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## HOUSE RESOLUTION

URGING HAWAII ELECTRICAL UTILITIES TO ADOPT A POLICY FOR THE  
FUTURE ELECTRICAL GRID TO SUPPORT THE USE OF MICRO-GRIDS  
AND SELF-SUFFICIENT RESIDENTIAL SOLAR PHOTOVOLTAIC SYSTEMS.

1           WHEREAS, Hawaii has the highest electricity rates of all  
2 states in the nation; and

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4           WHEREAS, Hawaii's high electrical rates are often  
5 attributed to Hawaii's reliance on imported oil and a doomed and  
6 obsolete electrical utilities business model that has not  
7 changed in over a century; and

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9           WHEREAS, Hawaii electrical utilities still follow an  
10 outdated business model requiring a central system operator to  
11 manage the power supply with fluctuating customer demand while  
12 maintaining the reliability of the power system; and

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14           WHEREAS, a micro-grid is a group of interconnected loads  
15 and distributed energy resources within clearly defined  
16 electrical boundaries that act as a single controllable entity  
17 with respect to the grid and can connect to the grid to operate  
18 in grid-connected mode and can disconnect from the grid to  
19 operate in island mode; and

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21           WHEREAS, a self-sufficient residential solar photovoltaic  
22 system is a photovoltaic system with a battery storage device to  
23 store energy, but can also provide excess energy to the  
24 electrical grid once the battery is at full capacity; and

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26           WHEREAS, the current electrical grid is analogous to the  
27 mainframe computer half a century ago that handled all computer  
28 processing while micro-grids are analogous to the modern  
29 personal computer that handles individual processing at the  
30 location where it is needed; and

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32           WHEREAS, developing an electrical grid compatible with  
33 micro-grids and self-sufficient residential solar photovoltaic



