Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2018

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

A This return/report is for:
- [ ] a multiemployer plan
- [ ] a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [X] a single-employer plan
- [ ] a DFE (specify) ____

B This return/report is:
- [ ] the first return/report
- [ ] the final return/report
- [ ] an amended return/report
- [ ] a short plan year return/report (less than 12 months)

C If the plan is a collectively-bargained plan, check here. . . . . ▶ [ ]

D Check box if filing under:
- [X] Form 5558
- [ ] automatic extension
- [ ] the DFVC program
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

1b Three-digit plan number (PN) ▶ 020

1c Effective date of plan 07/01/1980

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)
HEARTLAND COOPERATIVE

PO BOX 71399
DES MOINES, IA 50325-0399

2b Employer Identification Number (EIN) 42-0242420

2c Plan Sponsor's telephone number 515-225-1334

2d Business code (see instructions) 115110

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	12/27/2019	KELLY HAYERTZ
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	01/07/2020	TOM HAUSCHEL
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address ☐ Same as Plan Sponsor

ASSOCIATED BENEFITS CORPORATION

1415 28TH STREET, SUITE 100
WEST DES MOINES, IA 50266-1450

3b Administrator's EIN: 42-1279416

3c Administrator's telephone number: 515-226-0303

4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report:
a Sponsor's name
c Plan Name

4b EIN

4d PN

5 Total number of participants at the beginning of the plan year	**5**	954
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**).		
a(1) Total number of active participants at the beginning of the plan year	**6a(1)**	445
a(2) Total number of active participants at the end of the plan year	**6a(2)**	441
b Retired or separated participants receiving benefits	**6b**	281
c Other retired or separated participants entitled to future benefits	**6c**	242
d Subtotal. Add lines **6a(2)**, **6b**, and **6c**	**6d**	964
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	0
f Total. Add lines **6d** and **6e**.	**6f**	964
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	53
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1A

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply)		**9b** Plan benefit arrangement (check all that apply)	
(1)	☐ Insurance	**(1)**	☐ Insurance
(2)	☐ Code section 412(e)(3) insurance contracts	**(2)**	☐ Code section 412(e)(3) insurance contracts
(3)	☒ Trust	**(3)**	☒ Trust
(4)	☐ General assets of the sponsor	**(4)**	☐ General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- **(1)** ☒ **R** (Retirement Plan Information)
- **(2)** ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- **(3)** ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- **(1)** ☒ **H** (Financial Information)
- **(2)** ☐ **I** (Financial Information – Small Plan)
- **(3)** ☐ **A** (Insurance Information)
- **(4)** ☒ **C** (Service Provider Information)
- **(5)** ☒ **D** (DFE/Participating Plan Information)
- **(6)** ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2018 Form M-1 annual report. If the plan was not required to file the 2018 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code_____

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [ ] 101-500 [X] More than 500

Part I Basic Information

1 Enter the valuation date: Month 04 Day 01 Year 2018

2 Assets:

a Market value	**2a**	55789348
b Actuarial value	**2b**	54400787

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	274	17045716	17045716
b For terminated vested participants	235	5498149	5498149
c For active participants	445	21709221	22549306
d Total	954	44253086	45093171

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.79 %
6 Target normal cost	**6**	2048994

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

Signature of actuary

12/18/2019
Date

MARK A HENDRICKS
Type or print name of actuary

17-05452
Most recent enrollment number

MERCER
Firm name

816-556-4800
Telephone number (including area code)

2405 GRAND BLVD, SUITE 900
KANSAS CITY, MO 64108
Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	8694755
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	781600
9	Amount remaining (line 7 minus line 8)	0	7913155
10	Interest on line 9 using prior year's actual return of 8.88 %	0	702688
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.00%		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	8615843

Part III Funding Percentages

14	Funding target attainment percentage	14	101.53%
15	Adjusted funding target attainment percentage	15	120.64%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	100.00%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
04/15/2018	0	17894	10/15/2018	0	28621
05/15/2018	0	19166	11/15/2018	0	20151
06/15/2018	0	17484	12/15/2018	0	16324
07/15/2018	0	16884	01/15/2019	0	17439
08/15/2018	0	41905	02/15/2019	0	25635
09/15/2018	0	7900	03/15/2019	0	17107
			Totals ► 18(b)	3300000	18(c) 246510

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
	a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
	b Contributions made to avoid restrictions adjusted to valuation date	19b	0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	3093189

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)		
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)		
9	Amount remaining (line 7 minus line 8)		
10	Interest on line 9 using prior year's actual return of _____%		
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of _____%		
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		
	c Total available at beginning of current plan year to add to prefunding balance		
	d Portion of (c) to be added to prefunding balance		
12	Other reductions in balances due to elections or deemed elections		
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)		

Part III Funding Percentages

14	Funding target attainment percentage	14	%
15	Adjusted funding target attainment percentage	15	%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
10/31/2018	300000	0	07/31/2019	300000	0
12/07/2018	300000	0	09/04/2019	300000	0
01/03/2019	300000	0	10/02/2019	300000	0
02/06/2019	300000	0	11/06/2019	300000	0
03/05/2019	300000	0	12/10/2019	300000	0
07/31/2019	300000	0			
			Totals ► **18(b)**		**18(c)**

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a	Contributions allocated toward unpaid minimum required contributions from prior years	**19a**	
b	Contributions made to avoid restrictions adjusted to valuation date	**19b**	
c	Contributions allocated toward minimum required contribution for current year adjusted to valuation date	**19c**	

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☐ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
3.92%	5.52%	6.29%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions)

Prior regulation:	☐ Prescribed - combined	☒ Prescribed - separate	☐ Substitute	
Current regulation:	☐ Prescribed - combined	☐ Prescribed - separate	☐ Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6)	**31a**	2048994
b Excess assets, if applicable, but not greater than line 31a	**31b**	691773

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	1357221

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	1357221
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	3093189

38 Present value of excess contributions for current year (see instructions)

a Total (excess, if any, of line 37 over line 36)	**38a**	1735968
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

SCHEDULE C (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Service Provider Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection.

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan sponsor's name as shown on line 2a of Form 5500
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions). . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

OPPENHEIMER FUNDS SERVICES
P.O. BOX 5270
DENVER, CO 80217-5270

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

VANGUARD

23-1945930

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

PIMCO FUNDS
PO BOX 55060
BOSTON, MA 02205-5060

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

AMERICAN FUNDS SERVICE CO.
PO BOX 6007
INDIANAPOLIS, IN 46206-6007

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

ALPS CORE COMMODITY MANAGEMENT, LLC

PO BOX 44386
DENVER, CO 80203

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

LAZARD ASSET MANAGEMENT

30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

METWEST FUNDS

865 SOUTH FIGUEROA STREET
SUITE 1800
LOS ANGELES, CA 90017

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

FIDELITY INVESTMENTS

245 SUMMER STREET
BOSTON, MA 02210

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

WELLS FARGO BANK, N.A.

94-1347393

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
21 24 27 28 50 52	NONE	48840	Yes [X] No [ ]	Yes [ ] No [X]	0	Yes [X] No [ ]

(a) Enter name and EIN or address (see instructions)

MERCER

13-2934414

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
11 50	NONE	19133	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes [ ] No [ ]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a Name: DOUGLAS S. LANE	**b** EIN: 45-4124285	
c Position: ACTUARY		
d Address: 5700 WESTOWN PARKWAY, SUITE 100 WEST DES MOINES, IA 50266	**e** Telephone: 515-453-8589	

Explanation: CONSOLIDATE ALL ACTUARIAL SERVICES UNDER ONE FIRM

a Name:	**b** EIN:	
c Position:		
d Address:	**e** Telephone:	

Explanation:

a Name:	**b** EIN:	
c Position:		
d Address:	**e** Telephone:	

Explanation:

a Name:	**b** EIN:	
c Position:		
d Address:	**e** Telephone:	

Explanation:

a Name:	**b** EIN:	
c Position:		
d Address:	**e** Telephone:	

Explanation:

SCHEDULE D (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

DFE/Participating Plan Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection.

