BARBRI CLE WEBINAR

Shock and Electrocution Cases Against Utilities

Duties of Care, Statutory and Regulatory Frameworks, Defenses

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Two disciplines, one problem

Sean Breen

Partner, Howry Breen & Herman, LLP — Austin, Texas

- Plaintiff's trial lawyer, catastrophic injury and wrongful death
- Texas Verdicts Hall of Fame; Top 50 U.S. Verdicts
- Carries: statutory and regulatory law, liability theory, party identification, defenses, damages

H. Landis "Lanny" Floyd II, PE

Partner and Principal Consultant, Electrical Safety Group Inc.

- CSP, CESCP, CUSP, CMRP, CRL — 55+ years in occupational electrical safety
- DuPont (retired); Univ. of Alabama at Birmingham; Chicago Electrical Trauma Rehabilitation Institute
- Carries: technical standards, maintenance and equipment condition, mechanism of injury

We divide by discipline, not by side.

Where we are going, and what we will answer

I	Statutory and regulatory frameworks	15 min
II	Standards of care	15 min
III	Issues of liability	15 min
IV	Defenses and defense strategies	15 min
V	Damages	10 min
—	Live Q&A	15 min

The five questions we were asked to answer

1. What are the standards for maintenance and repair?
2. How has PG&E's guilty plea affected how utilities defend themselves?
3. Is electricity a consumer product for products liability purposes?
4. Do NESC standards have the force of law?
5. Must claims be asserted somewhere other than a court of law?

Three things that make this litigation different

A fractured chain

The entity that owns the pole may not own the conductor, and neither may control the energy. Different utilities can be responsible for each component.

A standard built on codes

The duty is defined by consensus standards adopted by reference, not by common sense — and by the defendant's own written program.

Evidence on a clock

The dispositive proof lives in utility data systems purged in 30–90 days, and in hardware replaced within hours.

Contact with overhead power lines remains the largest single category of electrical fatalities and injuries, inside and outside the workplace.

Mechanisms: direct contact · arc flash · arc blast · step and touch potential · secondary falls

