

**ComEd Summer Preparedness Hearing
Committee on Environmental Protection and Energy
Scheduled for Wednesday, July 12, at 10:00 a.m. in Council Chambers**

1. Please discuss reliability data for the City of Chicago using industry-standard metrics (SAIFI and CAIDI).

In 2022, overall reliability in the City of Chicago (measured by the System Average Interruption Duration Index, or SAIDI) was best on record and 81 percent better than the 2007-2011 average of 155 minutes. SAIDI performance in 2022 of 29 minutes was nine minutes better than in 2021 and one minute better than the previous best on record performance of 30 minutes in 2019.

The City of Chicago 2022 System Average Interruption Frequency Index (SAIFI), which measures the frequency of outages customers experienced, was also the best performance on record at 0.31. This performance was 30 percent better than in 2021, when SAIFI was 0.45, and 70 percent better than the average of 1.04 for 2007-2011. 2022 performance was 21 percent better than the prior best performance on record of 0.40 in 2019. Non-Storm SAIFI was also the best performance on record at 0.22 and 69 percent better than the historic average.

The 2022 Customer Average Interruption Duration Index (CAIDI), which measures the average length of outages that customers experienced, was 92 minutes, which is 38 percent better than the 2007-2011 historic average. CAIDI without storms was 62 minutes. In 2022, Chicago customers experienced a 99.99 percent reliability rate, which is the best on record.

1.1 Is reliability in the city improving?

Yes. Prior to 2012, the City of Chicago SAIFI was 1.04 with storms and 0.71 without storms. ComEd System SAIFI with storms across northern Illinois was 1.36. In 2022, the City of Chicago SAIFI with storms was 0.31 and 0.22 without storms. The System SAIFI also improved to 0.55 with storms.

1.2 Is this reliability consistent across all areas of the city? Where is improvement needed?

Yes, reliability improved across the city. In 2022, no Chicago Ward had a SAIFI above 0.60, which is half of the 1.20 benchmark threshold that the City established several years ago. ComEd has rigorous preventive and corrective maintenance programs designed to maintain this reliability performance. However, ComEd continues to monitor for underperforming wards (and there were none in 2022), worst performing circuits, and components on the grid that require further actions. We prioritize this work every year since performance can significantly change from year-to-year due to storms, public damage, and other uncontrollable factors.

1.3 Does your new tracking of environmental justice census block reliability data indicate any disparities in service reliability in environmental justice communities versus either the city overall or non-environmental justice neighborhoods in Chicago?

The majority of EIEC areas or Equity Investment Eligible Communities performed better than the overall City performance. EIEC includes environmental justice communities and R3 communities (Restore, Reinvest, and Renew) per the state’s Climate and Equitable Jobs Act (CEJA). Here are some important facts relating to ComEd 2022 performance in EIEC areas in Chicago:

- *61% of City of Chicago EIEC census blocks experienced better than the city average SAIFI (meaning 61% experienced fewer interruptions on average)*
- *68% of City of Chicago EIEC census blocks experienced better than the city average SAIDI (meaning 68% experienced fewer durations of interruptions on average)*

ComEd’s system is interconnected and does not adhere to neighborhood, community, or county boundaries. Circuits, Substations, and other distribution system components serve customers in multiple geographies including both EIEC and Non-EIEC areas. When ComEd analyzes system performance, ComEd identifies circuits and components that underperform on a variety of metrics through data analysis and identifies improvements that are most likely to improve performance.

2. What specific steps has ComEd taken to improve its infrastructure and prepare for the increased demand on the grid with hotter temperatures?

Earlier this spring, the National Oceanic and Atmospheric Administration (NOAA) forecasted above-average temperatures nationally – with a 33-40 percent likelihood of above average temperatures for June, July, and August. Chicago is no exception. NOAA expects more 90-degree days than normal this year, following the record-setting heat stretches we saw last year.

Last year, the city counted 31 days where the temperature reached 90 degrees, above the long-term average of 16 days.

A recent climate risk assessment commissioned by ComEd and conducted by the Argonne National Laboratory indicates that severe weather will show no signs of stopping in the years ahead. In fact, mid-century climate forecasts expect that our region will see more intense and prolonged heatwaves in summer months, which will be amplified by higher humidity. All of this will place stress on our system, elevating the likelihood of outages if additional investments to reduce the impact of climate change are not made.

