

**Town of Granite Falls
Electric Department
2007 Annual Report**



Employee Longevity

Billy Brown 24 Years

Jim Cushing 20 Years

Dean Isenhour 16 Years

Rick Sisk 5 Years

Stephen Stilwell 27 Years

Total Years Service 92

ELECTRIC DEPARTMENT PROJECTS FOR 2007

1. The year 2007 was busy and productive for the Electric Department. We have 2020 residential customers, 700 commercial customers, 28 industrial customers and 23 town services.
2. The Department has installed approximately 98% of the new electric system to the Lauth Property Group development, anchored by Super Wal-Mart, on the former Ray Starnes property located at the intersection of US 321 and US 321A. Services are completed at the Super Wal-Mart, Dollar Tree, Frankie's Pizza, Golden Bowl, Alltel Wireless, Tri-County Wireless, Wendy's, Murphy Oil and Bojangle's. We used 10,000 ft of 4 inch PVC pipe, 22,000 ft of 3 inch PVC pipe, 12,000 ft of 750 MCM wire, 20,000 ft of 1/0 wire and about 1000 ft of #2 copper wire. The Town worked with the NC Municipal Power Agency #1 to install a new generator and wired the controls to operate in case of an outage in the area.
3. Sunset Meadows Subdivision currently has a total of 39 homes and none under construction.
4. The Greens Subdivision has a total of 60 homes with 1 under construction.
5. The Brooks Glenn Subdivision Phase 1 is complete with 14 homes completed. Phase 2 has lots for sale with 1 home completed.
6. Stone Lake Subdivision continues to grow on Dry Ponds Road. Presently, there are 65 homes and 10 storage units completed, as well as the Clubhouse and Office/Postal Boxes.
7. Broadwater Landing Subdivision Phase 3 is complete and Phase 4 is approximately 50% complete with installation of infrastructure. There are a total of 12 homes constructed.
8. Riverbend Subdivision Phases 4 and 6 are complete. Phase 7 is complete except for street lighting. There are a total of 49 homes completed with 4 under construction.

9. The underground primary has been installed in Granite Creek Estates Phase 1, with 17 homes constructed. Phase 2 has all primary and conduits with 2 homes constructed.
10. There are 4 homes completed on Cook Street and 4 homes completed on Ike Starnes Road. The Falls Subdivision has 7 homes, Providence Glen Subdivision has 35 homes and Barnes Court is complete with 10 homes.
11. During the past year, the Electric Department completed 320 work orders and 1286 cut on/cut offs. We also installed 36 temporary services.
12. There were 14 new customers added to the security lighting program.
13. Continuing in the preventive maintenance program, we performed infrared scanning on all critical areas in the substation. All areas throughout the system were scanned to find and eliminate future trouble spots, with all "hot spots" being repaired shortly after scanning. Also scanned were the electric panels in the water and sewer plants, where several problems were detected and repaired.
14. Meter testing and calibration continued on 78 electrical meters.
15. The Town of Granite Falls continues to offer a rebate program to encourage contractors and homeowners to install energy efficient heat pumps and water heaters. Rebates given this past year totaled \$5,300. More gas customers are changing over to electric due to the instability of gas rates along with the rebate incentive. Energy audits are still available for all electric customers. This program helps the customer realize how they are using power and provides valuable information for improving their power bills.
16. Staff continues to monitor all electrical equipment in the substation as well as all pump stations in order to alert us to any potential problems.
17. The Town's aggressive tree-trimming program continued in 2007, eliminating many potential power interruptions and outages.

18. The Electric Department responded to 812 requests to locate underground power lines. This service eliminates accidental power outages due to damaged lines.
19. Staff installed 6 vacuum switches on the electric system this year. This device is a small reclosure that isolates just a small section of our system in case of a fault. This prevents our circuit breakers in the substation from operating, preventing a much larger outage.
20. There were approximately 53 new homes and businesses added to our electric system in 2007.
21. In 2006-2007, we purchased 3 new OCBs with the installation scheduled in 2008.
22. During the year, Electric employee Jim Cushing and subcontractors installed surge protection at the Water Plant and at each water tank. This should reduce problems with control and monitoring equipment failure.
23. Phase 2 of The Falls Medical Clinic was connected on US 321.
24. Squirrels continue to be our #1 problem with station operation with automobile wrecks being #2. Squirrel guards and other equipment have been installed on the system to assist in minimizing these outages.

Added 37 new services.
Continued Rebate Program.
Completed preventive maintenance at substation.
Total miles of primary wire – 103.
Completed energy audits for customers as requested.
Completed 320 work orders.
Installed 36 temporary services.
Completed 1,286 cut ons/cutoffs.
Set or changed out 46 poles.
Installed 14 new security lights.
Located 812 underground utilities through NC One Call.
Tested 78 meters.
Completed infrared scanning of the distribution lines.
Completed 220 service calls.
Installed 6,000 ft. overhead wire.
Installed Christmas lights.
Installed 12,000 ft. 750 MCM – 20,000 ft of 1/0 underground wire.
Spent 120 hours in employee training.
Sold 48,647,490 kwh to 2,401 customers
Spent 1185 hours reading meters.

Demand Side Management Report

Rebates funded in 2007 total \$5,300.
Town funded rebates since program began \$70,300.
Agency funded rebates since program began \$177,000 (increase of \$3,000 from previous year).
Rebates funded since program began \$247,300.
New kilowatts of demand sold since program began 2,195.
New kilowatts sold since rebate program began 3,669,680.
Energy audits performed for homes and businesses 27.

	<u>2005</u>	<u>2006</u>	<u>2007</u>
Work Orders Completed	324	316	320
Cut ons/Cut offs	1560	1579	1286
Temporary Services	28	36	36
Service Calls	31	34	42
Meters Tested	74	85	78
35' Poles	28	26	24
40' Poles	24	32	12
45' Poles	22	21	6
60' Poles	1	0	0
Underground Transformers Installed	18	24	35
Poletop Transformers Installed	12	18	16
Overhead Wire Installed/ft.	12000	8000	6000
Underground Wire Installed/ft.	18000	11000	37000
Safety and Training/hrs.	145	160	120
Meter Reading/hrs.	1144	1162	1185
Work order/Mapping/hrs.	280	290	320
Traffic Light Maintenance/hrs.	6	12	0
Substation Service/hrs.	100	40	10
Christmas Light Installation/hrs.	180	160	160
Kwh's Sold	45,771,519	46,950,485	48,647,490
Electric Customers Billed	<u>2394</u>	<u>2385</u>	<u>2401</u>
Residential Customers Billed	1990	1997	2020
Commercial Customers Billed	383	360	353
Industrial Customers Billed	21	28	28
City Owned Services		22	23
Total Miles of Primary Wire	91	95	103
Vacuum Switches Installed	15	9	0