My story today

Lessons from a 55-year journey in occupational electrical safety

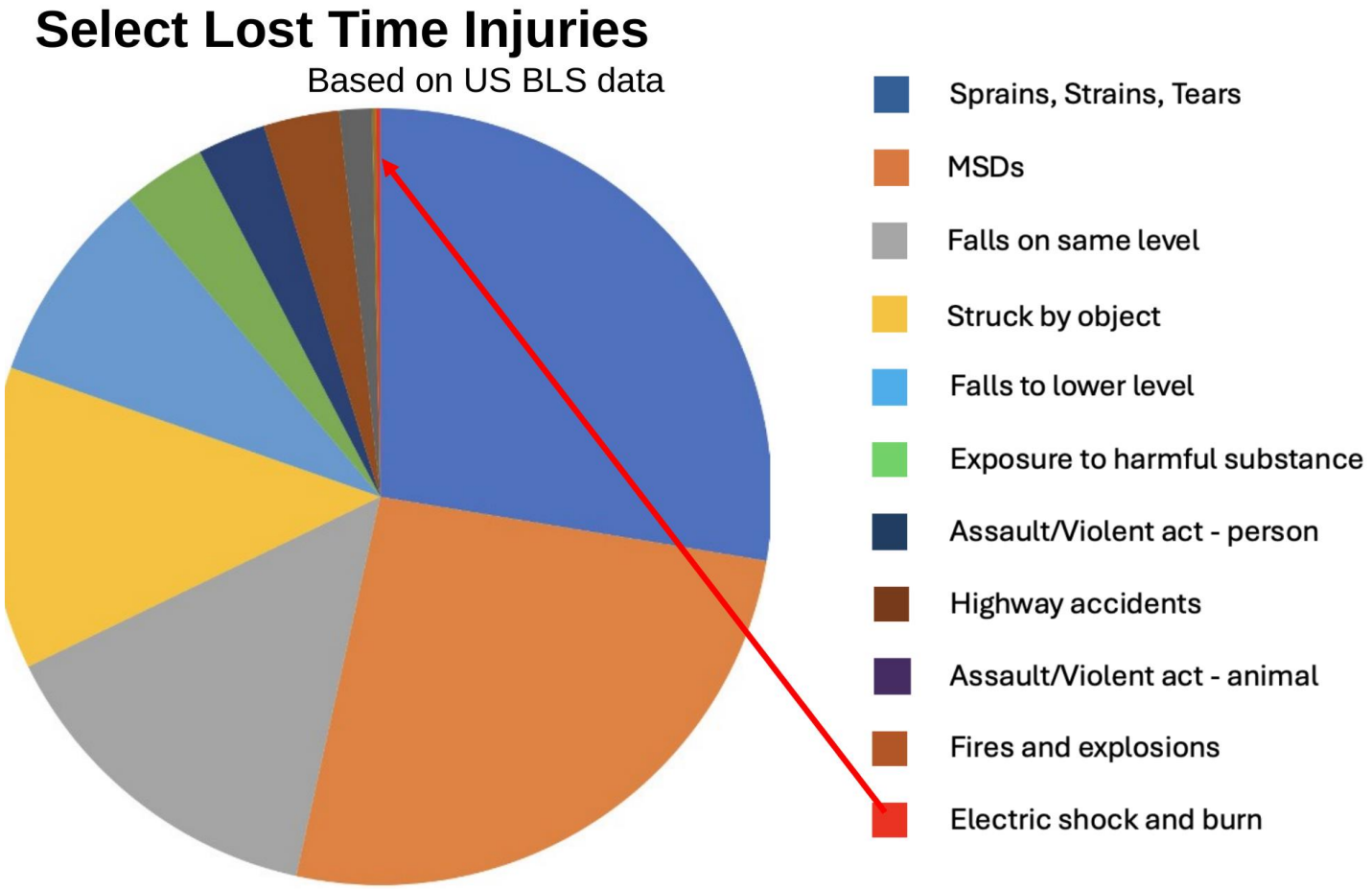
45+ years	DuPont career in industrial electric power systems
2005 – present	Expert witness services in occupational electrical safety
2013 – present	Adjunct professor, Advanced Safety Engineering and Management, University of Alabama at Birmingham
2025 – present	Staff electrical safety specialist, Chicago Electrical Trauma Rehabilitation Institute

Today: context for the injury — and the standard of care, as an engineer sees it.

Blinded by the data

Electric shock and burn is a sliver of the injury pie.

Which is exactly why organizations stop looking at it — and why the risk that remains is invisible.



Low frequency …

… but very high severity

1 in 13

lost time electrical injuries is fatal

ESFI

7th

leading cause of occupational fatality in the U.S.

ESFI

3rd

leading cause of fatality in construction

CPWR

2nd

most costly workers' compensation claim

Liberty Mutual

This severity profile is the reason these files are low-volume and high-stakes for both sides.

Incident consequences

Human error

Equipment failure

Electrical Incident

- No bad outcome
- Injury
  - Shock
  - Burn
  - Fall
  - Other
    - Fatal
    - Disabling
    - Physical
    - Neurological
- Equipment Damage
- Fire/Explosion
- Loss of Production/Services
- Raw materials waste
- Energy waste
- Environmental impact
- Off quality
- Corporate image

The hidden danger

If you believe that compliance will achieve safety, you may not see the residual risk.

— The premise of the standard-of-care fight in every one of these cases.

LANNY FLOYD

A worker’s awareness of risk

“I’ve been in the electrical trade business for 25 years. Until today, I can honestly say that I’ve never understood the hazards I’ve worked with.”

An electrician, at the end of an eight-hour hazard awareness seminar

The standard of care — an engineer's view

OSHA 1910.269

Generation, transmission, distribution

OSHA 1910.330–335

General industry

NESC

Qualified workers and public safety

NFPA 70E

Workers not qualified to work near T&D circuits

T&D Joint Partnership

Industry best practices

State high voltage acts

Statutory clearance and notification duties

Six sources, different scopes, different legal weight. Sorting that out is Section I.

