COMPLAINANT EXHIBITS 1-11

CASE NO. EC-2020-0252

Barbara Edwards, Complainant, v. Evergy Missouri West, Inc. d/b/a Evergy Missouri West, Respondent

EXHIBIT NO.	Public	C	WITNESS/TYPE/ISSUE(S)	OBJ.	MARKED	RECD
1			Property Rights			
2			Property Rights			
3			Property Rights			
4			Case Law			
5			Property Rights			
6			FCC			
7			Violations			
8			ADA (2)			
9			EHTrust Sage			
10			Direct Testimony of Norman W. Lambe			
11			Rebuttal Testimony of Timothy D. Schoechle			
12			Codes/Amendments			
13			EPA 2005ADA			

EXHIBIT NO. 1

Nebraska Law Review

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Property and the Right to Exclude

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haps the best-known exposition of this perspective was provided by the philosopher and New Deal lawyer Felix Cohen. His posthumously-published Socratic dialogue on the nature of private property[11] considers a number of attributes commonly associated with property, and through the positing of examples and counterexamples concludes that only the right to exclude is invariably connected with all forms of property. Cohen vividly summarizes his discussion in a manner suitable for memorialization on the blackboard:

> [T]hat is property to which the following label can be attached:
>
> To the world: Keep off X unless you have my permission, which I may grant or withhold.
>
> Signed: Private citizen
>
> Endorsed: The state.[12]

Single-variable essentialism also finds extensive if somewhat qualified support in the decisions of the contemporary U.S. Supreme Court. The Court has said of the right to exclude that it is "universally held to be a fundamental element of the property right;"[13] that it is "one of the most essential rights" of property;[14] and that it is "one of the most treasured" rights of property.[15] Although all these statements imply that the right to exclude is not the only right associated with property, no other right has been singled out for such extravagant endorsement by the Court. Moreover, the Court's decisions suggest that governmental interference with the right to exclude is more likely to be considered a taking of property without compensation under the Fifth Amendment than are interferences with other traditional elements of property.[16]

13. Since he regards trespassory protection of scarce resources as foundational to the understanding of property, Harris also would appear to be a qualified proponent of what I call single-variable essentialism.

11. *See* Felix S. Cohen, *Dialogue on Private Property*, 9 RUTGERS L. REV. 357 (1954)[hereinafter Cohen, *Dialogue on Private Property*]. Cohen's conclusion that property has an essential core of meaning is particularly striking in light of the fact that Cohen was also the author of a famous plea for functional rather than formalistic reasoning in law. *See* Felix Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809 (1935).

12. Cohen, *Dialogue on Private Property*, *supra* note 11, at 374.

13. Kaiser Aetna v. United States, 444 U.S. 164, 179-80 (1979).

14. *See* sources cited *supra* note 1.

15. Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 435 (1982).

16. *See, e.g.*, Dolan v. City of Tigard, 512 U.S. 374, 384 (1994); Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1011 (1984); Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. at 435; Kaiser Aetna v. United States, 444 U.S. at 179-80. In certain circumstances, the Court has held that interference with the right to exclude does not constitute a taking. For example, the Court has upheld a state constitutional rule prohibiting owners of shopping centers from excluding individuals who seek to exercise free speech rights on shopping center property. *See*

also says that the right to exclude is "among the most essential" of the bundled rights[31]).

These three schools of thought—single-variable essentialism, multiple-variable essentialism, and nominalism—do not exhaust the possibilities with respect to understanding of the nature of property. One of the most sophisticated modern expositions of property by a philosopher is that of Jeremy Waldron.[32] Borrowing a distinction developed by Ronald Dworkin, Waldron argues that private property is best understood as a general "concept," of which the various incidents or elements catalogued by Honore and others embody different "conceptions." He defines the general concept of private property as the understanding that, "in the case of each object, the individual person whose name is attached to that object is to determine how the object shall be used and by whom. His decision is to be upheld by the society as final."[33] This general concept, Waldron argues, takes on different conceptions in different contexts, depending on the type of resource involved, the traditions of the legal system, whether ownership is unified or divided, and so forth. For example, agricultural land may be subject to different types of restrictions on use than is personal property.

From the vantage point of this essay, Waldron's account can be seen as a combination of single-variable essentialism and nominalism. His definition of the core concept of private property—giving a named individual "final" authority to determine how resources "shall be used and by whom"—bears a strong family resemblance to Blackstone's sole and despotic right to exclude. Waldron would not define property solely in terms of this feature, however, but depicts property as morphing into a variety of conceptions in a manner consistent with the bundle of rights metaphor associated with nominalism. For example, he argues that the right of inheritance is entirely contingent and that one could have a system of private property with or without inheritance, without affecting the conclusion that the system was still one of private property.[34]

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31. *See, e.g.*, Dolan v. City of Tigard, 512 U.S. 374, 384 (1994); Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 433 (1982); Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979).
32. *See* Jeremy Waldron, *What is Private Property?*, 5 OXFORD J. LEGAL STUD. 313 (1985)[hereinafter Waldron, *What is Private Property?*]. A condensed version of this essay appears in JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 26-61 (1988).
33. Waldron, *What is Private Property?*, *supra* note 32, at 327. Waldron develops this concept by contrasting private property to collective (i.e., state-owned) property and common property (which he equates to unowned things). Thus, his core concept does not generalize to all forms of property.
34. *See id.* at 337-40. Waldron hints at one point that the right to transfer has a "tightness of connection" to the core concept that distinguishes it from other incidents like inheritance. *See id.* at 341. This concession points arguably toward a

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Airspace and the Takings Clause

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AIRSPACE AND THE TAKINGS CLAUSE

TROY A. RULE*

ABSTRACT

This Article argues that the United States Supreme Court's takings jurisprudence fails to account for instances when public entities restrict private airspace solely to keep it open for their own use. Many landowners rely on open space above adjacent land to preserve scenic views for their properties, to provide sunlight access for their rooftop solar panels, or to serve other uses that require no physical invasion of the neighboring space. Private citizens typically must purchase easements or covenants to prevent their neighbors from erecting trees or buildings that would interfere with these non-physical airspace uses. In contrast, public entities can often secure their non-physical uses of neighboring airspace without having to compensate neighbors by simply imposing height restrictions or other regulations on the space. The Court's existing regulatory takings rules, which focus heavily on whether a challenged government action involves physical invasion of the claimant's property or destroys all economically beneficial use of the property, fail to protect private landowners against these uncompensated takings of negative airspace easements. In recent years, regulations aimed at keeping private airspace open for specific government uses have threatened wind energy developments throughout the country and have even halted major construction projects near the Las Vegas Strip. This Article highlights several situations in which governments can impose height restrictions or other regulations as a way to effectively take negative airspace easements for their own benefit. This Article also describes why current regulatory takings rules fail to adequately protect citizens against these situations and advocates a new rule capable of filling this gap in takings law. The new rule would clarify the Court's takings jurisprudence as it relates to airspace and would promote more fair and efficient allocations of airspace rights between governments and private citizens.

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* Associate Professor, University of Missouri School of Law. Many thanks to Dennis Crouch, Wilson Freyermuth, Blake Hudson, Rhett Larson, Dale Whitman, and the faculty at Florida State University School of Law for their insightful comments on early versions of this Article.

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INTRODUCTION

Without ever venturing into the open airspace above private land, public entities can use that space to preserve scenic views for government buildings, to deliver sunlight to publicly-owned solar panels, to transmit military radar signals, or to serve other valuable functions.[1] This ability for governments to use private airspace without physically invading it has important implications in the context of takings law. Public entities typically acquire private property through voluntary sales or eminent domain, compensating citizens for the acquired property. However, governments can sometimes secure their non-physical uses of private airspace at far less expense by simply restricting the space rather than formally taking it. Through height restrictions or other land-use controls, public entities can take the equivalent of negative airspace easements tailored to serve their own interests. Such restrictions seek not to govern land use conflicts among private landowners but to conscript specific airspace into government service.

Regulations designed to keep airspace open so it can serve a non-trespassory government use typically are not compensable under existing regulatory takings law. Governments can often impose such restrictions without risking takings liability, even though the effective transfer of property rights resulting from such restrictions often mirrors that of an overt taking through eminent domain. Modern regulatory takings jurisprudence focuses heavily on whether the challenged government action involves a physical invasion of the claimant's property or whether it denies the claimant of all economically viable use of the parcel at issue. These shorthand tests, commonly known as the *Loretto* and *Lucas* rules,[2] succeed in detecting many types of government actions that warrant the payment of just compensation

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1. The protection of natural indoor lighting for public buildings and sunlight access for city-owned urban gardens are examples of other conceivable non-physical government uses of neighboring open airspace. Governments are increasingly recognizing the significant role that natural lighting designs can play in energy efficiency. *See, e.g.*, ARIZ. ADMIN. CODE § R14-2-1802.B.6 (2007) (providing that "solar daylighting," defined as the "non-residential application of a device specifically designed to capture and redirect the visible portion of the solar beam, while controlling the infrared portion, for use in illuminating interior building spaces in lieu of artificial lighting[,]" constitutes a "Distributed Renewable Energy Resource" together with renewable energy devices such as small wind turbines and passive solar energy systems). Government-sponsored urban gardens in blighted areas of major cities have also grown in popularity in recent years. *See generally* Catherine J. LaCroix, *Urban Agriculture and Other Green Uses: Remaking the Shrinking City*, 42 URB. LAW. 225 (2010) (describing urban garden programs in Cleveland, Ohio, Detroit, Michigan, and elsewhere).

2. Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982); Lucas v. S. Carolina Coastal Council, 505 U.S. 1003 (1992). For a more detailed description of these two regulatory takings rules and why they fail to adequately protect citizens against the regulatory takings of airspace easements discussed in this Article, see *infra* notes 81–105 and accompanying text.

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under the Takings Clause. However, neither of these rules accounts for instances when public entities restrict private airspace solely so that they can exploit it in ways that require no physical invasion. Landowners whose properties are subjected to such restrictions are thus left to argue their claims under the nebulous test set forth in *Penn Central*,[3] with slim chances of success. The legitimate police power restrictions of airspace upheld in *Penn Central* are materially different from the abuses of regulatory authority aimed at enhancing a public entity's own resource position that are described in this Article.[4] Unfortunately, most courts have heretofore been unable or unwilling to recognize this distinction when adjudicating takings claims over airspace.[5]

The imprecision of the Supreme Court's takings jurisprudence relating to airspace rights is increasingly problematic in this era of unprecedented competition for airspace. Airspace is a critical resource for renewable energy and sustainable development. Commercial wind turbines must extend hundreds of feet into rural skies to be fully productive.[6] Solar panels require vast amounts of open airspace to access direct sunlight.[7] And vertical development that extends high into urban airspace is a significant strategy for combating suburban sprawl.[8] As airspace grows ever more important in the coming years, conflicts between private citizens and governments over it will likely grow as well. Regulatory takings law in its present form is ill-equipped to fairly and efficiently govern these conflicts.

This Article draws attention to "veiled airspace easement regulations"—government-imposed restrictions that transfer the practical equivalent of negative airspace easements to public entities. Arguing that such regulations are exactly the sorts of government actions that the Takings Clause was intended to protect against, this Article advocates treating these regulations as

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3. *See* Penn. Cent. Transp. Co. v. City of New York, 438 U.S. 104 (1978).

4. For detailed examples of such exploitative uses of airspace restrictions, see generally *infra* text accompanying notes 41–68 (describing the potential for government entities to impose height restrictions to protect military radar, create buffers near airports, prevent the shading of municipal solar energy systems, or preserve scenic views for government buildings).

5. For a detailed discussion of *Penn Central*, how its facts are materially distinguishable from the situations that are the focus of this Article, and some possible reasons why the *Penn Central* test fails to adequately protect landowners in these contexts, see *infra* text accompanying notes 100–16 and 154–65.

6. Most commercial wind turbines are well over 300 feet high. *See* AM. WIND ENERGY ASS'N, WIND ENERGY TEACHER'S GUIDE 4 (2003), http://www.ocgi.okstate.edu/owpi/EducOutreach/Documents/AWEATeachersGuide.pdf (noting that modern "utlity-scale [wind] turbines can be 100 meters (over 300 feet) high or more").

7. For a primer on legal issues relating to solar access, see generally Sara C. Bronin, *Solar Rights*, 89 B.U. L. REV. 1217 (2009); Troy A. Rule, *Shadows on the Cathedral: Solar Access Laws in a Different Light*, 2010 U. ILL. L. REV. 851 (2010).

8. Vertical development can be an effective means of increasing urban densities, and greater urban density is often viewed as promoting sustainability. *See, e.g.*, MIKE DAVIS, PLANET OF SLUMS 134 (2006) (noting that "urban density can translate into great efficiencies in land, energy, and resource use").

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compensable takings. Part I of this Article highlights courts' longtime recognition of airspace rights as constitutionally protected property, including such recognition within the parallel context of eminent domain proceedings. Part II describes four specific examples of situations in which governments can abuse their regulatory power to effectively acquire valuable interests in private airspace and explains how the unique attributes of airspace have led courts to overlook these scenarios in their takings jurisprudence. Part III suggests that the Supreme Court should consider adopting an additional, supplemental takings rule that requires just compensation to landowners when regulations (i) deprive them of possessory interests in airspace (ii) for the primary purpose of securing the government's own exploitation of that space. Part III also discusses principles set forth in previous writings by Professors Joseph Sax and Jed Rubenfeld that could assist courts in distinguishing ordinary police power regulations of airspace from regulations involving such direct government exploitation of the restricted space that just compensation would be warranted under the proposed rule. Part IV argues that this new takings rule would add sorely-needed clarity to an ambiguous area of regulatory takings law and would promote more just and efficient allocations of airspace rights between public entities and private landowners.

I. AIRSPACE RIGHTS AND THE POWER OF EMINENT DOMAIN

Airspace, the layer of open space that blankets the earth's surface, is a complex and oft-forgotten natural resource. Airspace is as immovable and unique as land but differs in that it is also totally invisible and intangible.[9] Given airspace's peculiar attributes, it is unsurprising that courts and legal scholars have long struggled to formulate rules to govern its use.[10]

For centuries, neighbors have quarreled over conflicting uses of the airspace above their land.[11] Common law doctrines and statutory rules have

9. For a more detailed discussion of the distinct character of airspace as a natural resource, see Troy A. Rule, *Airspace in a Green Economy*, 59 UCLA L. REV. 270, 274–77 (2011).

10. For an excellent historical summary of the painstaking struggle to develop laws in the United States governing airspace rights, see generally STUART BANNER, WHO OWNS THE SKY?: THE STRUGGLE TO CONTROL AIRSPACE FROM THE WRIGHT BROTHERS ON (2008). Other commentators have also remarked on the difficulties and uncertainty associated with airspace rights laws. *See, e.g.*, Colin Cahoon, *Low Altitude Airspace: A Property Rights No-Man's Land*, 56 J. AIR L. & COM. 157, 191 (1990) (noting that decades after the advent of modern flight, "courts have yet to adopt a uniform theory of airspace property ownership"); Mary B. Spector, *Vertical and Horizontal Aspects of Takings Jurisprudence: Is Airspace Property?*, 7 CARDOZO L. REV. 489, 502 (1985) (noting that the "characterization and apportionment of rights in airspace became more complicated with the advent of commercial air travel").

11. *See generally* Eugene J. Morris, *Air Rights are "Fertile Soil"*, 1 URB. LAW. 247, 253–56 (1969) (describing numerous airspace-related legal disputes adjudicated in the nineteenth and early twentieth centuries).