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

Part I **Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)**
(Complete as many entries as needed to report all interests in DFEs)

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/TRP INST LCG MGD CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
45-6648614-001	C	3995850

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/BLACKROCK S&P 500 INDEX CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
94-3224211-001	C	6826620

a Name of MTIA, CCT, PSA, or 103-12 IE: WELLS FARGO/MFS VALUE CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
45-6648640-001	C	3914128

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/BLACKROCK S&P MIDCAP INDEX CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
52-2265235-001	C	3942321

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/MULTI-MANAGER SMALL CAP CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
45-6648658-001	C	2169240

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/BLACKROCK INTL EQUITY INDEX CIT

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
52-2265229-001	C	2692908

a Name of MTIA, CCT, PSA, or 103-12 IE: WELLS FARGO CORE BOND CIT F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
94-3222878-001	C	5863249

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/FEDERATED TOTAL RETURN BOND CIT

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN 46-6584317-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 5949162

a Name of MTIA, CCT, PSA, or 103-12 IE: WF/BLACKROCK ST INVESTMENT FUND F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN 41-6292499-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1016318

a Name of MTIA, CCT, PSA, or 103-12 IE: WF LIABILITY DRIVEN SOL. CIT III F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN 46-7074916-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 0

a Name of MTIA, CCT, PSA, or 103-12 IE: WF LIABILITY DRIVEN SOL. CIT I F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN 30-6225619-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 0

a Name of MTIA, CCT, PSA, or 103-12 IE: WF LIABILITY DRIVEN SOL. CIT II F

b Name of sponsor of entity listed in (a): WELLS FARGO BANK, N.A.

c EIN-PN 80-6049172-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 0

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

SCHEDULE H (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan sponsor's name as shown on line 2a of Form 5500
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)	341	1922
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)		
(9) Value of interest in common/collective trusts	1c(9)	35127349	36369796
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	19493266	21498593
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

			(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:			
	(1) Employer securities	1d(1)		
	(2) Employer real property	1d(2)		
e	Buildings and other property used in plan operation	1e		
f	Total assets (add all amounts in lines 1a through 1e)	1f	54620956	57870311
	Liabilities			
g	Benefit claims payable	1g		
h	Operating payables	1h		
i	Acquisition indebtedness	1i		
j	Other liabilities	1j		
k	Total liabilities (add all amounts in lines 1g through1j)	1k	0	0
	Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	54620956	57870311

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

	Income		(a) Amount	(b) Total
a	**Contributions:**			
	(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)	2700000	
	(B) Participants	2a(1)(B)	246510	
	(C) Others (including rollovers)	2a(1)(C)		
	(2) Noncash contributions	2a(2)		
	(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		2946510
b	**Earnings on investments:**			
	(1) Interest:			
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
	(B) U.S. Government securities	2b(1)(B)		
	(C) Corporate debt instruments	2b(1)(C)		
	(D) Loans (other than to participants)	2b(1)(D)		
	(E) Participant loans	2b(1)(E)		
	(F) Other	2b(1)(F)		
	(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		0
	(2) Dividends: **(A)** Preferred stock	2b(2)(A)		
	(B) Common stock	2b(2)(B)		
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	696076	
	(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		696076
	(3) Rents	2b(3)		
	(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)		
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
	(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0
	(5) Unrealized appreciation (depreciation) of assets: **(A)** Real estate	2b(5)(A)		
	(B) Other	2b(5)(B)		
	(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		1977004
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		-80023
c Other income	2c		42
d Total income. Add all **income** amounts in column (b) and enter total	2d		5539609
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	2128128	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines **2e(1)** through **(3)**	2e(4)		2128128
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: **(1)** Professional fees	2i(1)	19735	
(2) Contract administrator fees	2i(2)	2446	
(3) Investment advisory and management fees	2i(3)	48840	
(4) Other	2i(4)	70596	
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		141617
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		2269745
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		3269864
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		20509

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unqualified **(2)** ☐ Qualified **(3)** ☒ Disclaimer **(4)** ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? ☒ Yes ☐ No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: DELOITTE & TOUCHE LLP **(2)** EIN: 13-3891517

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. **(2)** ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	4a		X	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	4b		X	

			Yes	No	Amount
c	Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e	Was this plan covered by a fidelity bond?	4e	X		1000000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g	Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h	Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i	X		
j	Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j	X		
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m			
n	If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES	42-0242420	001

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ..... ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4190246. (See instructions.)

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection.

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan sponsor's name as shown on line 2a of Form 5500
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1** 0

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 94-1347393

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **3** 0

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☒ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☒ **Yes** ☐ **No** ☐ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☒ **No**

Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

The Restated Contributory Retirement Plan for Cooperatives

Administered By Associated Benefits Corporation
(Participating Employer—Heartland Co-op, Group 282)

Employer Identification Number: 42-0242420
Plan Number: 020

Financial Statements as of and for the Years Ended March 31, 2019 and 2018, Supplemental Schedules as of and for the Year Ended March 31, 2019, and Independent Auditors' Report

THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

Administered By Associated Benefits Corporation
(Participating Employer—Heartland Co-op, Group 282)

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NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

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USA

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Associated Benefits Corporation
Plan Administrator for The Restated Contributory
Retirement Plan for Cooperatives
(Participating Employer—Heartland Co-op, Group 282):

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of The Restated Contributory Retirement Plan for Cooperatives (Participating Employer—Heartland Co-op, Group 282) (the "Plan"), which comprise the statements of net assets available for benefits as of March 31, 2019 and 2018, and the related statement of changes in net assets available for benefits for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the Plan Administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 3, which was certified by Wells Fargo Bank, N.A., the trustee of the Plan, except for comparing such information with the related information included in the financial statements. We have been informed by the Plan Administrator that the trustee holds the Plan's investment assets and executes investment transactions. The Plan Administrator has obtained certifications from the trustee as of March 31, 2019 and 2018, and for the years then ended, that the information provided to the Plan Administrator by the trustee is complete and accurate.

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Other Matter

The supplemental schedules listed in the Table of Contents are required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and are presented for the purpose of additional analysis and are not a required part of the financial statements. Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we do not express an opinion on these supplemental schedules.

Report on Form and Content in Compliance With Department of Labor Rules and Regulations

The form and content of the information included in the financial statements and supplemental schedules, other than that derived from the information certified by the trustee, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

DELOITTE & TOUCHE LLP

September 30, 2019

THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

Administered By Associated Benefits Corporation
(Participating Employer—Heartland Co-op, Group 282)

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS AS OF MARCH 31, 2019 AND 2018

	2019	2018
NET ASSETS AVAILABLE FOR BENEFITS:		
Assets:		
Investments—at fair value	$ 57,868,389	$ 54,620,615
Accrued income	1,922	341
NET ASSETS AVAILABLE FOR BENEFITS	$ 57,870,311	$ 54,620,956

See notes to financial statements.

THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

Administered By Associated Benefits Corporation
(Participating Employer—Heartland Co-op, Group 282)

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS FOR THE YEARS ENDED MARCH 31, 2019 AND 2018

	2019	2018
INVESTMENT INCOME:		
Investment income	$ 722,836	$ 589,672
Net appreciation in fair value of investments	1,870,221	3,584,916
Investment expenses	(48,840)	(43,509)
Net investment income	2,544,217	4,131,079
CONTRIBUTIONS:		
Employer contributions	2,700,000	2,400,000
Employee contributions	246,510	245,055
Total contributions	2,946,510	2,645,055
TRANSFER OF ASSETS DUE TO MERGER		3,291,313
OTHER INCOME	(20,467)	5,997
DEDUCTIONS:		
Benefits paid directly to participants	2,128,128	1,957,852
Administrative expenses	92,777	120,005
Total deductions	2,220,905	2,077,857
NET CHANGE	3,249,355	7,995,587
NET ASSETS AVAILABLE FOR BENEFITS:		
Beginning of year	54,620,956	46,625,369
End of year	$ 57,870,311	$ 54,620,956

See notes to financial statements.

1. DESCRIPTION OF THE PLAN

The following description of The Restated Contributory Retirement Plan for Cooperatives (Participating Employer—Heartland Co-op, Group 282) (the "Plan") is provided for general informational purposes only. Participants should refer to the Plan document for a more complete description of the plan's information.

General—The Plan is a contributory defined benefit plan administered by Associated Benefits Corporation (the "Plan Administrator") that covers substantially all full-time employees of Heartland Co-op, with the exception of any new employees hired after April 1, 2015 at locations that made up the former United Western Cooperative. These employees are eligible for a different defined benefit plan. Employees who work 1,000 hours or more per year are eligible on the first day of the first or the seventh month of the Plan year following the attainment of age 21 and 4 months of service. Eligible employees make contributions equal to 1% of their compensation. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Pension Benefits—Participants can retire with their full pension on the first day of the month coincident with or immediately following their 65th birthday (normal retirement), attainment of age 62 with at least 5 years of service, or upon satisfying the Rule of 85 by reaching a combined total of age and years of service of 85 total years.

The monthly pension benefit under the Plan is equal to 1.25% of average monthly earnings, as defined, multiplied by years of credited service. Prior to April 1, 2014, the monthly pension benefit under the Plan was equal to 1.1% of average monthly earnings, as defined, multiplied by years of credit service prior to April 1, 2014. The normal form is a pension payable for the participant's lifetime. However, an actuarially reduced joint and 50% survivorship basis with 120 guaranteed monthly payments is the automatic form for married participants unless both the participant and spouse elect another form. Participants become 100% vested in employer contributions and earnings thereon after completion of five years of service.