I

Statutory and Regulatory Frameworks

15 minutes | Breen lead

- The three layers of governing authority
- The NESC — and whether it is law
- State overlays and high voltage safety acts
- Federal occupational standards
- Forum, immunity, and timing

Three layers of governing authority

1

Enacted law

State utility codes, high voltage safety acts, tort claims acts, workers' compensation statutes. Binding, with their own notice and limitations traps.

2

Consensus standards adopted by reference

The NESC and its state analogues. Binding within the adopting jurisdiction — subject to that state's deletions, amendments, and adopted edition.

3

Voluntary standards and internal programs

NFPA 70E and 70B, industry best practices, and the defendant's own O&M manuals. Not law. Frequently the most persuasive evidence in the case.

Most disputes about "the standard of care" are really disputes about which layer applies.

Does the NESC have the force of law?

PUBLISHED QUESTION 4 **Do the standards in the National Electrical Safety Code have the force of law?**

Only where adopted — and the adoption is edition-specific.

- The NESC (IEEE / ANSI C2) is written as a voluntary consensus standard. It becomes binding only when a legislature or public utility commission adopts it by reference
- Most states have adopted it in some form. Adoption is not uniform — states adopt different editions, with deletions, changes, and state-specific additions
- California is the principal exception: it writes its own utility codes — CPUC General Order 95 (overhead) and General Order 128 (underground)
- **Where adopted, noncompliance can support negligence per se. Where not adopted, the code remains admissible as evidence of accepted industry practice**

What that means in practice

Pin these before anyone opines on compliance

- The state and whether it adopted the NESC at all
- The edition in force when the installation was built
- The edition in force now, and any post-construction trigger
- The state's deletions, changes, and additions
- Any separate state clearance statute layered on top

The two arguments that follow

Defense

Compliance with an adopted code is compliance with the legislature's own judgment of what safety requires.

Claimant

The code is a floor. It does not purport to address every condition, and the utility's own standards routinely exceed it.

We take this up again in Section II.

State overlays: Texas as the working example

Clearance and inspection

- PURA § 38.004 — minimum clearance standard requiring NESC Rule 232 vertical clearances over specified lakes
- William Thomas Heath Power Line Safety Act (H.B. 4150, 2019) — enacted after three Boy Scouts were killed when their sailboat mast contacted a line over Lake O' the Pines
- PURA § 38.102 and PUCT Rule 16 TAC § 25.97 — mandatory inspection and annual safety-process reporting
- **The PUC publishes utility-reported instances of known noncompliance. A public, discoverable body of the utility's own admissions about its own system.**

High voltage safety act

- Tex. Health & Safety Code ch. 752 — six-foot prohibition on activity near a high voltage overhead line
- 48-hour notification and arrangement for de-energization or guarding
- § 752.008 — the violator is liable to the utility for damage to its facilities and for all liability the utility incurs from the contact

Legislative watch

H.B. 3004 (89th Leg., 2025) would have moved the prohibition from six feet to ten and broadened the responsible-person definition. Reported from committee; died in Calendars on May 7, 2025. Expect its return.

Federal occupational standards

Standard	Scope	Litigation use
29 C.F.R. § 1910.269	Power generation, transmission, and distribution	Defines qualified-worker practice; the reference point for utility crew conduct
§ 1910.333	Approach distances for unqualified persons	The ten-foot rule most non-utility workers are trained to
Part 1926 Subpart V	Construction — power transmission and distribution	Applies to contractor crews on utility work
§§ 1926.1407–1411	Cranes and derricks near power lines	Twenty-foot clearance regime; the crane contact fact pattern

- No private right of action — but violations are admissible on the standard of care and support negligence per se in a number of states
- Watch who the standard protects and who it binds: the defense presses this hard when the injured person works for a contractor

Forum, immunity, and timing

PUBLISHED QUESTION 5 **Do claims have to be asserted in a forum other than a court of law?**

Generally no — but four doctrines can move, limit, or extinguish the claim first.

