

Panel Discussion

Tom Neary, John Patton, Ron Fenex

VERs

Video Event Reports

This presentation begins with some common trends in the utilities industry including use of video and the rise of mobile devices. Utilities are using the intersection of these two technologies to solve some challenging problems that include raising employee engagement and collaboration. For example, video job aids have been used for almost a decade to improve the use and adherence of written procedures. This presentation looks how some utilities are extending the video job aid concepts by using mobile video to re-create high value events. In these high value cases where risk is continuing build because the class of event continues to re-occur or has resulted in significant loss, the visualization that VERs provide can be quite powerful to change the course of future events.

VERs must be done carefully by persons with grass roots backgrounds in operations and safety. When they are done correctly the VERs have a high level of authenticity that resonates with the field operators who are watching the VER. The field operator often says “Now that I am watching my peer in this video, I can see that I could find myself in a similar situation and this could happen to me”.

In this presentation several Utilities share some of their best VERs. A group of switching VERs will also be presented to show the power of visually recognizing patterns of switching event precursors. The presentation will also introduce the fundamentals for making VERs at your utility, including a template for creating VERs, incorporating a human performance briefing, and summarizing the corrective actions.

– NERC Human Performance Conference 2015



VERs

Video Event Reports

– NERC Human Performance Conference 2015





Tom Neary, P.E.

*Co-Founder & CEO
OpCon Technologies, Inc*

tneary@knowledgekeeper.com
(415) 659-1841



*Video Your Best Work,
While You Do Your Best Work!*



KnowledgeKeeper
OpCon Technologies
Business Video

Free



- OR -

Get FREE Account



John Patton

*Sr. Human Performance Specialist
Pacific Gas & Electric Company*

JMPn@pge.com
(510) 847 5116





Ron Fenex

T&D Technical and Safety Training Manager

APS

Ronald.Fenex@aps.com

602-371-5948



aps

Agenda:

Corporate Video & The Rise of Mobile Devices

Introduction to VER's

Five Minute VERs

96

1916

1916
*A German field
telephone station in
the Aisne
Department of
Northern France
during World War I.*

*Paul Thompson
FPG/Getty Images*



1980

1980
*Mobile Phone during
the Iranian Embassy
siege at Princes
Gate in South
Kennington,
London.*

Kypros/Getty Images



2012

2012
*Audience Members
Video and take
Pictures of President
Barrack Obama,
Florida Atlantic
University, Boca
Raton, Florida.*

Marc Serrota - Getty Images



96 Years



Corporate Video: Mobile Devices



Companies Are Adopting Mobile

FedEx Corp: 4,000 iPads
to Reduce Paper Documents

Lowes: 21,000 iPads
for Employees to Use on Store Floors instead of having to "find a computer"

Los Angeles USD: 641,000 iPads
to Expose Every Student to Technology that They Will Use in the Workforce

United Airlines: 11,000 iPads
Used to Update 3 Ring Flight Binders every few Weeks...Now Update Electronically

City of London: 14,000 "Smart Street Lights"
Where Workers Via iPad App:

- *Are Notified when the Light need to be Replaced*
- *Can Adjust Efficiency*

Companies Are Getting Help

Workers Are Buying Their Own Smart Phones in Drove

Workers Are Already Familiar From Consumer Use

IBM Has Formally Partnered with Apple

Now Recommending Clients Buy iPhones and iPads

IBM and Apple are Building 100 Mobile Apps for Enterprise

Consumers Have Moved to Online Video:

66% of 2013 Global Internet Traffic was Video
By 2018 it will be 78%

Every Second, One Million Minutes of Video Traffic
Will Cross The Global Internet by 2018

Companies Are Not Far Behind:

2018 Business Network IP Traffic Will Double
as Businesses Adopt Advanced Video Communications

2018 Traffic from Wireless and Mobile Devices will
Exceed Traffic from Wired Devices

Agenda:

Corporate Video & The Rise of Mobile Devices

Introduction to VERs

Five Minute VERs

Introduction to VERs:

