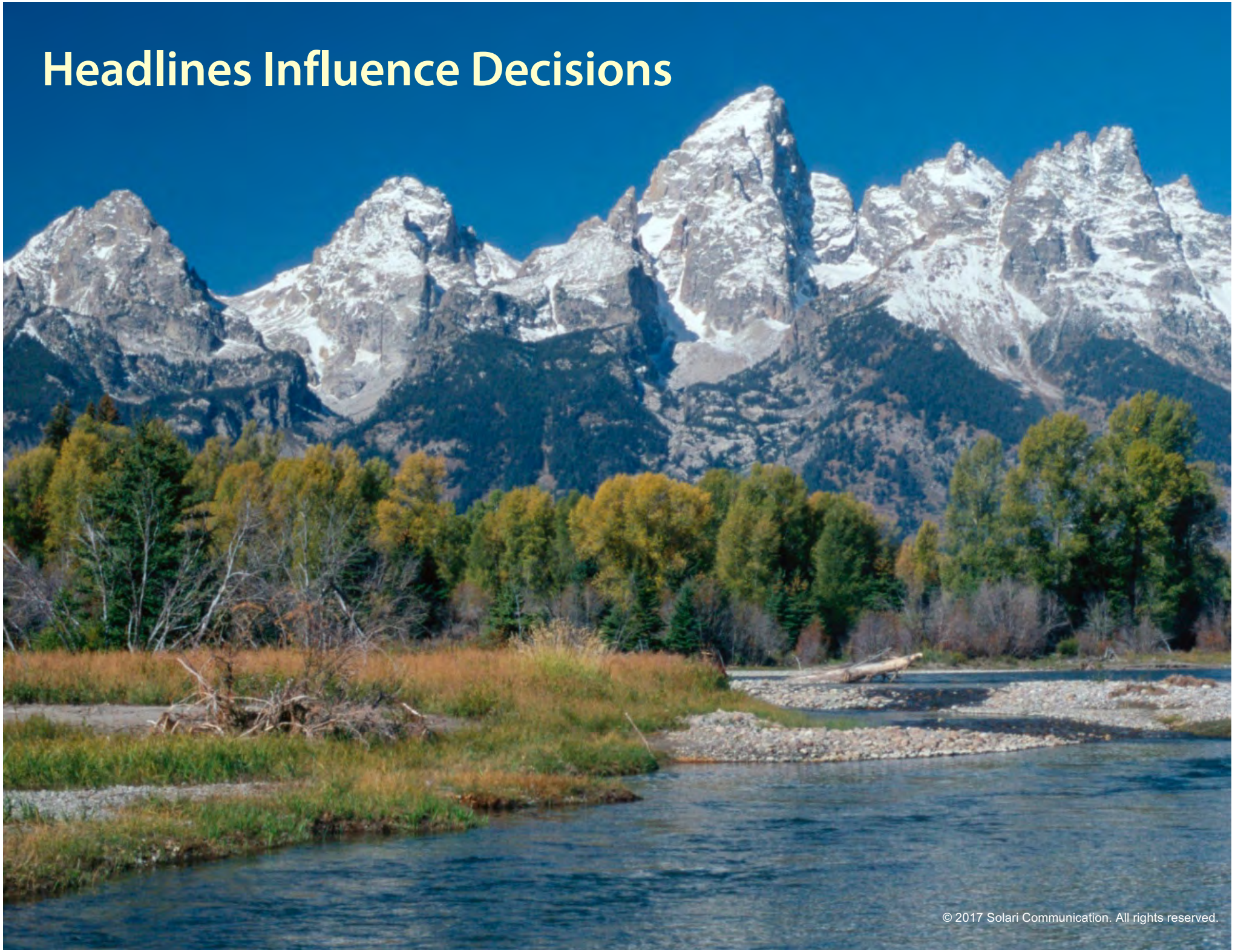
Communicating with IRP Stakeholders

Rich Maggiani
Solari Communication

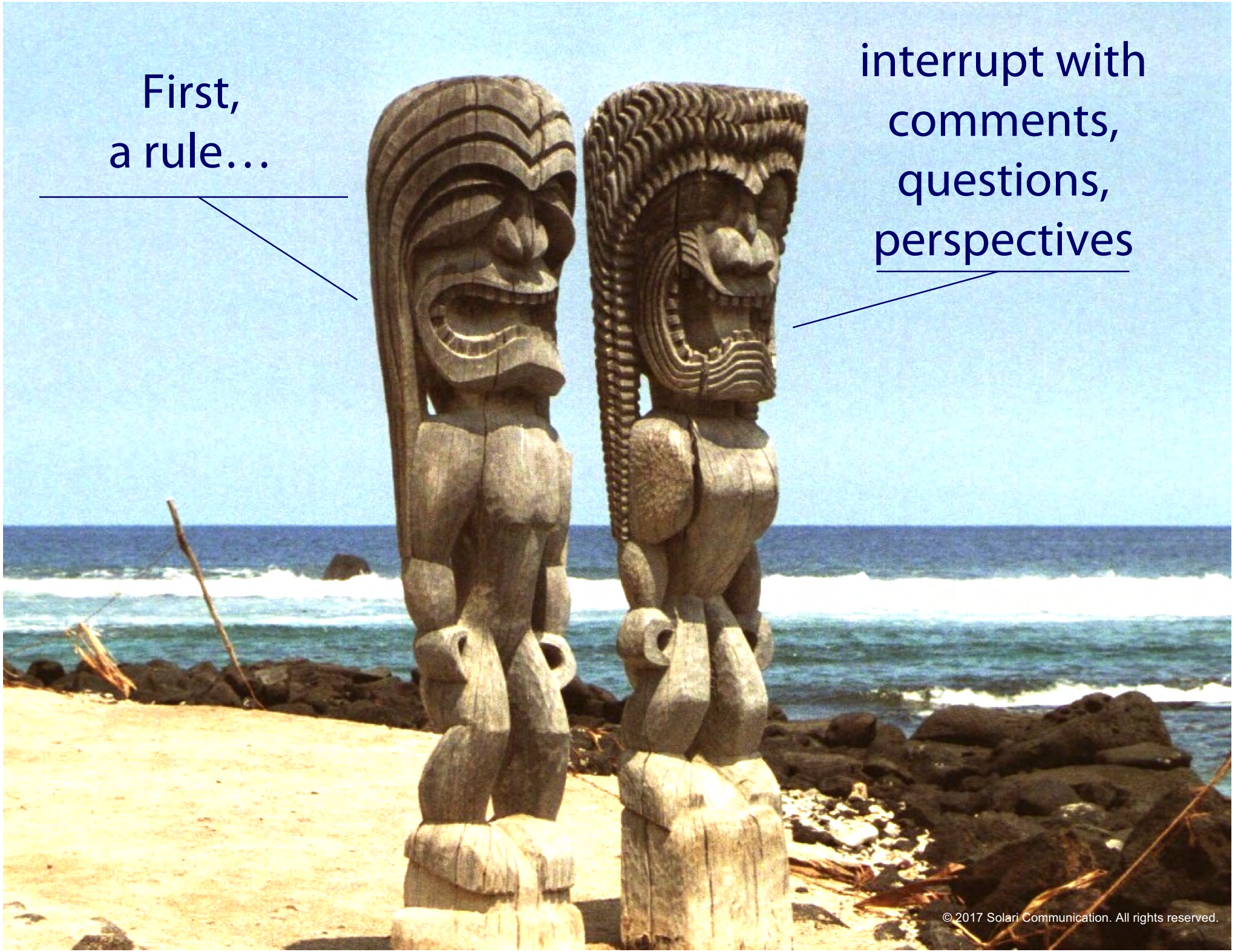
Headlines Influence Decisions



The Trail Ahead

Hawaiian Electric Case Study:

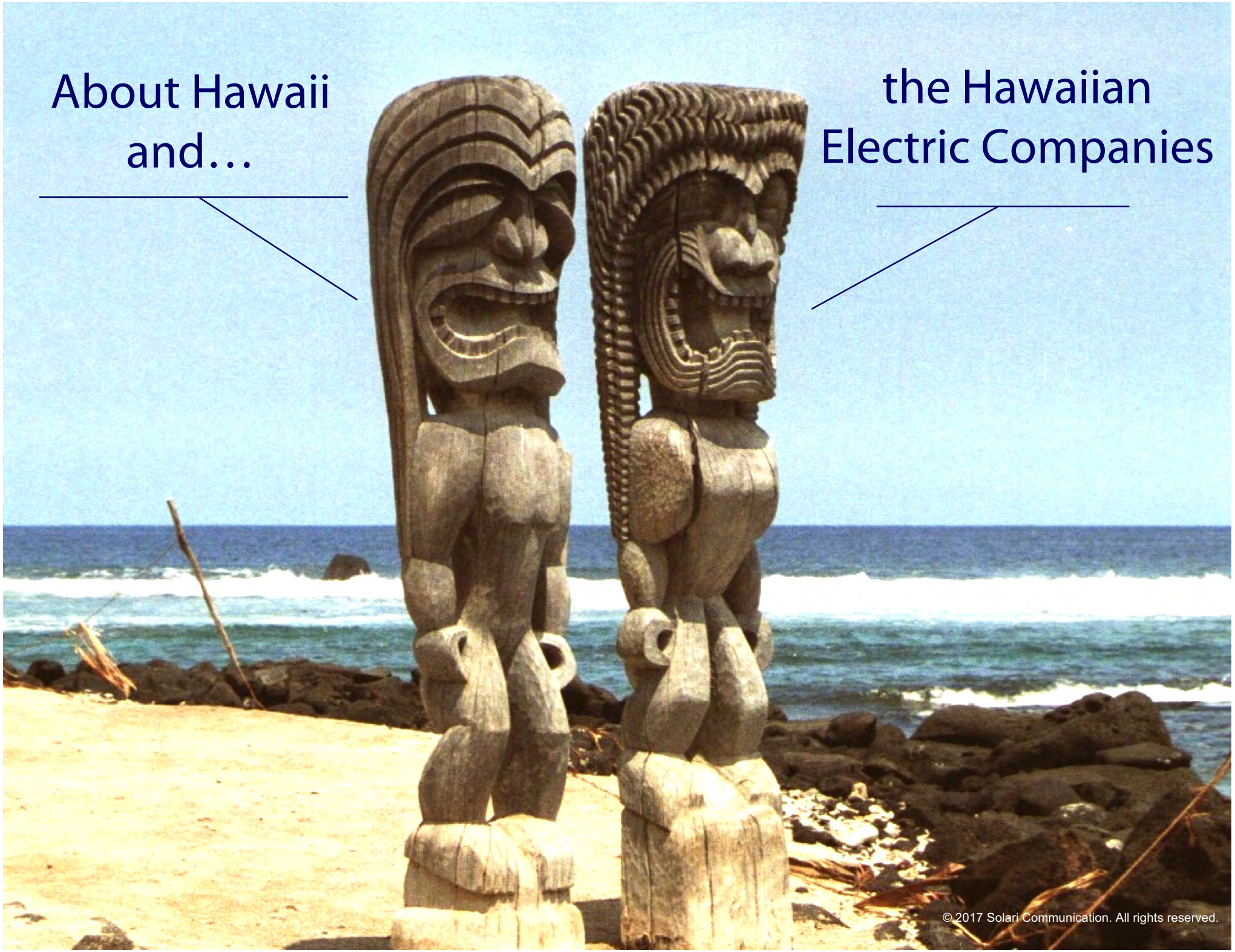
- About Hawaiian Electric
- Tale of Four Resource Plans
- Communicating Your Headline