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gradually evolved to address many of these conflicts among private landowners.[12] However, as the function of government has expanded over time,[13] public entities have increasingly made uses of airspace as well. When a government's use of private airspace clashes with a landowner's use of the space, perplexing legal questions can arise. Should the airspace rights in dispute receive the same property protections commonly afforded to surface land? And under what conditions should the law permit public entities to confiscate or interfere with those rights?

The Takings Clause of the Fifth Amendment is the obvious launching point for analyzing conflicts between governments and citizens over private airspace. Its brief language prohibits governments from taking "private property . . . for public use, without just compensation."[14] A threshold question that arises out of this language is whether the assets at issue in any regulatory taking case are legally cognizable "property" at all.[15] As the following parts show, longstanding case law and more than 70 years of compensated takings of airspace easements through eminent domain are evidence that airspace rights are indeed "property" under the Takings Clause.[16]

A. *Airspace Rights under Common Law*

Landowners have long held common law property rights in the low-altitude airspace above their parcels.[17] The origins of modern airspace law date as far back as the 1300s, when the Italian jurist Cino da Pistoia wrote,

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12. A discussion of the *ad coelum* doctrine at common law as it relates to airspace and of modern legislation aimed at addressing various airspace use conflicts arising from modern flight follows in Part I.A of this Article. *See infra* text accompanying notes 18–26.

13. Statistics on the growth of government spending as a percentage of Gross Domestic Product (GDP) evidence the substantial increase in government activities over the past century. *See, e.g.*, ROBERT C. ELLICKSON & VICKI L. BEEN, LAND USE CONTROLS 616 (2005) (noting that United States government spending increased from 10 percent of GDP in 1929 to 32.4 percent of GDP in 2003).

14. U.S. CONST. amend. V. Although the Fifth Amendment initially applied only to the federal government, courts have long interpreted the Fourteenth Amendment as making the Fifth Amendment applicable to state and local government as well. *See* STEVEN J. EAGLE, REGULATORY TAKINGS 4 (4th ed. 2009) ("Since 1897, the Supreme Court has interpreted the Takings Clause as applying to states and localities as well.").

15. The Supreme Court has made clear that the Takings Clause "only protects property rights as they are established under state law, not as they might have been established or ought to have been established." Stop the Beach Renourishment, Inc. v. Fla. Dept. of Envtl. Prot., 130 S. Ct. 2592, 2612 (2010).

16. *See infra* text accompanying notes 37–39.

17. The author recently published an article featuring a more detailed discussion of the nature of airspace and of the history of airspace rights. *See* Rule, *supra* note 9. Some of the background material in this part draws from that earlier article.

"*Cuius est solum, eius est usque ad coelum*,"[18] or "[to] whomsoever the soil belongs, he owns also to the sky."[19] This simple "*ad coelum* doctrine" distributes airspace rights based on ownership of the surface land situated immediately below the space. The doctrine appeared in Coke's commentaries[20] and in Blackstone's commentaries,[21] securing its place within English and American common law.[22] By the early 1900s, courts in the United States were applying it to find trespass for even minor intrusions into neighboring airspace.[23]

The United States Congress and the courts clarified the scope of landowners' airspace rights in the early twentieth century when airplanes began taking to the skies.[24] Federal legislation enacted during that period carefully defined "navigable airspace," which generally encompasses all space situated more than 500 feet above the ground,[25] and designated that space as a nationally-shared common area for modern flight.[26] Although the Supreme Court acknowledged navigable airspace legislation in *United States v. Causby* in 1946, characterizing navigable airspace as a "public highway" for air travel,[27] the Court emphasized that landowners still held property

18. Stuart S. Ball, *The Vertical Extent of Ownership in Land*, 76 U. PA. L. REV. 631 (1928) (attributing the phrase to Cino da Pistoia).

19. BLACK'S LAW DICTIONARY 453 (4th ed. 1968). The full maxim reads, "*cujus est solum, ejus est usque ad coelum et ad inferos*." *Id.*

20. *See, e.g.*, EDWARD COKE, COMMENTARIES ON LITTLETON, § 4a (1670).

21. *See, e.g.*, BLACKSTONE, 2 COMMENTARIES 8 (1836).

22. *See* ROBERT R. WRIGHT, THE LAW OF AIRSPACE 34 (1968) ("The *usque ad coelum* maxim, as we have seen, was in large measure a child of Coke, as far as its incorporation into English law was concerned."); *id.* at 35 ("*Blackstone's Commentaries* . . . reiterated Coke's viewpoint on ownership of airspace. These *Commentaries* burst upon the scene practically on the eve of American independence, and were accepted as 'quasi authority' in America.") (internal citations omitted).

23. *See, e.g.*, John Cobb Cooper, *Roman Law and the Maxim* Cujus Est Solum *in International Air Law*, 1 MCGILL L.J. 23, 60 (1952) (citing Hannabalson v. Sessions, 90 N.W. 93, 94 (Iowa 1902) (holding that reaching an arm across a property was a trespass because "[i]t is one of the oldest rules of property . . . that the title of the owner of the soil extends . . . upward usque ad coelum")); *see also* Butler v. Frontier Tel. Co., 79 N.E. 716 (N.Y. 1906) (finding an action for ejectment in connection with telephone wires strung above the plaintiff's land).

24. For a discussion of the discourse among courts and commentators regarding how to reconcile common law airspace rules with modern aviation, see generally BANNER, *supra* note 10, at 85–100. *See also* Rule, *supra* note 9, at 280–82; Marc R. Poirier, *The Virtue of Vagueness in Takings Doctrine*, 24 CARDOZO L. REV. 93, 178 (2002) (noting that "[a]irplane overflight provides an example where a technological advance that blossomed into widespread social use spawned a new type of property use conflict" and that, "in the early decades of this new resource use conflict, theories blossomed on how to characterize and resolve the dispute") (citation omitted).

25. The most current legislation relating to navigable airspace is the Federal Aviation Act of 1958. *See* 49 U.S.C.A. § 40103(a)–(b) (West 2012) (providing that United States citizens have a "public right of transit through the navigable airspace" and authorizing the Administrator of the Federal Aviation Administration to develop regulations more clearly defining what constitutes navigable airspace).

26. *See* 14 C.F.R. § 77 (2010).

27. *See* United States v. Causby, 328 U.S. 256, 264 (1946).

interests in the non-navigable airspace above their parcels. In the Court's words, a "landowner owns at least as much of the space above the ground as he can occupy or use in connection with the land[,]" and the "fact that he does not occupy it in a physical sense—by the erection of buildings and the like—is not material" to determining the scope of ownership.[28] In the decades since *Causby*, courts' frequent recognition of private airspace rights in the context of view easements,[29] condominium laws,[30] and solar access easements[31] has left little doubt that rights in non-navigable airspace are a legitimate form of property and that sub-adjacent landowners inherently possess those rights.[32]

B. Airspace Rights in Eminent Domain Proceedings

Courts' unwavering treatment of airspace rights as property under eminent domain law is further evidence that landowners hold property interests in the non-navigable airspace above their land. Eminent domain authority enables public entities to acquire private property for public use when they are unable to obtain it through a voluntary sale.[33] When appropriately exercised,[34] the eminent domain power deters landowners whose properties are needed for a

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28. *Id.* at 264 (citing Hinman v. Pac. Air Lines Trans. Corp., 84 F.2d 755 (9th Cir. 1936)).

29. *See, e.g.*, Schwartz v. Murphy, 812 A.2d 87 (Conn. App. Ct. 2002) (enforcing a view easement contained in a deed); Karen A. Jordan, *Perpetual Conservation: Accomplishing the Goal through Preemptive Federal Easement Programs*, 43 CASE W. RES. L. REV. 401, 407 n.31 (1992) (citing Andrew Dana & Michael Ramsey, *Conservation Easements and the Common Law*, 8 STAN. ENVTL. L.J. 2, 13 (1989)) (noting that "[m]odern courts have . . . recognized 'view easements'").

30. For a recent discussion of airspace rights in the condominium context, see generally Douglas C. Harris, *Condominium and the City: The Rise of Property in Vancouver*, 36 LAW & SOC. INQUIRY 694, 700–01 (2011) (describing the three-dimensional parceling of airspace in urban areas and emergence of condominium law in the United States and in Vancouver, British Columbia), and Bronin, *supra* note 7, at 1250 (describing how the "scarcity of land and the proliferation of dense, high-rise condominium buildings gave rise to horizontal airspace as a unit of real property—a concept in property law, which had not existed before the advent of skyscrapers").

31. Numerous states have enacted statutes expressly recognizing solar access easements as valid and enforceable real property interests. For a list of these state-level solar access statutes as of 2008, see Tawny L. Alvarez, *Don't Take My Sunshine Away: Right-to-Light and Solar Energy in the Twenty-First Century*, 28 PACE L. REV. 535, 547–48 n.90 (2008).

32. Even some state statutes expressly recognize the rights of landowners in the airspace above their parcels. *See, e.g.*, NEV. REV. STAT. § 493.040 (1923) (providing that the "ownership of the space above the lands and waters of this state is declared to be vested in the several owners of the surface beneath, subject to the right of flight . . . .").

33. For a survey of background principles and recurring issues in eminent domain law, see generally RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN (1985).

34. Much of the scholarly and popular criticism of the eminent domain power in recent years has related to the scope of "public use" under the Takings Clause in the wake of the Supreme Court's decision in *Kelo v. New London, Conn.*, 545 U.S. 469 (2005). For a primer on these issues, see generally William Woodyard & Glenn Boggs, *Public Outcry:* Kelo v. City of New London*—A Proposed Solution*, 39 ENVTL. L. 431, 431–43 (2009) (describing *Kelo* and its aftermath).

public use from "holding out" for excessively high sale prices and thereby impeding worthwhile public projects.[35] Eminent domain proceedings typically conclude with a private party's formal conveyance of a property interest to a government party, who pays some agreed-upon or court-determined amount of "just compensation" in return.[36]

Public agencies routinely pay just compensation to acquire airspace interests through eminent domain, engaging in essentially the same process they use to take interests in surface land. For instance, governments have been condemning airspace easements near airports for flight paths since shortly after the advent of modern aviation. Most airplanes require lengthy stretches of low-altitude airspace for takeoffs and landings, so takings of airspace easements through eminent domain often accompany airport construction and expansion projects.[37] Provisions expressly authorizing such takings of airspace easements upon payment of just compensation were included within the Uniform Airports Act of 1935,[38] and legislatures in twelve states had enacted laws authorizing the practice by 1941.[39] Governments also occasionally use eminent domain to condemn easements for scenic views.[40] This long history of airspace easement condemnations is further evidence that airspace rights are legally protected property under the Takings Clause.

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35. Commentators have long cited eminent domain authority as a means of helping public entities to overcome "holdout problems" in connection with land assemblies for roads and other public projects. *See, e.g.*, STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 124–25 (2004) (describing how eminent domain can assist in overcoming holdout problems); Thomas W. Merrill, *The Economics of Public Use*, 72 CORNELL L. REV. 61, 75 (1986) (framing eminent domain as a means of mitigating holdout problems in public projects that require the assembly of multiple privately-held parcels).

36. *See* SHAVELL, *supra* note 35, at 182–215 (providing a thorough analysis of issues associated with the "just compensation" requirement and distinguishing between explicit compensation and in-kind compensation).

37. *See* J. Scott Hamilton, *Allocation of Airspace as a Scarce Natural Resource*, 22 TRANSP. L.J. 251, 267 (1994) (noting that the "state or local government developing a public airport may use its power of eminent domain to condemn and purchase both land and aviation easements over land in the vicinity of the airport") (citation omitted). Specific instances abound of the use of eminent domain to take airspace rights near airports. *See, e.g.*, Emily Donohue, *Tree Stands in Flight Path*, THE TROY RECORD (Jan. 14, 2010), http://www.troyrecord.com/articles/2010/01/14/news/doc4b4e8784683f0540834863.txt (describing a county's plan to take airspace near a municipal airport to prevent interference from a tall tree).

38. *See* Warner Brock, *Constitutionality of a Zoning Regulation Requiring Landowners Abutting on an Airport Not to Build Beyond a Certain Height without Compensation*, 23 TEX. L. REV. 57, 64 (1944) (noting that the "Uniform Airports Act of 1935 gives authority to acquire airspace rights by eminent domain") (citation omitted).

39. *Id.* at 64 n.49 (citing John M. Hunter, Jr. & Lewis H. Ulman, *Airport Legal Developments of Interest to Municipalities—1941*, 13 J. AIR L. & COM. 116, 137 (1942)).

40. *See* Gideon Kanner, *Making Laws and Sausages: A Quarter-Century Retrospective on* Penn Central Transportation Co. v. City of New York, 13 WM. & MARY BILL RTS. J. 679, 777 (2005) (citing Kamrowski v. State, 142 N.W.2d 793 (Wis. 1966)) (noting that "passive easements (such as sight easements for highways, or scenic view easements) are condemned regularly").

EXHIBIT NO. 3

Takings Clause (Decisions of the U.S. Supreme Court)

Robert Meltz, LegislativeAttorney July 20,2015

Under the Takings Clause, courts allow two distinct types of suit. Condemnation (also "formal condemnation") occurs when a government or private entity formally invokes its power of eminent domain by filing suit to take a specified property, upon payment to the owner of just compensation. By contrast, a taking action is a suit by a property holder against the government, claiming that government conduct has effectively taken the property notwithstanding that the government has not filed a formal condemnation suit. Because it is the procedural reverse of a condemnation action, a taking action is often called an "inverse condemnation" action. A typical taking action complains of severe regulation of land use, though the Takings Clause reaches all species of property, real and personal, tangible and intangible. The taking action generally demands that the government compensate the property owner, just as when government formally exercises eminent domain.

EXHIBIT NO. 4

THE INDIANA LAWYER

Indy firm leads team winning $25M Missouri telecom settlement

November 20, 2018 | Dave Stafford

KEYWORDS COURTS / DISTRICT COURTS / INDIANAPOLIS / LAW FIRMS / LAWSUIT / SETTLEMENT / TELECOM

A seven-year court battle between Missouri landowners and a telecom company that strung fiber-optic cable across 796 miles of private property without permission or compensation has concluded with a $25 million settlement negotiated by a legal team led by an Indianapolis law firm.

Ron Waicukauski of Price Waicukauski Joven & Catlin, LLC, said in a press release that thousands of ranchers, farmers, homeowners and small businesspeople will benefit from the settlement with Sho-Me Power Electric Cooperative and Sho-Me Technologies, LLC.

"This settlement represents a victory for property rights and provides a substantial measure of justice for thousands of people whose property has been used for telecommunications without permission to do so," Waicukauski said. "It's not as much justice as we and two juries would have liked but, all things considered, it's a good result. It is telling that there were no objectors to the settlement."

The settlement amount includes attorney fees and costs, which have not yet been presented to the court.

The settlement comes after two trials in the federal court for the Western District of Missouri. The first trial resulted in a $79 million jury verdict in 2015. That judgment was partially reversed by the 8th Circuit Court of Appeals, which remanded for a new trial, where a second jury last year awarded $130 million.

However, the district court shortly afterward vacated that judgment and ordered a third trial. The settlement agreement came just before the third trial was set to begin.

A message seeking comment was left Tuesday for a Sho-Me spokesman.

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Missouri. Another suit alleging similar trespass by Central Electric Power Cooperative and its technology subsidiary is pending in the Circuit Court of Callaway County, Missouri.

