#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF NOLIN ) RURAL ELECTRIC COOPERATIVE ) CORPORATION TO PROVIDE ADEOUATE ) REVENUES FOR ITS OPERATIONS ) CASE NO. 8481

# ORDER

On March 31, 1982, Nolin Rural Electric Cooperative Corporation ("Nolin") filed with the Commission an application requesting authority to increase its revenue by \$650,519 annually, or 5.94 percent, effective May 1, 1982. Nolin stated that the proposed rate adjustment was required to furnish adequate and reliable service to its consumers, to meet the increased costs of operation, to maintain adequate reserves, and to maintain sufficient earnings ratios to meet the mortgage requirements of its primary lenders. Based on the determination herein, Nolin has been granted an increase in revenue of \$382,368 annually, or 3.49 percent.

On April 12, 1982, the Commission suspended the proposed rate increase until October 1, 1982, in order to conduct public hearings and investigations into the reasonableness of the proposed rates. Nolin was directed to give notice to its consumers of the proposed rates and the hearing scheduled for July 28, 1982. On April 6, 1982, the Consumer Protection Division of the Office of the Attorney General moved to intervene in this proceeding pursuant to KRS 367.150(8), which motion was granted. No other parties appeared to formally intervene herein.

### COMMENTARY

Nolin is a consumer-owned rural electric cooperative engaged in the distribution and sale of electric energy to approximately 14,850 member-consumers in the Kentucky counties of Breckinridge, Grayson, Green, Hardin, Hart, Larue, Meade and Taylor. Nolin purchases all of its power from East Kentucky Power Cooperative, Inc.

### TEST PERIOD

Nolin proposed and the Commission has accepted the 12month period ending December 31, 1981, as the test period for determining the reasonableness of the proposed rates. In utilizing the historic test period, the Commission has given full consideration to appropriate known and measurable changes.

### VALUATION

### Net Investment

Nolin proposed a net investment rate base of \$12,675,383. The Commission concurs with this determination with the following exceptions:

In accordance with past policy, the Commission has

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adjusted materials and supplies to reflect the 13-month average rather than the year-end balance proposed by Nolin. Likewise, prepayments have been adjusted to reflect the 13-month average as the Commission is of the opinion that such an adjustment provides greater recognition of the changing conditions in which a utility operates. Nolin included as working capital one-eighth of pro forma operation and maintenance expenses including other deductions and other interest expense. The Commission has excluded other income deductions and other interest expense from the determination of working capital inasmuch as those items are non-operating, "below-the-line" expenses.

The rate base has been reduced by \$33,230 to eliminate the balance in customer advances for construction at the end of the test year. The Commission is of the opinion that these advances are the equivalent of contributions of capital until their final disposition and should be treated as such for rate-making purposes.

Based on the Commission's adjustments, Nolin's net investment rate base for rate-making purposes is as follows: Utility Plant in Service \$ 14,639,533 Construction Work in Progress 233,061 Total Utility Plant 14,872,594 Add: Materials and Supplies Ŝ 192,369 Prepayments 64,637 204,842 Working Capital 461,848 Subtotal S Deduct: Depreciation Reserve 2,563,680 Customer Advances for Construction 33.230 Subtotal 2,596,910 Net Investment \$ 12,737,532



## Capital Structure

The Commission finds from the evidence of record that Nolin's capital structure at the end of the test year was \$13,471,192 and consisted of \$2,710,463 in equity and \$10,760,729 in long-term debt. In the determination of this capital structure, the Commission has excluded accumulated capital credit assignments from Nolin's wholesale power supplier in the amount of \$617,487.

#### **REVENUES AND EXPENSES**

Nolin proposed several adjustments to revenues and expenses to reflect more current and anticipated operating conditions. The Commission finds the proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications:

## Revenue Normalization

Nolin proposed an adjustment of \$697,443 to normalize its test year revenue from electric sales to reflect a full year's sales at the rates in effect at the time the application was filed based on the test year volume of sales. Since the filing of the application, Nolin has incurred and passed on to its consumers an increase in its wholesale power cost.

Flint Ink Corporation ("Flint Ink") is the only customer served under Nolin's schedule 7 - large industrial rate. Flint Ink was served for only 3 months of the test year at usage levels below the anticipated normal level. At the request of

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the Commission, Nolin submitted a usage analysis for Flint Ink for a full 12 months. The Commission is of the opinion that the 12-month usage analysis, which consists of 6 months of actual sales and 6 months of projected sales for the calendar year 1982, is a reasonable and accurate measurement of Nolin's future sales to Flint Ink.

Based on the adjusted sales volume to Flint Ink and the revised rates approved in Case No. 8415-M to flow through Nolin's increased power cost, the Commission has increased the proposed revenue normalization adjustment by \$1,121,175 to \$1,818,618.