The Trail Ahead

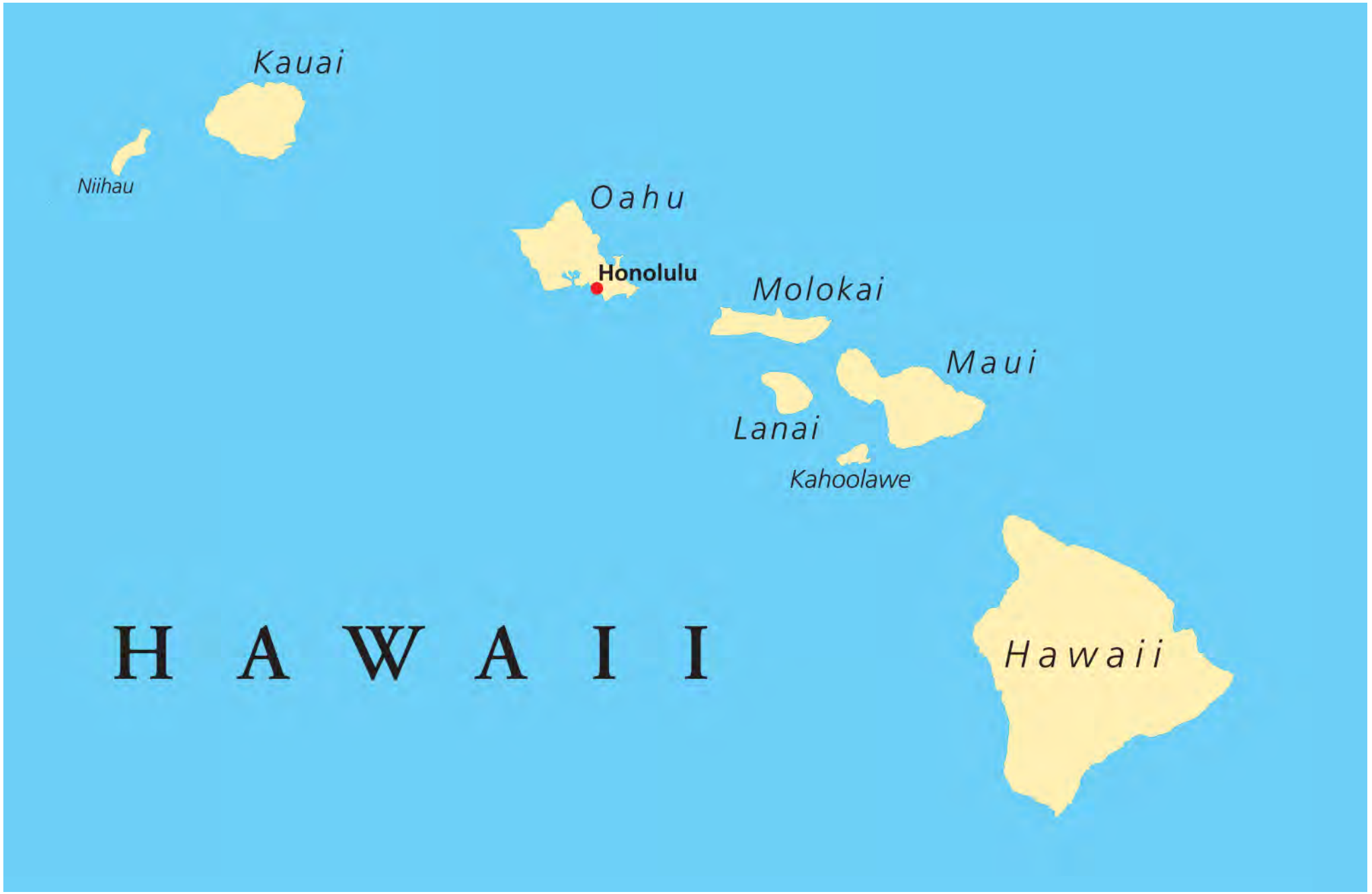
Hawaiian Electric Case Study:

