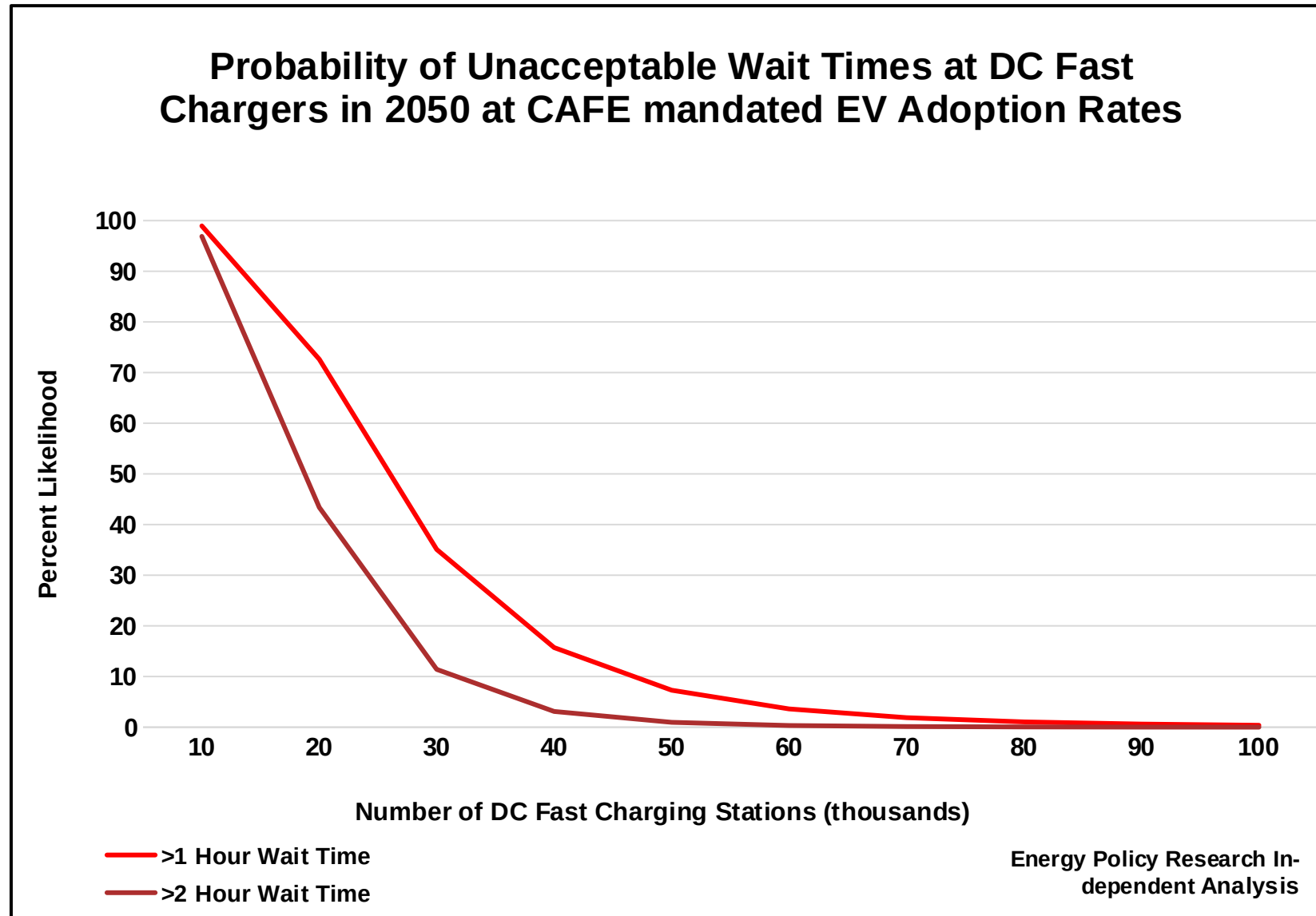


Chart of the Week #2024-28

Acceptability of EV Wait Times at DC Fast Charging Locations



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Washington, DC



Acceptability of EV Wait Times at DC Fast Charging Locations

- The Biden Administration's strict tightening of the CAFE standards would force an estimated 53% of vehicles on U.S. roads to be EVs by 2050.
- This will place increased stress on U.S. charging infrastructure. Currently, the U.S. has approximately 7,700 DC fast charging stations.
- In addition to average wait time, which EPRINC covered in the July 3rd Chart of the Week, the possibility of less frequent, higher impact events remains an issue.
- Even in the scenario where enough charging stations are built to keep average wait times under an hour, 15% of charging stations will experience wait times in excess of an hour; 3% will experience wait times in excess of two hours.
- In order to keep the probability of wait times that are in excess of one hour under 1%, EPRINC's analysis indicates that 70,000 new charging stations would need to be constructed for a total of 350,000 charging ports.
- There remains much uncertainty around charging useability.

Acceptability of EV Wait Times at DC Fast Charging Locations

- This chart and analysis is informed by a forthcoming EPRINC report, entitled “Electric Vehicles vs Internal Combustion Engines: An Energy Economic Analysis”. Stay tuned.
- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on these charts, please contact Matthew Sawoski (matthews@eprinc.org).