

<p style="text-align: center;"><b>Form 5500</b></p> <p style="font-size: small;">Department of the Treasury Internal Revenue Service</p> <hr/> <p style="font-size: small;">Department of Labor Employee Benefits Security Administration</p> <hr/> <p style="font-size: x-small;">Pension Benefit Guaranty Corporation</p>	<p><b>Annual Return/Report of Employee Benefit Plan</b></p> <p style="font-size: x-small;">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).</p> <p style="text-align: center;"><b>▶ Complete all entries in accordance with the instructions to the Form 5500.</b></p>	<p style="font-size: x-small;">OMB Nos. 1210-0110 1210-0089</p> <hr/> <p style="font-size: large; font-weight: bold; text-align: center;">2023</p> <hr/> <p style="text-align: center; font-weight: bold;">This Form is Open to Public Inspection</p>
---	---	---

**Part I Annual Report Identification Information**  
 For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

**A** This return/report is for:  a multiemployer plan  a multiple-employer plan (Filers checking this box must provide participating employer information in accordance with the form instructions.)

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:  Form 5558  automatic extension  the DFVC program

special extension (enter description)

**E** If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. . . . .

**Part II Basic Plan Information—enter all requested information**

<p><b>1a</b> Name of plan  <u>HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN</u></p>	<p><b>1b</b> Three-digit plan number (PN) ▶ <u>322</u></p>
<p><b>2a</b> 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)  <u>HITACHI ENERGY USA INC.</u></p> <p><u>901 MAIN CAMPUS DRIVE</u>  <u>RALEIGH, NC 27606</u></p>	<p><b>1c</b> Effective date of plan  <u>01/01/2020</u></p> <p><b>2b</b> Employer Identification Number (EIN)  <u>94-3273443</u></p> <p><b>2c</b> Plan Sponsor's telephone number  <u>901-205-6638</u></p> <p><b>2d</b> Business code (see instructions)  <u>335900</u></p>

**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.

<b>SIGN HERE</b>	Filed with authorized/valid electronic signature.	10/15/2024	VONNA M. JONES
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
<b>SIGN HERE</b>			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
<b>SIGN HERE</b>			
	Signature of DFE	Date	Enter name of individual signing as DFE

<b>3a</b> Plan administrator's name and address <input checked="" type="checkbox"/> Same as Plan Sponsor	<b>3b</b> Administrator's EIN	
	<b>3c</b> Administrator's telephone number	
<b>4</b> 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: <b>a</b> Sponsor's name <b>c</b> Plan Name	<b>4b</b> EIN	
	<b>4d</b> PN	
<b>5</b> Total number of participants at the beginning of the plan year	<b>5</b>	37
<b>6</b> Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines <b>6a(1)</b> , <b>6a(2)</b> , <b>6b</b> , <b>6c</b> , and <b>6d</b> ). <b>a(1)</b> Total number of active participants at the beginning of the plan year ..... <b>a(2)</b> Total number of active participants at the end of the plan year ..... <b>b</b> Retired or separated participants receiving benefits ..... <b>c</b> Other retired or separated participants entitled to future benefits ..... <b>d</b> Subtotal. Add lines <b>6a(2)</b> , <b>6b</b> , and <b>6c</b> . ..... <b>e</b> Deceased participants whose beneficiaries are receiving or are entitled to receive benefits ..... <b>f</b> Total. Add lines <b>6d</b> and <b>6e</b> . ..... <b>g(1)</b> Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item) ..... <b>g(2)</b> Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) ..... <b>h</b> Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....	<b>6a(1)</b>	34
	<b>6a(2)</b>	0
	<b>6b</b>	0
	<b>6c</b>	0
	<b>6d</b>	0
	<b>6e</b>	0
	<b>6f</b>	0
	<b>6g(1)</b>	
<b>6g(2)</b>		
<b>6h</b>		0
<b>7</b> Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item).....	<b>7</b>	

**8a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:  
**1B 3H**

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

<b>9a</b> Plan funding arrangement (check all that apply)	<b>9b</b> Plan benefit arrangement (check all that apply)
(1) <input type="checkbox"/> Insurance	(1) <input type="checkbox"/> Insurance
(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts	(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts
(3) <input checked="" type="checkbox"/> Trust	(3) <input checked="" type="checkbox"/> Trust
(4) <input type="checkbox"/> General assets of the sponsor	(4) <input type="checkbox"/> 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
  - (4)  **DCG** (Individual Plan Information) – Number Attached \_\_\_\_\_
  - (5)  **MEP** (Multiple-Employer Retirement Plan Information)

- b General Schedules**
- (1)  **H** (Financial Information)
  - (2)  **I** (Financial Information – Small Plan)
  - (3)  **A** (Insurance Information) – Number Attached   0
  - (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 2023 Form M-1 annual report. If the plan was not required to file the 2023 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 \_\_\_\_\_

---

<b>SCHEDULE SB</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  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).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	<small>OMB No. 1210-0110</small>  <b>2023</b>  <b>This Form is Open to Public Inspection</b>
---	--	--

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

▶ **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.