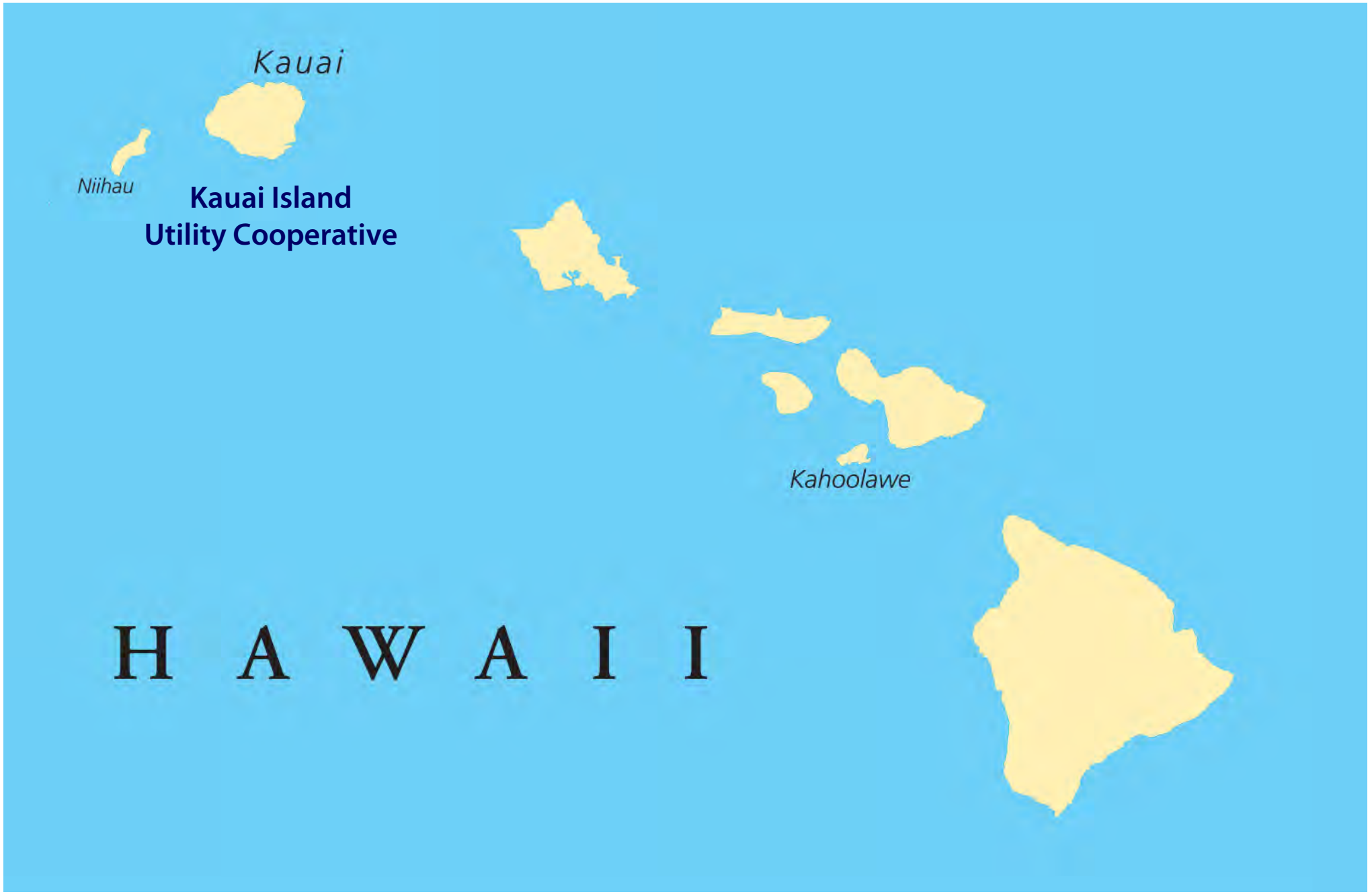
- About Hawaiian Electric

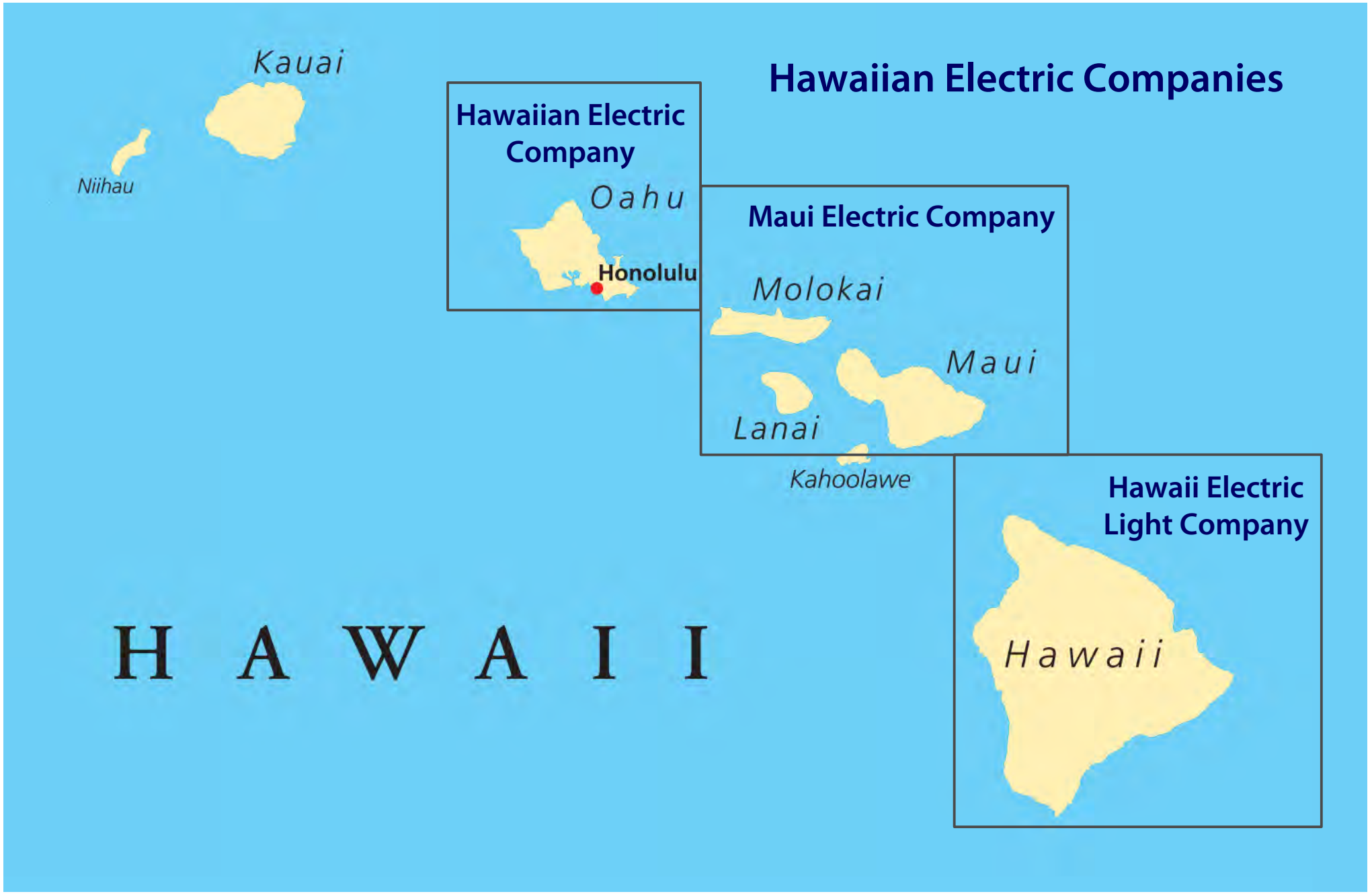



Let’s get started on that trail…

Hawaiian Electric
Maui Electric
Hawai‘i Electric Light


Kauai
Niihau
Oahu
Honolulu
Molokai
Maui
Lanai
Kahoolawe
HAWAII
Hawaii


Kauai
Niihau
Kauai Island
Utility Cooperative
Kahoolawe
HAWAII


Hawaiian Electric Companies
Kauai
Niihau
Hawaiian Electric Company
Oahu
Honolulu
Maui Electric Company
Molokai
Maui
Lanai
Kahoolawe
Hawaii Electric Light Company
Hawaii
HAWAII

Five Independent Island Grids

	Firm MW	+ RE MW	Firm RE MW	DG-PV
Hawaiian Electric	1,700	230	181	8.2%
	50	28 + 8	8	(2017)
Hawai'i Electric Light	242	165	38	10.8%
Maui Electric	278	116	0	10.7%
	Lanai = 11 MW		Molokai = 15 MW	

Renewable Portfolio Standard

Milestone	2009 RPS	2015 RPS
2010	10%	–
2015	15%	15%
2020	–	30%
2025	25%	–
2030	40%	40%
2040	–	70%
2045	–	100%

Year End	Attained RPS
2010	9.5%
2011	12.0%
2012	13.9%
2013	18.2%
2014	21.3%
2015	23.2%
2016	25.8%

"Hawaii is the Silicon Valley of clean energy. Hawaiian Electric has played a key role in building this reputation and encouraging innovation."

Brian Ryan, Vector Limited

New Zealand Energy Excelerator Global Partner

Got it!

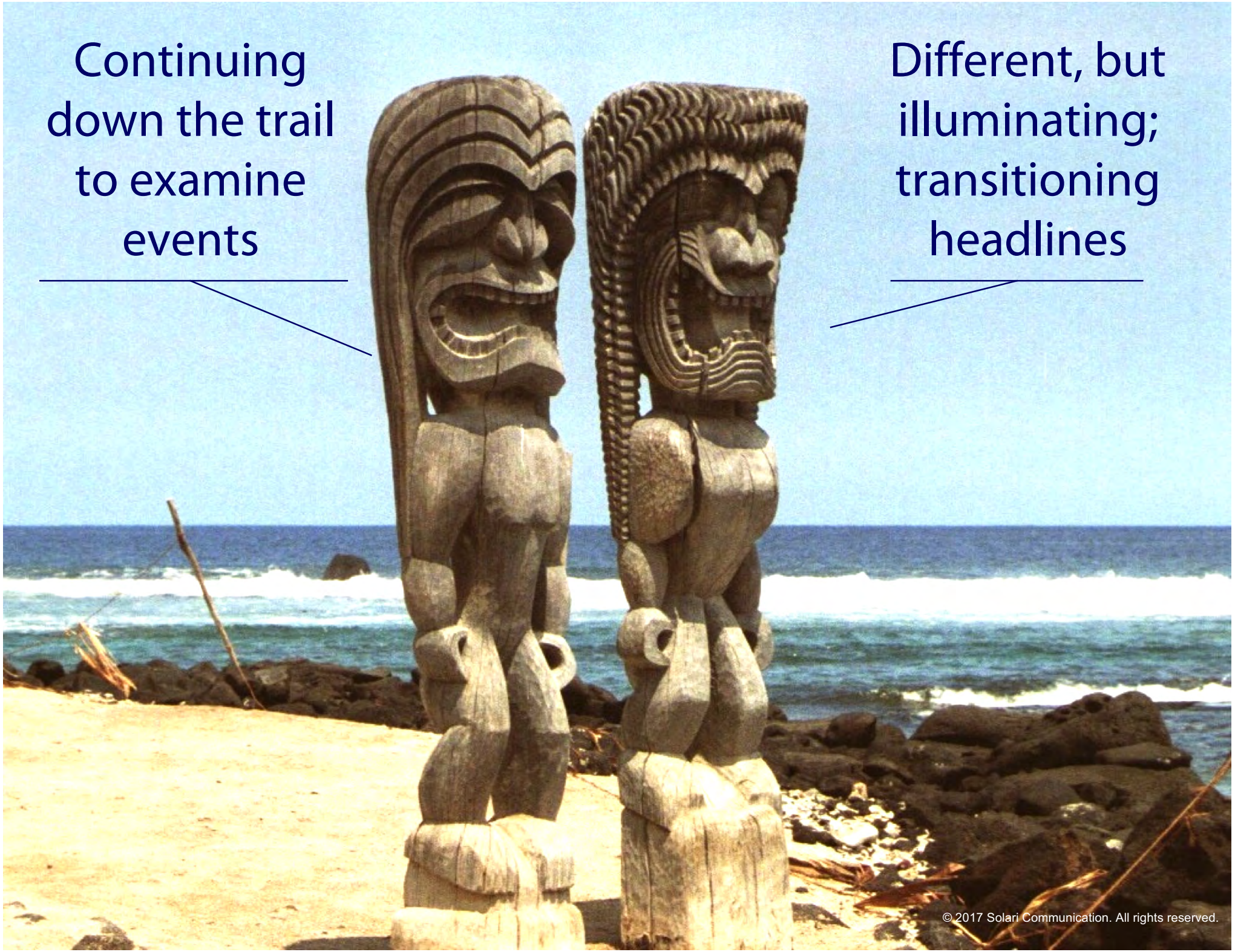
The Trail Ahead

Hawaiian Electric Case Study:

- About Hawaiian Electric
- Tale of Four Resource Plans

Continuing down the trail to examine events

Different, but illuminating; transitioning headlines



External Factors

- Entire PUC changed
- New Governor (2014) loudly opposes “merger” and LNG
- New PUC tries to control IRP content and results

IRP: 2013

2011

Mar — Order announcing IRP 2013; with an updated IRP Framework

2012

Mar — Order starting IRP 2013

Jun to… — IRP based on scenario planning; deadline = 365 days:

- Independent Entity & 68-person Advisory Board
- 17 Principal Issues
- Statute: 25% RPS by 2020; 40% RPS by 2030
- Twelve monthly AG meetings
- Seven additional unplanned technical sessions

2013

Jun — IRP 2013 filed: exceeds RPS, modernizes the grid, adds LNG

Jul — IE “cannot certify” IRP 2013

2014

Apr — IRP 2013 rejected (four months late); writes “Inclinations”

IRP: 2013

Comprehensive 42-page Executive Summary that followed past formats and outline

IRP casts a wide net: 752-page report (2,212 total)

Detailed every modeled resource plan (about 250)

Comprehensive discussion of results

Separate action plan for each utility

IRP: 2013 Assessment

- IE wouldn't certify; AG not fully considered; Framework not diligently followed; most Principal Issues not fully addressed
- Executive Summary too long; no clear headline
- No intermediate summaries
- Extremely technical
- Commission sought something different

[Executives wrote the Executive Summary following previous outlines; I wrote most everything else; more later]

PSIPs: 2014

2013	
Dec	HELCO PSIP ordered: 24 items in 4 Component Plans
2014	
Apr 21	HELCO files PSP; never ruled on (both before IRP ruling)
Apr 28	HECO & MECO PSIPs ordered (37/7 & 21/4 Component Plans) • Hawaiian Electric ordered to file four additional plans • All plans: 120-day deadline
Aug	Three 2014 PSIPs filed; all exceed RPS mandates • Transition to LNG; modernize the grid • Reduce customer bills; respond to all Component Plans
2015	
Jan	NextEra files “merger” application
Mar	Order issued to address “merger” application
Sep	Over 27,000 pages of IR responses since Order issued
Nov	2014 PSIPs mostly rejected; update ordered

PSIPs: 2014

Brief 9-page Executive Summary with a headline:
opening paragraph states the PSIP goal and high-level results

PSIPs pared down: 172-page report (412–711 total)

Little detail about modeling process

Focused discussion on results

Separate PSIP for each utility

PSIPs: 2014 Assessment

- Insufficient analysis—no surprise there
- Process not ″transparent″
- Component Plans not fully addressed
- Financials considered deceptive (real dollars)
- Executive Summary on target; main headline clear
- Narrative becoming simpler
- Conclusions & Recommendations to the point

[I wrote the Executive Summary and most everything else that wasn't submitted last minute]


