

# The Future Of Compliance Might Be Smarter Than You Think: THE PAST, PRESENT, & FUTURE - MARINA SHORE POWER DELIVERY SYSTEMS

TREVOR BURGESS CEO  
& CO-FOUNDER, VOLTSAFE  
NMMA Board of Directors



# TODAY'S GOALS: DEMYSTIFICATION

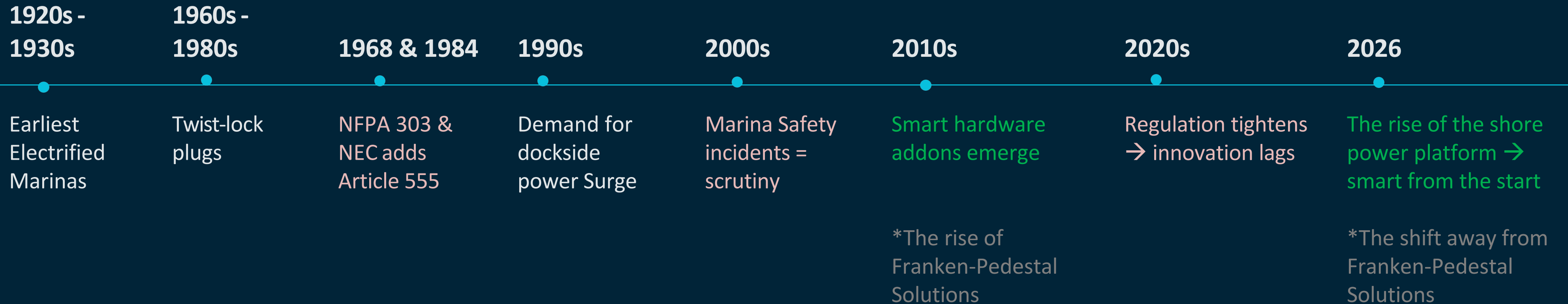
-How to Navigate NEC & NFPA Code Changes

-Compliance Options

-Smart Marinas



# HISTORY -> MARINA SHORE POWER DELIVERY



“Twist-lock plugs became the marina standard in the late 20th century because it solved yesterday’s problems, but now power delivery is mission critical and we need to solve both today’s tomorrow’s problems.”

\*1984 - NEC Article 555 - electrical rules for marinas, boatyards, and docking facilities.

# ABOUT ME...



10:11



SuperGrok



Video

♥ ↓ ↑ ...

Edit image ↑

I DON'T → take myself too seriously.

I DO → take my work seriously.

I BELIEVE → and invest in people.

I BELIEVE → in...

→→→→→ TECHNOLOGY→→→→→▶

I ALSO → believe...

10:10



SuperGrok



Video

♥ ↻ ↓ ↑ ...

Make a pic of me laying on my stomach on the ground...

Edit image ↑



SKYNET

**Who am I?**

**Professional Background?**

**VISION** - why am I so excited about *VoltSafe's prongless technology?*

*"But my papi always said → if it ain't broke, don't fix it."*

**How** does this solve liabilities associated with pronged plug designs?

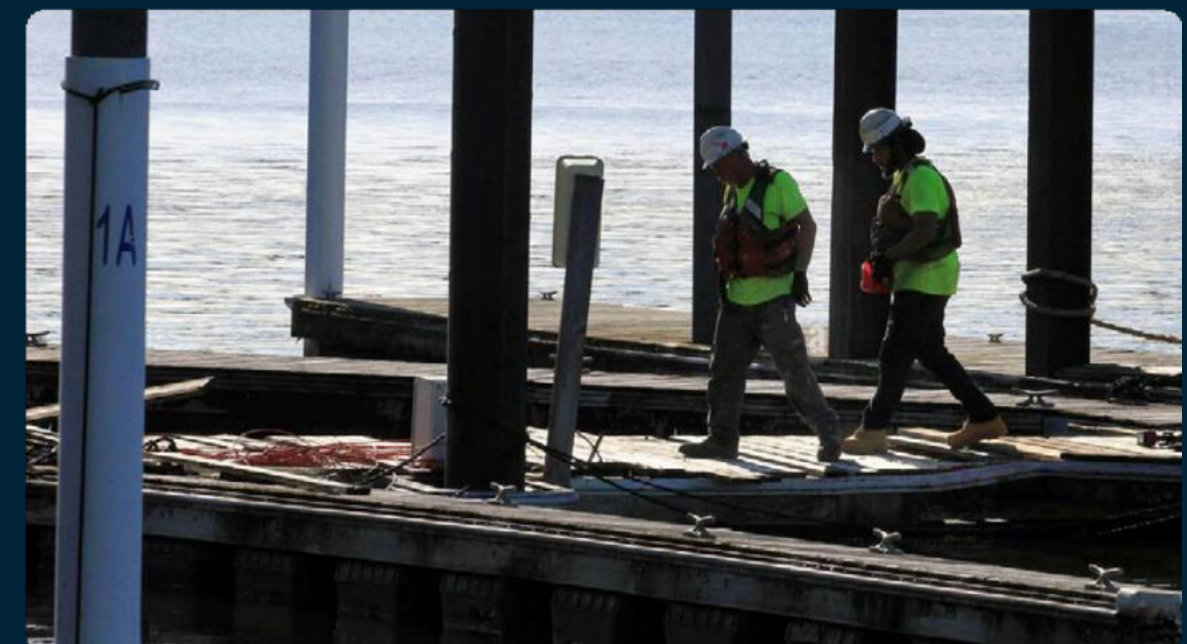
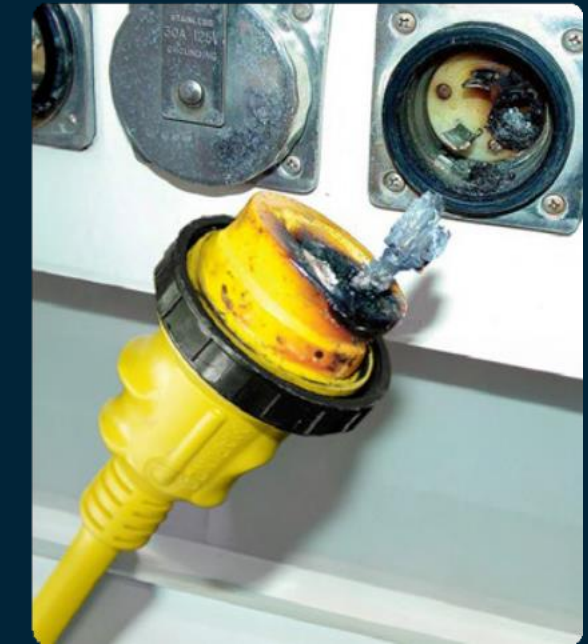
**Why** start with Marina Shore Power?

**When** will *VoltSafe's shore power solution be commercially available?*

# IN FOCUS -> SHORE POWER

## THE 'CURRENT' CONCERN

- > Recent NEC/CEC & NFPA Code Changes
- > Hidden risks
- > Rising costs
- > Liability exposure
- > Customer expectations






# PACIFIC NORTHWEST: Shore Power Common Pressures

- > Aging Waterfront Infrastructure (~48% of marina pedestals are beyond asset life)
- > Increased electricity demands
- > Seismic/Weather exposure
- > Compliance & Safety (Capex & Insurance)
- > Operational Excellence ( ▼ Costs, ▲ UX )



# GOVERNING SAFETY STANDARDS ORGANIZATIONS

CATEGORY	 <b>NFPA 303</b> Fire Safety for Marinas	<b>NEC</b> <b>NEC 555</b> Electrical Rules for Marinas	 <b>ABYC E-11</b> Boat Wiring Safety	 <b>UL Standards</b> Equipment Safety Testing
What It Covers	Fire prevention, fuel dock rules, emergency access, fire equipment, staff training.	Marina electrical wiring rules: grounding, pedestals, GFPE, leakage limits.	Safe wiring onboard boats: breakers, inlets, grounding, bonding.	Testing & certification for equipment: connectors, cords, pedestals, enclosures.
Primary Focus	Operational safety + fire protection.	Safe electrical construction on docks.	Safe electrical systems on boats.	Safety validation of electrical hardware.
Who Must Follow It	Marinas, ports, operators, boatyards.	Electricians, marinas, inspectors, manufacturers.	Boat builders, electricians, surveyors, owners.	Manufacturers creating electrical equipment.
Where It Stops	Not electrical hardware design or boat wiring.	Not fire procedures or boat wiring.	Not marina infrastructure or pedestals.	Not operational rules for marinas/boats.
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# SAFETY CERTIFICATION (Products)

## UL (Underwriters Laboratory)

### 1. Standards Development

UL develops safety standards aka the technical rulebook:

- what hazards must be addressed
- what construction methods are acceptable
- what tests must be passed
- what performance limits apply
- how products should be marked and documented

UL Standards & Engagement

Help Sign In

English US Dollar

Browse Catalog Resources Product Glossary Learn Standard Activity Report Request a Quote

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### Your Destination for Trusted Safety Standards

Explore our comprehensive library of trusted standards and related documents, which have guided safety, security, and sustainability since 1903.

This is the official platform for accessing Standards developed by UL Standards & Engagement, which are guidelines to ensure the safety, security, and sustainability of many products. The site offers a comprehensive catalog of standards covering various industries, including electrical appliances, fire safety, and cybersecurity. Users can browse, buy, and request quotes for both digital and premium hard copies of these standards, which are essential for compliance and safety in manufacturing and product development.