Participants are immediately vested in their contributions plus an annual interest rate of 120% of the Federal mid-term rate for the month of April of each Plan year. Accumulated employee contributions and interest thereon, net of applicable benefit payments, at April 1, 2018 were $1,254,885. The interest rates was 2.55% as of April 1, 2018. Participants become 100% vested in employer contributions after completion of five years of service.

Transfer of Assets Due to Merger—Effective March 31, 2018, Participating Employer—Alleman Cooperative, Group 39, merged into the Plan. The net assets available for benefit of $3,291,313 were rolled into the Plan and are shown as transfer of assets due to merger in the statement of changes in net assets. Due to the merger, the actuarial present value of accumulated plan benefits of $1,128,994 rolled to the Plan as of April 1, 2018.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting—The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

Use of Estimates—The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, disclosure of contingent assets and liabilities, and the actuarial present value of accumulated plan benefits and changes therein at the date of the financial statements. Actual results could differ from those estimates.

Risks and Uncertainties—The Plan utilizes various investment securities including mutual funds, money market funds, and collective trust funds. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Investment Valuation and Income Recognition—Investments are stated at fair value. Fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Investment Expenses—Investment expenses consisting of trustee fees and investment management fees are paid from Plan assets. Trustee fees and investment management fees are deducted from investment income or loss.

Administrative Expenses—Administrative expenses consisting of actuarial fees and payments to the Pension Benefit Guarantee Corporation (PBGC) are paid from Plan assets. Other administrative expenses, including expenses of the Plan Administrator, are paid by the Participating Employer.

Payment of Benefits—Benefit payments to participants are recorded upon distribution.

Subsequent Events—Subsequent events have been evaluated through September 30, 2019, the date the financial statements were available to be issued. The Plan has determined that there are no material events that require adjustment to or disclosure in these financial statements.

3. INFORMATION CERTIFIED BY THE TRUSTEE

The following is a summary of the unaudited information regarding the Plan as of March 31, 2019 and 2018, and for the years then ended, included in the Plan's financial statements and supplemental schedules, that was prepared by or derived from information prepared by Wells Fargo Bank, N.A., the trustee of the Plan, and furnished to the Plan Administrator. The Plan Administrator has obtained certifications from the trustee that such information is complete and accurate.

	2019	2018
Statements of net assets available for benefits:		
Investments—at fair value	$57,868,389	$54,620,615
Accrued income	1,922	341
Statements of changes in net assets available for benefits:		
Investment income	722,836	589,642
Net appreciation in fair value of investments	1,870,221	3,584,916
Transfer of assets due to merger		3,291,313

Supplemental schedules: All investment balances and information included in the supplemental schedules.

Note 6: All investment balances and investment information, excluding the level of investments.

4. FUNDING POLICY

The Participating Employer's funding policy is to make cash contributions to the Plan in excess of employee contributions as determined by the Plan's independent actuary. The Participating Employer met the minimum funding requirements of ERISA for the years ended March 31, 2019 and 2018. For financial statement purposes, all employer contributions made to meet the minimum funding requirements of ERISA are considered attributable to the current plan year and are accrued in the financial statements if not paid by year end. For PBGC funding purposes, all employer contributions made to the Plan prior to the filing of the Form 5500 are considered attributable to the previous year.

5. ACCUMULATED PLAN BENEFITS

Accumulated plan benefits are those future periodic payments that are attributable under the Plan's provisions to the employees' contributions, compensation, and services rendered as of the valuation date. Accumulated plan benefits include benefits expected to be paid to (1) retired or terminated employees or their beneficiaries and (2) present employees or their beneficiaries. Benefits payable as a result of retirement, death, disability or termination of employment are included, to the extent they are deemed attributable to employee service rendered to the valuation date.

The actuarial present value of accumulated plan benefits is determined by independent actuaries. Accumulated plan benefits are presented using beginning of the year benefit information date. The actuarial present value of accumulated plan benefits below is measured as of April 1, 2018, which is a proxy for March 31, 2018. The amount results

from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment.

The more significant actuarial assumptions used in the valuations as of April 1, 2018 and 2017 were as follows:

	April 1, 2018	April 1, 2017
Interest rate	6.83%	6.84%
Mortality	RP2014 separate annuitant/ nonannuitant mortality tables projected with improvement based on Scale MP2017	RP2014 separate annuitant/ nonannuitant mortality tables projected with improvement based on Scale MP2017
Salaries	Will increase according to an age-related table ranging from 8.25% down to 2.75%	Will increase according to an age-related table ranging from 7.50% down to 2.75%

In addition, eligible employees will retire according to the following schedule—employees eligible for the special rule of 85 benefit are assumed to retire according to the select rates shown below for the first year after becoming eligible. The ultimate rates apply to rule of 85 retirements after the first year since becoming eligible and regular retirements. The first year rates will not start before age 55 even if the rule of 85 applies earlier, nor will they ever fall below the ultimate rate for that age.

As of April 1, 2018 and 2017, the rates of retirement assumed were as follows:

Age	First Year	Ultimate
55–60	6 %	3 %
61		10
62		30
63		25
64		25
65		40
66		25
67		25
68		25
69		25
70 and over		100

The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated Plan benefits. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that certain changes in these estimates and assumptions could be material to the financial statements.

The actuarial present value of accumulated plan benefits as of April 1, 2018, using the aggregate cost method, is as follows:

Vested:	
Active participants	$19,511,050
Beneficiaries and retirees	15,792,545
Other participants (including participants active at other groups)	4,899,015
Total vested benefits	40,202,610
Nonvested active participants	740,377
Total actuarial present value of accumulated plan benefits	$40,942,987

The changes in the actuarial present value of accumulated plan benefits from April 1, 2017 to April 1, 2018 are as follows:

Actuarial present value of accumulated plan benefits at April 1, 2017	$37,612,898
Increase (decrease) during the year attributable to:	
Benefit accumulations	2,015,425
Change in actuarial assumptions	(344,904)
Increase for interest due to the decrease in the discount period	2,579,860
Benefits paid	(2,049,286)
Net change	2,201,095
Plan merger	1,128,994
Actuarial present value of accumulated plan benefits at April 1, 2018	$40,942,987

6. FAIR VALUE MEASUREMENTS

ASC 820, *Fair Value Measurements and Disclosures*, provides a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value, as follows: Level 1, which refers to securities valued using unadjusted quoted prices from active markets for identical assets; Level 2, which refers to securities not traded on an active market but for which observable market inputs are readily available; and Level 3, which refers to securities valued based on unobservable inputs. Assets are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

Asset Valuation Techniques—Valuation techniques maximize the use of observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation methodologies used for investments measured at fair value.

Mutual Funds—Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-ended mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Money Market Funds—Valued at cost plus accrued interest. Money market funds are primarily short-term comingled funds.

Collective Trust Funds—Valued at the net asset value of units of the funds. The net asset value as provided by the trustee is used as a practical expedient to estimate fair value. The net asset value is based on the fair value of the underlying investments held by the fund less its liabilities. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported net asset value. Participant transactions (purchases and sales) may occur daily. Were the Plan to initiate a full redemption of the collective trust, the investment advisor reserves the right to temporarily delay withdrawal from the trust in order to confirm that securities liquidations will be carried out in an orderly business manner. As the practical expedient is utilized, these funds are not included in the fair value leveling table, but are included as a reconciling line item to the statements of net assets available for benefits.

The following tables set forth by level within the fair value hierarchy a summary of the Plan's investments measured at fair value on a recurring basis at March 31, 2019 and 2018.

	Fair Value Measurements at March 31, 2019			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**	**Total**
Mutual funds	$21,498,593	$ -	$ -	$21,498,593
Money market funds		1,016,318		1,016,318
	$21,498,593	$1,016,318	$ -	22,514,911
Funds valued at NAV				35,353,478
Total				$57,868,389

	Fair Value Measurements at March 31, 2018			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Mutual funds	$19,493,266	$ -	$ -	$19,493,266
Money market funds		376,725		376,725
	$19,493,266	$376,725	$ -	19,869,991
Funds valued at NAV				34,750,624
Total				$54,620,615

Transfers Between Levels—The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period.

The significance of transfers between levels is evaluated based upon the nature of the financial instrument and size of the transfer relative to total net assets available for benefits. There were no transfers between levels for the years ended March 31, 2019 and 2018.

Net Asset Value (NAV) per Share—The following tables set forth a summary of the Plan's investments whose values were estimated using a reported NAV at March 31, 2019 and 2018.