Dwight Robertson of Miller County, Missouri, is a lead plaintiff in the $25 million corporate trespass settlement. As a class representative, he will receive $15,000 in addition to damages that will be awarded.

"I participated in this court case to help preserve property rights for myself and the other landowners," Robertson said. "I want to thank the entire legal team that represented the landowners in this case. Their accurate presentation of the case was successful in helping all landowners preserve our property ownership rights."

The case in the Western District of Missouri is *Chase Barfield, et al. v. Sho-Me Power Electric Cooperative, et al.*, 2:11-cv-4321.

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NEWS & BLOG

November 19, 2018

$25 Million Settlement of Missouri Landowners' Class Action Approved by District Court

Category: Class Actions (https://www.price-law.com/news-blog/category/class-actions/), Firm News (https://www.price-law.com/news-blog/category/firm-news/), Settlements & Decisions (https://www.price-law.com/news-blog/category/settlements-decisions/) | Author: Price Waicukauski Joven & Catlin, LLC (https://www.price-law.com/news-blog/author/pricelawfirm/) | Share: (https://twitter.com/intent/tweet?text=$25 Million Settlement of Missouri Landowners' Class Action Approved by District Court&url=https://www.price-law.com/news-blog/25-million-settlement-of-missouri-landowners-class-action-approved-by-district-court/) (https://www.facebook.com/sharer/sharer.php?u=https://www.price-law.com/news-blog/25-million-settlement-of-missouri-landowners-class-action-approved-by-district-court/) (https://plus.google.com/share?url=https://www.price-law.com/news-blog/25-million-settlement-of-missouri-landowners-class-action-approved-by-district-court/) (mailto:?subject=Please visit this link https://www.price-law.com/news-blog/25-million-settlement-of-missouri-landowners-class-action-approved-by-district-court/&body=Hey Buddy!, I found this information for you: '$25 Million

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Settlement of Missouri Landowners' Class Action Approved by District Court'. Here is the website link: https://www.price-law.com/news-blog/25-million-settlement-of-missouri-landowners-class-action-approved-by-district-court/. Thank you.)

A Missouri federal court has approved a $25 million class action settlement that compensates thousands of Missouri landowners for the unauthorized use of their property for commercial telecommunications. This settlement concludes seven years of hard-fought litigation between the class and Sho-Me Power Electric Cooperative and Sho-Me Technologies LLC.

The litigation included two jury trials in Jefferson City. The first trial resulted in a $79 million verdict that was reversed by the 8th Circuit Court of Appeals. In the second trial, the jury returned a verdict for $130.5 million that was later set aside by the district court. Shortly before a third trial was scheduled to start, the parties agreed to this settlement that received final approval on November 15.

Landowners who will benefit from this settlement include thousands of farmers, ranchers, homeowners, and small businesses. Plaintiffs' lead trial counsel, Ron Waicukauski of Indianapolis, commented: "This settlement represents a victory for property rights and provides a substantial measure of justice for thousands of people whose property has been used for telecommunications without permission to do so. It's not as much justice as we and two juries would have liked but, all things considered, it's a good result. It is telling that there were no objectors to the settlement."

Plaintiffs' co-counsel Kathleen Kauffman of Washington, D.C., added: "Holding Sho-Me accountable for trespass to the tune of $25 million affirms the rule of law and the simple concept that no person or company is above the law. No one can take private property without consent or legal right, regardless of commercial benefit."

Heidi Doerhoff Vollet of Cook, Vetter, Doerhoff & Landwehr, P.C. in Jefferson City, also cocounsel for Plaintiffs, said she was privileged to have been able to work on behalf of the more than 3,700 Missouri landowners who had their land rights taken from them by Sho-Me's course of conduct. "We are proud of this settlement and the results our clients achieved in standing up to corporate interests that, for years, had fought tooth and nail to avoid liability altogether."

Attorney Fred O'Neill of Thayer, Missouri discovered critical facts that revealed Sho-Me Power was disregarding the property rights of rural coop members and noted: "Despite years of fierce opposition by Sho-Me Power, the class was certified, the landowners were not divided, and ultimately prevailed."

Dwight Robertson of Miller County, Missouri, one of the class representatives who was a victim of the corporate trespass, said: "I participated in this court case to help preserve property rights for myself and the other landowners. I

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want to thank the entire legal team that represented the landowners in this case. Their accurate presentation of the case was successful in helping all landowners preserve our property ownership rights."

Brad Catlin of Indianapolis, another key member of the landowners' litigation team, concluded, "All of us who were privileged to play a part in correcting this injustice and vindicating the property rights of Missouri landowners can only thank this country's system of justice for giving us a chance to be a part of proving that everyone stands equal before the law."

In 2015, the same litigation team settled similar claims against an Oklahoma-based electric transmission cooperative and its technology subsidiary that had been operating in Missouri.

Another suit alleging similar trespassing conduct by Central Electric Power Cooperative and its technology subsidiary is pending in the Circuit Court of Callaway County, Missouri.

Chase Barfield, et al. v. Sho-Me Power Electric Cooperative, et al., Case No. 2:11-cv-4321NKL (W.D. Mo., 2015)

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EXHIBIT NO. 5

WIKIPEDIA

United States v. Causby

United States v. Causby, 328 U.S. 256 (1946), was a United States Supreme Court Decision related to ownership of airspace above private property. The Court held that title to land includes domain over the lower altitudes. The United States Government claimed a public right to fly over Causby's farm, while Causby argued such low-altitude flights entitled the property owner to just compensation under the takings clause of the Fifth Amendment."[1] The findings were two-fold. The court rejected the United States Government's assertion to "possess" and "control" airspace down to ground level, and it nullified the doctrine that property extends indefinitely upward.

Contents

Background

Thomas Lee Causby was a land owner less than a half mile from the end of the runway of Lindley Field, an airstrip in Greensboro, North Carolina.[2] During World War II, the United States military flew planes into the airstrip and as low as 83 feet (25 m) above Causby's Farm[2] thereby interfering with the productive use of the Causby farm. Vibrations and sounds caused by the aircraft prevented use of property as a chicken farm, killing over 150 chickens. After losing in lower courts, the Government maintained their claims to fly through all the airspace with impunity.

Under common law, a person who owns the soil also owns the space indefinitely upward, "*ad coelum* or to the heavens".[3][4][5][6][7]

United States v. Causby

Supreme Court of the United States

Argued May 1, 1946
Decided May 27, 1946

Full case name	*United States v. Causby*
Citations	328 U.S. 256 (https://supreme.justia.com/us/328/256/case.html) (*more*) 66 S. Ct. 1062; 90 L. Ed. 1206

Case history

Prior	104 Ct. Cls. 342, 60 F. Supp. 751, reversed and remanded.

Holding

'a landowner's domain includes the lower altitude airspace, but that property does not extend "ad coelum" (indefinitely upward).

Court membership

Chief Justice
vacant

Associate Justices
Hugo Black · Stanley F. Reed
Felix Frankfurter · William O. Douglas
Frank Murphy · Robert H. Jackson
Wiley B. Rutledge · Harold H. Burton

Case opinions

Majority	Douglas, joined by Reed, Frankfurter, Murphy, Rutledge
Dissent	Black, Burton

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The US referenced the 1926 *Air Commerce Act* in which the US government claimed to 'possess' all airspace.[8]

Jackson took no part in the consideration or decision of the case.

An appellate court ruled that a land owner's domain includes the airspace above it, and ruled that Causby was entitled to just compensation for the government having 'Taken' his property by allowing overflights through the airspace above his property.

The United States appealed this ruling against them, and the Supreme Court agreed to review the case, regarding the contradiction between the common laws of property ownership (without any height limit) against the assertion of a federal claim to possess **all** airspace above the United States down to ground level.[9]

Holding

The United States Supreme Court rejected the government's claim to 'possess' the space down to ground level.[10] The Court held low altitude flights to be "a direct invasion of [the landowner's] domain",[11] and that a "servitude has been imposed upon the land" by the occupancy of the private space.[12] The Court also recognized that a claim of property ownership indefinitely upward "has no place in the modern world."[13][14][15] Thereby rejecting "ad coelum"

> The court held the public's right of flight does not extend downward to the earth's surface. finding **"if the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere. Otherwise, buildings could not be erected, trees could not be planted, and even fences could not be run" ..."The fact that he does not occupy [space] in a physical sense -- by the erection of buildings and the like -- is not material. As we have said, the flight of airplanes, which skim the surface but do not touch it, is as much an appropriation of the use of the land as a more conventional entry upon it."**[16][17]

On remand, the Court of Claims was tasked with defining the value of the "property interests" that had been taken from Causby by flyovers. Because the lowest plane flew at 83 feet (25 m), and because flights above 365 feet (111 m) were considered within the public easement declared by congress, the Court needed to determine the value owed the Farmer for public use of his airspace between 83 and 365 feet (25 and 111 m). The Court did not need to compensate the farmer for use below 83 feet (25 m), because the planes did not fly below that height. [18]. Compensation was owed based on the occupancy of the property and not damage to chickens.

Dissent

Justice Black, joined by Justice Burton, dissented with the decision.[19] Black wrote that the majority opinion created "an opening wedge for an unwarranted judicial interference with the power of Congress to develop solutions for new and vital national problems." The minority opinion was predicated on interference with private property being resolved at the State Court level through tort law, rather than in Federal Court under a Constitutional review. However, the US government filed the appeal based upon an assertion of ownership to low altitude airspace, which the court roundly

rejected, and any case filed by the federal government becomes a federal court issue.[19] The dissenting opinion would have force the issue of compensation into State court, which was later rejected in Griggs v. Allegheny, 369 US 84,(1962).

See also

- Air rights
- *Cuius est solum, eius est usque ad coelum et ad inferos*
- Energy law
- List of notable United States Supreme Court cases
- List of United States Supreme Court cases, volume 328
- Property law
- Takings clause

References

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2. Nagy, John A. "Airport Noise Issue Not New: Chicken Farm Case Set Legal Precedent in 1946 Court Ruling". *Greensboro News and Record* (Greensboro, North Carolina). October 10, 1998.
3. Thomas Merrill, *Establishing Ownership: First Possession versus Accession,* p. 14, fn. 22-23, Law and Economics Workshop (University of California, Berkeley 2007 Paper 3), found at CDLib website (http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1174&context=berkeley_law_econ). Retrieved September 17, 2008.
4. *Cjus est solum, ejus est usque ad coelum et ad inferos.* This has been translated as "To whomever the soil belongs, he owns also to the sky and the depths." Black's Law Dictionary (6th ed. 1990). From Merrill, fn. 22, *q.v.*.
5. *"Cujus est solum, ejus est usque ad coelum, is the maxim of the law, upwards; therefore no man may erect any building, or the like, to overhang another's land: ... the word "land" includes not only the face of the earth, but every thing under it, or over it."* 28 Am. Jur.2d 618, 2 Blackstone Commentaries Book, 2, p. 18 (1836).
6. United States v. Causby, 328 U.S. 256, 260 261 (1946), citing I Coke, Institutes, 19th Ed. 1832, ch. 1, § 1(4a); 2 Blackstone, Lewis Ed. 1902, bk 2, p. 18.
7. 3 Kent, Commentaries, Gould Ed. 1896, p. 621
8. id 260
9. "To Sift 'Noisy Plane' Case: Supreme Court to Review Man's Right to Collect Damages". *Associated Press.* The New York Times. April 2, 1946. p. 21.
10. *id* 266
11. *id* 266
12. *id* 267.
13. *United States v. Causby,* 328 U.S. 256, 261 (1942).
14. 328 U.S. 256 (https://supreme.justia.com/cases/federal/us/328/256/) (1946). From Merrill, fn. 23, *q.v.*.
15. *id* 261
16. *id* 264
17. US v Causby (https://scholar.google.com/scholar_case?case=17209011020287234065).

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18. Causby v U.S. (https://scholar.google.com/scholar_case?case=18417830911449345480) 75 F.262 Ct.Cl (1948).
19. "High Court Upholds Award Against Low-Flying Planes". *Associated Press*. The Baltimore Sun. May 28, 1946. p. 1.

External links

- Works related to United States v. Causby at Wikisource
- Text of *United States v. Causby*, 328 U.S. 256 (1946) is available from: Google Scholar (https://scholar.google.com/scholar_case?case=17209011020287234065) Justia (https://supreme.justia.com/cases/federal/us/328/256/) Library of Congress (http://cdn.loc.gov/service/ll/usrep/usrep328/usrep328256/usrep328256.pdf)

EXHIBIT NO. 6

20-1025 (Lead); 20-1138 (Consolidated)

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

ENVIRONMENTAL HEALTH TRUST; CONSUMERS FOR SAFE CELL PHONES; ELIZABETH BARRIS; THEODORA SCARATO

CHILDREN'S HEALTH DEFENSE; MICHELE HERTZ; PETRA BROKKEN; DR. DAVID O. CARPENTER; DR. PAUL DART; DR. TORIL H. JELTER; DR. ANN LEE; VIRGINIA FARVER, JENNIFER BARAN; PAUL STANLEY, M.Ed.

Petitioners

v.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA

Respondents

Petition for Review of Order Issued by the Federal Communications Commission

PETITIONERS' JOINT OPENING BRIEF

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5. Smart Meters The regulations' method of averaging the exposure during compliance testing obscures real exposure levels and pulsation effects. "Smart Meters" illustrate the problem. In a response to a comment, the FCC claimed that "the devices normally transmit for less than one second, a few times a day and consumers are normally tens of feet or more from the meter face..."162 Many commenters corrected this assertion. Fifty experts in a letter "Correcting the Gross Misinformation"163 explained that a single smart meter can emit up to 190,000 intense bursts (or pulses) each day. The bursts can be two and a half times above the FCC's limits. People can receive aggregate exposure greater than from a cell phone. These finding were confirmed by a technical report and other expert 161 JA_@89. 162 JA_. 163 JA_. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 57 of 115 41 submissions.164 People can sleep a foot away from a meter or be close to apartment complex meter banks.165 The cumulative exposure is never measured.166 These erratic bursts/pulses create a bioactive on/off effect. One study of a physician with Radiation Sickness showed symptoms caused by the off-on, on-off rather than intensity, and concluded that "chronic exposure to low RFR can cause even greater harm than an acute exposure to high levels."167 The BIR pointed out the same issues. 168 Petitioner Paul Dart, MD and 4 other MDs provided an 87-page review explaining why Smart Meters pose a significant risk to public health. He submitted additional supporting analyses addressing chronic exposure, electrosensitivity, DNA damage, cancer, brain tumors, infertility and mechanisms of harm.169 AAEM referenced a peer-reviewed paper with 92 case studies170 on smart meters health effects. 164 JA_. 165 JA_. 166 JA_; JA_. 167 JA_. 168 JA_; JA_. 169 JA_; JA_; JA_; JA_. 170 JA_. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 58 of 115 42 Many individuals testified to horrible injuries by Smart Meters and their devastating impact on their lives.