### Featured Standards

#### Recently Published

First Edition   April 9, 2026 <b>UL 62841-3-15</b> Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-15: Particular Requirements for Transportable Magnetic Drills	New Edition   April 7, 2026 <b>UL 1738</b> Venting Systems for Gas-Burning Appliances, Categories II, III, and IV	First Edition   April 6, 2026 <b>UL 2700-1</b> Sustainability for Cleaning Products: Microbial-based Cleaning Products	New Edition   April 6, 2026 <b>UL 2700</b> Sustainability for Cleaning Products
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Featured Standards

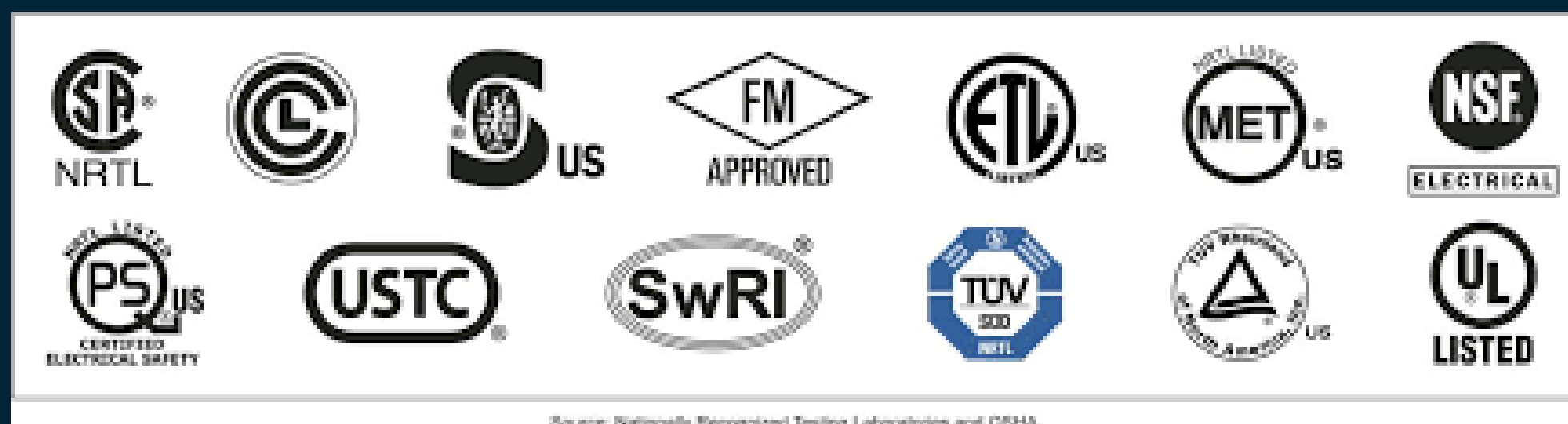
## 2. Nationally Recognized Testing Lab (NRTL) - Product Safety Certification Testing

(UL is just 1 of 18 NRTL's - all OSHA approved):

### NRTL's can:

- test products
- inspect factories
- certify compliance
- authorize listing marks
- perform follow-up surveillance

### NRTL's - Nationally Recognized Testing Labs



# Legacy Shore Power Systems

Prong-based plugs:

- Twist-lock receptacles
- Pin & sleeve

Manual power checks

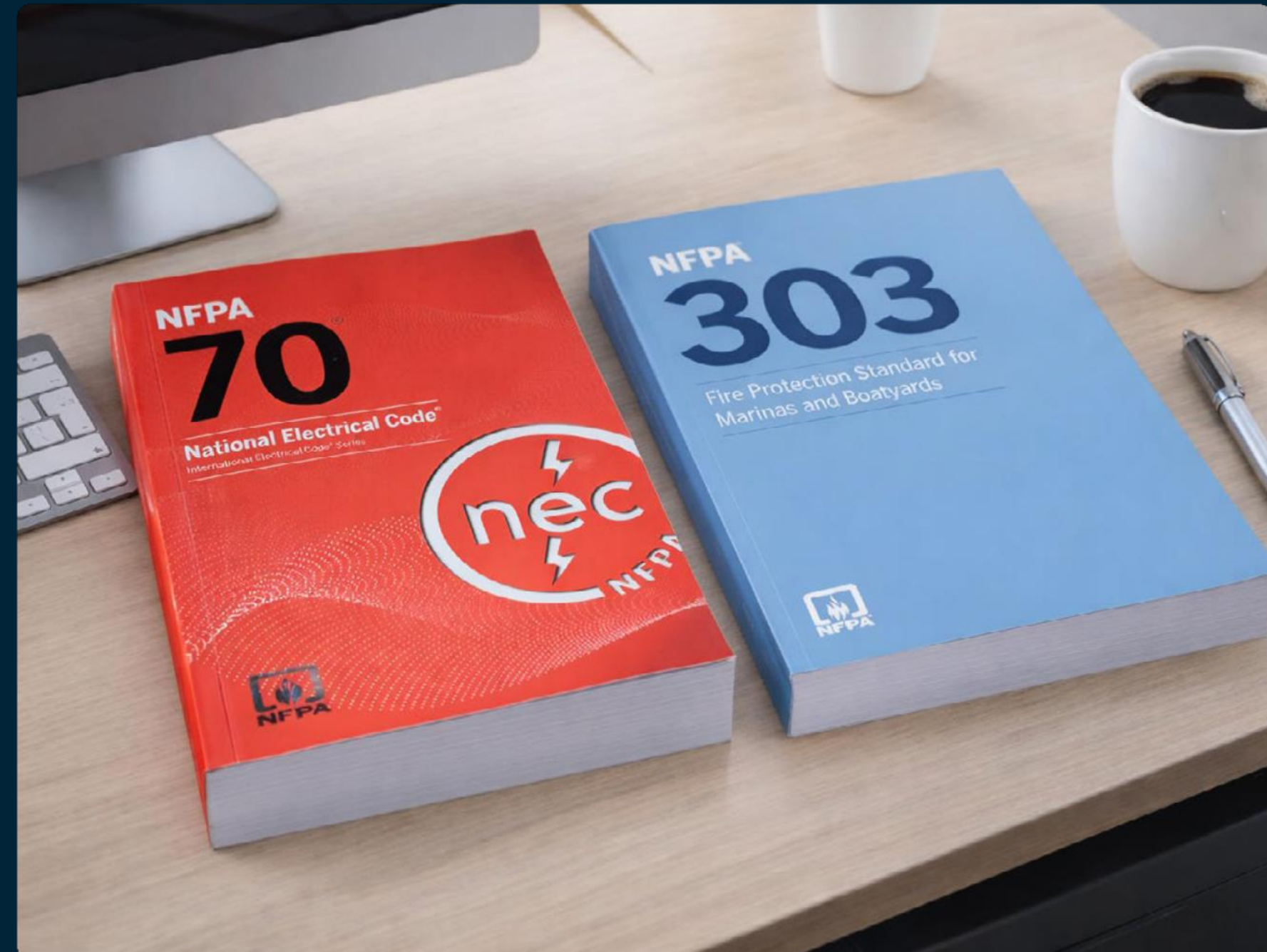
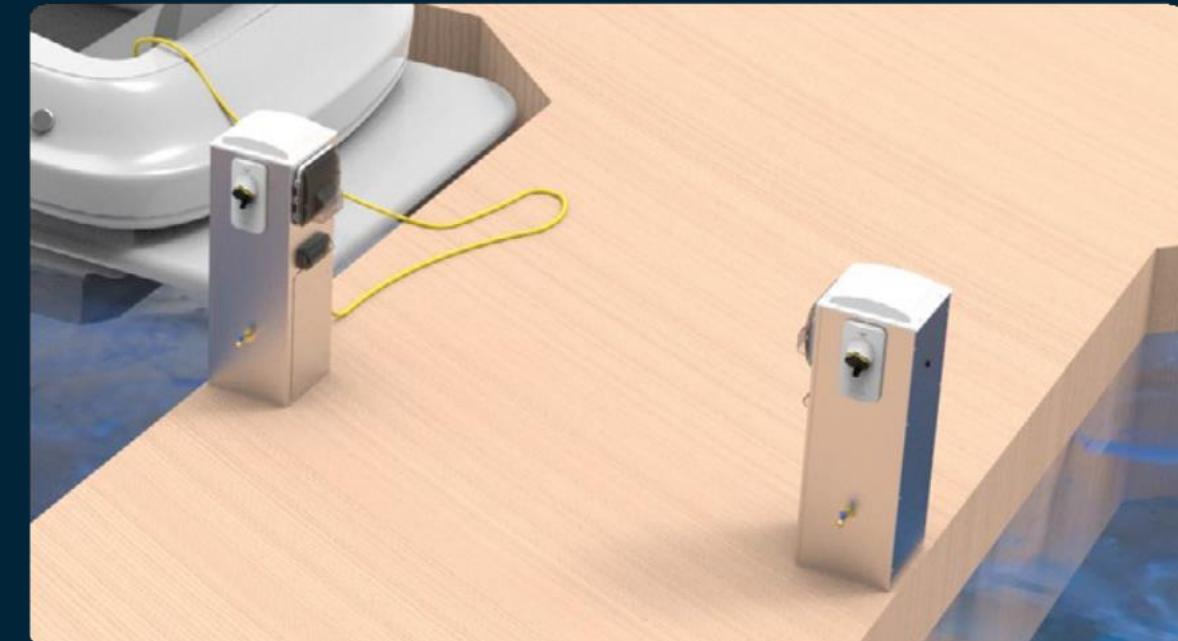
Reactive repairs

Meter reads by staff (or flat rate – spoiler alert – only live-aboards love flat rates)





Separate billing systems

# NEC (Article 555) 2023 & 2026

- > Mandatory 30mA GFPE for all marina receptacles >20A
- > Disconnects required within line-of-sight
- > Equipment must be installed 12" above high-water datum
- > No grandfathering of old gear
- > Mandatory leakage current testing before any new boat can plug-in