		Fair Value Estimated Using Net Asset Value per Share March 31, 2019				
Investment		Fair Value	Unfunded Commitment	Redemption Frequency	Other Redemption Restrictions	Redemption Notice Period
Collective trust funds:						
Domestic stock funds	(a)	$20,848,159	$ -	Immediate	None	None
International stock funds	(b)	2,692,908		Immediate	None	None
Domestic fixed income funds	(c)	11,812,411		Immediate	None	None
Total		$35,353,478	$ -			

		Fair Value Estimated Using Net Asset Value per Share March 31, 2018				
Investment		**Fair Value**	**Unfunded Commitment**	**Redemption Frequency**	**Other Redemption Restrictions**	**Redemption Notice Period**
Collective trust funds:						
Domestic stock funds	(a)	$18,385,630	$ -	Immediate	None	None
International stock funds	(b)	2,545,678		Immediate	None	None
Domestic fixed income funds	(c)	13,819,316		Immediate	None	None
Total		$34,750,624	$ -			

(a) The domestic stock funds seek to provide long-term growth of capital by investing primarily in equity securities and to achieve above average results over a market cycle. The funds employ a "multi-style, multi-manager" approach whereby portions of the domestic stock funds are allocated to different money managers who employ distinct investment styles. The funds use three principal investment styles intended to complement one another:

Growth: Emphasizes investments in equity securities of companies with above-average earnings growth prospects.

Value: Emphasizes investments in equity securities of companies that appear to the money manager to be undervalued relative to their corporate worth, based on earnings, book or asset value, revenues, cash flow or other measures.

Market-Oriented: Emphasizes investments in companies from the broad equity market rather than focusing on the growth or value segments of the market.

(b) The international stock funds provide participation in financial markets outside of the United States. The international stock funds invest in international financial markets, primarily those of developed economies in Europe and the Pacific Basin. These funds invest primarily in equity securities issued by foreign corporations, but may invest in other securities perceived as offering attractive investment return opportunities. As with the domestic equity funds, the international equity funds combine Growth, Value, and Market-Oriented Advisers to ensure style diversification.

(c) The fixed income funds strategies seek to invest at least 80% of their net assets plus any borrowing for investment purposes in a diversified portfolio of bonds, including corporate bonds of domestic and foreign issuers payable in U.S. dollars, short-term debt instruments, mortgage-related securities, and U.S. Treasury securities and other debt securities issued or guaranteed by the U.S. Government (including its agencies and instrumentalities). Although the strategies seek to invest primarily in investment-grade debt securities (i.e., those rated in the four highest rating categories by S&P or Moody's), they may include investing a portion of their net assets in bonds rated below investment grade.

7. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

Certain Plan investments are shares of mutual funds managed by Wells Fargo Bank, N.A. Wells Fargo Bank, N.A. is the trustee for the Plan, and therefore, these transactions qualify as exempt party-in-interest transactions. Fees paid by the Plan for the investment management services are included as a reduction of the return earned on each fund.

8. FEDERAL INCOME TAX STATUS

The Internal Revenue Service (IRS) has determined and informed the Participating Employer and the Plan Administrator by a letter dated April 6, 2017, that the Plan and related trust were designed in accordance with applicable regulations of the Internal Revenue Code (IRC). The Plan has been amended since receiving the determination letter. However, the Participating Employer and the Plan Administrator believe that the Plan is currently designed and operated in compliance with the applicable requirements of the IRC and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Participating Employer and the Plan Administrator believe it is no longer subject to income tax examinations for years prior to 2016.

9. PLAN TERMINATION

Although it has not expressed any intention to do so, the Participating Employer has the right under the Plan, in certain circumstances, to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, the net assets of the Plan will be allocated for payment of plan benefits to the participants in an order of priority determined in accordance with ERISA, applicable regulations thereunder, and the Plan document.

Certain benefits under the Plan are insured by the PBGC if the Plan terminates. Generally, the PBGC guarantees most vested normal age retirement benefits, early retirement benefits, and certain disability and survivor's pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan's termination, subject to a statutory ceiling on the amount of an individual's monthly benefit.

Whether all participants receive their benefits if the Plan is terminated at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide those benefits, the priority of those benefits to be paid and the level and type of benefits guaranteed by the PBGC at that time. Some benefits may be fully or partially provided for by the then existing assets and the PBGC guaranty, while other benefits may not be provided for at all.

* * * * * *

SUPPLEMENTAL SCHEDULES

THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

Administered By Associated Benefits Corporation

(Participating Employer—Heartland Co-op, Group 282)

EIN NUMBER: 42-0242420

PLAN NUMBER: 020

FORM 5500, SCHEDULE H, PART IV, LINE 4i—SCHEDULE OF ASSETS (HELD AT END OF YEAR)

AS OF MARCH 31, 2019

(a)	(b) Identity of Issue, Borrower, Lessor or Similar Party	(c) Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	(d) Cost	(e) Current Value
	ALPS Core Commodity Management Complete Commodities Strategy Fund	377,567 shares	$ 2,782,397	$ 2,658,074
	American Funds Europacific Growth Fund	56,498 shares	2,736,280	2,877,421
	Fidelity Emerging Markets Index Fund	131,400 shares	1,346,846	1,375,754
	Fidelity Real Estate Index Fund	250,516 shares	4,045,791	4,146,044
	Lazard Emerging Markets Debt Portfolio Class Fund	191,702 shares	1,574,976	1,479,333
	Metropolitan West Total Return Bond Fund	555,007 shares	5,966,679	5,905,271
	Oppenheimer Oppenheimer International Bond Fund Class I	206,209 shares	1,215,404	1,125,899
	PIMCO High Yield Fund	219,909 shares	1,944,250	1,930,797
*	Wells Fargo Blackrock International Equity Index CIT	180,099 shares	2,295,509	2,692,908
*	Wells Fargo Blackrock S&P Midcap Index CIT	184,822 shares	3,174,085	3,942,321
*	Wells Fargo Blackrock S&P 500 Index CIT	292,507 shares	5,096,452	6,826,620
*	Wells Fargo Blackrock Short-term Investment Fund	1,016,317 shares	1,016,318	1,016,318
*	Wells Fargo Core Bond CIT	507,408 shares	5,604,303	5,863,249
*	Wells Fargo Federated Total Return Bond CIT	530,403 shares	5,641,101	5,949,162
*	Wells Fargo MFS Value CIT	169,089 shares	3,146,148	3,914,128
*	Wells Fargo Multi-Manager Small Cap CIT	92,272 shares	1,659,376	2,169,240
*	Wells Fargo T. Rowe Price Institutional Large Cap Growth Managed CIT	121,525 shares	2,522,361	3,995,850
	TOTAL INVESTMENTS		$ 51,768,276	$ 57,868,389

* Party-in-interest.

THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

Administered By Associated Benefits Corporation
(Participating Employer—Heartland Co-op, Group 282)

EIN NUMBER: 42-0242420
PLAN NUMBER: 020

FORM 5500, SCHEDULE H, PART IV, LINE 4j—SCHEDULE OF REPORTABLE TRANSACTIONS
FOR THE YEAR ENDED MARCH 31, 2019

	(a) Identity of Party Involved	(b) Description of Asset	Number of Transactions	(c) Purchase Price	(d) Selling Price	(g) Cost of Asset	(h) Current Value of Asset on Transaction Date	(i) Net Gain (Loss)
	SINGLE TRANSACTIONS:							
	Fidelity	Real Estate Index Fund	1	$ 4,040,537	$ -	$ 4,040,537	$ 4,040,537	$ -
*	Wells Fargo	Blackrock Short-Term Investment Fund	1	3,271,522		3,271,522	3,271,522	
	Vanguard	REIT Index Fund	1		4,327,776	4,220,805	4,327,776	106,971
	SERIES OF TRANSACTIONS:							
	Fidelity	Real Estate Index Fund	2	$ 4,045,791	$ -	$ 4,045,791	$ 4,045,791	$ -
	Vanguard	REIT Index Fund	5	442,081		442,081	442,081	
*	Wells Fargo	Blackrock Short-Term Investment Fund	65	7,300,807		7,300,807	7,300,807	
	Vanguard	REIT Index Fund	5		4,575,347	4,472,126	4,575,347	103,221
*	Wells Fargo	Blackrock Short-Term Investment Fund	94		6,644,530	6,644,530	6,644,530	

* Party-in-interest.

Note: Columns (e) and (f) are not applicable and have been omitted.

See accompanying independent auditors' report.

Plan Name: **The Restated Contributory Retirement Plan for Cooperatives**
Plan Sponsor EIN: **42-0242420**
ERISA 3-digit Plan #: **020**
Plan Year Ending: **03/31/2019**

The required attachment marked with an "X" in the Attachment column is included within the Accountant's Opinion attachment to Schedule H, Part III, Line 3, which consists of the entire audit report issued by the plan's Independent Qualified Public Accountant ("IQPA").

