Case No. 16-3766

IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

Naperville Smart Meter Awareness,

Plaintiff-Appellant,

v.

City of Naperville,

Defendant-Appellee.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
District Court Civil No. 1:11-cv-09299
District Court Judge John Z. Lee

BRIEF OF AMICI CURIAE AMERICAN PUBLIC POWER ASSOCIATION, EDISON ELECTRIC INSTITUTE, AND NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION IN SUPPORT OF AFFIRMANCE

GREENE ESPEL PLLP
John M. Baker
Aaron P. Knoll
Chris L. Schmitter
222 S. Ninth Street, Suite 2200
Minneapolis, MN 55402
jbaker@greeneespel.com
aknoll@greeneespel.com
cschmitter@greeneespel.com
(612) 373-0830

Attorneys for Amici Curiae American Public Power Association, Edison Electric Institute, and National Rural Electric Cooperative Association

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Federal Cases

State Cases

Federal Statutes

Rules

Constitutional Provisions

Other Authorities

STATEMENT OF INTEREST

The American Public Power Association ("APPA") is the service organization representing the interests of not-for-profit, publicly owned electric utilities throughout the United States. More than 2,000 public power utilities, doing business in every state except Hawaii, provide electricity to approximately 48 million consumers, or about 15% of the nation's electricity customers. Of the 2,000-plus public power utilities in the United States, 199 are in Seventh Circuit states.

The Edison Electric Institute ("EEI") is the association that represents all U.S. investor-owned electric companies. EEI's members provide electricity for 220 million Americans, operating in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. EEI has dozens of international electric companies as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

The National Rural Electric Cooperative Association ("NRECA") is the service organization for over 900 not-for-profit rural electric cooperatives. A network of 841 distribution cooperatives provide electricity to approximately 42 million rural consumers—including businesses, homes, schools, farms,

irrigation systems, and other establishments—in 47 states. Collectively, rural electric cooperatives own and maintain 2.5 million miles of the nation's electric distribution lines and serve 13 percent of the nation's electric customers. Rural electric cooperatives also provide critical jobs and tax revenue in rural areas, employing over 70,000 people and paying $1.4 billion in state and local taxes. Of the over 900 electric cooperatives represented by NRECA, approximately 120 are operating in Seventh Circuit states.

Amici APPA, EEI, and NRECA are dedicated to ensuring that all Americans have access to safe, sustainable, reliable, and affordable electricity to power their homes, businesses, and communities. As a result, Amici have an interest in protecting the nation's electrical grid and pursuing efficient energy systems. Smart meters are critical in that effort. They provide essential data that improves utilities' ability to assess the needs of consumers and supply the right level of power. Because the City of Naperville's reasonable use of smart meters to gather aggregate electricity data fully complies with the Fourth Amendment, Amici submit this brief supporting affirmance of the district court's dismissal of Appellant's lawsuit.[1]

[1] Under Fed. R. App. P. 29(a)(4)(E), no party's counsel authored the brief in whole or in part. No party or party's counsel contributed money

Consistent with Fed. R. App. P. 29(a) (2), all parties have consented to the filing of this amicus brief.

ARGUMENT

When the Fourth Amendment was ratified, information about whether a homeowner was using little fuel or a lot of fuel was not a secret; once smoke from the fireplace passed through the chimney, others in the village could see it, and in "real time." A larger cloud of smoke might give watchers reason to believe that an occupant was awake and active. As that cloud diminished, someone might wonder (particularly after dark) whether the occupant had retired to bed. But none of the Framers would have seriously suggested that the smoke's visibility to others infringed upon any legitimate expectation of privacy, or otherwise constituted an unreasonable search.[2]

Similarly, the fact that a smart meter allows a municipal utility to receive data about current levels of electricity consumption does not infringe upon any legitimate expectation of privacy worthy of constitutional

---

intended to fund the brief's preparation or submission. No person—other than the amici, their members, or their counsel—contributed money intended to fund the brief's preparation or submission.

