

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY

Respondent.

DOCKETS UE-220066, UG-220067, and UG-210918 (*Consolidated*)

**RESPONSE TESTIMONY OF DAVID KONISKY
ON BEHALF OF
WASHINGTON STATE OFFICE OF ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT DK-1T

December 8, 2023

RESPONSE TESTIMONY OF DAVID KONISKY

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RESPONSE TESTIMONY OF DAVID KONISKY

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DOCKETS UE-220066, UG-220067, and UG-210918 (*Consolidated*)

EXHIBITS LIST

Exhibit DK-2	David Konisky CV
Exhibit DK-3	Nature Energy Article: Sociodemographic Disparities in Energy Insecurity among Low-income Households Before and During the COVID-19 Pandemic
Exhibit DK-4	Environmental Research Letters Article: The Persistence of Household Energy Insecurity during the COVID-19 Pandemic
Exhibit DK-5	Proceedings of the National Academy of Sciences Article: Behavioral and Financial Coping Strategies among Energy Insecure Households
Exhibit DK-6	iScience Article: Utility Disconnection Protections and the Incidence of Energy Insecurity in the United States
Exhibit DK-7	Nature Communications Article: Unveiling Hidden Energy Poverty using the Energy Equity Gap

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I. INTRODUCTION / SUMMARY

Q. Please state your name and business address.

A. My name is David Konisky, and my business address is 3706 E. Silver Creek Court, Bloomington, Indiana 47401.

Q. By whom are you employed and in what capacity?

A. I am the sole proprietor of DMK Consulting, LLC, an independent consulting firm which does work on environmental and energy policy. I am also a full-time, tenured professor at the Paul H. O’Neill School of Public and Environmental Affairs at Indiana University, Bloomington.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Public Counsel Unit of the Washington Attorney General’s Office (Public Counsel).

Q. Please describe your professional qualifications.

A. I am a Professor at the Paul H. O’Neill School of Public and Environmental Affairs at Indiana University where I hold the Lynton K. Caldwell Chair in Environmental Studies. I am also the Co-Director of the Energy Justice Lab. I have a Bachelor’s degree in Environmental Studies and History from Washington University in St. Louis, Master’s degrees in Environmental Management and International Relations from Yale University, and a PhD in Political Science from the Massachusetts Institute of Technology. I have an extensive record of research productivity and impact in the field of environmental and energy policy, with specific expertise in the areas of environmental justice, regulation, public

1 attitudes, statistics, and geographic information systems. I have published 85
2 peer-reviewed articles in leading environmental, public policy, and social science
3 journals, authored or edited six books, and contributed to numerous book chapters
4 and technical reports. My research has been recognized with numerous national
5 awards and I am an elected Fellow of the National Academy of Public
6 Administration.

7 Over the past several years, I have published numerous peer-reviewed
8 studies, technical reports, and policy briefs about residential energy insecurity and
9 utility disconnections. This research has been financially supported by the
10 National Science Foundation, the Alfred P. Sloan Foundation, and other
11 organizations, and the peer-reviewed studies from this research have been
12 published in leading journals including *Nature Energy*, *Proceedings of the*
13 *National Academy of Sciences*, and *Environmental Research Letters*. In addition,
14 the Energy Justice Lab that I co-direct has developed a Utility Disconnections
15 Dashboard, which compiles and shares national utility data on disconnections and
16 state-level policies to protect customers from utility disconnections. A copy of my
17 Curriculum Vitae is included as Exhibit DK-2.

18 **Q. Are you sponsoring any exhibits to your Response Testimony?**

19 A. Yes, I am sponsoring the following exhibits:

Exhibit DK-2	David Konisky Curriculum Vitae
Exhibit DK-3	Nature Energy Article: Sociodemographic Disparities in Energy Insecurity among Low-income Households Before and During the COVID-19 Pandemic

Exhibit DK-4	Environmental Research Letters Article: The Persistence of Household Energy Insecurity during the COVID-19 Pandemic
Exhibit DK-5	Proceedings of the National Academy of Sciences Article: Behavioral and Financial Coping Strategies among Energy Insecure Households
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Exhibit DK-7	Nature Communications Article: Unveiling Hidden Energy Poverty using the Energy Equity Gap

1 **Q. What is the purpose of this testimony?**

2 A. The purpose of this testimony is to inform the Utilities & Transportation
3 Commission’s (UTC or Commission) evaluation of Puget Sound Energy’s (PSE
4 or the Company) request to expand its dunning, which would put more customers
5 at risk of disconnections. The testimony presents evidence about the incidence of
6 utility disconnections across the United States as well as socio-demographic
7 disparities in the types of households that utilities disconnect due to nonpayment.

