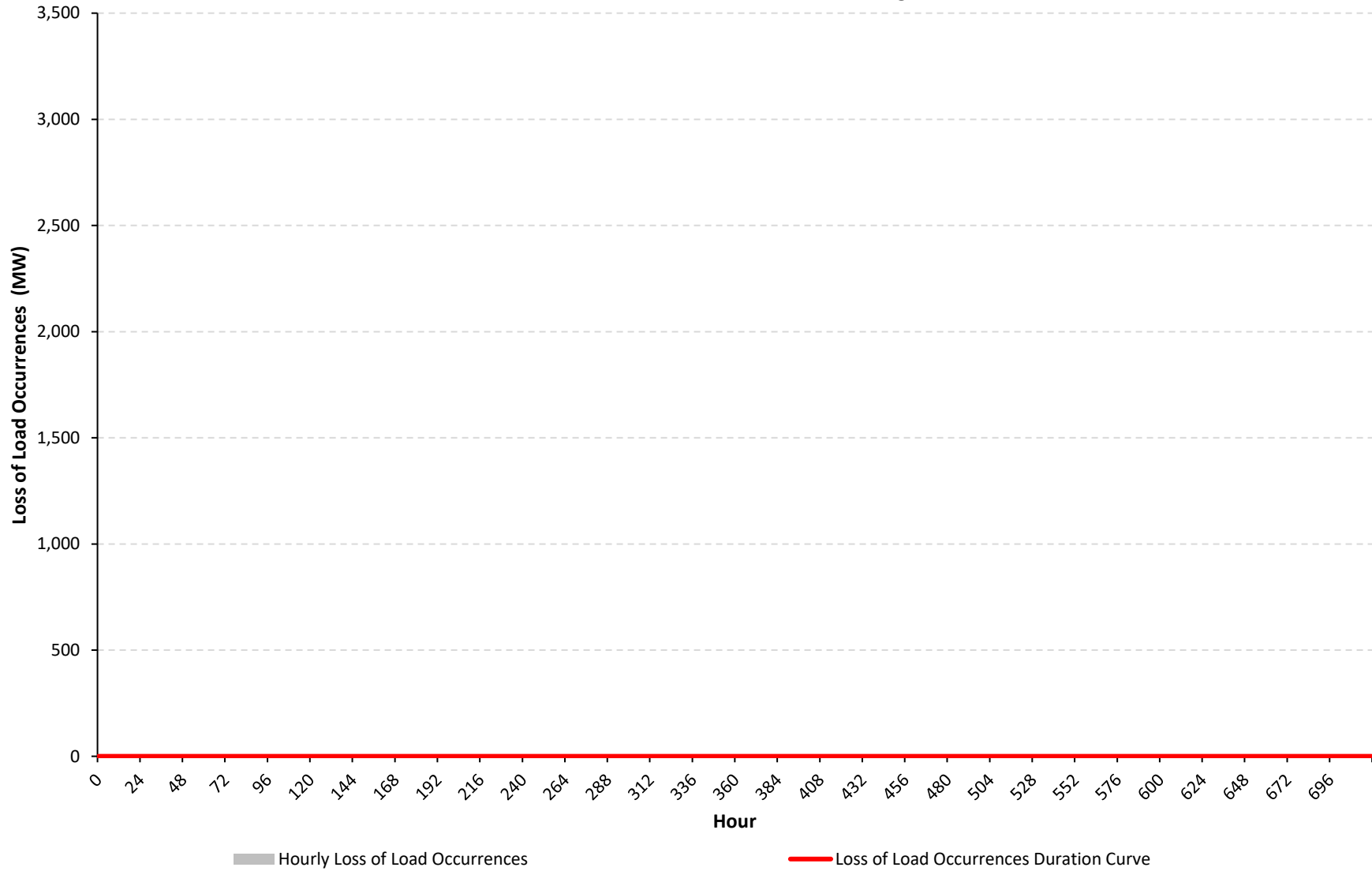
CLCPA Case - Summer - GIT Resource Set - Drought



### NYCA DE Resource Generation (MW) CLCPA Case - Summer - GIT Resource Set - Drought



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Summer - GIT Resource Set - Drought



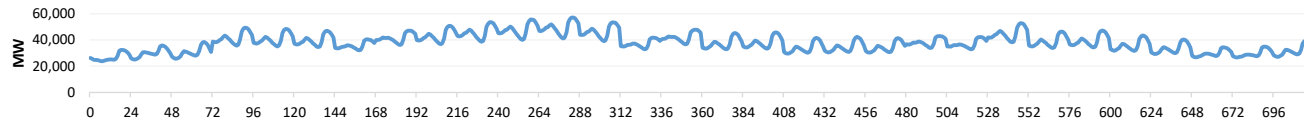
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 68 - CLCPA Case - Winter - GIT Resource Set - Drought**

**Hourly Results Summary**

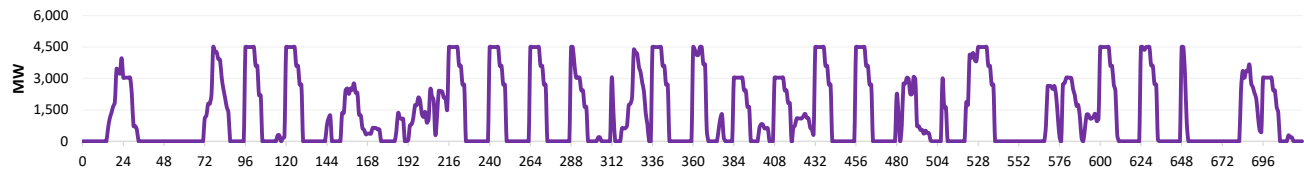
Case Name: CLCPA Case - Winter - GIT Resource Set - Drought

**Load During Modeling Period**



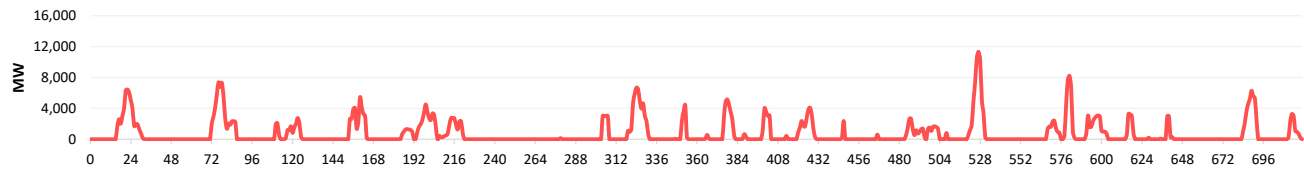
Loss of Load	
Total Hrs.	720
Total MWh	27,322,037
Avg. MW	37,947.3

**Price Responsive Demand Deployed During Modeling Period**



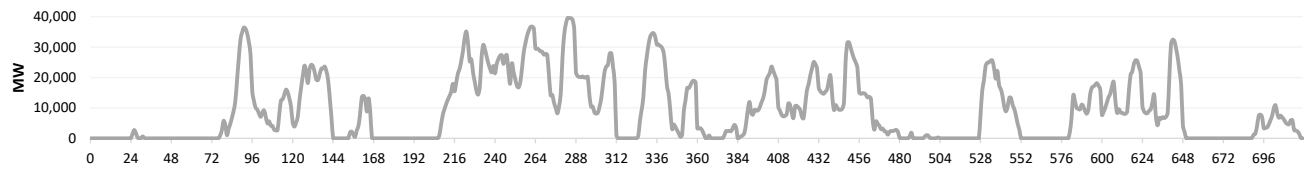
PRD Deployment	
Total Hrs.	376
Total MWh	952,384
Avg. MW	2,532.9

**Battery Energy Storage Deployed During Modeling Period**



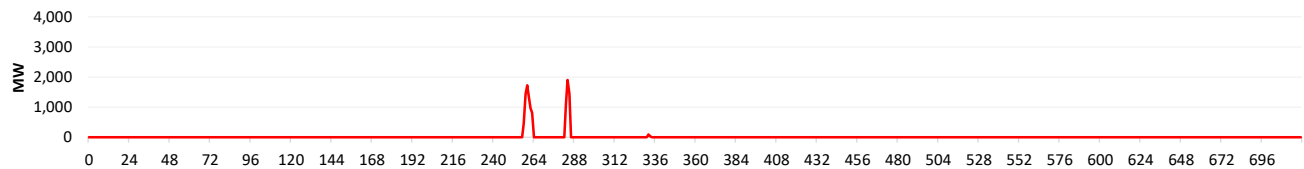
Battery Deployment	
Total Hrs.	232
Total MWh	568,033
Avg. MW	2,448.4

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	470
Total MWh	6,696,533
Avg. MW	14,247.9

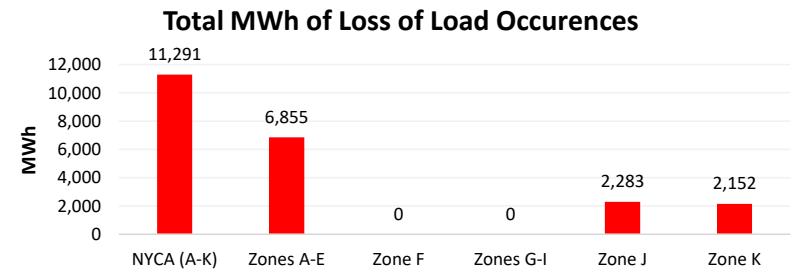
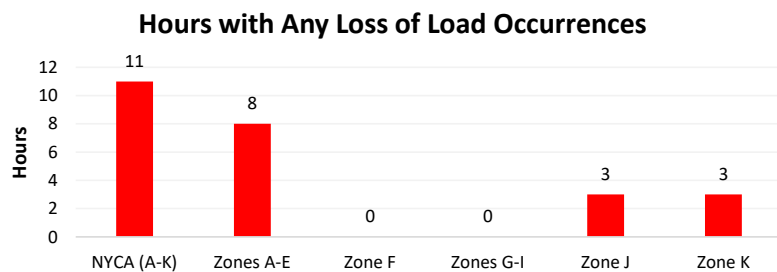
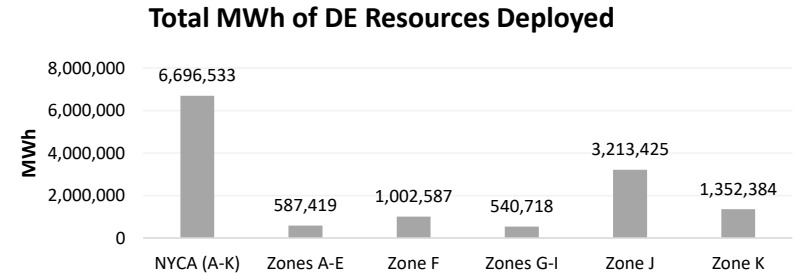
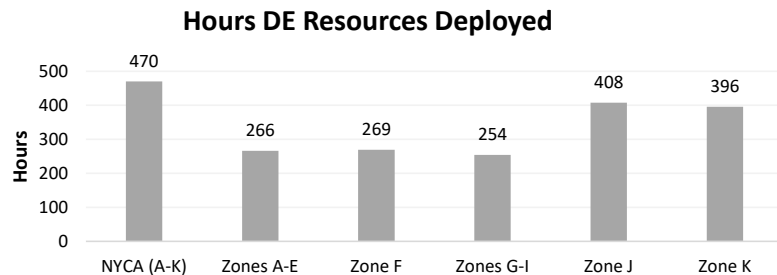
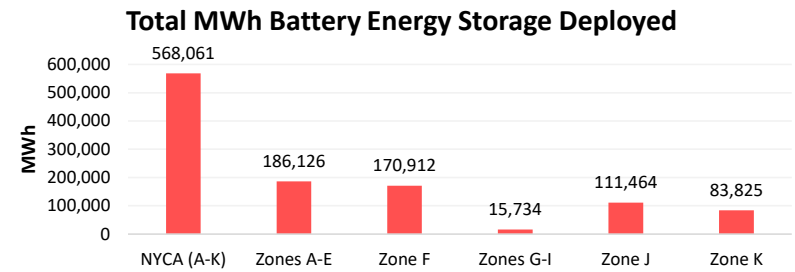
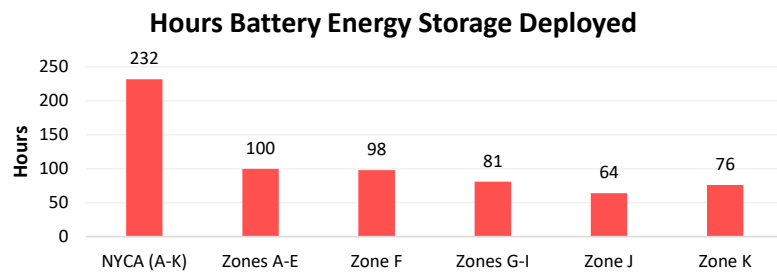
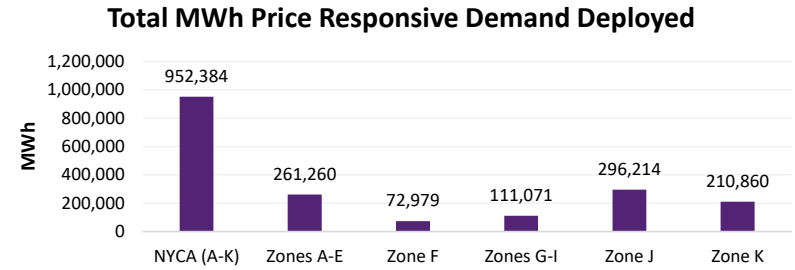
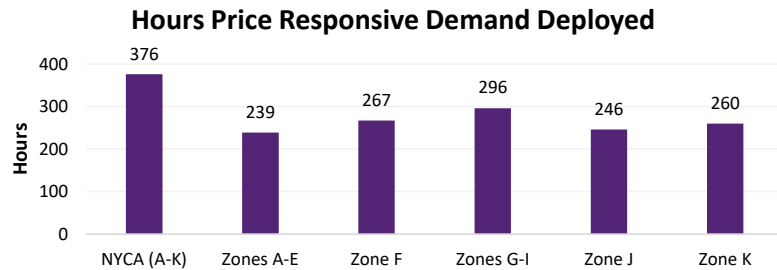
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	11
Total MWh	11,291
Avg. MW	1,026.4