We understand the significant risks an increase in hot and severe weather poses to our system. ComEd undertakes a rigorous process to forecast load, pressure test our system,

and run drills to prepare our teams in cases of severe weather and emergencies. Examples of being ready include:

- Verifying all portable generators of every size are ready for the summer and then testing early and completing all repairs prior to the summer;*
- Ensuring that our substation flooding mitigation plan is up to date and taking necessary actions to reduce risk. This step paid off last week with the torrential rain that caused flooding;*
- Completing an in-depth supply readiness plan which includes confirming with key suppliers, stocking mobile storm trailers utilized for severe storms, and developing mitigation plans for any disruptions to the supply chain for critical inventory; and,*
- Completing all City of Chicago summer readiness projects and planned maintenance inspections prior to the summer to mitigate the risk for long duration outages during the summer.*

2.1 What steps has ComEd taken to improve its infrastructure and prepare for other severe storm events, such as heavy rains, tornado threats, etc., that are increasing due to climate change?

The impacts of rapidly changing weather patterns aren't new to ComEd:

August 2020 Derecho was the worst storm in ComEd's recent history with hurricane force winds and extensive lightning, golf ball-sized hail, and 13 confirmed tornadoes in our service territory, including one in the City of Chicago. The storm had a regional impact, causing damage across a wide swath of our territory knocking out power to approximately 800,000 customers of which 142,000 were City of Chicago customers.

Had it not been for our Smart Grid investments, the 2020 Derecho would have caused more than 700,000 customer outages and taken nearly two weeks to fully restore.

As mentioned in Question 2, ComEd undertakes a series of steps to ensure we are prepared for extreme weather events including heat waves and other extreme events.

2.2 Please help the Committee understand the nature of ComEd's Multi-Year Grid Plan currently under review at the ICC. What projects in this Plan are relevant to Chicagoans and will ensure that the electric grid is resilient in the face of extreme weather events?

There are many advantages to our Multi-Year Plan, which was shaped by significant stakeholder engagement, and includes targeted investments through 2027 and a proposal to recover the costs of those investments across the four-year plan period.

Each investment that ComEd plans helps ensure the safety, resiliency and security of the grid while meeting the demands of climate change, decarbonization and electrification, evolving customer needs, and increasing cyber and physical security threats – all with a focus on equity and affordability.

Key areas of investment include:

- Improving service reliability and storm response: Upgrade and replace poor-performing or obsolete cable, wood poles and other equipment; trim or remove trees near power lines; and deploy advanced analytics that help prevent power outages and improve restoration of service to customers.*
- Supporting the clean energy transition: Enable safe and effective electrification of vehicles, homes, and industry through necessary upgrades to power lines and substations to meet increased electric demand and invest in technology needed to integrate large amounts of clean energy securely, safely and efficiently.*
- Improving coordination with communities: Enhance community resilience to storms and resource management for storm restoration.*
- Ensuring all communities can access and benefit from clean energy: Expand programs to prepare residents for good-paying clean energy jobs and use the advanced communication network to close the digital divide in under-resourced communities.*

The costs of these investments are recovered through a multi-year schedule that sets base rates and revenue requirements for four years, which provides greater predictability for customers while funding investments that are required to deliver at least 40 percent of benefits to equity investment-eligible communities.

Additionally, ComEd's Multi-Year Plan is subject to ICC-approved performance metrics that set targets for grid performance and equity. They measure continued improvement in reliability of the overall grid and greater resilience in environmental justice communities; reduction of peak electric demand on the grid; reduction of residential customer disconnections; reduction of the time it takes to connect distributed energy resources; and enhancement of service through the resolution of customer issues.

2.3 How does ComEd balance the need for investments to ensure reliability and resiliency against energy burden and affordability for vulnerable Chicagoans?

ComEd's multi-year plan ensures that ComEd has the ability, over the life of the plan, to invest in and maintain the grid to drive reliability, clean energy and equity outcomes while maintaining affordability, which has been and remains a priority. This is reflected in the fact that we have been able to achieve record reliability while keeping customer bills low. Currently, ComEd's average total monthly customer bill is among the lowest in the nation, and its residential customers' bills are approximately 20 percent lower than the average in the 10 largest U.S. metropolitan areas. Additionally, our historical grid investments have enabled ComEd to deploy a variety of programs that, to date, have delivered over \$8 billion in savings to customers by enabling them to reduce their monthly usage.

