

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 94.99% with Normalized Test Period MWh Sales
Billing Period December 1, 2024 - November 30, 2025
Docket No. E-2, Sub 1341

Harrington Exhibit 6A

| Line No. | Unit | Reference | Generation (MWh) | Unit Cost (cents/kWh) B = C/A/10 | Total System Cost (\$) C | Remove impact of SC DERP Net Metered Generation on System Avg Fuel (\$) D | System Capacity Cost (\$) E | System Fuel (Non-Capacity) Cost (\$) F = C + D - E |
|----------|---|-----------------------------------|------------------|-------------------------------------|-----------------------------|---|-----------------------------------|--|
| 1 | Total Nuclear | Workpaper 3, 4 | 29,898,302 | 0.6209 | \$ 185,636,000 | | | \$ 185,636,000 |
| 2 | Coal | Workpaper 13 | 6,710,084 | 4.4013 | 295,331,602 | | | 295,331,602 |
| 3 | Gas - CT and CC | Workpaper 3, 4 | 21,896,341 | 3.7600 | 823,304,204 | | | 823,304,204 |
| 4 | Reagents & Byproducts | Workpaper 5 | | | 36,613,958 | | | 36,613,958 |
| 5 | Remove SC DERP Net Metering Impact on System Avg Fuel | Workpaper 10 | | | | \$ 1,308,885 | | 1,308,885 |
| 6 | Total Fossil | Line 2 + Line 3 + Line 4 + Line 5 | 28,606,425 | | 1,155,249,764 | 1,308,885 | | 1,156,558,649 |
| 7 | Hydro | Workpaper 3 | 637,745 | | | | | |
| 8 | Utility Owned Solar Generation | Workpaper 3 | 294,499 | | | | | |
| 9 | Total Generation | Line 1 + Line 6 + Line 7 + Line 8 | 59,436,971 | | 1,340,885,764 | 1,308,885 | | 1,342,194,649 |
| 10 | Purchases | Workpaper 3, 4, or Exh 6B | 11,763,051 | | 580,041,053 | | \$ 69,586,519 | 510,454,534 |
| 11 | JDA Savings Shared | Workpaper 4 | | | (24,331,067) | | | (24,331,067) |
| 12 | Total Purchases | Line 10 + Line 11 | 11,763,051 | | 555,709,986 | | 69,586,519 | 486,123,467 |
| 13 | Total Generation and Purchases | Line 9 + Line 12 | 71,200,022 | | 1,896,595,750 | 1,308,885 | 69,586,519 | 1,828,318,115 |
| 14 | Fuel expense recovered through intersystem sales | Workpaper 3, 4 | (7,230,228) | | (235,690,333) | | | (235,690,333) |
| 15 | Line losses and Company use (MWh only) | Line 17 - Line 13 - Line 14 | (2,717,796) | | | | | |
| 16 | System Fuel Expense for Fuel Factor | Line 13 + Line 14 | | | \$ 1,660,905,417 | \$ 1,308,885 | \$ 69,586,519 | \$ 1,592,627,782 |
| 17 | Normalized Test Period MWh Sales at Meter | Exh 4 | 61,251,998 | | 61,251,998 | | | |
| 18 | Fuel and Fuel-Related Costs cents/kWh | Line 16 /Line 17 / 10 | | | 2.712 | | | |