[2] "The Court on occasion also has looked to history to discern whether certain types of government intrusion were perceived to be objectionable by the Framers of the Fourth Amendment." *Rakas v. Illinois*, 439 U.S. 128, 153 (1978) (Powell, J., concurring).

protection. That is in part because smart meters have become pervasive. A smart meter is not an "unreasonable" search, but is a very reasonable means of advancing significant government interests. The Court should affirm the district court's dismissal of Appellant's facial attack.

I. SMART METERS, ONCE NOVEL, ARE NOW A PERVASIVE PART OF THE NATION'S ENERGY INFRASTRUCTURE.

The pervasiveness of smart meters across the United States bolsters the case for why their use by a municipal electric utility is consistent with the Fourth Amendment.

A. Smart Meters Have Become a Pervasive Tool in the Effort to Achieve Greater Energy Efficiency.

Smart meters have become an important tool in the broader effort to modernize the nation's energy infrastructure and improve U.S. energy efficiency. Smart meters enable electricity consumers and utilities to monitor and manage electricity use by time of day.

By the end of 2015, electric companies had installed 65 million Advanced Metering Infrastructure (or "AMI") smart meters. U.S. Energy Info. Admin., Form EIA-861, Annual Electric Power Industry Report, https://www.eia.gov/electricity/annual/html/epa_10_10.html (last visited May 19, 2017). Roughly 57 million of the 65 million smart meters are

residential, covering over 50 percent of U.S. households. *Id.* In Naperville, Illinois, the 2015 data shows that the City had 59,020 AMI smart meters (52,625 residential, 6,386 commercial, and 9 industrial). *See Electric power sales, revenue, and energy efficiency Form EIA-861 detailed data files*, U.S. Energy Info. Admin. (Oct. 6, 2016) https://www.eia.gov/electricity/data/eia861/ (select the link for the ZIP file of 2015 data). By the end of 2016, deployment of smart meters was projected to reach 70 million smart meters. Inst. for Elec. Innovation, *Electric Company Smart Meter Deployments: Foundation for A Smart Grid*, Edison Foundation (Oct. 2016), http://www.edisonfoundation.net/iei/publications/Documents/Final%20Electric%20Company%20Smart%20Meter%20Deployments-%20Foundation%20for%20A%20Smart%20Energy%20Grid.pdf. Thirty of the nation's largest electricity providers have fully deployed smart meters. *Id.*

The nation's resolve to maintain and improve energy efficiency, through the use of tools like smart meters, is illustrated by the federal government's commitment to a "smart grid," embodied in the Smart Grid Investment Grant Program. *See Smart Grid*, Federal Energy Regulatory Commission (Apr. 21, 2016), https://www.ferc.gov/industries/electric/indus-act/smart-grid.asp; *see also* Energy Independence and Security Act of 2007

("EISA 2007"), tit. XIII, Pub. L. No. 110-140, 121 Stat. 1492, 1783 (2007); *Advanced Metering Infrastructure and Customer Systems – September 2016* (hereafter "September 2016 AMI Report"), *Final Report on Consumer Acceptance, Retention, and Response to Time-Based Rates from the Consumer Behavior Studies - November 2016* (hereafter "November 2016 Customer Report"), & *Smart Grid Investment Grant Program, Final Report – December 2016* (hereafter "December 2016 SGIG Report"), U.S. Dep't of Energy, https://www.energy.gov/oe/recovery-act-reports-and-other-materials-smart-grid-investment-grant-sgig.