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### **Oregon**

Publicly on a path toward **2026 NEC**

Expected timeline in **2026**

Often moves relatively quickly on code modernization

### **California**

Much larger regulatory process

Separate building standards cycle

Typically slower than WA/OR to newest NEC edition adoption statewide

### **Alaska**

More variable / verify current state and local enforcement path

### **Hawaii**

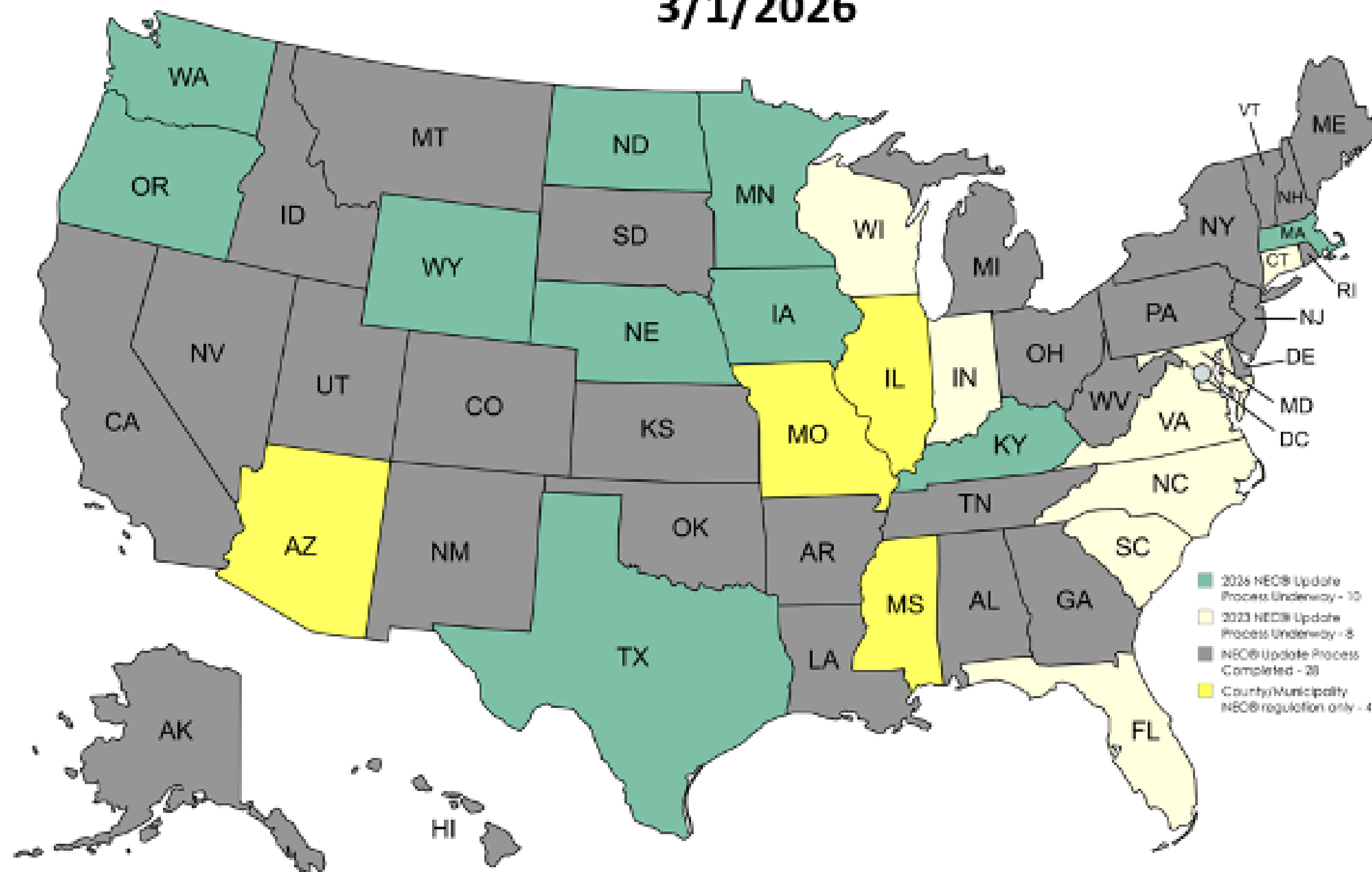
Independent adoption cycle / verify current status

### **British Columbia**

Uses **Canadian Electrical Code (CEC)**, not NEC

## **NEC® Update Process In Progress**

**3/1/2026**



# Why This Topic Matters Right Now

Three CORE forces are colliding at marinas:

1. Aging Marina Infrastructure – doesn't age like a fine wine
2. New Code Requirements – safety driven
3. Higher Marina UX Expectations – marina stakeholders → premium experiences

**For decades, shore power was treated as background infrastructure.**

**Now → Strategic Infrastructure → MISSION CRITICAL**

**Marina Cap-Ex decisions today → dictate future doors of possibility that open/close:**

**Safety compliance** — future proofing: ability to meet evolving NEC / code requirements

**Revenue growth** — monetizing power fairly and profitably

**Future vessel demand** — supporting larger boats, higher loads, EVs, hybrid systems

**Operating costs** — reducing outages, maintenance, wasted energy and increasing efficiencies

**Guest experience** — Premium UX, reliable power, easy connection, modern amenities

**Scalability** — adding slips, services, and new technologies without ripping everything out later

**Data & control** — data driven decision making, metering, monitoring, remote diagnostics, smart billing

**Insurance & liability** — lowering risk exposure from faults, fire, shock, and failures

**Asset value** — increasing marina attractiveness, valuation, and competitiveness

**Speed of adaptation** — whether the marina can evolve fast... or gets trapped by yesterday's hardware\*\*

# Why Legacy Systems Are Under Pressure

SAFETY issues – code changes

Hidden leakage current

Corrosion, Arcing, burnt plugs

GFPE - Nuisance tripping

Customer friction & frustration

## OPERATIONAL REALITY of 2023 NEC (GFPE) Compliance

Installing GFPE devices - “plug and play”? (Think again)

Almost ALL marinas quickly discover: SYSTEMIC ISSUE

- Nuisance tripping from leakage on boats - upstream feeder GFPE sometimes trips before slip GFPE (ie.  $>100\text{mA}$ )
- Hidden wiring faults
- Old cords causing issues
- Poor system coordination
- Significant Marina Stakeholder resolution \$ costs = friction = pissed off boaters
- Need for vessel testing policies

# AHJ's (Authorities Having Jurisdiction)

## Wield the enforcement sword

### Determine how adopted codes are:

- > Interpreted
- > Enforced
- > Approved (& signed off in the real world)

### For marinas, that can directly affect:

- > upgrade timelines
- > permit approvals
- > acceptable solutions
- > inspection outcomes
- > temporary allowances
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### Always stay in close touch with your AHJs – ask questions

- > reduce surprises, delays, and expensive mistakes

## 555.15 Replacement of Equipment



- If work changes:
  - Fit?
  - Form?
  - Function?
  - Must comply with the latest code requirements
- Maintenance vs. Modification
- Damage



## 555.15 Replacement of Equipment



- Maintenance
  - Light Bulb
  - Receptacle / Breaker
  - Meter
- Modification
  - New dock
  - New panel
  - New cable



## 555.30 Electrical Equipment and Connections



- Components and enclosures **listed** for submersion (not watertight) are ok.



- Listed products go through stringent tests to ensure products meet certain safety guidelines.

## 555.33 Receptacles



- At least 12" high



- Not below electrical datum plane

## 555.33 Receptacles

- Enclosures must be listed as a **marina power outlets**



- Listed products are designed for use in wet locations.



## 555.33 Receptacles

- Requires proper strain relief
- Catenary angle
- Reduces strain on cable caused by weight of the cord set
- Very important for larger amperages



## 555.33 Receptacles

- Each receptacle requires a circuit breaker
  - Same amperage
  - Same voltage
- Photo:
  - Receptacle - Breaker
  - 50A 125/250V – 50A, 2-Pole
  - 30A 125V – 30A, 1-Pole
  - 20A 125V GFCI – 20A, 1-Pole



## 555.33 Receptacles

- Shore power at least 30A
- 30A and 50A receptacle must be twist-lock
- 60A or larger must be pin and sleeve
- Avoid using splitters and adapters



## General Note – *Adapters and Splitters*



- Most "Y-Adapter" cord sets are not listed products and do not provide the proper circuit protection for a safe electrical connection.



- Listed products go through stringent tests to ensure products meet certain safety guidelines.

## General Note – *Listed Products*

- Listed products go through stringent tests to ensure products meet certain safety guidelines.



## General Note – *Listed Products*



- Overloading or overheating a receptacle can lead to melting, burning, arcing, and potential fire.



## 555.33 Receptacles



- 30A, 125V
- Twist-lock
- Requires 30mA ground-fault protection



- 20A, 125V GFCI
- Not for powering boats
- Labeled: "Not For Shore Power"
- Must be internally ground-fault protected



- 50A, 125/250V
- Twist-lock
- Requires 30mA ground-fault protection

## 555.33 Receptacles



- 100A 125/250V
- Pin and sleeve
- Requires 30mA ground-fault protection
- 100A 120/208V
- Pin and sleeve
- Requires 30mA ground-fault protection
- 100A and 200A 480V
- Pin and sleeve
- Requires 30mA ground-fault protection

## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter

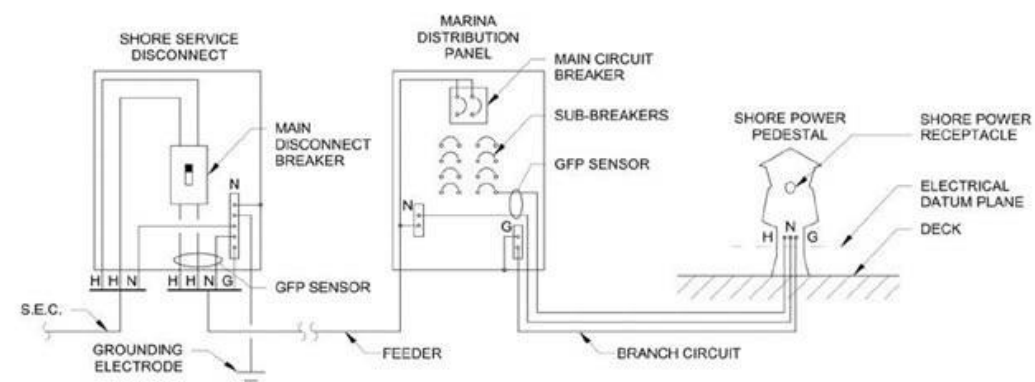






Diagram Courtesy of Gary Loftis

- **Feeders** must be protected at 100mA or less
- Feeder – cable or wire powering distribution equipment.
- Examples include cables going to
  - a Transformer
  - a Disconnect
  - a Panelboard

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# The NEC 2023 Code Changes

Ground Fault Protection Equipment

Faster Shutoffs

Better Equipment Placement Rules

More Documentation

Boat Leakage Testing by 2026

Before: Provide power as safe as possible.

Now: Detect leakage faster, test vessels, document it,  
and shut hazards down quickly.

# NEC 2023 - Why There Are Two Levels of marina GFPE requirements?



The code uses layered protection because they serve different purposes.

## **100 mA at Feeders (Upstream)**

Designed to help protect:

- Feeders
- Distribution equipment
- Larger system leakage issues
- Fire / equipment fault risk
- System-level faults

## **30 mA at Slip / Receptacle Level**

Designed to detect smaller leakage currents - where people and boats interact with power.