## Purchased Power Adjustment

In order to normalize its purchased power cost for the test year, Nolin proposed an adjustment of \$414,440 based on the wholesale power rate in effect at the time the application was filed. To reflect the increase in Nolin's power cost from East Kentucky Power Cooperative, Inc., approved in Case No. 8400, and the increase in purchases due to the adjustment for sales to Flint Ink, the Commission has increased Nolin's proposed adjustment by \$1,098,091 to \$1,512,531. This reflects an increase of 4 mills in Nolin's wholesale power rate and increased purchases of approximately 13,550 kilowatts and 5,114,000 kilowatt-hours to supply Flint Ink.

# Fuel Clause

In Case No. 8077 the Commission adjusted Nolin's base rates to roll in the fuel cost of its wholesale power supplier.

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# Suppremental Recifement Denerits

For the last 10 months of the test year, Nolin paid to its former general manager, Mr. Clem Tharp, \$1,184 monthly as a supplemental retirement benefit. Nolin proposed an adjustment of \$2,368 to annualize these payments for a 12-month period. The agreement entered into by Nolin and Mr. Tharp calls for these payments to continue for 5 years from the date of Mr. Tharp's retirement. Nolin introduced little evidence to support the necessity of these payments, and in fact, Nolin's counsel requested that no questions be asked concerning the circumstances of Mr. Tharp's retirement. Without more detailed support for the necessity of these payments than Nolin was willing to offer, the Commission cannot allow them to be borne by Nolin's consumers. Therefore, Nolin's test year operating expenses have been reduced by \$11,842 to eliminate, for rate-making purposes, the expense incurred for the supplemental retirement benefits paid to Mr. Tharp.

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### Donations

During the test year, Nolin expended \$247 for donations to educational and civic organizations. The Commission is of the opinion that expenditures of this type produce little, if any, benefits to Nolin's consumers and, therefore, should not be allowed for rate-making purposes.

## Franchise Taxes

Nolin incurred \$49,456 in franchise tax expenses during the test year. In July 1982, Nolin began collecting this tax from its customers in Radcliff and Vine Grove, the cities which assess these taxes. To reflect that these taxes would no longer be recovered through rates, Nolin proposed an adjustment of \$25,000, or one-half of the test year expense, to reduce operating expenses for one-half of the calendar year 1982. Since the rates approved herein will be effective on a prospective basis and Nolin will not record franchise tax assessments as an expense during the time these rates are in effect, the Commission is of the opinion that no amount of the franchise tax expense incurred during the test year should be included as a rate-making expense. Therefore, Nolin's adjustment to reduce the test year expense has been increased by \$24,456, to \$49,456, to eliminate the full amount of the test year expense.

## Contributions

In addition to the \$247 for donations which has not been allowed for rate-making purposes, Nolin incurred additional

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expenses of \$1,220 for contributions which were recorded as non-operating, below-the-line expenses. As of March 1981, Nolin's management decided such expenditures were imprudent and they were discontinued. The Commission agrees with Nolin's decision and has therefore reduced the level of non-operating expenses by \$1,220 to reflect the discontinuance of these expenditures.

### Interest on Long-Term Debt

Nolin proposed an adjustment of \$74,999 to annualize interest expense on long-term debt. Components of this adjustment included the advance of \$400,000 subsequent to the test year and the anticipated increase in the interest rate on a National Rural Utilities Cooperative Finance Corporation ("CFC") note during 1982. In determining the additional expense on the amount advanced subsequent to the test year Nolin proposed to include only 86.6 percent of the annual expense because only 10.4 months of calendar year 1982 remained after the advance date of February 18, 1982. The Commission is of the opinion that Nolin's pro forma interest expense should reflect a full year's expense on the \$400,000 advanced subsequent to the test year. This will increase the proposed adjustment by \$2,685.

In calculating its annual interest expense Nolin included an expected change, from 9 to 14 percent, in the interest rate on CFC note C-10. Nolin's witnesses testified that the interest rate had not yet changed, that no change could

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occur before January 1983, and that the magnitude of any change in the interest rate could not be determined at this time. Therefore, the Commission is of the opinion that the historical interest rate of 9 percent should be applied to CFC note C-10 as no change in the interest rate has yet occurred. This will reduce the proposed adjustment by \$13,575.

The net effect of both changes made herein is to reduce Nolin's proposed adjustment by \$10,890 to \$64,109.