According to the Federal Energy Regulatory Commission, smart grid improvements "will apply digital technologies to the grid, and enable real-time coordination of information from generation supply resources, demand resources, and distributed energy resources." *Smart Grid*, *supra*. Key components to a smart grid include the use of "smart" technologies for "metering, communications concerning grid operations and status, and distribution automation." *Id.* These investments in the U.S. energy infrastructure help "detect local changes in electricity usage and communicate that information instantaneously to electric utilities and wholesale energy market actors." Alexandra B. Klass & Elizabeth J. Wilson,

Remaking Energy: The Critical Role of Energy Consumption Data, 104 Cal. L. Rev. 1095, 1097 (2016). Indeed, in the last several years through amendments to the Public Utilities Regulatory Policies Act, Congress has required utilities to consider smart meters and prompted intense focus on smart meters in federal agency, state legislative, and public utility commission proceedings. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95–617, 92 Stat. 3117 (1978); *see, e.g.*, Energy Policy Act of 2005, Pub. L. No. 109–58, §§ 1251–54 (2005); EISA 2007, § 1307, 121 Stat. 1791.

These advances are significant because electricity generation makes up 39 percent of total U.S. energy consumption. *U.S. Energy Facts Explained*, U.S. Energy Info. Admin., https://www.eia.gov/energyexplained/?page=us_energy_home (last updated June 3, 2016). Buildings themselves account for 68 percent of electricity use. *Green Building; Why Build Green?*, U.S. Envtl. Protection Agency https://archive.epa.gov/greenbuilding/web/html/whybuild.html (last visited May 5, 2017). By 2013, over one thousand cities adopted greenhouse gas reduction goals, with an emphasis on increasing energy efficiency in buildings and government operations. *See* J.B. Wogan, *What Can Cities Really Do About Climate Change?*, Governing (Dec. 2014), http://www.governing.com/topics/transportation-infrastructure

/gov-climate-change-grand-rapids-michigan.html. McKinsey & Company, a global management consulting firm, reports that an upfront investment of $520 billion (not including program costs) in energy-efficiency improvements could result in eventual average bill savings of 24 percent. McKinsey & Co., *Unlocking Energy Efficiency in the U.S. Economy: Executive Summary* 10 (July 2009).

Smart meters are critical—and hence have become pervasive—components to the smart-grid effort.

B. The Pervasiveness of Smart Meters Undermines Any Asserted Expectation of Privacy from Their Use as a Means to Gather Electricity Usage Information.

Courts recognize that, the more commonplace the method of gathering information, the less reasonable is any expectation of privacy, even in a residential setting. For example, consider the constitutional status of a low-tech information-gathering device: the flashlight. The Supreme Court and the lower federal courts have consistently held that law enforcement's use of a flashlight or searchlight is not a search for Fourth Amendment purposes—even when the light is directed into a home or its curtilage. *See United States v. Dunn*, 480 U.S. 294, 305 (1987) (citing *Texas v. Brown*, 460 U.S. 730, 739-40 (1983) and *United States v. Lee*, 274 U.S. 559, 563 (1927));

see also United States v. Hanahan, 442 F.2d 649, 654 (7th Cir. 1971). In finding no reasonable expectation of privacy against nighttime illumination, courts note that flashlights are pervasive. *United States v. Law*, 384 F. App'x 121, 123–24 (3d Cir. 2010) (flashlight is a "commonplace piece of police equipment"); *State v. Rose*, 909 P.2d 280, 399 (Wash. 1996) ("A flashlight is an exceedingly common device; few homes or boats are without one."); *Commonwealth v. Johnson*, 777 S.W.2d 876, 879 (Ky. 1989) (a flashlight is a "widely available device").

Courts also recognize that as a method of information gathering becomes typical, the corresponding expectation of privacy diminishes. Aerial observation might once have been rare, but has become far more common. In *California v. Ciraolo*, the Supreme Court held that no Fourth Amendment search occurred when law enforcement secured a private plane and deliberately flew over a home to observe it from an altitude of 1,000 feet. 476 U.S. 207, 209 (1986). The Court found the occupant of the home had no reasonable expectation of privacy against aerial observation. *Id.* at 213-14. The Court observed, "[i]n an age where private and commercial flight in the public airways is routine," it was unreasonable to expect that activities within the curtilage of the home "were constitutionally protected from being

observed with the naked eye" from 1,000 feet in the air. *Id.* at 215. And just three years later, in *Florida v. Riley*, the Supreme Court upheld the use of a helicopter to observe a home and its curtilage at an altitude of 400 feet. 488 U.S. 445, 451 (1989).