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Deprivation of or interference with personal rights or liberty interests is also an injury. Those rights/interests include the ADA, FHA, bodily autonomy and property rights. The ADA and FHA each provide a private cause of action for refusal to accommodate a disability or handicap. 42 U.S.C §12133 (public services), §12188 (services by private entities). Public and private service providers deny accommodations by claiming FCC-authorized emissions are "safe" and no accommodation is due and/or FCC rules pre-empt ADA and FHA remedies. The regulations authorize emissions that intrude on private property and invade the body. Harm to property or interference in property rights provides standing. Scenic Am., Inc. v. United States DOT, 836 F.3d 42, 55 (2016); Idaho, By & Through Idaho Pub. Utils. Comm'n v. ICC, 35 F.3d 585, 591 (D.C. Cir. 1994). Multiple record comments expressed personal objections to involuntary RF/EMF exposures and noted the FCC's failure to clarify whether the exposure limits preempt these constitutional and statutory rights. AntiVivisection Soc'y, 946 F.3d at 619. Elliot@¶¶11, 15; Tsiang¶¶35, 38; USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 77 of 115 61 Adkins@¶¶11, 18-19; Tachover@5, 35, 37, 41, 46-47, 51, 60; Carpenter@39, 45, 60

Pages 80,81,82

Additional Legal Considerations A. Personal Objection to Involuntary Exposure Inquiry ¶232224 recognized that "exposures due to fixed RF sources are both involuntary and long-term." At least 29 individuals advised the FCC they objected to involuntary exposure.225 Others contended that involuntary exposure was a trespass, nuisance, assault, battery, or torture.226 All asserted their statutory, constitutional and/or common law individual rights. The Order wrongly failed to acknowledge these comments or even address this topic. B. ADA/FHA Petitioners strongly contest the notion current

regulations adequately protect the general population. But assuming, arguendo, they are generally protective that cannot end the inquiry. Radiation Sickness is real, many have it and more will soon. The CDC and Justice Department agree it is, respectively, a source of injury and disability.227 We know its cause. The only way to treat the disease is through exposure-avoidance. The issue is how that can be accomplished in today's 224 28 FCC Rcd at 3581 225 JA_. 226 JA_. 227 See Part I.D. supra. [Human Evidence – Radiation Sickness] USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 97 of 115 81 wireless-infested world. Those with Radiation Sickness require consideration and accommodation on a case-by-case basis. FCC did nothing about them. At large number of comments asked the FCC to clarify its regulations do not pre-empt ADA or FHA rights and remedies or prevent accommodations to those disabled by Radiation Sickness.228 For example, Chris Nubbe contended that "[t]he Telecommunications Act should not be interpreted to allow them no remedy under City, State or Federal laws or constitutions."229 The Cities of Boston and Philadelphia specifically flagged this issue and sought clarification.230 Sufferers must surmount tremendous difficulties, mistreatment and discrimination. They face a dismal future: progressive worsening from unavoidable, ever-increasing and more intense exposure from multiple sources using a variety of pulsation/modulation schemes.231 Some have died or committed suicide because constant RF/EMF was torturing them beyond their ability to survive or cope.232 228 JA_. 229 JA_. 230 JA_@7-8. 231 JA_. 232 JA_. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 98 of 115 82 The regulations provide "color of law" to wireless provider activities that inflict injuries on innocent people and children who just want to enjoy life, peace and security. They cannot go into public spaces, access medical care, obtain public services, use public transportation, drive on the road, fly, stay at a hotel or have a job. Their children are ridiculed, forced out of schools and into social isolation. Finding a home has become almost impossible.233

Pages 88,89,90, 91,92

1. Property Rights FCC-authorized emissions intrude on private property against the owner's will. "The hallmark of a protected property interest is the right to exclude others. That is 'one of the most essential sticks in the bundle of rights that are commonly characterized as property.'" Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 673, 119 S. Ct. 2219, 2224 (1999). Government-authorized interference with enjoyment and use of the land is a compensable taking. United States v. Causby, 328 U.S. 256, 66 S. Ct. 1062 (1946) (non-physical intrusion of airport noise).244 Kyllo v. United States, 533 U.S. 27, 32 (2001) involved government agents that directed RF energy at the defendant's home. The energy waves intruded on the defendant's property and violated the owner's property-based right to exclude others. 533 U.S. at 34-40. 244 RF/EMF property intrusions are similar to loud noises. They, among other things, cause a reduction in melatonin production, which reduces sleep quality. See Part I.C.3. (neurological). Preventing someone from getting a good night's rest is classic nuisance. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 105 of 115 89 2. Bodily Autonomy and Informed Consent Non-consensual RF emissions violate individuals' right to bodily autonomy. The FCC's current regulations authorize interference with human biological processes "Bodily autonomy" and "autonomy privacy" derive from the "negative" individual liberty rights embodied in the Bill of Rights. United States v. Rumely, 345 U.S. 41 (1953); NAACP v. Patterson, 357 U.S. 449 (1958); Griswold v. Connecticut, 381 U.S. 479 (1965); Stanley v. Georgia, 394 U.S. 557 (1969); Eisenstadt v. Baird, 405 U.S. 438 (1972); Roe v. Wade, 410 U.S. 113 (1973). Cruzan v. Dir. Mo. Dep't of Health, 497 U.S. 261, 269-273 (1990) expressly recognized and reaffirmed the right to self-determination and bodily integrity. FCC-authorized emissions violate non-consenting citizens' "right to be let alone." In common law and most state statutes, non-consensual irradiation is a "battery." "A battery is an intentional act that causes harmful or

offensive bodily contact." Doe v. District of Columbia, 796 F.3d 96, 107 (D.C. Cir. 2015). RF/EMF radiation "contacts" the body and penetrates the skin. People who suffer contact and penetration after expressing non-consent will be both harmed and offended. The wireless provider is intentionally unleashing radiation and knows there will be contact. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 106 of 115 90 Jacobson v. Massachusetts, 197 U.S. 11, 25 S. Ct. 358 (1905) held a state may generally mandate vaccines. The Court closed its opinion, however, with an important caveat: if the individual can show a special sensitivity due to a medical condition there must be some process for case-by-case exceptions. This is necessary to avoid the ultimate liberty deprivations–denial of life itself or cruelty. 197 U.S. at 38-39. Government-sanctioned and virtually mandatory exposure to RF/EMF can rise to the level of cruelty and inhumane treatment described in Jacobson. The FCC's disregard for this situation has caused a sub-population to lose hope of ever being able to meaningfully participate in society. 245 Reasoned decision-making requires that the FCC at least acknowledge the situation and provide some rational justification for the incredible costs it is imposing on a significant segment of the population. Jacobson also flatly requires that the Commission allow for some remedy for those who suffer from exposure. This is necessary to "'protect the health and life' of susceptible individuals." In re Abbott, 954 F.3d 772, 789 (5th Cir. 2020) (citing Jacobson, 197 U.S. at 37). Many participants requested that the FCC 245 JA_. USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 107 of 115 91 provide a remedy. It could have, at least, noted that those with individual health conditions related to or worsened by exposure can seek and obtain accommodations on a case-by-case basis or through an as-applied challenge. See Gonzales v. Carhart, 550 U.S. 124, 167 (2007). The Commission wrongly avoided the entire issue. 3. Preemption/Implied Repeal The Communications Act does not expressly repeal ADA/FHA rights and remedies, which are specific and operate case-by-case. Unless there is "clear

intention otherwise, a specific statute will not be controlled or nullified by a general one, regardless of the priority of enactment." Telecomms. Research & Action Ctr. v. FCC, 836 F.2d 1349, 1361, n.25 (D.C. Cir. 1988). Similarly, there was no repeal by implication. There is no "clear and manifest evidence of congressional intent to displace the ADA or FHA through the Communications Act. The earlier and later statutes can be reconciled and coexist. In re Grand Jury Subpoena, 912 F.3d 623, 628 (D.C. Cir. 2019). Case-by-case accommodation does not disrupt the FCC's authority to promulgate general standards. G v. Fay Sch., Inc., 282 F. Supp. 3d 381, 395 (D. Mass. 2017). An agency cannot repeal a statute. Merritt v. Cameron, 137 U.S. 542, 551- 52 (1890). There is no evidence Congress intended to delegate its legislative USCA Case #20-1025 Document #1854148 Filed: 07/29/2020 Page 108 of 115 92 repealer power to the Commission, especially since the ADA and FHA are administered by other federal agencies and enforced through the courts. Hunter v. FERC, 711 F.3d 155, 160 (D.C. Cir. 2013). In any event, neither Congress nor the FCC can suspend or override constitutional rights

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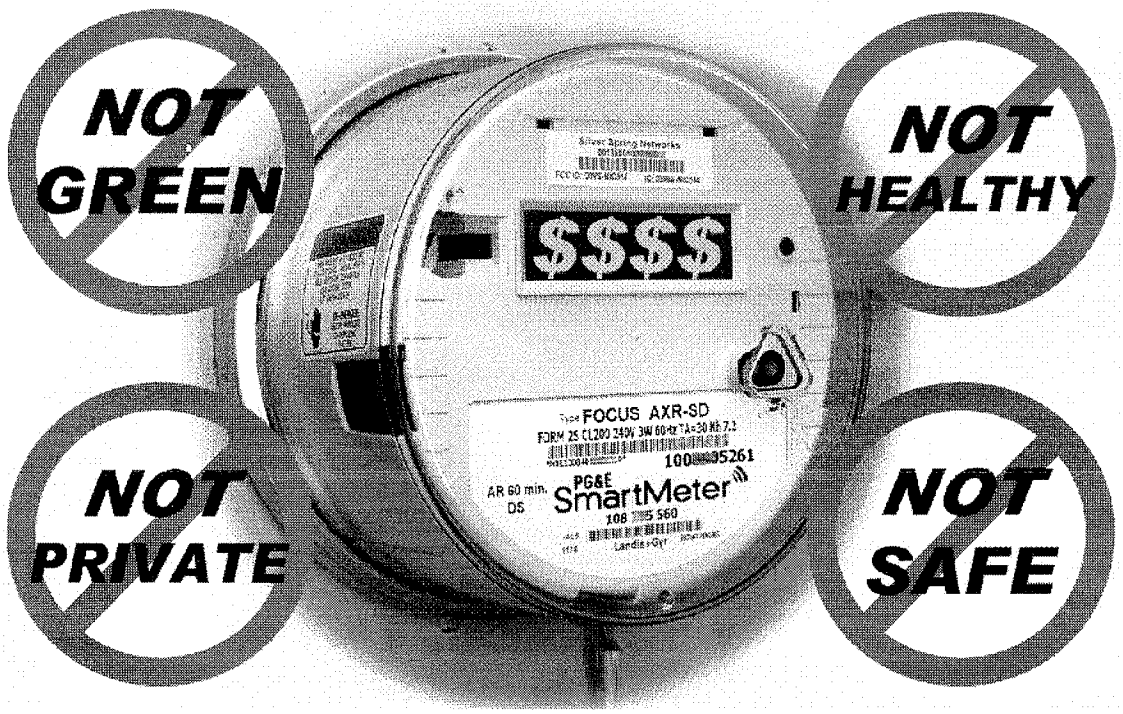
When "human lives are at stake" an agency "must press forward with energy and perseverance in adopting regulatory protections."

EXHIBIT NO. 7

Legal, Constitutional and Human Rights Violations of Smart Grid and Smart Meters

Congressional White Paper

http://www.StopSmartGrid.org



With In Depth Writings and Contributions by: Nina Beety, Marilynne Martin,

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Exhibit F
1 of 3

From: Legal,Constitutiona land Human Rights Violations of Smart Grid and Smart Meters

CONGRESSIONAL WHITE PAPER

http://www.StopSmartGrid.org

Liz Barris 310-455-7530

7) 14th AMENDMENT http://www.law.cornell.edu/constitution/amendmentxiv "...No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the US; nor shall any State deprive any person of life, liberty, or property, without due process of law... " The federal government is actively abridging the privileges of U.S. citizens through the enforcement of this program, and depriving citizens of life, liberty and property.

"...NOR SHALL PRIVATE PROPERTY BE TAKEN FOR PUBLIC USE WITHOUT JUST COMPENSATION" Smart meters operate in mesh networks, with signals hopping from one person's home or business to another, acting as communication devices for the utilities regardless of whether or not that person wants their home to be used as a relay station for the utility and without compensating the home or business owner whose property is being used by the utility as a relay station or communications hub.

SMART GRID VIOLATES ADA Smart grid and smart meters create untenable, basic lifestyle problems, including being unable to inhabit ones own home. People who are sensitive to microwave radiation are forced to flee their home, however, sleeping in the street and in their car is not much of a better alternative now due to smart grid transmitters and repeaters blanketing entire neighborhoods and communities. Not only do smart meters and smart grid transmit microwave radiation both inside the home and throughout the neighborhood when they send signals, but smart meters also have now created dirty electricity throughout the home and the entire grid (meaning outside the home as well), due to dirty electricity created through high frequency transients being on all power and electricity lines that contain smart grid transmissions.

17) SMART METERS AND SMART GRID VIOLATE FCC RULES AND REGULATIONS ON INTERFERENCE Power Utility Smart Meters Causing Router Interference, Maine Public Advocate Says Users Not Being Educated https://secure.dslreports.com/shownews/Power-Utility-Smart-Meters-Causing-RouterInterference-117120 "If some appliances, computers or communications equipment have been working oddly lately, the Maine Public Advocate's office said your electric meter may be to blame...The office put out a statement this week saying Central Maine Power Co.'s "smart meters" -- which use low-power radio frequency transmissions to send meter readings to the company -- are interfering with a wide range of household electronic devices, from garage door openers and WiFi devices to security systems."

34) EXTORTION AND VIOLATION OF HUMAN RIGHTS AND PROPERTY RIGHTS A violation of 2404 HOBBS ACT UNDER COLOR OF OFFICIAL and an act of extortion: 2404 Hobbs Act – Under Color of Official Right http://www.justice.gov/usao/eousa/foia_reading_room/usam/title9/crm02404.htm "In addition to the "wrongful use of actual or threatened force, violence, or fear," the Hobbs Act (18 U.S.C. § 1951) defines extortion in terms of "the obtaining of property from another, with his consent . . . under color of official right." EXTORTION http://legal-dictionary.thefreedictionary.com/extortion "The obtaining of property from another induced by wrongful use of actual or threatened force, violence, or fear, or under color of official right." Also, utilities are rendering entire sections of homes unlivable due to smart meter radiation exposure. This would be considered to be a "taking" of property by the utility for their use of smart grid

Energy Policy Act of 2005 http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf "(14) Time-based metering and communications,-(A) Deadline. Not later than 18 months after the date of enactment of this paragraph, each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-based rate schedule, under which the rate charged by the electric utility varies during different time periods and reflects the variance, if any, in the utility's costs of generating and purchasing electricity at the wholesale level." Per the Energy and Commerce Policy Act of 2005, the customer was to be "offered" a smart meter, not extorted when refusing one or have their utilities shut off when refusing one. This is a discrepancy that must be addressed when examining how the utilities were able to cash in on the billions of tax payer cash give away from the federal government. The actions involved in rolling out smart grid were clearly all VIOLATIONS of the bill that enabled the utilities to receive those tax payer funds. Because of this, we believe those funds were gotten through illegal means and should be returned to the US Treasury. Most utilities in the US (Vermont being the only exception) are choosing the tactic of extortion - charging the customer not to invade their privacy or not to harm them with pulsed microwave radiation emitting smart meters. Some customers wealthy enough to afford the "opt out fees" will pay them just to try and save their own health and life, the lives if their children and loved ones. But they are in the end not even getting what they have been extorted for because in most cases they are still being exposed to either their neighbors smart meter or in many cases, a repeater or collector meter is put up where the opt out customer is to "fill the gap" in the grid...in other words, smart grid is blanketed, ubiquitous, pulsed, microwave exposure for which in reality, there IS NO ESCAPE and therefore nullifying to a large extent the opt out of the citizens who does not wish to risk life and limb for this physically punishing surveillance program. Although having to pay the utility to spare the customers life or health is not only in the category of extortion, but even if the "opt out" customer allows themselves to be extorted (the other option being having their utilities CUT OFF) the utility still does not deliver what the customer has paid for...to not be exposed to the pulsed microwave emissions. Therefore, the act of charging a customer to "not harm or violate them" by "opting out" of what is by law, a voluntary program is illegal and an act of extortion and fraud and deceit as the customer is clearly NOT getting what they are paying for and should never have had to pay to retain their Constitutional rights to health, life, liberty and property and privacy in the first place

EXHIBIT NO. 8

Americans with Disabilities Act of 1990 (42 U.S.C. 12101)

SEC. 3. CODIFIED FINDINGS.