The long-term approach to ratemaking and grid planning within the Multi-Year Plan will help us continue to maintain affordability while making essential investments that would only become

more expensive if postponed. To smooth the customer bill impact of the revenue requirement increases included in the plan, ComEd is adopting a phased in approach to defer the effect on rates of a portion of the 2024 revenue requirement until 2026. At ComEd's requested rate for 2027, the average residential bill at the end of the four-year plan period would be less than even the average 2021 residential utility bill in more than half of U.S. states.

ComEd has delivered value to our customers, has done so with reasonable rates, and will continue to do so under the proposed Multi-Year Plan. That being said, we recognize that increasing rates can pose a challenge for low- and moderate-income customers. ComEd continues to monitor the changing economic conditions that challenge the ability of some customers to pay their electric bills and has recently enhanced its range of support options that will help customers in need keep the lights on. In fact, ComEd has already announced new and enhanced customer-assistance options that will make more customers aware of the help available, provide more grants to help with electric bills, and remove barriers customers sometimes face when accessing assistance options. Per the recommendation of the staff of the Illinois Commerce Commission, ComEd will be introducing a reduced rate for low-income customers by 2024. We also remain committed to working with stakeholders to develop a robust, holistic and comprehensive portfolio of programs to provide additional assistance.

3. Has ComEd identified any weak points in its grid?

ComEd's grid is continuously strengthened because we routinely analyze system performance. ComEd identifies circuits and components that underperform on a variety of metrics through data analysis and identifies improvements that are most likely to improve performance. We prioritize this work every year since performance can significantly change from year-to-year due to storms, public damage, and other uncontrollable factors.

3.1 Does it have a map of those weak points it can share with the committee?

We do not have a map available.

3.2 How does ComEd plan on addressing weak points in an equitable way?

As mentioned previously, when ComEd analyzes system performance, ComEd identifies circuits and components that underperform on a variety of metrics through data analysis and identifies improvements that are most likely to improve performance. Our system is interconnected and does not adhere to ward, neighborhood, community, or county boundaries. Circuits, Substations, and other distribution system components serve customers in multiple geographies including both EIEC and Non-EIEC areas.

4. We would like to see the granular breakdown of environmental justice data from ComEd by census blocks in Chicago, such as (at a minimum), the data ComEd now tracks because of the ICC's performance metrics case. Please share this data both in a table format as well as mapped out.

ComEd will meet with the Chair to discuss this data request.

4.1 How does ComEd determine the cost of interconnection studies so that Chicagoans can install rooftop or community solar?

Residential interconnections, which represent about 95% of applications received annually, generally do not require distribution upgrades to interconnect. Those that do have interconnection costs are capped at \$200 per Illinois statute.

The costs of preliminary interconnection technical reviews and studies are included in the application fees set forth in 83 IL Administrative Code, Part 466 and Part 467, respectively. Certain projects needing more extensive interconnection facilities or distribution upgrades may require an additional facilities study, for which ComEd charges a flat fee based on the historical levels of effort to conduct these studies.

4.2 Why does there continue to be too little solar inside city limits, and what part does ComEd play in changing that?

Historically, developers of projects such as community solar have located them in rural areas primarily due to lower-cost land acquisition and abundant space to install facilities. Recent changes in the Illinois Power Agency's scoring methodology for traditional community solar, driven by new provisions of the Climate and Equitable Jobs Act (CEJA), are leading to a migration of community solar projects towards commercial and industrial rooftops in Chicago and nearby suburbs, and this trend is anticipated to continue in the near future.

The distribution grid was designed as a one directional model, where power flows into homes and businesses, as it has been for a century. The future grid requires whole new levels of flexibility, visibility, and sophistication, where power can flow in both directions. ComEd's role is to modernize our grid for the future.

4.3 Can ComEd provide any data comparing the impact of renewable energies on the grid to traditional energy sources?

This isn't an apples-to-apples comparison due to increasing complexity of power flow and increasing renewable participation.

Our grid serves as a crucial infrastructure that enables the efficient, reliable, and safe delivery of clean electricity to load centers. By strengthening the grid, we can further enhance the environmental benefits that Distributed Energy Resources (DERs) like solar photovoltaic provide.