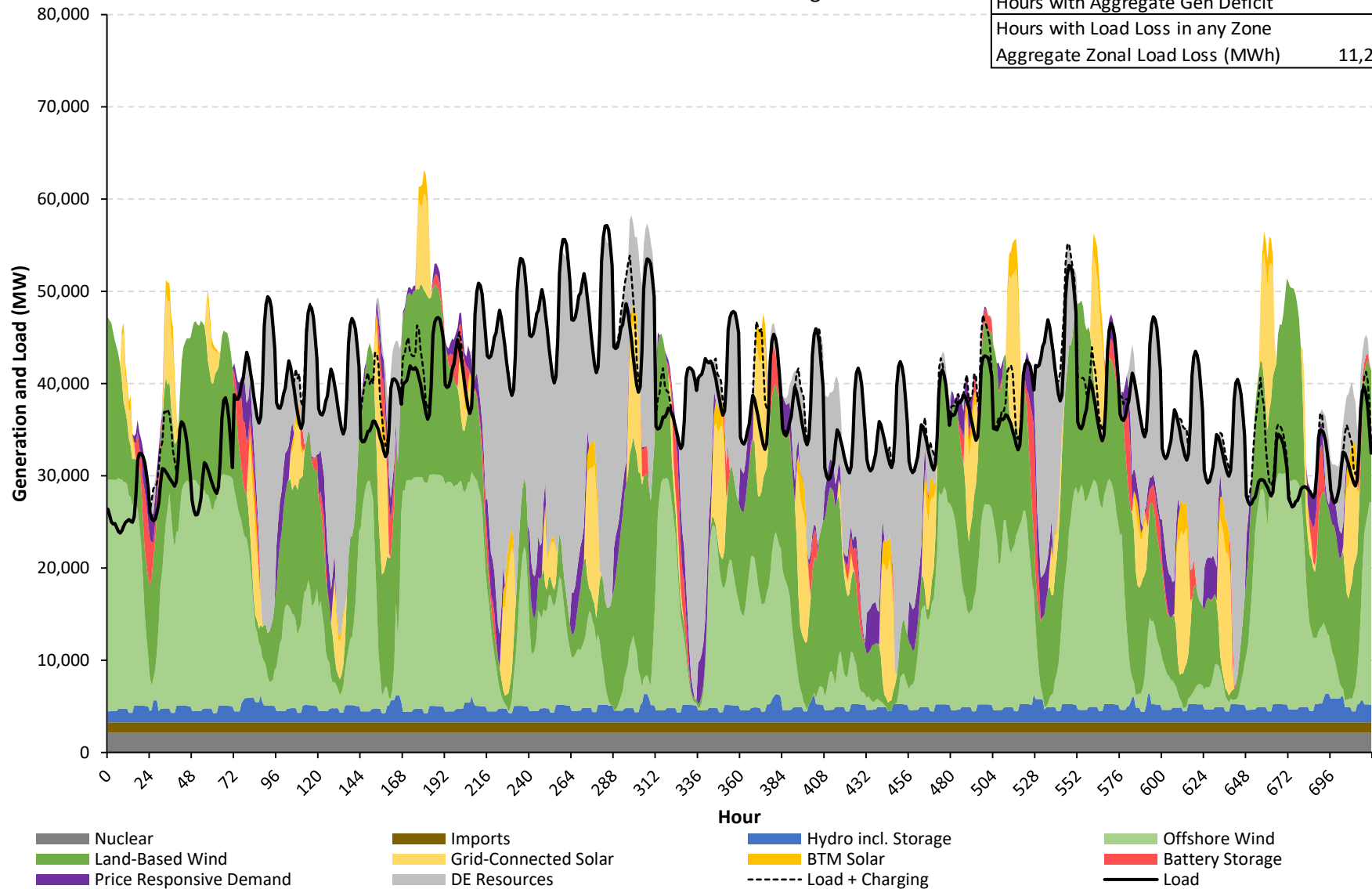
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Drought



### NYCA Hourly Load/Generation Balance by Resource Type CLCPA Case - Winter - GIT Resource Set - Drought

Aggregate Load in Period (MWh)	27,322,037
Aggregate Gen in Period (MWh)	30,550,285
Gen Surplus/Deficit (MWh)	3,228,248
Hours with Aggregate Gen Deficit	11
Hours with Load Loss in any Zone	11
Aggregate Zonal Load Loss (MWh)	11,291

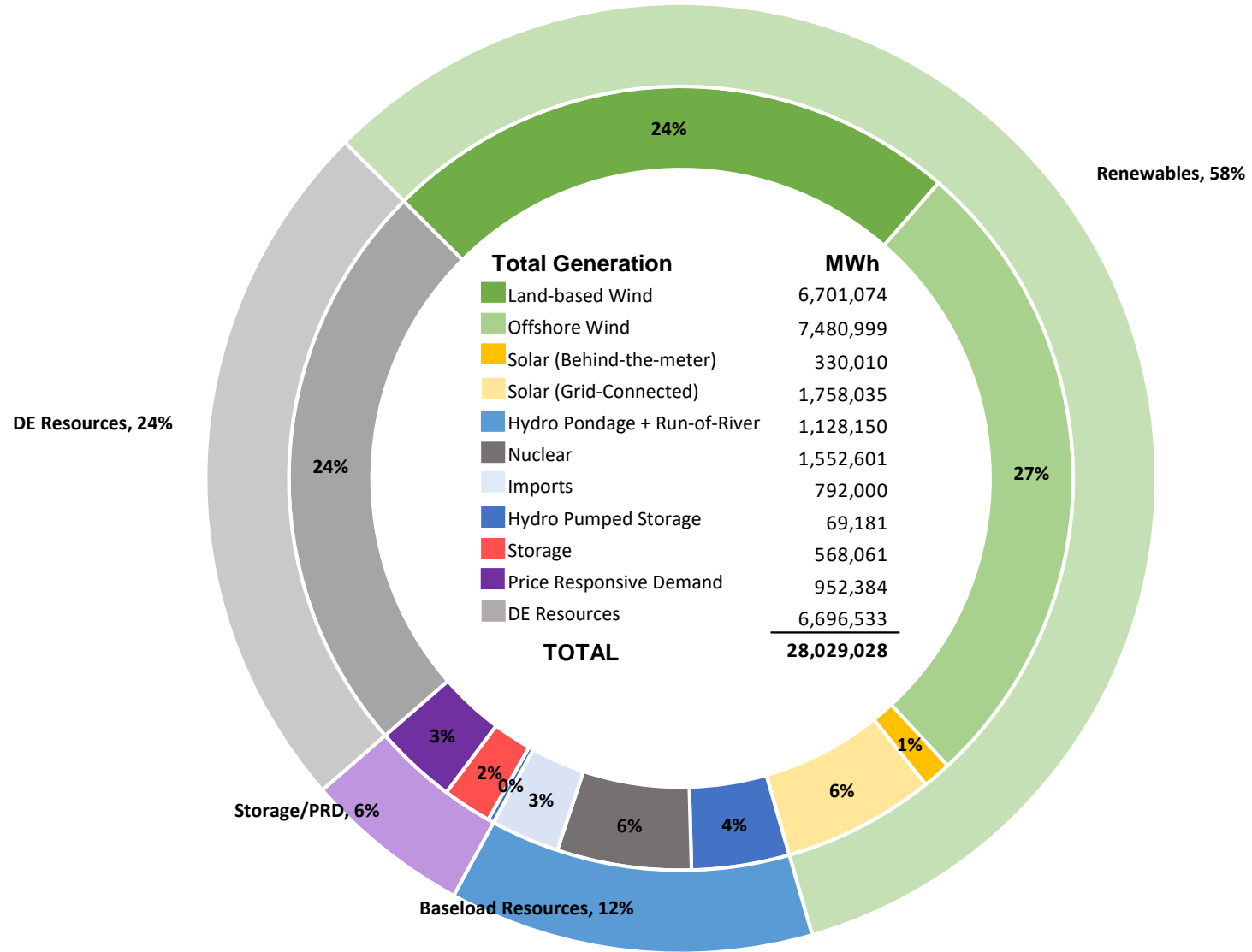


**Note:**

[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

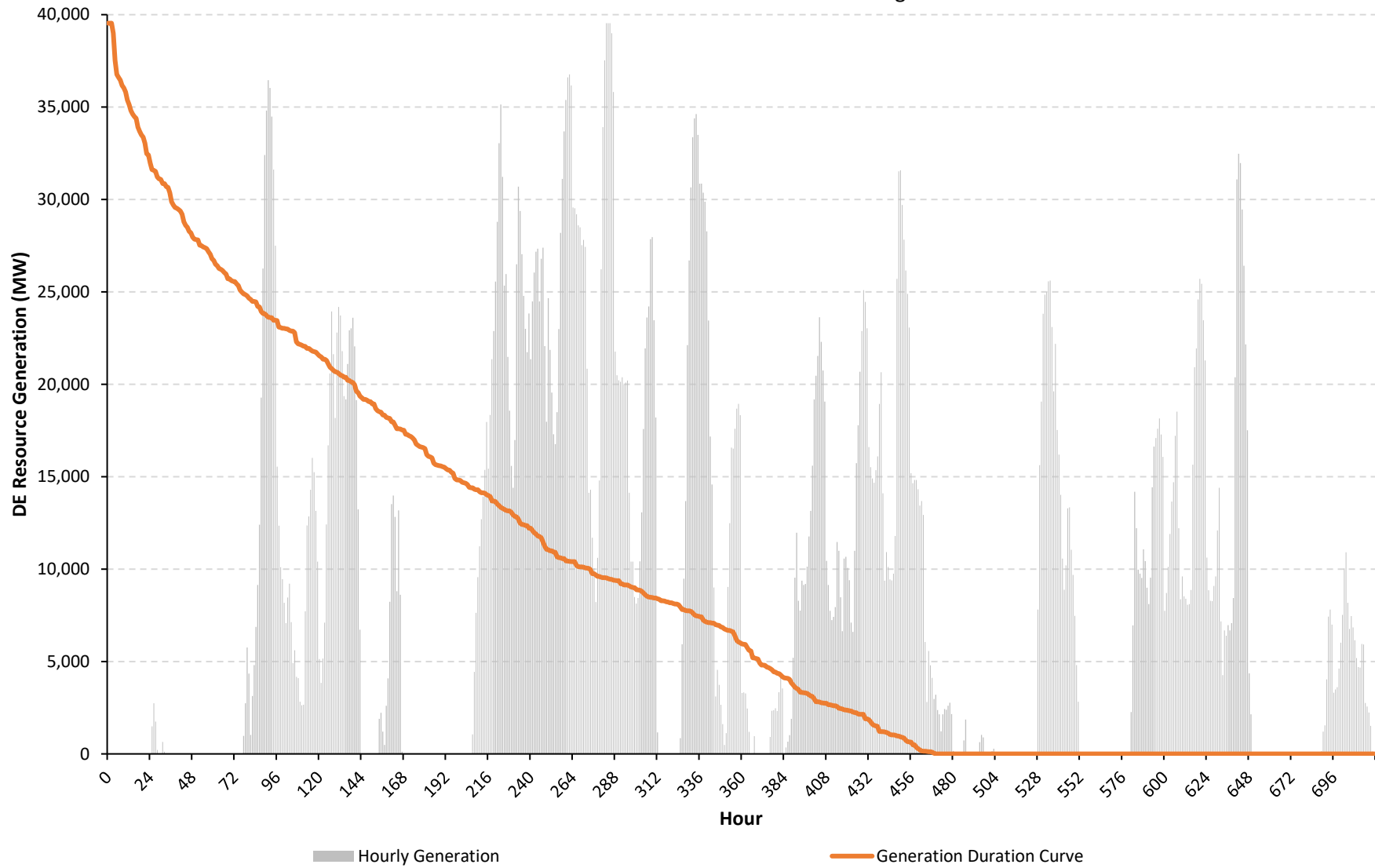
### Generation by Resource Type

CLCPA Case - Winter - GIT Resource Set - Drought

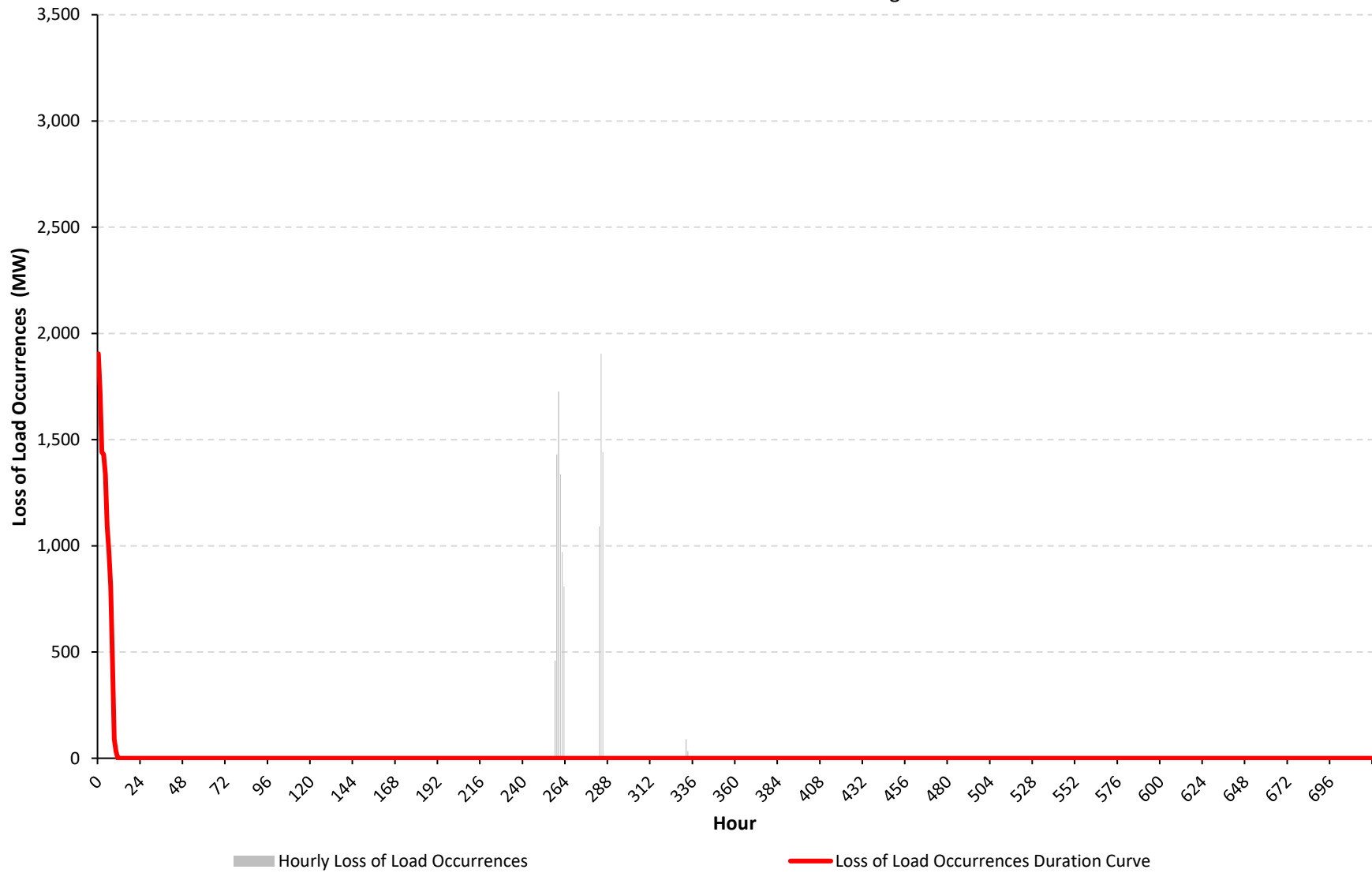




### NYCA DE Resource Generation (MW) CLCPA Case - Winter - GIT Resource Set - Drought



### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Drought



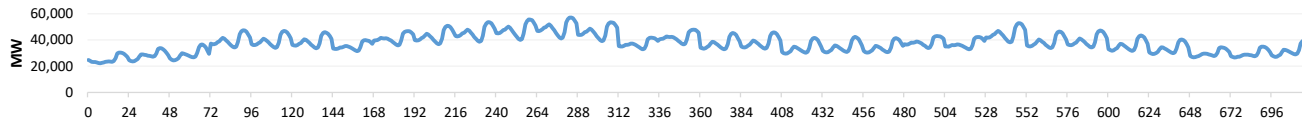
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 69 - CLCPA Case - Winter - GIT Resource Set - Icing**

**Hourly Results Summary**

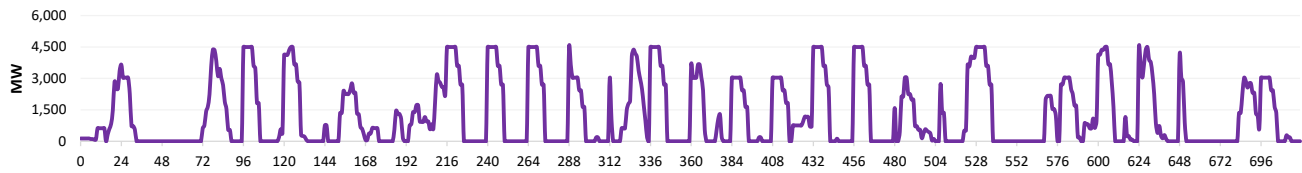
Case Name: CLCPA Case - Winter - GIT Resource Set - Icing