In assessing whether the Fourth Amendment allows information to be pervasively observed, courts do not hesitate to apply reasoning derived from the analog world to the digital era. For example, courts recognize different expectations of privacy for the content of a communication (which itself is often private) and the "information necessary to get those communications from point A to point B" (which is not). *United States v. Carpenter*, 819 F.3d 880, 886 (6th Cir. 2016). The information used to communicate—the mailing address on the outside of a package, the phone number dialed, the "metadata used to route internet communications," and the cell-site data associated with a cell phone—is not constitutionally protected. *Id.* at 886–87. The Sixth Circuit found no reasonable expectation of privacy because "any cellphone user who has seen her phone's signal strength fluctuate must know that, when she places or receives a call, her phone 'exposes' its location to the nearest cell tower and thus to the company that operates the tower." *Id.* at 888. When a widely used method of communication requires users to

make other information visible to others, the courts find no expectation of privacy in the other information shared. Raw data regarding electricity usage—no matter how current, or how frequently updated—deserves no greater constitutional protection than such transmission data.

As explained above, smart meters have become a pervasive means of obtaining aggregate information about electricity usage. When the means of obtaining information are pervasive, courts reject the argument that those means infringe a privacy interest protected by the Fourth Amendment. The Court should likewise reject Appellant's argument that the use of smart meters in Naperville impacts any reasonable privacy interest.

II. ONE REASON FOR THE PERVASIVE USE OF SMART METERS IS THEIR VALUE IN MAINTAINING A HEALTHY ENERGY GRID.

Smart meters have become pervasive throughout the United States in large measure because of their role in sustaining a healthy energy grid.

The information from smart meters, together with information from other systems such as GIS and outage-management and demand-management systems, allows engineers to improve grid performance, and to prevent greater problems. *See* Adam Cooper, *Smart Meter Deployments: Foundation for a Smart Grid*, Electric Perspectives, Nov./Dec. 2016, at 44–45, *available at* http://mydigimag.rrd.com/publication/frame.php?i=356335&

p=&pn=&ver=html5 (hereafter "Electric Perspectives"); *see also* September 2016 AMI Report; December 2016 SGIG Report. The ability to quickly determine, at a customer level, whether service has dropped, and to map that real-time information, can be an important diagnostic tool for energy companies to use in maintaining and restoring service, compared to analog meters that reflect only monthly usage when read by meter-readers in the field. *See* Noelia Uribe-Perez, et al., *State of the Art and Trends Review of* Smart Metering *in Electricity Grids*, 6 Appl. Sci. 68, 82 (2016) (hereafter "*Smart Metering Review*") ("[T]he introduction of outage and distribution management systems provides enhanced outage management and restoration services as well as improved distribution system and device monitoring.").

Data from smart meters also improves the effectiveness of energy load management services, and makes it possible to offer more efficient time-based pricing programs that reward participants for reducing energy consumption, both for expected and unexpected peak periods. *See* November 2016 Customer Report, at ix–x, 59 (describing an innovative pricing plan implemented by OG&E involving 120,000 customers, allowing

customers to shift usage from peak to off-peak hours, and resulting in a net benefit-to-cost ratio and savings for consumers).

III. SMART METERS ALSO HELP UTILITIES CONTROL AND REDUCE RATES BY REDUCING OPERATIONAL COSTS.

Smart meters achieve a significant public benefit because of their ability to reduce operational costs—and thereby decrease customer rates and charges.

Put simply, smart meters report which customers are out of power, and eliminate the need for customers to call in their outage. By enabling up-to-date information about problems to reach utilities automatically, smart meters help to avoid costs arising from field visits to customers' sites. *See Smart Metering Review*, at 82 (summarizing that smart meters in the United States yield material operational savings by enabling remote "reading" and "connection" and reducing "energy theft"); November 2016 Customer Report, at 4 (stating that smart meters provide "new opportunities for utilities to lower costs by automating meter reading, service connections and disconnections, and tamper and theft detection").

