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## **An Evaluation of the Motivations Regulating the Privacy of Utility Customer Data Through Legal Philosophies and Precedents**

### **Abstract:**

In California, the dissemination of utility customer data (UCD) is regulated by the 15/15 Rule, a 2014 decision by the California Public Utilities Commission. Under the 15/15 Rule, the state of California anonymizes the UCD of non-residential (e.g. commercial and industrial) customers if there are less than 15 customers in a region and one customer accounts for more than 15 percent of consumption ( $N = 15$ ). In contrast, for residential customers, the aggregation threshold is higher ( $N = 100$ ) and as a result, much less stringent. This decision was made in an effort to protect the privacy of consumers and the security of information, but it primarily benefits non-residential customers. Since the consumption patterns of the biggest players cannot be publicly revealed, this masking of information undermines the ability to develop policies for the needs of the public and the achievement of Los Angeles's sustainability goals. Through an exploration of existing legal philosophy and precedents regarding privacy, the current regulatory framework governing utility customer data and its motivations can be properly evaluated. Many legal scholars concur that commercial businesses and corporations are not entitled to the same personal privacy rights as individuals. Based on this rationale, the 15/15 Rule is inefficient because it prioritizes the privacy of non-residential entities, which primarily consist of businesses, over individuals and hinders the development of policies to promote sustainability for the public good.

### **Introduction:**

Scholars are currently on a mission to make Los Angeles the world's most sustainable megacity by 2050 (Sustainable LA Grand Challenge). To accomplish this sustainability goal, the city will need to find a way to minimize consumption and emissions. For this reason, utility customer data (UCD) should be used to analyze consumption patterns and transform sustainability practices.

However, UCD is not readily accessible in California because of the 15/15 Rule. The 15/15 Rule is a 2014 decision by the California Public Utilities Commission, which anonymizes the UCD of non-residential customers if there are less than 15 members in a region and any one customer accounts for more than 15 percent of the consumption quantity measured (Public Utilities Commission 2014). It is important to note that the aggregation threshold for residential customers is 100 (Public Utilities Commission 2014), which is much less stringent than 15/15. This decision was made in an effort to protect the privacy of consumers and the security of information, but it primarily benefits commercial customers. Businesses and corporations typically consume more utilities than residential households, yet the 15/15 Rule protects their UCD more rigorously.

The motivation to advocate for the release of more UCD concerns sustainability in relation to sustainable consumption and emission reductions. Sustainable energy consumption requires a collective reduction of energy use from the community in order to avoid unnecessary pollution (Gurría 2007) (Environmental Protection Agency). An experiment at the University of California, Los Angeles (UCLA) residential halls suggests that the public dissemination of consumption information motivated a 20 percent reduction in electricity consumption through decreased use of heating and cooling (Delmas & Lessem 2014). That work demonstrates that there is a link between the increased release of UCD and the potential achievement of sustainability goals.

The development of differential privacy is one solution to bypassing the 15/15 Rule. Differential privacy allows for the calibration of usability and privacy that suits the user and use case. With this method, anonymous data sharing can be facilitated as data can be extracted from individual data without deidentification in the final results (Eigner et al. 2014). Essentially, differential privacy is a guaranteed method for sharing sensitive private data statistics so that the data cannot be traced back to any individual, regardless of whether or not other metadata is available. With the implementation of differential privacy, it is possible to release UCD information while protecting anonymity and in turn, the privacy of customers.

While differential privacy is a promising solution to bypassing UCD privacy rules, it raises questions regarding decisions made about privacy. The implementation and wide adoption of differential privacy methods will not change the lack of accountability regarding resource usage that regulations, such as the 15/15 Rule, cause.

Additionally, researchers have argued that the 15/15 standard overreaches in its effort to protect privacy and neglects the public good. Instead of the 15/15 standard, through quantitative analysis, they found that a Rule of 50 offers flexibility and would be the optimal balance between privacy and usefulness (Ruddell et al. 2020). In this case, 50 refers to the number N that UCD may not be released unless it is aggregated into a group size of at least N customers.

Ultimately, UCD is useful in the development of sustainability policies, which leads to a clear need to critically evaluate the 15/15 Rule.

### **Methods:**

To assess the effectiveness and validity of the 15/15 Rule, this paper will take the approach of legal analysis. It will explore existing legal philosophies regarding privacy including the definition of privacy and who is entitled to it. It will also examine court cases and precedents regarding privacy to see how the philosophies are applied. Using these two perspectives, this paper aims to arrive at an evaluation of the 15/15 Rule through a legal lens.

### **Legal Definitions of Privacy:**

The right to privacy was first detailed in 1890 by Samuel Warren and Louis Brandeis, who defined it as man's "right to be let alone" (Warren & Brandeis 1890). However, they acknowledged that there were limitations to their theory in that "the right to privacy does not prohibit any publication of matter which is of public or general interest" (Warren & Brandeis 1890). Warren and Brandeis expanded on this by explaining that generally, an individual's private life should not be published if it has no relation to his fitness for public office, public position, or any act done by him in a public capacity.