**Load During Modeling Period**



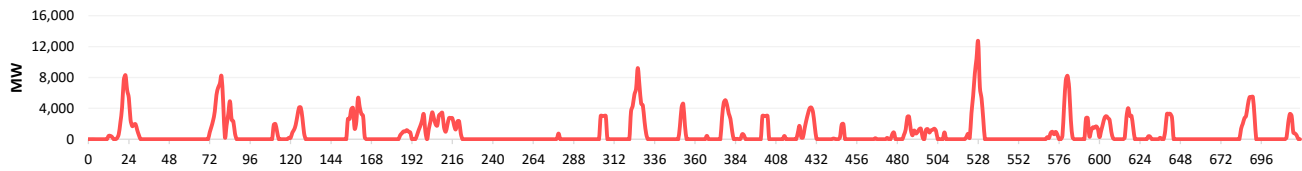
Loss of Load	
Total Hrs.	720
Total MWh	27,087,588
Avg. MW	37,621.6

**Price Responsive Demand Deployed During Modeling Period**



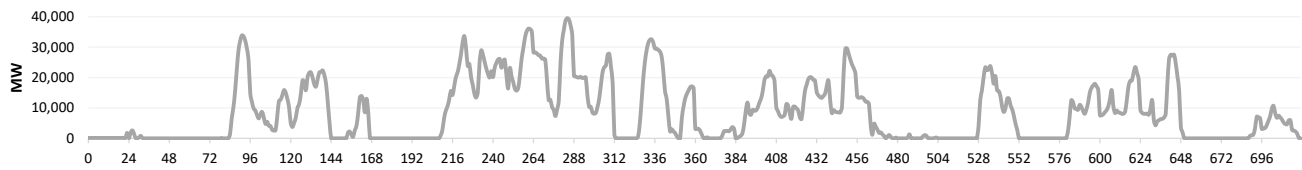
PRD Deployment	
Total Hrs.	398
Total MWh	906,457
Avg. MW	2,277.5

**Battery Energy Storage Deployed During Modeling Period**



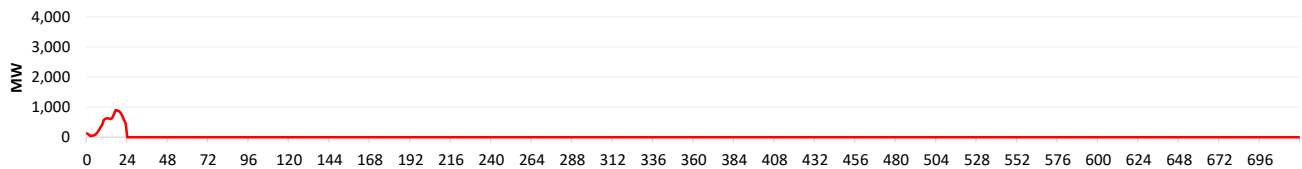
Battery Deployment	
Total Hrs.	245
Total MWh	577,476
Avg. MW	2,357.0

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	480
Total MWh	6,145,568
Avg. MW	12,803.3

**Loss of Load Occurrences During Modeling Period**

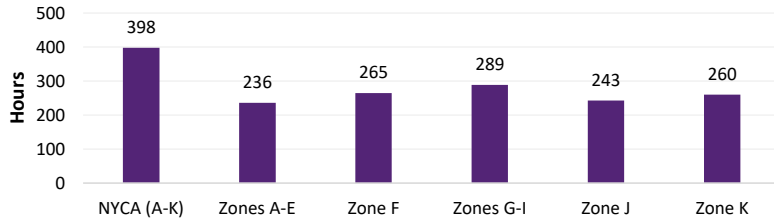


Loss of Load Occurrences	
Total Hrs.	24
Total MWh	11,242
Avg. MW	468.4

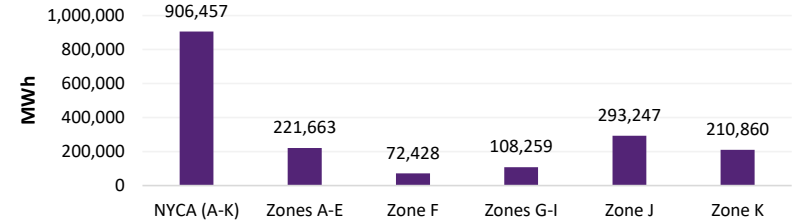
### Full Period Results Summary

Case Name: CLCPA Case - Winter - GIT Resource Set - Icing

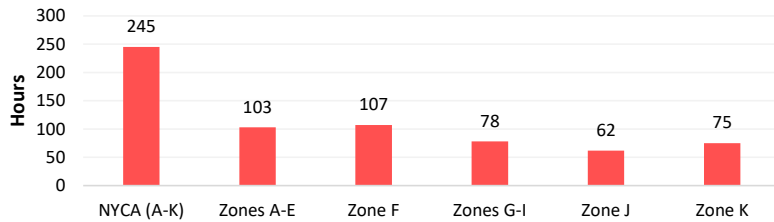
**Hours Price Responsive Demand Deployed**



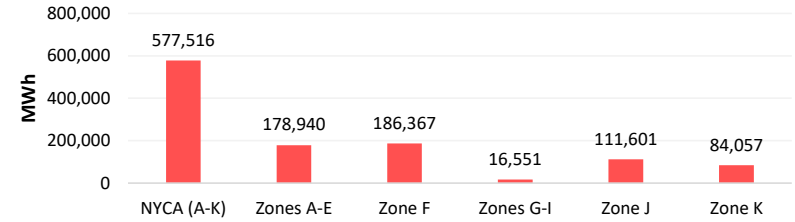
**Total MWh Price Responsive Demand Deployed**



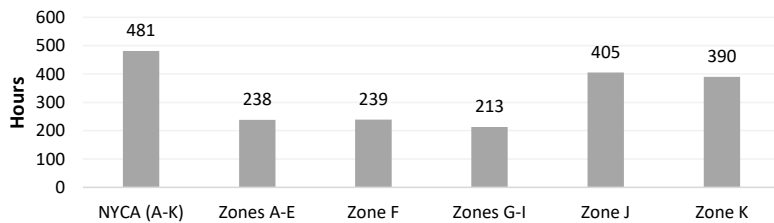
**Hours Battery Energy Storage Deployed**



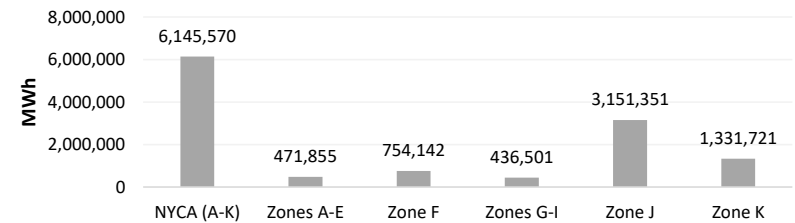
**Total MWh Battery Energy Storage Deployed**



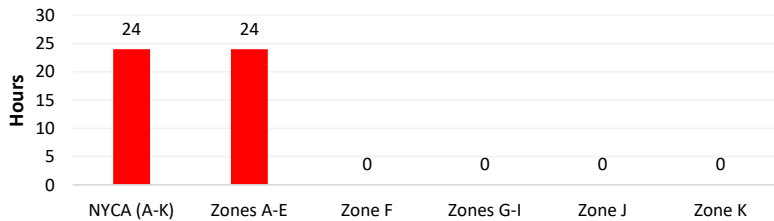
**Hours DE Resources Deployed**



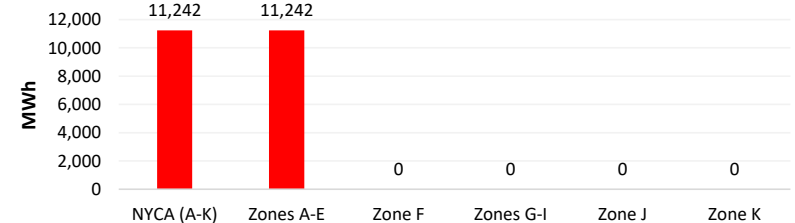
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



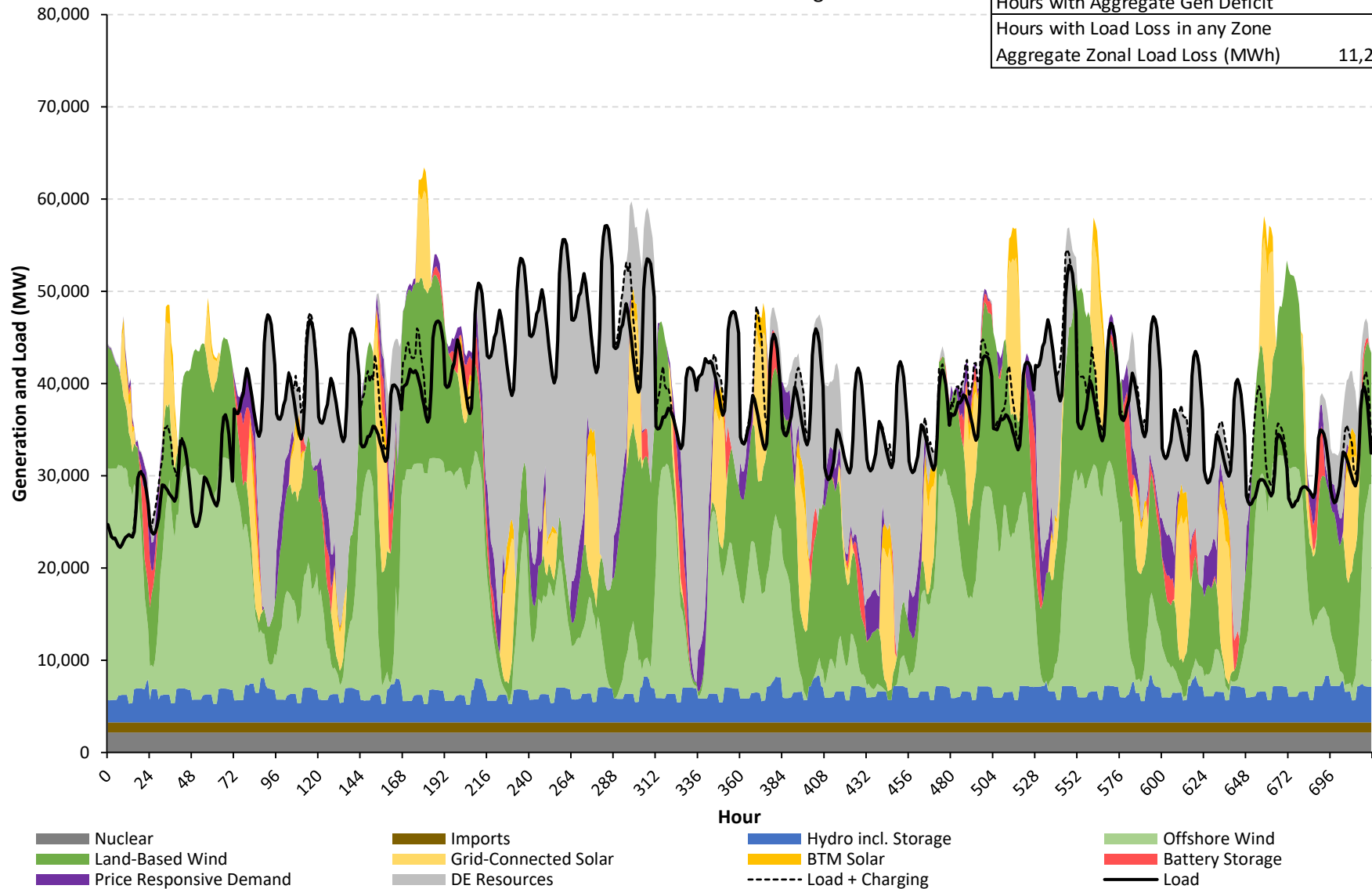
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

CLCPA Case - Winter - GIT Resource Set - Icing

Aggregate Load in Period (MWh)	27,087,588
Aggregate Gen in Period (MWh)	30,743,382
Gen Surplus/Deficit (MWh)	3,655,794
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	24
Aggregate Zonal Load Loss (MWh)	11,242

