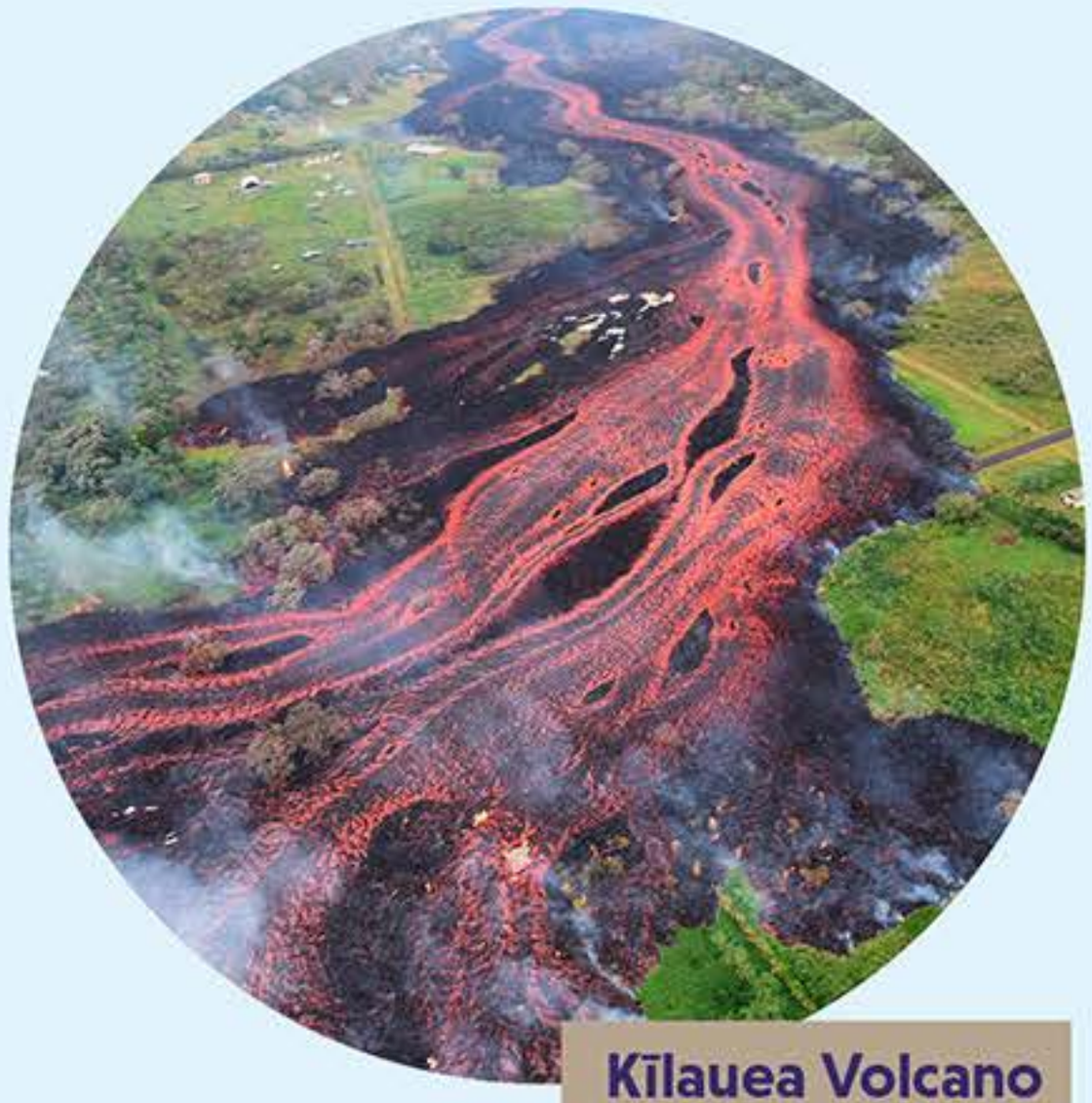
# Resilience

"Resilience is the ability of a system or its components to adapt to changing conditions and withstand and rapidly recover from disruptions." – *Public Utilities Commission Staff*

## Making our Grid More Resilient

Besides strengthening our existing infrastructure and being better prepared for disasters, we must also consider the future as the grid evolves and new technology emerges. As Hawai'i moves toward 100% clean energy, we must ensure that the decisions we make will make the grid even more resilient than it is today.



**Kīlauea Volcano Eruption**

## Key Planning Elements

» Minimize impacts of severe events
» Sustain mission critical functions under severe conditions
» Rapidly recover from a severe event
» Learn from severe events and continuously adapt

## ⚠ Threat Scenarios

**Hurricane**

**Tsunami/Earthquake**

**Physical/Cyber Attack**

**Volcano**

## Solution Options

Here are some examples of how we can make our grid even more resilient in the future:

» Increased emergency resources
» Microgrids
» Structure hardening
» Targeted undergrounding
» Renewable generation diversity
» Distributed resources
» Customer programs

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