Some cost savings arise from the ability to remotely troubleshoot connectivity problems. Following weather-related crises, such as blizzards and hurricanes, the ability of a utility to detect and solve problems remotely

enhances the speed of the overall recovery of the affected areas. *See* Electric Perspectives, at 45 (explaining that PECO Energy could restore service to customers two to three days faster after a February 2014 ice storm hit Philadelphia). The enhanced ability to remotely troubleshoot problems further improves customer satisfaction. For example, it can allow for high-usage alerts that give customers an earlier warning if their bill is projected to be higher than normal. *See Smart Metering Review*, at 83 (smart meters "have enabled services to end-users such as automated budget assistance and bill management tools, energy use notifications, smart pricing, and demand response programs").

Ultimately, as municipalities are confronted with the need to "improve the efficiency of their buildings, reduce greenhouse gas emissions, and realize the potential of improved demand side management of energy resources," they are increasingly considering and adopting the use of smart meters as a key aspect of the solution. *Remaking Energy*, 104 Cal. L. Rev. at 1157.

IV. THE CITY'S SMART-METER PROGRAM IS REASONABLE WHEN THESE STRONG GOVERNMENT INTERESTS ARE BALANCED AGAINST THE NONEXISTENT OR MINIMAL INVASION OF ANY LEGITIMATE EXPECTATION OF PRIVACY.

The City and its residents have powerful interests in a smart-meter program. In light of the pervasiveness of smart meters, Appellant's members have little or no legitimate expectation of privacy from the use of smart meters. On balance, the City's reasonable interests outweigh Appellant's unjustified concerns, and demonstrate that its smart-meter program is constitutional under the Fourth Amendment.

The Fourth Amendment's "central requirement" is one of reasonableness. *Texas v. Brown*, 460 U.S. 730, 739 (1983). The question of whether a search is "unreasonable" is a determination "that requires a 'balancing of governmental and private interests.'" *Bell v. City of Chicago,* 835 F.3d 736, 739 (7th Cir. 2016) (quoting *New Jersey v. T.L.O.,* 469 U.S. 325, 341 (1985)), *cert. denied*, 137 S. Ct. 1231 (2017). The reasonableness of a search under the Fourth Amendment is determined "by balancing its intrusion on the individual's Fourth Amendment interests against its promotion of legitimate government interests." *Hiibel v. Sixth Judicial Dist. Court of Nev., Humboldt Cty.,* 542 U.S. 177, 187–88 (2004) (quotation omitted).

In the balancing analysis, where the intrusion is minimal or the expectations of privacy are diminished, the governmental interests that make the intrusion reasonable may be general in nature. For instance, in upholding the constitutionality of using a swab to obtain a defendant's DNA sample after his arrest, the Supreme Court explained that "[i]n some circumstances, such as '[w]hen faced with special law enforcement needs, *diminished expectations of privacy, minimal intrusions*, or the like, the Court has found that certain general, or individual, circumstances may render a warrantless search or seizure reasonable.'" *Maryland v. King*, 133 S. Ct. 1958, 1969 (2013) (emphasis added) (quoting *Illinois v. McArthur*, 531 U.S. 326, 330 (2001)).

Here, the collection of aggregate information by smart meters should be considered reasonable for several reasons. First, the information is less personal than DNA.[3] *See id.* at 1969. Second, there is no physical intrusion, unlike a blood test. *See Birchfield v. North Dakota*, 136 S. Ct. 2160, 2177–78 (2016). Third, smart meters are not part of any process for collecting

[3] Indeed, the government's frequent collection of detainees' DNA—genetic information that is even more private and personal than information about electricity usage—has been found reasonable under the Fourth Amendment. *King*, 133 S. Ct. at 1969.

information for potential use in a prosecution of anyone. Fourth, the household is already on notice that information about electricity usage is being collected. *See King*, 133 S. Ct. at 1969-70. The process of collection is standardized; the same information is collected from each household, those collecting the information use minimal or no discretion, and accordingly there would be no facts for a magistrate to review in determining the appropriateness of the alleged "search." *Id.* And finally, collecting the information serves a legitimate government purpose. *Id.*

Balanced against the privacy interests of Appellant's members in the information, the City's reasonable interests for using smart meters to achieve efficient and cost-effective electricity services are superior.