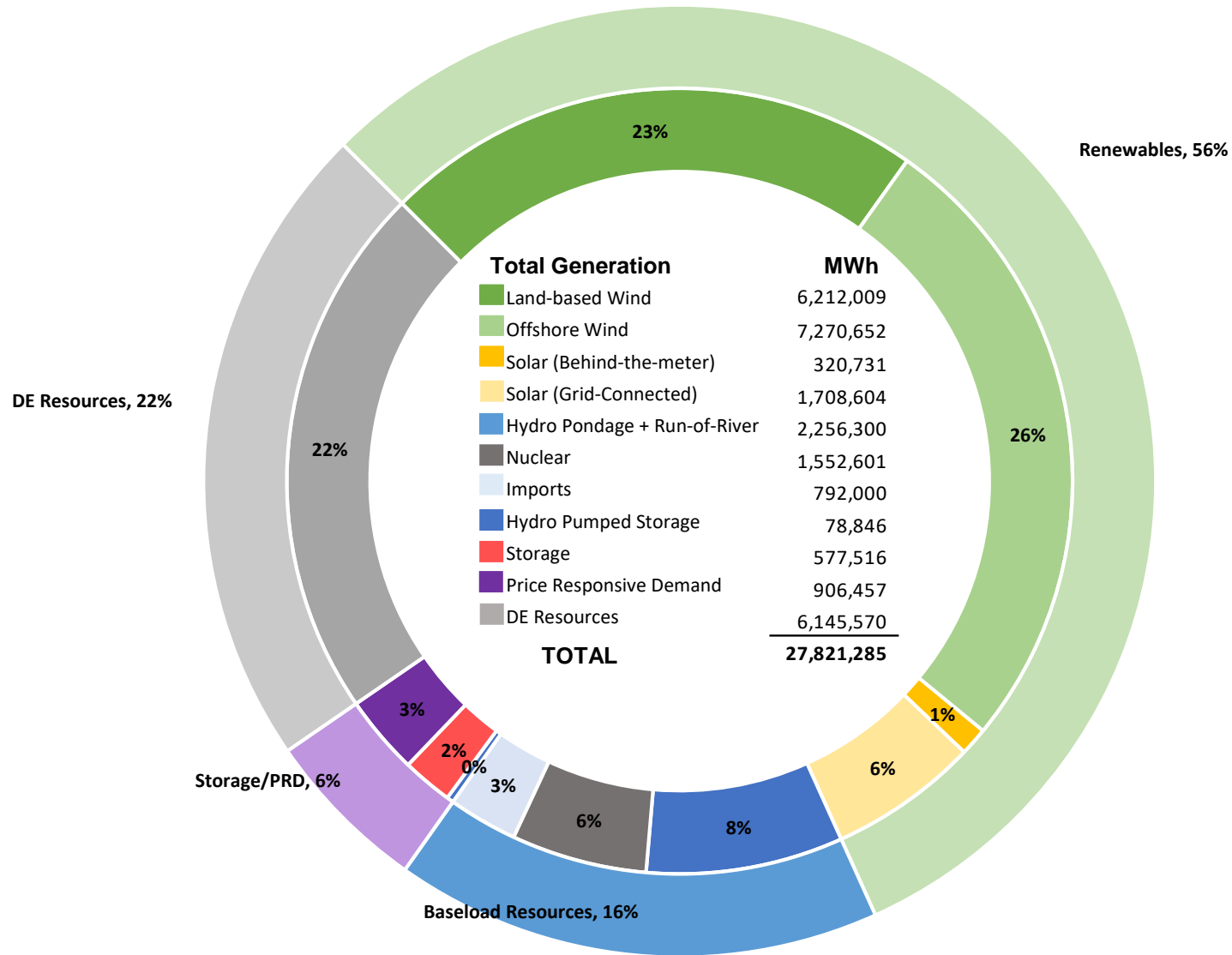


**Note:**

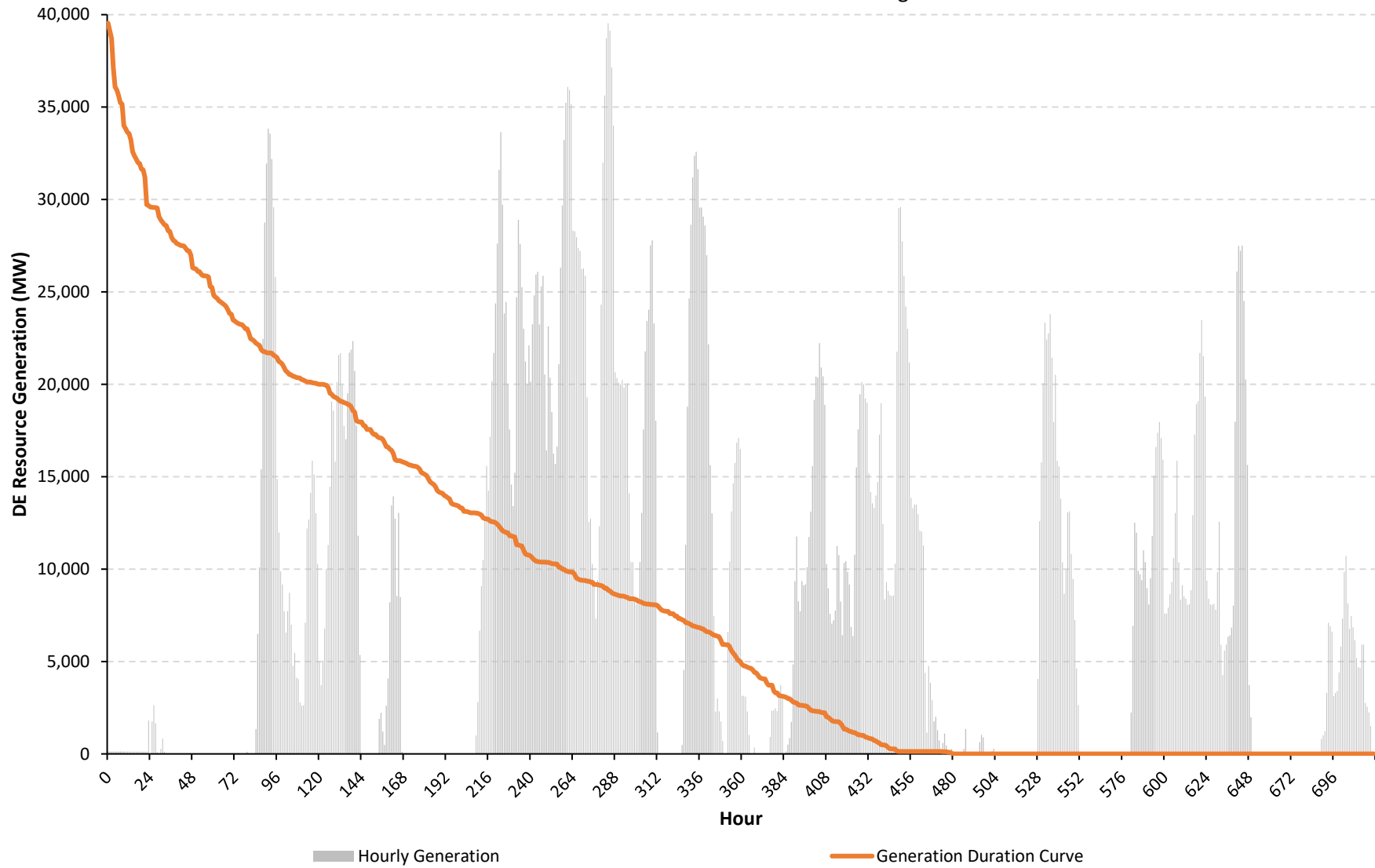
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

CLCPA Case - Winter - GIT Resource Set - Icing

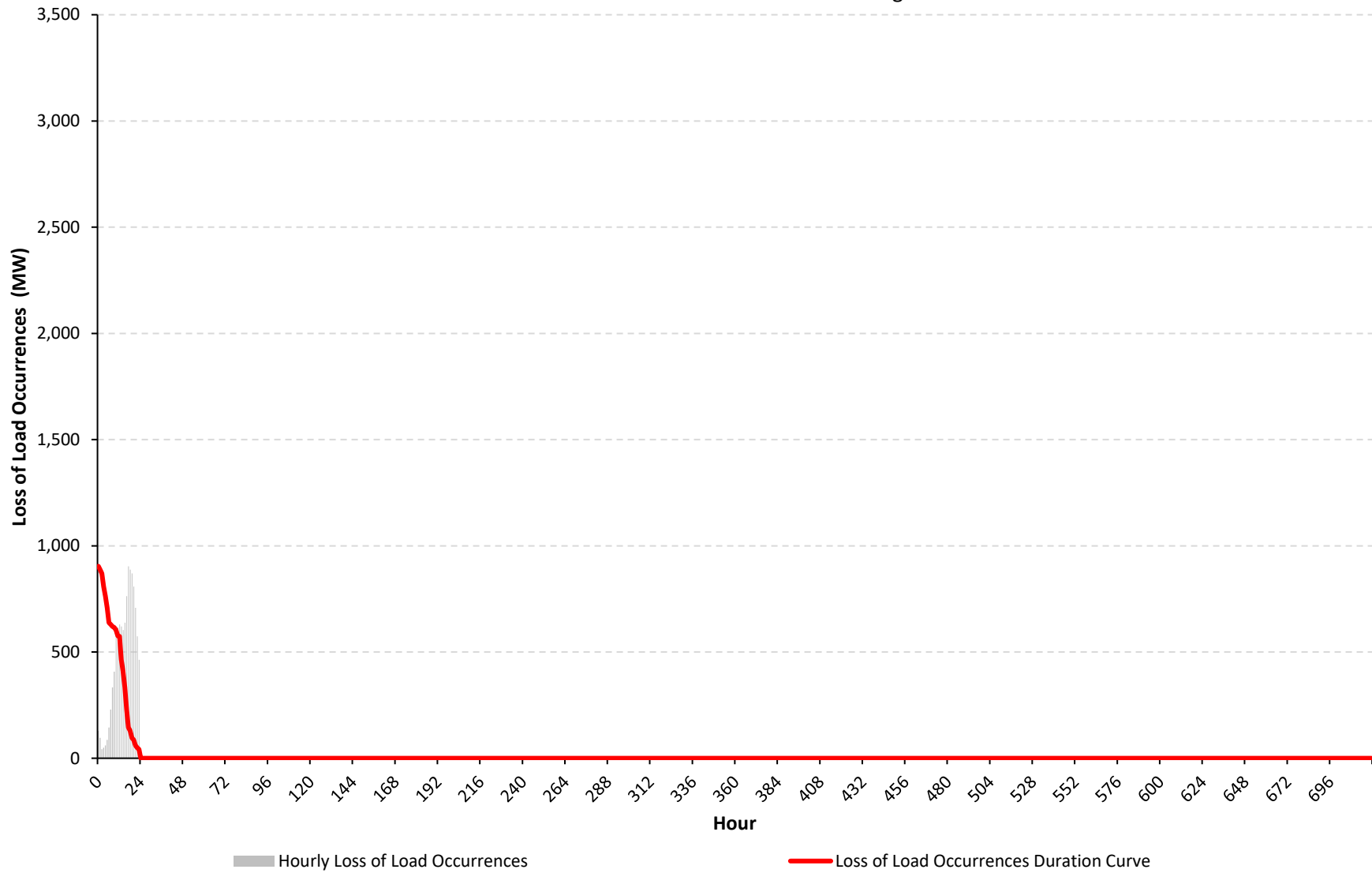


### NYCA DE Resource Generation (MW) CLCPA Case - Winter - GIT Resource Set - Icing





### NYCA Loss of Load Occurrences (MW) CLCPA Case - Winter - GIT Resource Set - Icing



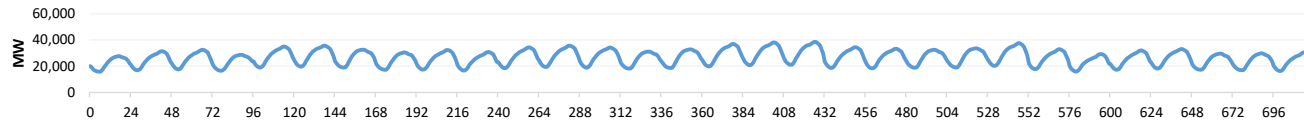
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 70 - Reference Case - Summer - GIT Resource Set**

### Hourly Results Summary

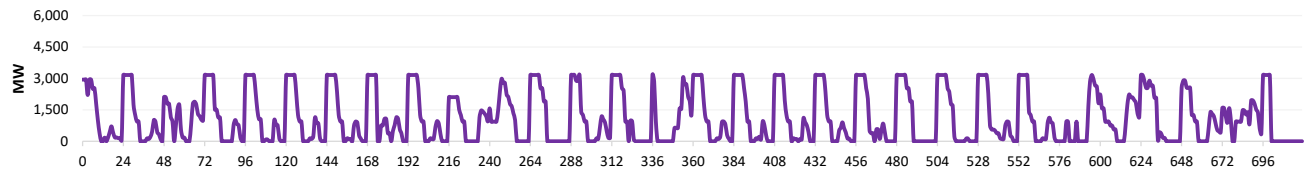
Case Name: Reference Case - Summer - GIT Resource Set

**Load During Modeling Period**



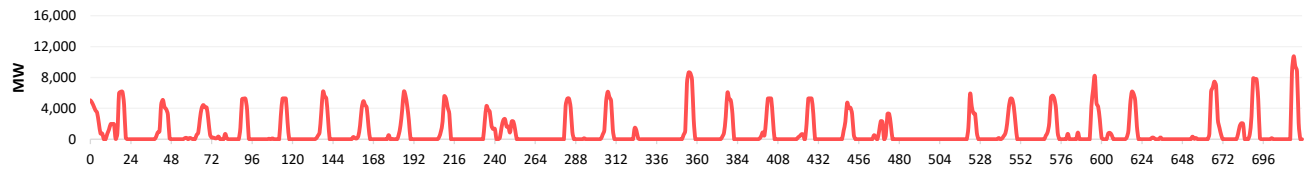
Loss of Load	
Total Hrs.	720
Total MWh	19,012,814
Avg. MW	26,406.7

**Price Responsive Demand Deployed During Modeling Period**



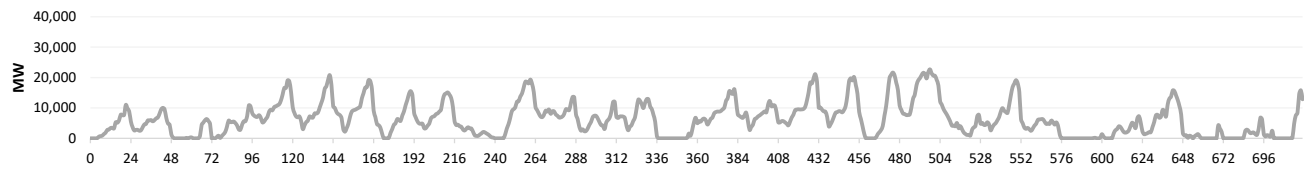
PRD Deployment	
Total Hrs.	488
Total MWh	805,597
Avg. MW	1,650.8

**Battery Energy Storage Deployed During Modeling Period**



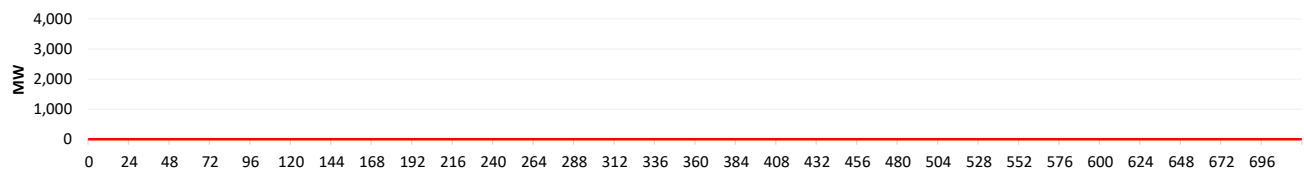
Battery Deployment	
Total Hrs.	254
Total MWh	703,811
Avg. MW	2,770.9

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	609
Total MWh	4,575,827
Avg. MW	7,513.7

**Loss of Load Occurrences During Modeling Period**

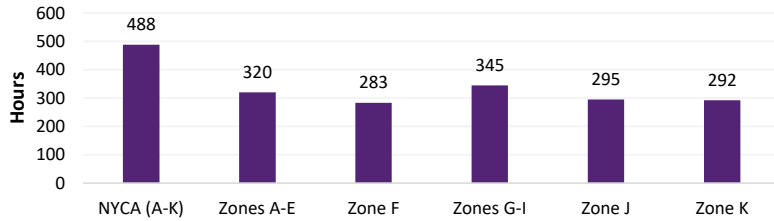


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

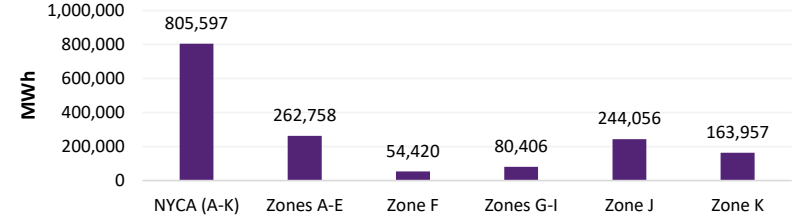
### Full Period Results Summary

Case Name: Reference Case - Summer - GIT Resource Set

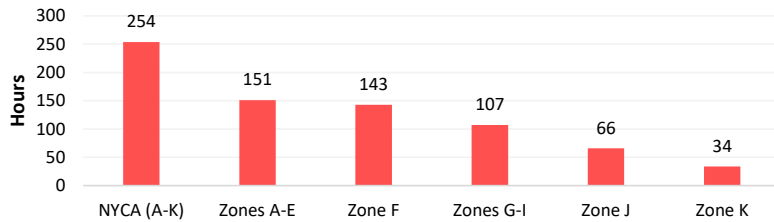
**Hours Price Responsive Demand Deployed**



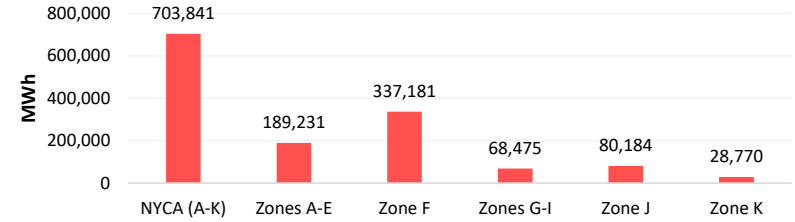
**Total MWh Price Responsive Demand Deployed**



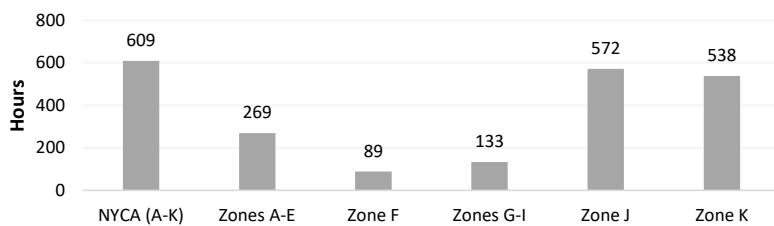
**Hours Battery Energy Storage Deployed**



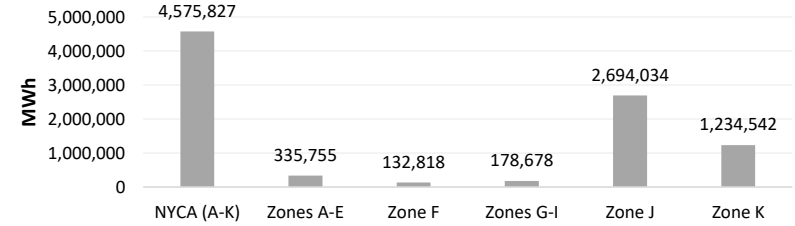
**Total MWh Battery Energy Storage Deployed**