8 **II. ENERGY INSECURITY AND DISCONNECTIONS**

9 **Q. What is energy insecurity?**

10 A. Energy insecurity refers to the inability of a household to adequately meet its
11 basic residential energy needs. Examples of energy insecurity include the inability
12 to afford to pay for energy services (electricity, natural gas, fuel oil, etc.),
13 forgoing food, medicine, or other essential services to pay energy costs, leaving
14 one’s home at an unhealthy temperature (i.e., too hot or too cold) to avoid energy

1 costs, and the threat or actual or loss of service when a utility disconnects a
2 customer due to nonpayment. Utility disconnections are commonly considered the
3 most severe form of energy insecurity since they entail a complete loss of service.
4 Numerous studies have demonstrated that high financial energy burdens increase
5 the risk of poverty, and that energy insecurity is associated with adverse physical
6 and mental health,¹ and can force households into difficult decisions such as
7 whether to “heat or eat.”²

8 **Q. How widespread is energy insecurity in the United States and in the State of**
9 **Washington?**

10 A. According to the U.S. Energy Information Administration’s Residential Energy
11 Consumption Survey (RECS), 27 percent of U.S. households experienced some
12 form of energy insecurity during 2020 (the most recent year of data available).³
13 As shown in Figure 1, 20 percent of U.S. households reported having to reduce or
14 forgo food or medicine to pay energy costs and 10 percent reported having to
15 leave their home at unhealthy temperatures. In terms of the most severe form of
16 energy insecurity—utility disconnections—10 percent of respondents, representing

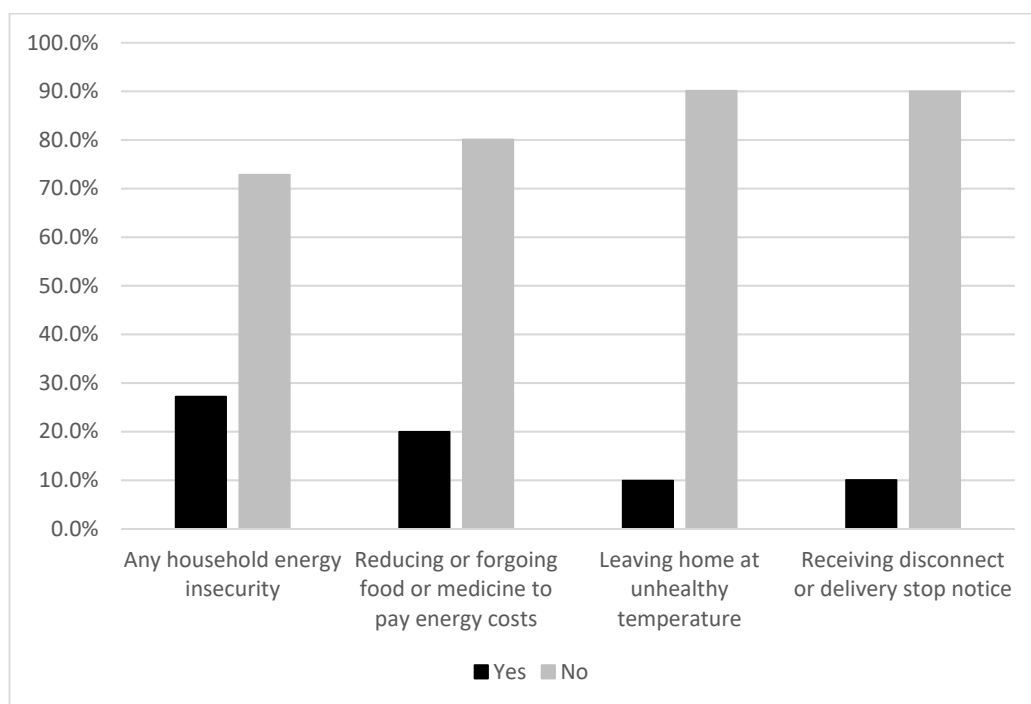
¹ See, Jeremiah Bohr, Anna C. McCreery, *Do energy burdens contribute to economic poverty in the United States? A panel analysis*, *Social Forces* 99, 155–177 (2020); Diana Hernández, *Understanding ‘energy insecurity’ and why it matters to health*, *Soc. Sci. & Med.* 167, 1–10 (Nov. 2016); Dana Hernández, Eva Siegel, *Energy insecurity and its ill health effects: a community perspective on the energy-health nexus in New York City*, *Energy Rsch. & Soc. Sci.* 47, 78–83 (Apr. 2019); Ying Huang, Colleen M. Heflin, Asiya Validova, *Material hardship, perceived stress, and health in early adulthood*, *Anns. of Epid.* 53, 69–75 (Jan. 2021); Christine Liddell, Chris Morris, *Fuel poverty and human health: a review of recent evidence*, *Energy Pol’y* 38, 2987–2997 (June 2010); Ziyu Zhang, Hongting Shu, Hong Yi, Xiaohua Wang, *Household multidimensional energy poverty and its impacts on physical and mental health*, *Energy Pol’y* 156, 112381 (Sept. 2021).