Form/Schedule	Line #	Description	Attachment
5500 Sch. H	Line 3	Financial Statements used in formulating the IQPA's opinion	X
5500 Sch. H	Line 4i	Schedule of Assets (Held at End of Year)	X
5500 Sch. H	Line 4i	Schedule of Assets (Acquired and Disposed of Within Year)	
5500 Sch. H	Line 4j	Schedule of Reportable Transactions	X
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

Plan Name: **The Restated Contributory Retirement Plan for Cooperatives**
Plan Sponsor EIN: **42-0242420**
ERISA 3-digit Plan #: **020**
Plan Year Ending: **03/31/2019**

The required attachment marked with an "X" in the Attachment column is included within the Accountant's Opinion attachment to Schedule H, Part III, Line 3, which consists of the entire audit report issued by the plan's Independent Qualified Public Accountant ("IQPA").

Form/Schedule	Line #	Description	Attachment
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5500 Sch. H	Line 4j	Schedule of Reportable Transactions	X
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

Plan Name: **The Restated Contributory Retirement Plan for Cooperatives**
Plan Sponsor EIN: **42-0242420**
ERISA 3-digit Plan #: **020**
Plan Year Ending: **03/31/2019**

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5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

Schedule C, line 2(h) Formula Description

Pool B

Category/Fund	Asset Class	Ticker	Target Allocation	Expense Ratio	Revenue Share	Net Exp Ratio
Equities:						
WF/T. Rowe Price Inst'l Large Cap Gr CIT F	Large Cap Growth	n/a	6.85%	0.317%	0.00%	0.317%
WF/Blackrock S&P 500 Index CIT F	Large Cap Core-passive	n/a	11.80%	0.014%	0.00%	0.014%
WF/MFS Value CIT F	Large Cap Value	n/a	6.85%	0.367%	0.00%	0.367%
WF/Blackrock S&P Midcap Index CIT F	Midcap Core-passive	n/a	6.85%	0.027%	0.00%	0.027%
WF/Multi-Manager Small Cap CIT F	Small Core	n/a	3.65%	0.614%	0.00%	0.614%
WF/Blackrock Intl Equity Index CIT F	Foreign Lg Bl-passive	n/a	4.80%	0.054%	0.00%	0.054%
Am Funds EuroPacific Growth R6	Foreign Large Blend	RERGX	4.80%	0.490%	0.00%	0.490%
Fidelity Emerging Markets Index	Diver. Em Mkts-passive	FPADX	2.40%	0.080%	0.00%	0.080%
			48.00%			
Core Fixed Income:						
WF Core Bond CIT F	Fixed - intermediate	n/a	10.65%	0.170%	0.00%	0.170%
MetWest Total Return Bond I	Fixed - intermediate	MWTIX	10.65%	0.450%	0.10%	0.350%
WF/Federated Total Return Bond CIT F	Fixed - intermediate	n/a	10.70%	0.164%	0.00%	0.164%
			32.00%			
Specialty Fixed Income:						
PIMCO High Yield Inst'l	High Yield	PHIYX	3.35%	0.570%	0.00%	0.570%
Oppenheimer International Bond Inst'l	Dev Mkt Int'l Fixed	OIBIX	2.00%	0.590%	0.00%	0.590%
Lazard Emerging Markets Debt Inst'l	Emerging Mkt Fixed	LEDIX	2.65%	0.940%	0.10%	0.840%
			8.00%			
Real Assets and Alternatives:						
Fidelity Real Estate Index	Real Estate-passive	FSRNX	7.20%	0.070%	0.00%	0.070%
ALPS|CoreComdty Mgmt CompleteCmdty Strategy I	Commodities	JCRIX	4.80%	1.170%	0.16%	1.010%
			12.00%			
			100.00%			
	Composite Expense Ratio:		**0.280%**			

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection

For calendar plan year 2018 or fiscal plan year beginning 04/01/2018 and ending 03/31/2019

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES

B Three-digit plan number (PN) ▶ 020

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
HEARTLAND COOPERATIVE

D Employer Identification Number (EIN)
42-0242420

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [ ] 101-500 [X] More than 500

Part I Basic Information

1 Enter the valuation date: Month 04 Day 01 Year 2018

2 Assets:

a Market value	**2a**	55,789,348
b Actuarial value	**2b**	54,400,787

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	274	17,045,716	17,045,716
b For terminated vested participants	235	5,498,149	5,498,149
c For active participants	445	21,709,221	22,549,306
d Total	954	44,253,086	45,093,171

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.79%
6 Target normal cost	**6**	2,048,994

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE MARK A HENDRICKS MH — 12-18-2019

Signature of actuary — Date

MARK A HENDRICKS — 1705452

Type or print name of actuary — Most recent enrollment number

MERCER — 816-556-4800

Firm name — Telephone number (including area code)

2405 GRAND BLVD, SUITE 900

KANSAS CITY MO 64108

Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	8,694,755
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	781,600
9	Amount remaining (line 7 minus line 8)	0	7,913,155
10	Interest on line 9 using prior year's actual return of 8.88%	0	702,688
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.00%		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	8,615,843

Part III Funding Percentages

14	Funding target attainment percentage	14	101.53%
15	Adjusted funding target attainment percentage	15	120.64%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	100.00%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
04/15/2018	0	17,894	01/03/2019	300,000	0
05/15/2018	0	19,166	02/06/2019	300,000	0
06/15/2018	0	17,484	03/05/2019	300,000	0
07/15/2018	0	16,884	07/31/2019	300,000	0
08/15/2018	0	41,905	07/31/2019	300,000	0
09/15/2018	0	7,900	09/04/2019	300,000	0
10/15/2018	0	28,621	10/02/2019	300,000	0
11/15/2018	0	20,151	11/06/2019	300,000	0
12/15/2018	0	16,324	12/10/2019	300,000	0
01/15/2019	0	17,439			
02/15/2019	0	25,635			
03/15/2019	0	17,107			
10/31/2018	300,000	0			
12/07/2018	300,000	0			
			Totals ▶ 18(b)	3,300,000	18(c) 246,510

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	3,093,189

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
3.92 %	5.52 %	6.29%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions)

Prior regulation: ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Current regulation: ☐ Prescribed - combined ☐ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):		
a Target normal cost (line 6)	**31a**	2,048,994
b Excess assets, if applicable, but not greater than line 31a	**31b**	691,773

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	1,357,221

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	1,357,221
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	3,093,189
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	1,735,968
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

Schedule SB, line 22 – Description Of weighted average retirement age

Age	Retirement Rate	LX Table
55	3.00%	100,000.00
56	3.00%	97,000.00
57	3.00%	94,090.00
58	3.00%	91,267.30
59	3.00%	88,529.28
60	3.00%	85,873.40
61	10.00%	83,297.20
62	30.00%	74,967.48
63	25.00%	52,477.24
64	25.00%	39,357.93
65	40.00%	29,518.45
66	25.00%	17,711.07
67	25.00%	13,283.30
68	25.00%	9,962.48
69	25.00%	7,471.86
70	100.00%	5,603.90
Average Retirement Age		62.90

Schedule SB, Part V – Summary of Plan Provisions

Mercer has used and relied on the plan documents, including amendments, and interpretations of plan provisions, supplied by Associated Benefits Corporation as summarized below. Associated Benefits Corporation is solely responsible for the validity, accuracy and comprehensiveness of this information. If any plan provisions supplied are not accurate and complete, the results of any calculation may differ significantly from the results that would be obtained with accurate and complete information. Moreover, plan documents may be susceptible to different interpretations, each of which could be reasonable, and the results of estimates under each of the different interpretations could vary.

The following is a summary of what we understand to be the most relevant plan provisions for purposes of our valuation; these provisions should not be used for purposes of determining benefits under the plan.

	Contributory Plan	Noncontributory Plan
Effective date	May 1, 1953; amended to comply with ERISA effective May 1, 1975; restated January 1, 2017.	May 1, 1980; restated January 1, 2017.
Participation date	April 1 and October 1	Same.
Plan year	April 1 through March 31	Same.
Eligibility	Employer chooses: 1. Employees who work at least 1,000 hours per year are eligible on the April 1st or October 1st following attainment of age 21 and completion of four months of employment. 2. Employees are eligible on the April 1st or October 1st following attainment of age 21. Landus Cooperative (Group 78) – New employees hired on or after September 1, 2009 are not eligible to participate. For former West Central Cooperative (Group 138) – New employees hired on or after January 1, 2006 are not eligible to participate. Five Star Cooperative (Group 168) – Eligibility is attainment of age 18. United Services Association (Group 193) – New employees hired on or after March 31, 2007 are not eligible to participate.	Same. NEW Cooperative, Inc. (Group 23) – New employees hired on or after September 1, 2009 are not eligible to participate. Farmers Cooperative Company (Group 76) – New employees hired on or after April 1, 2012 are not eligible to participate. StateLine Cooperative (Group 190) – New employees hired on or after June 1, 2016 are not eligible to participate. IAHC FC Stone Group, Inc. (Group 201) – New employees hired on or after April 1, 2006 are not eligible to participate. New Vision Coop (Group 205) – New employees hired on or after April 1, 2010 are not eligible to participate. River Valley Cooperative (Group 225) – New employees hired on or after April 1, 2006 and employees whose sum of attained age and pensionable credited service did not equal or exceed 75 as of April 1, 2006 are not eligible to participate.