That means:

- Better local protection
- Faster response near the hazard
- Reduced risk at the point of use

## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter

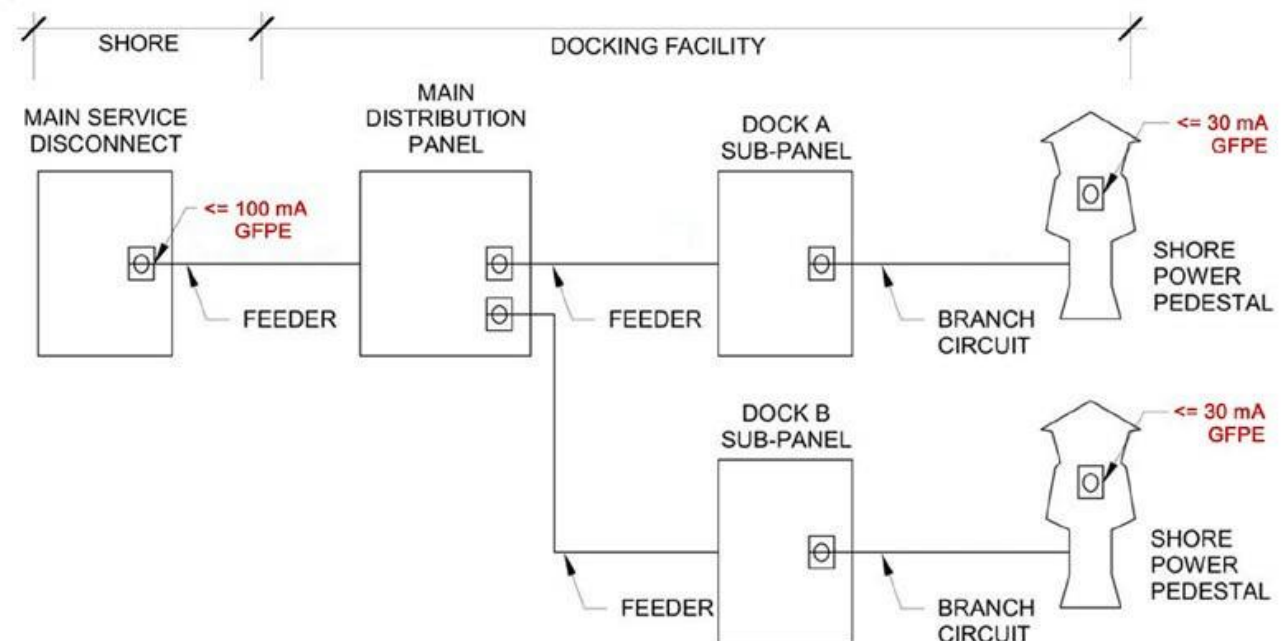


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## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter



## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter

- **Receptacles in pedestals** must be protected at 30mA or less
- 30A and above used for shore-power = 30mA or less
- Anything not for shore power = 5mA or less



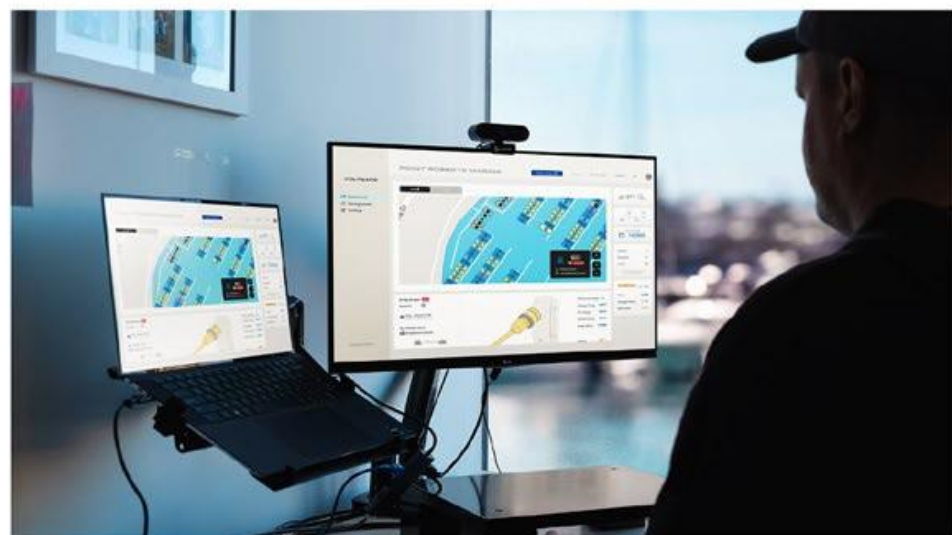
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- **Facilities with more than three (3) receptacles for boats** must have a leakage testing device for boats.
- Each boat must be tested prior to plugging into the marina.



## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter

- **You must keep a log**
- Each boat must be tested prior to plugging into the marina.
- one of the things VS developed in anticipation of this is to constantly have the vessel monitored
- We can show we perform a leakage measurement before the power turns on



## 555.35 Ground-Fault Protection of Equipment (GFPE) and Ground-Fault Circuit Interrupter

- **Will become effective January 1, 2026.**
- No grandfather clauses.
- No adoption delays.



## 555.36 Disconnecting Means for Shore Power Connection(s)

- Each receptacle requires an independent circuit breaker.
- Breaker must be within 30" of the receptacle it controls.
- Must be located so turning off the breaker disconnects power to the receptacle.



## 555.36 Disconnecting Means for Shore Power Connection(s)

- Each marina power outlet shall have an emergency shutoff device that must:
  - be within sight of the power outlet.
  - be externally operable.
  - be manually resettable.
  - deenergize all power to the power outlet.



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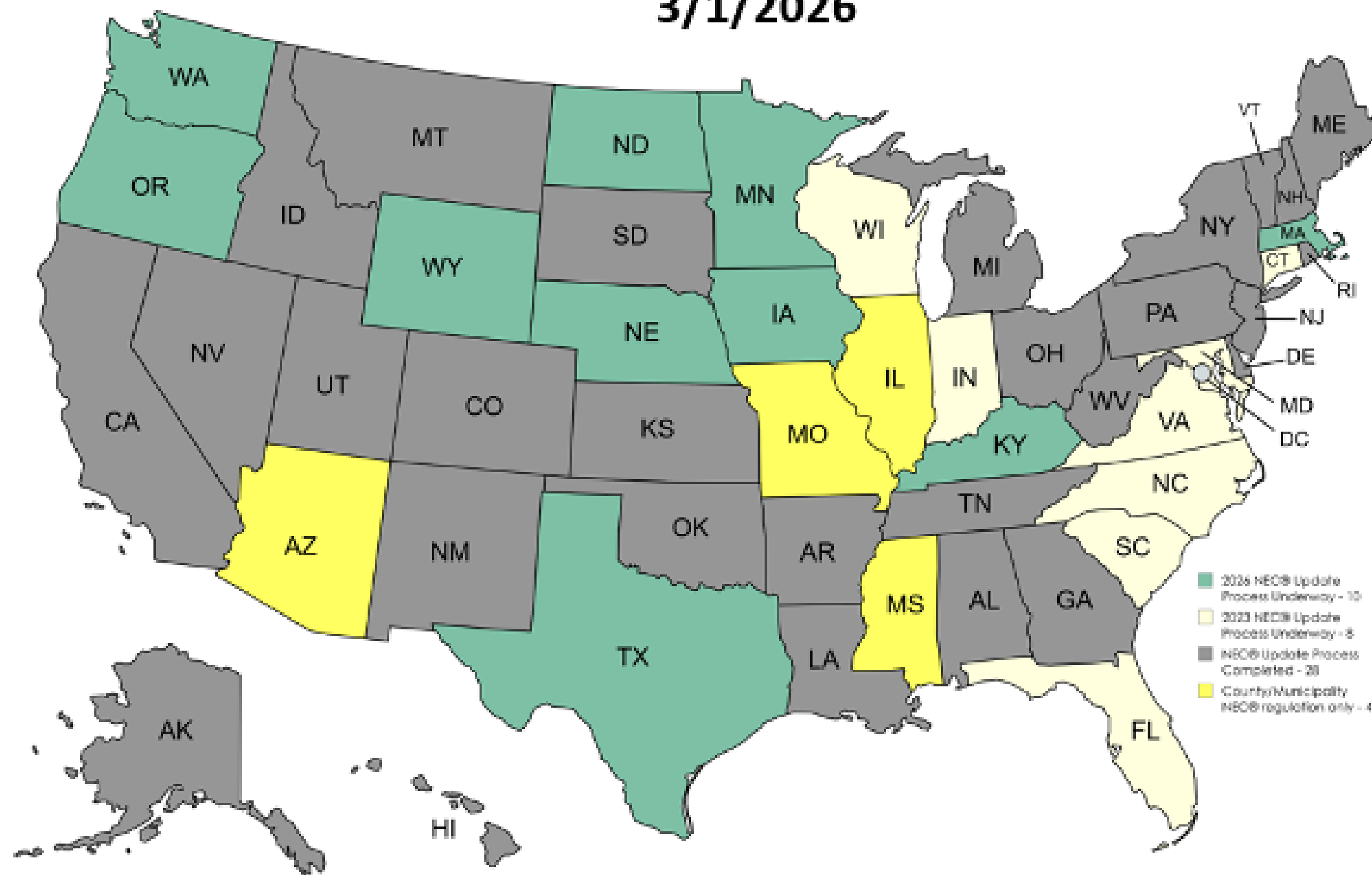
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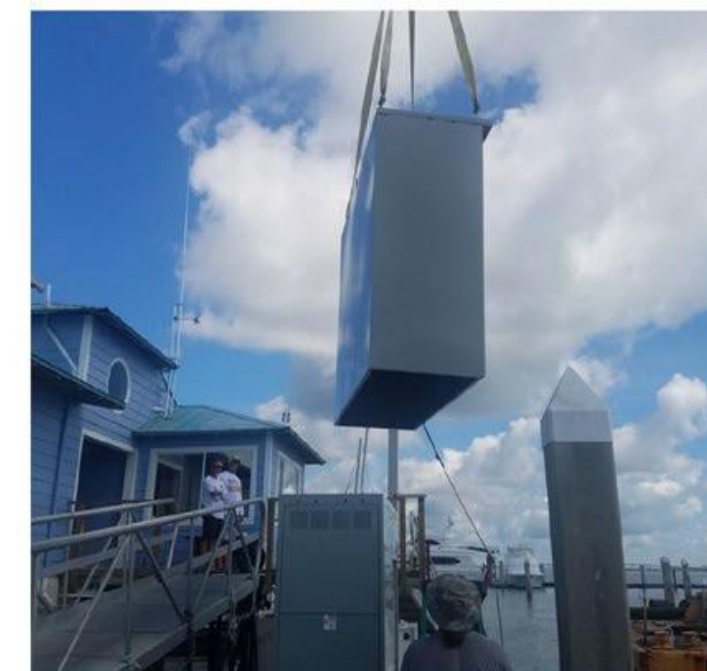
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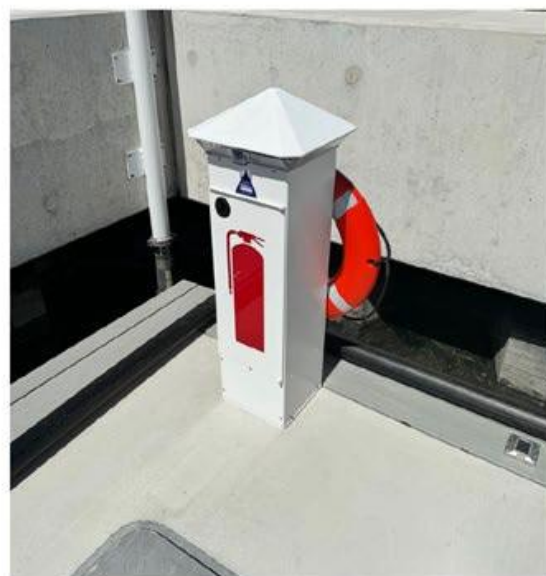