Wow, That Could Happen to Me

- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

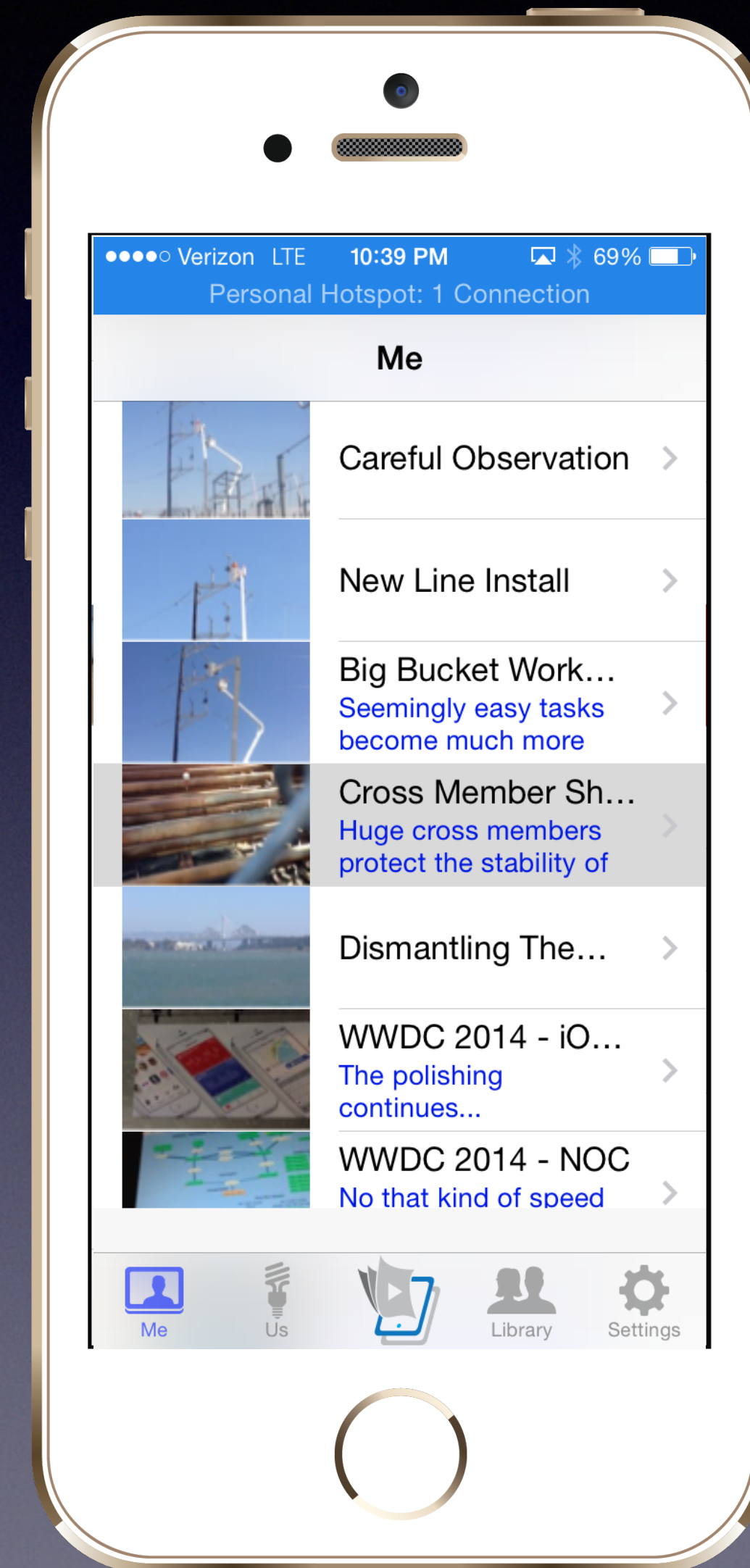
What is a VER?

Video Event Report (VER)

A Simple 5 -10 Minute
Video Recreation of a
“High Value Event”

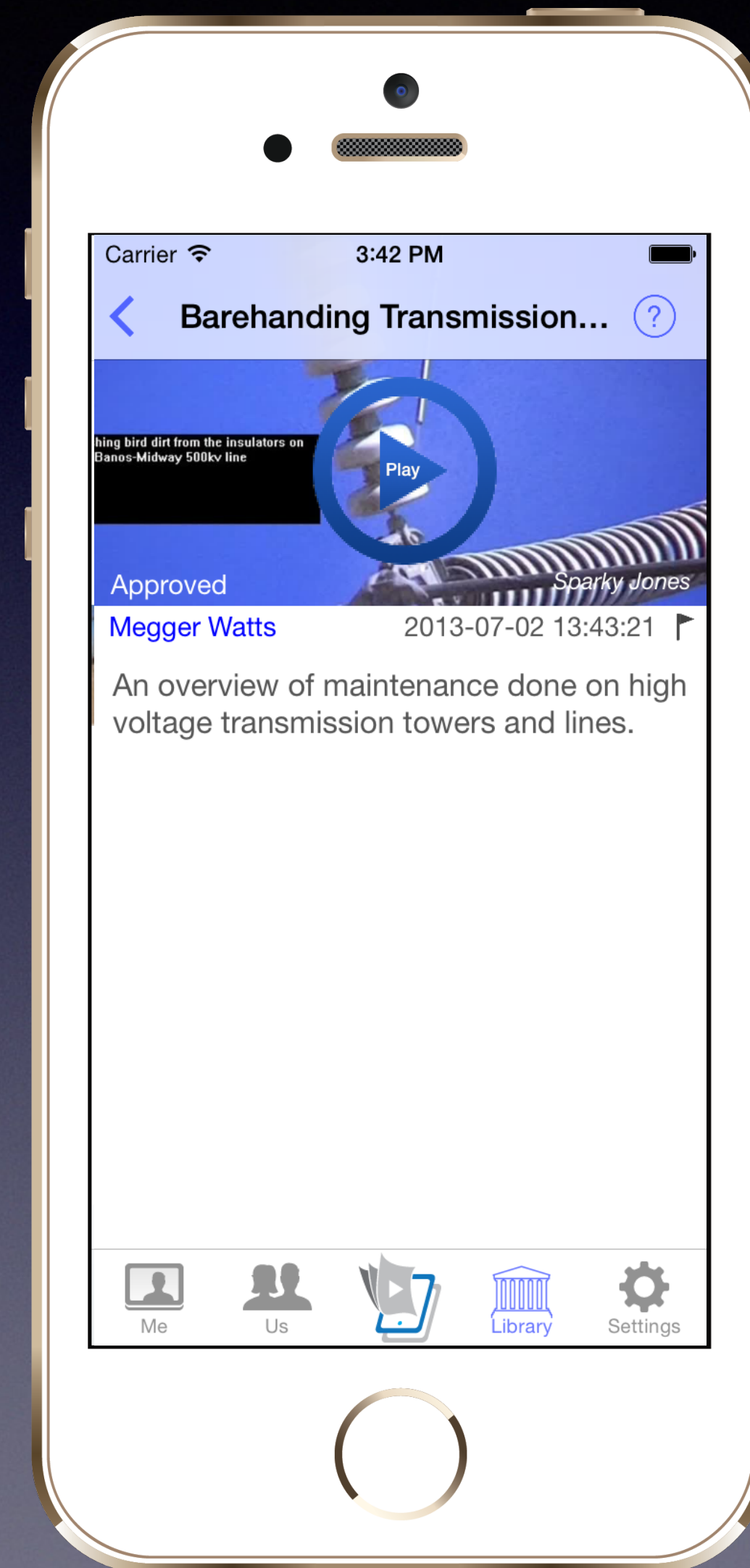
Video Work Journals (VWJs)