PSIP:
Apr 2016

2015

Nov 4

Updated April 2015 PSIPs ordered:

- Initial Statement of Issues & 8 Observations & Concerns
- Revision Plan, Interim PSIP, & Updated PSIP
- 22 intervenors rejected; admitted as participant “Parties”

Nov 25

Revision Plan filed; conference schedule outlined

Dec

“Merger” hearings begin

2016

Feb

Interim PSIP filed; new modeling of DER, DR, u-s RE unveiled

Mar

“Merger” hearings end; 7,200 transcript pages

Apr 1

Updated PSIP filed, work still to be done:

- Exceeds RPS mandates; addresses 7 of 8 O&Cs
- LNG as a transition fuel; 383 MW 3x1 CC
- Comprehensive grid transformation
- Oahu-based utility-scale wind and solar potential
- Results based on “merger” approval

PSIP: April 2016

Executive Summary (18 pages) focuses on the inclusive nature of attaining 100% renewable generation within 30 years in support of pending “merger”

PSIPs expanded: 284-page report (1,218 total)

Detail discussion about new modeling process

Comprehensive action plans for each utility

It’s a plan;
subject to change as circumstances and assumptions change

PSIP: April 2016 Assessment

- Never ruled on because PSIP was incomplete, still…
- Too depended on “merger” approval
- LNG as transitional fuel a political issue
- 383 MW 3x1 CC a questionable direction
- Executive Summary a narrative supporting ”merger”
- Main headline is clear, although soft
- Overall narrative simpler

[Executive & myself co-wrote the Executive Summary; again, I wrote most everything else that wasn’t submitted last minute]


PSIP: Dec 2016

2016	
Apr	HNEI: Alt Ownership for Electric Utility on Oahu & Hawaii Island
May –Oct	Several Party conferences & meetings held
Jul	"Merger" dismissed without prejudice
Aug 16	Order clarifies Updated PSIP; adds Work Plan & Dec 1 deadline • Six additional issues; Party IRs; Party & HECO SOPs
Aug 26	Hawaiian Electric Motion for Clarification: never ruled on
Sep	Work Plan filed; updates assumptions and modeling process
Oct– Nov	Order: new deadline Dec 23, no utility SOP required
Dec	Updated Dec PSIP filed: • 52% RPS by 2022; Molokai 100% RE by 2020 • No LNG; maximizes DER; modernized the grid
2017	
Feb	Party and HECO SOPs filed. And the waiting begins…

PSIP: December 2016

Executive Summary follows the pyramid structure

PSIP focused: 186-page report (1,962 total)

Attains 100% RPS in 2040, 5 years ahead of schedule

Detail discussion about a revised modeling process;
uses three tools for duplicative analysis;
all modeled resource plans detailed

One comprehensive action plan under One Company initiative

PSIP: December 2016 Assessment

- Executive Summary strongest yet
- Overall narrative much simpler
- Main headlines prominent
- Many chapter and appendix summaries
- Strong plan; realities exposed
- Awaiting decision…

[I wrote the Executive Summary, and most everything else that wasn't submitted last minute; more later]

"I don't view the utility as some kind of enemy to be castigated. We are all in one boat in Hawaii. We will sink or swim together. It doesn't help to demonize the utility. Some of our actions seem harsh, but we are following the rules and doing our job."

Randy Iwase, Chair

Hawaii Public Utilities Commission

Got it!

The Trail Ahead

Hawaiian Electric Case Study:

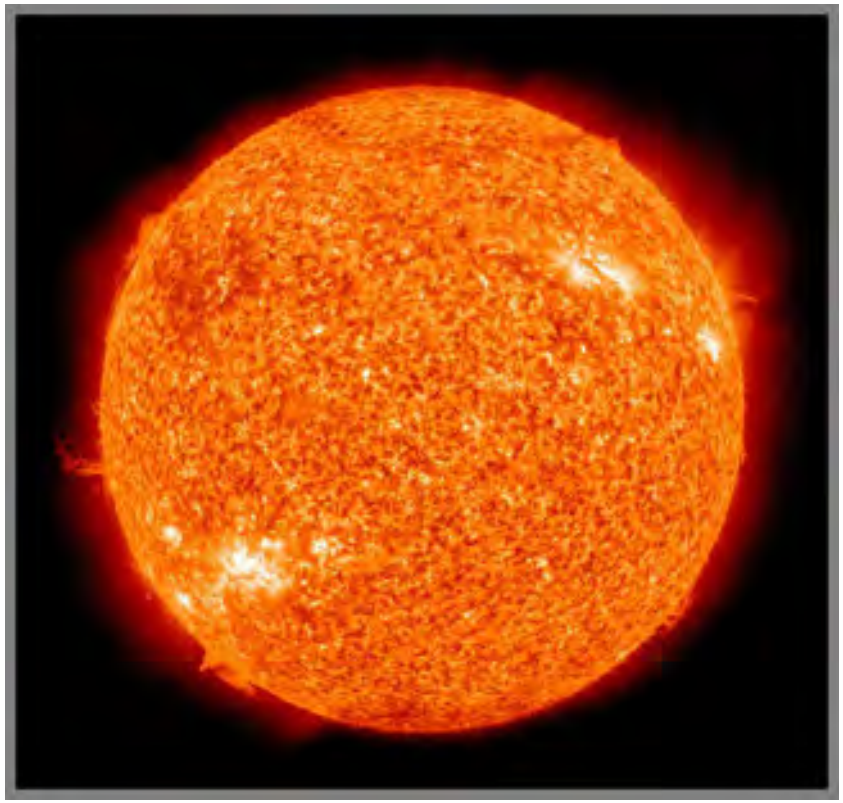
- About Hawaiian Electric
- Tale of Four Resource Plans
- Communicating Your Headline


First:
Understand Your Audience

What is this?

And this?

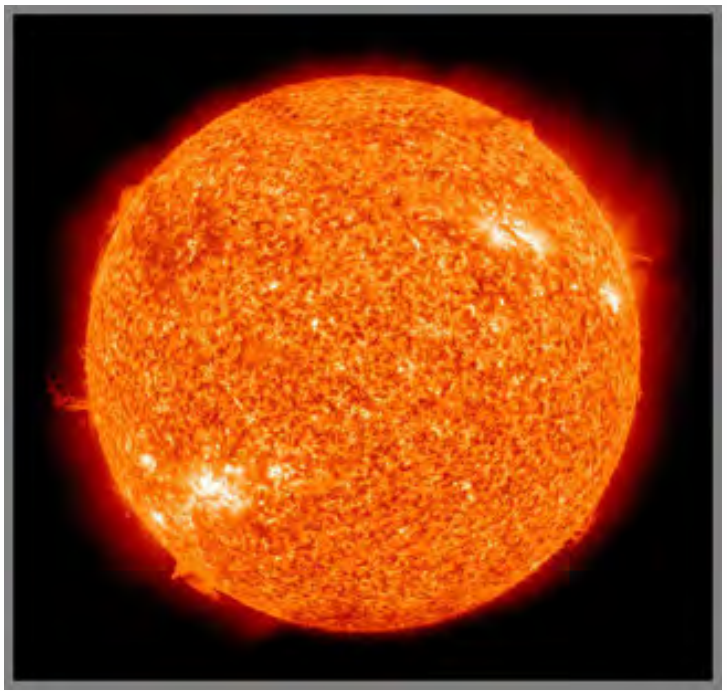
And this?



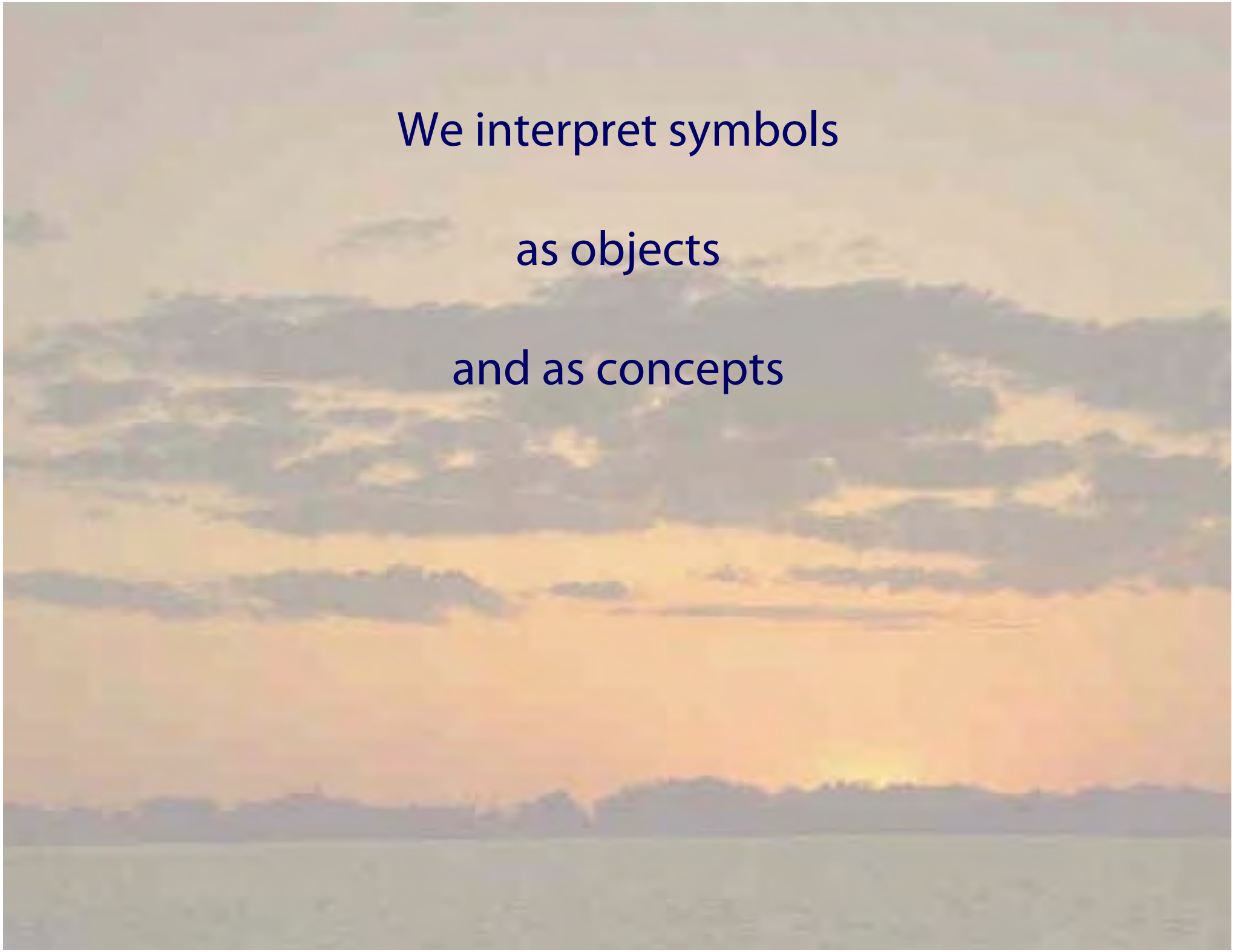
And this too?