Section 2(a) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101) is amended—

(1) by amending paragraph (1) to read as follows: "(1) physical or mental disabilities in no way diminish a person's right to fully participate in all aspects of society, yet many people with physical or mental disabilities have been precluded from doing so because of discrimination; others who have a record of a disability or are regarded as having a disability also have been subjected to discrimination;";

(2) by striking paragraph (7); and

(3) by redesignating paragraphs (8) and (9) as paragraphs (7) and (8), respectively.

SEC. 4. DISABILITY DEFINED AND RULES OF CONSTRUCTION.

(a) DEFINITION OF DISABILITY.—Section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102) is amended to read as follows:

"SEC. 3. DEFINITION OF DISABILITY.

"As used in this Act:

"(1) DISABILITY.—The term 'disability' means, with respect to an individual—

"(A) a physical or mental impairment that substantially limits one or more major life activities of such individual;

"(B) a record of such an impairment; or

"(C) being regarded as having such an impairment (as described in paragraph (3)).

"(2) MAJOR LIFE ACTIVITIES.—

"(A) IN GENERAL.—For purposes of paragraph (1), major life activities include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.

"(B) MAJOR BODILY FUNCTIONS.—For purposes of paragraph (1), a major life activity also includes the operation of a major bodily function, including but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions.

"(3) REGARDED AS HAVING SUCH AN IMPAIRMENT.—For purposes of paragraph (1)(C):

"(A) An individual meets the requirement of 'being regarded as having such an impairment' if the individual establishes that he or she has been subjected to an action prohibited under this Act because of an actual or perceived physical or mental impairment whether or not the impairment limits or is perceived to limit a major life activity.

"(B) Paragraph (1)(C) shall not apply to impairments that are transitory and minor. A transitory impairment is an impairment with an actual or expected duration of 6 months or less.

"(4) RULES OF CONSTRUCTION REGARDING THE DEFINITION OF DISABILITY.—The definition of 'disability' in paragraph (1) shall be construed in accordance with the following:

"(A) The definition of disability in this Act shall be construed in favor of broad coverage of individuals under this Act, to the maximum extent permitted by the terms of this Act.

"(B) The term 'substantially limits' shall be interpreted consistently with the findings and purposes of the ADA Amendments Act of 2008.

"(C) An impairment that substantially limits one major life activity need not limit other major life activities in order to be considered a disability.

"(D) An impairment that is episodic or in remission is a disability if it would substantially limit a major life activity when active.

"(E)(i) The determination of whether an impairment substantially limits a major life activity shall be made without regard to the ameliorative effects of mitigating measures such as—

"(I) medication, medical supplies, equipment, or appliances, low-vision devices (which do not include ordinary eyeglasses or contact lenses), prosthetics including limbs and devices, hearing aids and cochlear implants or other implantable hearing devices, mobility devices, or oxygen therapy equipment and supplies;

"(II) use of assistive technology;

"(III) reasonable accommodations or auxiliary aids or services; or

"(IV) learned behavioral or adaptive neurological modifications.

"(ii) The ameliorative effects of the mitigating measures of ordinary eyeglasses or contact lenses shall be considered in determining whether an impairment substantially limits a major life activity.

"(iii) As used in this subparagraph—

"(I) the term 'ordinary eyeglasses or contact lenses' means lenses that are intended to fully correct visual acuity or eliminate refractive error; and

"(II) the term 'low-vision devices' means devices that magnify, enhance, or otherwise augment a visual image.".

(b) CONFORMING AMENDMENT.—The Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) is further amended by adding after section 3 the following:

"SEC. 4. ADDITIONAL DEFINITIONS.

"As used in this Act:

"(1) AUXILIARY AIDS AND SERVICES.—The term 'auxiliary aids and services' includes—

"(A) qualified interpreters or other effective methods of making aurally delivered materials available to individuals with hearing impairments;

"(B) qualified readers, taped texts, or other effective methods of making visually delivered materials available to individuals with visual impairments;

"(C) acquisition or modification of equipment or devices; and

"(D) other similar services and actions.

"(2) STATE.—The term 'State' means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin

Islands of the United States, the Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Mariana Islands."

(c) AMENDMENT TO THE TABLE OF CONTENTS.—The table of contents contained in section 1(b) of the Americans with Disabilities Act of 1990 is amended by striking the item relating to section 3 and inserting the following items:

"Sec. 3. Definition of disability.

"Sec. 4. Additional definitions.".

EXHIBIT NO. 9

From Environmental Health Trust ehtrust.org Dr. Devra Davis, founder.
cited June 11,2020

Most smart meters emit very strong pulses of RFR twenty four hours a day.
Contrary to claims made by utility providers that the exposure is "low," many smartmeters continuously emit RFR in millisecond blasts. These short bursts of radiation can be very powerful.
Wireless smart meters typically produce very short high levels of pulsed RF/microwaves. They emit these millisecond-long RF bursts on average 9,600 times a day **with a maximum of 190,000 daily transmissions** and a peak level emission two and a half times higher than the stated safety signal, as the California utility Pacific Gas & Electric recognized before that State's Public Utilities Commission when directly asked. To be clear- smartmeters can average 1900 transmissions in a 24 hour period.

From the Sage Report, Sage Associates, Santa Barbara, CA, January 1,2011

SUMMARY OF FINDINGS This Report has been prepared to document radiofrequency radiation (RF) levels associated with wireless smart meters in various scenarios depicting common ways in which they are installed and operated. The Report includes computer modeling of the range of possible smart meter RF levels that are occurring in the typical installation and operation of a single smart meter, and also multiple meters in California. It includes analysis of both two-antenna smart meters (the typical installation) and of three-antenna meters (the collector meters that relay RF signals from another 500 to 5000 homes in the area). RF levels from the various scenarios depicting normal installation and operation, and possible FCC violations have been determined based on both time-averaged and peak power limits (Tables 1 - 14). Potential violations of current FCC public safety standards for smart meters and/or collector meters in the manner installed and operated in California are predicted in this Report, based on computer modeling (Tables 10 – 17). Tables 1 – 17 show power density data and possible conditions of violation of the FCC public safety limits, and Tables 18 – 33 show comparisons to health studies reporting adverse health impacts. FCC compliance violations are likely to occur under normal conditions of installation and operation of smart meters and collector meters in California. Violations of FCC safety limits for uncontrolled public access are identified at distances within 6" of the meter. Exposure to the face is possible at this 3 distance, in violation of the time-weighted average safety limits (Tables 10- 11). FCC violations are predicted to occur at 60% reflection (OET Equation 10 and 100% reflection (OET Equation 6) factors*, both used in FCC OET 65 formulas for such calculations for time-weighted average limits. Peak power limits are not violated at the 6" distance (looking at the meter) but can be at 3" from the meter, if it is touched. This report has also assessed the potential for FCC violations based on two examples of RF exposures in a typical residence. RF levels have been calculated at distances of 11" (to represent a nursery or bedroom with a crib or bed against a wall opposite one or more meters); and at 28" (to represent a kitchen work space with one or more meters installed on the kitchen wall). FCC compliance violations are identified at 11" in a nursery or bedroom setting using Equation 10* of the FCC OET 65 regulations (Tables 12-13). These violations are predicted to occur where there are multiple smart meters, or one collector meter, or one collector meter mounted together with several smart meters. FCC compliance violations are not predicted at 28" in the kitchen work space for 60% or for 100% reflection calculations. Violations of FCC public safety limits are

predicted for higher reflection factors of 1000% and 2000%, which are not a part of FCC OET 65 formulas, but are included here to allow for situations where site-specific conditions (highly reflective environments, for example, galley-type kitchens with many highly reflective stainless steel or other metallic surfaces) may be warranted.* 4 *FCC OET 65 Equation 10 assumes 60% reflection and Equation 6 assumes 100% reflection. RF levels are also calculated in this report to account for some situations where interior environments have highly reflective surfaces as might be found in a small kitchen with stainless steel or other metal counters, appliances and furnishings. This report includes the FCC's reflection factors of 60% and 100%, and also reflection factors of1000% and 2000% that are more in line with those reported in Hondou, 2001; Hondou, 2006 and Vermeeren et al, 2010. The use of a 1000% reflection factor is still conservative in comparison to Hondou, 2006. A 1000% reflection factor is 12% (or 121 times as high) a factor for power density compared to Hondou et al, 2006 prediction of 1000 times higher power densities due to reflection. A 2000% reflection factor is only 22% (or 441 times) that of Hondou's finding that power density can be as high as 2000 times higher. 5 In addition to exceeding FCC public safety limits under some conditions of installation and operation, smart meters can produce excessively elevated RF exposures, depending on where they are installed. With respect to absolute RF exposure levels predicted for occupied space within dwellings, or outside areas like patios, gardens and walk-ways, RF levels are predicted to be substantially elevated within a few feet to within a few tens of feet from the meter(s). For example, one smart meter at 11" from occupied space produces somewhere between 1.4 and 140 microwatts per centimeter squared (uW/cm2) depending on the duty cycle modeled (Table 12). Since FCC OET 65 specifies that continuous exposure be assumed where the public cannot be excluded (such as is applicable to one's home), this calculation produces an RF level of 140 uW/cm2 at 11" using the FCCs lowest reflection factor of 60%. Using the FCC's reflection factor of 100%, the figures rise to 2.2 uW/cm2 – 218 uW/cm2, where the continuous exposure calculation is 218 uW/cm2 (Table 12). These are very significantly elevated RF exposures in comparison to typical individual exposures in daily life. Multiple smart meters in the nursery/bedroom example at 11" are predicted to generate RF levels from about 5 to 481 uW/cm2 at the lowest (60%) reflection factor; and 7.5 to 751 uW/cm2 using the FCCs 100% reflection factor (Table 13). Such levels are far above typical public exposures. RF levels at 28" in the kitchen work space are also predicted to be significantly elevated with one or more smart meters (or a collector meter alone or in combination with multiple smart meters). At 28" distance, RF levels are predicted in the kitchen example to be as high as 21 uW/cm2 from a single meter and as high as 54.5 uW/cm2 with multiple smart meters using 6 the lower of the FCCs reflection factor of 60% (Table 14). Using the FCCs higher reflection factor of 100%, the RF levels are predicted to be as high as 33.8 uW/cm2 for a single meter and as high as 85.8 uW/cm2 for multiple smart meters (Table 14). For a single collector meter, the range is 60.9 to 95.2 uW/cm2 (at 60% and 100% reflection factors, respectively) (from Table 15). Table 16 illustrates predicted violations of peak power limit (4000 uW/cm2) at 3" from the surface of a meter. FCC violations of peak power limit are predicted to occur for a single collector meter at both 60% and 100% reflection factors. This situation might occur if someone touches a smart meter or stands directly in front. Consumers may also have already increased their exposures to radiofrequency radiation in the home through the voluntary use of wireless devices (cell and cordless phones), PDAs like BlackBerry and iPhones, wireless routers for wireless internet access, wireless home security systems, wireless baby surveillance (baby monitors), and other emerging wireless applications. Neither the FCC, the CPUC, the utility nor the consumer know what portion of the allowable public safety limit is already being used up or pre-empted by RF from other sources already present in the particular location a smart meter may be installed and operated. Consumers, for whatever personal reason, choice or necessity who have already eliminated all possible wireless exposures from their property and lives, may now face excessively high RF exposures in their homes from 7 smart meters on a 24-hour basis. This may force limitations on use of their otherwise occupied space, depending on how the meter is located, building materials in the structure, and how it

is furnished. People who are afforded special protection under the federal Americans with Disabilities Act are not sufficiently acknowledged nor protected. People who have medical and/or metal implants or other conditions rendering them vulnerable to health risks at lower levels than FCC RF limits may be particularly at risk (Tables 30-31). This is also likely to hold true for other subgroups, like children and people who are ill or taking medications, or are elderly, for they have different reactions to pulsed RF. Childrens' tissues absorb RF differently and can absorb more RF than adults (Christ et al, 2010; Wiart et al, 2008). The elderly and those on some medications respond more acutely to some RF exposures. Safety standards for peak exposure limits to radiofrequency have not been developed to take into account the particular sensitivity of the eyes, testes and other ball shaped organs. There are no peak power limits defined for the eyes and testes, and it is not unreasonable to imagine situations where either of these organs comes into close contact with smart meters and/or collector meters, particularly where they are installed in multiples (on walls of multi-family dwellings that are accessible as common areas). In summary, no positive assertion of safety can be made by the FCC, nor relied upon by the CPUC, with respect to pulsed RF when exposures are chronic and occur in the general population. Indiscriminate exposure to environmentally ubiquitous pulsed RF from the rollout of millions of new RF sources (smart meters) will mean far greater general population exposures, and potential health consequences. Uncertainties about the 8 existing RF environment (how much RF exposure already exists), what kind of interior reflective environments exist (reflection factor), how interior space is utilized near walls), and other characteristics of residents (age, medical condition, medical implants, relative health, reliance on critical care equipment that may be subject to electronic interference, etc) and unrestrained access to areas of property where meter is located all argue for caution.

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Conditions Influencing Radiofrequency Radiation Level Safety The location of the meter in relation to occupied space, or outside areas of private property such as driveways, walk-ways, gardens, patios, outdoor play areas for children, pet shelters and runs, and many typical configurations can place people in very close proximity to smart meter wireless emissions. In many instances, smart meters may be within inches or a few feet of occupied space or space that is used by occupants for daily activities. Factors that influence how high RF exposures may be include, but are not limited to where the meter is installed in relation to occupied space, how often the meters are emitting RF pulses (duty cycle), and what reflective surfaces may be present that can greatly intensify RF levels or create 'RF hot spots' within rooms, and so on. In addition, there may be multiple wireless meters installed on some multi-family residential buildings, so that a single unit could have 20 or more electric meters in close proximity to each other, and to occupants inside that unit. Finally, some meters will have higher RF emissions, because – as collector units – their purpose is to collect and resend the RF signals from many other meters to the utility. A collector meter is estimated to be required for every 500 to 5000 buildings. Each collector meter contains three, rather than two transmitting antennas. This means higher RF levels will occur on and inside buildings with a collector meter, and significantly more frequent RF transmissions can be expected. At present, there is no way to predict whose property will be used for installation of collector meters. People who are visually reading the wireless meters 'by sight' or are visually inspecting and/or reading the digital information on the faceplate may have 37

EXHIBIT NO. 10

DIRECT TESTIMONY OF
NORMAN W. LAMBE
NMPRC CASE NO. 15-00312-UT

Table of Exhibits for Norman Lambe ("NL")

CFRE NL 1. Resume of Norman Lambe

CFRE NL 2. Protocol Insurance Services, Report, December 3, 2015 to Norman Lambe from Vincent Panko, Protocol Insurance Services. RE: Claim number 2015-2031-77A

CFRE NL 3 a and CFRE NL 3 b. EFI Global Forensic Electric Engineering Reports, 100 Degrees Hot Pot, LLC, Claim number 77A5001263-00 (2015-1618-77A). CFRE 3 a - is dated September 18th 2015, the follow-up report, CFRE 3 b - is Dated June 6 2016.