- Video documenting work done and aspects of work processes
- **Why?**
Important to the Person who is Doing the Work
- Remembering “As Found” and “As Left”
- Easier than Writing it Down
- Personal Library of “My Work”



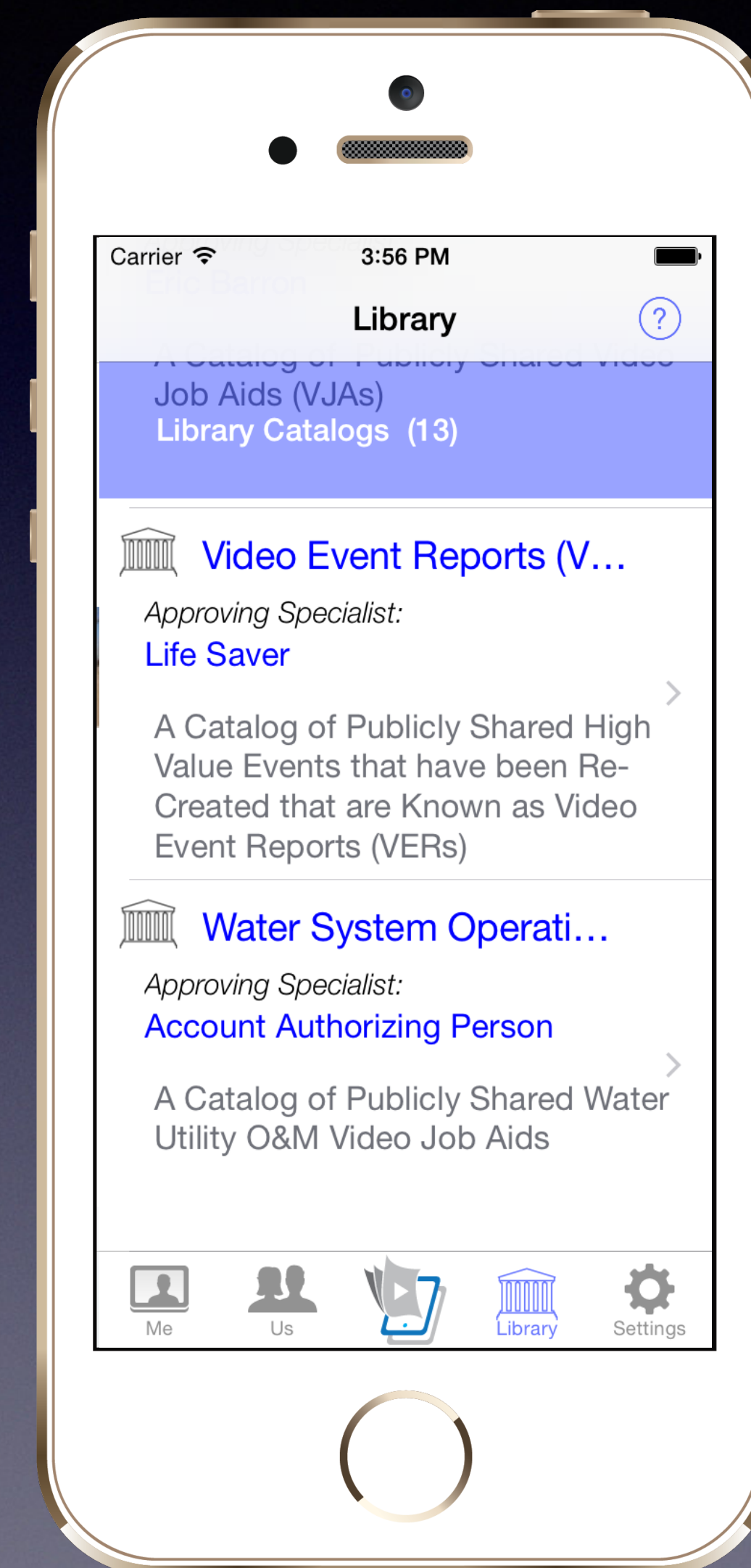
Video Job Aids (VJAs)

- Visualize a Written Procedure
- *Why?*
Use When Difficult to Write
e.g. "How to Tie a Knot"
- Written Procedure Always Takes Precedence
- Approved by Company Appointed Specialist who is Expert on the Written Procedure and Compliance



Video Event Reports (VERs)

- Recreate “High Value Events”
- *Why?*
Use to get Everyone to Visually Remember What Happened Not the Event Outcome
- If Done Correctly, Everyone Who Watches the VER will Say “*Hey, That Could Happen to Me*”
- VERs are Only Effective when Shared with Everyone Who Might Repeat the Event



Introduction to VERs:

Wow, That Could Happen to Me

- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

Why?