But are they really?

Actually, they are simply symbols



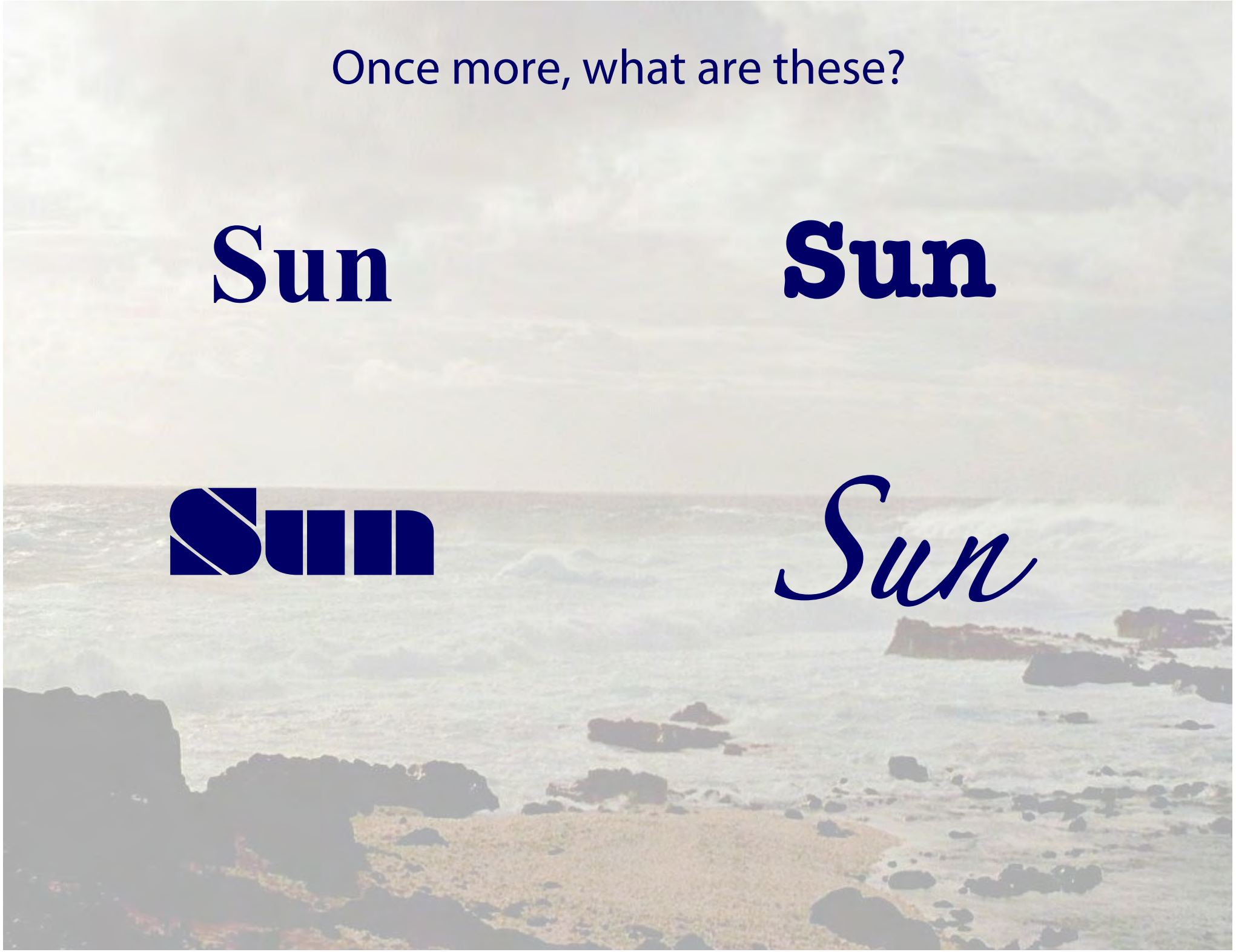
And so are these


We interpret symbols
as objects
and as concepts

What are these?

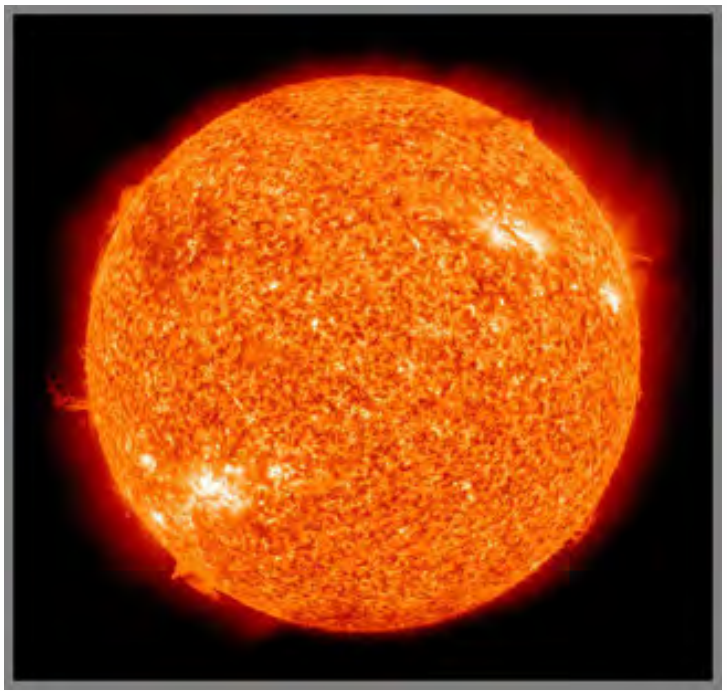

Actually, they are symbols too

Once more, what are these?




That’s right, they are symbols too

Just like these



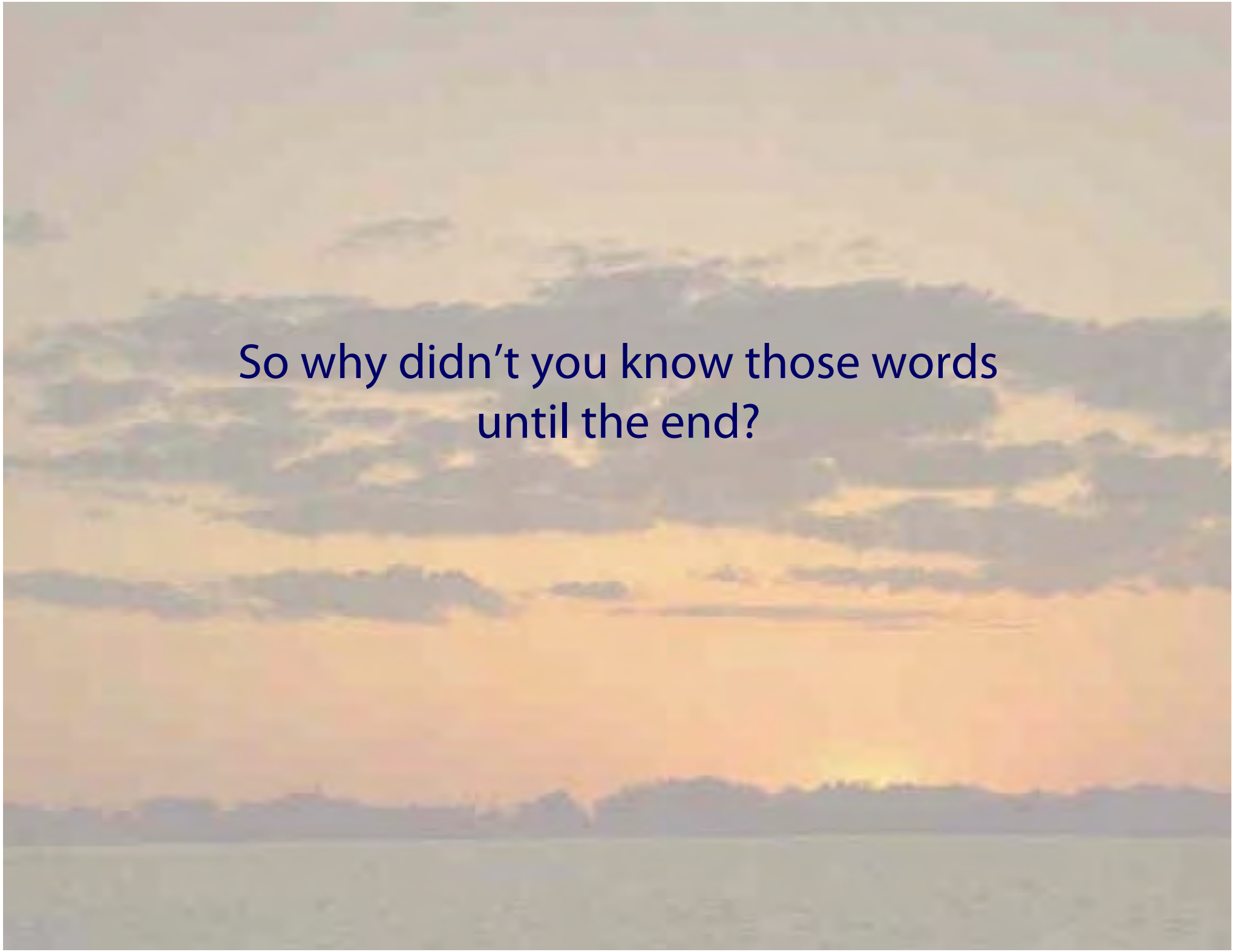
Okay, one last time: what are these?

太阳

태양

شمس

sol


So why didn’t you know those words
until the end?

Your not understanding *those* words

is the same as your audience

not understanding *your* words.


peak
load
ramp
contingency
cycling
baseload
capacity
inertia
frequency

What is cycling?


ANIMATOR

What is peak?

So…

How to define these words, and others like them?