² Jayanta Bhattacharya, Thomas DeLeire, Steven Haider, Janet Currie, *Heat or eat? Cold-weather shocks and nutrition in poor American families*, *Am. J. of Pub. Health* 93, 1149–1154 (2003).

³ U.S. Energy Information Administration, *Residential Energy Consumption Survey, 2020*.
<https://www.eia.gov/consumption/residential/>.

1 12.36 million households, reported having received a disconnect or delivery stop
2 notice because of nonpayment of a bill. The RECS has not released state-level
3 data, so there are not specific statistics for the state of Washington. However, the
4 indicators for the Pacific region of the country are generally similar to the national
5 patterns.⁴

6 **Figure 1: U.S. Energy Information Administration’s Residential Energy Consumption Survey**
7 **(Prevalence of Energy Insecurity among U.S. Population 2020)⁵**



8 More recent data from the U.S. Census Bureau’s Household Pulse Survey⁶ shows
9 similar patterns. Per the October 18–October 20, 2023, wave of the survey, about
10 17.3 percent of the U.S. adult population reside in households that reported being

⁴ *Id.*

⁵ *Id.*

⁶ U.S. Census Bureau, *Week 63 Household Pulse Survey: October 18 – October 30*, at Table 4 Housing Tables (Household Energy Use and Spending in the last 12 Months, by Select Characteristics) (Nov. 8, 2023).

1 unable to pay some or the full amount of an energy bill at some point during the
2 last twelve months. Of this 17.3 percent, for 4.0 percent it was “almost every
3 month”, 7.2 percent “some months”, and 6.1 percent one or two months.

4 The Household Pulse Survey also provides state level data, though the
5 survey’s small state sample sizes require these data to be interpreted cautiously.
6 For the state of Washington,⁷ 14.6 percent of the adult population reside in
7 household that reported being unable to pay some or the full amount of an energy
8 bill at some point during the last twelve months. Of this 14.6 percent, for 4.3
9 percent it was “almost every month,” 4.3 percent “some months,” and 5.9 percent
10 one or two months of the year.

11 These data on energy insecurity illustrate the widespread nature of this
12 form of material hardship.

13 **Q. What how many customers in the United States do energy utilities disconnect**
14 **each year because of nonpayment?**

15 A. Not all (or even most) energy utilities in the United States are required to report
16 the number of customers that they disconnect each year due to nonpayment. There
17 is no national disclosure requirement, and state requirements vary, with only some
18 states having mandatory disclosure rules for select utility companies. For these
19 reasons, it is not possible to ascertain the total number of disconnections that
20 occur across the United States. The Commission, however, currently requires
21 disclosure on a quarterly basis for Washington investor-owned utilities.