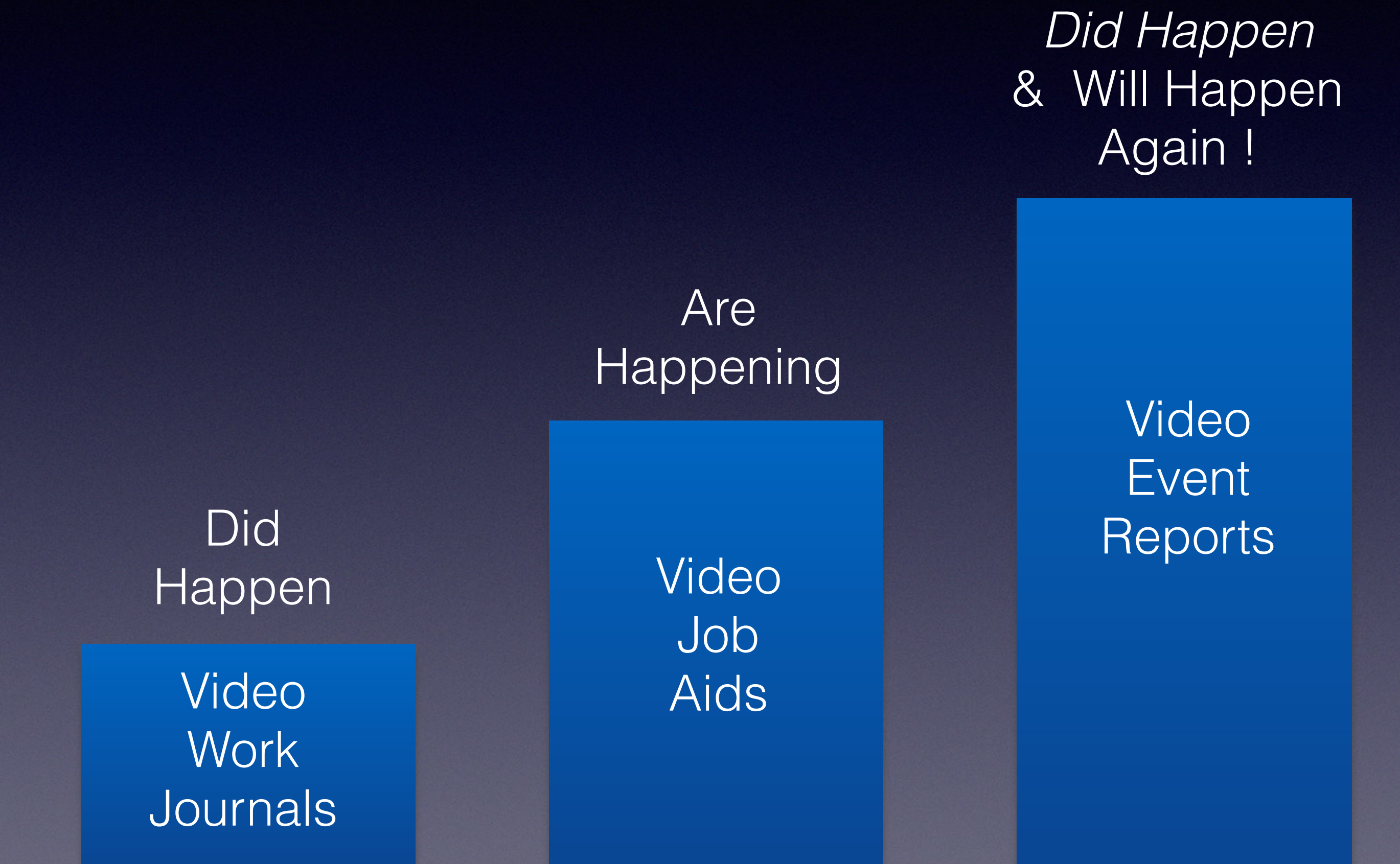
VERs Enable **Everyone**
to Focus on and Visually
Remember the Event,
not the Person, not the Outcome

"When you have the outcome, you have the emotion attached to the outcome. The person in the event does not have that"

Mike Legatt

WECC Human Performance Conference 2014

Relative Value



Safe Work by Everyone

is

Productive Work

What Happens When
You Think You are Safe
but You are Not?

Knowingly
Not Safe

Knowingly
Safe

Unknowingly
Safe

Unknowingly
Not Safe

Introduction to VERs:

Wow, That Could Happen to Me

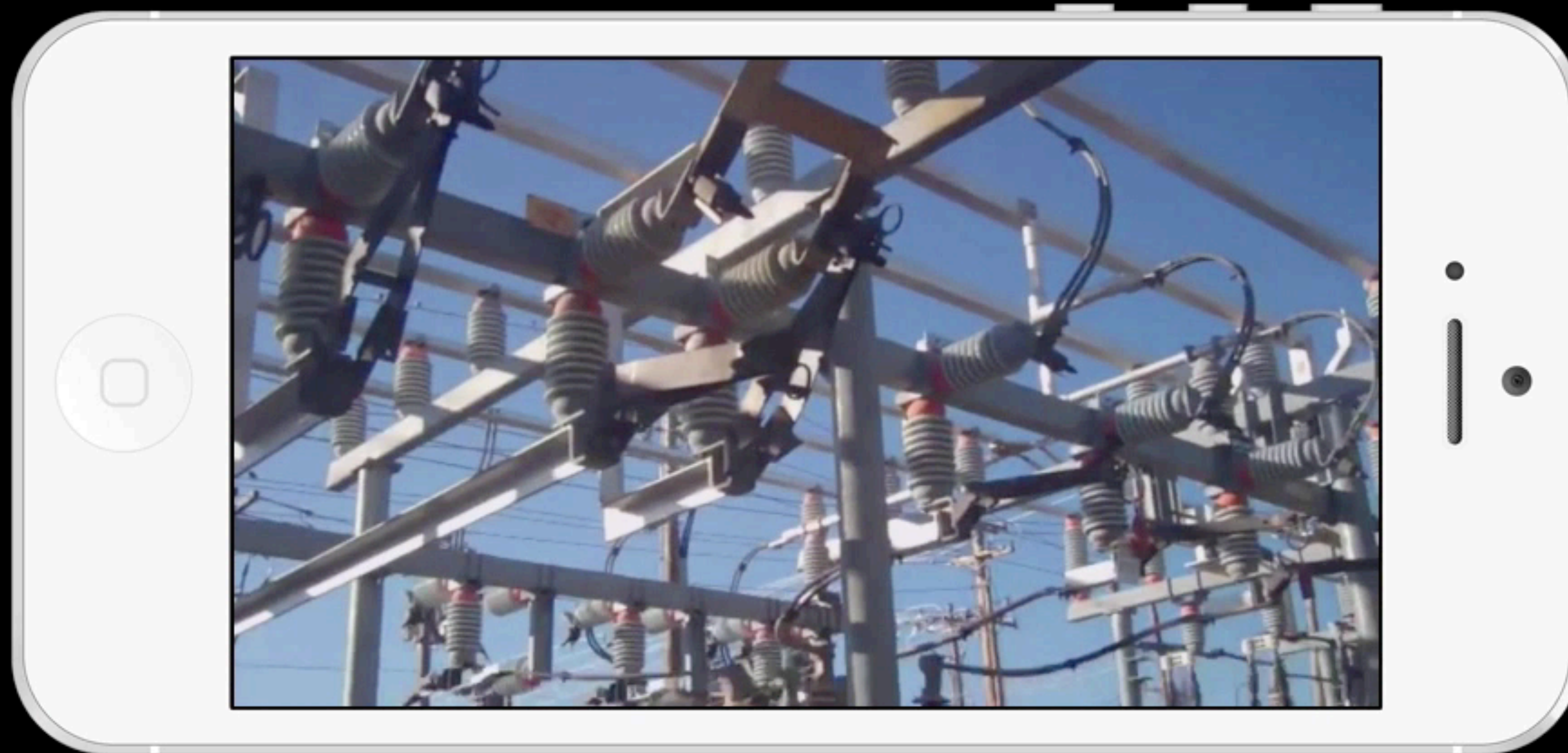
- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

Thought He Was Safe...

*“All of a Sudden
the Bees Came Out”*

VER 0001

Switchman Encounters Bees



** The locations, names and full length of this VER have been redacted so that this VER can be shared publicly.*

Knowingly Safe Requires Perfect Execution of The Critical Step(s)

A CRITICAL STEP
*is any human action
that will trigger immediate, irreversible, and
intolerable harm to an asset, if that action or a
previous action is performed improperly.*



What Was the Critical Step?

The Bees Nearby? (nope..)

The Physical Opening of the Switch (yes !)

VER's Always "Show"

The Critical Step(s)

to Everyone Who is Unknowingly Not Safe

Introduction to VERs:

Wow, That Could Happen to Me

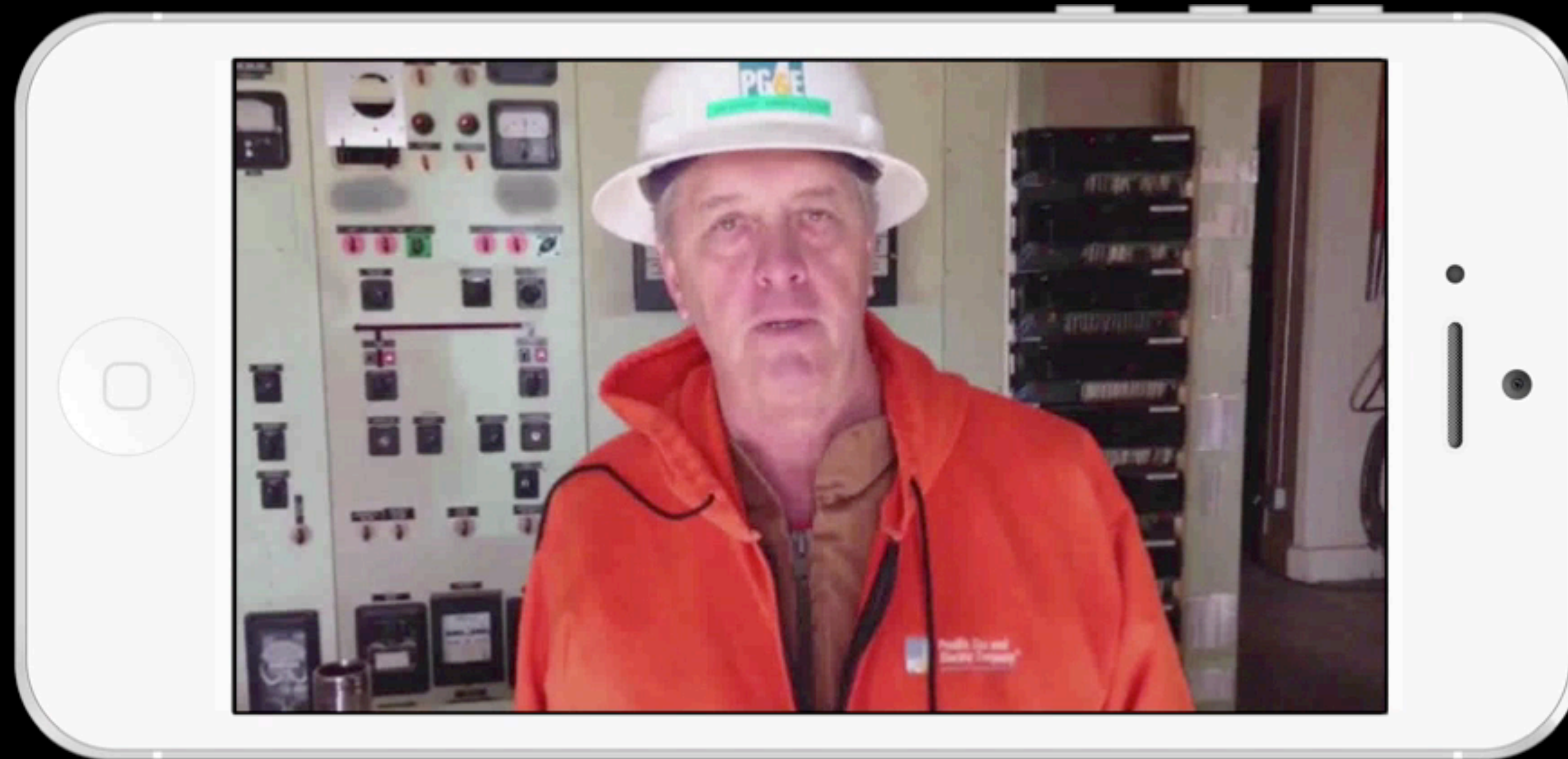
- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