- Maintenance
  - Light Bulb
  - Receptacle / Breaker
  - Meter
- Modification
  - New dock
  - New panel
  - New cable



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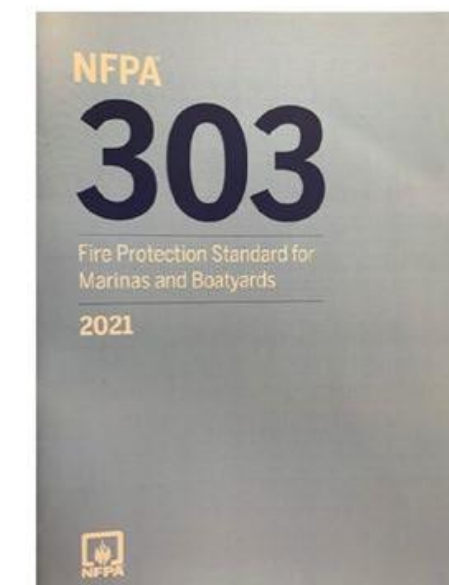
- Key point – a circuit breaker handle cannot be used to accomplish this portion of the code.
- What can be used:
  - Disconnect
  - Molded case switch
  - Push Button
- Purpose is to cut off power to marina in the event of an emergency



## NFPA 303

We will also examine NFPA 303 – Fire Protection Standard for Marinas and Boatyards.

- 2021 Latest Edition
- NEC 555 and NFPA 303 are very similar
- One Exception: Inspections and Testing



## NFPA 303 5.20: Inspection, Testing, and Maintenance of Electrical Wiring and Equipment

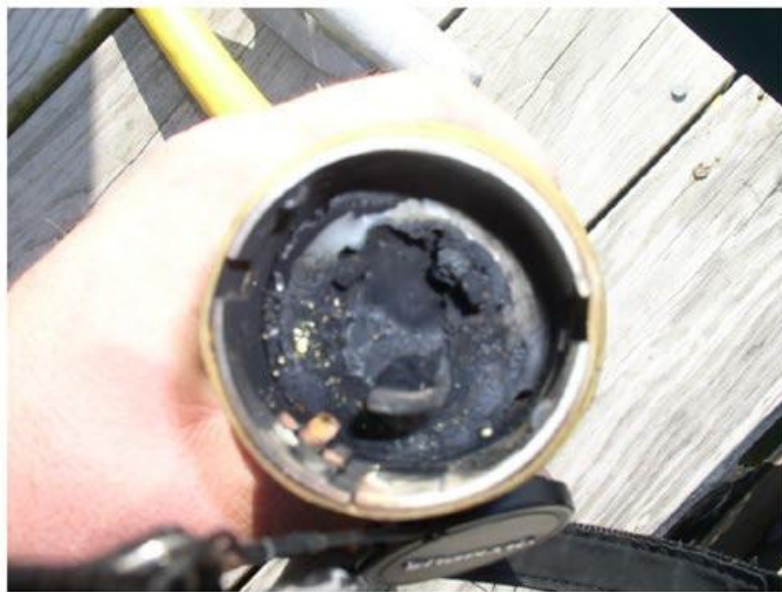


- Inspection of all:
  - Electrical wiring including cable
  - Ground connections
  - Conduit and supports
  - Pedestals and utility centers
  - Distribution gear
  - Receptacles and circuit breakers
- Required annually
- Needs to be documented

## NFPA 303 5.20



## NFPA 303 5.20



## NFPA 303 4.8: Ground-Fault Testing for Marinas



- All vessels shall be tested for the presence of ac ground faults at the time of the initial connection to the marina electrical system...
- Required annually
- Vessel must display leakage under 30mA
- Retroactive within 2-years of adoption
- Needs to be documented
- Why?
- How and Where?

## Why Is Testing Required?



- Identify boats with potentially dangerous electrical leakage problems before they connect to your marina electrical system.
- Typically ground-fault monitor tied to various receptacles and circuit breakers designed to evaluate the integrity of a boat's electrical system.
- Visual displays help provide added piece of mind that a boat connecting to your marina is electrically safe.

## How and Where to Test?



### Monitors:

#### • Types:

- Single-Channel
- Multi-Channel
- Integral CT
- Digital Displays
- Smart Devices & Dashboards

#### • Locations:

- Portable
- Permanent
  - Fuel Piers
  - Greeting Docks

## Typical Testing Procedure

1. Turn off all breakers on the power pedestal and testing device.
2. Turn off all circuits on the vessel.
3. Plug the power cord or cords into the testing device and then into the pedestal.
4. Energize the power outlet supply and then the testing device.
5. Energize the VGFCU (main and branch breakers) – See Notice.
6. Energize all of the circuits on the vessel one at a time and **document** the ground-fault reading.
7. If the readings do not exceed 30mA, the vessel is code compliant.
8. If the readings exceed 30mA, the vessel is not code compliant and should be barred from plugging in until repairs have been made and the vessel has been retested.

## Portable Testing Devices



## Portable Testing Carts



## Cord Set Testers



## Smart Devices & Dashboards



## Importance of Testing Documentation

Current	Effects
15 mA to 20 mA	Pain shock, muscle contraction

## General Electrical Safety

- Electrical work should only be completed by certified electricians.
  - Marina work should comply with all NEC and NFPA codes.
  - Routine maintenance and inspections should be performed at least annually per NFPA 5.20 "Maintenance of Electrical Wiring and Equipment."
    - Document inspections and maintenance for liability purposes.
  - Boat owners should have all electrical work completed by ABYC certified electricians.
    - Boat owners should also document inspections and maintenance for liability purposes.

# NEC – GFPE Compliant Device Types (Comparison)

## GFPE Hardware - Cost (not including Outlets, Pedestal, Labor)

*\*Below example - 125V 30A Marina Shore Power*

GFPE Device Type	What It Is	Typical Hardware Cost (USD)	Notes
<b>30A GFPE Breaker</b>	Breaker with built-in leakage trip protection	<b>\$200 – \$400</b>	Most common retrofit path
<b>Inline 30A ELCI / GFPE Device</b>	Plug-in or hardwired inline protection device	<b>\$300 – \$700</b>	Fast retrofit, visible external device
<b>Ground Fault Relay + CT + Contactor</b>	Multi-component engineered protection system	<b>\$250 – \$1,500</b>	Flexible, more complex installs
<b>Integrated Smart GFPE Module</b>	Electronic protection board built into smart pedestal	<b>\$250 – \$1,200 (module only)</b>	Often sold inside full pedestal package
<b>VoltSafe Native Safety System</b>	Built-in controlled energization + software monitoring architecture	<b>\$749</b>	Includes prongless connector technology & adapters, power metering, temp sensing, smart-enabled controls

# The Future Of Compliance Might Be Smarter Than You Think:



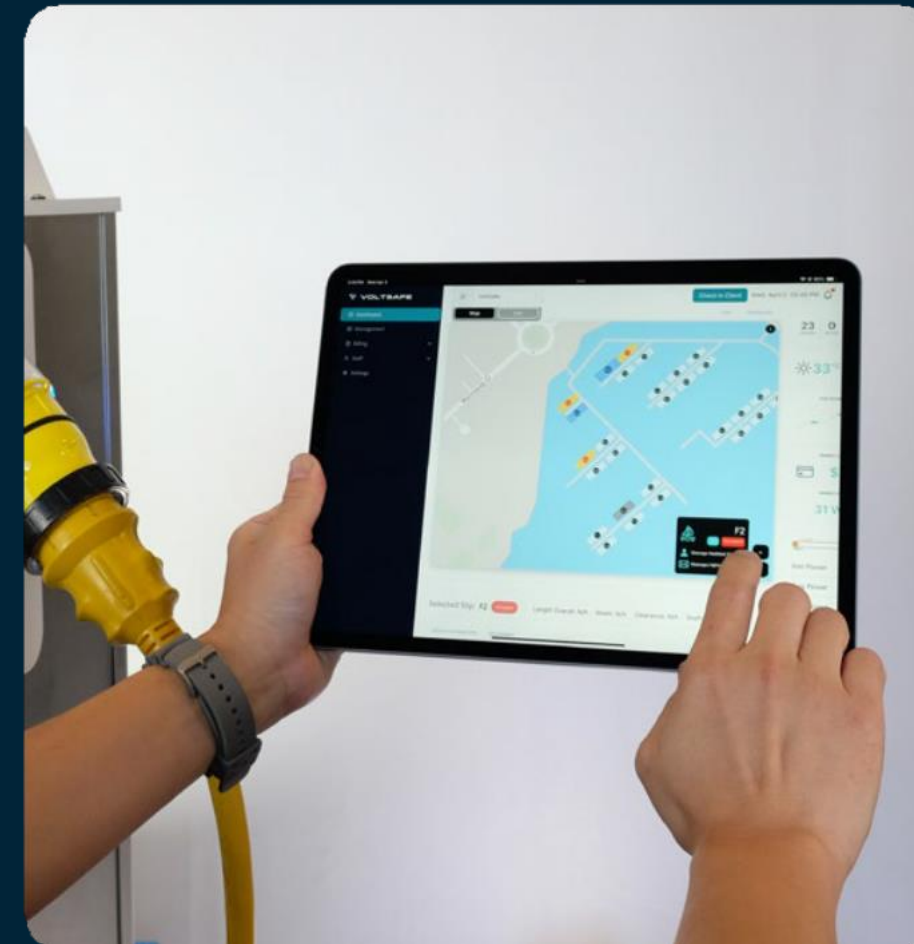
# SMART BY DESIGN



> **Magnetic, prongless shore power system.**



> **Off by default = no risk of shocks.**



> **Smart dashboard + boater app = real-time visibility, automated billing, alerts.**



> **Seamless fit with existing marina cord sets.**

# 5 MAKE ONE DECISION, NOT EIGHT

GROUND FAULT LEAKAGE DETECTION



LEAKAGE MEASUREMENT



AUTOMATED PAYMENT



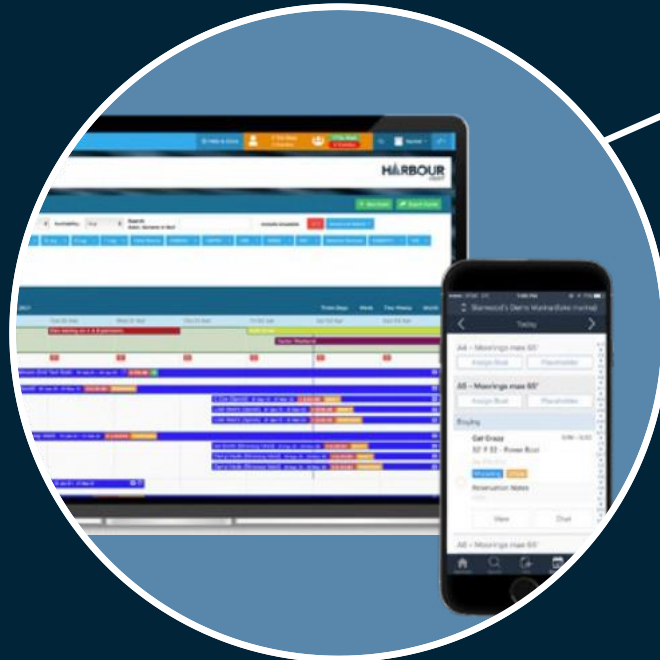
IOT METERING MODULES



LOAD MANAGEMENT



MANAGEMENT SOFTWARE



REMOTE ON/OFF



# 6 SMART MARINA INFRASTRUCTURE



## CENTRALIZED DASHBOARD FOR OPERATORS

notifications for corrosion, overheating, current leakage, or faulty equipment.



