



California's new [income-graduated fixed charge](#) (IGFC) policy makes [two major moves](#). The IGFC 1) unbundles costs from volumetric rates and shifts a portion of those costs into a separate fixed charge and 2) imposes the fixed charge on the basis of income. The IGFC has been described as unprecedented—but just what is new about this rate reform and how new is it? This post, the second in a series exploring California's new IGFC policy, surveys the history of fixed charges and income-graduated charges in rate design to contextualize how much of a break the new policy represents with past practice.

Changes to residential rate design—like the IGFC policy—do not directly impact utility revenue, which is set in a separate proceeding. Instead, rate design impacts the distribution of costs between and within the customer classes. Rate design has been a site of experimentation and contestation since the earliest days of electricity provisioning. The favored principles of rate design have changed over the past century to reflect shifting material circumstances, intellectual trends, and social goals.

### **The Evolution of Fixed Charges**

Rate designs that include both a volumetric rate and a separate fixed charge have been common since the early 20<sup>th</sup> Century. The perceived benefits and downsides of the fixed

charge have changed over time, as have the costs recovered by the fixed charge. In the earliest days of electricity provisioning, fixed charges were common in residential rates due to the limits of metering technology. The installation and operation of meters was costly, so it was sometimes more efficient for utilities to impose fixed monthly charges (even though more complex rate structures had been [theorized](#) since the [late 19<sup>th</sup> century](#)). Fixed charges were sometimes imposed based on the [size of the building](#) or number of lights, but generally irrespective of actual electricity use.

Utilities swiftly adopted cheap, flat volumetric rates as metering technology improved. By the 1930s, however, utilities began applying to public utility commissions for the [right to bill](#) a separate fixed charge to cover the capital costs of extending service to residences in addition to the volumetric rate. In this case, utilities wanted separate fixed charges because they saw a benefit to their business. Marketing experiments had shown that this rate structure facilitated higher consumption than bundling all costs into flat volumetric rates. Covering the [capital costs](#) of “extending electrical service to a home, including distribution lines, step-down transformers, light lines, and meters” in a separate fixed charge allowed utilities to charge lower volumetric rates to incentivize higher use. Utilities wanted to grow the market for electricity and they were building out the country’s electricity infrastructure at substantial cost. Together, fixed charges and declining block volumetric rates—which imposed lower costs for more electricity use—[supported both goals](#).

By the early 1970s, the tide began to turn on the mid-century’s period of growth and on higher fixed charges. Fuel prices rose rapidly and electricity rates increased for the first time in decades. Between 1970 and 1982 average residential and industrial electricity prices increased by [37% and 124%](#) respectively and electricity consumption [leveled off](#). Alongside broader critiques of the post-war administrative state, rising costs drove accusations that prior electricity rates had incentivized overinvestment in physical infrastructure and overcharging ratepayers. Regulators and policymakers began to reevaluate their approach to rate design.

One major development during this period was the [elevation of efficiency](#) relative to [other ratemaking principles](#). In some states, the elevation of economic efficiency spurred a growing interest in setting retail rates at as close to marginal cost as possible, which had implications for fixed charges. In industries with high fixed costs, like electricity, adopting rates based on short run marginal costs often results in a [revenue shortfall](#). There are a range of mechanisms through which the missing fixed costs can be recovered alongside the short run marginal costs collected in the volumetric charge, including fixed charges and (at least in theory) [taxes](#).

Despite California regulators' [stated interest](#) in pricing based on marginal costs, however, fixed costs have often been bundled into volumetric rates. There are many reasons for this, including the technical challenges of setting prices at marginal costs. Another reason is that regulators balance competing principles when they set rates, from fairness to stability to customer understandability and acceptance. [Environmentalists](#) have successfully advocated for low fixed charges on the basis of conservation. The idea is that a volumetric rate based on marginal costs may be more economically efficient, but could create a price signal too weak to incentivize conservation, another important goal. Bundling more costs into the volumetric rate, on the other hand, will create a stronger price signal more likely to encourage energy conservation. Consumer protection groups have [traditionally opposed](#) larger fixed charges on fairness grounds, due to their regressive impacts. Imposing the same costs on all ratepayers will disproportionately burden lower-income ratepayers. In recent decades these critiques contributed to a trend towards higher volumetric rates and lower fixed charges, often limited to [customer-specific costs](#) (like metering, billing, and customer assistance).