Thought He Was Safe...

*“All of a Sudden
the Switch Opened”*

VER 0002

Switchman Inadvertently Opens Breaker



** The locations, names and full length of this VER have been redacted so that this VER can be shared publicly.*



What Was the Critical Step?

Opening the Cutout Panel (yes)

The Physical Opening of the Switch (yes)

VERs Always “Show”

The Critical Step(s)

to Everyone Who is Unknowingly Not Safe

If a V&E is Done Correctly
The *Unknowingly Not Safe*
Viewers Will Realize,
and Will Verbalize,

“Wow, That Could Happen to Me”

Types of VERRs

- High Frequency Events
- Low Frequency / High Consequence
- Switching Events
- Near Miss / Near Hit

A Library of Switching Event
VERs

“Pattern Recognition”

Library of Switching VERs

- Contains All of the Visual History
- A Set of Visual Data Points
- Visually Help Every Switchman to Recognize the “Fingerprint of Traps” or “Pattern” of a Given System

Lets Keep Going...

Introduction to VERs:

Wow, That Could Happen to Me

- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

Everyone Thought He Was Safe...

*“All of a Sudden
He Succumbed to Heat Stress”*

VER 0003

Worker Succumbs to Heat Stress



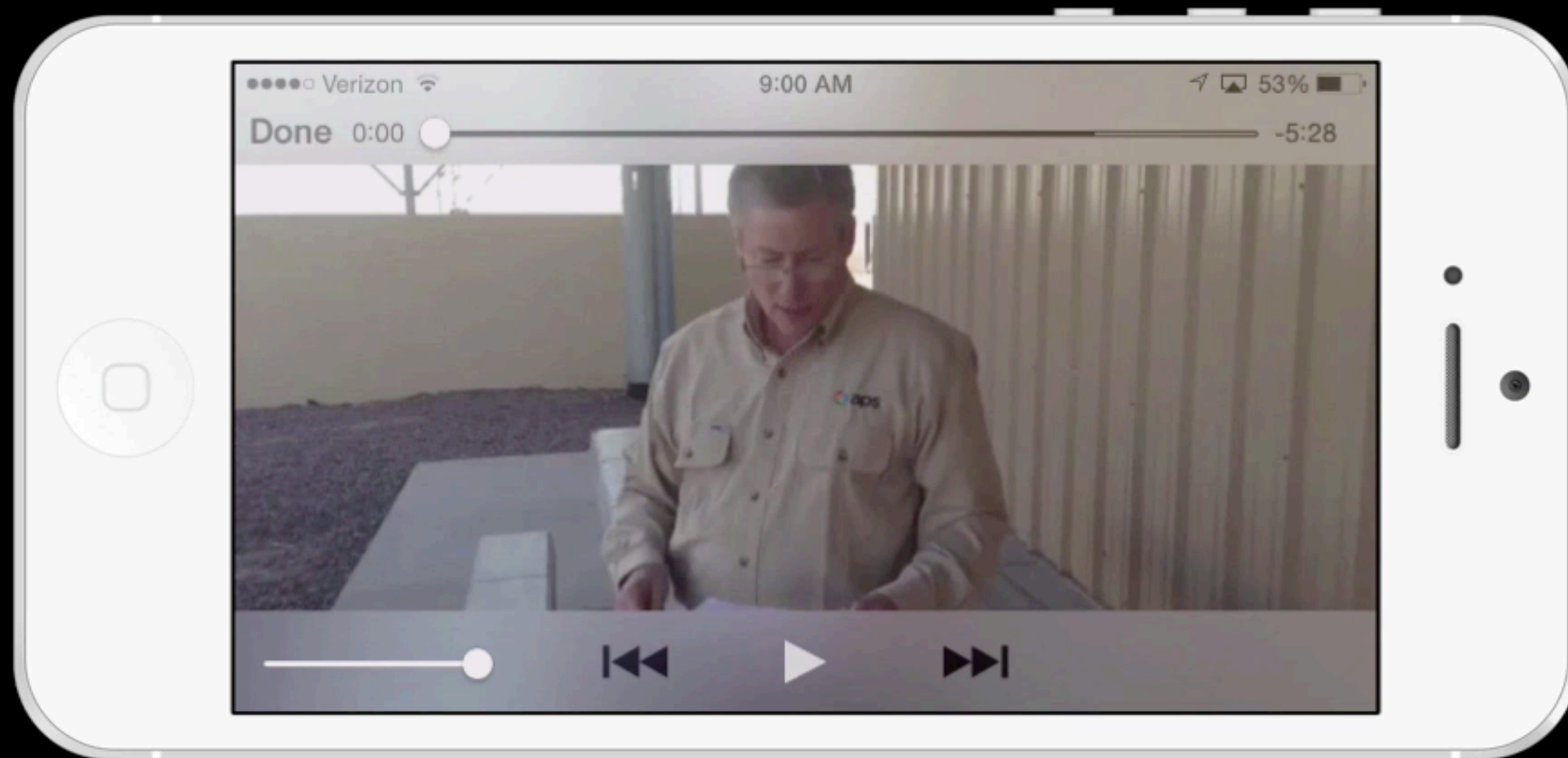
** The locations, names and full length of this VER have been redacted so that this VER can be shared publicly.*

Everyone Thought He Was Safe...