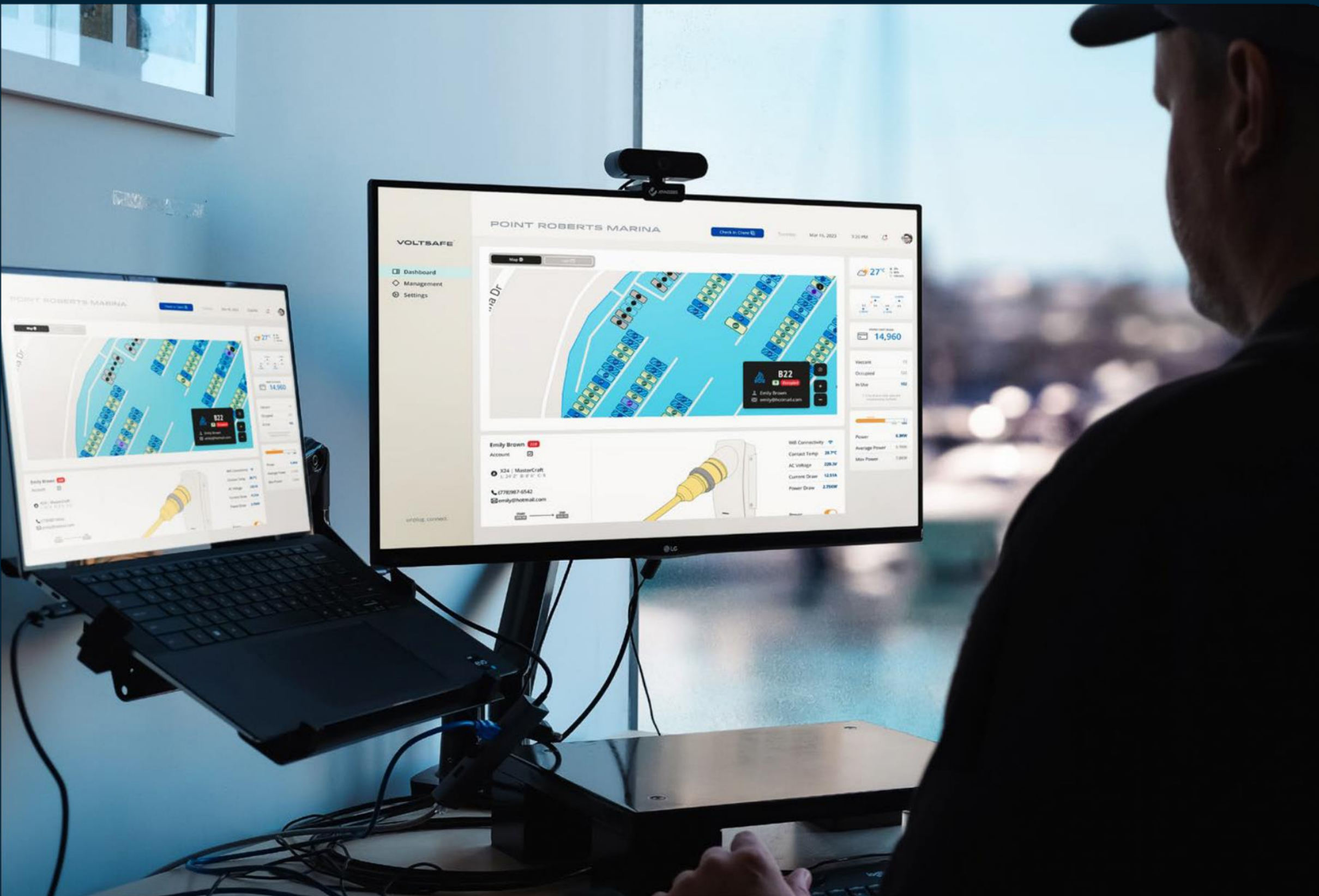
## BOATERS APP

turn power on/off, pay instantly, receive alerts.



## VOLTSAFE PEDESTALS

robust, safe-to-touch connectors, water-resistant, corrosion-resistant.



# PEAK DEMAND MANAGEMENT

- > AC, EV chargers, cooktops = massive draw
- > Load balancing spreads demand efficiently
- > Avoid surprise charges & downtime

# ELECTRIFICATION & MICROGRID POTENTIAL

From Energy Expense

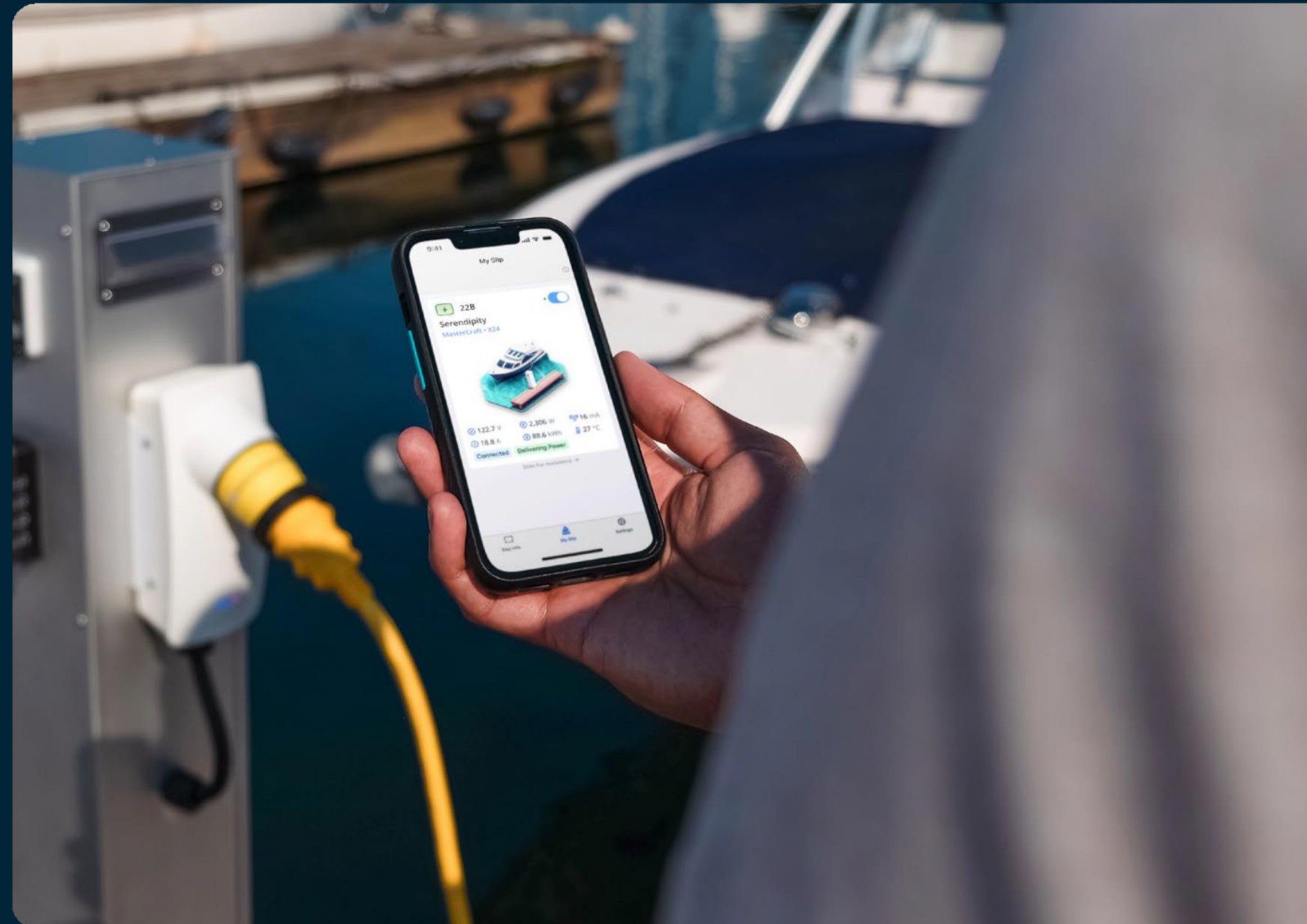
→ Energy Asset

- > EV boats + dock electrification = new demand profiles
- > Microgrid resiliency & revenue (load shaving, storage)
- > Participating in grid programs = ROI multiplier



# TRANSPARENCY & BOATER TRUST

- > Show power usage in boater app
- > Automated, itemized billing
- > Instant alerts for unsafe loads
- > Visibility builds trust & loyalty





## THE MARKET LANDSCAPE TODAY

- > Most marinas run on 20th-century tech
- > Code changes force decisions
- > Boaters expect seamless, safe, smart service
- > Hardware/software silos beginning to merge

