



Cape Hatteras

Electric Cooperative
ANNUAL REPORT 2021



Front Cover: 1st Place photo contest winner,
"The new Jug Handle Bridge at sunset,"
by Kerry Hooper, Jr.

2nd Place photo contest winner,
"The Cape Hatteras Lighthouse under the night sky,"
by Jennifer Carr

Cape Hatteras Electric Cooperative takes pride in being a community-focused organization. We are pleased to share this 2021 annual report and to provide information about the operational and financial health of CHEC, your trusted energy partner.

Safety

The safety of employees, members and visitors is always CHEC's top priority. The new year brought hope in the face of the Covid-19 pandemic in that two vaccines received emergency use authorization from the FDA. Knowing the health of our workforce has a direct impact on reliability and member service, we proactively reached out to Dare County DHHS and were included in an early vaccination group. To date, 75% of CHEC employees have been vaccinated versus the North Carolina average of 58.43%.

We had another successful year with zero recordable accidents or worker's compensation claims. A worker's compensation audit resulted in a 26.5% reduction in premiums. Lastly, we participated in a safety lab with our insurer, Federated Rural Electric Insurance Exchange (FREIE), and the other 25 North Carolina electric distribution cooperatives. During this lab, CHEC was identified as one of only six high-performing cooperatives in the state. A high-performing cooperative is one that maintains an OSHA metric of Days Away, Restriction and Transfer Rate (DART) rate of less than 1.5.

The Electric System

In 2021, the number of electric services on Hatteras Island grew slightly by 0.9% over 2020. Significantly higher visitation resulted in an overall increase in energy use by 11%. The peak demand for Hatteras Island decreased slightly to 39.8 megawatts (MW) in July 2021. This is compared to the previous year's peak, of 40.6 MW in July 2020. CHEC continued to utilize conservation voltage reduction (CVR) during periods of peak energy use to reduce voltage within acceptable levels, reducing demand charges on the cooperative's wholesale power cost. CVR reduces member's demand and energy use without impacting their comfort.

Milder temperatures combined with CVR and thermostat controls were responsible for the lower summer demand. However, increasing numbers of year-round residents and visitation resulted in higher demand during the shoulder months. The load was too high in the spring and fall to carry out several maintenance projects, which would require running the backup diesel generators located in Buxton and Ocracoke villages. These projects were deferred until



Mission Statement

Cape Hatteras Electric Cooperative is a locally owned, managed and governed electric service provider dedicated to the safety of our employees, members and visitors, and a brighter future for the people and communities that we serve.

2022, and either have or will be carried out this spring and fall.

CHEC continued to work with N.C. Department of Transportation (NCDOT), Flatiron Construction, the National Park Service and U.S. Fish & Wildlife Service (USFWS) throughout the year coordinating the construction necessary to attach 115kV transmission cables to the new Rodanthe Bridge slated to be open to traffic in April 2022.

Lee Electric contract crews completed the underground boring on the north end of the bridge and most of the overhead work, including the risers on the north and south ends of the bridge by late summer. A contract was awarded to New River Electrical in October to complete the installation of the hanger, conduit and cable system on the new bridge. Successful negotiations with NCDOT resulted in crews being permitted to start construction just prior to the end of the year. Recent negotiations with USFWS resulted in the delay of the removal of the roadbed and sandbags along the 1.8-mile stretch of NC Highway 12 that will be bypassed by the new Rodanthe Bridge.

Delaying this removal until Nov. 30, 2022, will give CHEC both protection and access to its existing transmission lines that provide electricity to all of Hatteras and Ocracoke Islands. The delay will also provide protection and access to the fiber optic cable owned by Lumen Technologies, which is buried in the easement from USFWS and provides internet and communications for the islands. A condition of the agreement requires CHEC to expedite the schedule to install the hanger, conduit and cable system on the new bridge. The expedited schedule will require on-bridge work and lane closures throughout the summer, with the goal of completion before the end of October.

In October, the cooperative completed and the board of directors approved a new four-year construction workplan (CWP) for 2022-2025, and a long-range workplan for the 20-year period 2022-2041. Some of the projects included in the CWP are the Hatteras substation transformer upgrade, Buxton substation foundation repairs and 115kV line switch replacements in Buxton, Avon and Waves. The CWP also includes 35kV pole replacements and upgrading substation remote terminal units (RTUs).