<b>A</b> Name of plan <u>HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN</u>	<b>B</b> Three-digit plan number (PN) ▶	<u>322</u>
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>HITACHI ENERGY USA INC.</u>	<b>D</b> Employer Identification Number (EIN) <u>94-3273443</u>	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

**Part I Basic Information**

<b>1</b>	Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2023</u>		
<b>2</b>	Assets:		
	<b>a</b> Market value .....	<b>2a</b>	<u>154680</u>
	<b>b</b> Actuarial value .....	<b>2b</b>	<u>170148</u>
<b>3</b>	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	<b>a</b> For retired participants and beneficiaries receiving payment .....	<u>3</u>	<u>8858</u>
	<b>b</b> For terminated vested participants .....	<u>0</u>	<u>0</u>
	<b>c</b> For active participants .....	<u>34</u>	<u>146547</u>
	<b>d</b> Total .....	<u>37</u>	<u>155405</u>
<b>4</b>	If the plan is in at-risk status, check the box and complete lines (a) and (b) .....		
	<b>a</b> Funding target disregarding prescribed at-risk assumptions .....	<b>4a</b>	
	<b>b</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 .....	<b>4b</b>	
<b>5</b>	Effective interest rate .....	<b>5</b>	<u>5.07 %</u>
<b>6</b>	Target normal cost		
	<b>a</b> Present value of current plan year accruals .....	<b>6a</b>	<u>43336</u>
	<b>b</b> Expected plan-related expenses .....	<b>6b</b>	<u>0</u>
	<b>c</b> Target normal cost .....	<b>6c</b>	<u>43336</u>

**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.

<b>SIGN HERE</b>		
	Signature of actuary	<u>10/14/2024</u>
	<u>THOMAS W. KADLEC</u>	Date
	Type or print name of actuary	<u>23-07871</u>
	<u>MERCER</u>	Most recent enrollment number
	Firm name	<u>609-520-2508</u>
	<u>ONE UNIVERSITY SQUARE DRIVE</u>	Telephone number (including area code)
	<u>SUITE 100</u>	
	<u>PRINCETON, NJ 08540</u>	
	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

<b>Part II Beginning of Year Carryover and Prefunding Balances</b>		(a) Carryover balance	(b) Prefunding balance
<b>7</b>	Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....	0	0
<b>8</b>	Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....	0	0
<b>9</b>	Amount remaining (line 7 minus line 8) .....	0	0
<b>10</b>	Interest on line 9 using prior year's actual return of <u>-18.38</u> % .....	0	0
<b>11</b>	Prior year's excess contributions to be added to prefunding balance:		
<b>a</b>	Present value of excess contributions (line 38a from prior year) .....		1647
<b>b(1)</b>	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 <u>5.47</u> % .....		90
<b>b(2)</b>	Interest on line 38b from prior year Schedule SB, using prior year's actual return .....		0
<b>c</b>	Total available at beginning of current plan year to add to prefunding balance .....		1737
<b>d</b>	Portion of (c) to be added to prefunding balance .....		
<b>12</b>	Other reductions in balances due to elections or deemed elections .....	0	0
<b>13</b>	Balance at beginning of current year (line 9 + line 10 + line 11d - line 12) .....	0	0

<b>Part III Funding Percentages</b>			
<b>14</b>	Funding target attainment percentage .....	<b>14</b>	88.57 %
<b>15</b>	Adjusted funding target attainment percentage .....	<b>15</b>	88.57 %
<b>16</b>	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement .....	<b>16</b>	97.18 %
<b>17</b>	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage .....	<b>17</b>	%

<b>Part IV Contributions and Liquidity Shortfalls</b>		<b>18 Contributions made to the plan for the plan year by employer(s) and employees:</b>			
(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
04/13/2023	44000	0			
04/24/2024	3000	0			
			<b>Totals ▶</b>	<b>18(b)</b>	47000
				<b>18(c)</b>	0

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

<b>a</b> Contributions allocated toward unpaid minimum required contributions from prior years .....	<b>19a</b>	0
<b>b</b> Contributions made to avoid restrictions adjusted to valuation date .....	<b>19b</b>	0
<b>c</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date .....	<b>19c</b>	46208