It is essential to recognize that DERs are not a substitute for the grid, but themselves one method of expanding and optimizing use of some components of it. While DERs may offer some expansion deferral benefits in certain locations where grid investment would otherwise be required, they need to be just as reliable and readily available as the alternative grid expansion would have been if they are to perform this function. This is particularly true in view of increased reliance on the electric grid due to electrification.

**5. How much, in dollars, does ComEd provide as customer assistance for its customers?
Please do not include federal or state funding in this amount.**

Excluding federal or state funding (LIHEAP, PIPP, ERAP and UDAP), ComEd helped connect 8,977 customers in Chicago to \$1,422,472.84 (GAR + SARP) in bill assistance in 2022. Through July 6 in 2023, when LIHEAP, PIPP, ERAP and UDAP are also excluded, ComEd helped connect 11,118 customers in Chicago to \$1,511,872.18 (GAR + SARP) in bill assistance.

Year	Chicago Customers	Number of Grants	Total Grant Dollars
2022	8,977	30,041**	\$1,422,472.84
2023*	11,118	28,916**	\$1,511,872.18

**2023 only includes YTD as of 7/6/23; **A customer may have received more than one grant*

With the inclusion of federal and state funding, across ComEd’s entire service territory, we helped connect nearly 211,000 customers to approximately \$129,000,000 in 2022. In Chicago specifically, ComEd helped connect 106,566 customers with \$61,862,149.37 in bill assistance in 2022. Through July 6 in 2023, ComEd helped connect 79,308 customers in Chicago with \$29,573,834.01 in bill assistance.

We have provided data on federal and state funding, as all funding together paints a bigger picture of the efforts ComEd undertakes to help connect our customers with assistance even beyond internal offerings.

Chicago Assistance Table

		CUSTOMERS IN CHICAGO ONLY	
CALENDAR YEAR	PROGRAM	# OF CUSTOMERS	TOTAL GRANT
2022	Total	106,566	\$61,862,149.37
	<i>ERAP (Emergency Rental Assistance Program)</i>	3,091	\$1,607,369.12
	<i>GAR (Give-A-Ray)</i>	255	\$91,160.75
	<i>LIHEAP (Low-Income Home Energy Assistance Program)</i>	84,995	\$44,190,168.00
	<i>PIPP (Percentage of Income Payment Plan)</i>	17,673	\$10,295,378.33
	<i>SARP (Supplemental Arrearage Reduction Program)</i>	8,722	\$1,331,312.09
	<i>UDAP (Utility Disconnection Avoidance Program)</i>	7,180	\$4,346,761.08
2023	Total	79,308	\$29,573,834.01
	<i>ERAP (Emergency Rental Assistance Program)</i>	2	\$387.76
	<i>GAR (Give-A-Ray)</i>	256	\$129,495.98
	<i>LIHEAP (Low-Income Home Energy Assistance Program)</i>	60,122	\$23,816,225.00
	<i>PIPP (Percentage of Income Payment Plan)</i>	13,513	\$4,245,349.07
	<i>SARP (Supplemental Arrearage Reduction Program)</i>	10,862	\$1,382,376.20

Program Definitions

- *ERAP: Provides federal funds which can be used for utility arrearage relief by landlords and renters*
- *Give-A-Ray: Provides income eligible customers with an active ComEd account the advantage of participating in a community solar project without paying the usual subscription fees and eligible customers may see average electric bill savings of \$83 per month, or \$1,000 annually*
- *LIHEAP: Federal funding that is remitted to the state. Provides grants to eligible customers based on household income and household size. Contact the local community action agency via the LIHEAP Hotline: 1-877-411-9276*
- *PIPP: State funding. The Percentage of Income Payment Plan (PIPP) program is a benefit choice within the Illinois Low Income Home Energy Assistance Program (LIHEAP) that is available to customers of Ameren Illinois, ComEd, Nicor Gas and North Shore Gas/ Peoples Gas*
- *SARP: An assistance program that eases the financial stress of paying for power and encourages energy efficiency as the result of timely bill payments. ComEd customers who are at 150 percent of the Federal Poverty Level and have back payments owed to ComEd will be able to enroll in SARP. ComEd is the first utility in Illinois to offer such a program*
- *UDAP: Emergency state and federal program administered following the pandemic to assist residents at risk for imminent utilities shutoff*