Schedule SB, Part V – Summary of Plan Provisions

Employee contribution	United Farmers Cooperative (Group 175)- Effective January 1, 2017, employees contribute 1% of their monthly earnings. Heartland Co-op (Group 282) – Effective April 1, 2014, employees contribute 1% of their monthly earnings. Central Valley Ag (Group 327) – Prior to July 1, 2009 employees contributed 3% of their monthly earnings. From July 1, 2009 through August 31, 2014 employees contributed 5% of their monthly earnings. Effective September 1, 2014 employees contribute 4% of their monthly earnings. All other groups - employees contribute 2¾% of their monthly earnings. Several contributory groups currently waive the employee contribution requirement.	No employee contributions.
Contribution account	An account is established for each participant consisting of his employee contributions with interest through April 30, 1975. Employee contributions after May 1, 1975 are added to the Account and the Account is credited with interest. Effective for plan years after March 31, 1988, interest shall be credited at the annual rate of 120% of the Federal mid-term rate for April of the plan year. For 2017, this rate was 2.55%. For 2018, this rate is 3.27%.	N/A.
Monthly earnings	Monthly Earnings are calculated by dividing the prior calendar year total earnings by the number of weeks worked and multiplying the result times 4 1/3 to obtain a monthly rate. Earnings are limited to $200,000 per year indexed as provided for by law – limit for 2018 is $275,000.	Same. Note that total earnings include 401(k) and Section 125 elective deferrals.
Average monthly earnings	Plan benefits are computed using the average of the monthly earnings for the highest five consecutive years prior to termination.	Same.
Credited service	Prior to May 1, 1975, Credited Service is the number of years and months from date of hire. Since May 1, 1975, Credited Service is the number of 1,000-hour plan years. If less than 1,000 hours in year of hire or termination, partial credit is given equal to the number of full months worked divided by 12. Employers who adopt the Plan choose whether to grant Credited Service prior to date of adoption.	Same.
Normal retirement date	Participants are entitled to retire and receive their full pension benefit on the first of the month coincident with or immediately following their 65th birthday.	Same.

Schedule SB, Part V – Summary of Plan Provisions

Normal retirement benefit

The monthly pension is equal to the percent of Average Monthly Earnings specified in the Employer's Adoption Agreement multiplied by years of Credited Service.

The following employers (by group number) have selected a 1.25% benefit accrual formula: 175 and 282.

The following employers (by group number) have selected a 1.35% benefit accrual formula: 121.

The following employers (by group number) have selected the 1.55% post March 31, 1994 accrual formula: 32, 78, 168, and 328.

The following employers (by group number) have selected the 1.65% post March 31, 1994 accrual formula: 81 and 193.

Participants have a minimum benefit equal to the accrued benefit frozen as of 3/31/1994 under the prior contributory formula (1.1% of Average Monthly Earnings up to $400 PLUS 1.65% of Average Monthly Earnings in excess of $400 multiplied by Credited Service) PLUS the future benefit percent of Average Monthly Earnings specified in the Employer's Adoption Agreement multiplied by years of Credited Service after April 1, 1994.

Prairie Ag Cooperative (Group 32) – Accruals frozen as of February 28, 2018.

Central Valley Ag (Group 327) – the monthly pension is equal to 1.25% of Average Monthly Earnings multiplied by years of Credited Service through June 30, 2009 plus 1.75% of Average Monthly Earnings multiplied by Years of Credited Service on and after July 1, 2009.

For plan years after March 31, 1994, participants are guaranteed a minimum accrual for each plan year. The minimum accrual is equal to one-half of the accrual on the benefit formulas since April 1, 1994 PLUS the benefit deemed to be purchased by employee contributions made since April 1, 1994 under IRC Section 411(c)(2).

The monthly pension is equal to 1.1% of Average Monthly Earnings multiplied by years of Credited Service. Participants have a minimum benefit equal to the accrued benefit as of the later of March 31, 1989 and the date the Employer adopted the Noncontributory Plan, PLUS 1.1% of Average Monthly Earnings multiplied by years of Credited Service earned after the later of March 31, 1989 and the date of adoption. Section 401(a)(17) Members have an additional minimum benefit equal to the accrued benefit frozen as of 3/31/94 (determined limiting Earnings to $235,840) PLUS 1.1% of Average Monthly Earnings multiplied by Credited Service after April 1, 1994.

The frozen March 31, 1994 accrued benefit is adjusted to reflect increases in the Member's Average Monthly Earnings after March 31, 1994 as allowed by 42 C.F.R. Section 1.401(a)(4)-13.

Ag Processing, Inc. (Group 4) & AGP Grain Marketing LLC (Group 527)– the monthly pension is equal to sum of the following:

- 0.8% of Average Monthly Earnings (AME) and 0.4% of AME less $1,250 all multiplied by years of credited service preceding January 1, 1984
- 1.15% of AME and 0.5% of AVE less $833.33 multiplied by years of Credited Service following January 1, 1984

North Iowa Cooperative (Group 10) – the monthly pension is equal to 1.1% of Average Monthly Earnings multiplied by years of Credited Service prior to April 1, 2006 plus 0.90% of Average Monthly Earnings multiplied by years of Credited Service following April 1, 2006.

NEW Cooperative, Inc. (Group 23) – the monthly pension is equal to 1.4% of Average Monthly Earnings multiplied by years of Credited Service.

Ag Partners, LLC (Group 150) – Accruals frozen as of December 1, 2008.

Schedule SB, Part V – Summary of Plan Provisions

Normal retirement benefit (cont'd)		Green Plains Grain Company LLC (Group 177) – Accruals frozen as of January 1, 2009. IAHC FC Stone Group, Inc. (Group 201) – the monthly pension is equal to 1.25% of Average Monthly Earnings multiplied by years of Credited Service. Accruals frozen as of September 1, 2009. Associated Benefits Corp. (Group 210) – the monthly pension is equal to 1.65% of Average Monthly Earnings multiplied by years of Credited Service. River Valley Cooperative (Group 225) – the monthly pension is equal to the sum of the following: • 1.00% of Average Monthly Earnings (AME) and 0.5% of AVE less $650 multiplied by years of Credited Service preceding September 1, 1999 • 1.5% of AME multiplied by Credited Service from September 1, 1999 to April 1, 2003 • 1.1% of AME multiplied by years of credited service following April 1, 2003 Golden Growers Cooperative (Group 323) – the monthly pension is equal to 1.836% of Average Monthly Earnings multiplied by years of Credited Service. Accruals frozen as of January 1, 2013. Innovative Ag Services Co. (Group 423) – the monthly pension is equal to 1.50% of Average Monthly Earnings multiplied by years of Credited Service through March 31, 2009 plus 0.8% of Average Monthly Earnings multiplied by years of Credited Service from April 1, 2009 through August 31, 2011 plus 1.10% of Average Monthly Earnings multiplied by years of Credited Service on and after September 1, 2011. Other plans with no active participants: 294, 323, 471, 509, 510, 513, 514, 516, 8027, 8110, 8183, 8195, 8337.
Form of monthly retirement income	The standard form of receiving monthly retirement income will be for a participant's lifetime. However, if the participant is married and unless he specifically elects the standard form or another alternate form of benefit and his spouse consents, his benefits will be paid on a joint and 50% survivorship basis with 120 guaranteed payments.	Same.