Primary and exclusive jurisdiction

Many commissions hold exclusive original jurisdiction over rates and terms of service. Courts abate or refer claims that in substance attack a tariffed term, even when pleaded in tort.

Filed rate doctrine and tariffs

Tariff limitations of liability. Jurisdictions split sharply — next slide.

Governmental immunity

Municipal utilities and river authorities. Proprietary versus governmental function; damages caps; short tort claims act and charter notice periods that are routinely missed.

Alternative forums

Workers' compensation as its own administrative track, and arbitration clauses in customer service agreements.

First-week task: determine whether any defendant is a governmental unit, pull the tariff, and calendar every notice deadline — before investigating anything else.

Tariff limitations of liability — a real jurisdictional split

Jurisdiction	Holding	Practical effect
Texas	SWEPCO v. Grant, 73 S.W.3d 211 (Tex. 2002) — a narrowly drawn tariff limiting personal injury liability is valid where a remedy is preserved for gross negligence and willful misconduct	Ordinary negligence claims can be capped. Plead and prove gross negligence.
Indiana	Tyus v. Indianapolis Power & Light — no legislative authority for a tariff to bar a noncustomer's negligence claim	Noncustomer status defeats the defense
Arizona	Tariff limitations confined to economic loss from service interruption; the utility owes the highest degree of care as to personal injury and property damage	Tariff is not a personal injury defense
Pennsylvania	Commission policy statement bars tariff language exculpating a utility for personal injury from negligence or intentional torts	Defense unavailable by regulation

Claimant takeaway

Pull the filed tariff in week one. In a limitation state the pleading has to be built around the gross negligence carve-out from the start — not amended into it after a summary judgment motion.

For in-house counsel

A tariff limitation is only as good as the forum. Confirm whether it reaches noncustomers, whether the commission had authority to approve it, and whether the gross negligence carve-out swallows it on these facts.

II

Standards of Care

15 minutes | Floyd lead on the technical standards

- The legal formulation and the duty owed
- Design and construction — clearances and grandfathering
- Maintenance and repair
- NFPA 70B and the 2023 shift
- The internal standard

The duty, and the design standards that express it

The legal formulation

Electricity is a dangerous instrumentality. The degree of care is commensurate with the danger — most jurisdictions impose a high degree of care on the entity that controls it.

- The duty is to anticipate foreseeable conduct near energized lines — not merely to satisfy a clearance table
- Nondelegable duties, and the limits of the independent contractor defense

Design and construction

- NESC Rule 232 — vertical clearances over ground, roadways, and water
- NESC Rule 234 — clearances from buildings, signs, and other structures
- **Grandfathering: an installation that conformed to the edition in force when built is generally not required to be rebuilt to a later edition**
- What triggers an upgrade obligation: rebuild, relocation, reconductoring, changed ground elevation, changed use of the land beneath, actual notice of encroachment

Standards for maintenance and repair

PUBLISHED QUESTION 1 **What are the standards for maintenance and repair?**

There is no single standard. Four sources stack.

NESC Part 4, Rule 214	Lines and equipment in service must be inspected and tested at intervals suited to conditions, with defects corrected or documented. The provision that frames the first discovery request and the first internal audit.
State inspection regimes	Mandatory cycles and record retention — PUCT Rule 16 TAC § 25.97 in Texas, CPUC General Order 165 in California.
Asset condition programs	Wood pole groundline inspection and treatment, sounding and boring, remaining-strength criteria; vegetation management cycles; hardware and component condition.
NFPA 70B	Electrical equipment maintenance on the customer and industrial side — and, since 2023, a standard rather than a recommended practice. Next slide.

The Camp Fire is the paradigm: a worn C-hook on a nearly century-old transmission tower.