⁷ *Id.*

1 The Energy Justice Lab has compiled disconnection counts from utilities
2 across the United States where reporting is required and has developed the most
3 comprehensive accounting of known energy utility disconnections. These data are
4 publicly available at the Energy Justice Lab’s Utility Disconnections Dashboard.⁸

5 For the last full year of data available – 2022 – we find that there were
6 more than 2.66 million electricity or natural gas disconnections of residential
7 customers due to nonpayment across the country. It is important to emphasize that
8 this total represents a *drastic* undercount of the true number of disconnections
9 because of the lack of national reporting. Disconnection rates (the number of
10 residential disconnections divided by the total number of residential customers)
11 range considerably across utilities, from as low as less than 0.1 percent to more
12 than 10.0 percent.

13 **Q. How many residential customers does Puget Sound Energy disconnect**
14 **because of nonpayment?**

15 A. Over the period of January 2019 to September 2023, PSE reports having
16 disconnected 45,804 residential customers due to nonpayment.⁹ This period spans
17 an extended time in which there was a disconnection moratorium in place for PSE
18 and other utilities in Washington. PSE’s annual disconnection totals during this
19 period are as follows:

⁸ Sanya Carley and David Konisky, *Utility Disconnections Dashboard*, Energy Just. Indiana U (Jan 30, 2023) <https://utilitydisconnections.org>.

⁹ *Id.*

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Table 1: Puget Sound Energy's Annual Disconnection Totals

Year	Total Disconnections
2019	38,458
2020	938
2021	0
2022	1,566
2023	4,842

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The years of 2020, 2021, and 2022 were unusual years due to policy restrictions on disconnections during the COVID-19 pandemic.

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Figure 2 graphs PSE’s residential disconnections on a monthly basis over this time period. The trend clearly shows the effect of the disconnection moratorium that was in place during the COVID-19 pandemic, as well PSE’s ongoing practices required by the Commission to limit disconnections. Over the course of 2023, PSE has been reconnecting an increasing number of customers.

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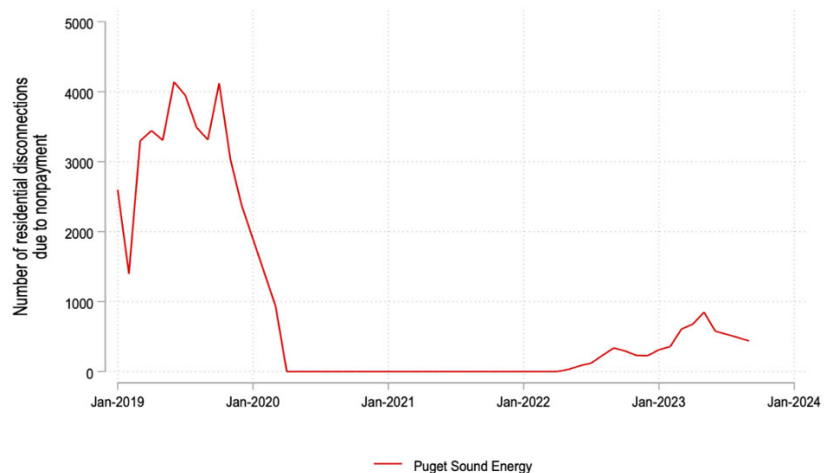
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Figure 2: Monthly Residential Disconnections, Puget Sound Energy, January 2019–September 2023¹⁰



¹⁰ *Id.*

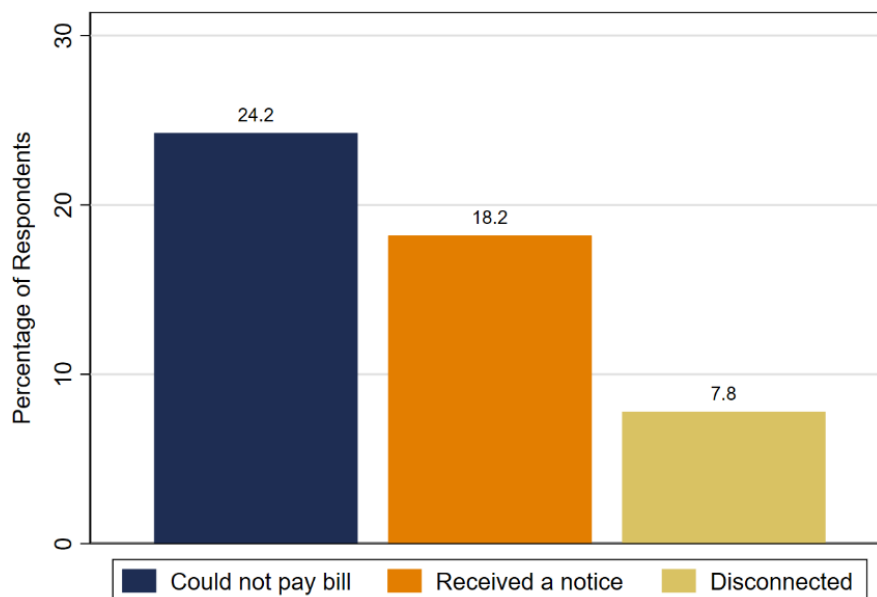
1 **Q. What are the socio-demographic correlates of utility disconnections?**