There are a number of solutions,
each depends on your
writing style guide

First, don’t use different words

Ramp ≠ Increase

Contingency ≠ incident

Footnote

Glossary

Narrative definition

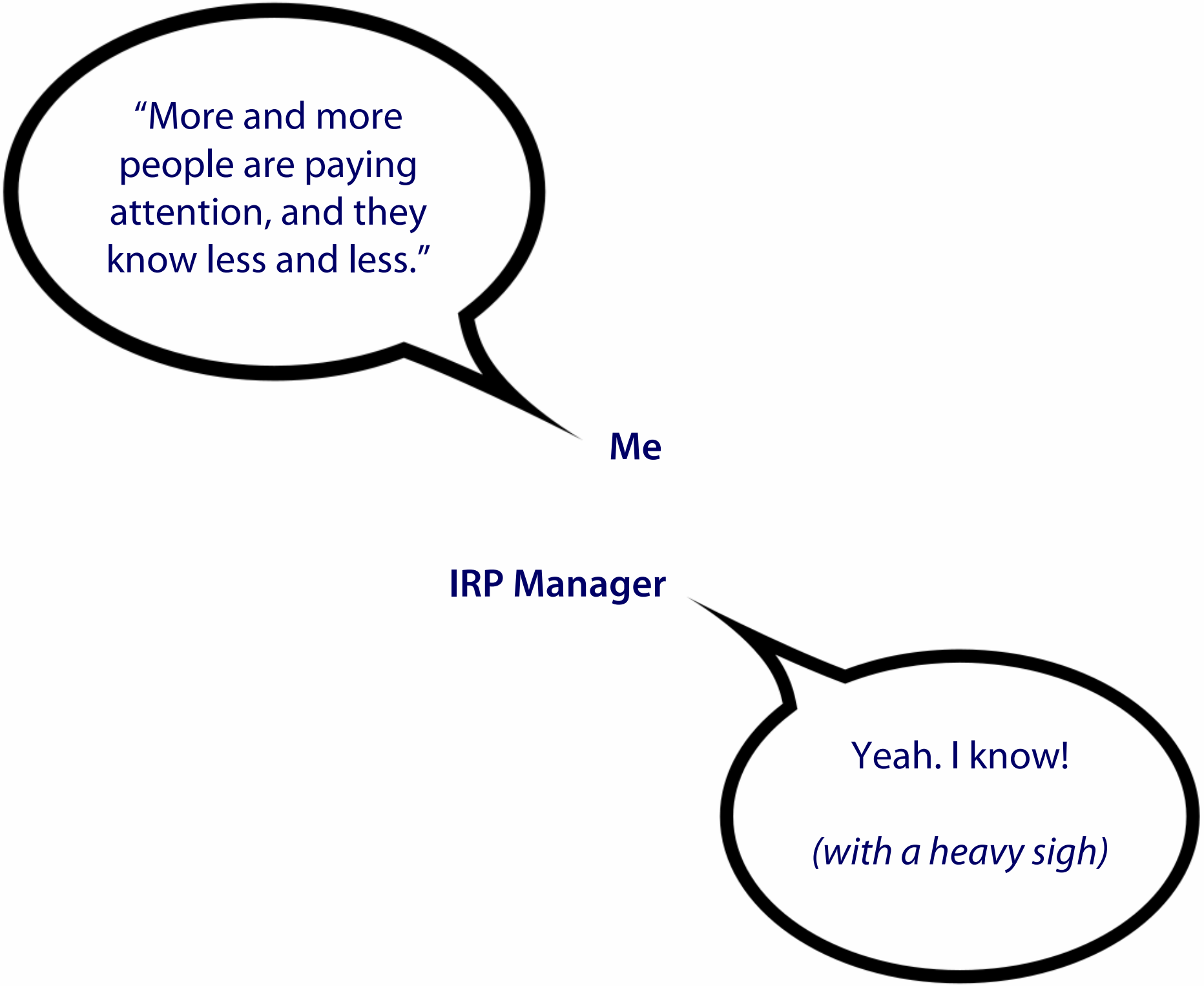
Narrative explanation

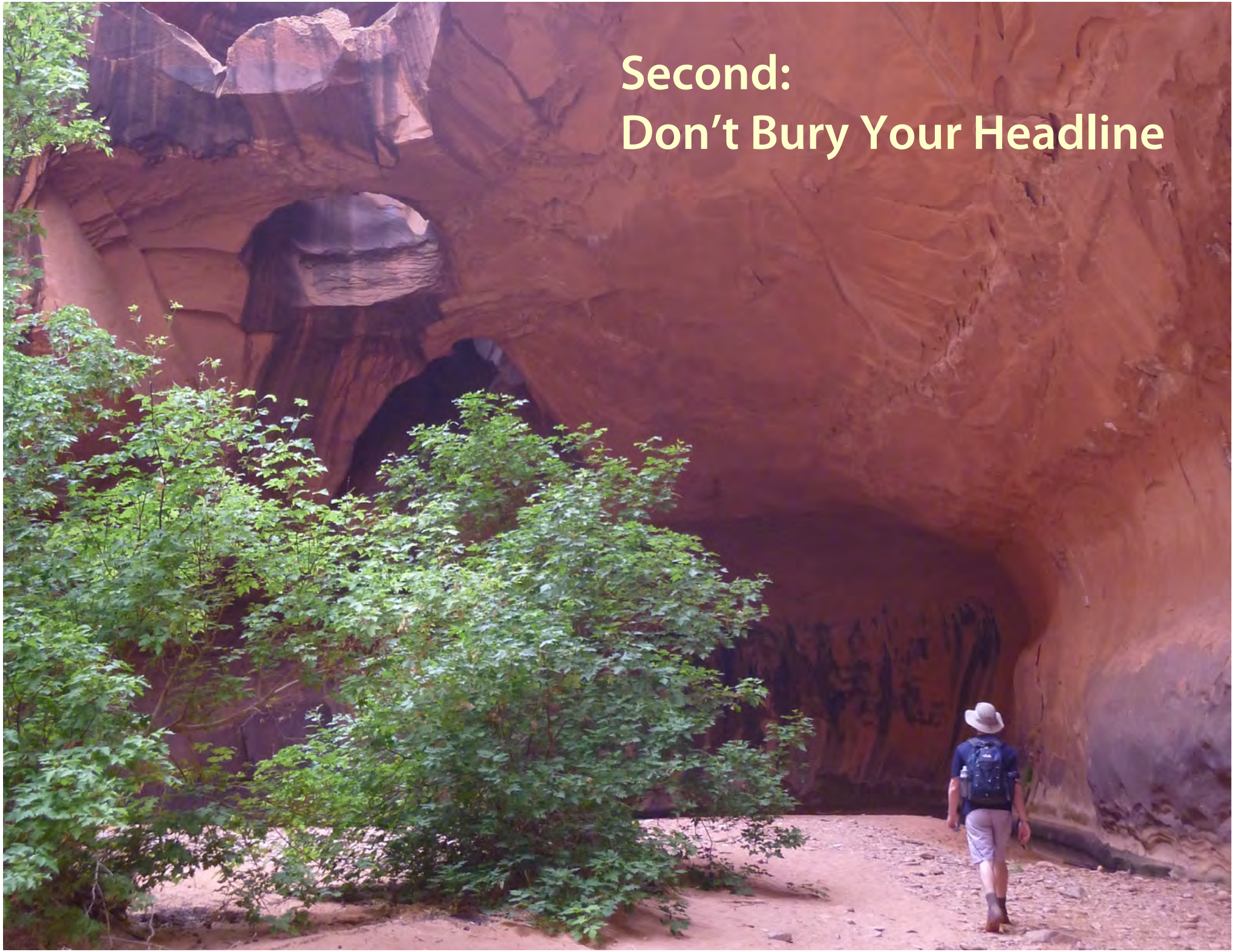
Narrative definition:

Ramp is the rate that a generator increases or decreases its power output, generally specified in MW per minute.

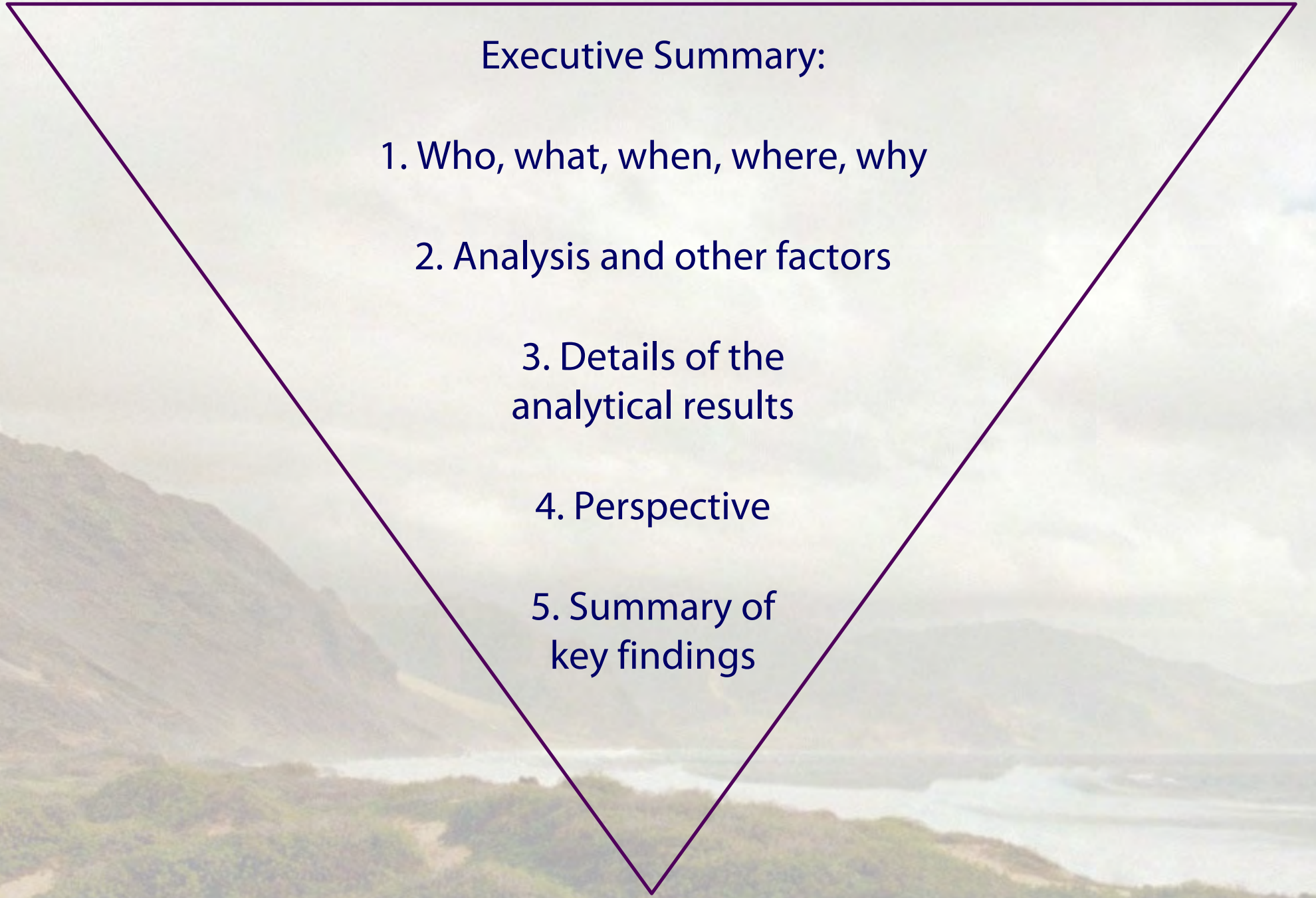
Narrative explanation:

The fast-start generator ramped up to its full power output of 60 MW in only 4 minutes, achieving a ramp rate of 15 MW per minute.