**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
0	0	0	0

<b>Part V Assumptions Used to Determine Funding Target and Target Normal Cost</b>			
<b>21</b> Discount rate:			
<b>a</b> Segment rates:	1st segment: %	2nd segment: %	<input checked="" type="checkbox"/> N/A, full yield curve used
<b>b</b> Applicable month (enter code).....			<b>21b</b> 64
<b>22</b> Weighted average retirement age .....			<b>22</b> 64
<b>23</b> Mortality table(s) (see instructions)	<input type="checkbox"/> Prescribed - combined <input checked="" type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute		

<b>Part VI Miscellaneous Items</b>			
<b>24</b> Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>25</b> Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. .... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>26</b> Demographic and benefit information			
<b>a</b> Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. .... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>b</b> Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>27</b> If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....			<b>27</b>

<b>Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years</b>			
<b>28</b> Unpaid minimum required contributions for all prior years .....			<b>28</b> 0
<b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....			<b>29</b> 0
<b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....			<b>30</b> 0

<b>Part VIII Minimum Required Contribution For Current Year</b>			
<b>31</b> Target normal cost and excess assets (see instructions):			
<b>a</b> Target normal cost (line 6c).....			<b>31a</b> 43336
<b>b</b> Excess assets, if applicable, but not greater than line 31a .....			<b>31b</b> 0
<b>32</b> Amortization installments:	Outstanding Balance	Installment	
<b>a</b> Net shortfall amortization installment .....	21936	2077	
<b>b</b> Waiver amortization installment .....	0	0	
<b>33</b> 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 .....			<b>33</b>
<b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....			<b>34</b> 45413
	Carryover balance	Prefunding balance	Total balance
<b>35</b> Balances elected for use to offset funding requirement .....			0
<b>36</b> Additional cash requirement (line 34 minus line 35).....			<b>36</b> 45413
<b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....			<b>37</b> 46208
<b>38</b> Present value of excess contributions for current year (see instructions)			
<b>a</b> Total (excess, if any, of line 37 over line 36)			<b>38a</b> 795
<b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....			<b>38b</b>
<b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....			<b>39</b> 0
<b>40</b> Unpaid minimum required contributions for all years .....			<b>40</b> 0

<b>Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)</b>			
<b>41</b> If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input checked="" type="checkbox"/> 2021			

<b>SCHEDULE D</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>	<b>DFE/Participating Plan Information</b>  This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).  <b>▶ File as an attachment to Form 5500.</b>	OMB No. 1210-0110  <hr/> <b>2023</b>  <b>This Form is Open to Public Inspection.</b>
---	--	--

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

<b>A</b> Name of plan <u>HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN</u>	<b>B</b> Three-digit plan number (PN) ▶	<u>322</u>
<b>C</b> Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>HITACHI ENERGY USA INC.</u>	<b>D</b> Employer Identification Number (EIN) <u>94-3273443</u>	

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

<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:	<u>HITACHI ENERGY USA INC. MASTER TRUS</u>		
<b>b</b> Name of sponsor of entity listed in (a):	<u>HITACHI ENERGY USA INC.</u>		
<b>c</b> EIN-PN <u>94-3273443-324</u>	<b>d</b> Entity code <u>M</u>	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	<u>0</u>
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)	
<hr/>			
<b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE:			
<b>b</b> Name of sponsor of entity listed in (a):			
<b>c</b> EIN-PN	<b>d</b> Entity code	<b>e</b> 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)

**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)

**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)



<b>SCHEDULE I</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Financial Information—Small Plan</b>  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).  <b>▶ File as an attachment to Form 5500.</b>	<small>OMB No. 1210-0110</small>  <b>2023</b>  <b>This Form is Open to Public Inspection</b>
--	---	--

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

<b>A</b> Name of plan <u>HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN</u>	<b>B</b> Three-digit plan number (PN) ▶ <u>322</u>
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 <u>HITACHI ENERGY USA INC.</u>	<b>D</b> Employer Identification Number (EIN) <u>94-3273443</u>

Complete Schedule I if the plan covered fewer than 100 participants as of the beginning of the plan year. You may also complete Schedule I if you are filing as a small plan under the 80-120 participant rule (see instructions). Complete Schedule H if reporting as a large plan or DFE.