*“All of a Sudden
His Finger Got Pinched”*

VER 0004

Cable Puller Pinch

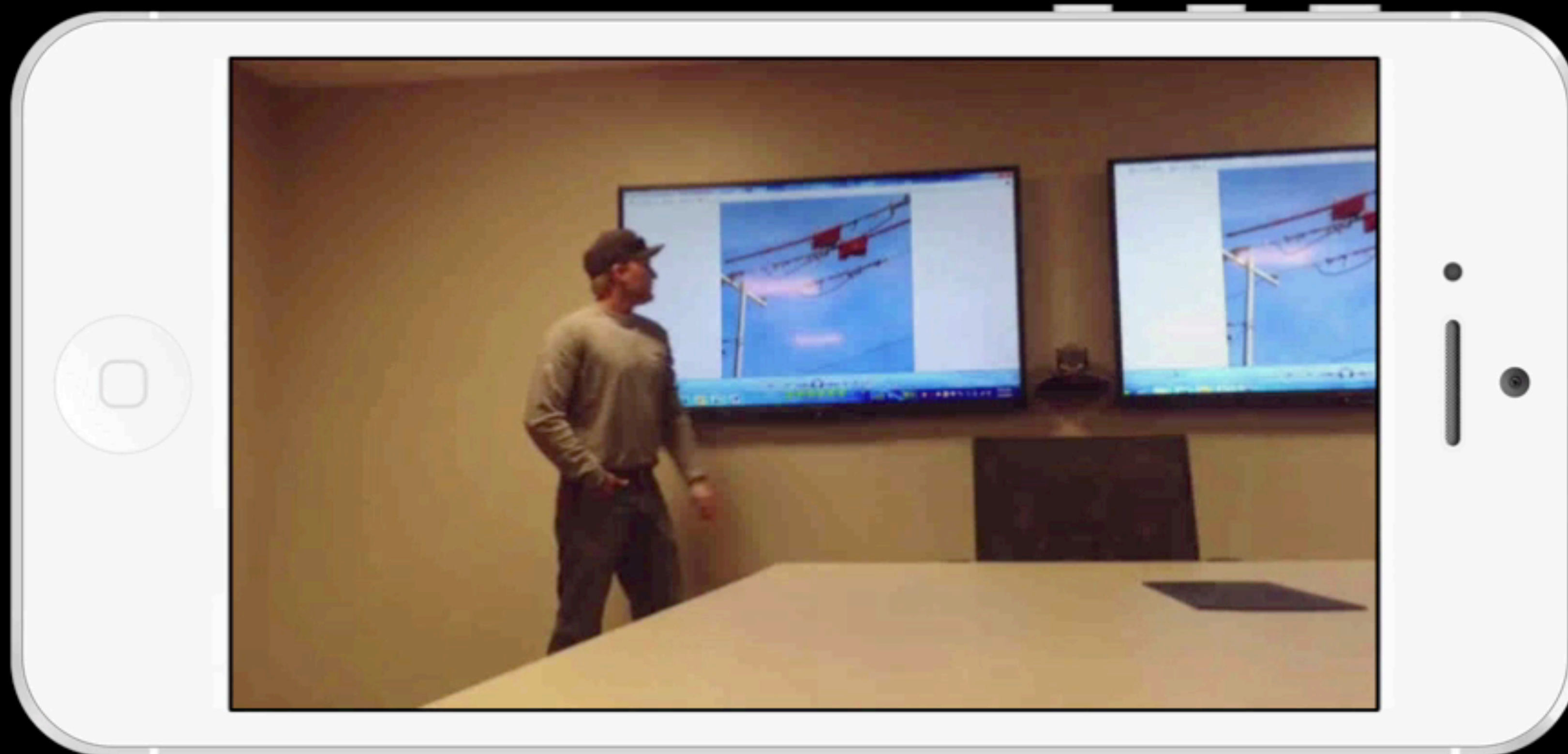


** The locations, names and full length of this VER have been redacted so that this VER can be shared publicly.*

Everyone Thought They Were in Control...

*“All of a Sudden
The Load Dropped”*

VER 0005 Inadvertent Load Drop



** The locations, names and full length of this VER have been redacted so that this VER can be shared publicly.*

Remember This?

Safe Work by Everyone

is

Productive Work

What Happens When
You Think You are Safe
or In Control...
but You are Not?

What Happens When
Everyone Thinks Everyone Is Safe
but They are Not?

An Event Will Occur

Introduction to VERs:

Wow, That Could Happen to Me

- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

VER's Can Create a
Knowingly Safe Workforce
Only if They Are Rapidly Created
and Rapidly Disseminated
To *Everyone* in a Given Workforce

Everyone Who Views a Great VER Agrees:
"That Could Happen to Me"

Latent Organizational Weaknesses “Traps”



This Should Never Have Happened...