A key factor that determines how high fixed charges are today is which costs utilities choose to recover in the fixed charge versus the volumetric rate. A [2017 survey](#) of 37 utilities found that about half of the surveyed utilities collected fixed charges to cover only customer-related costs (including "the costs of the meter, service drop, a portion of the transformer, billing, and customer service") while others also included "elements of distribution facilities or minimum system costs." [The survey](#) also found that, of the utilities that collected fixed charges to cover only customer-related costs, several "indicated that they [we]re moving in the direction of including additional fixed costs such as distribution costs in the fixed charge."

The preference for low or nonexistent fixed charges came at a time when the nation's electricity infrastructure was well-established and the much more [recent push](#) for climate-related electrification had yet to begin. Today we are living in a [different world](#) and, over the past decade, the trend has started to [shift](#) on fixed charges. Utilities around the country have been [calling for](#) higher fixed charges and there has been [greater interest](#) in fixed charges generally. The trend dates to a 2013 [Edison Electric Institute report](#) highlighting the disruptive challenges of distributed resources and recommending that utilities impose higher fixed charges. Investor-owned utilities are looking out for their interests, but they aren't the only ones changing course on fixed charges. To take one example: The joint [opening brief](#) in the IGFC proceeding from consumer advocates, the Utility Reform Network, and environmental advocates, the Natural Resources Defense Council, acknowledges these groups' historical aversion to fixed charges and the new circumstances

that have motivated them to support the IGFC today.

### **Income-Based Rate Design**

Conceptions of economic justice have been at the core of public utility regulation since the [Progressive Era](#). As early as the 1920s, reformers [pushed back](#) against regressive rates that “worked against the electrical modernization of lower-income households and households in technologically inadequate dwellings.” In 1961, James Bonbright’s canonical *Principles of Ratemaking* included principles relevant to [equity](#), including that rates should seek “fairness . . . in the apportionment of total costs of service among the different ratepayers so as to avoid arbitrariness and capriciousness.”

Today, [commitments to equity](#) and reversing regressive impacts of electricity rate design remain a [greater priority](#) than ever before. Regulators are acting on these redistributive concerns. A [2019 study](#) of 1,300 utilities across the country found that utilities “whose ratepayers have more unequal incomes levy more redistributive tariffs, charging less to low users and more to high users.” In the IGFC proceeding, [a decision](#) from April of this year adopted a set of rate design principles including: “All residential customers (including low-income customers and those who receive a medical baseline or discount) should have access to enough electricity to ensure that their essential needs are met at an affordable cost.” But this principle isn’t new. It is a slightly modified version of a [CPUC principle](#) dating to 2014, which has been [applied](#) to evaluate rate design proposals ever since.

The justice in “just and reasonable rates” has come to include a broad range of consumer protections including rate discounts and benefits available to low-income ratepayers throughout the country. California discounts rates for low-income Californians in the California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance Program (FERA) programs. Many [other states](#) have comparable discounts or provide heating or cooling benefits to low-income ratepayers. The federal government has also recognized the necessity of electricity as a social good and [provides assistance](#) nationwide.

Fixed charges have been historically disfavored as regressive, but AB 205 tackles the equity issue head on by imposing the fixed charge on an income-graduated basis. This isn’t the first time fixed charges have taken income into consideration. The [2017 survey](#) of utilities described above found that: “Some utilities offer a lower fixed charge to low-income customers or alternatively offer a fixed credit to low-income customers that could be characterized as simply providing a lower fixed charge to low-income customers.” For example, Oklahoma Gas & Electric, DTE Energy, and Glendale Water & Power all offered low-income discounts issued as monthly bill credits. The Modesto Irrigation district offered

a discount both on the monthly fixed charge and the first 850 kWh of electric usage.

