Remarks by Micah Remley Senior Vice President of Product at EnerNOC Before the

U.S. Department of Energy – Quadrennial Energy Review Task Force "Electricity Distribution and End Use: How Do We Manage Challenges and Opportunities?"

Boston, MA
April 15, 2016

- When the topic of the electricity grid comes up most people automatically think of infrastructure power plants, transmission, distribution networks.
- But when I draw a parallel to another industry that used to always be about engineering and infrastructure the auto industry the biggest race in the auto industry now is around software.
- The average new high-end car now has 100 million lines of computer code in it.
- This is increasing safety and reducing emissions by allowing the car to be aware of what is going on around it, while at the same time the car itself is becoming part of an information network that is informing the decisions made by other drivers and cars
- Similarly, software and intelligence in the electricity space can increase efficiency and reduce emissions by connecting with what is going on behind the meter and making distributed demand and generation assets part of an information network that can help to optimize the grid.
- We can do this by using machine learning algorithms to learn how customers are using energy and then connecting them with ways to save. Using machine learning tools we can tell, using energy data only, the types of businesses behind the meter, primary uses, and ways for them to save.
- We can also do this by taking incredibly complex energy invoicing and tariff structures, making them simple, and then giving customers clear ways to save money in an automated fashion through their smartphones.
- This will move us beyond the simple paper or emailed bill that most customers still receive and allow electricity customers to become connected to their energy consumption and give them control over its use and costs.