The Cape Hatteras Electric Cooperative electric system is unusual among electric cooperatives in having a considerable portion of its total dollar investment in transmission facilities. With over 40 miles

of 115kV transmission lines, CHEC has the highest investment in transmission plant per kWh sold out of all North Carolina electric cooperatives and consistently ranks in the top ten out of all electric cooperatives in the United States. Transmission plant is more costly to construct and maintain than distribution facilities. \$26.5 million or 38% of the total physical plant investment of \$70.3 million, is in transmission facilities.

Electric Generation

Cape Hatteras Electric Cooperative does not own any electric power generation directly. CHEC is a joint-owner through NC Electric Cooperative's generation supplier, North Carolina Electric Membership Corporation (NCEMC), in the Catawba Nuclear plant and the Lee Combined Cycle gas plant in South Carolina. NCEMC also owns and operates two combustion turbine gas plants in Anson and Richmond counties in North Carolina, and the Buxton and Ocracoke diesel-generating plants. The fuel mix pie chart displayed in this report includes NCEMC-owned assets and purchase power agreements.

Severe Weather and Outages

2021 was CHEC's most reliable year in the cooperative's history. Despite a very active 2021 Atlantic hurricane season that produced 21 named storms, Hatteras Island was again largely spared the wrath of major storms and the power outages that often accompany them.

The total outage time from all causes resulted in only 45 minutes of average outage time per member in 2021, compared to our five-year average of more than 1,000 minutes per member.

Our focus on improving the resilience of the electric grid is a year-round effort. We take steps on a daily basis to ensure the electric grid can quickly and effectively recover from storms and other threats so our members have the reliable, affordable and sustainable electricity they depend on.

CHEC's outage map, available on [chec.coop](https://www.chec.coop), shows members' reported electrical outages happening anywhere on Hatteras Island. NC Electric Cooperative's outage map, which shows outages statewide, can be found at [ncelectriccooperatives.com](https://www.ncelectriccooperatives.com).

Financial Strength

The cooperative continues to remain financially strong. Operating margins for 2021 were \$3,294,750, which is higher than budget and last year's margins of \$2,970,367. The higher margins were due to record-high visitation, lower wholesale power cost and lower operating expenses from the continuation of the pandemic. The cooperative sold 141 million kWh in 2021, up from 128 million in 2020. In 2021, CHEC distributed capital credits to current and former members in the amount of \$1,886,998.

Cooperative Business Model

An electric cooperative's corporate structure is one of member ownership. The cooperative belongs to the communities that it serves. Cooperatives typically serve communities that are not considered profitable by the neighboring investor-owned utility. As a result, CHEC operates as a not-for-profit electric service provider and our loyalty is to our members. A portion of excess margins are refunded each year to past and current members, in the form of capital credits. Retained earnings are used to reduce borrowing requirements of the cooperative and are also refunded in future years.

Governance

The cooperative is governed by a member elected board of directors. These leaders are members who live in and are actively involved in the communities of Hatteras Island. Directors are elected to rotating three-year terms.

All incumbent directors have obtained the National Rural Electric Cooperative Association's (NRECA) Credentialed Cooperative Director certification through training and education, and most have obtained the Board Leadership Certificate as well as the elite Director Gold status.

The board's functions include establishing strategic goals and objectives of the cooperative, setting governing policy, approving budgets and selecting a general manager to carry out the day-to-day operations of the cooperative. The board of directors meet regularly to carry out their responsibilities. Meeting dates are posted on our website at [chec.coop](https://www.chec.coop)

Member Participation

Cape Hatteras Electric Cooperative encourages member participation. Ballots are mailed each year to provide all members the opportunity to vote in the annual election of directors. The participation rate by CHEC's members is good, with a response of more than 23%.

The 2022 Annual Meeting of Members will be held on Monday, May 23, at the Cape Hatteras Secondary School located on NC Highway 12 in Buxton. Dinner will be served at 6 p.m., followed by a short business meeting.

Member Engagement

CHEC continues to offer in-person member service as well as an interactive voice response (IVR) system called Autocue. Members can now check their account status, balance, due dates and pay by check or credit card by calling our main number day or night. Autocue provides this service in both English and Spanish.

The cooperative continues to offer a mobile app for Android or Apple phones, allowing members to view bills, sign up for alerts and reminders, track daily use, view payment history and make payments. Members can also sign up to receive alerts via text or email concerning their account. Members have unlimited access to view their account and make payments by using our online Customer Service Portal. The MyUsage option on the portal allows members to track daily use and view payment and use history. To view the portal, visit [chec.coop](https://www.chec.coop) and click "My Account".

CHEC is constantly searching for more ways to connect with members. We invite you to follow us on Facebook, Twitter and Instagram to stay up-to-date on the latest cooperative news, community events, energy-saving tips and outage updates. These communication tools prove to be invaluable during planned and unplanned outages.

