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*Comment Received From: Jackson Wang*
*Submitted On: 3/18/2020*
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## Comments on Load Management Docket Number 19-OIR-01

*Additional submitted attachment is included below.*

e - Radio

March 16, 2020

Via email to: docket@energy.ca.gov
California Energy Commission
Docket Unit, MS-4
Docket Number: 19-OIR-01
1516 Ninth Street
Sacramento, CA 95814-5512

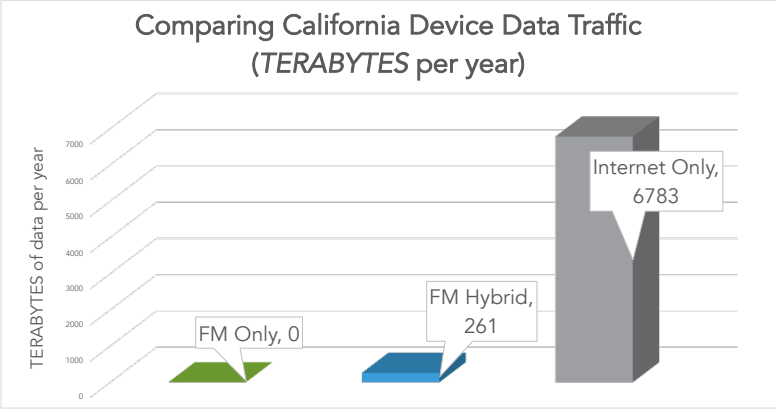
Subject: Comments on Load Management Docket Number: 19-OIR-01

We are writing to express our support for California Energy Commission ("CEC") effort to develop the foundation for a statewide system that automates the creation of hourly and sub-hourly costs or signals that can be used by end-use automation to provide real-time demand flexibility on the grid.

Our support of these initiatives is consistent with the presentations that e-Radio and other stakeholders made at the January 14, 2020 Workshop on 2020 Load Management Standards Proceedings. In addition, we also support the contents of the draft Load Management Tariff Standard Markup document presented during the March 2, 2020 Staff Workshop.

As stated in our presentation in January 2020 (CEC Docket 19-OIR-01, TN# 231535 https://efiling.energy.ca.gov/GetDocument.aspx?tn=231535&DocumentContentId=63348), e-Radio's broadcast-based architecture can provide the outbound link from one utility to an infinite number of devices, thereby reducing the utility's data traffic required to provide this signal communication

The table below is a summary of the total number of data traffic between end use devices and the utility assuming 3 devices per household with 5 min pricing intervals.



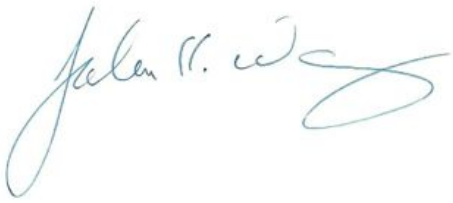
We believe that appliances must be connected to be useful in any “real time rate” schema. One method is to have an embedded receiver or a modular demand response communications port compliant with ANSI/CTA–2045-A communication interface standard.

e-Radio has produced receiver modules and matching transmitter networks compliant with the CTA 2045 standard and has worked with several utilities and national laboratories to successfully test the system with utility customers. Our FM CTA 2045 solution is a simple and secure method to shift loads without affecting consumer lifestyles or their privacy. Results can be referenced at https://www.bpa.gov/EE/Technology/demand-response/Pages/CTA2045-DataShare.aspx. In 2020, e-Radio is looking at the development of an ASIC (application specific integrated circuit) to further increase capability at a reduction in cost, package size and power consumption.

Our work has primarily focused on Water Heaters but we are now actively testing HVAC units and expect to add Electric Vehicle and charging equipment shortly as well. In addition, we are looking to showcase the capability of the highly reliable FM broadcast infrastructure to advise consumers of location and time responsive loads which will be especially useful in such instances as emergency fire deterrence and a more consumer friendly alternative to utility blackouts. This can be achieved by targeting specific grid address loads within sub-station distribution transformer lines to prevent overloading of the reduced capacity of aging infrastructure equipment.

We are looking to conduct a live demonstration of our technology in California with XPERI corporation and other industry partners in 2020 and invite all stakeholders of this load management docket to observe or to join as a participant.

Thank you for your consideration.



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