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Sent: Tuesday, June 22, 2021 4:37 PM
To: appliances@energystar.gov
Cc: Daken, Abigail
Subject: Consumer Refrigeration Product: spec refinement recommendations

Follow Up Flag: Follow up
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Dear ENERGYSTAR Product Lead,

To inform the Consumer Refrigeration Product v5.1 Specification, EPRI recently convened with a committee of DR-Ready project advisors. An outcome was to make public EPRI's 2018 DR-Ready report on lab evaluation of a Connected Refrigerator and resulting recommendations for Connected specification refinement. Attached is a summary of published recommendations to advance Connected functionality from the report.

Further details can be found in the Recommendations chapter in the report at the link below:

<https://www.epri.com/research/products/00000003002012941>

Connected Refrigerator Lab Evaluation and Recommendations

- Proposed Refinements to "Connected Criteria"
 1. **DAL Functionality**
 - Extend minimum duration to 6 hours (beyond 4 hours)
 - Allow for at least 2 DAL events per rolling 24-hour period (beyond 1 per rolling 24-hr)
 2. **TALR Functionality**
 - 10-minute response duration is not as useful as 30-min
 - Research is needed with manufacturers on how long can interrupt compressor without impact on food safety
 - With this info consider increasing minimum duration and minimum number of TALR per defined period (e.g., 6-8 hours)
 3. **Temperature Setting Adjustment for DR**
 - 2018 EPRI lab evaluation: 15% average power savings from 3-degree setpoint increase for refrigerator compartment and 4-deg for freezer compartment
 - Consider temperature adjustment settings, so long as within FDA recommended 40 deg F for food storage.
 4. **Additional data reporting**
 - Connectivity status and log (historic and operational)
 - Consumer override
- Details in 2018 DR-Ready Report # 3002012941



Regards,
Angela Chuang
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