

2016

Accelerating Equity Retirement in Rural Electric Cooperatives

Jeffrey S. Royer

University of Nebraska-Lincoln, jroyer@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/agecon_cornhusker

Royer, Jeffrey S., "Accelerating Equity Retirement in Rural Electric Cooperatives" (2016). *Cornhusker Economics*. 731.
http://digitalcommons.unl.edu/agecon_cornhusker/731

This Article is brought to you for free and open access by the Agricultural Economics Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Cornhusker Economics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Cornhusker Economics

Accelerating Equity Retirement in Rural Electric Cooperatives

Market Report	Year Ago	4 Wks Ago	9-916
Livestock and Products,			
Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.	138.27	118.00	105.37
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	241.00	165.75	145.42
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	214.92	158.39	138.69
Choice Boxed Beef, 600-750 lb. Carcass.	238.45	200.54	189.47
Western Corn Belt Base Hog Price Carcass, Negotiated	66.12	63.75	57.82
Pork Carcass Cutout, 185 lb. Carcass 51-52% Lean.	84.61	75.19	80.24
Slaughter Lambs, woolled and shorn, 135-165 lb. National.	154.79	163.35	165.13
National Carcass Lamb Cutout FOB.	359.13	351.94	361.80
Crops,			
Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu.	4.02	2.99	2.81
Corn, No. 2, Yellow Nebraska City, bu.	3.59	2.99	2.95
Soybeans, No. 1, Yellow Nebraska City, bu.	8.69	9.42	9.14
Grain Sorghum, No.2, Yellow Dorchester, cwt.	5.96	4.50	4.54
Oats, No. 2, Heavy Minneapolis, Mn, bu.	2.85	2.30	2.25
Feed			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	160.00	163.75	147.50
Alfalfa, Large Rounds, Good Platte Valley, ton.	82.50	72.50	65.00
Grass Hay, Large Rounds, Good Nebraska, ton.	82.50	*	*
Dried Distillers Grains, 10% Moisture Nebraska Average.	137.50	122.50	120.50
Wet Distillers Grains, 65-70% Moisture Nebraska Average.	46.25	*	34.25
* No Market			

Electric cooperatives serve an estimated 42 million people in the United States by providing power to 18.5 million businesses, homes, schools, churches, farms, irrigation systems, and other customers. They deliver 11 percent of the electric power sold in this country, operating in 47 states and 80 percent of all counties. Electric cooperatives serve their members through the generation, transmission, and distribution of electricity. Power supply cooperatives (also called generation and transmission or G&T cooperatives) are engaged in the generation or purchase of electricity and the transmission of wholesale electricity to distribution cooperatives, which carry electricity to retail customers. There are 840 distribution cooperatives and 65 power supply cooperatives in the United States, and they own combined assets of \$140 billion.

To raise equity capital, electric cooperatives must rely on net margins allocated to members in the form of capital credits. Capital credits are allocated to individual members based on their purchase of electricity from a cooperative. Those margins are retained for use by the cooperative until the credits are eventually replaced by new allocations and redeemed in cash. Capital credits are usually retired according to the first-in/first-out (FIFO) method. Under the FIFO method, a cooperative retires, or rotates, capital credits in the order they were allocated as the oldest allocations are replaced by new ones.

Without a systematic plan for retiring capital credits, a cooperative cannot ensure that its members are financing the organization in proportion to the benefits they receive or that each generation of members is carrying its own weight. In 2005, a task force appointed by the National Rural Electric Cooperative Association

Finance Corporation (CFC) recommended that every electric cooperative should have a policy for retiring capital credits on an annual basis subject to the discretion of its board of directors and its financial condition. The task force also recommended that every cooperative should have an equity management plan that included setting electric rates to generate cash flows sufficient for retiring capital credits. In a 2008 article critical of electric cooperatives, Jim Cooper, U.S. representative from Tennessee, argued that the cooperatives were overcapitalized by 10 to 30 percent and had unused borrowing capacity that would allow them to retire \$3 billion to \$9 billion of capital credits on a one-time basis without threatening their financial stability.

A recent UNL Department of Agricultural Economics study assessed the ability of the average distribution cooperative to retire capital credits.¹ That study examined the financial impacts on the cooperative of three equity retirement strategies:

1. *Replacing equity with term debt*—Acquiring additional long-term debt to replace equity capital so the cooperative can undertake an immediate one-time retirement of capital credits.
2. *Reducing the rate of equity accumulation*—Lowering the rate at which equity is accumulated and relying more on long-term debt to finance asset growth so the cooperative's margins can be used to accelerate the retirement of capital credits.
3. *Adjusting the electric rate*—Raising the electric rate so the cooperative can generate additional margins for retiring capital credits and shift a greater share of financing to those members who currently benefit most from its use.

The impacts of these strategies were analyzed by tracking several key financial indicators, including the cooperative's equity share and its times-interest-earned ratio (TIER). The equity share is represented by equity divided by total assets. The TIER is a measure of interest coverage, or the ability of a business to make interest payments. It is calculated by dividing the sum of net income and total interest expense by total interest expense. Financial advisors generally recommend that distribution cooperatives maintain an equity share of at least 30 percent and a TIER of at least 1.5.

According to the study, the average distribution cooperative could replace up to 25 percent of its equity with term debt without reducing its equity share or TIER below recom-

mended levels. However, lenders suggest the cooperative probably would be able to obtain unsecured financing for only about 5–15 percent of its equity. In addition to the immediate one-time benefit members would receive from the retirement of capital credits, the replacement of equity with term debt would provide an important secondary benefit by raising the rate of return on equity due to increased financial leverage. That higher rate of return would improve the cooperative's ability to rotate capital credits in the future.

Under the second strategy, the cooperative would reduce the rate at which it accumulates equity so a larger share of new assets is financed with borrowed capital. In that way, more of current earnings can be used to retire capital credits while the cooperative's equity share is gradually reduced. An advantage of this strategy is that new assets may provide a source of collateral for new loans, thus providing the cooperative greater access to financing and at lower interest rates than with unsecured debt. Simply by lowering the rate at which it accumulates equity, a cooperative can shorten its rotation cycle. In addition, as the equity share declines over time, the rate of return will rise, further reducing the length of the cycle. An analysis contained in the study demonstrates that the average distribution cooperative could substantially reduce its rotation cycle by halving its rate of equity growth.

Cooperatives may have considerable flexibility in setting the rates they charge members for electricity and therefore may benefit from exploring higher electric rates as a means for accelerating the retirement of capital credits. Another analysis included in the study shows that the average distribution cooperative could reduce its rotation cycle by more than three years with only a minimal increase in its electric rate. Shorter rotation cycles would require greater rate increases, but the cooperative could shorten its rotation cycle substantially with less than a 5 percent increase.

Jeffrey S. Royer, (402) 472-3108
Professor, Dept. of Agricultural Economics
University of Nebraska–Lincoln
jroyer@unl.edu

¹ Jeffrey S. Royer, "Assessing the Ability of Rural Electric Cooperatives to Retire Capital Credits," *Journal of Cooperatives* 31 (2016): 32–50. Download available at <http://digitalcommons.unl.edu/ageconfacpub/132/>.