NFPA 70B: the 2023 shift

“should” → “shall”

The 2023 edition converted NFPA 70B from a Recommended Practice to a Standard, with mandatory language throughout.

- A documented Electrical Maintenance Program
- Equipment condition assessments driving maintenance scope and interval
- System studies — including incident energy analysis — at intervals not exceeding five years

Not itself law — but OSHA can cite it through the General Duty Clause, and it has become the benchmark for what a reasonable owner does. It governs the customer-side and industrial equipment at the center of most premises electrical cases.

The internal standard — usually the most important one

What to look for

- Construction standards, O&M manuals, inspection procedures, switching and clearance rules
- Deferred maintenance backlogs and unresolved trouble tickets
- Capital budget documents showing recommended work that was not funded
- Internal audits and post-incident reviews

Why it outperforms the code at trial

A jury understands a company that wrote down what it should do and then did not do it. No expert is required to explain it.

The defense response

Internal standards are aspirational, exceed the legal requirement, and should not be permitted to set the duty. Expect a motion in limine.

For in-house counsel: audit the gap between the standard the company publishes and the intervals it actually funds. Where the two diverge, close the gap or change the document — leaving both in place creates the worst version of the record.

III

Issues of Liability

15 minutes | Breen lead

- A. Tracing ownership and control
- The electronic record and the retention clock
- B. Identifying all defendants
- Is electricity a product?
- The injured worker and the third-party action

Three questions. Three potentially different answers.

Who owns the pole?

Utility, telecom, cooperative, municipality, or a joint-use arrangement among them

Who owns the conductor?

A different entity may own the wire on the same pole — including the attacher

Who controlled the energy?

Operational control at the moment of contact is the question that decides duty

The entity chart

- Transmission and distribution utility, retail electric provider, generator
- Electric cooperative, municipally owned utility, river authority
- Joint-use poles: attachment agreements, telecom and cable attachers, NJUNS tickets, make-ready records

The documentary path

- CCN filings and route maps; GIS and circuit maps
- Pole tags and asset numbers; easement and license records
- Mutual aid agreements and contractor master service agreements

The electronic record — and the retention clock

System state

- SCADA and EMS logs
- Outage management system records
- Relay targets and digital fault recorder data
- Sequence-of-events recorder output
- Recloser and sectionalizer operations

People and response

- Dispatch and switching orders
- Radio and telephone audio; CAD entries
- Truck AVL/GPS and telematics
- Crew timesheets and work orders
- AMI last-gasp and restoration signals

History and condition

- Trouble tickets and prior complaints
- Prior contact history at the location
- Inspection and pole test records
- Infrared survey results
- Vegetation management documentation

Much of this is purged in 30 to 90 days, and the hardware is often replaced within hours. A preservation demand naming these systems specifically — not a boilerplate litigation hold — changes the evidentiary posture more than any other early step. The mirror-image obligation on the utility side is a hold that actually reaches the operational systems rather than only email.

Everyone who touched the hazard

Contractors

- Line-clearance and vegetation management vendors
- Construction contractors
- Crane and aerial lift operators
- Staffing agencies

Premises side

- Property owner
- General contractor and retained control
- Site operator directing work near energized lines

Products

- Insulators, connectors, hardware
- Transformers and switchgear
- Boom and aerial lift equipment
- Proximity warning devices

For in-house counsel: joint-use and contractor agreements determine who ultimately pays. Review indemnity, additional-insured, and pole attachment terms before an incident — not during tender negotiations after one.

Is electricity a product?

PUBLISHED QUESTION 3 **Is electricity considered a consumer product for purposes of product liability?**

The majority rule draws the line at the meter.