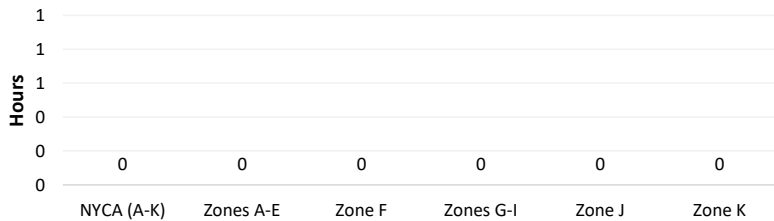
**Hours DE Resources Deployed**



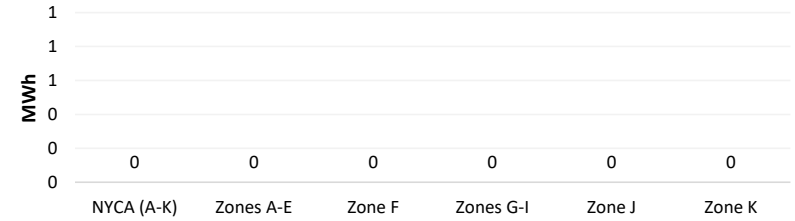
**Total MWh of DE Resources Deployed**



**Hours with Any Loss of Load Occurrences**



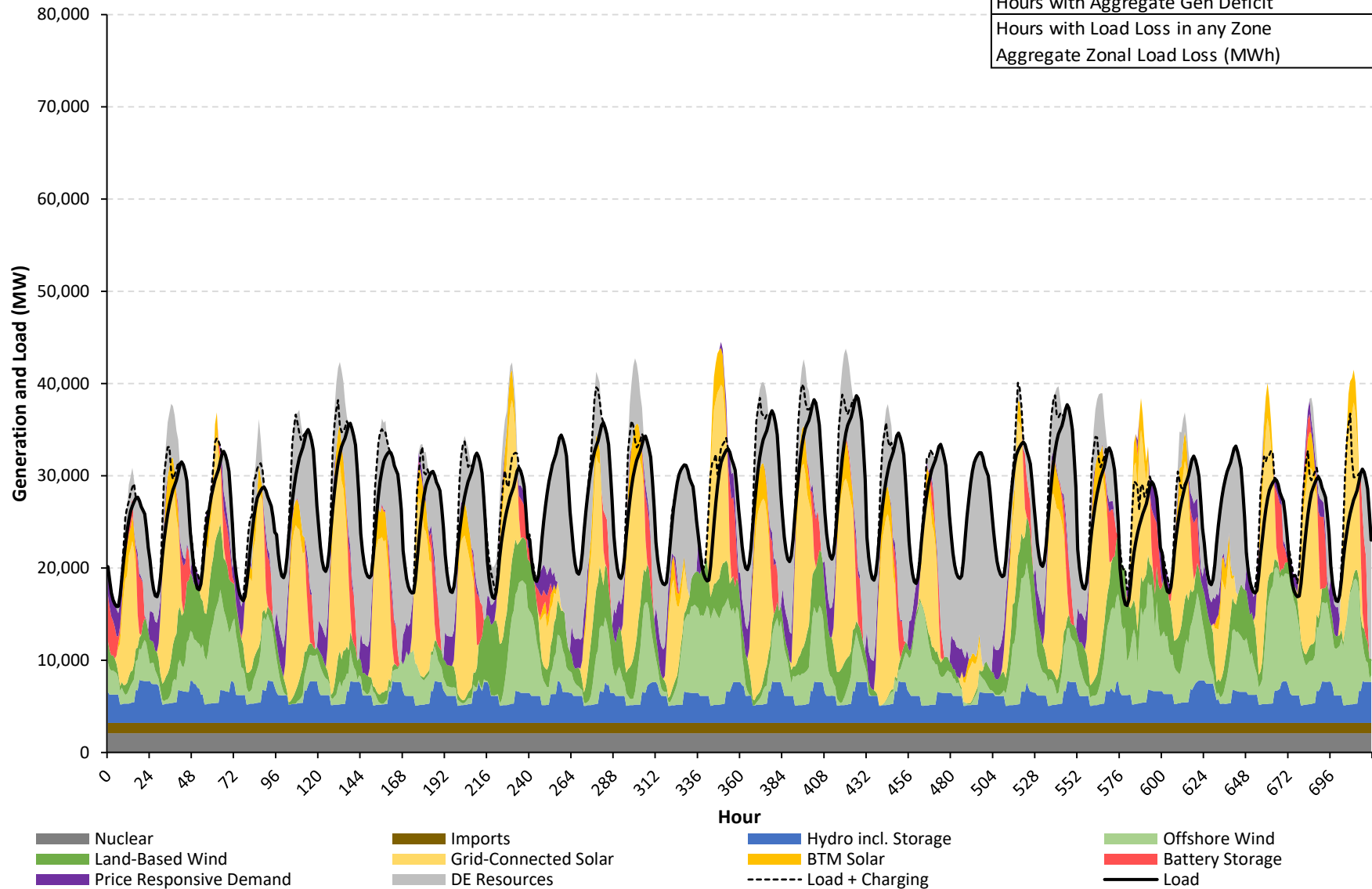
**Total MWh of Loss of Load Occurrences**



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Summer - GIT Resource Set

Aggregate Load in Period (MWh)	19,012,814
Aggregate Gen in Period (MWh)	20,660,018
Gen Surplus/Deficit (MWh)	1,647,205
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

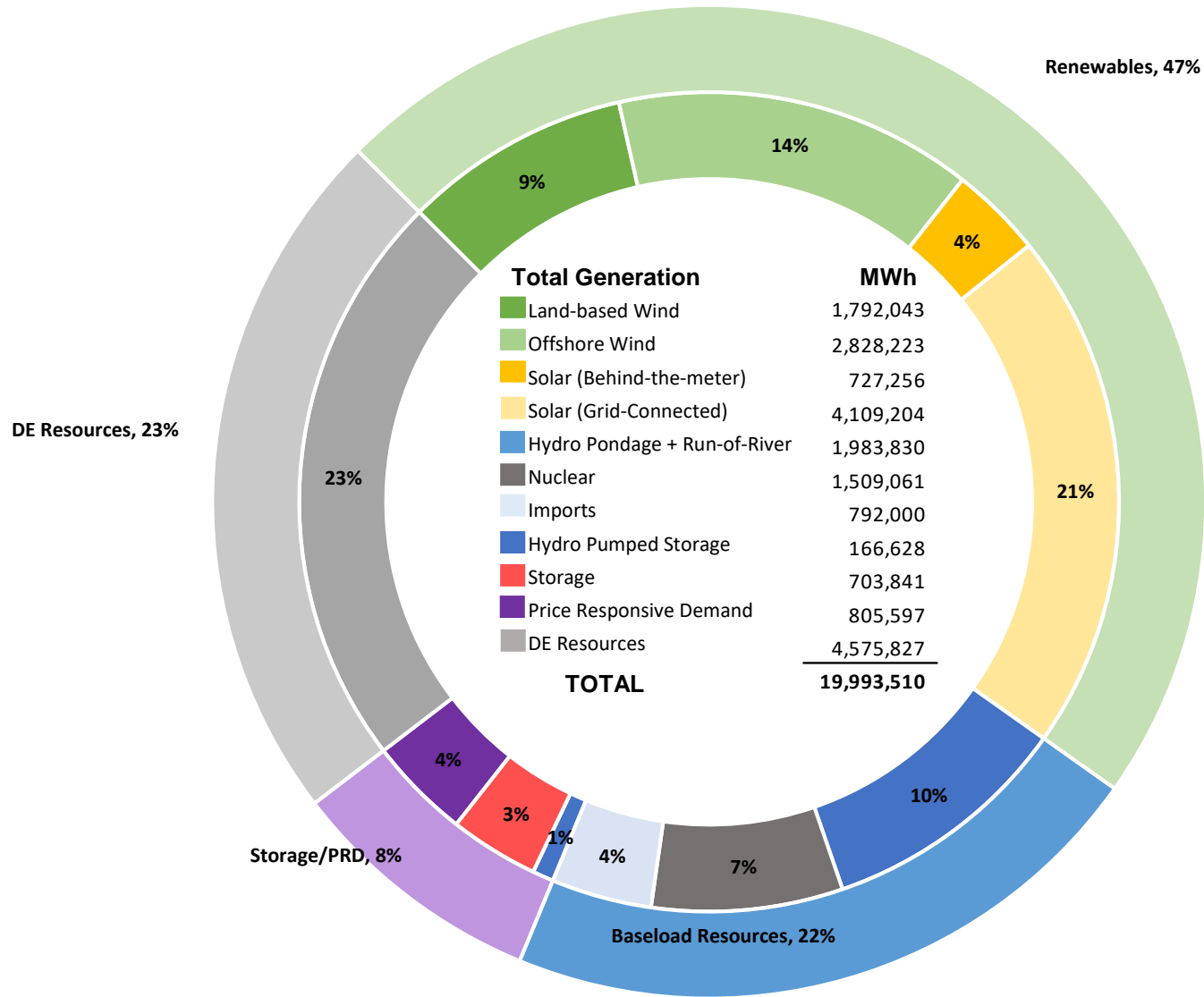


**Note:**

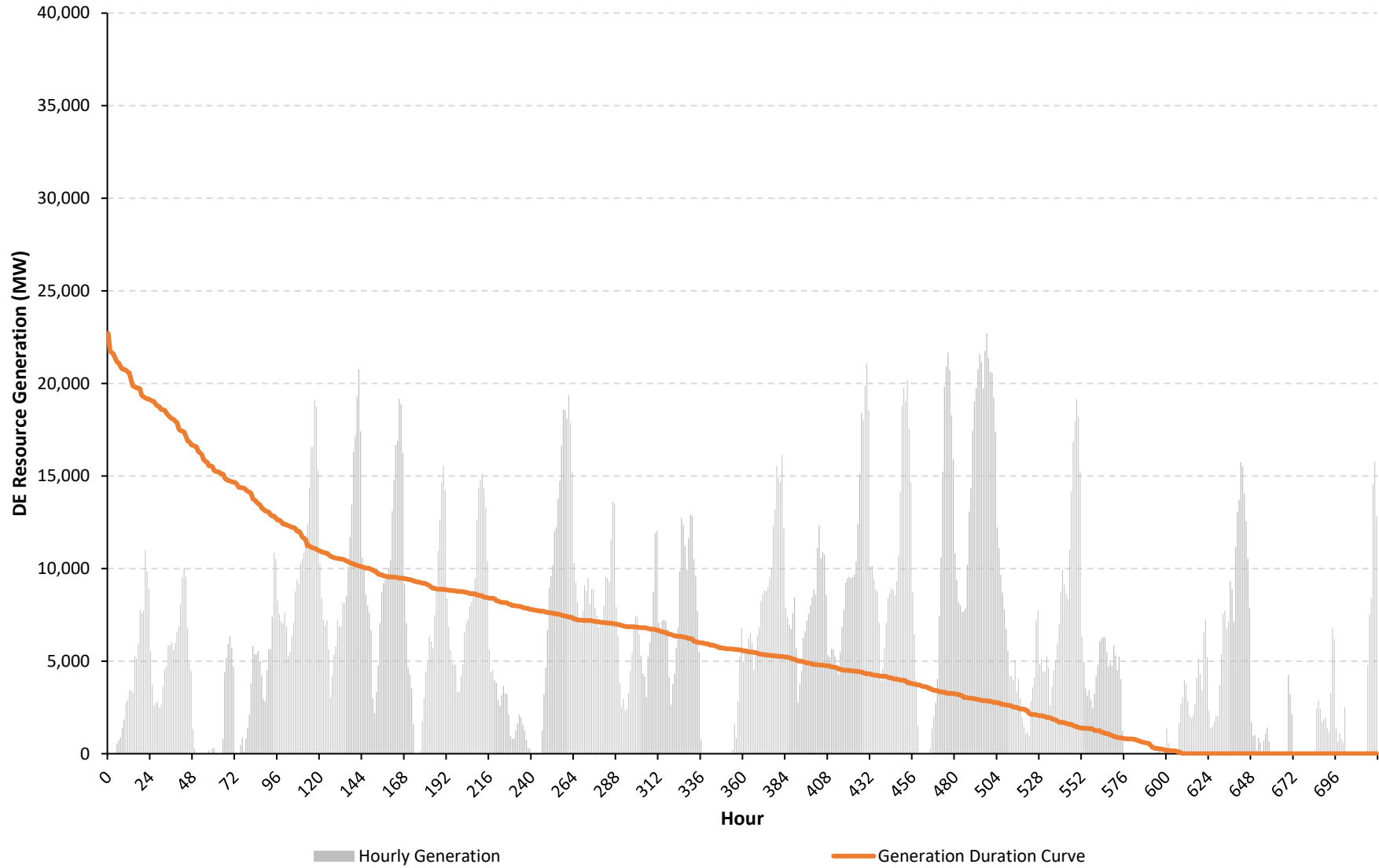
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

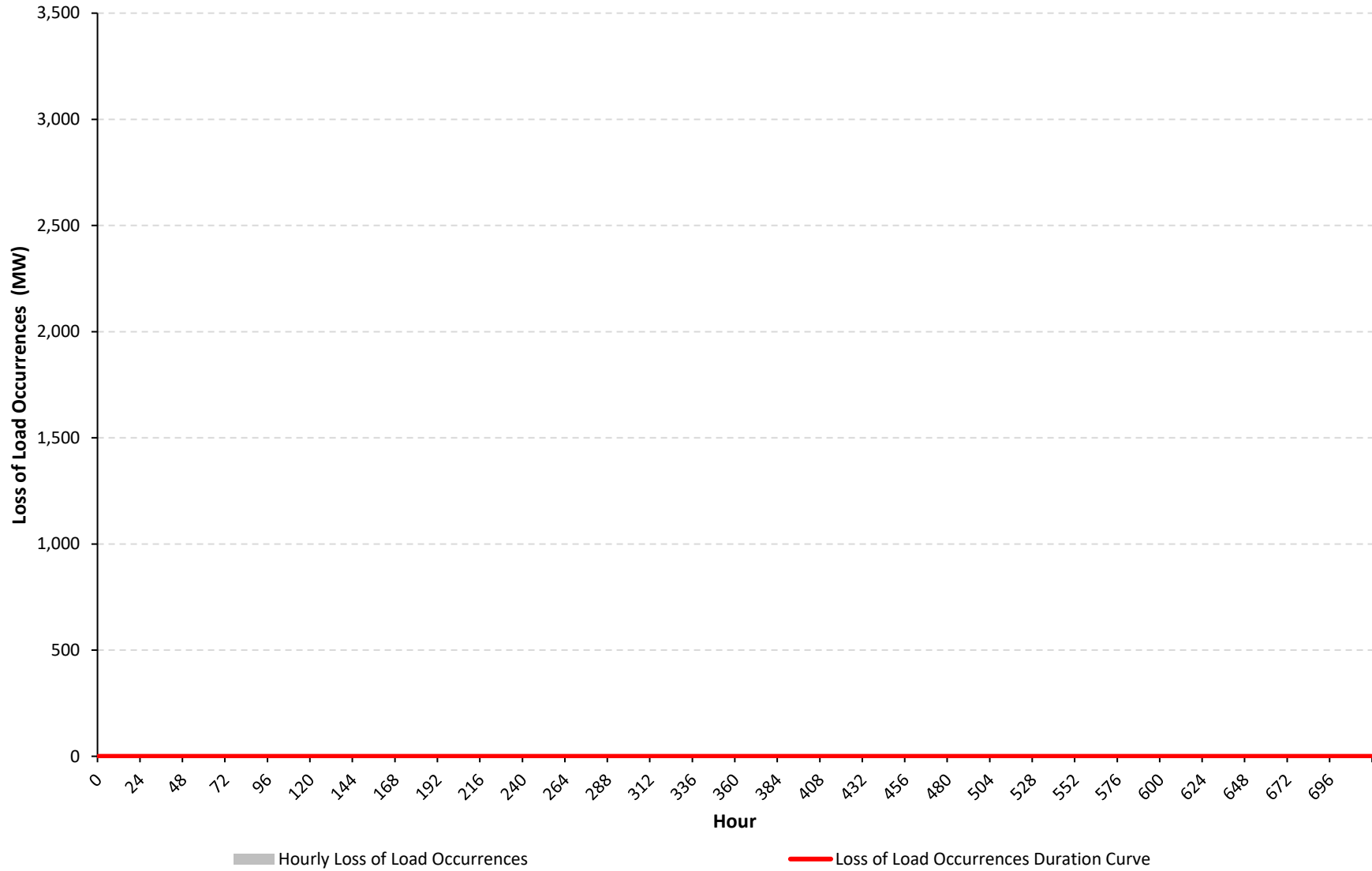
Reference Case - Summer - GIT Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Summer - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Summer - GIT Resource Set