And Yet There are Still Places in the World
Where this Will Happen Again

Unless Everywhere that This Trap Exists the
Managers and Workers See this Video First

Success: Requires Everyone
In the Workforce
to Always Have Access VETs

Mobile First is “Frictionless”

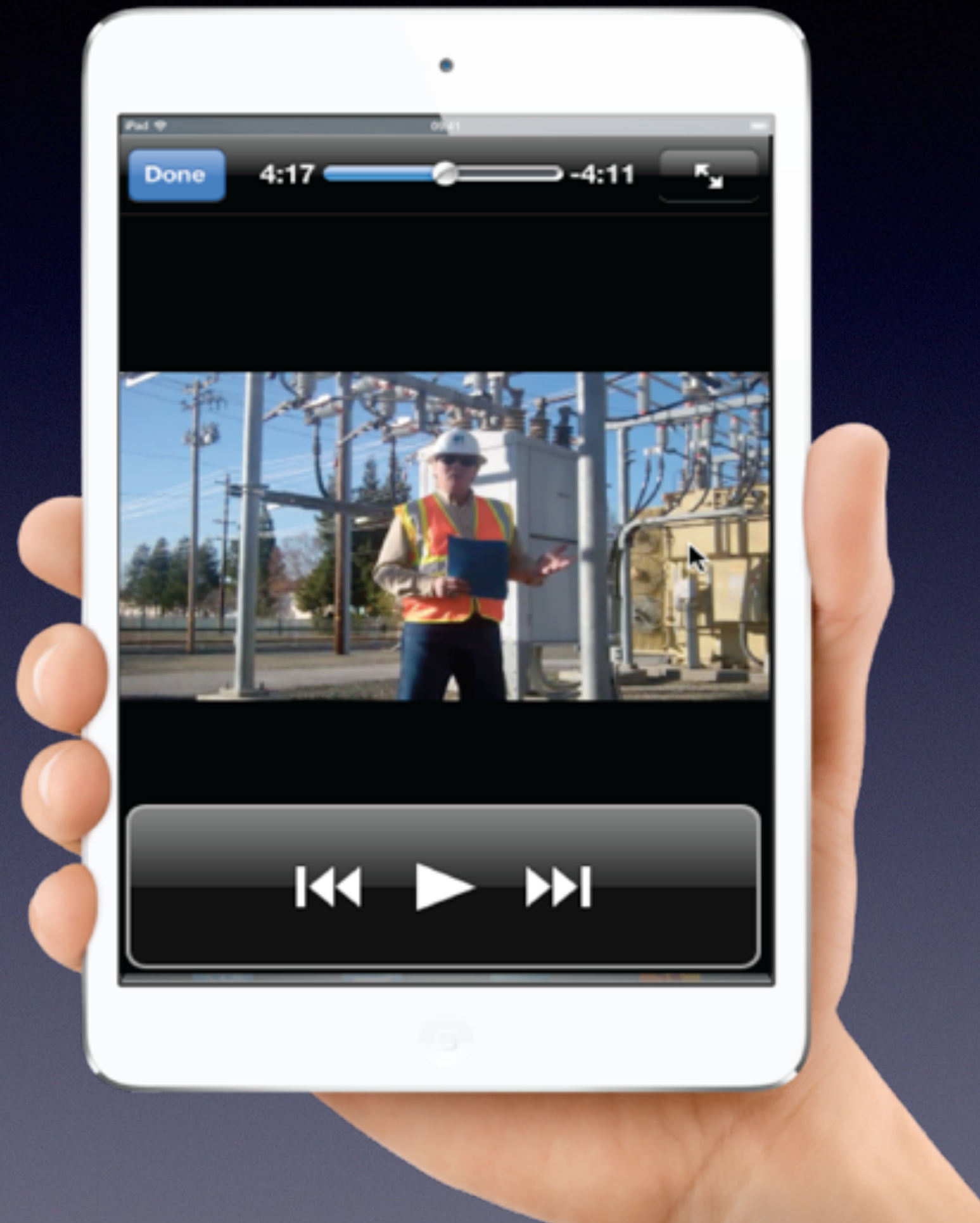
United Airlines: 11,000 iPads

Used to Update 3 Ring Flight Binders every few Weeks... Now Update Electronically



A Mobile First Strategy = Everyone

Everyone
Who
Could
Come into
Contact
with the
Trap



*“Wow,
That Could
Happen
to Me”*

Agenda:

Corporate Video & The Rise of Mobile Devices

Introduction to VER's

Five Minute VERs

Course: Five Minute VEsRs (Free)

Learn to Rapidly Create and Share 5 Minute Video Event Reports (VERs)



KnowledgeKeeper

OpCon Technologies
Business Video

Free



- OR -

Get FREE Account

knowledgekeeper.com



Lesson 1: Wow, That Could Happen to Me

- ✱ What is a Video Event Report (VER)?
- ✱ Why? Awareness of Knowingly Safe
- ✱ Discuss the Critical Steps
- ✱ Fingerprinting the Traps
- ✱ Everyone Thought He was Safe
- ✱ Success Requires Mobile First Strategy

Course: Five Minute VEs

Completed

Lesson 1: Wow, That Could Happen to Me

Lesson 2: Your First Shared HD Video

Lesson 3: Easy HD Editing

Lesson 4: The Schwermann Template

Lesson 5: Your First VER

Course: Five Minute VEsRs (Free)

Learn to Rapidly Create and Share 5 Minute Video Event Reports (VERs)



KnowledgeKeeper

OpCon Technologies
Business Video

Free



- OR -

Get FREE Account

knowledgekeeper.com



VERs

Video Event Reports

– NERC Human Performance Conference 2015