Since Warren and Brandeis sparked discussion regarding the concept of privacy and the laws regarding privacy, other scholars have attempted to define what constitutes privacy. Some scholars have declared that the concept of privacy cannot be clearly defined and articulated. In particular, legal scholar Arthur Miller proclaimed that privacy is "exasperatingly vague and evanescent" and the laws of privacy are "a thing of threads and patches" (Baruch & Miller 1971). Miller worried growing technological advancements would threaten individuals' rights to privacy and that existing privacy laws at the time were not sufficient. He also acknowledged that the constitutional right to disseminate information conflicted with individuals' constitutional right to privacy and the two competing interests needed to be balanced.

Legal scholar Daniel J. Solove argues that the need for privacy stems from society and that privacy provides relief from various kinds of social friction. However, Solove argues that “privacy is not freedom from all forms of social friction” (Solove 2006). In fact, Solove posits that although privacy is often concerned with the effects on individuals’ lives, it is not necessarily an individualistic right. Instead, privacy is a constitutive right that extends beyond mental pain and distress caused to particular individuals, or social friction.

There are also arguments that in order to maintain human relations and survive, individuals must be in some intermediate state where there is a balance between privacy and interaction (Gavison 1984), and the purpose of this paper is to explore how to achieve that ideal state.

### **Legal Precedents Regarding Privacy:**

The Supreme Court of the United States has set several precedents concerning privacy. The right to privacy was first recognized in *Griswold v. Connecticut* (1965), which found that the personal protections in the First, Third, Fourth, Fifth, and Ninth Amendments of the Constitution implied a right to privacy, and that together, they form a “zone of privacy” (Douglas & Supreme Court Of The United States 1964)

It is important to note that privacy-related cases after *Griswold*, such as *Roe v. Wade* (1972) and *Lawrence v. Texas* (2003), rely on Justice Harlan's concurrence rather than the majority opinion. These cases extended the right to privacy through the Fourteenth Amendment (Blackmun & Supreme Court Of The United States 1972) (Kennedy & Supreme Court Of The United States 2002).

In 2005, CompTel, an AT&T competitor, filed a Freedom of Information Act (FOIA) request into the Federal Communications Commission’s (FCC) probe of AT&T. AT&T fought the request, citing that the disclosure of that information would be a violation of “personal privacy” (Supreme Court Of The United States 2011). In 2009, the U.S. Court of Appeals for the Third Circuit held that “personal privacy” did apply to corporations.

However, in 2011, the Supreme Court reversed the lower court decision in *FCC v. AT&T Inc.* (2011), finding that corporations did not have “personal privacy” rights. In a unanimous opinion, Chief Justice John Roberts wrote that “personal” does not refer to an impersonal company. He wrote that people often use the word “personal” to mean the opposite of

business-related, with a strong delineation between the two (Supreme Court Of The United States 2011).

### **Discussion:**

Based on the legal philosophies and precedents presented in previous sections, it can be seen that many legal scholars concur that privacy concerns individuals and not commercial entities. This rationale is exemplified in other privacy regulations, such as the Fair Credit Reporting Act and Health Insurance Portability and Accountability Act (HIPAA), which protect individuals' privacy. The 15/15 Rule is unique in that it protects commercial entities as well.

Thus, the 15/15 Rule is inefficient because it prioritizes the privacy of non-residential customers, or commercial entities, over the privacy of individuals as evidenced by the more stringent aggregation threshold for the former.

Additionally, when legal scholars discuss privacy as it relates to individuals, they all mention a limitation to privacy. Warren & Brandeis specified that the right to privacy cannot prohibit any publication of public interest, which lends credence to the assertion that privacy cannot be protected at the expense of the public good. Following this rationale, since reduced consumption and emissions is a goal for Los Angeles, UCD cannot be privatized to its current extent because it jeopardizes the goals of the public in that due to a lack of information, effective policies cannot be developed.

Ultimately, the extent of the privacy protections afforded to non-residential customers by the 15/15 Rule does not align with existing legal philosophies and precedents.

### **Looking Forward:**

While privacy always hinders sustainability in some way, it is especially detrimental when a resource is limited. Future research should explore the ideal relationship between privacy and sustainability. It is constructive to consider a rule for the aggregation of UCD that is flexible. Privacy does not need to be thought of as an absolute standard.

For example, the State of California is currently experiencing a drought. For this reason, UCD regarding water consumption trends would be incredibly important to study in developing policies that target reduction. In this way, a relationship between the need for UCD and scarcity can be observed. As scarcity of a resource increases, the need for information, perhaps in the form of UCD, also increases. However, the 15/15 Rule is rigid and does not adjust itself to

reflect the current state of affairs. Moving forward, it is important to develop an alternative regulation that calibrates the optimal balance between privacy and sustainability as scarcity shifts.

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