Note: Rounding differences may occur

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Harrington Exhibit 6B

| Line No. | Description | | Residential | General Service Small | General Service Medium | General Service Large | Lighting | Total |
|--|---|------------------------|----------------|-----------------------|------------------------|-----------------------|--------------|------------------|
| 1 | NC Retail Normalized Test Period MWh Sales at Generation | Workpaper 9 | 17,747,413 | 2,028,212 | 10,880,035 | 8,337,849 | 346,144 | 39,339,653 |
| Calculation of Fuel and Fuel-related (Non-Capacity) Rate by Class | | | | | | | | |
| | | | | | | | | Amount |
| 2 | System Fuel and Fuel-related (Non-Capacity) Costs | Exhibit 6A | | | | | | \$ 1,592,627,782 |
| 3 | NC Portion - Jurisdictional % based on Normalized Test Period MWh Sales at Generation | Workpaper 9 | | | | | | 61.72% |
| 4 | NC Retail Fuel (Non-Capacity) Costs before 2.5% Purchase Power Test | Line 2 * Line 3 | | | | | | \$ 983,008,038 |
| 5 | NC Retail Amount Excluded by 2.5% Purchased Power Test | Workpaper 15, opp sign | | | | | | - |
| 6 | NC Retail Fuel (Non-Capacity) Costs Allowable Under GEN. STAT. § 62-133.2(A2) | Line 4 + Line 5 | | | | | | \$ 983,008,038 |
| 7 | NC Retail Normalized Test Period MWh Sales at Generation Allocation Factors | Line 1 / Line 1 Total | 45.11% | 5.16% | 27.66% | 21.19% | 0.88% | 100.00% |
| 8 | Fuel (Non-Capacity) Costs allocated on Normalized Test Period MWh Sales at Generation | Line 6 * Line 7 | \$ 443,467,293 | \$ 50,680,372 | \$ 271,867,217 | \$ 208,343,801 | \$ 8,649,355 | \$ 983,008,038 |
| Calculation of Renewable and Qualifying Facilities Purchased Power Capacity Rate by Class | | | | | | | | |
| | | | | | | | | Amount |
| 9 | Renewable Purchased Power Capacity | Workpaper 4 | | | | | | \$ 22,968,069 |
| 10 | Purchases from Qualifying Facilities Capacity | Workpaper 4 | | | | | | 46,618,449 |
| 11 | Total of Renewable and Qualifying Facilities Purchased Power Capacity | Line 9 + Line 10 | | | | | | \$ 69,586,519 |
| 12 | NC Portion - Jurisdictional % based on Production Demand Allocator | Workpaper 12 | | | | | | 62.82% |
| 13 | NC Renewable and Qualifying Facilities Purchased Power Capacity | Line 11 * Line 12 | | | | | | \$ 43,710,929 |
| 14 | Production Demand Allocation Factors | Workpaper 12 | 50.47% | 23.41% | 8.43% | 16.56% | 1.14% | 100.000% |
| 15 | Renewable and Qualifying Facilities Purchased Power Capacity allocated on Production Demand % | Line 13 * Line 14 | \$ 22,059,077 | \$ 10,231,089 | \$ 3,685,216 | \$ 7,238,564 | \$ 496,981 | \$ 43,710,929 |
| Billed Rates | | | | | | | | |
| 16 | NC Retail Normalized Test Period MWh Sales at Meter | Workpaper 9 | 16,810,349 | 1,921,223 | 10,323,848 | 8,038,354 | 328,031 | 37,421,804 |
| | | | cents/kWh | cents/kWh | cents/kWh | cents/kWh | cents/kWh | |
| 17 | Fuel (Non-Capacity) cents/kWh based on Projected Billing Period MWh Sales at Meter | Line 8 / Line 16 / 10 | 2.638 | 2.638 | 2.633 | 2.592 | 2.637 | |
| 18 | Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh based on Projected Billing Period Sales at Meter | Line 15 / Line 16 / 10 | 0.131 | 0.533 | 0.036 | 0.090 | 0.152 | |
| 19 | EMF Increment/(Decrement) cents/kWh based on Normalized Test Period Sales at Meter | Exh 3B, 3C, 3D, 3E, 3F | 0.354 | 0.037 | 0.174 | 0.424 | 0.900 | |
| 20 | EMF Interest Decrement cents/kWh based on Normalized Test Period Sales at Meter, if applicable | n/a | | | | | | |
| 21 | Proposed Net Fuel and Fuel-Related Costs Factors | Sum Lines 17:20 | 3.123 | 3.208 | 2.843 | 3.106 | 3.689 | |

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