CFRE NL 4. San Diego Fire Department's Incident Report number FS 14023257, regarding named insured Troy's Greek Restaurant.

CFRE NL 5. Policy, A & E Insurance for Architects & Engineers containing Lloyds of London's Exclusion 32.

CFRE NL 6. Squirrels, Grid Security and a Stuffed Rudd, Nick Hunn

Exhibit I-1

DIRECT TESTIMONY OF
NORMAN W. LAMBE
NMPRC CASE NO. 15-00312-UT

Q. Please state your name, job title and business address.

A. My name is Norman Lambe. I am a Senior Property Claims Examiner at Precision Risk Management, PO Box 628, Cypress, CA 90630.

Q. Please describe your professional background and experience.

A. I have worked in property claims approximately 30 years. I have been involved in the investigation, evaluation, and adjustment of insurance claims for property damage. This encompasses the investigation of the destruction to the named insured's buildings, structures and business or personal property. Since June 1, 2010, I have served as a Senior Property Claims Examiner at Precision Risk Management, Inc., in Cypress, California.

Prior to my current employment, I served as a Senior Property Claims Examiner for First American Property and Casualty in Santa Ana, California, from 2003 -2010. My work with this insurance carrier also involved the investigation, evaluation, and adjustment of Homeowner and Commercial First Party Claims. I have been involved in the investigation of fire losses to homes and businesses as well as the adjustment of the building claims and the adjustment of personal property loss. I have experience in adjusting losses that range from a destroyed sofa or the theft of a television set to claims from 9/11 attacks to claims for damages and losses that resulted from fires caused by "smart" meters. For further relevant work experience please see Exhibit CFRE NL 1.

I have had first-hand experience in the following "smart" meter-caused fires cases:

2015-1369-77A—shopping center fire

2015-2031-77A---condominium complex fire

2013-9656-77A---apartment complex fire

2015-2156-77A---restaurant fire

2016-2692-77A--- hotel power surge

Q. Have you testified previously before the New Mexico Public Regulation Commission ("Commission")?

A. No.

Q. What is the purpose of your testimony?

A. I am concerned for the well-being of homeowners and business owners who purchase or rent their facilities and then buy insurance policies to protect themselves from damage and loss in the event of a catastrophe. I see submission of this testimony as part of my job, to do what I can to spare people from pain and suffering. If there is something that I can do to keep that from happening, to help prevent a home or business from burning, then I want to do it.

I will testify to some of the challenges that have arisen from "smart" meter deployments. Additionally, I am submitting evidence that "smart" meters have caused fires and that these meters are sometimes removed by utility companies before a proper investigation

can be conducted. On this subject I am submitting 4 reports, Exhibits CFRE NL 2, CFRE NL 3 a and b, and CFRE NL 4.

I am also submitting Exhibit CFRE NL 5. This document includes an exclusion that indicates that an insurance company that has Lloyds of London as its reinsurer, will not pay for any physical illness that is directly related to the insured's exposure to radio frequency radiation ("RFR"). "Smart" meters are one of the major appliances that produce RFR.

I also submit CFRE NL 6, an article detailing the growing threat of cyber-attach, this is a serious threat and problem associated with AMI deployment; It should not be taken lightly.

Q. What challenges do you face as a claims examiner?

A. In the event of damage or loss to property, and usually after the insured person(s) are reimbursed for damages, Claims Examiners are obligated to pursue the responsible party for the recovery of the named insured's deductible, and for the money that the insurance company dispersed for repair of the damage.

My job can be very unpopular at times, especially when the insured believes that they are entitled to more than what the policy can provide. Although property claims reimbursement is limited to the actual valuation of the property loss, I can see that in

Exhibit I-1
Page 4 of 12

many cases the losses cause severe mental and emotional strain and hardship for the claimant.

Q. What are some of the issues that have arisen from "smart" meter-caused fires?

A. In cases of fire involving "smart" meters, by the time a representative from the insurance company arrives at the scene, the utility has already responded, usually during the course of the local fire department's fire suppression efforts. Utility companies commonly remove the "smart" meter that had malfunctioned and/or ignited prior to completion of the necessary investigation into the cause of the fire. This hampers my ability to see that a proper investigation is performed for insurance purposes. This also complicates the job of Fire Marshals and/or fire department investigators. This may potentially also lead to a misdiagnosis by fire departments and insurance agencies and an undercounting of the total number of "smart" meter caused fires.

Utility companies have kept the "smart" meters, claiming that they are the company's property, and they can do with them as they please. It can take me several months, if not years, to obtain *the* "smart" meter that is believed to be the same one involved in, and the primary cause of a particular fire. Thus, the timeframe required to perform the requisite analysis is substantially extended; consequently, fires caused by "smart" meters can be extremely challenging to investigate and resolve.

Q. Please describe the significance of Exhibit CFRE NL 2.

A. CFRE NL 2. Is a Report from Vincent Panko of Protocol Insurance Services, dated December 3, 2015 to me, Norman Lambe, RE: Claim number 2015-2031-77A. This case exemplifies the difficulty that we encounter when trying to obtain access to "smart" meters in order to perform a proper investigation.

We still have not been permitted the opportunity to inspect the meter by Nevada Energy. Residents stated that the "smart" meter exploded. The inability to access the meters in "smart" meter fire cases is a consistent problem.

Q. Please describe the significance of Exhibit CFRE NL 3 b.

A. Exhibit CFRE NL 3 b is a forensic electric engineering investigation report for a loss at 5600 Spring Mountain Road; Las Vegas, Nevada in 2015. The business is 100 Degrees Hot Pot LLC, claim number 77A5001263-00 (2015-1618-77A).

Exhibit CFRE NL 3 b is a follow-up report. CFRE NL 3 b details new findings on the referenced loss that were revealed during the course of the joint destructive inspection of the "smart" meters. These meters were the subject of an earlier report by this author, dated September 18, 2015 which have also submitted, as CFRE NL 3 a. The joint destructive inspection was conducted at NV Energy; 6226 W. Sahara Blvd.; Las Vegas, NV, on April 21, 2016.

CFRE NL 3 b reveals that the "smart" meters were removed from the scene prior to completion of the fire investigation. This report indicates that the remote switching mechanism in a "smart" meter was determined to be the cause of the fire.

Unlike analog meters, "smart" meters can turn power "on" or "off" remotely. Sometimes, during activation of this remote switch, a tremendous burst of power can cause arcing in the meter and result in fire. As noted in the report by EFI Global (CFRE NL 3 b p.4), "All observed damage to the electrical panel and the meter itself is consistent with a fire triggered by extreme heat at the defective switch contacts inside the meter. The heat transferred to the metal clips, which were held in position by a resin-based insulator. The extreme heat ignited the insulator. The ensuing fire burned upward inside the panel, explaining the damage to the circuit breaker located directly above it. Open flame conducts electricity, so the flame drew an arc between the two energized power rails in the panel, explaining the unusual arc patterns in the center circuit on the panel, which was not part of the 'HP' meter circuit."

This fire occurred solely and directly as a result of the installation of a defective meter into an existing and serviceable electrical panel by the utility company, NV Energy. The fire originated in a locked and concealed area that is accessible only to employees of NV Energy. The owners and occupants of the subject building did nothing wrong and were powerless to prevent this fire. The employee(s) of NV Energy who installed the meter were the last persons having the opportunity to inspect the subject meter and associated

panel. The responsibility to identify and prevent electrical fires of this nature rests with the utility provider and, by inference, the manufacturer of the defective meter.

Q. Please describe the significance of your Exhibit CFRE NL 4.

A. CFRE NL 4 is a San Diego Fire Department Incident Report, number FS 14023257. On February 26, 2014, a fire broke out at Friars Village, a shopping mall located at 10450 Friars Road in San Diego, California, at Troy's Greek Restaurant.

Many entries from this report provide important independent accounts of what took place at the Friars Village Shopping Mall. SDGE refers to San Diego Gas and Electric:

- At 18:21:14, the report states "have SDGE expedite, 2 elect boxes on fire."
- This is repeated at 18:21:42 "/ SDG expedite 2 elect boxes on fire"
- At 18:34:47 the report states that "...2 high voltage elec boxes smoldering at the elec shut off for the strip mall... units standing by until SDGE arrives..."
- Another entry at 19:42:09: "2 SDGE meters on fire. 15 businesses evacuated and w/o power."

Please note that as of the date of this testimony, more than two years later, we have not yet been able to gain access to our insured's "smart" meter in order to perform the requisite investigation.

Q. Why have you not been able to gain access to the meter in this incident?

A. If the meter caused the fire, the utility would be responsible for the damages caused by the fire, not my insurance company; therefore, I believe that the utility does not want my company to inspect the meter.

Q. How does not gaining access to the "smart" meter affect the insurance business?

A. To meet our obligations, insurance providers must determine the cause of damage that we insure. If another party is determined to be responsible for damage, then they would be responsible for paying for damages. "Smart" meters cause fires. When utilities do not let insurance companies investigate these meters, the cause of those fires, our companies are left to pay for the damages inflicted upon our customers.

Q. What do you believe to be the likely outcome of the threats posed by radio frequency radiation and "smart" meter caused fires?

A. I believe some of the problems associated with "smart" meters are coming to a crescendo. Soon enough, one or more large property insurance companies will decide to exclude any damage to a building, business or personal property directly related to the malfunction of a "smart" meter, or more specifically, "smart" meter-caused fires. There is already one significant development whereby Lloyd's of London has issued an exclusion; by this I mean that they have incorporated an exclusion into their policies to exempt the company from paying for any "smart" meter or other radio frequency radiation ("RFR") related illnesses. Electric "smart" meters, or more specifically, an

AMI system in whole is a particularly dangerous source because of the quantity, frequency, and pulsing nature of the output of this sort of radiation.

Insurance companies were some of the earliest companies to recognize the threat of global climate change posed by greenhouse gasses, which is now a thoroughly accepted phenomenon. Now is appears that insurance companies will be amongst the first to recognize the dangers associated with health issues that result from exposure to RFR such as AMI systems and other RFR emitting devices.

Q. Please be specific, how has Lloyds of London reacted to health damages caused by exposure to electromagnetic or radio frequency radiation, including those from "smart" meters?

A. Lloyds of London, perhaps the world's largest reinsurance carrier, issued "Exclusion 32." This exclusion indicates to other insurance companies that has Lloyds of London as its reinsurer (underwriter) will not pay for any physical illness that is directly related to the insured's exposure to radiofrequencies (RFs). I am submitting a copy of Lloyds of London's Exclusion 32 as contained within an A & E Insurance for Architects & Engineers policy, Exhibit CFRE NL 5.

Q. Would UL certification ensure that a meter is safe?

A. Most "smart" meters have not been certified by any independent certification body, such as Underwriters Laboratory ("UL") or Canadian Standards Association ("CSA").

Instead "smart" meters are routinely certified by industry groups such as ANSI and IEEE. All of the models of meters that have burned, and many have, have been certified by these industry groups. UL has a new certification standard that is said to have been developed to insure the safety of "smart" meters, UL Standard 2735. But, even this certification is not sufficient. The very meters that have received this certification, Sensus and Landis & Gyr, have caused fires.

Q. What other concerns do you have about "smart" meters?

"Smart" meters also pose a security risk. On May 3, 2016, Nick Hunn of WiForce Consulting, Ltd. testified at the UK House of Commons' Science and Technology's "evidence check" and inquiry into the country's "smart" metering initiative. Mr. Hunn stated: "The concern I have is that every smart meter has an isolation switch so it can be remotely connected from the supply . . . If somebody could hack into that or just by mistake turn off very large numbers of meters, that sudden shock of taking them off the grid, and even worse, be able to turn back on at the same time, would cause significant damage. And to me that's an unnecessary risk." CFRE NL 6 is an article by Nick Hunn that notes some recent cyber-attacks. This threat should not be trivialized.

Q. What are your recommendations about PNM's AMI Project Proposal?

Installing "smart" meters is not a prudent investment. It is not fair for PNM to put unnecessary risk onto the shoulders of its customers including the risk of "smart" meters caused fires or health risks. Furthermore, how these AMI meters affect the electrical

wiring systems of old homes and customer's appliances must be thoroughly studied. Finally, the absolute safety of any and all meters should be proven *before* they are installed, if ever they are installed.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

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EXHIBIT NO. 11

INTERVENOR MATARA

REBUTTAL TESTIMONY

OF

TIMOTHY D. SCHOECHLE

IN RE: INTERSTATE POWER AND LIGHT COMPANY

DOCKET NO. TF-2018-0029, TF-2018-0030, TF-2019-0028, TF-2019-0029

August 1, 2019

Exhibit I-2

Q: Please state your name.

A: My name is Timothy Schoechle.

Q: By whom are you presently employed and in what capacity?

A: I am an international consultant in computer and communications engineering, policy, and standards. I am self-employed dba Smarthome Laboratories, Ltd., at 3066 Sixth Street, Boulder, Colorado, 80304.

Q: What is your educational and professional background and education?

A: I have an M.S. in Telecommunications from the University of Colorado College of Engineering and Applied Science and a Ph.D. in Communication [policy] from the School of Journalism and Mass Communication at the University of Colorado. I have worked in the field of engineering and policy related to electric power as applied to home and building systems for over 30 years.

I was involved during the early 1990s in the engineering development and standardizaton of remote metering that became ANSI C.12, presently known as Advanced Metering Infrastructure (AMI). My full background and experience is set forth on Exhibit A to this testimony.

Q: Please describe your professional experience.

A: I have been engaged in engineering and development for over 40 years in the field of industrial and home automation, control systems hardware and software, and consumer electronics, and I have started related business ventures. I have also served for over a decade in teaching and course development at the graduate and undergraduate levels at the University of Colorado, Colorado State University, and Regis University. Over the past two decades, I have also conducted studies and prepared public policy papers and books related to communication networks, to electricity and renewable energy, and to technical standards and standardization. I have also developed graduate and undergraduate university courses in cyber-security and privacy. I have written several technology and policy papers related to energy and telecommunications published by the National Institute for Science, Law and Public Policy.

Q: Have you provided testimony in prior regulatory proceedings?

A: I provided testimony to the New Mexico Public Regulation Commission in 2016 and 2017. In 2016 I provided a report that was submitted as a part of testimony to the Colorado Public Utilities Commission. Most recently, I provided testimony to the New York Public Service Commission in 2018 and to the Iowa Utilities Board in 2018 in SPU-2018-0007 and in 2019 in the Compliance Tariff dockets dealing with the community wide opt out.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of Intervenor Matara.

Q: Are you sponsoring any exhibits and if so please identify them.

A: Yes, the following:

Exhibit A: Schoechle CV

Exhibit B: Technical paper: Timothy Schoechle, *Smart grid data privacy: key issues and third-party institutional dimensions*. University of Colorado. 2012. (35 pages)

Exhibit C: Nicole Hong, Liz Hoffman and AnnaMaria Andrtis. "Capital One Reports Data Breach Affecting 100 Million Customers, Applicants." *The Wall Street Journal*. July 30, 2019. p A1.

Q: Please summarize the issues that you will rebut in your testimony.