6. What are ComEd's trends regarding disconnection of customers for non-payment?

ComEd considers disconnection as a last resort in its credit and collections process. Prior to a customer being eligible for disconnection, ComEd sends a disconnection notice, which includes the amount past due, date after which the customer may be eligible for disconnection, information on various payment methods accepted by ComEd, and information on financial assistance programs. Following service of the notice (and assuming no payment has been made), ComEd also initiates a field notification call three days prior to the account becoming eligible for disconnection, and, if that call is unsuccessful in reaching the customer, a follow-up call is made 24 hours prior to the account becoming eligible for disconnection.

We offer several options to assist customers with paying their bill. Customer can contact ComEd to enroll in Deferred Payment Arrangements (DPAs) to pay over an extended period and avoid disconnection of electric service. Customers who cannot afford to pay or that are on a fixed income, may be eligible for financial assistance programs, such as Low- Income Home Energy Assistance Program (LIHEAP) or Percentage of Income Payment Plan (PIPP), or extended payment due dates. Information on these financial assistance programs and payment arrangements are provided on ComEd's website and on disconnection notice

After a drop in disconnections in 2020 due to the pandemic (service suspensions were approximately 1/3 of the typical pre-pandemic volume in 2020) disconnections have returned to pre-pandemic norms beginning in 2021.

6.1 What steps is ComEd taking to reduce the number of customers it disconnects

There are several steps that occur to help customers avoid disconnections. Customers are contacted several times to let them know payment is due and to provide information about possible options, including payment plans and assistance programs. We offer several options to assist customers with paying their bill. Customer can contact ComEd to enroll in Deferred Payment Arrangements (DPAs) to pay over an extended period and avoid disconnection of electric service. For customers who cannot afford to pay or that are on a fixed income may be eligible for financial assistance programs, such as Low- Income Home Energy Assistance Program (LIHEAP) or Percentage of Income Payment Plan (PIPP), or extended payment due dates. Information on these financial assistance programs and payment arrangements are provided on ComEd's website and on disconnection notices.

Additionally, ComEd works with the Customer Assistance and Advocacy and the Energy Efficiency groups to target our outreach effort to ensure the customers who need assistance have opportunities to receive it. We leverage summaries of the customer risk segmentation information by zip code as well as the monthly credit & collections report filed with ICC containing summary data on disconnections, reconnections, and other credit and collections data by zip code to identify which areas we will focus the outreach.

6.2 What is ComEd's policy regarding the disconnection of customers during air quality events like the one we experienced last week or flooding events that we experienced in the past few days?

ComEd follows the legal requirements for disconnections as delineated in Part 280 of the Illinois Administrative Code (83 Ill. Adm. Code 280), and The Illinois Public Utilities Act (220 ILCS 5/1-101).

Disconnections are prohibited on days where temperatures were forecasted to be at or below 32 degrees Fahrenheit or at or above 95 degrees Fahrenheit. Service suspensions are also halted during periods of storm restoration, however once that is completed there are no additional limitations for disconnections for weather events.

7. What steps is ComEd taking to coordinate with the city on federal funding opportunities?

The Infrastructure Investment Jobs Act (IIJA) and the Inflation Reduction Act (IRA) have made available unprecedented federal resources. ComEd is dedicated to supporting the state's competitiveness in these opportunities and to ensuring that eligible entities in our territory can be competitive in their proposals.

At a state level, ComEd participated in the Illinois Commerce Commission's Notice of Inquiry Report on IIJA. The report summarized information collected by Illinois' regulated utilities and

other stakeholders about eligibility to federal grants, loans, assistance, and programs. ComEd also provided input on ways the ICC and State of Illinois can assist in securing these federal funds.

ComEd has already found some success in the earliest IJJA opportunities. A ComEd proposal was successful to fund middle mile dark fiber investments that leverage existing ComEd infrastructure to increase high-speed broadband access for 440,000 unserved or underserved households in Chicago. ComEd partnered with community stakeholders to develop this proposal which will support high-speed broadband on the west and south sides of Chicago.

ComEd is seeking federal funding to create a Community Resiliency Hub – a first-of-its kind pilot to promote and study new technologies to advance decarbonization. Hubs will explore elements of electric vehicle charging, battery storage, grid infrastructure upgrades, advanced communications network, community partnerships and workforce development, among other topics.