2 A. Over the past several years, I have collaborated with colleagues on research that
3 examines the socio-demographic patterns of utility disconnections. Specifically,
4 we have administered surveys to low-income households to quantify the
5 prevalence of energy insecurity among low-income Americans and to identify the
6 factors correlated with its incidence. These surveys were given to nationally
7 representative samples of low-income households in four separate waves between
8 May 2020 and June 2021, such that we re-survey households over time to collect
9 longitudinal data. The samples consisted of individuals residing in households
10 with incomes within 200 percent of the Federal Poverty Line (FPL), which at the
11 time of the surveys equated to \$25,520 for an individual, and \$52,400 for a family
12 of four. The first wave of the survey had 2,813 respondents, with the subsequent
13 three waves having 2,247, 1,670, and 1,378 respondents, respectively. Findings
14 from these surveys have been published in peer-reviewed articles in the scientific
15 literature, copies of which are contained in Exhibit DK-3, Exhibit DK-4, and
16 Exhibit DK-5.

17 Figure 3 shows overall rates of energy insecurity over the 12-month period
18 of the study. According to the surveys, about 24 percent of low-income
19 households were unable to pay an energy bill in at least one month, about 18
20 percent received a shut-off notification in at least one month, and nearly 8 percent
21 reported having had their service disconnected in at least one month.

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Figure 3: Rates of Energy Insecurity among Low-Income Households, May 2020-2021¹¹



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Extrapolating these rates of energy insecurity to the entire U.S. low-income population (again, measured here as people and households within 200 percent FPL), we estimated that, during the year of the study, 23.5 million people (4.6 million households) could not pay a bill, 17.7 million people (3.5 million households) received a shut-off notification, and 7.5 million people (1.5 million households) experienced a utility disconnection. Regarding the statistics on disconnections, it is important to note that the period of the time covered by the surveys coincided with COVID-era moratoria on disconnections in many parts of the country, which undoubtedly reduced the incidence of disconnections.¹²

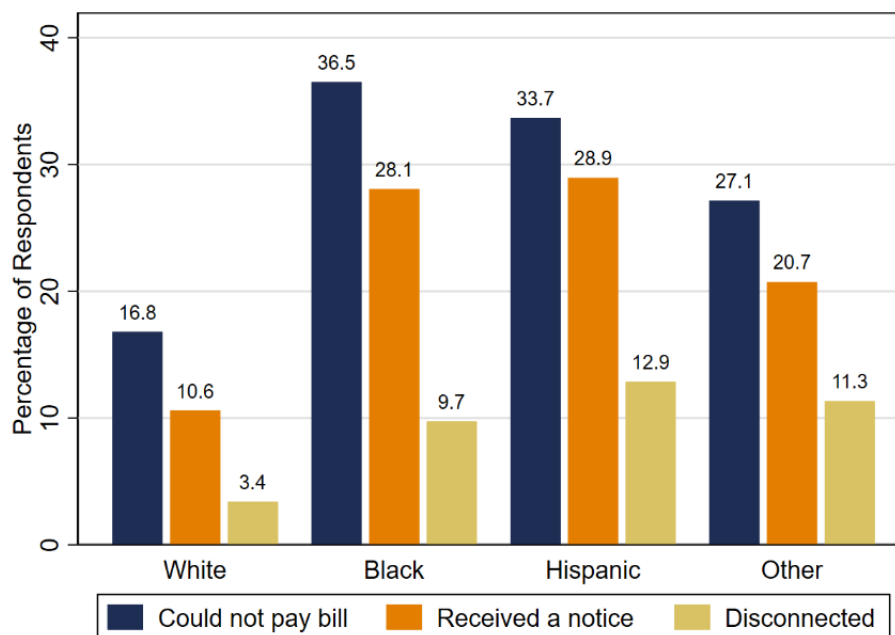
Further analysis of the survey data reveals several notable socio-

¹¹ Sanya Carley and David Konisky, *Survey of Household Energy Insecurity in Time of COVID Preliminary Results of Wave 4*, Energy Just. Indiana U. (July 5, 2021) https://energyjustice.indiana.edu/doc/wave_4_report.pdf.