**Part I Small Plan Financial Information**

Report below the current value of assets and liabilities, income, expenses, transfers and changes in net assets during the plan year. Combine the value of plan assets held in more than one trust. Do not enter the value of the portion of an insurance contract that guarantees during this plan year to pay a specific dollar benefit at a future date. 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.**

		(a) Beginning of Year	(b) End of Year
<b>1 Plan Assets and Liabilities:</b>			
<b>a</b> Total plan assets .....	<b>1a</b>	154680	0
<b>b</b> Total plan liabilities .....	<b>1b</b>	0	
<b>c</b> Net plan assets (subtract line 1b from line 1a) .....	<b>1c</b>	154680	0
<b>2 Income, Expenses, and Transfers for this Plan Year:</b>		(a) Amount	(b) Total
<b>a</b> Contributions received or receivable:			
<b>(1)</b> Employers .....	<b>2a(1)</b>	44000	
<b>(2)</b> Participants .....	<b>2a(2)</b>		
<b>(3)</b> Others (including rollovers) .....	<b>2a(3)</b>	0	
<b>b</b> Noncash contributions .....	<b>2b</b>		
<b>c</b> Other income .....	<b>2c</b>	19450	
<b>d</b> Total income (add lines 2a(1), 2a(2), 2a(3), 2b, and 2c) .....	<b>2d</b>		63450
<b>e</b> Benefits paid (including direct rollovers) .....	<b>2e</b>	1395	
<b>f</b> Corrective distributions (see instructions) .....	<b>2f</b>		
<b>g</b> Certain deemed distributions of participant loans (see instructions) .....	<b>2g</b>		
<b>h</b> Administrative service providers (salaries, fees, and commissions) .....	<b>2h</b>		
<b>i</b> Other expenses .....	<b>2i</b>		
<b>j</b> Total expenses (add lines 2e, 2f, 2g, 2h, and 2i) .....	<b>2j</b>		1395
<b>k</b> Net income (loss) (subtract line 2j from line 2d) .....	<b>2k</b>		62055
<b>l</b> Transfers to (from) the plan (see instructions) .....	<b>2l</b>		-216735

**3 Specific Assets:** If the plan held assets at any time during the plan year in any of the following categories, check "Yes" and enter the current value of any assets remaining in the plan as of the end of the plan year. Allocate the value of the plan's interest in a commingled trust containing the assets of more than one plan on a line-by-line basis unless the trust meets one of the specific exceptions described in the instructions.

		Yes	No	Amount
<b>a</b> Partnership/joint venture interests .....	<b>3a</b>		X	
<b>b</b> Employer real property .....	<b>3b</b>		X	
<b>c</b> Real estate (other than employer real property) .....	<b>3c</b>		X	
<b>d</b> Employer securities .....	<b>3d</b>		X	
<b>e</b> Participant loans .....	<b>3e</b>		X	
<b>f</b> Loans (other than to participants) .....	<b>3f</b>		X	
<b>g</b> Tangible personal property .....	<b>3g</b>		X	

**Part II Compliance Questions**

	Yes	No	Amount
<b>4</b> During the plan year:			
<b>a</b> 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>b</b> Were any loans by the plan or fixed income obligations due the plan in default as of the close of plan year or classified during the year as uncollectible? Disregard participant loans secured by the participant's account balance. ....	4b	X	
<b>c</b> Were any leases to which the plan was a party in default or classified during the year as uncollectible? .....	4c	X	
<b>d</b> Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a.) .....	4d	X	
<b>e</b> Was the plan covered by a fidelity bond? .....	4e	X	1000000
<b>f</b> 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	
<b>g</b> 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	
<b>h</b> 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	
<b>i</b> Did the plan at any time hold 20% or more of its assets in any single security, debt, mortgage, parcel of real estate, or partnership/joint venture interest?.....	4i	X	
<b>j</b> Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? .....	4j	X	
<b>k</b> Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? If "No," attach an IQPA's report or 2520.104-50 statement. (See instructions on waiver eligibility and conditions.) .....	4k	X	
<b>l</b> Has the plan failed to provide any benefit when due under the plan? .....	4l	X	
<b>m</b> If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.) .....	4m	X	
<b>n</b> 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)
CASH BALANCE PENSION PLAN FOR CERTAIN REPRESENTED EMPLOYEES OF HITACHI ENERGY USA INC.	94-3273443	321

**5c** Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) .....  Yes  No  Not determined  
 If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 523034.