ComEd seeks to partner with community and municipal proposals where utility expertise can be utilized to improve proposal competitiveness. As these opportunities take shape, ComEd subject matter experts provide letters of support, detailed analyses, or even matching funding resources that can be leveraged to increase the likelihood that grants will be awarded.

7.1 How is ComEd coordinating with the city and other stakeholders to implement beneficial electrification (transportation and buildings) utility programs?

As the adoption of electric vehicles, heat pumps, and industrial electrification technologies accelerates, the City of Chicago and ComEd will need to work closely together to ensure that energy transition runs smoothly. One key initiative to achieve this is the EV readiness program that ComEd has funded at the Metropolitan Mayor's Caucus. The City of Chicago is a part of the first cohort in that program, which seeks to prepare municipalities to meet the growing demand for EVs and EV charging infrastructure. The program is funded in part by a \$225,000 commitment from ComEd and aims to assist local governments with developing policies and practices to safely integrate EVs and EV charging programs.

ComEd has also been working with stakeholders through a series of workshops to shape a beneficial electrification plan, which will be implemented starting this year. The BE plan includes several initiatives that will help ComEd and the City of Chicago to enhance existing processes to support fully electric buildings and vehicles. For example, the BE plan includes a pilot initiative for right-of-way charging. ComEd has already worked with the City of Chicago to install two ports in the right of way at 4259 S. Calumet in Bronzeville as a part of a Department of Energy funded Multi-Unit Dwelling charging initiative. ComEd anticipates that the lessons from the Bronzeville deployment will be extended further as the BE Plan pilots are launched in 2024.

Beyond these new initiatives, ComEd will continue to work actively with the City of Chicago to ensure that customer needs are met. Existing processes in New Business and Capacity Planning have proven to be robust to the current demand for charging sites to ensure that customers have the safe, resilient, and reliable power that they need at the locations where they need it.

Nevertheless, we know that the energy transition will change customers' needs, and we will be working with the city and with other stakeholders to ensure that these changing needs are met.

7.2 If the company is not offering utility incentives and assistance for electrification, why not and when will it start?

BE Plan Incentives and assistance:

The Illinois Commerce Commission recently approved ComEd's Beneficial Electrification Plan. ComEd will invest \$231 million over the next three years to help customers make the transition to electrification. This commitment will support various new programs designed to remove barriers to electric transportation and residential technologies—including, but not limited to, electric vehicles (EVs) and charging infrastructure, as well as all-electric heat pumps, which are high-efficiency heating and cooling devices.

The \$231 million includes rebates for residential customers for electric vehicle charging infrastructure, electric heat pumps, and associated infrastructure upgrades; and for C&I and public sector customers for the purchase of EVs and to defray the costs associated with make-ready infrastructure for certain EV charging installations. In addition, ComEd will invest in additional programs to educate and empower customers, including assistance with fleet electrification assessments and in pilot programs to study the benefits of electrification technologies. ComEd will also open its Watt-Hour delivery class to offer nonresidential customers with stand-alone EV charging stations as an alternative to demand-based rates.

ComEd is planning on rolling out the Watt-hour delivery class, additional education and awareness programs, and limited rebates for residential building electrification later this year, with the majority of the incentives rolling out early 2024.

EE Electrification: *The company started offering incentives and assistance for building electrification through our Energy Efficiency programs. ComEd recently piloted a whole home electrification program where 56 homes in Chicago have been retrofitted as part of ComEd's Whole Home Electrification program, a first-of-its-kind initiative designed to convert single family and multi-unit homes to energy-saving, all-electric heating and cooling systems and appliances. Through the Whole Home Electrification program, ComEd is investing \$40 million to deliver no-cost retrofits to qualifying low-income customers through 2025.*

EV Toolkit:

- ComEd is working to accelerate the electrification of transportation and is here to help customers navigate the growing EV industry so they can make informed decisions.*
- Our EV Toolkit – comed.com/ev – is a one-stop-shop that provides an overview of EV brands and models, as well as a calculator that can determine the potential fuel cost savings of switching from a gas vehicle to an EV.*
- The toolkit also provides up-to-date information about savings, benefits and incentives for the purchase of EVs, which currently include a state rebate and federal tax credit.*