¹² Konisky, Exh. DK-6 (Nature Communications Article: Unveiling Hidden Energy Poverty using the Energy Equity Gap).

1 demographic correlates of utility disconnections, including substantial disparities
2 in the rates of disconnections across population groups. Figure 4 shows rates of
3 energy insecurity across different racial and ethnic groups. Focusing on
4 disconnections (represented by the gold bars), the data indicate that during the
5 year of the survey, about 10 percent of Black and 13 percent of Hispanic low-
6 income households experienced a disconnection, compared to 3.4 percent of
7 White low-income households. That is, disconnection rates for Black and
8 Hispanic low-income households were about three and four times, respectively,
9 higher than White low-income households.

10 **Figure 4: Rates of Energy Insecurity among Low-Income Households across Race and**
11 **Ethnicity, May 2020–2021¹³**

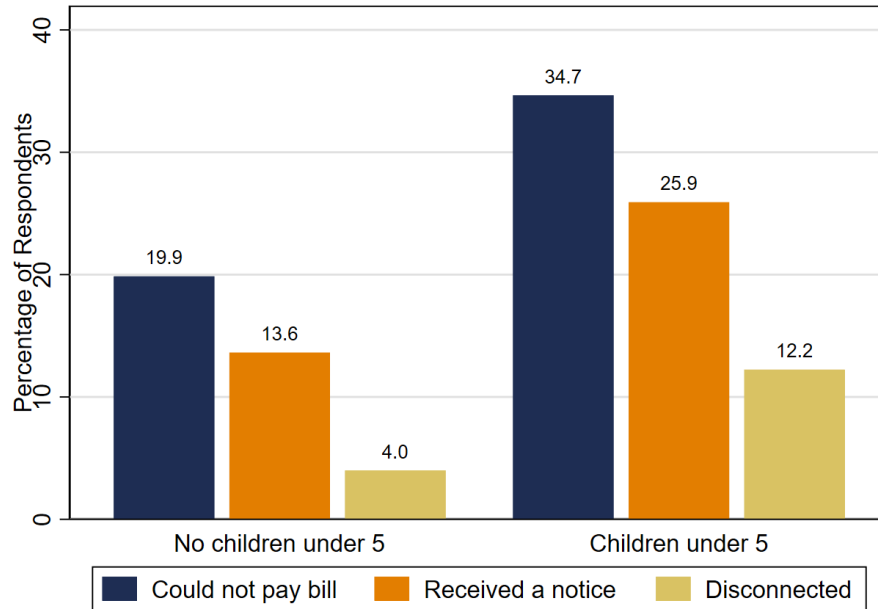


12 Similar analysis shows disparities among low-income households with

¹³ Sanya Carley and David Konisky, *Survey of Household Energy Insecurity in Time of COVID Preliminary Results of Wave 4*, Energy Just. Indiana U. (July 5, 2021) https://energyjustice.indiana.edu/doc/wave_4_report.pdf.

1 young children. As shown in Figure 5, low-income households with at least one
2 child under the age of five years old were three times more likely to be
3 disconnected during the study period.

4 **Figure 5: Rates of Energy Insecurity among Low-Income Households with and without**
5 **Children under the Age of Five, May 2020-2021¹⁴**



6 Further statistical analysis, including multivariate regression analysis,
7 shows that these types of disparities persist, even when controlling for a large
8 suite of individual and contextual factors that might also be associated with
9 different forms of energy insecurity. In addition to disparities across race,
10 ethnicity, and children in the home, our analysis shows that people residing in
11 deficient or energy inefficient housing conditions and households with a resident
12 who relies on an at-home electronic medical device were all more likely to
13 experience higher rates of energy insecurity, including utility disconnections.