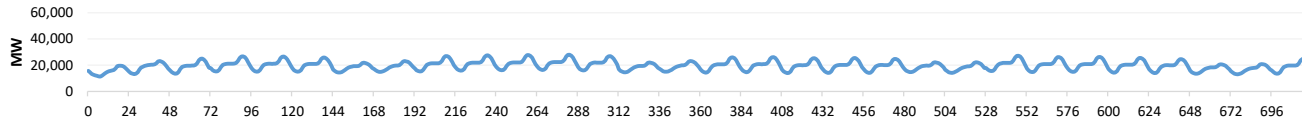
## **Appendix C. Diagnostic Charts for All Cases**

### **Case 71 - Reference Case - Winter - GIT Resource Set**

### Hourly Results Summary

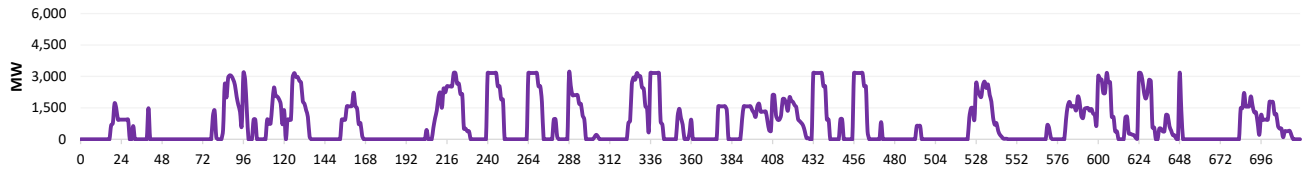
Case Name: Reference Case - Winter - GIT Resource Set

**Load During Modeling Period**



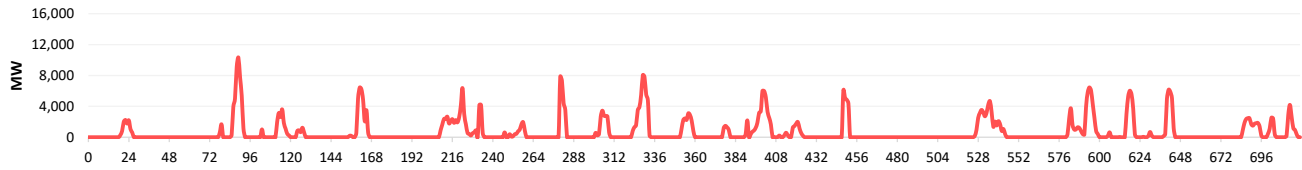
Loss of Load	
Total Hrs.	720
Total MWh	14,111,467
Avg. MW	19,599.3

**Price Responsive Demand Deployed During Modeling Period**



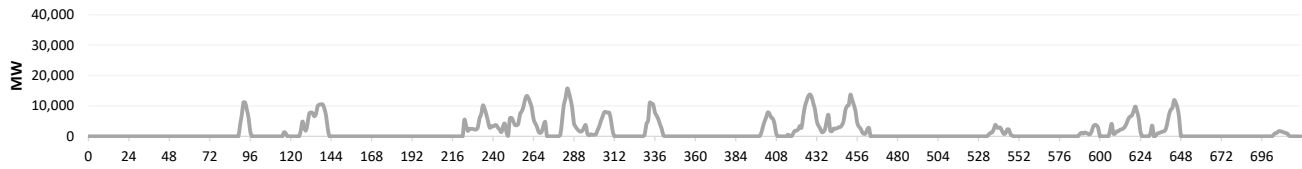
PRD Deployment	
Total Hrs.	347
Total MWh	548,183
Avg. MW	1,579.8

**Battery Energy Storage Deployed During Modeling Period**



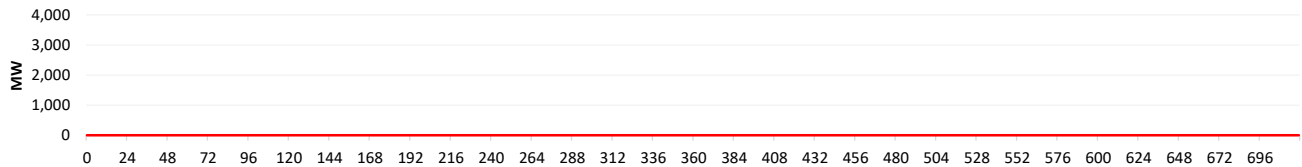
Battery Deployment	
Total Hrs.	228
Total MWh	515,089
Avg. MW	2,259.2

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	252
Total MWh	1,150,129
Avg. MW	4,564.0

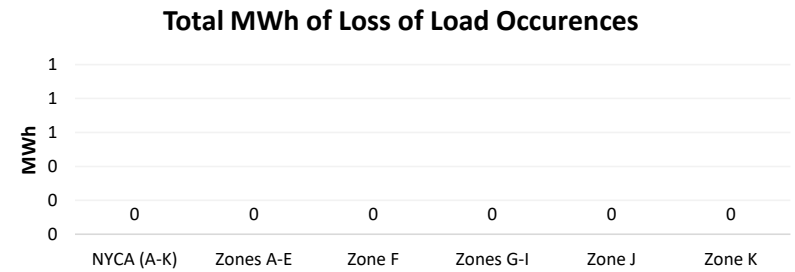
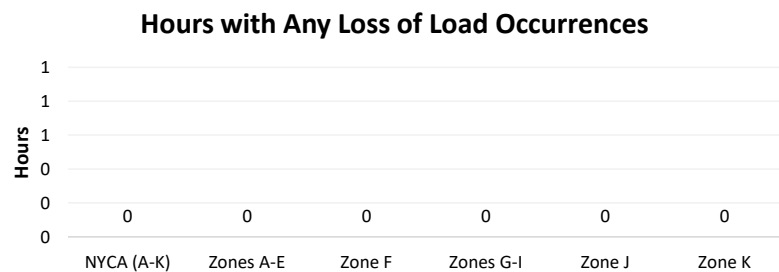
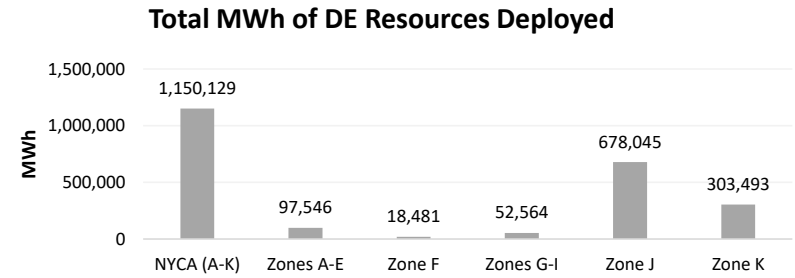
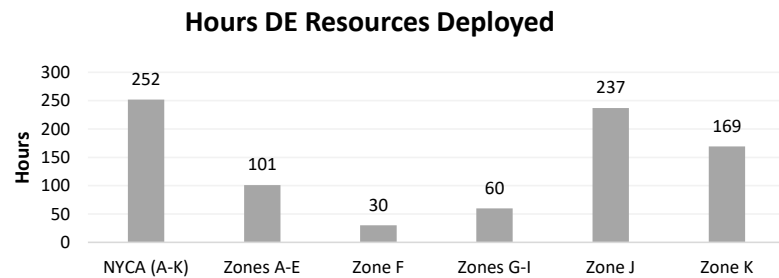
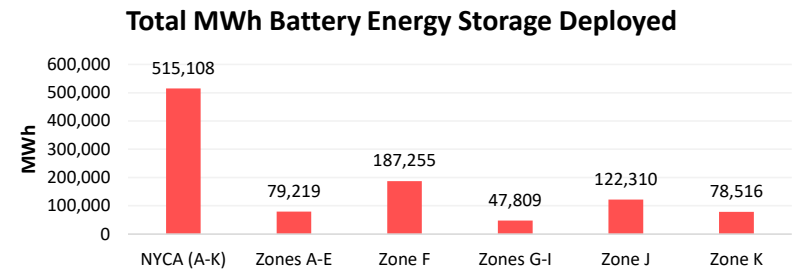
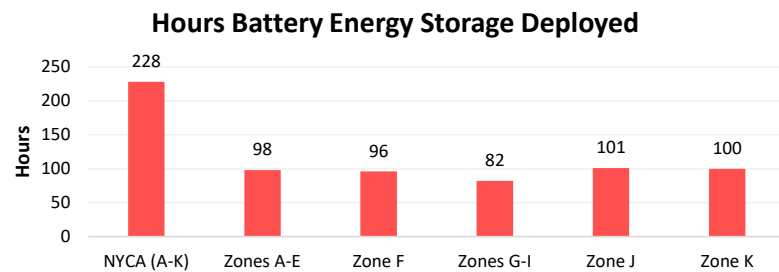
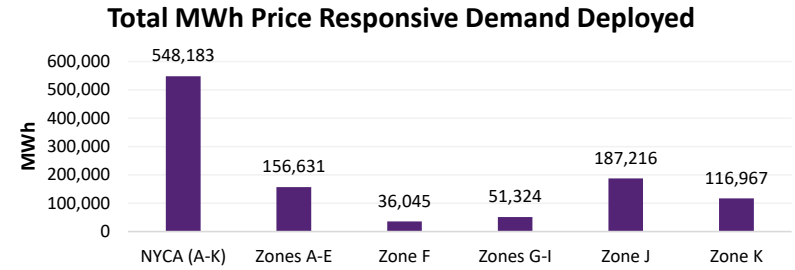
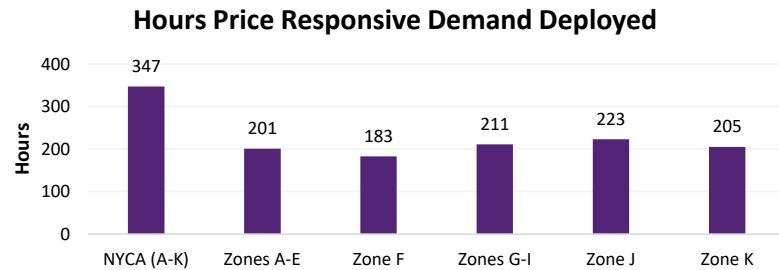
**Loss of Load Occurrences During Modeling Period**



Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

### Full Period Results Summary

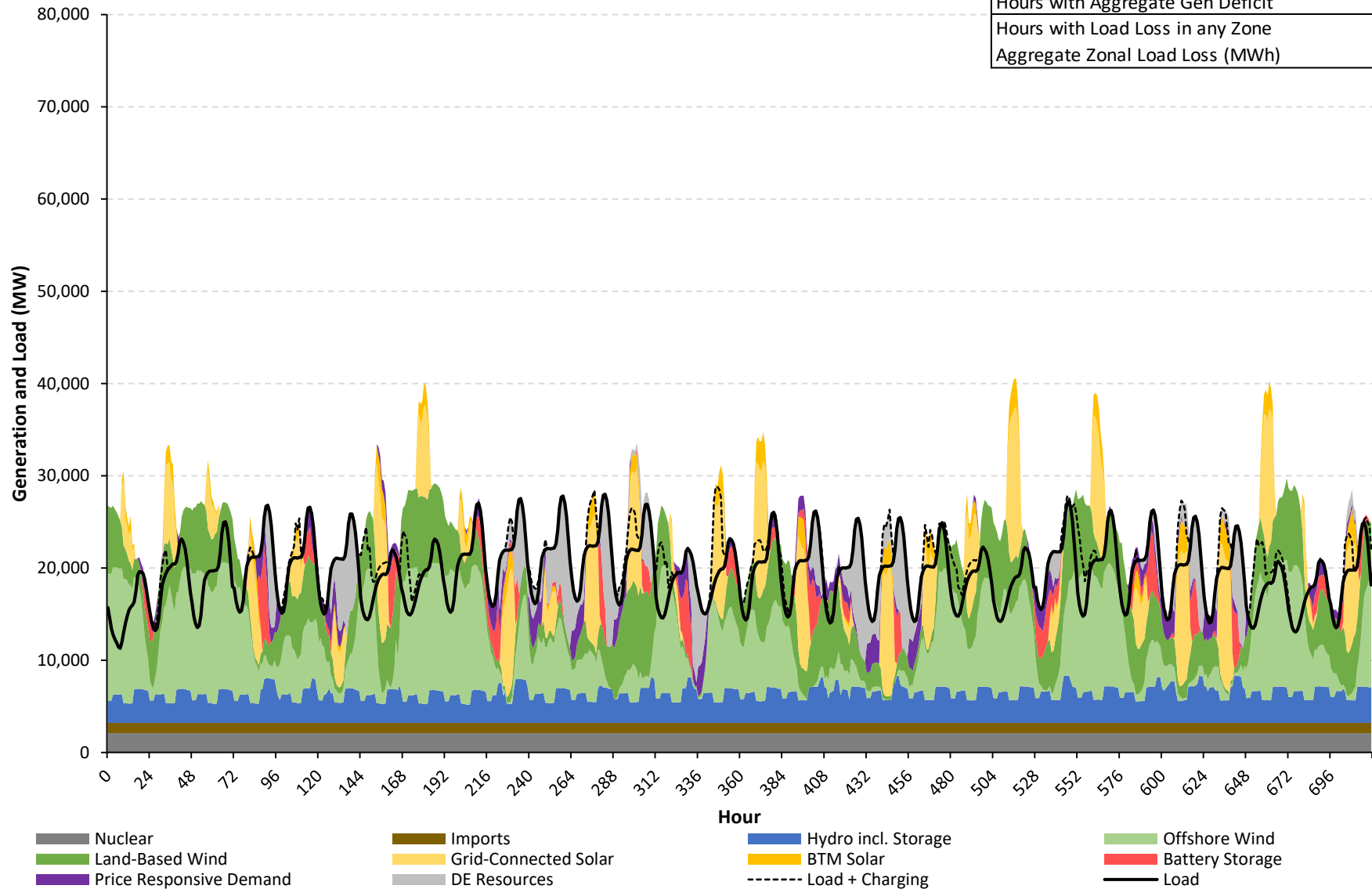
Case Name: Reference Case - Winter - GIT Resource Set



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Winter - GIT Resource Set

Aggregate Load in Period (MWh)	14,111,467
Aggregate Gen in Period (MWh)	17,135,603
Gen Surplus/Deficit (MWh)	3,024,136
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