# KEY PLAYERS: DIFFERENT APPROACHES

## Eaton, HyPower

Traditional hardware + bolt-on metering

## MarineSync, Quadlogic

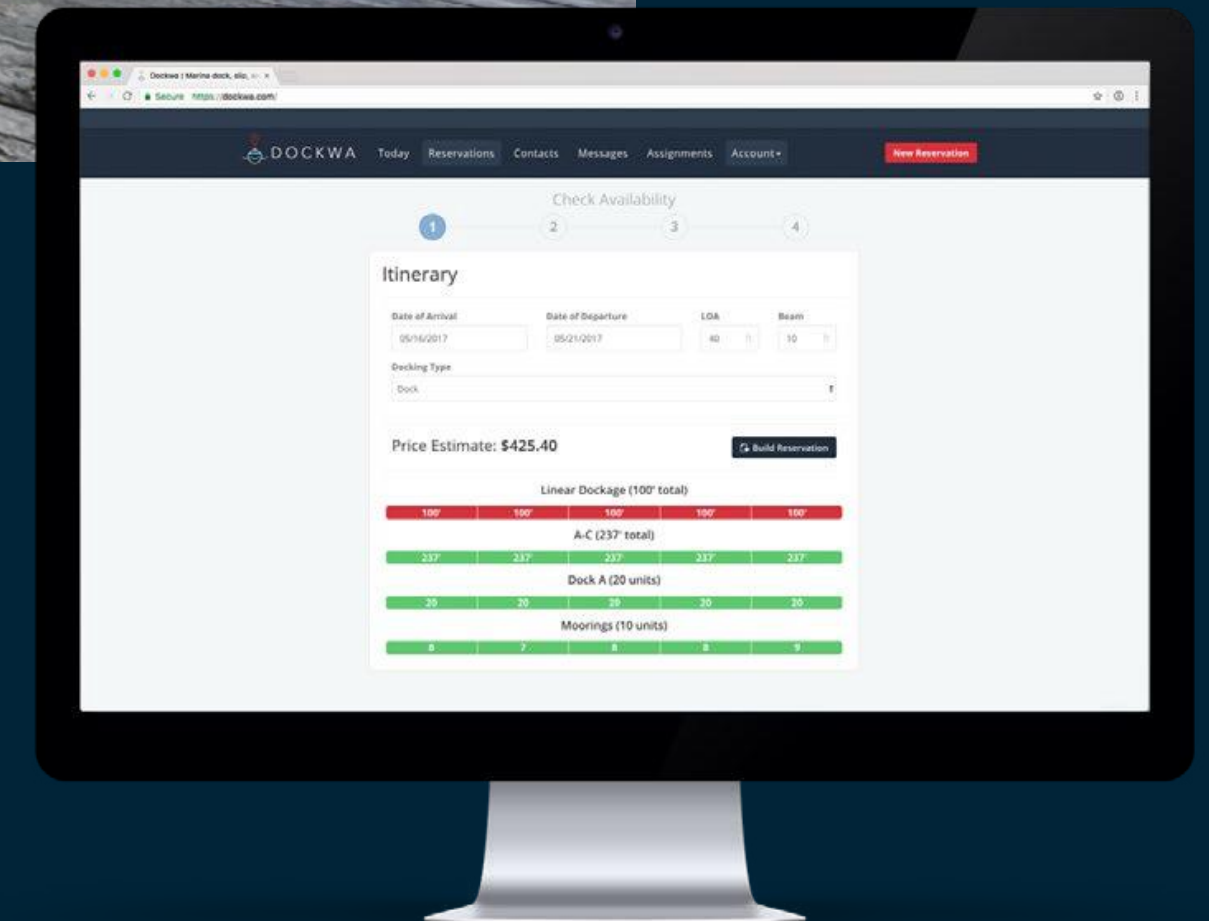
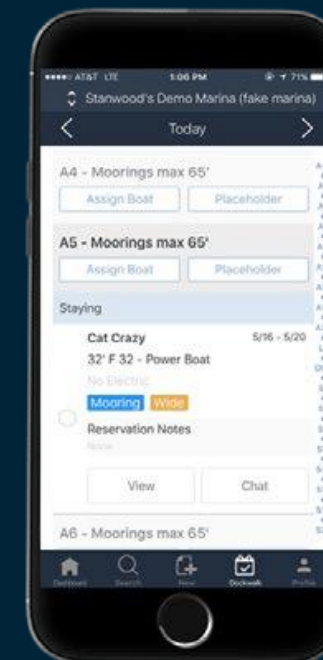
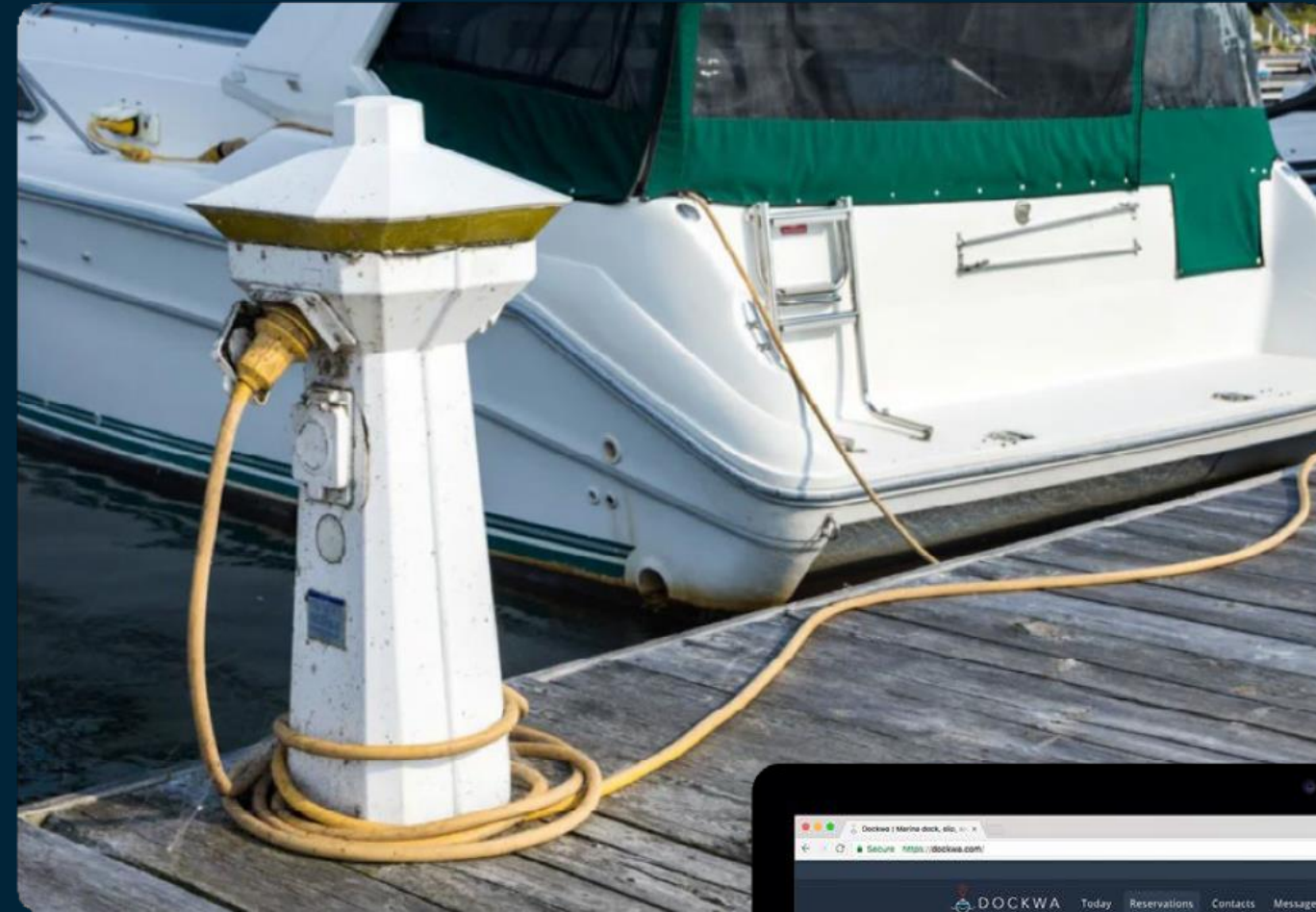
Utility monitoring, no smart control

## Dockwa, Molo

CRM with limited hardware touch - APIs

## VoltSafe

Full-stack, prongless, real-time smart power



# MODERNIZATION TRENDS & STATS

- > 65% of boaters prefer marinas with smart tech
- > Smart shore power = 42% fewer outages
- > Automated billing = 80% fewer disputes
- > +18% avg revenue lift from smart energy tools

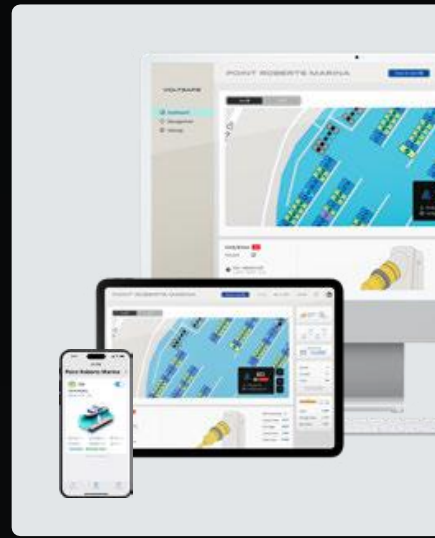


# INNOVATION SNAPSHOT — VOLTSAFE

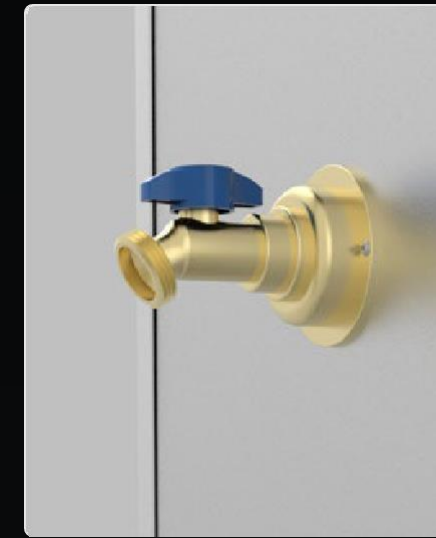
- > First certified prongless smart shore power
- > No arcing, no corrosion, no exposed live metal
- > Smart pedestal + dashboard + app = one ecosystem
- > NEC 2026 ready + embedded load sensing