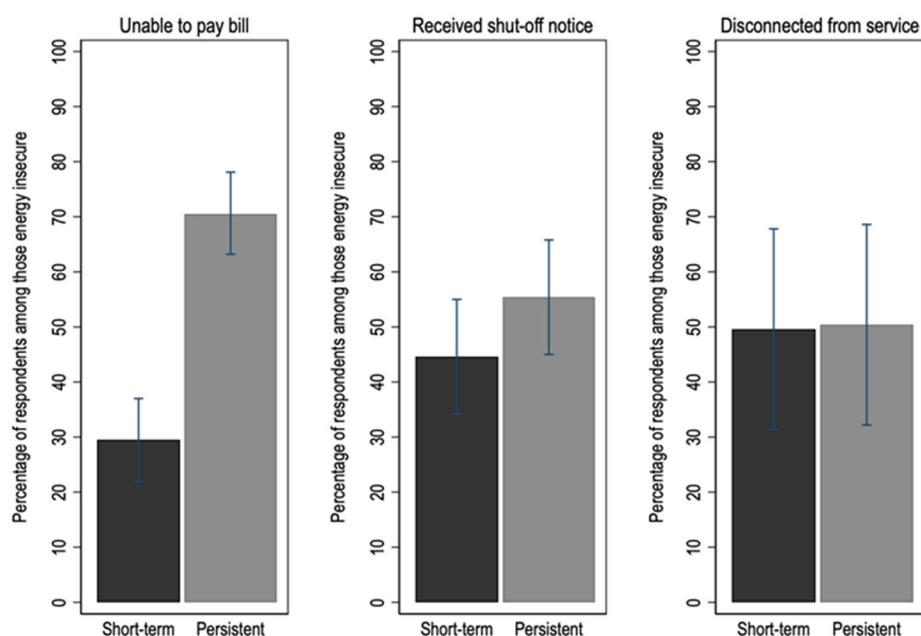
¹⁴ *Id.*

1 And, to underscore, these factors emerge as important correlates even when
2 accounting for household income.

3 **Q. Is energy insecurity and short-term or persistent problem for low-income**
4 **households?**

5 A. Our research shows that, among those that experience energy insecurity, it is often
6 recurring situation.¹⁵ Figure 6 below shows results of an analysis that considers
7 whether respondents in our surveys experienced each type of energy insecurity
8 once or on multiple occasions over the course of the study period.

9 **Figure 6: Short-term and Persistent Residential Energy Insecurity¹⁶**



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The data reveal that, for example, households that are unable to pay an

¹⁵ Konisky, Exh. DK-4 (Nature Communications Article: Unveiling Hidden Energy Poverty using the Energy Equity Gap).

¹⁶ *Id.*

1 energy bill in a given month, are more likely to experience similar affordability
2 challenges in a future month. This recurring pattern often results in the
3 accumulation of debt and likely increases the risk of surpassing some threshold at
4 which time a utility company is more likely to shut-off service. The same pattern
5 occurs for disconnections. Our research shows that, during May 2020 and May
6 2021, about half of the low-income households in our surveys that reported
7 having had their service disconnected, had it disconnected more than once.

8 **Q. How do people cope when they are disconnected from residential energy**
9 **services?**

10 A. When a utility company disconnects customers from electricity or another energy
11 service (e.g., natural gas), they engage in a variety of coping strategies in
12 response. For people who are experiencing severe material hardship, coping with
13 a utility disconnection is likely to exacerbate this hardship and, in some cases,
14 may result in risky or dangerous practices.

15 Through our surveys with low-income households, we identified several
16 common coping strategies.¹⁷ Some households take financial measures such as
17 seeking energy assistance from a state or local agency, borrowing money from
18 family, friends, neighbors, or a religious organization, or seeking out a payment
19 arrangement with the utility. These types of strategies are generally low risk.
20 However, our research also finds that people often adopt financially risky
21 strategies such as accumulating debt, engaging in bill balancing (i.e., the practice

¹⁷ Konisky, Exh. DK-5 (Proceedings of the National Academy of Sciences Article: Behavioral and Financial Coping Strategies among Energy Insecure Households).

1 of paying down only a portion of one or more bills to have enough to pay another
2 bill), taking out high-interest loans (e.g., payday loan), or forgoing other essential
3 expenditures such as food or medicine to pay off their arrears and to get
4 reconnected. These types of measures may provide short-term relief, but they may
5 exacerbate the financial stress of affected households and leave people in a worse
6 long-term situation.