<b>SCHEDULE R</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Retirement Plan Information</b>  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).  <b>▶ File as an attachment to Form 5500.</b>	<small>OMB No. 1210-0110</small>  <b>2023</b>  <b>This Form is Open to Public Inspection.</b>
--	---	---

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

<b>A</b> Name of plan <u>HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN</u>	<b>B</b> Three-digit plan number (PN) ▶	<u>322</u>
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 <u>HITACHI ENERGY USA INC.</u>	<b>D</b> Employer Identification Number (EIN) <u>94-3273443</u>	

<b>Part I</b>	<b>Distributions</b>
---------------	----------------------

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

<b>1</b> Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....	<b>1</b>	<u>0</u>
---	----------	----------

**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): 31-0841368

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

<b>3</b> Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year .....	<b>3</b>	<u>0</u>
--	----------	----------

<b>Part II</b>	<b>Funding Information</b> (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.**

<b>6 a</b> Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) .....	<b>6a</b>	
<b>b</b> Enter the amount contributed by the employer to the plan for this plan year .....	<b>6b</b>	
<b>c</b> 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) .....	<b>6c</b>	

**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

<b>Part III</b>	<b>Amendments</b>
-----------------	-------------------

**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

<b>Part IV</b>	<b>ESOPs</b> (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 (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (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 deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:

<b>a</b> The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: <input type="checkbox"/> last contributing employer <input type="checkbox"/> alternative <input type="checkbox"/> reasonable approximation (see instructions for required attachment) .....	<b>14a</b>	
<b>b</b> The plan year immediately preceding the current plan year. <input type="checkbox"/> Check the box if the number reported is a change from what was previously reported (see instructions for required attachment) .....	<b>14b</b>	
<b>c</b> The second preceding plan year. <input type="checkbox"/> Check the box if the number reported is a change from what was previously reported (see instructions for required attachment).....	<b>14c</b>	

**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:

<b>a</b> The corresponding number for the plan year immediately preceding the current plan year .....	<b>15a</b>	
<b>b</b> The corresponding number for the second preceding plan year .....	<b>15b</b>	

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

<b>a</b> Enter the number of employers who withdrew during the preceding plan year .....	<b>16a</b>	
<b>b</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 .....	<b>16b</b>	

**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) and (b):

**a** Enter the percentage of plan assets held as:  
 Public Equity: \_\_\_\_\_% Private Equity: \_\_\_\_\_% Investment-Grade Debt and Interest Rate Hedging Assets: \_\_\_\_\_%  
 High-Yield Debt: \_\_\_\_\_% Real Assets: \_\_\_\_\_% Cash or Cash Equivalents: \_\_\_\_\_% Other: \_\_\_\_\_%

**b** Provide the average duration of the Investment-Grade Debt and Interest Rate Hedging Assets:  
 0-5 years  5-10 years  10-15 years  15 years or more

**20 PBGC missed contribution reporting requirements.** If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

**a** Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero?  Yes  No

**b** If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:  
 Yes.  
 No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.  
 No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.  
 No. Other. Provide explanation.....

**Part VII IRS Compliance Questions**

**21a** Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules?  Yes  No

**21b** If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).  
 Design-based safe harbor method  
 "Prior year" ADP test  
 "Current year" ADP test  
 N/A

**22** If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter \_\_\_/\_\_\_/\_\_\_\_ (MM/DD/YYYY) and the Opinion Letter serial number \_\_\_\_\_.

**Schedule SB, line 26 — Schedule of Active Participant Data**

Attained age	Years of credited service										Total
	Under 1	1–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40 & up	
Under 25											
25–29											
30–34											
35–39											
40–44											
45–49					1		4				5
50–54						1	7				8
55–59				1		1	3		5		10
60–64							2	1	2		5
65–69							2	1	1		4
70 & up				1			1				2
Total				2	1	2	19	2	8		34

In each cell, the number is the count of active participants for each age/service combination.

**Schedule SB, Part V — Statement of Actuarial Assumptions/Methods****Actuarial assumptions for January 1, 2023 Funding Valuation**

<b>Discount rate sponsor elections</b>		
• Segment rates or full yield curve	Full Yield Curve with no look-back	
<b>Mortality sponsor elections</b>		
• Healthy and disabled participants	Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2014 mortality table backed off to 2006 and then projected with mortality improvement using scale MP – 2021 in accordance with the IRS regulation 1.430(h)(3)-1.	
<b>Other economic assumptions</b>		
• Inflation	2.50% per year for increase in IRC Section 415 and 401(a)(17) limitations	
• Expected investment return	5.75% for 2021, 5.00% for 2022 and 6.25% for 2023	
• Expenses	\$0	
<b>Demographic and other assumptions</b>		
• Benefit commencement age for		
– Future preretirement death	The later of the death of the active participant or the date the participant would have attained eligibility for early retirement benefits.	
– Future and current vested deferred	The later of age 65 or termination of employment.	
– Future disabilities	Upon Disability	
– Active retirements	Later of early retirement eligibility and termination of employment.	
• Form of payment	All participants are assumed to elect the normal form, if they have not yet made an election.	
• Spouse assumptions	<b><u>Male participants</u></b>	<b><u>Female participants</u></b>
– Percentage married	70%	70%
– Spouse age difference	3 years younger	3 years older
• Actuarial Increases	UP84 mortality and 7.75% interest for calculating the actuarially increased benefit for postponed retirement benefits.	
• Withdrawal	<b><u>Attained age</u></b>	<b><u>Rate</u></b>
	20	4.3%
	25	3.4%
	30	2.7%
	35	2.2%
	40	1.7%
	45	1.4%
	50	1.1%
	55	0.8%
	60	0.6%