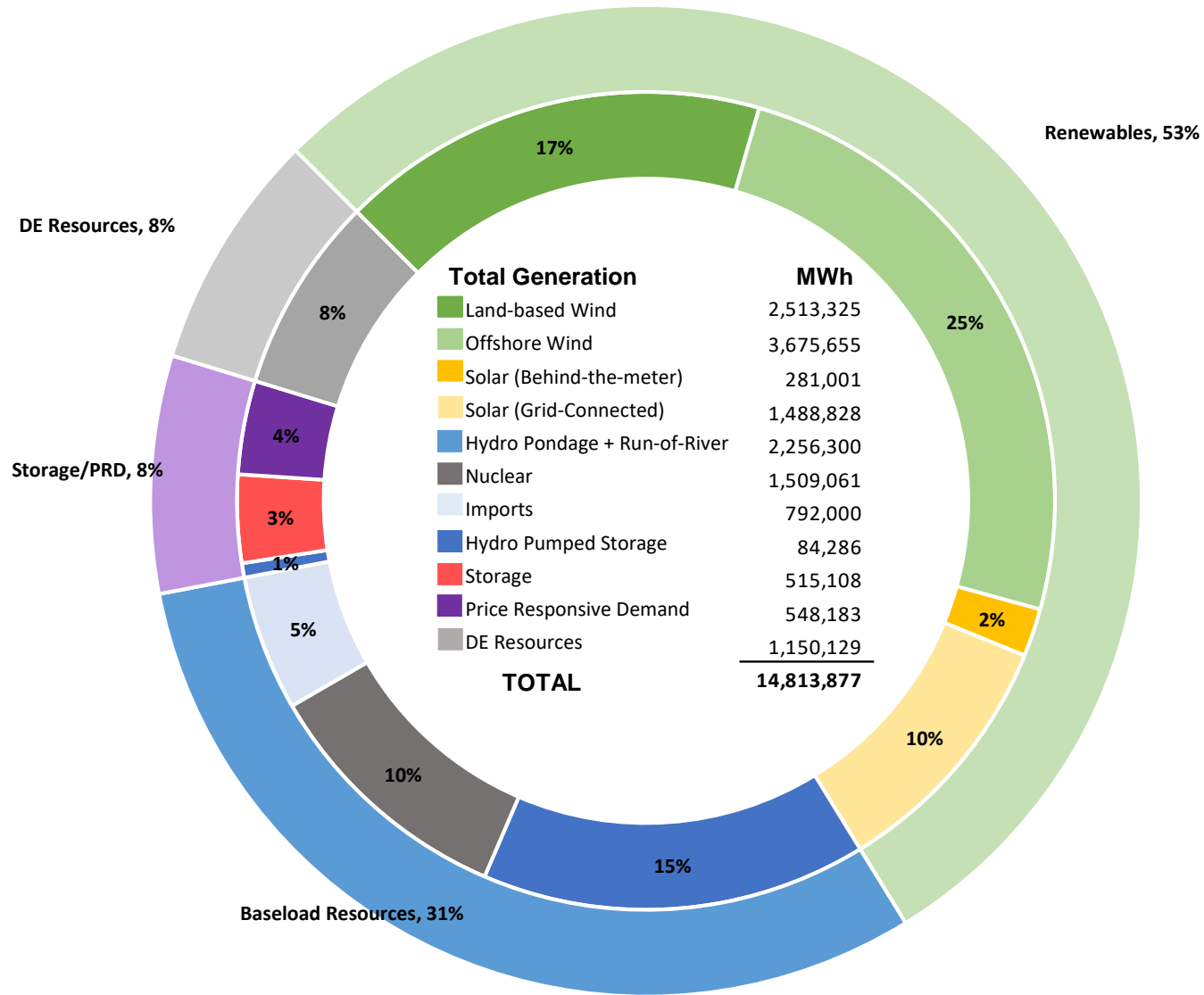


**Note:**

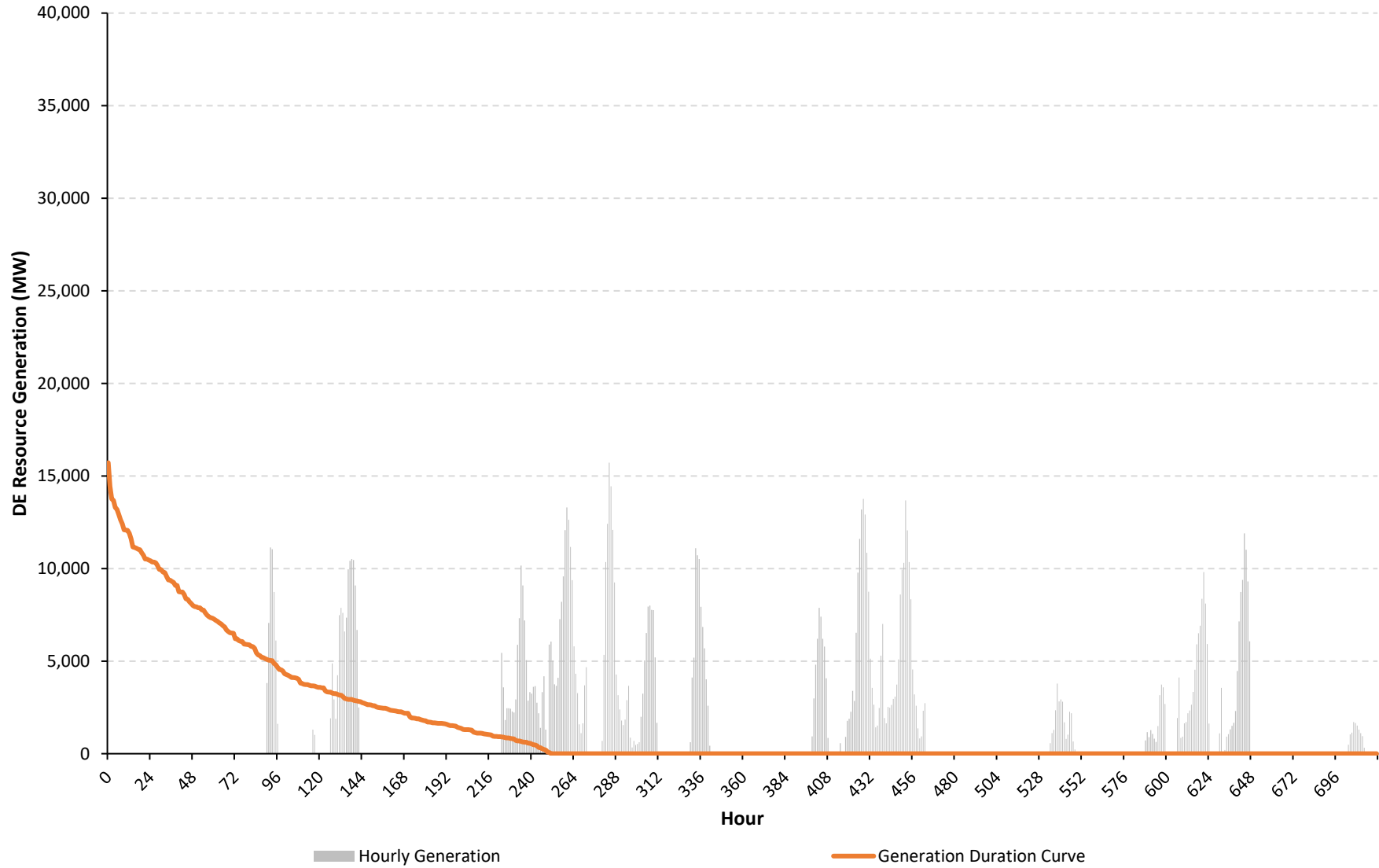
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

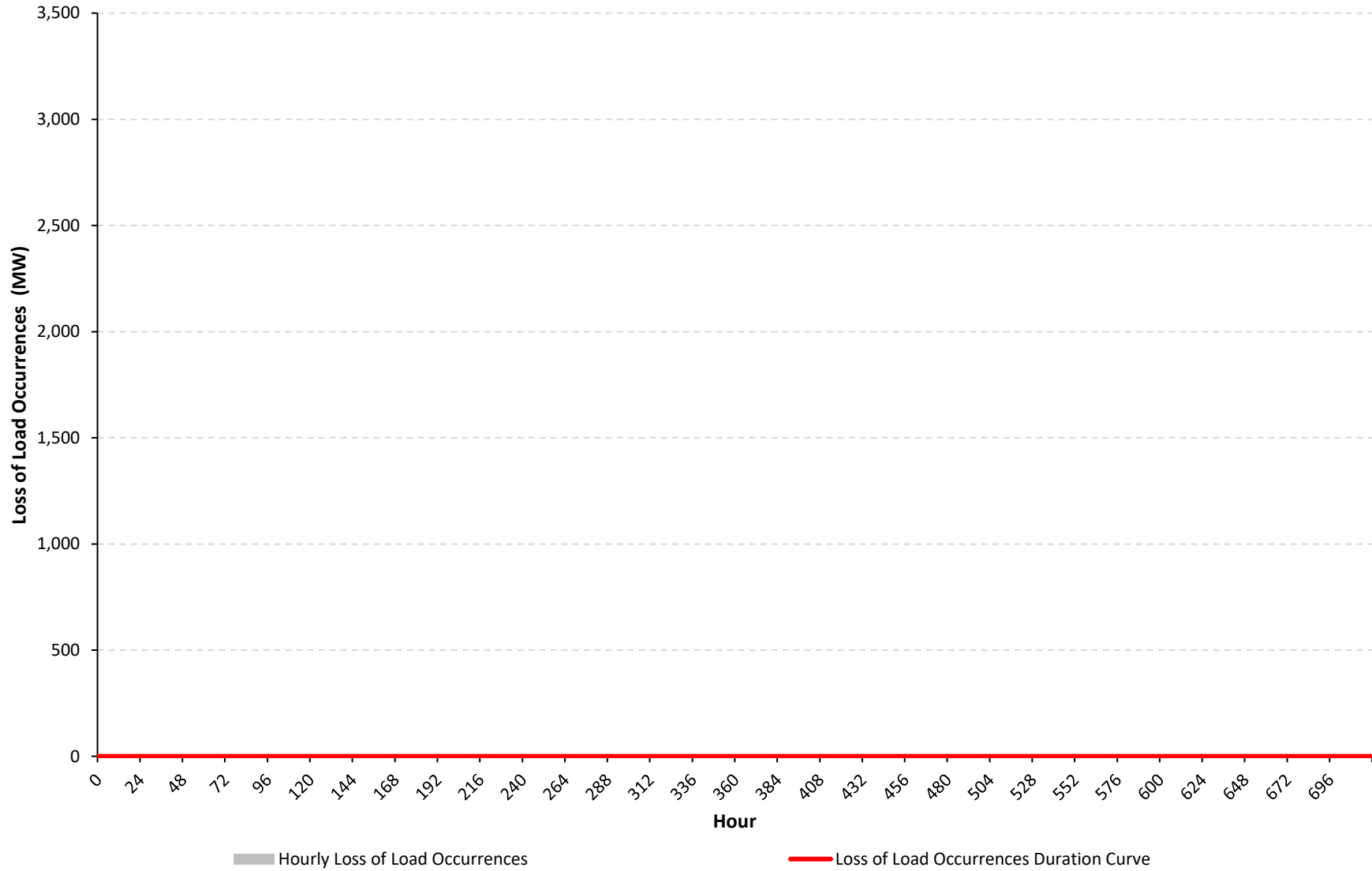
Reference Case - Winter - GIT Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Winter - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Winter - GIT Resource Set



## **Appendix C. Diagnostic Charts for All Cases**

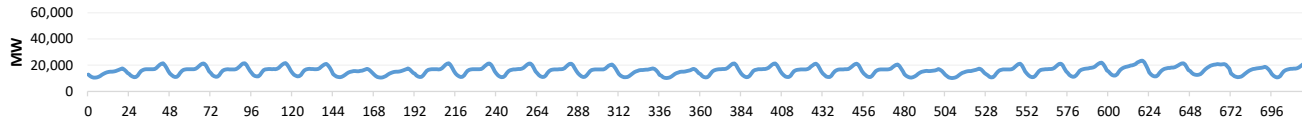
### **Case 72 - Reference Case - Shoulder - GIT Resource Set**



### Hourly Results Summary

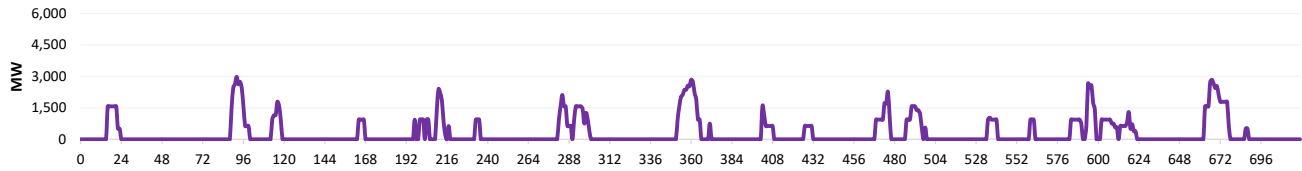
Case Name: Reference Case - Shoulder - GIT Resource Set

**Load During Modeling Period**



Loss of Load	
Total Hrs.	720
Total MWh	11,385,240
Avg. MW	15,812.8

**Price Responsive Demand Deployed During Modeling Period**



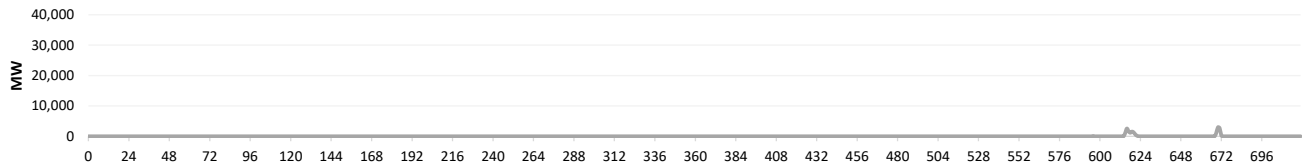
PRD Deployment	
Total Hrs.	169
Total MWh	216,269
Avg. MW	1,279.7

**Battery Energy Storage Deployed During Modeling Period**



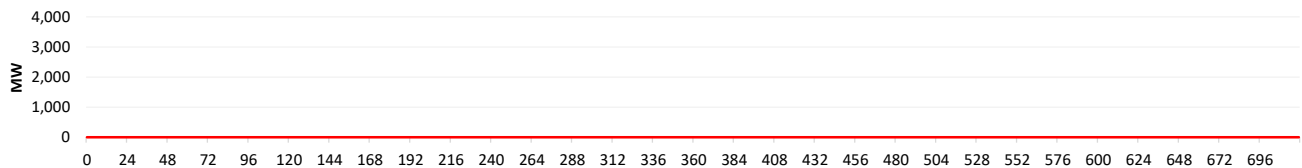
Battery Deployment	
Total Hrs.	110
Total MWh	203,482
Avg. MW	1,849.8

**DE Resources Deployed During Modeling Period**



DE Resources Deployment	
Total Hrs.	15
Total MWh	17,287
Avg. MW	1,152.5

**Loss of Load Occurrences During Modeling Period**

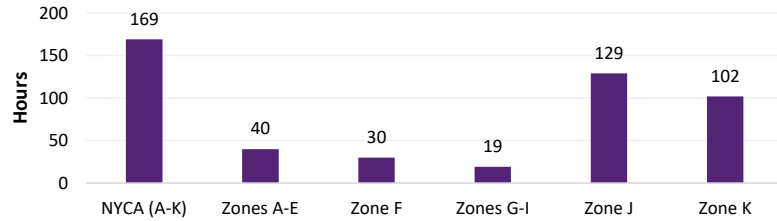


Loss of Load Occurrences	
Total Hrs.	0
Total MWh	0
Avg. MW	0.0

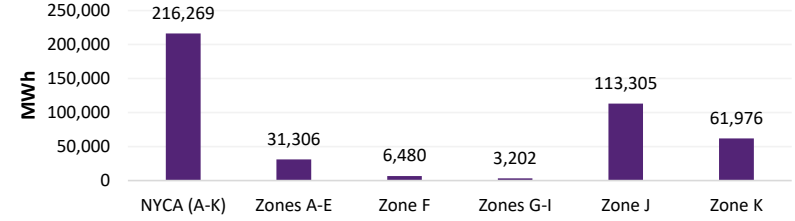
### Full Period Results Summary

Case Name: Reference Case - Shoulder - GIT Resource Set

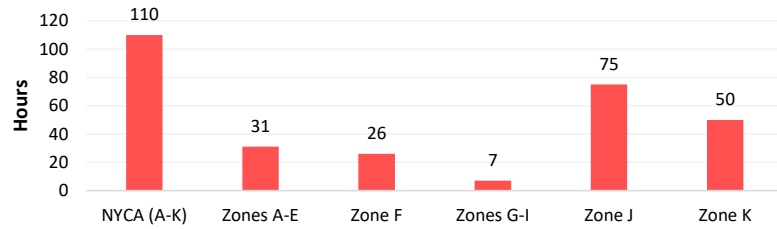
#### Hours Price Responsive Demand Deployed