CHEC utilizes the community-run radio station, Radio Hatteras, to provide emergency information during and after major events, as well as other important information about your cooperative. CHEC supports Radio Hatteras by providing the station with space for antennas and equipment. Tune in to Radio Hatteras on 99.1FM and 101.5FM to hear the cooperative's daily public service announcements at 9:30 a.m. and 3:30 p.m.

Email notification for outages and other important information continues to function well. For members that have provided their email addresses, CHEC is now offering the convenience of e-billing. E-billing makes receiving your electric bill faster and easier while eliminating unnecessary paper use.

Current Challenges

System reliability and resilience continues to be a high priority. The electric grid has evolved substantially in recent years and will continue to change as new advancements are transforming the ways co-ops and other utilities transmit power and our members use it. As storms become more frequent and more severe, we are constantly looking at new technologies and construction techniques to both harden our infrastructure, making it less susceptible to storm damage, and smart grid devices, to improve response time when outages do occur.

Attaching transmission cables to the Rodanthe bridge is a significant, yet essential, investment in reliability for electric members on both Hatteras and Ocracoke Islands. Despite a broad distribution of bid documents, only one bid was received from from New River Electrical for the installation of the conduit, hangers and cable on the new bridge. Labor shortages and material costs resulted in a much higher bid than was previously estimated and the total cost of the project is nearly \$15 million. We are pursuing government infrastructure funds, and alternatively, loan funds may be available to the cooperative for this project. The cooperative will employ an independent rate consultant to conduct a cost of service study later this year to determine if current electric rates are sufficient to recover the cooperative's cost associated with this project.

Cybersecurity continues to be a major concern for the utility industry. The ransomware attack on the Colonial Pipeline in May 2021, which crippled fuel supplies in multiple eastern states, put critical infrastructure and the industrial control systems (ICS) that manage their operations in the limelight.

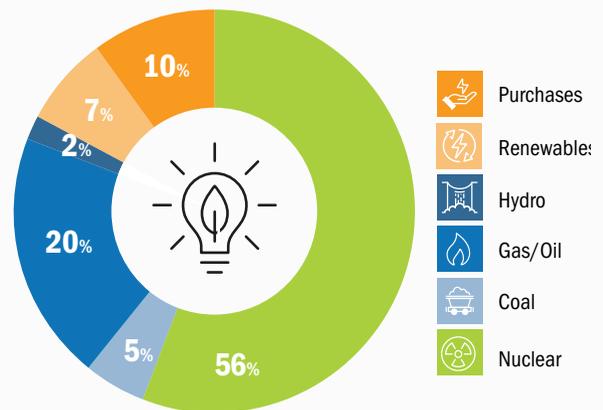
Just prior to the attack, in April 2021, CHEC began the process of investigating the use of a new cybersecurity tool focused on providing additional protection for ICS called Essence 2.0. Essence 2.0 was created by the National Rural Electric Cooperative Association (NRECA) and is an anomaly detection device that uses operational technology sensors to identify and notify about possible network breaches within seconds. After the Colonial Pipeline attack, the Biden Administration became focused on ICS which paved the way for NRECA to receive an additional grant from the DOE to ensure that their Essence tool is an affordable resource for small utilities.

As of the writing of this report, the new tool had been deployed and is learning our system by analyzing network traffic against known devices. CHEC is constantly enhancing and reinforcing our defenses with new technologies and best practices to protect member data and cooperative operations.

Focus On a Sustainable Future

CHEC and North Carolina's Electric Cooperatives have been planning for a brighter, more sustainable future for a long time. We've spent the past decade reducing our dependence on carbon-intensive power generation, and as a result, our current fuel mix is more than 50% carbon free. More than half of the power supplied to us from our wholesale power provider comes from emissions-free nuclear generation, an extremely reliable, safe and affordable source of electricity. Our early investment in nuclear energy has allowed our members to benefit from the lowest carbon electricity in the Southeast. North Carolina's Electric Cooperatives, including CHEC, will continue its commitment to providing reliable electricity at the lowest possible cost while also advancing the pursuit of responsible sustainability goals. Together, our target goals are a 50% reduction in carbon emissions from 2005 levels by 2030 and net-zero emissions by 2050. To meet these goals while maintaining reliability and affordability, we will continue to prioritize emissions-free nuclear as a key part of our energy future.

Current Fuel Mix



The low-cost, low-carbon future our members desire will stem from innovation and new technologies leveraged across cooperative-operated distribution systems, including new consumer and commercial solutions.