**Schedule SB, Part V — Statement of Actuarial Assumptions/Methods**

65	0.3%
70	0.1%

<ul style="list-style-type: none"> <li>Retirement</li> </ul>	<b>Attained age</b>	<b>Attained age</b>
	60	8.0%
	61	11.0%
	62	20.0%
	63	15.0%
	64	30.0%
	65 – 69	50.0%
	70	100.0%
<ul style="list-style-type: none"> <li>Disability rates</li> </ul>	One-half of the disability rates in the twelfth valuation of the Railroad Retirement Board (set forward 1 year for males and set back 4 years for females).	

*Schedule SB, Part V — Statement of Actuarial Assumptions/Methods***Rationale for significant demographic assumptions**

- **Mortality (Healthy & Disability)** - The assumption was selected by the plan sponsor and represents a best estimate of future experience.
- **Termination** - Termination rates were selected based on the union turnover rates from the 2003 Pension Plan Turnover Study published by the Society of Actuaries and are believed to have similar characteristics to the plan population.
- **Disability** - Disability rates were selected based on the published table from the twelfth valuation of the Railroad Retirement Board for pension participants and are believed to have similar characteristics to the plan population.
- **Retirement** - Retirement rates were selected based on plan sponsor expectations for the future with periodic monitoring of observed gains and losses caused by retirement patterns different than assumed.
- **Percent married** - The assumed percentage married was selected based on general population statistics on the marital rates of individuals of retirement age.

## Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

### Actuarial Methods for Funding

#### Asset Methods

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.

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.

#### Participant methods

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

- **Participants included:** The plan sponsor provides us with data on all employees as of the valuation date, but only those employees who have completed the plan's eligibility requirements are included in the valuation of liabilities.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break-in-service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

#### Minimum Funding Methods

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 are 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.

<b>SCHEDULE SB</b> <b>(Form 5500)</b> <small>Department of the Treasury Internal Revenue Service</small> <hr/> <small>Department of Labor Employee Benefits Security Administration</small> <hr/> <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  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).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	OMB No. 1210-0110 <hr/> <b>2023</b> <hr/> <b>This Form is Open to Public Inspection</b>
---	--	---

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

▶ **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.

<b>A</b> Name of plan HITACHI ENERGY USA INC. CRYSTAL SPRINGS PLANT RETIREMENT INCOME PLAN	<b>B</b> Three-digit plan number (PN) ▶	322
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF HITACHI ENERGY USA INC.	<b>D</b> Employer Identification Number (EIN) 94-3273443	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

<b>Part I Basic Information</b>			
<b>1</b> Enter the valuation date:	Month <u>01</u>	Day <u>01</u>	Year <u>2023</u>
<b>2</b> Assets:			
<b>a</b> Market value.....	<b>2a</b>		154,680
<b>b</b> Actuarial value .....	<b>2b</b>		170,148
<b>3</b> Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
<b>a</b> For retired participants and beneficiaries receiving payment .....	3	8,858	8,858
<b>b</b> For terminated vested participants.....	0	0	0
<b>c</b> For active participants.....	34	146,547	183,226
<b>d</b> Total .....	37	155,405	192,084
<b>4</b> If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
<b>a</b> Funding target disregarding prescribed at-risk assumptions.....	<b>4a</b>		
<b>b</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 .....	<b>4b</b>		
<b>5</b> Effective interest rate.....	<b>5</b>		5.07%
<b>6</b> Target normal cost			
<b>a</b> Present value of current plan year accruals.....	<b>6a</b>		43,336
<b>b</b> Expected plan-related expenses .....	<b>6b</b>		0
<b>c</b> Target normal cost.....	<b>6c</b>		43,336

**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.

<b>SIGN HERE</b>	 Signature of actuary	<u>10/14/2024</u> Date
	THOMAS W. KADLEC Type or print name of actuary	<u>2307871</u> Most recent enrollment number
	MERCER Firm name	<u>609-520-2508</u> Telephone number (including area code)
	ONE UNIVERSITY SQUARE DRIVE SUITE 100 PRINCETON NJ 08540 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 V Assumptions Used to Determine Funding Target and Target Normal Cost**