Schedule SB, Part V – Summary of Plan Provisions

Optional forms	Lifetime with 60, 120 or 180 payments guaranteed. Joint and ½, ⅔, ¾ or full, with 120 payments guaranteed. 60, 120 or 180 guaranteed payments only. Lump sum, if actuarial value is less than $5,000.	Same.
Optional form conversion factors	For lifetime annuities: 8% and the 1984 Unisex Pension Mortality Table. For lump sum and certain only annuities: the applicable interest rate under Internal Revenue Code 417(e)(3)(C) for the third calendar month preceding the month that contains the distribution and the applicable mortality table published in accordance with Internal Revenue Code Section 417(e)(3)(B).	Same.
Early retirement benefit	A participant may retire at (i) age 55 with 10 years of service, (ii) age 62 with five years of service, or (iii) any time after the sum of his attained age and service is 85 or more provided that he has at least 20 years of Credited Service and his last five years of service count as Credited Service. The benefit is calculated in the same manner as the normal retirement benefit, based on Credited Service to early retirement. If the participant qualifies under the rule of 85 described in (iii) above, there is no reduction in the benefit. Otherwise, the benefit is reduced 1/300 for each month by which the early retirement date precedes age 62.	Same.
Termination benefit (vested)	Participants who terminate employment after completing five years of service are 100% vested in their accrued benefit which is payable at age 65. Employers with this vesting schedule (by group number): 32, 78, 81, 121, 168, 175, 193, 282, 327 and 328. Participants who are not vested are entitled to their Employee Contribution Benefit payable at age 65. At the time of termination, a participant may, by written request receive his Contribution Account. His accrued benefit is reduced by the portion of the benefit funded by his Contribution Account. A terminated participant with 5 or more years of Service but less than 10 years of Service may elect immediate commencement of the vested benefit any time after attaining age 62, without reduction. A terminated participant with 10 or more years of Service may elect immediate commencement of the vested benefit any time after attaining age 55, reduced by 1/300th for each month of the commencement date precedes age 62. No	Same. Employers with 5-year cliff vesting (by group number): 23, 136, 150, 170, 190, 205, 226, 323, 324, 326, 334, 351, 371, 423 and 471 Employers with graded vesting (by group number): 4, 10, 36, 135, 156, 173, 177, 201, 210, 216, 223, 225, 229, 258, 294, 302, 345, 415, and 527 Years of Service / Vested % Less than 2 years: 0% 2 years: 20% 3 years: 40% 4 years: 60% 5 years: 80% 6 years or more: 100%

Schedule SB, Part V – Summary of Plan Provisions

	reduction applies if the participant meets the Rule of 85 described above.	
Death benefit	The spouse or beneficiary of a participant who dies after becoming eligible for early or normal retirement is entitled to receive a death benefit equal to the greater of the Actuarial Value of i) the survivor income payable had the participant retired and elected the joint and 100% survivor option on the first day of the month preceding his death, and ii) the participant's accrued benefit payable for 60 months. If an active participant dies prior to meeting eligibility requirements for early or normal retirement, the spouse or beneficiary is entitled to receive a death benefit equal to the greater of the Actuarial Value of i) the survivor income payable had the participant terminated employment and immediately begun receiving benefits under 50% Joint & Survivor option, and ii) the member's accrued benefit payable for 60 months. If survived by a spouse, the death benefit is paid as a life annuity equivalent in value to the greater of the Actuarial Values. The spouse may elect to receive the benefit as a 60 month certain annuity. If not survived by a spouse, the death benefit is paid as a 60 month annuity. Such death benefit shall be paid first to the beneficiary designated by the participant. If no beneficiary is designated, it is paid first to the surviving spouse; if there is no surviving spouse, then in equal parts to the surviving children of the member; or if there are no surviving children, then in equal parts to the surviving parents of the member; or if there are no surviving parents, then in equal parts to the surviving siblings of the member. The death benefit is payable to the member's estate if the member is not survived by a spouse, child, parent, or sibling and has not designated a beneficiary.	Same.

Schedule SB, Part V – Summary of Plan Provisions

Disability benefit	If a participant is determined to be totally and permanently disabled, he is entitled to an immediate monthly income equal to his accrued benefit reduced 1/300 per month for each month prior to age 62 down to age 55 and actuarially thereafter. A minimum monthly benefit of $50.00 is payable to a participant with at least five years of Credited Service at date of disability.	Same.
Late retirement	Benefit at actual retirement is based on Credited Service and Average Monthly Earnings to termination date.	Same.

Maximum benefits	Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2018, the limit is $220,000.
Changes since prior valuation	The following groups changed formulas: - 32 – Accruals frozen as of February 28, 2018 - 8039 – Merged into Group 282 In addition, changes in the maximum compensation and maximum benefit limits were recognized.
Benefits not included in the valuation	To the best of our knowledge, no benefits were excluded from the valuation.
Significant events	None.

Benefits Included or Excluded

Unless noted below, all benefits provided by the plans, as restated effective January 1, 2017, are included in this valuation.

- **Most recent plan amendments included:** The plans were restated effective January 1, 2017.
- **Plan amendments excluded:** None.
- **Late retirement increases**:
  - *Active participants:* This valuation does not reflect actuarial increases for participants over age 70½.
  - *Deferred vested participants:* This valuation does not reflect actuarial increases for participants over age 70½.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 401(a)(17) have been incorporated into our calculations. The limitation of Internal Revenue Code Section 415(b) was assumed not to apply.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether any plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). The funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V – Summary of Plan Provisions

Plan Provisions Specific to Funding
Additional Benefits Included or Excluded

- **IRC Section 436 benefit restrictions:**
  - *Unpredictable contingent event benefits:* None.
  - *Plan amendments:* See above.
  - *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
  - *Benefit accruals:* The funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

Actuarial Assumptions

Interest

Funding

Segment rates or full yield curve	Segment	
Look-back months	0	
	Stabilized	**Nonstabilized**
First 5 years	3.92%	1.94%
Next 15 years	5.52%	3.66%
Over 20 years	6.29%	4.44%

These rates were updated since the prior valuation, as prescribed by the IRS.

Expenses

Administrative related expenses (actuarial fees, PBGC premiums, and legal fees) assumed to equal the current year flat-rate PBGC premium plus 0.08% of the market value of assets. This is based on analysis of expenses paid in the 2013-2014 plan year.

Mortality

Funding

Section 430(h)(3) prescribed separate static annuitant and nonannuitant tables for the valuation year. Based on sponsor elections, these tables are based on the RP 2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Turnover

Based on select rates of turnover for the first four years of service and ultimate rates thereafter. Turnover rates reflect findings from the analysis of plan experience for the 2007-2010 valuation years and the expectation that future termination patterns and the circumstances of the employers will not differ significantly from the period studied. Sample rates are shown below.

	Rate of turnover				
	Completed years of service				
Age	**0**	**1**	**2**	**3**	**4+**
25	25.00%	25.00%	20.00%	15.00%	11.00%
30	25.00	25.00	20.00	15.00	11.00
35	20.00	20.00	15.00	15.00	8.66
40	20.00	20.00	15.00	15.00	7.31
45	16.00	16.00	12.00	8.00	6.00
50	16.00	16.00	12.00	8.00	4.75
55	12.00	12.00	10.00	8.00	4.00
60	12.00	12.00	10.00	8.00	4.00

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

Groups 216, 323, 326 and 415 assume no withdrawal.

Groups 509, 510, 513, 514, and 516 assume only the ultimate (4+ years of service) withdrawal rates.

Groups 4 and 527 use the rates above for 0 - 3 years of service but different ultimate rates. Sample rates are shown below.

Age	Rate of turnover
25	9.00%
30	9.00%
35	8.00%
40	6.00%
45	4.00%
50	3.00%
55	2.00%
60	2.00%

Disability — None assumed.

Expected Return on Plan Assets — Varies based on which asset pool the plan sponsor was invested in on each valuation date. For calculating the actuarial value of assets, rates are limited by the 3rd segment rate for each year; rates for this purpose for 2018 are to be determined.

	2017	2016
• Pool A	6.48%	6.65%
• Pool B	6.48%	6.25%
• Pool C	6.32%	4.75%
• Pool D	5.18%	N/A
• Pool E	4.35%	N/A

The number of pools was expanded from three to five prior to April 1, 2017, with the current Pool B and Pool D being added, the original Pool B becoming Pool C, and the original Pool C becoming Pool E.

The expected rate of return on plan assets is based on projected rates of return using capital market assumptions prepared by Wells Fargo to the extent they are consistent with those published in Mercer Investment Consulting's *Capital Markets Outlook* for the plan's target asset mix. The expected return on assets assumption is net of an adjustment of 10 bps for expenses assumed to be paid from plan assets.

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

Salary increases

Salaries will increase according to an age-related table ranging from 8.25% down to 2.75% per annum. Illustrative future salary increase information is as follows:

Age	Salary increase
20	8.25%
25	7.50%
30	6.25%
35	5.50%
40	5.00%
45	4.25%
50	4.00%
55	3.75%
60	2.75%
65	2.75%

The salary increase assumption reflects findings from the analysis of plan experience for the 2007-2010 calendar years and the expectation that future wage increases and the circumstances of the employers will not differ significantly from the period studied.

Incidence of retirement

Age	Rate of Retirement
55	3%
56	3
57	3
58	3
59	3
60	3
61	10
62	30
63	25
64	25
65	40
66	25
67	25
68	25
69	25
70 & Over	100

For employees who become eligible to retire prior to age 55, turnover rates are used.

For frozen groups 177 and 201, same assumptions until eligible for unreduced retirement, but then 100% at unreduced retirement age.

For groups 216 and 326, all retirements are assumed at age 62.

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

For group 415, all retirements are assumed at age 65.