"More and more people are paying attention, and they know less and less."
Me
IRP Manager
Yeah. I know!
(with a heavy sigh)


Second:
Don't Bury Your Headline

Typical Information Flow: Burying the Headline



Example: Burying the Headline

IRP 2013 Executive Summary

- Starts with the known and irrelevant
- First headline: page 7; IRP results: page 17
- Reader: "Where's the important information?"
- No overarching statement

[btw, I didn't write this]

1. Who, what, when, where, why

Hawaiian Electric Company, Hawaii Electric Light Company, and Maui Electric Company [collectively referred to as the "Companies"] have developed the 2013 Integrated Resource Planning (IRP) Action Plan and report in cooperation with the Independent Entity (IE) and the Advisory Group (AG) established for this purpose by the Hawaii Public Utilities Commission (Commission) in accordance with the IRP Framework.[1] (page 1)

Problem: Irrelevant; already known

2. Analysis and other factors

The general goal of IRP is to develop an Action Plan that guides how the Companies will meet energy objectives and customer energy needs consistent with State of Hawaii energy policies and goals. The 2013 IRP Objectives were developed with the AG, and are presented below (followed by a bulleted list). (page 1)

Problem: Already known

3. Details of the analytical results

Historically, a traditional IRP would assess the new generation resource needs for a nominal 20-year planning period in a fully-regulated market with increasing demand for generation capacity. This is not the case in Hawaii today. Due to high fuel costs, effective energy efficiency programs, customer self-generation of electricity and economic conditions, utility sales and peak loads have declined for several years and are expected to be relatively flat (Stuck in the Middle IRP Scenario) or continue to decline (Blazing a Bold Frontier IRP Scenario) in the future. (page 1)

Problem: While important, it lacks context

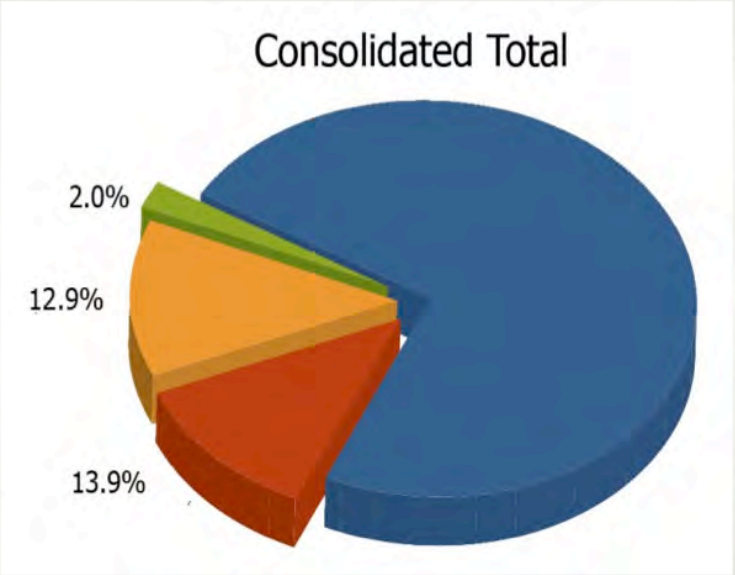
4. Perspective

The Companies' goal is to better understand and respond to our customers' preferences and priorities. Our relationship with our customers begins in their homes and their businesses — helping them to conserve energy, to take advantage of energy efficiency and distributed generation options like PV, and to provide them the most information and the greatest control of their electricity use possible through tools such as smart meters and energy education. We also must continue to live up to our responsibility to ensure safe and reliable service for our customers' homes and businesses, in whatever manner and from whatever source our customers choose. (page 2)

Problem: Again, it's important, but not page 2 important.

5. Summary of key findings

The Companies met a record 13.9% of energy needs from renewable generation in 2012—well ahead of the 12% reported for 2011 & on the way to passing the next clean energy goal of 15% in 2015. (page 7)



Problem: 7 pages to get to a headline

- Grid modernization (page 17)
- Costs and bills (page 22)
- Fairness (page 25)
- Scenarios, resource plans, and action plans (page 27)

Problems: Ten more pages before results; is it even obvious?

Addressing Audience Needs: Headline First

Example: Headline First

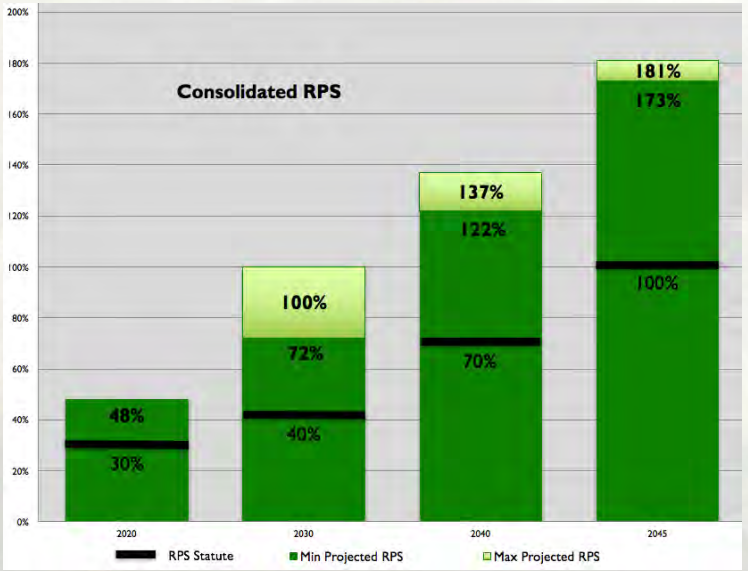
PSIP: December 2016 Executive Summary

- Hot item first: exceed RPS
- Actions that exceed RPS + summary details
- Reader gets important information in first 3 pages
- Overarching statement: attaining RPS doable
- That's headline first

[btw, I did write this]

1. Summary of key findings

By implementing the proposed action plan, we will exceed the 2020 RPS mandate of 30%, achieving an estimated 48%, and doubling our 2016 RPS. Under multiple longer-term scenarios, our RPS can be at least 72% by 2030 and reach at least 100% by 2040, ahead of the 2045 deadline. (page 1)



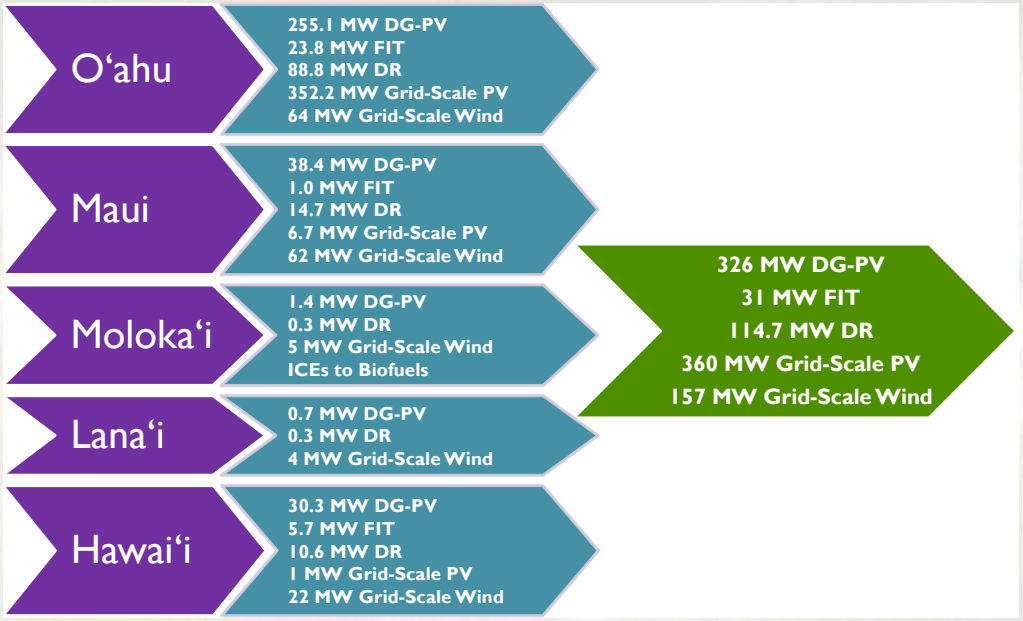
2. Perspective

Our PSIP accelerates the pace on the path to 100% renewable energy. The Action Plans:

- Exceed Hawaii's 2020 Renewable Portfolio Standard (RPS) and achieve a consolidated RPS of 52% over the next five years.
- Enable Moloka'i to achieve 100% renewable energy by 2020.
- Maximize distributed energy resources—fairly compensated.
- Make high use of demand response programs.
- Aggressively seek grid-scale renewable resources, leveraging federal tax credits.
- Pursue grid modernization to enable continued integration of renewable energy.
- Preserve long-term flexibility to use emerging technologies and accommodate changing circumstances.
- Reduce operations that use fossil fuels and contribute to global warming. (page 2)

3. Details of the analytical results

Here are the renewable generation and customer demand response additions in our proposed near-term action plans. (page 3)



- Seven renewable energy planning principles (page 4)
- Strong DER growth (page 4)
- Grid modernization; costs (page 5)
- Interisland transmission (page 6)