CHEC supports all energy solutions that are a fit for our members, uphold the safety and reliability of our grid and improve the diversity of our resources while also ensuring that costs are not shifted to members without access to the latest technologies. Our nation's electric grid is shifting from a model where large, centrally located generating plants produce power and push it to the far corners of the grid, to a model that incorporates more distributed energy resources and technologies, like home solar. This is an exciting time in our industry, and we want our members to make a choice that is right for them.

CHEC has created a new toolkit designed to simplify complex questions about solar power as a home energy resource. The toolkit was launched in response to increasing member interest in solar technologies. As your local energy provider, we want to work with members who are interested in pursuing a home solar installation and help them make well informed decisions. The toolkit is available at chec.coop/solar.

CHEC believes that electric vehicles will play a significant role in the future of transportation, and we are preparing for that future now. We offer members rebates and special rates to support increased EV adoption. These "time of use" rates allow members to save by charging during off-peak hours, enabling CHEC and members to work together to use the grid more efficiently. We also allow members to borrow our all-electric Nissan Leaf to experience driving an EV firsthand. To view all EV programs, or to schedule your test drive, visit chec.coop/ev.

Our commitment is also demonstrated through our collective effort with the electric cooperatives statewide to expand EV charging throughout rural North Carolina, bringing opportunities for increased tourism and commerce to co-op communities. CHEC has installed three public charging stations on Hatteras Island, including two Level 2 stations in Waves and Hatteras, and a DC Fast station in Avon. All three sites have shopping, dining and recreational opportunities within walking distance for drivers to enjoy while charging their vehicles. To view all charging stations on Hatteras Island, visit plugshare.com.

In 2021, CHEC continued to meet the North Carolina's Renewable Energy Portfolio Standard (REPS). Through NCEMC, CHEC purchased



3rd Place photo contest winner,
"Kinnakeet Pier sunrise" by Bernie Lewis

renewable energy and renewable energy credits (RECs) from various solar, wind, biomass, swine and poultry waste projects.

CHEC's 50kW community solar garden in Hatteras also continues to earn RECs to help the cooperative comply with the REPS law. The educational component of the project is an added bonus from which both Hatteras Island schools and the Hatteras Island Ocean Center benefit. You can view the real-time production of the project by visiting the Sunny Portal at chec.coop.

A significant part of the REPS law continues to be met through energy efficiency programs that help our members reduce their monthly electricity bill. CHEC sells ecobee thermostats at a discount to members who participate in our demand reduction (DR) program. For members who have a Nest thermostat, we offer a "Bring Your Own Thermostat" program that also allows you to enroll in our DR program. All electric homes in both programs receive a monthly credit for participation.

CHEC continues to offer prepaid metering, recognized as an energy cost monitor, allowing members to pay when and how they want. This program allows members to closely monitor their use with options to receive daily communications about kWh use, account balances and high use alerts.

The cooperative helps members save money by issuing rebates for qualifying Energy Star appliance purchases and for the secondary refrigerator/freezer turn-in program. CHEC also offers low-interest loans with financing options for commercial and residential members to purchase high efficiency heat pumps and other energy efficiency improvements. For more information on any of our member energy programs, visit chec.coop/energysolutions.

These programs and solutions will help make our sustainability goals a reality. Because we live and work in the community that we serve, we have strong relationships with our members and can work with you as we shape the future of the electric grid and make power more reliable, affordable, and sustainable for everyone. In addition, efforts to use electricity in new and beneficial ways to make devices and processes cleaner, smarter and less expensive - from EVs to appliances - will help us further cut carbon emissions and reach our long-term sustainability goals. All of these efforts are part of our ongoing commitment to building a brighter future for the people, businesses and communities of Hatteras Island.

Manager's message

CHEC's core job is keeping the lights on, but our passion is serving our members. We've worked hard to earn your trust and respect by providing exceptional service and a commitment to our community. As a result, CHEC received the highest American Customer Satisfaction Index (ACSI) score out of all participating electric cooperatives in the 2021 National Survey on the Cooperative Difference.



CHEC's score and No. 1 ranking reflect directly on the dedication to excellence put forth by our employees both in the field and in the office. Our strong performance in the national survey is especially rewarding as we have worked hard to improve the quality of life for our members during the difficult times that the pandemic has presented. Thank you to our members who took the time to answer the survey questions.