A: I will rebut 1) testimony of Bauer in regard to AMI deployment and to two modes of meter operation proposed for community-wide opt out; 2) testimony of Reed in regard to the utilization of AMI for distributed generation; 3) testimony of Reed and Davis in regard to the validity of meter transmission mode testing, and testimony of Davis regard to the testing of meter transmission modes; 4) testimony of Vognsen in regard to the Rider AIMCOO tariff and to testing of meter transmission modes; and Lenzen in regard to IPL privacy policy and data security.

REBUTTAL TO BAUER TESTIMONY

Q: Do you have any issues or concerns with of the testimony of Bauer, as well as Davis and Reed, regarding the testing of two alternative modes of meter transmission?

A: My primary concern is why we are talking about detailed variations of AMI metering when the basic underlying assumption, the appropriateness of further investment in smart meters by IPL, is deeply problematic. This AMI metering technology has become obsolete, and in view of the growing urgency of a widespread transition in our society to solar and other decentralized renewable electricity sources, often called "distributed energy resources" (DER). Conventional smart meter technology, including AMI, is not considered to be a component of grid modernization today, and radio-based metering networks are inadequate for meeting future needs for high-speed real-time communication (i.e., optical fiber) among premises-based control systems for managing the localized use, generation, and storage of electricity. To see where grid technology is going, it would be wise to look at the initiatives being brought forward by the U.S. Department of Energy and the federal labs such as *Transactive Energy*.[1] It is likely that AMI meters will be superseded within a very few years at best. Ratepayers will likely be burdened with the stranded costs.

Another concern I have is that IPL unilaterally chose to deploy AMI throughout its territory without prior authorization by the IUB. IPL should not expect capital cost recovery because they made this choice for their own convenience. Electricity ratepayers should have had a role in this decision and should have had the option of keeping their old analog meters and not paying for IPL's expensive AMI adventure. IPL is acting as an un-regulated utility monopoly that appears to have proceeded with the expectation of perfunctory retroactive approval of cost recovery by the IUB. This is not how we govern in a democratic society and a market economy.

I have a further concern that the two metering options being presented by IPL (i.e., "on-demand" or "opt-out" modes) represent a false choice. A third choice should be to keep the old analog meter, given that thousands of members of the local Fairfield community have voiced a preference for non-radiating meters and have objected to IPL's unilateral actions. Such actions have exacerbated the lack of trust of IPL within the community in regard to the choice of meter and its operation modes. Regardless of their initial settings, meter operating modes can be changed by IPL at any time, without notice, recourse, or penalty to IPL.

[1] *2019 IEEE PES Transactive Energy Systems Conference* held July 8-10, University of Minnesota, Minneapolis. (note: refer to the opening keynote speaker, NARUC President Nick Wagner, <https://ieee-tesc.org>)

Exhibit I-2
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Q: Do you have issues or concerns with AMI or other smart meters in terms of the customer granular meter data they yield?

A: Yes. Bauer notes (Bauer testimony, page 6) that customers with AMI meters in either *on-demand* or *opt-out* mode will not capture granular usage data and he points to the revised IPL privacy policy as beneficial to normal customers. The protection of customer's personal data would actually be an advantage, rather than a disadvantage. This is further explained later in regard to the Lenzen testimony and the IPL Privacy Policy.

Q: Do you have issues or concerns with AMI or other smart meters in terms of claim that it can be useful for distributed generation (i.e., solar PV) customers?

A: Yes. Reed notes (Reed testimony, page 5, line 11) that customers with AMI meters in either *on-demand* or *opt-out* mode will not pick up interval data and readings will be too infrequent to aid distributed generation. This may be correct, however that is the point. The AMI meter network, even when in normal mode is simply too slow, cumbersome, and has too much latency (i.e., delay) to serve any useful role in or solar or DER integration, including demand response. This gets into the topic of grid modernization mentioned previously. The key technologies for DER grid integration will be premises-based control devices for localized premises management of use, generation and storage of electricity, and will be connected by optical fiber to other premises sharing the local distribution grid for the localized trading of energy in real-time (e.g., microgrids, Transactive Energy). In the future, metering will utilized on the premises to manage its energy and will be merely one of many features provided by such premises equipment—sending only the data needed for billing or operations to utilities via secure optical fiber networks.

REBUTTAL TO REED AND DAVIS TESTIMONY

Q: Do you have any issues or concerns with the testimony of Reed and Davis regarding the validity of the testing of two alternative modes of meter transmission?

A: Yes. The test was designed and managed by IPL, not by an independent 3rd party laboratory. IPL controlled all aspects of the testing. Aside from the pre-determined mode and meter choice assumptions underlying the testing, the process did not conform to the most basic

research ethics requiring an independent investigator, thus compromising the objectivity and credibility of the results from the start. For example, the tests were performed with the "buddy mode" turned off, a factor that could result in a dramatic increase in transmissions under certain circumstances.

A broader concern is the need for a network map or architectural drawing that shows the geographical relationship between the towers, repeaters, and the meters, including buddy meters and each of their specific traffic load. This would be needed to understand the projected network traffic pattern and load, as well as how many times a message repeats and for what reasons in order to evaluate the total impact on the population (see Matara testimony).

Q: Do you have additional concerns about the testimony of Davis regarding the testing of two alternative modes of meter transmission?

A: Yes. There are a few questions. The meters that did not have a version of 5.A.2.0 of the *Flexnet*™ firmware were physically changed out rather than being updated over the network. If this version was the only one tested, what about other versions? How many of the other versions are in use? If other versions were tested, what would be the difference?

REBUTTAL TO VOGNSEN TESTIMONY

Q: Do you have any issues or concerns with the testimony of Vognsen regarding the Rider AIMCOO tariff and testing of two alternative modes of meter transmission?

A: Yes. The Vognsen testimony seems somewhat convoluted and confusing. For example, in the question about community vs. individual billing (Vognsen testimony, page 5, line 20) his answer seems to assume the reverse the sense of the question. He then launches into a critique of community billing, but then later (page 7, line 1) he seems to advocate the Rider AMICOO arrangement as a proper and reasonable community billing arrangement. This entire explanation seems unnecessarily obscure. In summary, the Rider AIMCOO arrangement seems contrived to obstruct any community opt-out.

From a broader perspective, the basic question that emerges from this testimony is, if ratepayers are paying for the service, why would they not have a say in what the service is? The concept of

community rights is completely eclipsed by the dominant interests of an unfettered private corporation. The people that are buying the electricity are only "ratepayers," and IPL seems to regard its real "customer" as the regulatory agency, but even they are condescended to.

REBUTTAL TO VOGNSEN TESTIMONY

Q: Do you have any issues or concerns with the testimony of Lenzen regarding the IPL Privacy Policy and meter data privacy and security?

A: Yes. Lenzen notes (Lenzn testimony, page 3) that IPL is "...keenly aware of its responsibility in regard to the substantial amount of personal information it receives, uses, and manages on behalf of its more than one million customers." AMI meters will capture a prodigious amount of granular usage data and she points to the revised IPL privacy policy as beneficial to normal customers. This is interesting for several reasons:

1) Granular meter data is not useful for energy management, but represents "surveillance data" that creates a significant privacy risk to the customer (see Exhibit B, pages 5-6). Granular meter data exposes a window on the most intimate details of customer's lives. Many consider it an invasion of the privacy of the customer's home. In recent years, data collection, big data analytics, and behavioral modification (e.g., advertising) have transformed the IT/big tech industry into a new business model and its economy of "surveillance capitalism"—monetizing our personal lives and predicting and shaping our behavior. This new model is characterized and described in detail in a new book by Harvard Business School Professor Shoshana Zuboff.[2]

2) Lenzen draws a distinction between personally identifiable information and "aggregate or de-identified data" (page 4 and 6) and the different policies that apply to these data. Despite Lenzen's or IPL's assumption, data cannot be de-identified or anonymized by aggregation, or any other means (see Exhibit B, page 12, section 3.1.2).

3) Privacy policies are a form of unilateral "contract" which Professor Zuboff characterizes as an un-contract, or a unilateral declaration over which the customer has no control and

[2] Shoshana Zuboff. *The age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power.* New York: Public Affairs/Perseus Books. 2019. (691 pages).

who must tacitly accept in order to receive the service. Zuboff likens these to the click-through user agreements universally employed by the computer software industry, and she compares such "agreements" or "contracts" to the *Requirimiento*, the legalistic recitations of the Spanish Conquistadors as they invaded and appropriated the indiginous communities of the New World.[3] Similarly, the IPL privacy policy appropriates the data and privacy of its customers for its own purposes, without recourse or remedy.

4) Despite the claims of Lenzen (page 7) about the value of "Residential Energy Assessments" and "Residential Behavioral programs," employing granular data for behavioral targeting of customers, the usefulness of these has been shown to be limited or non-existent. Rather this accumulation of customer data increases the privacy and security risk by turning data over to IPL's 3rd party vendors, consultants, or other service entities or "other reasonable business reasons" (Lenzen, page 6). For example, the latest in a lengthy trail of data breaches is the Capital One bank hack reported in *The Wall Street Journal* on July 30, "Capital One Reports Data Breach Affecting 100 Million Customers, Applicants." This hack appears to be carried out by a former employee of Amazon Data Services, one of the largest 3rd party cloud service providers.

In rebuttal to Lenzen, the data simply cannot be protected in today's environment. As evidenced above, customer data has grown too valuable to contain. The raw personal behavioral data from meters has become the "gold" in the new economy of surveillance capitalism. If the meter data were needed for some reasonable purpose, such as actually controlling the flow of electricity, load management, or demand response, a reasonable argument might be made to collect such data—however this is not the case. The best way to protect data is to not collect it in the first place. The meter data is not needed to manage electricity and represents an increasingly inviting target to those who would wish to exploit the data of the meter network for purposes unintended by the customer/ratepayer.

Q: Does this conclude your testimony?

A: Yes, it does.

[3] Zuboff, page 178.

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STATE OF COLORADO)

) SS: AFFIDAVIT OF TIMOTHY D. SCHOECHLE

COUNTY OF BOULDER)

I, Timothy D. Schoechle, being first duly sworn on oath, depose and state that I am the same Timothy D. Schoechle identified in the testimony being filed with this affidavit; that I have caused the testimony and exhibits to be prepared and am familiar with the contents thereof, and that the testimony exhibits are true and correct to the best of my knowledge, information and belief as of the date of this affidavit.

/s/ Timothy D. Schoechle

Timothy D. Schoechle

Subscribed and sworn to before me, A Notary Public, in and for said County and State, this 1st day of August, 2019.

/s/_____

Notary Public

My Commission expires:

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EXHIBIT NO. 12

Physical occupation[edit]

The most straightforward takings claim arises when the government physically occupies some part of a landowner's property without compensation: this runs directly into the plain language of the amendment itself. It is a "taking" of some property without compensation. With certain exceptions, a direct physical occupation, temporary or permanent, represents a taking. In some few cases, we find disputes surrounding whether a government action in fact constitutes a physical direct and immediate occupation of land. A leading case is *United States v. Causby*, 328 U.S. 256 (1946), in which a landowner was subjected incessant low-level military flights well below the federally recognized aviation airspace. In requiring compensation, the Court held:

The landowner owns at least as much of the space above the ground as we can occupy or use in connection with the land. See Hinman v. Pacific Air Transport, 9 Cir., 84 F.2d 755. The fact that he does not occupy it in a physical sense-by the erection of buildings and the like-is not material. ... In this case, as in Portsmouth Harbor Land & Hotel Co. v. United States, supra, the damages were not merely consequential. They were the product of a direct invasion of respondents' domain. As stated in United States v. Cress, 243 U.S. 316, 328, 37 S.Ct. 380, 385, ' ... it is the character of the invasion, not the amount of damage resulting from it, so long as the damage is substantial, that determines the question whether it is a taking.' Flights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land.

18 U.S. Code § 242.Deprivation of rights under color of law

Whoever, under color of any law, statute, ordinance, regulation, or custom, willfully subjects any person in any State, Territory, Commonwealth, Possession, or District to the deprivation of any rights, privileges, or immunities secured or protected by the Constitution or laws of the United States, or to different punishments, pains, or penalties, on account of such person being an alien, or by reason of his color, or race, than are prescribed for the punishment of citizens, shall be fined under this title or imprisoned not more than one year, or both; and if bodily injury results from the acts committed in violation of this section or if such acts include the use, attempted use, or threatened use of a dangerous weapon, explosives, or fire, shall be fined under this title or imprisoned not more than ten years, or both; and if death results from the acts committed in violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse, or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title, or imprisoned for any term of years or for life, or both, or may be sentenced to death.

Exhibit J

UNITED STATES CODE
TITLE 18 - CRIMES AND CRIMINAL PROCEDURE
PART I - CRIMES
CHAPTER 13 - CIVIL RIGHTS

§ 241. Conspiracy against rights

If two or more persons conspire to injure, oppress, threaten, or intimidate any inhabitant of any State, Territory, or District in the free exercise or enjoyment of any right or privilege secured to him by the Constitution or laws of the United States, or because of his having so exercised the same; or

If two or more persons go in disguise on the highway, or on the premises of another, with intent to prevent or hinder his free exercise or enjoyment of any right or privilege so secured -

They shall be fined not more than $10,000 or imprisoned not more than ten years, or both; and if death results, they shall be subject to imprisonment for any term of years or for life.

§ 242. Deprivation of rights under color of law

Whoever, under color of any law, statute, ordinance, regulation, or custom, willfully subjects any inhabitant of any State, Territory, or District to the deprivation of any rights, privileges, or immunities secured or protected by the Constitution or laws of the United States, or to different punishments, pains, or penalties, on account of such inhabitant being an alien, or by reason of his color, or race, than are prescribed for the punishment of citizens, shall be fined not more than $1,000 or imprisoned not more than one year, or both; and if bodily injury results shall be fined under this title or imprisoned not more than ten years, or both; and if death results shall be subject to imprisonment for any term of years or for life.

42 U.S. Code § 1983.Civil action for deprivation of rights

Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress, except that in any action brought against a judicial officer for an act or omission taken in such officer's judicial capacity, injunctive relief shall not be granted unless a declaratory decree was violated or declaratory relief was unavailable. For the purposes of this section, any Act of Congress applicable exclusively to the District of Columbia shall be considered to be a statute of the District of Columbia.

42 U.S.C. § **1985** grants a civil cause of action for damages caused by various types of conspiracies aimed at injuring a person in his/her person or property, or denying him/her a Federal right or privilege. § **1985** mainly deals with three instances of conspiracy: those aimed at preventing an officer from performing his/her duties; those aimed at obstructing justice by intimidating a party, witness, or juror; and those aimed at depriving a person's rights or privileges.

42 U.S. Code § 1986.Action for neglect to prevent

- U.S. Code
- Notes

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Every person who, having knowledge that any of the wrongs conspired to be done, and mentioned in section 1985 of this title, are about to be committed, and having power to prevent or aid in preventing the commission of the same, neglects or refuses so to do, if such wrongful act be committed, shall be liable to the party injured, or his legal

representatives, for all damages caused by such wrongful act, which such person by reasonable diligence could have prevented; and such damages may be recovered in an action on the case; and any number of persons guilty of such wrongful neglect or refusal may be joined as defendants in the action; and if the death of any party be caused by any such wrongful act and neglect, the legal representatives of the deceased shall have such action therefor, and may recover not exceeding $5,000 damages therein, for the benefit of the widow of the deceased, if there be one, and if there be no widow, then for the benefit of the next of kin of the deceased. But no action under the provisions of this section shall be sustained which is not commenced within one year after the cause of action has accrued.