4. Analysis and other factors

Stakeholder Involvement. We analyzed many scenarios and strategies for attaining our RPS goals. These scenarios included multiple long-term energy scenarios developed by Hawaiian Electric and by PSIP stakeholders. As part of this evaluation, we collaborated with PSIP stakeholders, thoughtfully considering their suggestions and input. Here is a sampling of scenarios from several stakeholders along with our general assessment of those scenarios: (page 7)

[followed by a list of specific input topics]

5. Who, what, when, where, why

[omitted]

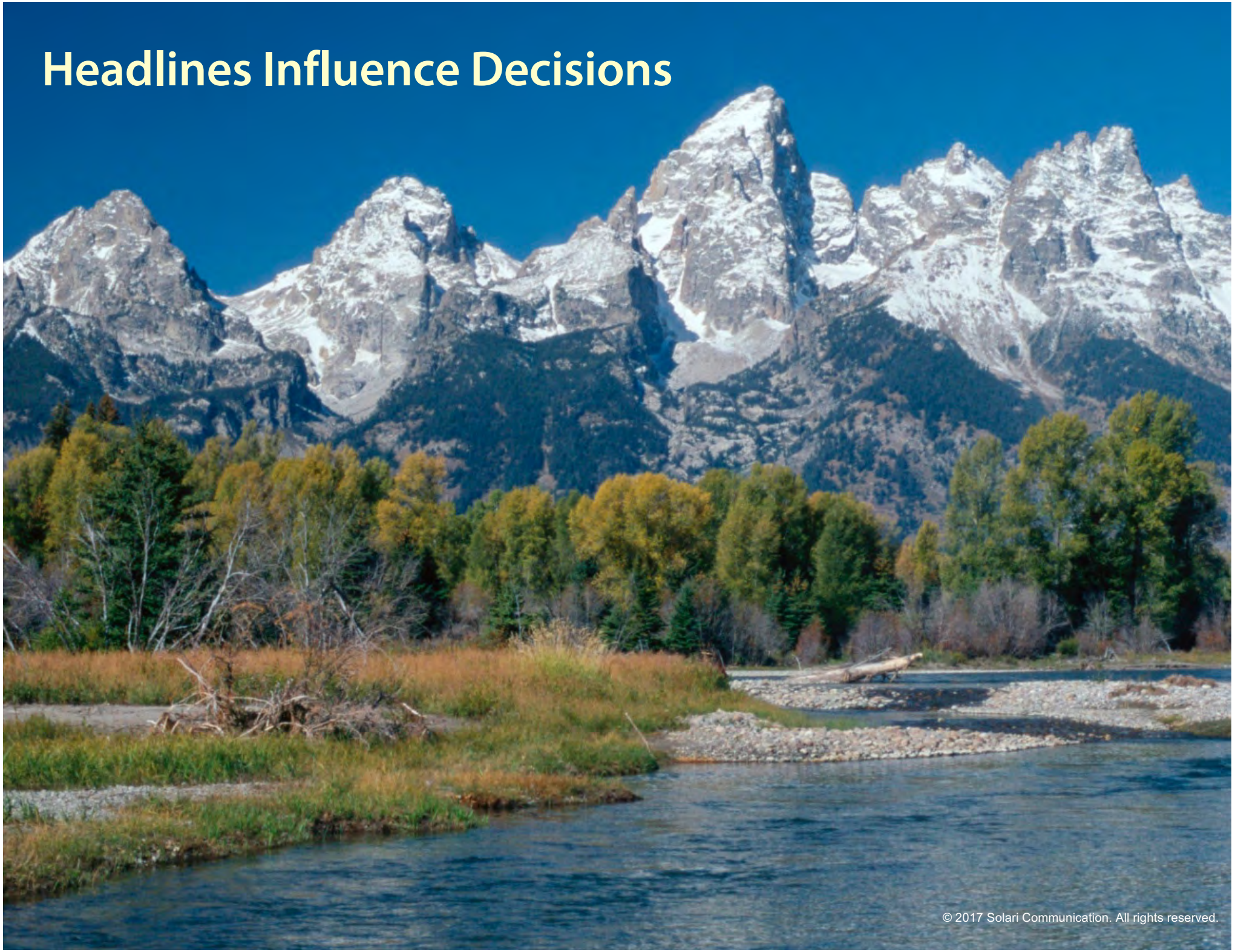
One Final Point

The technical trail is fundamental to resource plans.

The communication trail is also fundamental to resource plans.

That's the insight we derived over these four resource plans.

Headlines Influence Decisions



Got it!

It’s the End of the Trail!

Thank you.

Rich Maggiani

Communication Consultant
Writer & Editor

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802.999.7440

Rich.Maggiani@SolariCommunication.com
www. SolariCommunication.com

Remember:

Headlines Influence Decisions

Appendix

Hawaiian Electric Resource Plan Timeline

External Factors

- Entire PUC changed
- New Governor (2014) loudly opposes “merger” and LNG
- New PUC tries to control IRP content and results

IRP: 2013

2011

Mar 14

Order announcing IRP 2013; with an updated IRP Framework:

- Goal and governing principles
- Commission, utility, government, and public roles
- Independent Entity and 68-person Advisory Group
- Planning process and guidelines

2012

Mar 1

Order starting IRP 2013:

- Deadline: 365 days after Advisory Group formed

Jun 29

IE named; Advisory Group formed. Represented are:

- Local businesses and associations
- Legislature
- Environmental groups
- Energy developers
- County officials
- Governmental agencies
- Residents

2012

Jul 19

More Commission direction:

- Principal Issues and questions to address

Aug – Dec

IRP process:

- Monthly day-long Advisory Group meetings
- IRP based on scenario planning: two-day interactive session
- 17 Principal Issues to address
- Statute: 25% RPS by 2020; 40% RPS by 2030

2013

Jan – May

IRP process:

- Monthly day-long Advisory Group meetings
- 7 additional technical sessions
- 17 Principal Issues to address
- Statute: 25% RPS by 2020; 40% RPS by 2030

2013

Jun 28

IRP 2013 filed; individual action plans for each utility.

- Exceeds RPS goals
- Lowers customer bills
- Modernizes the grid
- Partially transitions to LNG to lower costs and meet environmental standards
- Addresses rooftop solar expansion

Jul 29

Independent Entity "cannot certify" IRP 2013

Sep 9

15 intervenors admitted

Dec 20

Hawaii Electric Light ordered to file a Power Supply Improvement Plan (PSIP):

- Within 120 days
- Order cites 24 provisions to address in four Component Plans

2014

Apr 21

Hawaii Electric Light files Power Supply Plan (PSP)

- Never ruled on

Apr 28

Four months late, Commission "rejects" IRP 2013 for:

- Not complying with the Framework
- Failing to meaningfully address 13 of 17 Principal Issues

Includes Commission's Inclinations as basis for resource plans; three major sections:

- Creating a 21st century generation system
- Creating modern T&D grids
- Reforming policy and regulatory policies to achieve Hawaii's clean energy future

Two additional orders to continue PSIP process

PSIPs: 2014

2014

Apr 28

Hawaiian Electric ordered to file five plans:

- Interconnection Requirements Study: 30 days
- Distribution Circuit Monitoring program: 60 days
- Distributed Generation Interconnection Plan: 120 days
- Integrated Interconnection Queue plan: 120 days
- Power Supply Improvement Plan (PSIP): 120 days addressing 37 provisions within 7 Component Plans

Apr 28

Maui Electric ordered to file a Power Supply Improvement Plan: 120 days addressing 21 provisions within 4 Component Plans

Aug 7

PSIP docket established

Aug 26

Hawaiian Electric, Maui Electric, and Hawaii Electric Light all file individual PSIPs containing some overlapping company-wide information…

2014

Aug 26

All three filed 2014 PSIPs:

- Exceed RPS mandates
- Transition to LNG
- Upgrade the T&D grid
- Reduce customer bills
- Respond to all Component Plans

Sep 12

Public comments invited

2015

Jan 29

NextEra files “merger” application

Mar 2

Order issued to address “merger” application

Apr – Sep

NextEra and Hawaiian Electric file over 27,000 pages in response to intervenor and Commission IRs


PSIP:
Apr 2016

2015

Nov 4

2014 PSIPs mostly rejected; update ordered:

- Initial Statement of Issues outlined
- 8 Observations & Concerns
- Revision Plan by November 25, 2015
- Interim PSIP Update by February 15, 2016
- Updated PSIP by April 1, 2016
- 22 intervenors rejected, but admitted as participant “Parties”

Nov 25

Revision Plan filed

Dec 2

“Merger” hearings begin

Dec 11

One more Party added

Dec 17

First stakeholder conference

2016

Jan 7

First technical conference

Feb 16

Interim PSIP Update filed:

- Decision Framework: DER, DR, utility-scale resources
- Party input
- "Merged" utility commits to speeding up RPS attainment

Mar 8

Second technical conference

Mar 11

"Merger" headings end; 7,200 transcript pages

Apr 1

Updated PSIP filed, work still to be done:

- LNG as a transition fuel
- 383 MW 3x1 CC
- Addresses 7 of 8 Observations & Concerns
- Comprehensive grid transformation
- Exceeds RPS mandates
- Oahu-based utility-scale wind and solar potential


PSIP: Dec 2016

2016

Apr 26

Hawaii Natural Energy Institute publishes "Alternative Ownership for Electric Utility on O'ahu and Hawaii Island"

May 17

Second stakeholder conference

Jun 3

Public comments invited

Jun 29

Third stakeholder conference

Jul 15

"Merger" dismissed without prejudice

Aug 16

Order to clarify Revised PSIP content:

- Six additional issues to address
- Two more technical conferences
- Work Plan by September 7
- Revised PSIP by December 1
- Party IRs
- Party and Hawaiian Electric SOPs

2016

Aug 26

Hawaiian Electric Motion for Clarification: never ruled on

Aug – Oct

Four additional stakeholder meetings

Sep 7

Revised Work Plan filed:

- Updated analysis process using 3 modeling tools
- Updated assumptions
- Updated O‘ahu-sited utility scale wind and solar potential

Sep 21

Third technical conference

Oct 3

Fourth technical conference

Oct 17

Order changing PSIP deadline to December 23

- Extends IR and SOP deadlines
- Removes Hawaiian Electric SOP requirement

2016

Nov 14

Order extending IR and SOP deadlines

Dec 23

Revised PSIP filed:

- Accelerates renewable generation
- 52% RPS by 2022
- No LNG
- Molokai 100% renewable energy by 2020
- Maximizes DER
- Modernizes the grid

2017

Feb 14

SOPs filed, including a Hawaiian Electric SOP

…

And the waiting begins…

Thank you.

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