Our commitment to this community has been well established over the years and is always a primary focus of our activities. In 2021, CHEC helped the Hatteras Village Civic Association (HVCA) attain a zero-interest loan through the US Department of Agriculture's Rural Economic Development Loan and Grant (REDLG) program, to help pay for the newly constructed multi-use pathway around Hatteras Village. Once HVCA repays CHEC, the funds will remain with the cooperative and can be loaned out again for other economic and community development projects on the island. Please contact us if your non-profit organization would like more information about the REDLG program.

Our commitment to community also extends to our local schools. From support through academic scholarships and Bright Ideas education grants to opportunities like the Youth Tour, Cooperative Leadership Camp and Touchstone Energy Basketball camps, we are committed to supporting the development of tomorrow's leaders.

As a locally owned and operated business, we are proud of our role in helping bring good things to our community. While the larger environment in which we operate is constantly changing, one thing remains constant. Working together with you, the members we serve, we'll continue to operate in a way that is consistent with our No. 1 survey ranking.

On behalf of the board of directors and employees of CHEC, I want to thank you for your patronage in 2021 and for the opportunity to serve you. We are pleased to be able to bring back our in-person Annual Meeting this year and hope to see you there on May 23.

Susan E. Flythe

Executive vice president and general manager

Annual Meeting

Monday, May 23,

Cape Hatteras Secondary School
NC Highway 12 Buxton.

Dinner will be served at 6 p.m.,
followed by a short business meeting.

Board of **Directors**

Your cooperative is governed by a member-elected board of directors. These directors are members who are actively involved in the communities of Hatteras Island. Directors are elected to rotating three-year terms. Directors presently serving are well trained in the job to which they were elected. The functions of the board of directors are to set governing policy, approve budgets and select a manager to carry out the day-to-day operations of the cooperative. The board of directors meet regularly to carry out their responsibilities.



President
Richard A. Midgett



Vice President
John R. Hooper



Secretary/Treasurer
Dan G. Oden Jr.



Director
Angela Conner Tawes



Director
Bryan Mattingly



Director
Briggs McEwan

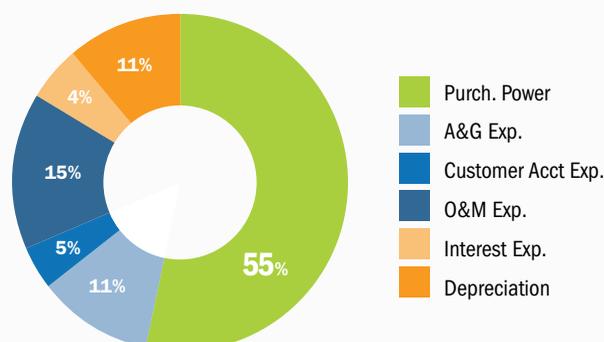


Director
Tami Thompson

December 2021 Financial Statements

AS OF DECEMBER 31	2021	2020
Operating Revenue	\$20,596,761	\$19,836,240
Patronage Capital & Operating Margins		
Patronage Capital and Operating Margins	3,294,750	2,970,367
Interest Income and Other Non-Operating Margins	166,197	378,620
Capital Credits from Associated Organizations	386,382	394,014
Patronage Capital or Margins	\$3,847,329	\$3,743,001
Assets		
Net Utility Plant	58,164,806	54,881,270
Investment in Associated Organizations	4,611,888	4,276,862
Investments in Economic Development Projects	612,000	288,000
Special Funds	583,516	551,637
Temporary Investments and Cash	5,942,717	6,001,791
Notes and Accounts Receivable	690,891	771,796
Materials and Supplies	2,369,469	2,817,867
Other Current and Accrued Assets	593,384	879,297
Prepayments	184,118	172,740
Deferred Debits	1,118,566	647,959
Total Assets	\$74,871,335	\$71,289,219
Liabilities And Other Credits		
Patronage Capital	44,997,990	42,952,609
Long Term Debt	25,532,368	24,220,121
Notes and Accounts Payable	629,740	670,547
Accumulated Operating Provisions	500,000	500,000
Consumer Deposits	83,045	81,581
Other Current and Accrued Liabilities	2,630,209	2,448,321
Deferred Credits	498,003	416,040
Total Liabilities and Other Credits	\$74,871,335	\$71,289,219
2020 Expenses		
Purchased Power	9,118,110	8,879,770
Depreciation	1,974,962	1,748,933
Interest Exp	946,697	916,784
O & M Exp	2,520,100	2,541,791
Customer Acct Exp	763,135	737,494
A & G Exp	1,979,007	2,041,101
Total Expenses	\$17,302,011	\$16,865,873

2021 Expenses





A Touchstone Energy® Cooperative

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Office Hours: 8 a.m.–5 p.m.