(R.S. § 1981.)

Fourth Amendment

The Fourth Amendment originally enforced the notion that "each man's home is his castle", secure from unreasonable searches and seizures of property by the government. It protects against arbitrary arrests, and is the basis of the law regarding search warrants, stop-and-frisk, safety inspections, wiretaps and other forms of surveillance, as well as being central to many other criminal law topics and to privacy law.

Learn more...

Primary tabs

Amendment IV

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

‹ Third Amendment up Fifth Amendment ›

Fifth Amendment

The Fifth Amendment creates a number of rights relevant to both criminal and civil legal proceedings. In criminal cases, the Fifth Amendment guarantees the right to a grand jury, forbids "double jeopardy," and protects against self-incrimination. It also requires that "due process of law" be part of any proceeding that denies a citizen "life, liberty or property" and requires the government to compensate citizens when it takes private property for public use.

Learn more...

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Gore (election recounts), Reed v. Reed (gender discrimination), and University of California v. Bakke (racial quotas in education). See more...

Primary tabs

Amendment XIV

Section 1.

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2.

Representatives shall be apportioned among the several states according to their respective numbers, counting the whole number of persons in each state, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice President of the United States, Representatives in Congress, the executive and judicial officers of a state, or the members of the legislature thereof, is denied to any of the male inhabitants of such state, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such state.

Section 3.

No person shall be a Senator or Representative in Congress, or elector of President and Vice President, or hold any office, civil or military, under the United States, or under any state, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any state legislature, or as an executive or judicial officer of any state, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

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WIKIPEDIA

Fifth Amendment to the United States Constitution

The **Fifth Amendment** (**Amendment V**) to the United States Constitution addresses criminal procedure and other aspects of the Constitution. It was ratified in 1791 along with nine other articles of Bill of Rights. The Fifth Amendment applies to every level of the government, including the federal, state, and local levels, in regard to a US citizen or resident of the US. The Supreme Court furthered the protections of this amendment through the Due Process Clause of the Fourteenth Amendment.

One provision of the Fifth Amendment requires that felonies be tried only upon indictment by a grand jury. Another provision, the Double Jeopardy Clause, provides the right of defendants to be tried only once in federal court for the same offense. The self-incrimination clause provides various protections against self-incrimination, including the right of an individual to not serve as a witness in a criminal case in which they are the defendant. "Pleading the Fifth" is a colloquial term often used to invoke the self-incrimination clause when witnesses decline to answer questions where the answers might incriminate them. In the 1966 case of *Miranda v. Arizona*, the Supreme Court held that the self-incrimination clause requires the police to issue a *Miranda* warning to criminal suspects interrogated while under police custody. The Fifth Amendment also contains the Takings Clause, which allows the federal government to take private property for public use if the government provides "just compensation."

Like the Fourteenth Amendment, the Fifth Amendment includes a due process clause stating that no person shall "be deprived of life, liberty, or property, without due process of law." The Fifth Amendment's due process clause applies to the federal government, while the Fourteenth Amendment's due process clause applies to state governments. The Supreme Court has interpreted the Fifth Amendment's Due Process Clause as providing two main protections: procedural due process, which requires government officials to follow fair procedures before depriving a person of life, liberty, or property, and substantive due process, which protects certain fundamental rights from government interference. The Supreme Court has also held that the Due Process Clause contains a prohibition against vague laws and an implied equal protection requirement similar to the Fourteenth Amendment's Equal Protection Clause.

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The Fifth and Fourteenth Amendments to the United States Constitution each contain a due process clause. Due process deals with the administration of justice and thus the due process clause acts as a safeguard from arbitrary denial of life, liberty, or property by the government outside the sanction of law.[91] The Supreme Court has interpreted the due process clauses to provide four protections: procedural due process (in civil and criminal proceedings), substantive due process, a prohibition against vague laws, and as the vehicle for the incorporation of the Bill of Rights.

Takings Clause

Eminent domain

The "Takings Clause", the last clause of the Fifth Amendment, limits the power of eminent domain by requiring "just compensation" be paid if private property is taken for public use. This provision of the Fifth Amendment originally applied only to the federal government, but the U.S. Supreme Court ruled in the 1897 case *Chicago, B. & Q. Railroad Co. v. Chicago* that the Fourteenth Amendment extended the effects of that provision to the states. The federal courts, however, have shown much deference to the determinations of Congress, and even more so to the determinations of the state legislatures, of what constitutes "public use". The property need not actually be used by the public; rather, it must be used or disposed of in such a manner as to benefit the public welfare or public interest. One exception that restrains the federal government is that the property must be used in exercise of a government's enumerated powers.

The owner of the property that is taken by the government must be justly compensated. When determining the amount that must be paid, the government does not need to take into account any speculative schemes in which the owner claims the property was intended to be used. Normally, the fair market value of the property determines "just compensation". If the property is taken before the payment is made, interest accrues (though the courts have refrained from using the term "interest").

Property under the Fifth Amendment includes contractual rights stemming from contracts between the United States, a U.S. state or any of its subdivisions and the other contract partner(s), because contractual rights are property rights for purposes of the Fifth Amendment.[92] The United States Supreme Court held in *Lynch v. United States*, 292 U.S. 571 (1934) that valid contracts of the United States are property, and the rights of private individuals arising out of them are protected by the Fifth Amendment. The court said: "*The Fifth Amendment commands that property be not taken without making just compensation. Valid contracts are property, whether the obligor be a private individual, a municipality, a state, or the United States. Rights against the United States arising out of a contract with it are protected by the Fifth Amendment. United States v. Central Pacific R. Co., 118 U. S. 235, 118 U. S. 238; United States v. Northern Pacific Ry. Co., 256 U. S. 51, 256 U. S. 64, 256 U. S. 67. When the United States enters into contract relations, its rights and duties therein are governed generally by the law applicable to contracts between private individuals.*"[93]

The federal courts have not restrained state and local governments from seizing privately owned land for private commercial development on behalf of private developers. This was upheld on June 23, 2005, when the Supreme Court issued its opinion in *Kelo v. City of New London*. This 5–4 decision remains controversial. The majority opinion, by Justice Stevens, found that it was appropriate to defer to the city's decision that the development plan had a public purpose, saying that "the city has carefully formulated a development plan that it believes will provide appreciable benefits to the community, including, but not limited to, new jobs and increased tax revenue." Justice Kennedy's concurring opinion observed that in this particular case the development plan was not "of primary benefit to ... the developer" and that if that was the case the plan might have been impermissible. In the dissent, Justice

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Sandra Day O'Connor argued that this decision would allow the rich to benefit at the expense of the poor, asserting that "Any property may now be taken for the benefit of another private party, but the fallout from this decision will not be random. The beneficiaries are likely to be those citizens with disproportionate influence and power in the political process, including large corporations and development firms." She argued that the decision eliminates "any distinction between private and public use of property—and thereby effectively delete[s] the words 'for public use' from the Takings Clause of the Fifth Amendment". A number of states, in response to *Kelo*, have passed laws and/or state constitutional amendments which make it more difficult for state governments to seize private land. Takings that are not "for public use" are not directly covered by the doctrine,[94] however such a taking might violate due process rights under the Fourteenth amendment, or other applicable law.

The exercise of the police power of the state resulting in a taking of private property was long held to be an exception to the requirement of government paying just compensation. However the growing trend under the various state constitution's taking clauses is to compensate innocent third parties whose property was destroyed or "taken" as a result of police action.[95]

"Just compensation"

The last two words of the amendment promise "just compensation" for takings by the government. In *United States v. 50 Acres of Land (1984)*, the Supreme Court wrote that "The Court has repeatedly held that just compensation normally is to be measured by "the market value of the property at the time of the taking contemporaneously paid in money." *Olson v. United States*, 292 U.S. 246 (1934) ... Deviation from this measure of just compensation has been required only "when market value has been too difficult to find, or when its application would result in manifest injustice to owner or public". *United States v. Commodities Trading Corp.*, 339 U.S. 121, 123 (1950).

Civil asset forfeiture

Civil asset forfeiture[96] or occasionally civil seizure, is a controversial legal process in which law enforcement officers take assets from persons suspected of involvement with crime or illegal activity without necessarily charging the owners with wrongdoing. While civil procedure, as opposed to criminal procedure, generally involves a dispute between two private citizens, civil forfeiture involves a dispute between law enforcement and *property* such as a pile of cash or a house or a boat, such that the thing is suspected of being involved in a crime. To get back the seized property, owners must prove it was not involved in criminal activity. Sometimes it can mean a threat to seize property as well as the act of seizure itself.[97]

In civil forfeiture, assets are seized by police based on a suspicion of wrongdoing, and without having to charge a person with specific wrongdoing, with the case being between police and the *thing itself*, sometimes referred to by the Latin term *in rem*, meaning "against the property"; the property itself is the defendant and no criminal charge against the owner is needed.[96] If property is seized in a civil forfeiture, it is "up to the owner to prove that his cash is clean"[98] and the court can weigh a defendant's use of their 5th amendment right to remain silent in their decision.[99] In civil forfeiture, the test in most cases[100] is whether police feel there is a preponderance of the evidence suggesting wrongdoing; in criminal forfeiture, the test is whether police feel the evidence is beyond a reasonable doubt, which is a tougher test to meet.[98][101] In contrast, criminal forfeiture is a legal action brought as "part of the criminal prosecution of a defendant", described by the Latin term *in personam*, meaning "against the person", and happens when government indicts or charges the property which is either used in connection with a crime, or derived from a crime, that is suspected of being committed by the

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Federal law violations: The Energy Policy Act of 2005 (H.R. 6) states Section 1252 Smart Metering (a) (14) Time-Based Metering and Communications.—(A) Not later than 18 months after the date of enactment of this paragraph, each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a timebased rate schedule under which the rate charged by the electric utility varies during different time periods and reflects the variance, if any, in the utility's costs of generating and purchasing electricity at the wholesale level. The time-based rate schedule shall enable the electric consumer to manage energy use and cost through advanced metering and communications technology. (B) The types of time-based rate schedules that may be offered under the schedule referred to in subparagraph (A) include, among others— (i) time-of-use pricing...,(ii) critical peak pricing...,(iii) real-time pricing..., and (iv) credits... (C) Each electric utility subject to subparagraph (A) shall provide each customer requesting a time-based rate with a time-based meter capable of enabling the utility and customer to offer and receive such rate, respectively. (f) FEDERAL ENCOURAGEMENT OF DEMAND RESPONSE DEVICES.—It is the policy of the United States that time-based pricing and other forms of demand response, whereby electricity customers are provided with electricity price signals and the ability to benefit by responding to them, shall be encouraged... "Offer," "upon customer request," "encouraged" – there is no federal mandate for the Smart Meter program as it is being conducted in California. Americans with Disabilities Act violations 135 Americans with Disabilities Act of 1990, 42 USC 12101 (as amended by ADA Amendment Act of 2008) defines a disability as A) a physical or mental impairment that substantially limits one or more major life activities of such individual; B) a record of such an impairment; or C) being regarded as having such an impairment Major life activities A) include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working. B) include the operation of a major bodily function, including but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions. The ADA Amendment Act of 2008 states at section 2, that "physical or mental disabilities in no way diminish a person's right to fully participate in all aspects of society, yet many people with physical or mental disabilities have been precluded because of discrimination; others who have a record of a disability or are regarded as having a disability also have been subjected to discrimination; Also the definition of disability in this Act shall be construed in favor of broad coverage of individuals under this Act to the maximum extent permitted by the terms of this Act. US Access Board Recognizes EMF Sensitivity "The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals. "The Board plans to develop technical assistance materials on best practices for accommodating individuals with multiple chemical sensitivities and electromagnetic sensitivities. The Board also plans to sponsor a project on indoor environmental quality. In this project, the Board will bring together building owners, architects, building product manufacturers, model code and standard-setting organizations, individuals with multiple chemical sensitivities and electromagnetic sensitivities, and other individuals. This group will examine building design and construction issues that affect the indoor environment, and develop an action plan that can be used to reduce the level of chemicals and electromagnetic fields in the built environment." EMF Safety Network CPUC Application, A. 10-04-018, April 2010 136 The CPUC and utility companies have failed to accommodate those who are disabled due

to electromagnetic sensitivities, and therefore, they are in violation of ADA. This includes rendering homes inaccessible, or making the home the only marginally safe place a person can be, if there is no Smart Meter, while restricting access to one's community. These customers continue to experience discrimination and are harmed personally by the forced exposure to the radiation/rf/emf emitted by smart meters surrounding their homes. ...Numerous physicians have written letters to SCE [Southern California Edison] and the PUC warning of life threatening dangers to their patients if the patient is exposed to the radiation and dirty electricity that is created by the wireless smart meter mesh network. Medical conditions such as environmental illness, neurological damage, immunological damage, elderly, and children, respiratory and cardiac medical conditions are a few of the conditions that are adversely affected by this mesh network of wireless smart meters. These disabilities are recognized and given protection under federal and state laws infra. ...The mesh network and wireless smart meters surrounding their home cause a barrier to accessing their home either fully or partially. This barrier also causes illness and deterioration of their disability or medical condition. ...The consequence of this "deployment", throughout the State, literally on every home and business, leaves this vulnerable population in the unfathomable situation where they (are) excluded from participation in society and precluded from access to homes, businesses and government buildings and services. They cannot find anywhere to seek refuge because the mesh network is virtually everywhere. Southern Californians for Wired Solutions to Smart Meters (SCWSSM), Comments on SCE Compliance Filing, 11-07-020, January 16, 2012, p. 4, 5 California Constitution, Article 1 -- multiple violations: (Constitution text source: www.leginfo.ca.gov/.const/.article_1) SECTION 1 All people are by nature free and independent and have inalienable rights. Among these are enjoying and defending life and liberty, acquiring, possessing, and protecting property, and pursuing and obtaining safety, happiness, and privacy. People have been arrested for defending their life, for protecting their property, and for pursuing their safety and happiness by trying to stop Smart Meter installation in their communities. 137 In this illegally forced installation of Smart Meters, they are barred from pursuing their privacy, safety, and happiness, barred from protecting their property, and barred from enjoying and defending their liberty and their lives. With the new imposition of the illegal opt-out, only those with the financial wherewithal can participate – in itself a discriminatory process – in obtaining some small modicum of their Section 1 rights. SECTION 3 (A) (4) Nothing in this subdivision supersedes or modifies any provision of this Constitution, including the guarantees that a person may not be deprived of life, liberty, or property without due process of law, or denied equal protection of the laws, as provided in Section 7. SECTION 7 (a) A person may not be deprived of life, liberty, or property without due process of law or denied equal protection of the laws; There has been no due process of law for the deprivation of life, liberty, and property which people have experienced as a result of this program. People have been rebuffed at the CPUC, by the Attorney General's office, and by local city and county governments when they have attempted to assert their rights. People have been deprived of liberty, including the right to travel freely in their own communities and equal access, because of Smart Meters, the mesh network and/or star system, and the data collection antenna infrastructure. People have been deprived of their own property either because Smart Meters were installed on their homes or infrastructure installed nearby, because Smart Meters were installed on other homes nearby, or because of high frequency voltage transients ("dirty" electricity) travelling on electrical lines in their neighborhood and/or into their homes and buildings via electrical wiring and water pipes, making their homes or buildings unlivable. And it is clear from the severity of symptoms some are experiencing, that they are in danger of losing their lives, leaving us to wonder how many hundreds have already died. This has all happened without due process, without