The IGFC goes a step further than these income-based programs. Instead of dividing ratepayers into just two groups—those eligible for discounted rates, like CARE/FERA, and all the rest—the policy must include at least three tiers. Proposals for the first version of the IGFC include between three and five tiers, which comprise all ratepayers. A system that includes more tiers should allow for a more granular design to the income-graduated rates.

### **The IGFC Proceeding Today**

Imposing fixed charges and providing relief to low-income customers are both commonplace. The IGFC combines these approaches in a new way in order to access the benefits of a higher fixed charge and lower volumetric rate, without the regressive impacts. The questions that will determine just how much of a break the IGFC marks with common practice—which costs will be shifted to the fixed charge and how the income tiers will be structured—are being tackled in the opening briefs of the CPUC proceeding now.

The Administrative Law Judge in the IGFC proceeding [has limited](#) the first version of the IGFC to one which will “rely on existing income verification processes used by the Commission for the California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance Program (FERA) programs.” This is meant to decrease the complexity of the initial proceeding to ensure compliance with the statutory deadline of summer 2024. As a result, the Administrative Law Judge will not consider some of the more ambitious initial proposals for the first version of the charge. Even with this limitation, however, the opening briefs filed last week propose several very different approaches.

The first major question for parties is which costs should be shifted into the fixed charge. Many of the IGFC proposals include higher fixed charges than national averages. One reason is that they shift costs more often recovered in the volumetric charge into the fixed charge. For context, the monthly fixed charges in the 2017 survey discussed above ranged from \$5-\$24. The joint opening brief from the big three utilities for the first version of the IGFC, [proposes](#) fixed charges ranging from \$13-\$51 (PG&E), \$24-\$73 (SDG&E), and \$10-\$51 (SCE). On the other end of the spectrum, Clean Coalition, a renewable energy organization, [shifts](#) fewer costs out of the volumetric charge, resulting in fixed charges ranging from \$0-\$18.51. Somewhere in between, the Utility Reform Network and NRDC [has proposed](#) charges ranging from \$5-\$40.17, depending on several factors. Of course, each proposal will also reduce the volumetric rates by the costs they shift to the fixed charge.

The second reason the IGFC proposals include charges that are higher than the national average is because California has some of the highest electricity costs in the country. Reducing costs will also be necessary to make California rates affordable, but the IGFC will not accomplish this on its own.

The second major question parties must address is how to structure the income brackets for the fixed charge. On one end, the three major utilities have proposed a three-tiered structure, with CARE/FERA customers with a household income 100% Federal Poverty Level or less in the first bracket, all other CARE/FERA customers in the second bracket, and all non-CARE/FERA customers in the third bracket. Clean Coalition also proposes a three-tiered structure with CARE customers in the first bracket, FERA customers in the second, and all other customers in the third.

Public interest advocates from the environmental, consumer protection, and environmental justice spaces also have proposed a range of options. These proposals generally dedicate more attention to the income-graduated piece of the fixed charge and some advocate for expansive use of existing CARE/FERA income verification processes. The California Environmental Justice Alliance has [proposed](#) a five-tiered structure that the organization argues tracks the progressiveness of California income tax liability and “contains the smallest regressivity within the brackets of any proposal.” Sierra Club has [proposed](#) a different five-tiered structure.

The adoption of the IGFC reflects changing ideas about how rates should be set in response to the need to electrify and ensure equitable rates. But California is known for innovative, unprecedented energy and environmental policy. The more important question is whether the new rate structure will be able to deliver on [AB 205's](#) goals of stabilizing rates, more fairly distributing the burden of supporting the electric system, and contributing to California's climate change goals. Upcoming posts will delve into these lively debates.