

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORP /DC/
 Form 424B3
 February 27, 2014

Rule 424 (b) (3)
 Registration No. 333-177949

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities Offered | Maximum Aggregate Offering Price | Amount of Registration Fee(1)(2) |
|---|----------------------------------|----------------------------------|
| Subordinated Debt Securities | \$290,000.00 | \$37.35 |

- (1) Calculated in accordance with Rule 457(r) of the Securities Act of 1933.
- (2) The amount in this column has been transmitted to the SEC in connection with the securities offered by means of this pricing supplement.

TRADE DATE: February 27, 2014
 PRICING SUPPLEMENT NO. 478 DATED February 27, 2014
 TO PROSPECTUS SUPPLEMENT DATED October 8, 2013
 AND PROSPECTUS DATED November 14, 2011

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION (“National Rural”)

MEMBER CAPITAL SECURITIES

| | |
|-------------------------|---|
| Principal Amount: | \$290,000.00 |
| Issue Price: | 100% of Principal Amount |
| Original Issue Date: | 3/4/2014 |
| Maturity Date: | 3/4/2044 |
| Interest Rate: | 5.00% |
| Regular Record Dates: | Each March 15 and September 15 |
| Interest Payment Dates: | Each April 1 and October 1 |
| First Coupon Date: | 4/1/2014 |
| Product Ranking: | Subordinate to all existing and future senior indebtedness of National Rural and all existing and future subordinated indebtedness of National Rural that is held by or transferrable by non-members of National Rural. |
| Optimal Redemption | Redeemable at the option of National Rural, in whole or in part, at any time after March 4, 2024 at a redemption price equal to 100% of the principal amount to be redeemed |

together with accrued and unpaid interest, if any, to the redemption date.

Option to Extend Interest Payment Period:

National Rural will have the right to extend the interest payment period to a period not exceeding 10 consecutive semi-annual interest payment periods. At the end of a deferral period, National Rural must pay all interest then accrued and unpaid together with interest thereon at the same rate as specified for the securities.

Restrictions on Transfer:

The securities can only be sold or transferred to other National Rural voting members upon the written consent of National Rural.

Agent's Commission:

None

Form of Note:
(Book-Entry or Certificated)

Certificated

Denominations / Multiples:

\$25,000 / \$5,000

Listing:

None

Member Capital Securities may be issued by National Rural in an unlimited aggregate principal amount.