# Extraordinary Gain

During the test year Nolin had a \$2,900 gain from the sale of land once held as a future substation site. Nolin holds no similar property and such sales are unlikely to recur. Therefore, the Commission has reduced Nolin's non-operating income by \$2,900 to eliminate this item for rate-making purposes. Capital Credits

Nolin did not propose any adjustment to its test year level of capital credits reflected on its operating statement; however, Nolin did propose to exclude all capital credits from the calculation of TIER for rate-making purposes. The Commission has, in past cases, allowed generation and transmission capital credits to be excluded from pro forma revenue in determining revenue requirements. Accordingly, the Commission has made an adjustment of \$79,300 to exclude Nolin's generation and transmission credits for rate-making purposes. In accordance with past policy the Commission will include other capital credits from associated organizations as income in the year in which they are assigned.

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The effect of the revised pro forma adjustments on net income is as follows:

	Actual	Pro Forma	Adjusted
	Test Period	Adjustments	Test Year
Operating Revenues Operating Expenses Operating Income Interest on Long-Term Debt Other Income and	\$10,647,191 10,071,426 \$575,765 548,216	64,109	\$12,203,232 <u>11,315,377</u> \$ 887,855 612,325
(Deductions) - Net	<u>188,488</u>	(80,980)	<u>    107,508</u>
Net Income	<u>\$216,037</u>	\$ 167,001	\$   383,038

#### **REVENUE REQUIREMENTS**

The actual rate of return on Nolin's net investment rate base established herein for rate-making purposes was 4.51 percent. After taking into consideration the accepted pro forma adjustments, Nolin would realize a rate of return of 6.97 percent. Nolin placed little emphasis on the rate of return on net investment and placed greater emphasis on the requested times interest earned ratio ("TIER").

In accordance with the management policy which has been adopted by its board of directors, Nolin requested additional revenue in this matter sufficient to produce a TIER of 2.50. The mortgages securing Nolin's long-term debt require only that it achieve an average TIER of 1.50 for 2 of the 3 most recent calendar years. This requirement, which applies to all rural electric cooperatives, has been considered by the Commission in past cases involving rates for cooperatives and the Commission has consistently allowed a return on investment which produces a TIER of 2.25, based on the adjusted historical test year, as compensation for business and financial risks.

In determining whether a greater TIER is required, the Commission has assessed the business and financial risks currently faced by Nolin. The most significant risk Nolin faces is a sudden increase in the cost of purchased power. This risk is virtually non-existent due to the fuel adjustment clause which allows Nolin to fully recover any such increase. and the Commission's practice of allowing timely flow-throughs of purchased power increases. The Commission has further reduced the risk facing Nolin by allowing increased interest cost on debt "drawn down" subsequent to the test year, without making any adjustment for revenues and expenses which will be generated by this capital. This results in allowing interest on this additional capital as well as providing the margin for a 2.25 TIER. The Commission concludes that Nolin's risks are not abnormal and that there is not sufficient justification for the 2.50 TIER Nolin has requested.

The Commission is of the opinion that Nolin's adjusted rate of return is inadequate and a more reasonable rate of return would be 9.97 percent. In order to achieve this rate of return Nolin should be allowed to increase its annual revenue by approximately \$382,368 which would result in a TIER of 2.25. This additional revenue will provide net income of \$765,406 which should be sufficient to meet the requirements in Nolin's mortgages securing its long-term debt.

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#### REVENUE ALLOCATION AND RATE DESIGN

Nolin proposed to allocate the revenue increase to the various rate classes in direct proportion to the revenue currently produced by the rate classes. Within the rate classes, Nolin proposed increasing all energy and demand charges by an equal percentage factor, except for schedules 1, 2 and 7. On schedules 1 and 2, for residential and small commercial customers, respectively, Nolin proposed a new rate design consisting of a customer charge and a flat rate for all KWH usage which would replace the current rate design consisting of a minimum charge, which allowed the customer to use up to 40 KWH, and a two-step, declining block rate design for the balance of the KWH usage. On schedule 7 for large industrial customers, Nolin proposed to increase only the energy charge as the demand charge currently tracks the demand cost of Nolin's wholesale power supplier.

The Commission is of the opinion that the proposed rate design and the proposed revenue allocation are reasonable and should be approved except for the proposed customer charges for rate schedules 1 and 2. For both its residential and small commercial customers Nolin proposed a monthly customer charge of \$7 but offered no evidence to support such a charge. The Commission, therefore, finds that the proposed customer charges for rate schedules 1 and 2 are unreasonable and should

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be denied. Based on Nolin's existing minimum charge and taking into consideration the amount of increase granted herein together with the elimination of any energy usage from the minimum monthly charge, the Commission is of the opinion and finds that a monthly customer charge of \$5 is just and reasonable and should be approved for rate schedules 1 and 2.

### SUMMARY

The Commission, having considered the evidence of **record and being advised**, is of the opinion and finds that:

1. The rates in Appendix A are the fair, just and reasonable rates for Nolin and will produce gross annual revenue sufficient to pay its operating expenses, service its debt and provide a reasonable surplus for equity growth.

