

Winter Storm 2021

Presented on March 22

2021

SM

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Winter Storm 2021

- 73% of US Mainland under snow cover
- 3000 Daily temperature records
- 79 All-Time low temperature records
- All but the southernmost part of SPP was below 0



SPP Resources

- Feb 9th, SPP declared Conservative Operations
- Feb 14th, SPP notified members to maximize available generation
- By the Feb 15, over 20 GW of Gas generation was in Outage
- Wind outages increased 5X from the beginning of February
- At the peak, over 35 GW of SPP generation was in outage



Load Shedding Events

- SPP serves as the Balancing Authority for the region, mandated by NERC to equalize energy demand with energy production
- Loss of generation resources resulted in the first directed Load Shedding in SPP history
- SPP members coordinated temporary outages to prevent a wide scale collapse of the grid



Load Shedding Events

- Load Shedding directives were proportional
 - Evergy 18.12%
 - Springfield 1.22%
 - BPU 0.92%
 - IPL 0.38%

 - (percentage of total system outages)



IPL Generation Assets

- IPL CTs ran daily
- 2/13 Dogwood reduced output to 40%, then shut down 2/17 due to gas supply issues
- IATAN2 ran throughout the event
- NC2 came out of an outage, limited to 60%
- Windfarms were limited, but operated daily
- All assets performed in accordance with the terms of agreements



Economic Cost of Winter Storm 2021

- Gas prices increased 100x normal costs
- IPL purchases from SPP approx. \$57.7 M for February
- Generation credits from SPP approx. \$55.9 M
- Net energy cost for February approx. \$1.8 M
- IPL CTs generated nearly \$14 M in credits, second only to latan2 in our portfolio



Other Questions

- Annual use of CTs
 - CY2020 IPL CTs were called on 155 days, produced \$1.52 M in SPP credits
 - CY2019 IPL CTs were called on 162 days, produced \$1.94 M in SPP credits
- Dogwood ownership – Kelson is still the largest shareholder at 33.9%, with the same five utility participants
- Oneta update – refinancing only





Questions ?

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