In the system — a service

- While in transmission and distribution, electricity is treated as a service, not a product
- It becomes a product for strict liability only once it passes the customer's meter and enters the stream of commerce
- Ransome v. Wisconsin Electric Power (Wis. 1979); Pierce v. PG&E (Cal. App. 1985); Restatement (Third) § 19 cmt. d; Hanus v. Texas Utilities (Tex. App.—Fort Worth 2002)

What this means for your case

- **In an overhead contact case, strict products liability against the utility is generally unavailable. The claims are negligence and premises liability**
- The edges are litigated — Stein v. Southern California Edison (Cal. App. 1992): a meter exploded from a transformer arc; product even though the electricity had not passed the meter
- Product claims attach to hardware, equipment, and the customer-side installation — not the electrons
- Distinguish: electricity is not a "consumer product" as defined by the Consumer Product Safety Act

The injured worker and the non-employer third party

1. **Exclusive remedy**

   Workers' compensation bars the claim against the employer. The case depends on finding a non-employer defendant.

2. **The employer defenses**

   Statutory employer, borrowed servant, dual employment. OCIP and CCIP wrap-ups and the deemed-employer problem. Nonsubscriber jurisdictions change the analysis.

3. **The lien**

   Carrier subrogation, lien negotiation, and structuring settlement around it.

4. **The trap**

   Contractual indemnity and high voltage act liability running from the utility back to the employer — which can convert a recovery into a circular payment.

Evaluate the indemnity exposure before the demand goes out, not after the tender comes back.

IV

Defenses and Defense Strategies

15 minutes | Both presenters

- PG&E's guilty plea and what it changed
- The standard defense playbook, and the answers
- Working the defense experts

PG&E's guilty plea — what actually happened

PUBLISHED QUESTION 2 **How has PG&E's guilty plea in California affected how utilities defend themselves?**

84

counts of involuntary manslaughter, plus one count of unlawfully causing a fire

2020

June 16, in Butte County Superior Court — the CEO entered a plea as each victim's name was read

C-hook

The 2018 Camp Fire began when a suspension hook on a nearly century-old transmission tower failed

$3.5M

The statutory maximum fine, plus $500,000 to the district attorney. No individual was charged

One of the largest corporate admissions of criminal liability in U.S. history — and it was a maintenance case.

What changed in practice

Criminal exposure is modeled

Parallel proceedings, Fifth Amendment assertions by employee witnesses, and motions to stay civil discovery are live issues in serious-injury cases they were not before.

Incident response runs through counsel

From the first hour. Root cause analyses are structured for privilege. The frank post-incident memorandum is far rarer than it was ten years ago.

A narrative template for claimants

Deferred maintenance of aging assets as institutional choice rather than accident. Prior findings, penalties, and monitorships offered as notice and gross negligence evidence.

Records now exist that did not

Utilities redirected resources into inspection, vegetation management, and asset condition programs. That generates a record — which cuts both ways.

De-energization is an established capability

Public safety power shutoff protocols undercut the historic defense that de-energizing a known hazard was impractical.

The defense counter: the plea arose from a wildfire prosecution in a California regime with no analogue elsewhere. Expect a motion in limine on any reference to PG&E — justify relevance on notice, feasibility, or industry knowledge, not propensity.

The defense playbook, and the answers (1 of 2)

Defense position	Claimant response
Comparative fault — the claimant saw the line and worked near it anyway	Foreseeability of exactly this conduct; documented history of similar contacts at this location and system-wide; human factors evidence on task focus; the utility's own training materials acknowledging that people get close to lines
Open and obvious / no duty	The hazard is energization plus absence of clearance, not the visible conductor; nondelegable duty; actual notice of the specific condition
NESC compliance	A minimum, not a safe harbor; the utility's own construction standards exceed it; the code does not address the known site-specific hazard
Grandfathering of an existing installation	Triggering events requiring upgrade; changed ground elevation and site use; encroachment the utility knew about; inspection findings never acted on
Responsibility ends at the meter	Identify precisely where in the system the contact occurred; service drop, weatherhead, and mast disputes; retained control over customer-side equipment

The defense playbook, and the answers (2 of 2)