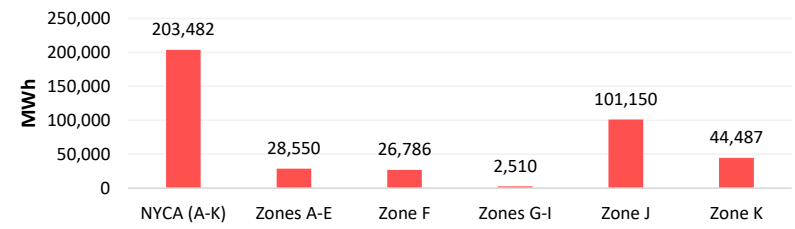
#### Total MWh Price Responsive Demand Deployed



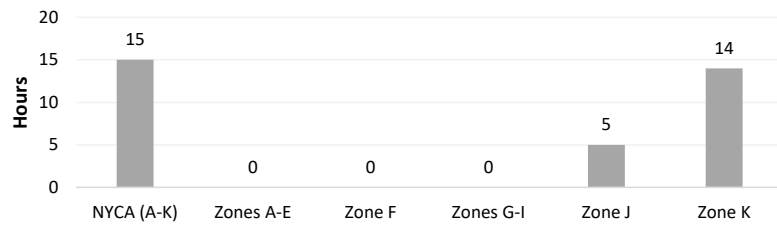
#### Hours Battery Energy Storage Deployed



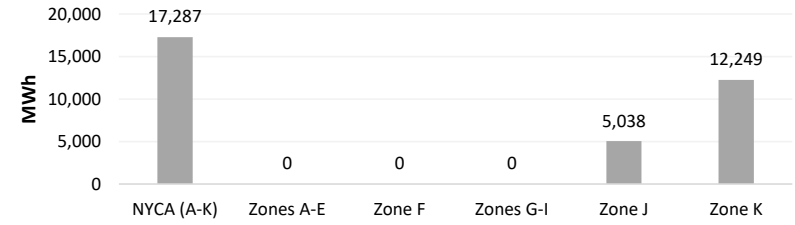
#### Total MWh Battery Energy Storage Deployed



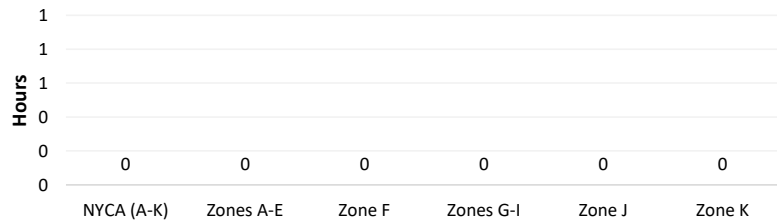
#### Hours DE Resources Deployed



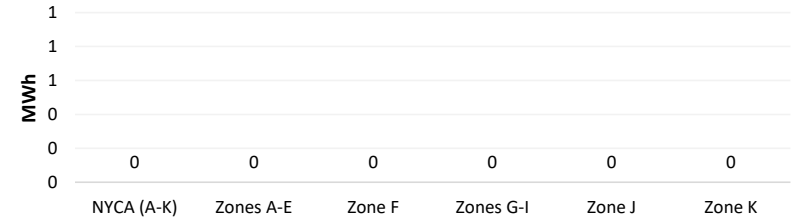
#### Total MWh of DE Resources Deployed



#### Hours with Any Loss of Load Occurrences



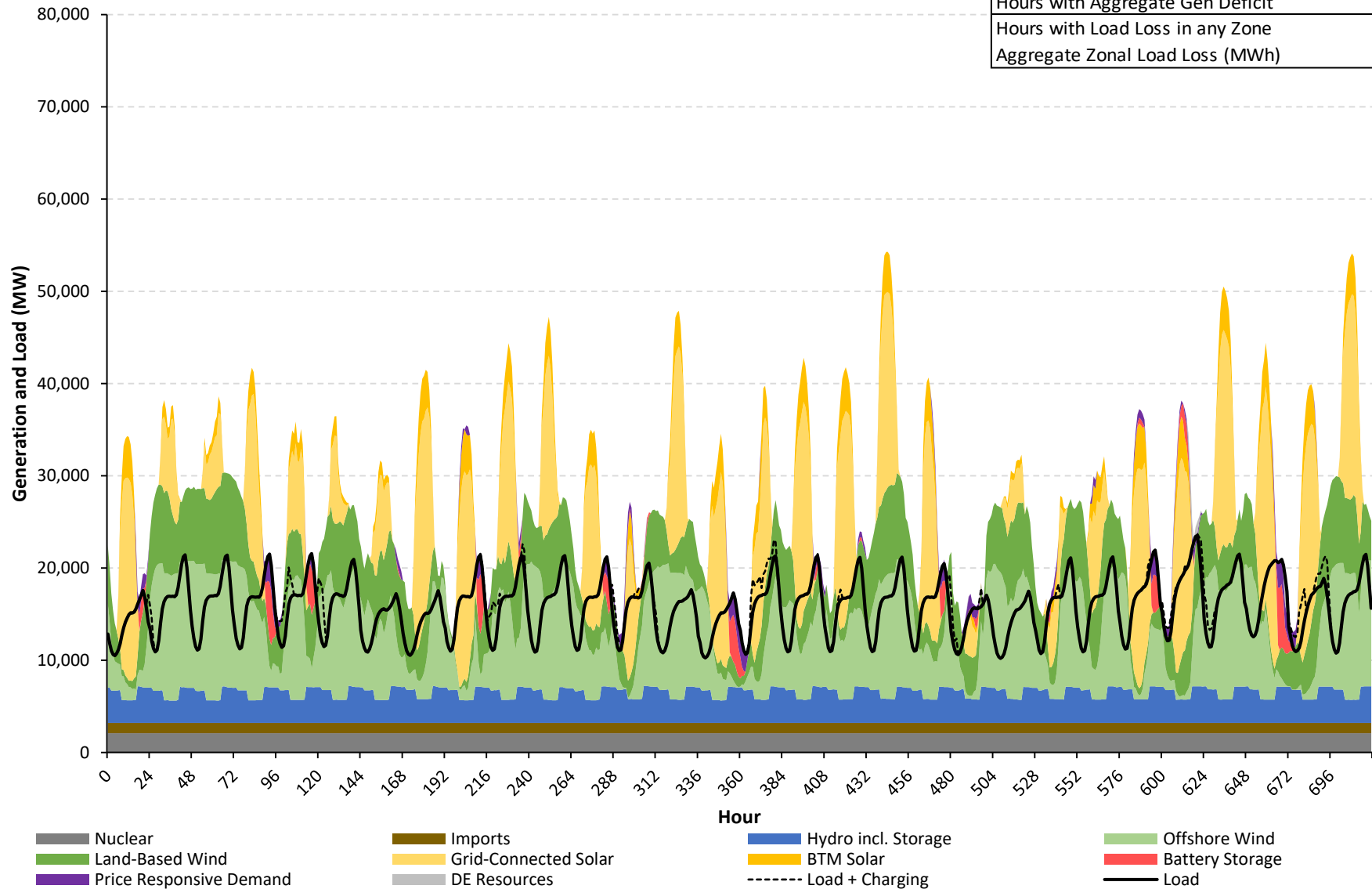
#### Total MWh of Loss of Load Occurrences



### NYCA Hourly Load/Generation Balance by Resource Type

Reference Case - Shoulder - GIT Resource Set

Aggregate Load in Period (MWh)	11,385,240
Aggregate Gen in Period (MWh)	19,786,890
Gen Surplus/Deficit (MWh)	8,401,650
Hours with Aggregate Gen Deficit	0
Hours with Load Loss in any Zone	0
Aggregate Zonal Load Loss (MWh)	0

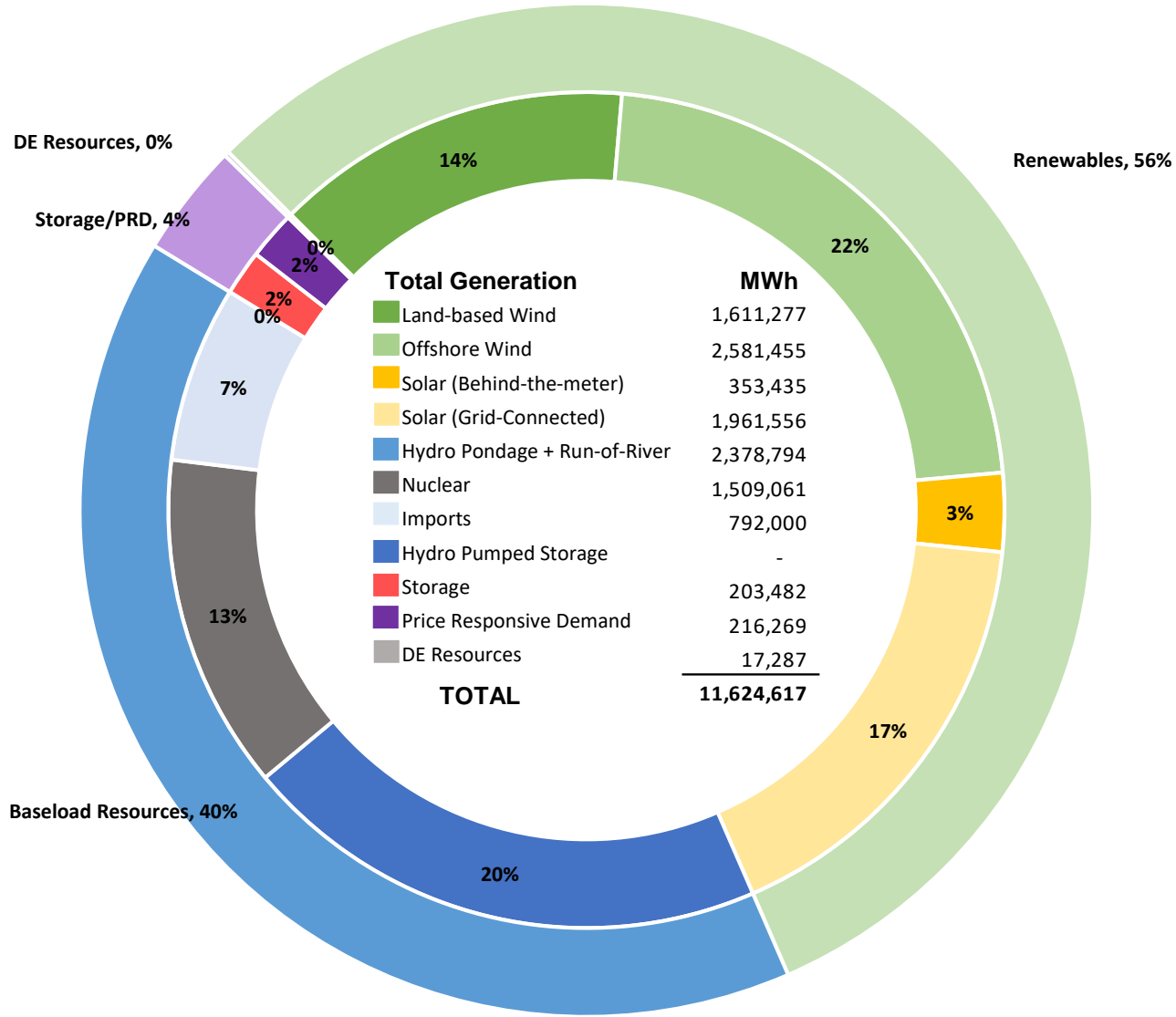


**Note:**

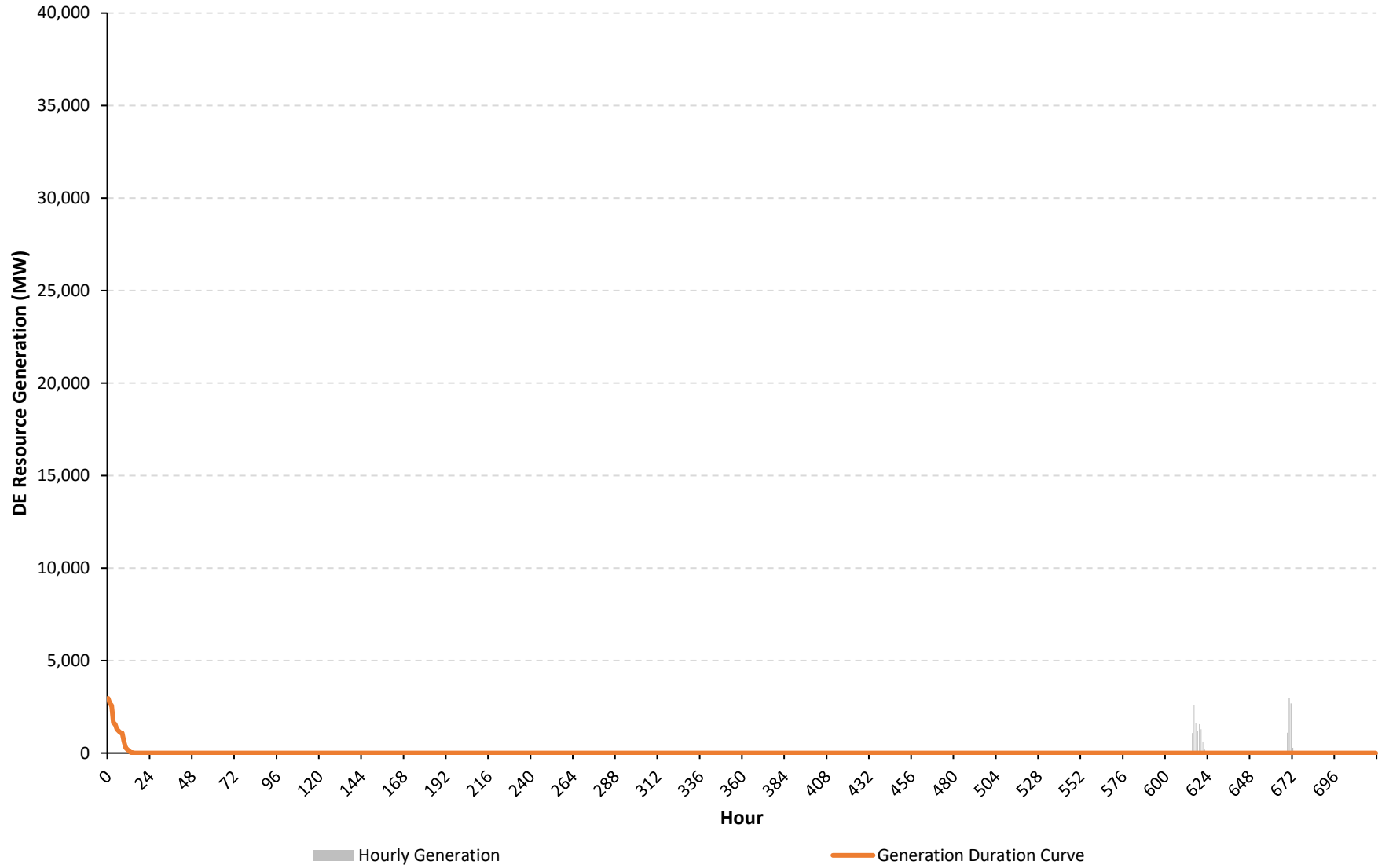
[1] Aggregate Generation in period includes curtailed renewable output not used to meet load or charge storage.

### Generation by Resource Type

Reference Case - Shoulder - GIT Resource Set



### NYCA DE Resource Generation (MW) Reference Case - Shoulder - GIT Resource Set



### NYCA Loss of Load Occurrences (MW) Reference Case - Shoulder - GIT Resource Set