Retirement rates reflect findings from the analysis of plan experience for the 2007-2010 valuation years and the expectation that future retirement patterns and the circumstances of the employers will not differ significantly from the period studied.

Spouse's benefit

80% of all employees are assumed married with husbands two years older than their wives.

This assumption is based on an examination of historical election patterns as of March 31, 2012.

Form of payment

1/3 of participants are expected to commence benefits as a Life Only annuity, 1/3 as a 100% J&S annuity, and 1/3 as a 5-Year Certain annuity

This assumption is based on an examination of historical election patterns as of March 31, 2012.

Commencement for vested terminations

Age 62

Conversion basis

For the Contributory Plan, contribution accounts are converted to equivalent monthly benefits using stabilized interest rates and the current year 417(e) mortality table.

Interest earned by employee contributions

Year	Interest rate
2018	3.00%
2019	3.50%
2020	4.00%
2021	4.50%
2022	4.75%
2023 and later	5.00%

Historically, the required interest rate for employee contributions has been substantially similar to yields on five-year corporate bonds of high quality. These rates are based on five-year bond yields implied from the IRS Funding Yield Curve for January 2017.

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

Inflation — The inflation assumption used to project the maximum salary limitation for future years is 2.2%. This assumption is based on the inflation assumption periodically published by Mercer Investment Consulting in their *Capital Markets Outlook* with adjustments to reflect historical average inflation rates.

Actuarial Methods

An actuarial valuation is only a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict the plan's future financial condition or its ability to pay benefits in the future and does not provide any guarantee of future financial soundness of the plan. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the period of time over which benefits are paid, plan expenses and the amount earned on any assets invested to pay benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of estimates to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that, if used, in our judgment, would not have significantly affected our results. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

Valuations do not affect the ultimate cost of the plan, only the timing of when benefit costs are recognized. Cost recognition occurs over time. If the costs recognized over a period of years are lower or higher than necessary, for whatever reason, normal and expected practice is to adjust future cost levels to recognize the entire cost of the plan over time.

Asset Valuation Method

The asset valuation method is an average of the adjusted market value for each year during the last 2 years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430. Contributions made after April 1, 2018 have not been reflected in these initial results.

For purposes of the asset valuation method only, contributions during the plan year are assumed to be made in the middle of the month in which they are contributed and receivable contributions are assumed to be made on the last day of the month in which they are contributed, except for contributions during December, which are assumed to be in the middle of the month.

A characteristic of this asset method is that over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Schedule SB, Part V – Statement of Actuarial Assumptions / Methods

Participant Methods

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** Associated Benefits Corporation provides us with data on only those employees who have completed the eligibility requirements so only participants are included in the valuation of the liabilities.
- **Participants excluded:** No actuarial liability is included for nonvested participants who terminated prior to the valuation date.
- **Insurance contracts**: The plan does not have any insurance contracts.
- **Transferred participants**: The liabilities for benefits earned prior to their transfer by employees who have transferred to another Associated Benefits Corporation employer have been included with the liabilities for terminated vested participants at their former employer.

Actuarial Cost Method

Method for Minimum Funding

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

Schedule SB, Line 24 – Change in actuarial assumptions

- The select rate of retirement for the first year someone attains Rule of 85 was eliminated (does not affect groups 216, 326 and 415).
- The form of payment was updated as described above.
- The interest earned on employee contributions was updated as described above (contributory plans only).
- The inflation assumption was updated as described above.

Schedule SB, Line 25 – Change in method

The actuarial cost method has changed since the prior valuation due to the change in service provider. This change meets the requirements for automatic approval.

The Restated Contributory Retirement Plan for Cooperatives
Valuation Date: April 1, 2018
Schedule SB, Line 26 – Schedule of Active Participant Data
Group 282 - Heartland Co-op EIN/PN: 42-0242420/20

Attained age	Service										
	Under 1	1–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40 & up	Total
Under 25	3	33	1								37
25–29	3	19	11								33
30–34	3	15	7	5							30
35–39	1	11	7	12	6						37
40–44	4	11	9	4	9	2					39
45–49	2	8	8	8	4	4	1				35
50–54	2	17	13	9	5	4	2	1			53
55–59	2	20	11	22	10	5	3	1	3		77
60–64		13	12	21	5	7	2	3	2	5	70
65–69		6	3	7	1		1		1	1	20
70 & up		4	5	3	2						14
Total	**20**	**157**	**87**	**91**	**42**	**22**	**9**	**5**	**6**	**6**	**445**

#282

Form **5558**
(Rev. September 2018)

Department of the Treasury
Internal Revenue Service

Application for Extension of Time To File Certain Employee Plan Returns

▶ For Privacy Act and Paperwork Reduction Act Notice, see instructions.
▶ Go to *www.irs.gov/Form5558* for the latest information.

OMB No. 1545-0212

File With IRS Only

Part I Identification

A Name of filer, plan administrator, or plan sponsor (see instructions)	B Filer's identifying number (see instructions)
HEARTLAND COOPERATIVE	Employer identification number (EIN) (9 digits XX-XXXXXXX)
Number, street, and room or suite no. (If a P.O. box, see instructions)	42-0242420
PO BOX 71399	Social security number (SSN) (9 digits XXX-XX-XXXX)
City or town, state, and ZIP code	
DES MOINES IA 50325-0399	

C Plan name	Plan number	Plan year ending— MM	DD	YYYY
THE RESTATED CONTRIBUTORY RETIREMENT PLAN FOR COOPERATIVES	0 2 0	3	31	2019

Part II Extension of Time To File Form 5500 Series, and/or Form 8955-SSA

1 ☐ Check this box if you are requesting an extension of time on line 2 to file the first Form 5500 series return/report for the plan listed in Part I, C above.

2 I request an extension of time until 1 / 15 / 2020 to file Form 5500 series. See instructions.
Note: A signature IS NOT required if you are requesting an extension to file Form 5500 series.

3 I request an extension of time until 1 / 15 / 2020 to file Form 8955-SSA. See instructions.
Note: A signature IS NOT required if you are requesting an extension to file Form 8955-SSA.

The application **is automatically approved** to the date shown on line 2 and/or line 3 (above) if **(a)** the Form 5558 is filed on or before the normal due date of Form 5500 series, and/or Form 8955-SSA for which this extension is requested; and **(b)** the date on line 2 and/or line 3 (above) is not later than the 15th day of the 3rd month after the normal due date.

Part III Extension of Time To File Form 5330 *(see instructions)*

4 I request an extension of time until / / to file Form 5330.
You may be approved for up to a 6-month extension to file Form 5330, after the normal due date of Form 5330.

a Enter the Code section(s) imposing the tax . . . . . ▶ a

b Enter the payment amount attached . . . . . ▶ b

c For excise taxes under section 4980 or 4980F of the Code, enter the reversion/amendment date . . . ▶ c

5 **State in detail why you need the extension:**

Under penalties of perjury, I declare that to the best of my knowledge and belief, the statements made on this form are true, correct, and complete, and that I am authorized to prepare this application.

Signature ▶ **Date ▶**

Plan Name: **The Restated Contributory Retirement Plan for Cooperatives**
Plan Sponsor EIN: **42-0242420**
ERISA 3-digit Plan #: **020**
Plan Year Ending: **03/31/2019**

The required attachment marked with an "X" in the Attachment column is included within the Schedule SB – Single-Employer Defined Benefit Plan Actuarial Information pdf attachment to Form 5500 or Form 5500-SF, Part VI, line 11 which consists of the entire actuarial information issued by the plan's Actuary.

Form/Schedule	Line #	Description	Attachment
5500 Sch. SB		Actuarial Assumptions and Methods	X
5500 Sch. SB		Summary of Plan Provisions	X
5500 Sch. SB		Statement of Enrolled Actuary	X
5500 Sch. SB	7	Explanation of Discrepancy in Prior Year Funding Standard Carryover Balance or Prefunding Balance	
5500 Sch. SB	18	Contributions Made to the Plan for the Plan Year	
5500 Sch. SB	19	Discounted Employer Contributions	
5500 Sch. SB	22	Description of Weighted Average Retirement Age	X
5500 Sch. SB	24	Explanation of Change in Actuarial Assumptions	X
5500 Sch. SB	25	Change in Method	X
5500 Sch. SB	26	Schedule of Active Participant Data	X
5500 Sch. SB	32	Schedule of Amortization Bases	

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5500 Sch. SB	19	Discounted Employer Contributions	
5500 Sch. SB	22	Description of Weighted Average Retirement Age	X
5500 Sch. SB	24	Explanation of Change in Actuarial Assumptions	X
5500 Sch. SB	25	Change in Method	X
5500 Sch. SB	26	Schedule of Active Participant Data	X
5500 Sch. SB	32	Schedule of Amortization Bases	