**21** Discount rate:

<b>a</b> Segment rates:	1st segment: %	2nd segment: %	3rd segment: %	<input checked="" type="checkbox"/> N/A, full yield curve used
<b>b</b> Applicable month (enter code).....				<b>21b</b>

**22** Weighted average retirement age ..... **22** 64

**23** Mortality table(s) (see instructions)  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** Demographic and benefit information

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

**b** Is the plan required to provide a projection of expected benefit payments? 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**

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

**Part VIII Minimum Required Contribution For Current Year**

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

<b>a</b> Target normal cost (line 6c).....	<b>31a</b>	43,336
<b>b</b> Excess assets, if applicable, but not greater than line 31a .....	<b>31b</b>	0

<b>32</b> Amortization installments:	Outstanding Balance	Installment
<b>a</b> Net shortfall amortization installment .....	21,936	2,077
<b>b</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**

<b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	<b>34</b>	45,413
--	-----------	--------

	Carryover balance	Prefunding balance	Total balance
<b>35</b> Balances elected for use to offset funding requirement.....			0

<b>36</b> Additional cash requirement (line 34 minus line 35) .....	<b>36</b>	45,413
<b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	<b>37</b>	46,208

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

<b>a</b> Total (excess, if any, of line 37 over line 36)	<b>38a</b>	795
<b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....	<b>38b</b>	

<b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....	<b>39</b>	0
<b>40</b> Unpaid minimum required contributions for all years.....	<b>40</b>	0

**Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)**

**41** If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies.  2019  2020  2021

**Schedule SB, line 22 — Description of Weighted Average Retirement Age**

Each employee is assumed to retire in accordance with the table of retirement rates. The proportion of employees expected to retire at each potential retirement age is shown below. The average retirement age is 64.

(A) Retirement age	(B) Retirement percent	(C) Lx	(D) Number of employees expected to retire (B) x (C)	(E) (A) x (D)
60	8.0%	10,000	800	48,000
61	11.0%	9,200	1,012	61,732
62	20.0%	8,188	1,638	101,531
63	15.0%	6,550	983	61,901
64	30.0%	5,568	1,670	106,903
65	50.0%	3,897	1,949	126,668
66	50.0%	1,949	974	64,309
67	50.0%	974	487	32,641
68	50.0%	487	244	16,564
69	50.0%	244	122	8,404
70	100.0%	122	122	8,526
Total			10,000	637,179
Average				63.72

**Schedule SB, Part V — Summary of Plan Provisions**

**Summary of major plan provisions**

Effective date and plan year	Original plan: The Plan was established on December 31, 2019 as a future service wrap-around plan of the ABB Crystal Springs Plan. Amendments through March 31, 2024 are reflected in the plan provisions. Plan year: January 1 – December 31.
Status of the plan	The plan was closed to new entrants as of May 1, 1996. Any individual hired after this date is not eligible for benefits.
Significant events	None.

**Definitions**

• Covered employees	Any hourly rate employee hired prior to the participation date.
• Participation	The ABB Crystal Springs plan includes all benefits accrued through December 31, 2019, and the HE Crystal Springs Plan includes all future service accruals for active participants as of December 31, 2019.
• Credited service	One year of credited service is earned for each plan year in which a participant has 1,700 or more hours of service. Partial years of credited service are earned for plan years in which a participant has less than 1,700 hours, according to the schedule below:

Hours	Service
>= 1,615	1.0
1,445 - 1,614	0.9
1,275 - 1,444	0.8
1,105 - 1,274	0.7
935 - 1,104	0.6
765 - 934	0.5
595 - 764	0.4
425 - 594	0.3
255 - 424	0.2
85 - 254	0.1
≤ 84	0.00

Credited service includes service earned under the ABB Crystal Springs Plan.

• Vesting service	One year for each 1,000 hour calendar year of employment by Kuhlman Electric Corporation. Vesting service includes service earned under the Crystal Springs Plan.
-------------------	---

**Normal retirement**

• Eligibility	Retirement at the later of age 65 and the 5th anniversary of the date of hire.
• Benefit	Monthly benefit - The benefit level multiplied by years of credited service. The benefit payable from this Plan is offset by the accrued benefit earned under the ABB Crystal Springs Plan as of December 31, 2019.