V. ASSERTIONS BY THE APPELLANT AND ITS AMICI THAT SMART-METER DATA REVEALS PRIVATE ACTIVITY WITHIN THE HOME ARE UNSUBSTANTIATED, AND ILLOGICAL.

Appellant and its amici strain to argue that smart-meter data about energy consumption reveals private activity on an individual basis within the home. This attempt falls flat.

There are significant and important differences between the character of information about personal energy consumption and other types of personal information that receive special protection. As two scholars on the

subject have explained, the personal information that can be obtained about energy use, as compared to activity in other sectors, is far diminished:

> Concerns over reidentification and abuse of data are particularly trenchant in the health care and education spheres. In both industries, the data collected can be personally revealing and potentially damaging if publicized improperly. Energy consumption data, to a large degree, lacks the severity of these concerns. Personal energy consumption, or the kWh used by a customer's appliances each month, if made public, is almost certainly less revealing than a medical file and less damaging than a school disciplinary history. . . . [T]he lower risks of disclosure and the generally lower utility of deidentified energy consumption data mean that much of the current debate over deidentification methods may not be as critical in the energy data context as it is in the health and education data contexts.

Remaking Energy, 104 Cal. L. Rev. at 1140–41.

Not only are concerns about misuse of smart-meter data unwarranted, but as the City discusses in persuasive detail in its brief, Appellant's and its Amici's assertions about the City's use of smart-meter data are unsupported. (*See* City of Naperville Br. at 29–32.)

VI. THE ABILITY OF PRIVACY ADVOCATES TO HYPOTHESIZE HOW MUNDANE DATA REGARDING A CUSTOMER'S CURRENT ENERGY USE COULD CONCEIVABLY BE PUT TO PERNICIOUS USE SHOULD NOT GIVE RISE TO A NEW CONSTITUTIONAL LIMITATION.

Appellant and its amici place too much reliance on the most hypothetical of possibilities, which is an extreme and disfavored approach to

deciding whether a law or policy should be declared facially unconstitutional.

As the U.S. Supreme Court observed in *United States v. Karo*, "we have never held that potential, as opposed to actual, invasions of privacy constitute searches for purposes of the Fourth Amendment. . . . It is the exploitation of technological advances that implicates the Fourth Amendment, not their mere existence." 468 U.S. 705, 712 (1984).

Similarly, identifying hypothetical uses for information obtained through a search does not establish the degree of the intrusion or the weight it should receive in the reasonableness balancing. What matters is the use that is intended. For example, "[i]t is not disputed . . . that chemical analysis of urine, like that of blood, can reveal a host of private medical facts about an employee, including whether he or she is epileptic, pregnant, or diabetic." *Skinner v. Ry. Labor Execs.' Ass'n*, 489 U.S. 602, 617 (1989). But in considering whether the Fourth Amendment was violated by a requirement that student athletes undergo drug testing, the Supreme Court reasoned that "it is significant that the tests at issue here look only for drugs, and not for whether the student is, for example, epileptic, pregnant, or diabetic." *Vernonia Sch. Dist. 47J v. Acton*, 515 U.S. 646, 658 (1995).

The approach of Appellant and Amici also conflicts with this Court's August 2016 description of the current analysis of whether a law is a facial violation of the Fourth Amendment. "There is no categorical bar to mounting a facial challenge under the Fourth Amendment, *but, in doing so, Plaintiffs assume a demanding burden—establish[ing] that a law is unconstitutional in all of its applications*." *Bell*, 835 F.3d at 738 (emphasis added) (citations omitted). So long as a court focuses on the incremental effect that a policy or regulation has in augmenting the government's actual authority (beyond things that the government could do even without the policy or regulation), *Bell* continues to require a plaintiff pursuing a facial attack to prove that every application of the law is unconstitutional. And in answering the question of whether every application of the law is unconstitutional, "reasonableness is still the ultimate standard under the Fourth Amendment." *Soldal v. Cook Cty., Ill.,* 506 U.S. 56, 71 (1992); *Bell,* 835 F.3d at 739 (same).