7 Our research also finds that, without power, people engage in a variety of
8 behavioral coping strategies such as the use of space heaters, a fireplace, an oven,
9 a dryer vent, or burning trash to generate heat. People also may opt to maintain
10 the temperature in their home at an uncomfortably high or low temperature, and
11 recent research shows that this temperature limiting behavior is more common
12 among historically disadvantaged populations.¹⁸

13 **Q. What can national data tell us about potential disparities in utility**
14 **disconnections for customers of Puget Sound Energy?**

15 A. The survey research described above was designed to be nationally-
16 representative, not representative of either the state of Washington or PSE
17 customers. However, there is no specific reason to believe that the findings for
18 low-income populations nationally are not broadly applicable. That is, PSE
19 customers who experience energy insecurity and face the risk of disconnections
20 due nonpayment are likely to share similar attributes with those who face these
21 circumstances nationally. These customers are more likely to be people of color,

¹⁸ Konisky, Exh. DK-7 (Nature Communications Article: Unveiling Hidden Energy Poverty using the Energy Equity Gap).

1 families with young children, households with medically vulnerable residents, and
2 people living in poor housing conditions.

3 **Q. How many people are likely to be disconnected under PSE's proposed**
4 **phased approach to resume dunning?**

5 A. Carol L. Wallace's testimony of November 17, 2023, describes PSE's proposed
6 phased approach to resuming dunning for its customers.¹⁹ Currently, PSE
7 indicates that it is only pursuing disconnections among customers who have not
8 received bill assistance in the last two years or with incomes estimated to be
9 greater than 200 percent FPL or 80 percent AMI and who have arrears that exceed
10 \$1,000.²⁰ The pending request is to lower both the income and arrears threshold in
11 a phased manner between now and June 2024.²¹ At the end of the phased
12 approach, customers at any income level and with arrears of \$150 or more would
13 be at risk of disconnection as part of the Company's expanded dunning process.
14 Per PSE's estimates, over this period, 101,688 customers would newly enter the
15 dunning process, 42,709 customers would reach the disconnect queue, and 2,563
16 customers would be disconnected for non-payment.²² Based on PSE's numbers,
17 approximately 2.5 percent of their customers who enter the dunning process
18 would ultimately have their service disconnected due to nonpayment, and about
19 6.0 percent of their customers who reach the disconnect queue would ultimately
20 have their service disconnected due to nonpayment.²³

¹⁹ Direct Testimony of Carol L. Wallace, Exh. CLW-13T.

²⁰ *Id.* at 17:14–16.

²¹ Wallace, Exh. CLW-13T at 19 (Table 2).

²² *Id.*

²³ *Id.* (6.0 percent extrapolated from data displayed in Table 2).

1 Wallace notes that, over the past six months, 12 percent of PSE's
2 customers who entered the Company's disconnect queue were disconnected,
3 which is double the rate the Company seems to be assuming moving forward.²⁴ If
4 the actual rate is 12 percent, using PSE's estimates of the number of customers
5 that would enter the disconnect queue, 5,125 customers would be disconnected.
6 Wallace does not explain the difference in the rate of projected disconnections
7 versus observed rate of disconnections among customers in the disconnection
8 queue.

9 **Q. Who is likely to be disconnected under PSE's proposed phased approach to**
10 **resume dunning?**

11 A. Under the proposed phased approach, beginning in November 2023, PSE
12 indicates that customers who will enter dunning process will have income
13 thresholds of above and below 200 percent FPL (i.e., there is no specific income
14 threshold). Recall, that the survey research I have described in this testimony
15 focused on low-income households with incomes at or below 200 percent FPL. In
16 my judgment, the survey research suggests that the customers likely to be
17 disconnected through this proposed approach are likely to share similar attributes.
18 That is, absent targeted efforts to mitigate them, there will likely be substantial
19 disparities in who PSE disconnects from service, with people of color, families
20 with young children, people living in dwellings with poor conditions, and those
21 who are medically vulnerable most affected.

²⁴ *Id.* at 20:1-2.

1 **Q.** **Does this conclude your testimony?**

2 A. Yes it does.