**Schedule SB, Part V — Summary of Plan Provisions**

Benefit level -

<b>Termination date</b>	<b>Benefit level</b>
Effective 01/01/1997	\$11.00
Effective 01/01/1998	\$12.00
Effective 01/01/1999	\$13.00
Effective 01/01/2001	\$14.00
Effective 01/01/2002	\$15.00
Effective 01/01/2003	\$16.00

**Early retirement**

- **Eligibility** Retirement before Normal Retirement Date and on or after both attaining age 60 and completing ten years of Credited Service.
- **Benefit** The monthly pension benefit determined as of the early retirement date, offset by the pension benefit earned under the ABB Crystal Springs Plan as of December 31, 2019, reduced 5/9% for each month that retirement precedes Normal Retirement Date.

**Deferred vested termination**

- **Eligibility** Termination for reasons other than death or retirement after completing five years of Vesting Service.
- **Benefit** A monthly benefit equal to the benefit level multiplied by years of Credited Service, payable in full at age 65, offset by the benefit earned under the ABB Crystal Springs Plan as of December 31, 2019. The member may elect commencement on or after age 60 if he has at least 10 years of Credited Service. This benefit will be reduced 5/9% for each month that retirement precedes Normal Retirement Date.

**Pre-retirement death**

- **Eligibility** Death while eligible for normal, early, postponed, or deferred vested termination benefits, with a surviving spouse.
- **Benefit** In the event of death of a vested employee prior to retirement, his surviving spouse will be entitled to 50% of the reduced accrued benefit as of the date of death, payable upon the later of (1) the date of employee’s death and (2) the attainment of the employee’s earliest retirement age. There is a charge for this coverage for the period from age 35 to age 65.  
 The accrued benefit payable from this plan is offset by the accrued benefit earned under the ABB Crystal Springs Plan as of December 31, 2019.

**Schedule SB, Part V — Summary of Plan Provisions****Disability**

- |               |  |
|---------------|--|
| • Eligibility | Permanent and total disability prior to Normal Retirement Date, following 10 years of Credited Service.  |
| • Benefit     | A monthly benefit equal to the benefit level multiplied by years of Credited Service to the date of disablement, reduced by Worker's Compensation benefits. The entire disability benefit is paid by Hitachi Energy. |

**Postponed retirement**

- |               |  |
|---------------|--|
| • Eligibility | Retirement after Normal Retirement.  |
| • Benefit     | A monthly benefit equal to the greater of (a) a benefit based on Credited Service at Late Retirement, or (b) an actuarially increased benefit based on Credit Service at Normal Retirement, offset by the accrued benefit earned under the ABB Crystal Springs Plan as of December 31, 2019. |

**Form of benefits**

- |                              |  |
|------------------------------|--|
| • For unmarried participants | Pension benefits are paid as a life annuity.   |
| • For married participants   | Pension benefits are paid as an actuarially reduced 50% joint & survivor annuity.  |
| • Optional forms             | The optional forms of benefit payment available to each Participant in lieu of Normal Forms. The forms of benefit are as follows:<br>(a) 75% Joint & Survivor<br>(b) 5 Year Certain and Life |

**Benefits included or excluded**

Unless noted below, all benefits provided by the plan are included in this valuation:

- **Plan amendments excluded:** None.
- **Late retirement increases:**
  - *Active participants:* The plan applies late retirement actuarial increases for all participants who defer retirement beyond their normal retirement date and this valuation includes those increases.
  - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase, if applicable.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether the plans are top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plans are not top-heavy as it is our understanding no key employees participate in the plans ; therefore, 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**

- **Benefit restrictions:** Benefit restrictions (if applicable) are ignored in this valuation.

**Plan provisions specific to funding****Additional benefits included or excluded**

- **IRC Section 436 benefits restrictions:**
  - *Unpredictable contingent event benefits:* This valuation excludes restricted contingent event benefits that occurred before the valuation date but includes contingent event benefits which are expected to occur on or after the valuation date regardless of anticipated funding-based limitations.
  - *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 plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.
- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

**Plan provision changes since prior valuation**

None.

*Schedule SB, line 32 — Schedule of Amortization Bases*

## Shortfall amortization Charge

The total shortfall amortization charge is the sum of the individual shortfall amortization installments for each plan year since the IRC Section 430 changes made by ARPA took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

Shortfall bases				
Year established	Outstanding balance	Years remaining	2024 Installment	
2021	\$ 7,953	13	\$	807
2022	(4,250)	14		(410)
2023	18,233	15		1,680
Total	\$ 21,936		\$	2,077

***Schedule SB, line 25 — Change in Method***

- The plan sponsor elected to use the full yield curve (instead of segmented interest rates) beginning with the 2023 plan year. This one-time method change is eligible for automatic approval

*Schedule SB, line 24 — Change in Actuarial Assumptions*

**Actuarial assumption changes since prior valuation**

- The expected investments return increased from 5.00% in 2022 to 6.25% in 2023.