Not every application of the City's policy results in an intrusion that is unreasonable in light of the balancing of governmental and private interests. For that reason alone, the facial attack fails. Situational variables are important in deciding in any given case whether the use of technology to

learn more about something behind closed doors constitutes a search. As this court observed last year in a case involving a cell site simulator to locate a particular cell phone within a neighborhood,"[i]f a cell-site simulator is like a GPS tracker, and if the approach of the concurring opinions in *[United States v. Jones,* 132 S. Ct. 945 (2012)], is adopted, then it would be necessary to know how long the police used a simulator while searching for Patrick and just how accurate is the location information it provides." *United States v. Patrick*, 842 F.3d 540, 544 (7th Cir. 2016). Even if the court assumes that energy usage information is reflective of private personal activity, and even if the court assumes that the ability to collect usage information in a person's home is a significant intrusion for Fourth Amendment purposes, such considerations are not present in every structure served by a smart meter, and therefore would not be available to outweigh the governmental interests described at the outset of this brief.

A similar problem arises from the fact that Plaintiff acknowledges that an analog electric meter does not violate the Fourth Amendment, supposedly because the data intervals are counted in days rather than hours (or minutes). But, while smart meters can make it possible for utilities to collect usage data at much shorter intervals, such collection is no more than

an option, rather than an inherent result of the installation of smart meters. In short, even if the court accepts virtually everything in Appellant's brief, all that means about the Naperville policy's constitutionality is that "it depends." Under these circumstances, a facial challenge must fail.

Because Appellant's and its Amici's allegations regarding the use of smart-meter data are wildly speculative and completely unsupported, and because those speculative allegations still do not show that the Naperville policy is unconstitutional in every application, the Court should reject their attempt to wage a facial attack on the City's smart-meter program. It should reject their attempt to impose a new constitutional limitation to the pervasive use of smart meters in the United States.

CONCLUSION

For the reasons set forth above, Amici Curiae American Public Power Association, Edison Electric Institute, and National Rural Electric Cooperative Association respectfully request the Court to affirm the judgment below.

Respectfully submitted,

GREENE ESPEL PLLP

s/John M. Baker
John M. Baker
Aaron P. Knoll
Chris L. Schmitter
222 S. Ninth Street, Suite 2200
Minneapolis, MN 55402
jbaker@greeneespel.com
aknoll@greeneespel.com
cschmitter@greeneespel.com
(612) 373-0830

Attorneys for Amici Curiae American Public Power Association, Edison Electric Institute, and National Rural Electric Cooperative Association

CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(g)(1), the undersigned certifies that this brief complies with the type-volume limitations of FED. R. APP. P. 32(a)(7). The brief was prepared Microsoft Word 2010, which reports that the brief contains 4,345 words, excluding items listed in Fed. R. App. P. 32(f).

s/John M. Baker
John M. Baker

☑

CERTIFICATE OF SERVICE

Certificate of Service When All Case Participants Are CM/ECF Participants

I hereby certify that on May 19, 2017, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Seventh Circuit by using the CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system.

s/ Stacy D. Mattingly

☐

CERTIFICATE OF SERVICE

Certificate of Service When Not All Case Participants Are CM/ECF Participants

I hereby certify that on _____, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Seventh Circuit by using the CM/ECF system.

Participants in the case who are registered CM/ECF users will be served by the CM/ECF system.

I further certify that some of the participants in the case are not CM/ECF users. I have mailed the foregoing document by First-Class Mail, postage prepaid, or have dispatched it to a third-party commercial carrier for delivery within 3 calendar days, to the following non-CM/ECF participants:

counsel / party:	address:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

s/_____