2. The rates proposed by Nolin would produce revenue in excess of that found reasonable herein and should be denied upon application of KRS 278.030.

IT IS THEREFORE ORDERED that the rates in Appendix A be and they hereby are approved for service rendered by Nolin on and after October 1, 1982.

IT IS FURTHER ORDERED that the rates proposed by Nolin be and they hereby are denied.

IT IS FURTHER ORDERED that within 30 days from the date of this Order Nolin shall file with the Commission its revised tariff sheets setting out the rates approved herein.

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# Done at Frankfort, Kentucky, this 28th day of September,

1982.

# PUBLIC SERVICE COMMISSION

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Vice Chairman

Commissioner

**ATTEST:** 

Secretary

#### APPENDIX

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 8481 DATED SEPTEMBER 28, 1982

The following rates and charges are prescribed for the customers in the area served by Nolin Rural Electric Cooperative Corporation. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

SCHEDULE 1 RESIDENTIAL, FARM, NON-FARM, TRAILERS AND MOBILE HOMES\*

Rates:

Customer Charge	\$5.00 per month
All KWH Charge	.05381 per KWH

Minimum Charge:

The minimum monthly charge for single phase service shall be \$5.00.

SCHEDULE 2 COMMERCIAL, SMALL POWER, SINGLE PHASE AND THREE FHASE SERVICE\*

Rates:

Customer Charge All KWH Charge \$5.00 per month .06049 per KWH

### Minimum Charge:

The minimum monthly charge for single phase service shall be \$5.00.



### Rates:

### Demand Charge

\$3.24 Per Kilowatt of Billing Demand Per Month

### Energy Charge

First	2,500 1	KWH Per	Month	\$.05346	Net	Per	KWH
Next	12,500 1	KWH Per	Month	.04875	Net	Per	KWH
Over	15,000 H	KWH Per	Month	.04733	Net	Per	KWH

## SCHEDULE 4 INDUSTRIAL\*

### Rates:

### Demand Charge

\$3.24 Per Kilowatt of Billing Demand Per Month

## Energy Charge

First	3,500	KWH	Per	Month	\$.05852	Net	Per	KWH
Next	6,500	KWH	Per	Month	.04497	Net	Per	KWH
Over	10,000	KWH	Per	Month	.04146	Net	Per	KWH

#### SCHEDULE 5 RURAL LIGHT\*

#### Applicable: Entire Service Area\*

### Rates:

Service for the above unit shall be unmetered and billed on the consumer's monthly bill for other electrical service furnished by the Cooperative, at the rate of \$5.83 each and every month for each lighting fixture contracted for by the consumer.

### SCHEDULE 6\*

#### Rates:

Mercury Vapor Series or Multiple	KWH/Light	
Standard Overhead	76	AD 71 Dem Idebe Dem
7,000 Initial Lumens	75	\$2.71 Per Light Per Month
20,000 Initial Lumens	170	8.54 Per Light Per Month





Ornamental Service		
7,000 Initial Lumens	75	\$3.78 Per Light Per
		Month
20,000 Initial Lumens	170	9.68 Per Light Per
		Month

#### SCHEDULE 7 LARGE INDUSTRIAL\*

<u>Applicable</u>: Flint Ink Corporation (Chromatic Color Corp., Elizabethtown, Ky.)

# Type of Service:

Three phase 60 hertz at 12,470 volts, as agreed to in the special 5-year Agreement for Service.

Rates per Month:

Demand Charge

\$6.15 per kilowatt of billing demand per month

Energy Charge

All KWH at \$0.03508 Net per KWH

### Minimum Charge:

The minimum monthly charge shall be as specified in the Agreement for Service - \$1,500.00

### Determination of Billing Demand:

The billing demand shall be the maximum kilowatt demand established by the consumer for any period of 15 consecutive minutes during the month for which the bill is rendered, as indicated or recorded by a demand meter and adjusted for power factor as follows:

#### Power Factor Adjustment:

The consumer agrees to maintain unity power factor as nearly as practicable. Power factor may be measured at any time. Should such measurements indicate that the power factor at the time of his maximum demand is less than 85%, the demand for billing purposes shall be the demand as indicated or recorded by the demand meter multiplied by 85% and divided by the percent power factor.

## Contract for Service:

The consumer must give satisfactory assurance by means of a written agreement as to the character, amount and duration of the business and complete a 5-year contract.



# Power Cost Increase:

Refer to Section 2d of the "Agreement for Electric Service."

## \*Fuel Adjustment Clause:

The above rate may be increased or decreased by an amount per KWH equal to the fuel adjustment amount per KWH as billed by the Wholesale Power Supplier plus an allowance for line losses. The allowance for line losses will not exceed 10% and is based on a 12-month moving average of such losses.