L5-30 ADAPTER



SOFTWARE SUITE



WATER SPIGOTS



BREAKER PANEL



SMART LEDs



X2

X4

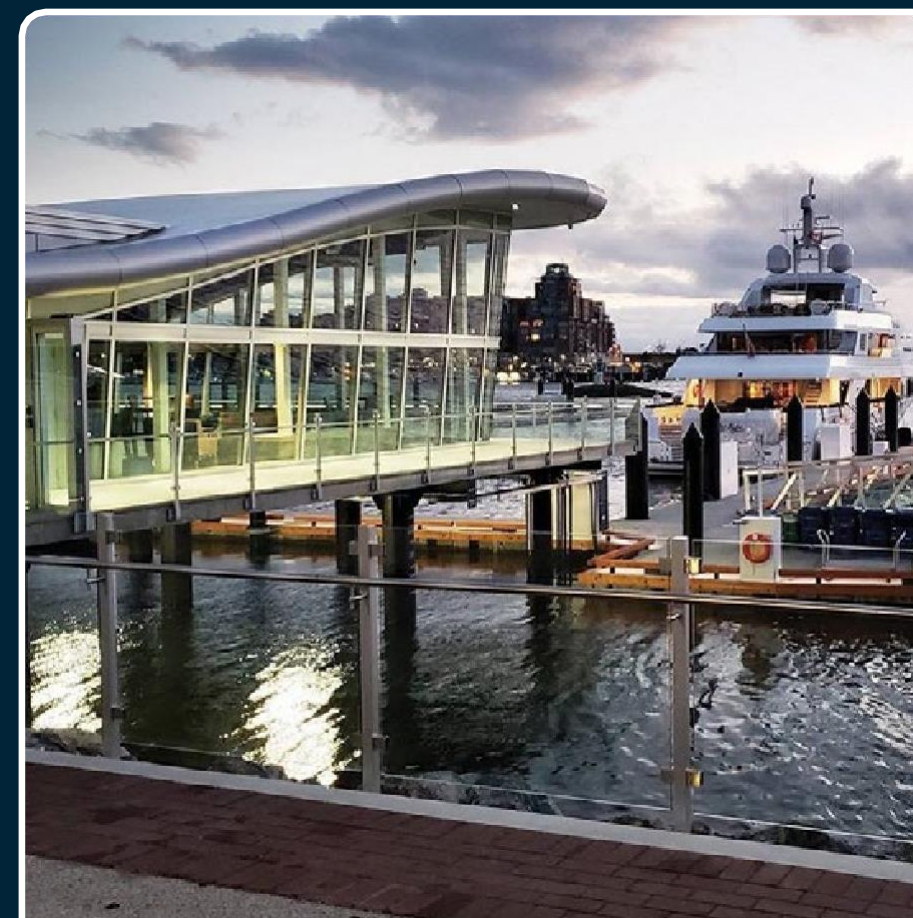
# WHAT'S NEW AT VOLTSAFE:



> VoltSafe Selected to Join Port of San Diego's Blue Economy Portfolio



> VoltSafe Executed a Large-Scale Deployment with The Royal Vancouver Yacht Club



> VoltSafe and Mostar Labs Have Partnered to Build the Future of Mobile Marine Electrification



> NMMA Canada Board of Directors Adds VoltSafe Co-Founder & CEO, Trevor Burgess

# KEY PARTNERSHIPS & ACCELERATOR PROGRAMS



YACHTING VENTURES  
COMMUNITY MEMBER



ROYAL CANADIAN NAVY PILOT  
PROJECT FOR LEVEL 2 EV  
CHARGERS



ASSOCIATION OF BRITISH  
COLUMBIA MARINE  
INDUSTRIES  
PROUD MEMBER



VANCOUVER MARITIME  
CENTRE FOR CLIMATE  
PROUD MEMBER



PACIFIC COAST CONGRESS OF  
HARBORMASTERS & PORT  
MANAGERS  
PROUD MEMBER



INTERNATIONAL  
ELECTRIC MARINE  
ASSOCIATION  
PROUD MEMBER



WASHINGTON  
MARITIME BLUE  
PROUD MEMBER



NATIONAL MARINE  
MANUFACTURERS  
ASSOCIATION PROUD  
MEMBER



ASSOCIATION OF  
MARINA INDUSTRIES  
PROUD MEMBER



AMERICAN BOAT AND  
YACHT COUNCIL PROUD  
MEMBER



**innovate BC**

INNOVATE BC &  
NRC IRAP  
BC FAST PILOT GRANT



**innovate BC**

INNOVATE BC &  
NRC IRAP  
BC FAST PILOT GRANT



INNOVATIVE SOLUTIONS  
CANADA  
GRANT RECIPIENT



CANADA'S OCEAN  
SUPERCLUSTER  
MEMBER: CEPAC  
PROJECT 2024



SOCAL CLEANTECH  
EXPRESS  
PORTS & LOGISTICS  
(CANADIAN TRADE  
COMMISSIONAER SERVICE)



NEWLAB  
SUPPORTED COMPANY



BOATING ONTARIO  
PROUD MEMBER

# REAL- WORLD IMPACT

*“High time marinas take safety seriously - VoltSafe makes it easy.”*

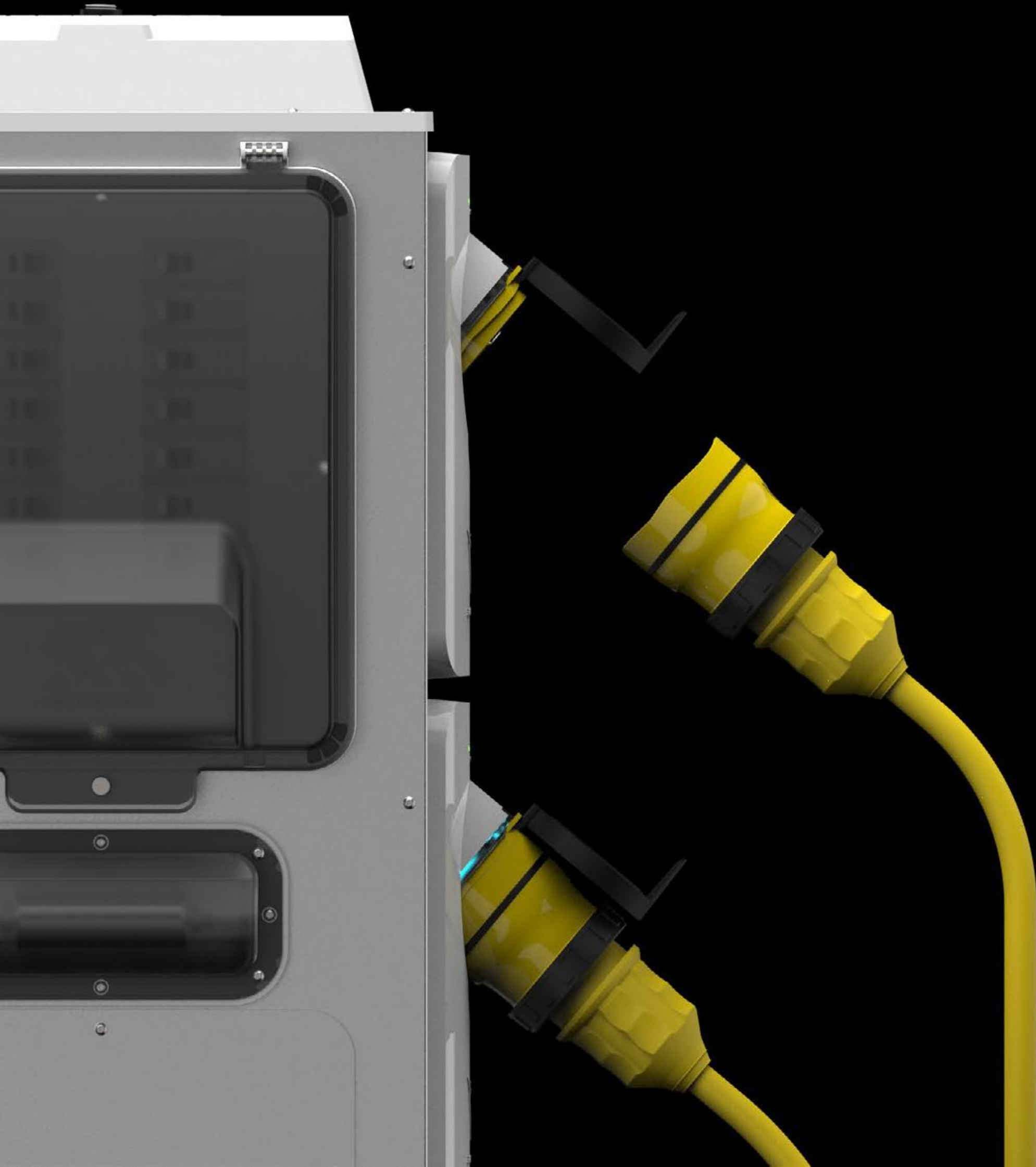
– Chris Lougheed  
Gibsons Landing Harbour Authority  
VoltSafe Pilot Program Participant



*“They’ve developed a product that remedies the previous issues we’ve had.”*

– Chris Barnett  
Royal Vancouver Yacht Club  
First Marina with Full Deployment of VoltSafe Pedestals





## FINAL TAKEAWAYS

- > NEC mandates are real and coming fast, especially with 2026 NEC requiring mandatory upgrades and testing. Stay in touch with your AHJs – they wield the sword.
- > Smart shore power pays for itself (less downtime, less liability)
- > Electrification can be an asset, not just a cost
- > The future isn't bolt-on smart tech. It's native intelligence

# LET'S TALK

**TREVOR BURGESS**

CEO & Co-founder, VoltSafe

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[voltsafemarine.com](http://voltsafemarine.com)



## HARDWARE

CONTROL BOX AND PEDESTAL	VOLTSAFE SOLUTION	LIGHTHOUSE (SS) INCUMBENT CORD	HARBOR LIGHT (SS) INCUMBENT CORD
No Arcing	✓	✗	✗
No Corrosion	✓	✗	✗
IP67 - Sealed to Safety	✓	✗	✗
Marina Grade Aluminum	✓	✗	✗
Does not Electrify the Water	✓	✗	✗
Does not Trip Breakers	✓	✗	✗
Prevents Stray Current	✓	✗	✗
Accessibility - Easy to Connect/Disconnect	✓	✗	✗
Surge Protection	✓	✗	✗
Revenue-Grade Power Metering	✓	✗	✗
LED Power Indicator Light	✓	✓	✓
Automated Safety	✓	✗	✗
Remotely Turn Power On and Off	✓	✗	✗

## SOFTWARE

DASHBOARD AND COMPANION APP	VOLTSAFE SOLUTION	DOCKWA	MARINE SYNC
Marina Manager Dashboard	✓	✓	✓
Boat Owner Companion App	✓	✓	✓
Boat Owner Shore Power Control	✓	✗	✗
Interactive, Real-Time Slip Map	✓	✗	✗
Current Leakage Detection	✓	✗	✓
Built-In CRM	✓	✓	✓
Automated Billing	✓	✓	✗
Temperature Monitoring	✓	✗	✗
Automated Check In/Out	✓	✗	✗
Real-time Power Usage Data/Analytics	✓	✗	✓
Real-time Device notifications	✓	✗	✓
Peak Demand Monitoring	✓	✗	✗
Peak Demand Reduction	✓	✗	✗
Marina Shore Power Control	✓	✗	✓