Defense position	Claimant response
Statutory immunity and damages caps	Proprietary versus governmental function analysis; premises defect and tangible property exceptions; cooperatives are not governmental units
Tariff limitation and the filed rate doctrine	The jurisdictional split; gross negligence and willful misconduct carve-outs; noncustomer status; whether the commission had authority to authorize the limitation
Sole proximate cause and superseding cause	Concurrent causation; the utility's failure created the condition the intervening act exploited
High voltage safety act violation as a shield	Statutory exemptions; whether the defendant is a "responsible person"; whether the notification duty was triggered; the utility's conduct after it received notice

Working the defense experts

- The utility operations expert, and the gap between corporate policy and field practice
- The human factors expert deployed against the injured worker, and how to bound the opinion
- Reconstruction disputes over clearance measurement, sag and tension, and conductor temperature at the time of contact

V

Damages

10 minutes | Floyd on mechanism, Breen on proof and valuation

- From mechanism to damages
- Proving injury that does not photograph
- Exemplary exposure and resolution posture

From mechanism to damages

The surface wound understates the injury. Current takes a path, and everything on that path is damaged.

The acute picture

- Cardiac dysrhythmia
- Compartment syndrome and fasciotomy
- Amputation
- Rhabdomyolysis and renal failure
- Secondary fall and blast trauma

The long tail — where the value is

- Delayed peripheral and central neuropathy
- Neurocognitive and neuropsychiatric sequelae
- Chronic pain and CRPS
- The causation fight over symptoms that emerge months later

Entry and exit wounds photograph poorly and prove little. The internal path is the case — and the delayed neurologic picture is where the valuation lives.

Proving it, valuing it, resolving it

Proving the invisible

- Neuropsychological testing
- Day-in-the-life documentation
- Before-and-after witnesses
- Treating physiatrist and neuropsychologist

Valuing the future

- Life care plan and future medical
- Revision surgery and prosthetic replacement cycles
- Vocational and economic loss
- Disfigurement, impairment, household services

Exemplary and resolution

- Prior contacts at the same location
- Unresolved tickets and unfunded safety recommendations
- Policy-limits demands across multiple carriers
- Mediate once the electronic record is in hand

For in-house counsel: exemplary exposure tracks the maintenance and notice record, not the severity of the event. Reserve early — the maintenance record is knowable long before the medical picture is.

First-week checklist

Item	Claimant counsel	Utility / in-house
Map the chain	Pole owner, conductor owner, energy controller, attachers, contractors	Confirm asset ownership and joint-use records before responding to any demand
Preservation	System-specific demand naming SCADA, OMS, relay, recloser, AMI, dispatch audio, AVL	Hold that reaches operational systems, not only custodial email
Physical evidence	Demand joint inspection and chain of custody before repair	Document and retain removed components; photograph before restoration
Governmental status	Is any defendant a governmental unit? Calendar notice deadlines	Assess immunity, caps, and whether the function is proprietary
Tariff	Pull the filed tariff; assess the limitation of liability provision	Assess enforceability in the forum state and against a noncustomer
Standards	Fix the NESC edition and state amendments as of construction	Confirm construction-year compliance and any post-construction triggers
Maintenance record	Inspection cycles, pole tests, vegetation records, trouble tickets, prior contacts	Assemble the same record before it is requested; identify gaps early
Employment posture	Exclusive remedy, statutory employer, OCIP/CCIP, subrogation	Contractual indemnity, additional insured status, tender analysis

The five questions, in one line each

1	**Maintenance and repair**	No single standard — NESC Part 4, state inspection cycles, NFPA 70B, and the defendant's own written program, which is usually the most demanding of the four.
2	**PG&E's guilty plea**	Criminal exposure became real; incident response reorganized around privilege; and claimants gained a deferred-maintenance narrative and a feasibility argument on de-energization.
3	**Electricity as a product**	A service in the system, a product past the meter. In an overhead contact case that forecloses strict liability against the utility.
4	**NESC force of law**	Only where adopted, in the edition and with the amendments that state enacted. California writes its own orders instead.
5	**Forum**	Court — unless primary jurisdiction, a tariff limitation, governmental notice, or comp exclusivity gets there first.

Questions

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